

Attachment 2
Site Assessment/ Investigation Documentation

PHASE I ENVIRONMENTAL SITE ASSESSMENT

&

Limited Asbestos Testing

**19, 23 NORTH STREET
City of Buffalo, New York 14202**

PREPARED FOR:

FIRST AMHERST DEVELOPMENT GROUP

**4508 Main Street
Amherst, New York 14226**



**PREPARED BY:
PASSERO ASSOCIATES
100 LIBERTY POLE WAY
ROCHESTER, NY 14604**

May 15, 2006

P.N. 2006222.01

PRIVILEGED AND CONFIDENTIAL

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1.0 EXECUTIVE SUMMARY

Passero Associates performed this Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM practice E 1527-05 and the November 1, 2005 USEPA regulations for "Conducting All Appropriate Inquiries" (CAAI), for the benefit of **First Amherst Development Group**. Assignment of this document can be made only with the written permission of Passero Associates.

SUBJECT PROPERTY:

19, 23 North Street
City of Buffalo, New York 14202

1.1 Report Findings

The subject site is comprised of two contiguous parcels totaling approximately 0.2 acre in size, located on the north side of North Street in the City of Buffalo, New York (Appendix 1). The 23 North Street parcel is improved with an approximately 11,096-square-foot building, built as a residential house in the 1800s. Currently vacant, it had been utilized as a radio studio from at least the 1950s to the 1980s. The 19 North Street parcel is a parking lot with a garage at the north side of the parcel; this parcel was also historically occupied by a residence.

Historic Sanborn Fire Insurance Maps indicate that the subject parcels were both occupied by residential dwellings in 1989 and 1925 (Appendix 3). In 1951, the building at 23 North Street was labeled "Broadcast Radio Station W.E.B.R.". By 1981, the dwelling had been removed from the subject 19 North Street parcel (a/k/a 21 North St.), and a "radio tower" had been installed. The 1986 Sanborn Map is similar to the 1981 Map.

Based on the age of the subject building, an asbestos inspection is required prior to renovation or demolition, in compliance with NYSDOL and federal asbestos regulations. Limited asbestos sampling was conducted for analysis by phased light microscopy (PLM) concurrently with this Phase I Environmental Site Assessment (ESA). The PLM analyses indicated three out of 14 sampled materials were determined to contain asbestos. Asbestos containing materials determined by the PLM screening are linoleum and mastic under the second floor carpet, and 9-inch tiles on the first floor (Appendix 4). A more comprehensive asbestos inspection should be conducted prior to renovation. A description of all sampled materials and results is provided in Section 5.3.

Evidence of water incursion and mold growth was noted in the subject building during this site inspection. Mold issues should be addressed during renovation in compliance with all applicable mold mitigation protocols.

Two four-inch metal pipes are present in the driveway at 19 North Street. At Passero Associates' directive, these pipes were investigated by Huron Plumbing; they were determined to be a sewer vent pipe and cleanout.

Based on the age of the subject building, lead-based paints are presumed to be present. Site renovation should be carried out using "lead-safe" work practices in compliance with OSHA regulations. Lead clearance should be obtained upon completion of the renovation.

Two out-of-service former heating oil tanks are located in the older basement beneath the subject building. City of Buffalo Environmental Engineer Dennis Sutton stated that the City has no requirements to remove these tanks. If future renovation or basement improvement is proposed, these tanks should be removed in compliance with the City Fire Code.

1.2 Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM practice E 1527-05 for the subject parcels located at 19 and 23 North Street in the City of Buffalo, New York. **This assessment has revealed no evidence of recognized environmental conditions in connection with the subject site except for the following:**

1. ASTM E 1527-05 states that asbestos-containing materials (ACM) are "non-scope considerations that persons may want to assess in connection with commercial real estate." During this Phase I ESA, linoleum and mastic under the second floor carpet, and 9-inch tiles on the first floor were determined to be ACM.
2. ASTM E 1527-05 states that lead-based paints (LBP) are "non-scope considerations that persons may want to assess in connection with commercial real estate". Based on the age of the subject building, LBP are presumed to be present.
3. ASTM E 1527-05 states that industrial hygienic conditions are "non-scope considerations that persons may want to assess in connection with commercial real estate". During this site inspection, evidence of water incursion and mold growth was noted.

1.3 Recommendations

1. Prior to renovation or demolition of the subject building, an asbestos survey should be conducted in compliance with state and federal asbestos regulations. The non-friable organically bound (NOB) materials determined to be non-asbestos materials during this preliminary asbestos screening

should be verified not to contain asbestos by transmission electron microscopy prior to disturbance.

2. When the subject building is renovated, the work should be carried out with "lead-safe work practices" in compliance with OSHA regulations.
3. Mold issues should be addressed during renovation in compliance with all applicable mold mitigation protocols.

2.0 PURPOSE

This Phase I Environmental Assessment report has been prepared in accordance with ASTM Standard E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The purpose of this practice is to identify recognized environmental conditions on the subject property, if any. Recognized environmental conditions are defined as the presence or likely presence of hazardous substances or petroleum products under conditions indicating a past, current, or the threat of a future release of those substances on the property.

In addition, the purpose of this report is to evaluate "business environmental risk" regarding any environmental conditions which can materially impact the property.

3.0 SCOPE OF WORK

The scope of this Phase I Environmental Assessment has been limited to a review of the following sources of information.

- A) A visual site inspection (reconnaissance) of the subject property and all facilities and improvements on the subject property.
- B) Historical maps and aerial photographs which may reflect prior uses of the subject property and which are reasonably obtainable through state or local government agencies.
- C) Reasonably obtainable federal, state and local government records of: listed hazardous/solid waste sites, spill reports, underground and bulk storage tank facilities, hazardous waste treatment, storage and disposal (TSD) handler and generator records and recorded environmental complaints as provided by the Environmental Data Resources (EDR) Summary Report.
- D) PLM analyses performed on 14 SACM collected for asbestos analysis concurrently with this Phase I ESA.

To augment that information, a Freedom of Information Law (FOIL) request was sent to the NYSDEC for information concerning the subject site; as of May 11, 2006, a reply has not been received from the NYSDEC. **Passero Associates reserves the right to revise this report based upon any pertinent information concerning the subject property that may be forthcoming from this department.**

To the best of Passero Associates' knowledge, the information contained in this report is true and accurate. Passero Associates' personnel have exercised due diligence in the compilation of the information contained herein appropriate to environmental professionals engaged in investigations of this sort.

4.0 USER PROVIDED INFORMATION

4.1 Owner Interview

The subject site is owned by Lutheran Church of the Holy Trinity (LCHT); they had not completed and returned the environmental questionnaire at the time that this report was prepared. Mark Busch of LCHT provided the following information to Peter Morton during the site visit:

The subject building was built as a residence in the 1800s; it was converted for use as a radio studio in the 1950s; the radio operated through the 1990s. A florist purchased the property in the late 1990s and operated a flower shop until 2003, at which point ownership reverted to LCHT.

4.2 Environmental Liens/Valuation Reductions

We recommend that an attorney review the Abstract of Title to confirm that there are no environmental liens, deed restrictions, or reductions of the subject property value due to known environmental conditions.

4.3 Reason for Performing Phase I

This Phase I Environmental Site Assessment was performed relative to the purchase of the subject property by First Amherst Development, LLC for future renovation and conversion to residential space.

5.0 SUBJECT PROPERTY/VICINITY DESCRIPTION

5.1 Site Reconnaissance

Mark Busch of LCHT, and Benjamin Obletz and Darcey M. Kolodziej of First Amherst Development accompanied Peter S. Morton, C.P.G. of Passero Associates during the site visit on May 10, 2006.

5.1.1 Site Description

The subject site is comprised of two contiguous parcels totaling approximately 0.2 acre in size, located on the north side of North Street in the City of Buffalo, New York (Appendix 1). The 23 North Street parcel is improved with an approximately 11,096-square-foot building, built as a residential house in the 1800s. Currently vacant, it had been utilized as a radio studio from at least the 1950s to the 1980s. A 150 foot metal radio tower is located in the parking lot east of the building (see photos).

The 19 North Street parcel is a parking lot with a garage at the north side of the parcel; this parcel was also historically occupied by a residence.

5.1.2 Subject Building -

The Site is improved with an approximately 11,096 square-foot masonry building, built as a residential house in the 1800s. A one-story block addition at the north side was added by W.E.B.R. to expand their radio studio. Basements are present beneath the original house, and beneath the northern addition.

5.1.3 Evidence of Tanks -

Two out-of-service former heating oil tanks are located in the older basement beneath the subject building. City of Buffalo Environmental Engineer Dennis Sutton stated that the City has no requirements to remove these tanks. If future renovation or basement improvement is proposed, these tanks should be removed in compliance with the City Fire Code.

Two four-inch metal pipes are present in the driveway at 19 North Street. At Passero Associates' directive, these pipes were investigated by Huron Plumbing; they were determined to be a sewer vent pipe and cleanout.

5.1.4 *Storage Practices -*

The subject site was historically residential property, prior to the 1950s conversion for use as a radio station. As such, current (or historic) waste storage, chemical storage, or petroleum storage is not of environmental concern on the subject site.

5.1.5 *Evidence of Spills/Releases -*

No evidence of spills was noted during the site visit, and the EDR database does not identify any spills on the subject site (Appendix 3).

5.2 **Limited Asbestos Inspection**

5.2.1 *Discussion*

As part of this Phase I ESA on May 10, 2006, preliminary asbestos screening was conducted; 14 samples were collected of suspected ACM for PLM analyses.

5.2.2 *Results*

	<u>Asbestos Content</u>
1) 3 rd floor 9-inch brown tile at top of stairs	0%
2) 3 rd floor black 9-inch black tile at top of stairs	0%
3) 3 rd floor wallboard	0%
4) 3 rd floor tan 9-inch floor	0%
5) 3 rd floor plaster	0%
6) 2nd floor mosaic linoleum under carpet	11%
7) 2 nd floor felt under carpet	0%
8) 2 nd floor paper under carpet	0%
9) 2 nd floor black felt	0%
10) 2 nd floor red linoleum	0%
11) 2 nd floor fibrous wall material	0%
12) 1 st floor dark green 9-inch tile	0%
13) 1 st floor light green 9-inch tile	0%
14) 1st floor very dark green 9-inch tile	6%

5.2.3 *Conclusion*

Prior to renovation or demolition of the subject building, an asbestos survey should be conducted in compliance with state and federal asbestos regulations. The non-friable organically bound (NOB) materials determined to be non-asbestos materials during this preliminary asbestos screening should be verified not to contain asbestos by transmission electron microscopy prior to disturbance.

5.4 Adjacent Parcels

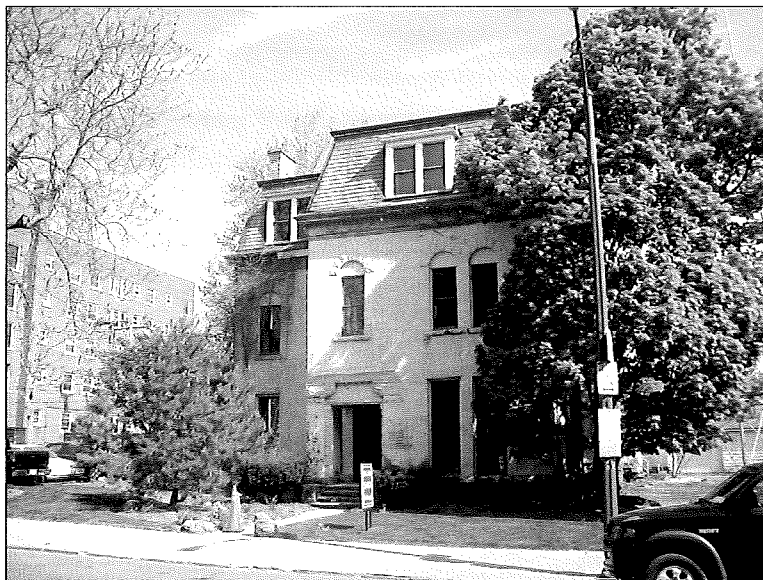
A vacant commercial building is at the east side of the subject 19 North Street Parcel; a church is to the north and south, and residential apartments are to the west.

No recognized environmental conditions are identified on adjacent parcels that appear to have a negative impact on the subject site.

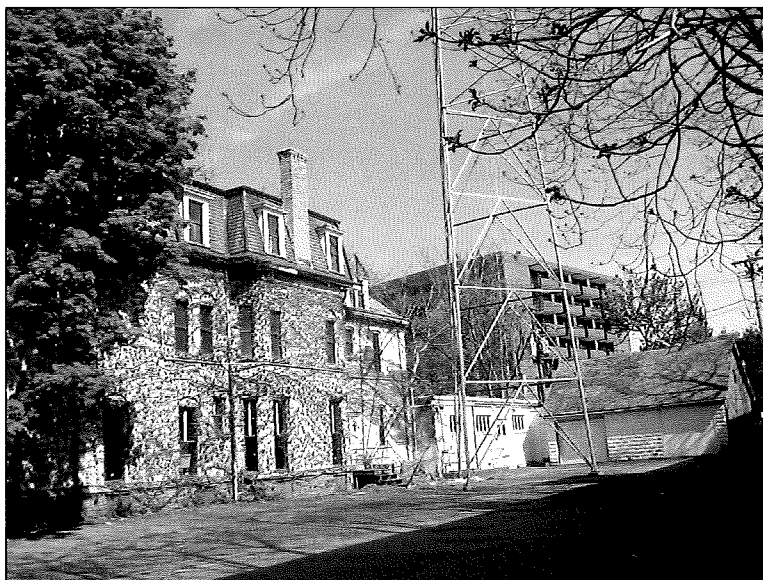
5.5 Subject Site Photographs

Representative photographs of the subject site are presented in the following pages:

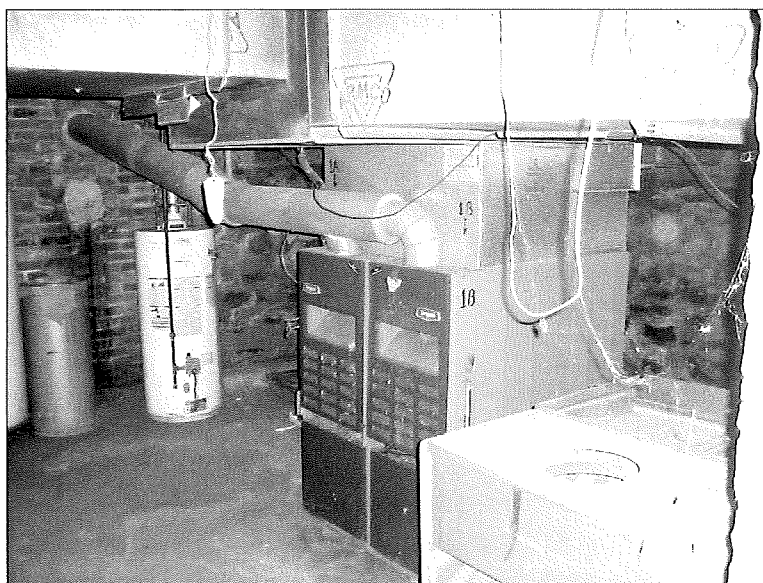
Looking north at subject site



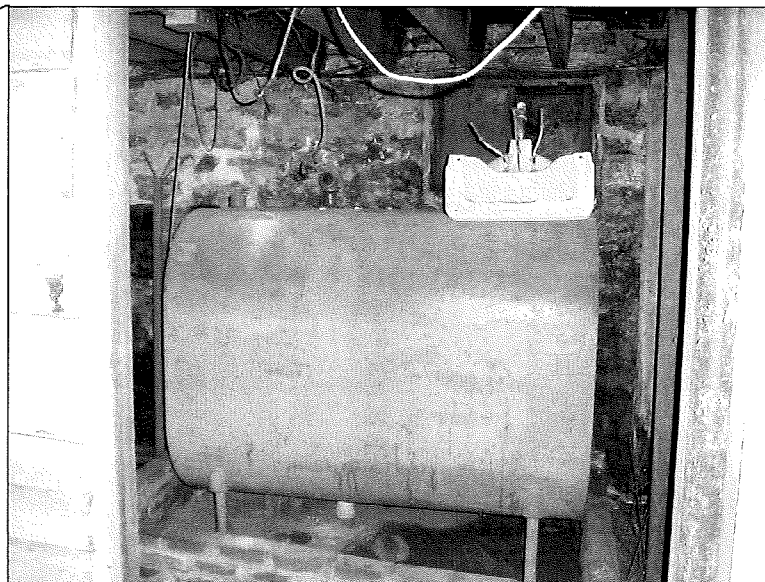
*Radio tower, addition, and garage
at north side of subject site*



Gas-fired basement furnace



Out-of-service basement heating oil tanks



Evidence of water incursion



Peeling paint



Sewer vent and cleanout



ACM linoleum under carpet



6.0 HISTORY AND USE

6.1 Historical Maps

Historic Sanborn Fire Insurance Maps indicate that the subject parcels were both occupied by residential dwellings in 1989 and 1925 (Appendix 3). In 1951, the building at 23 North Street was labeled "Broadcast Radio Station W.E.B.R.". By 1981, the dwelling had been removed from the subject 19 North Street parcel (a/k/a 21 North St.), and a "radio tower" had been installed. The 1986 Sanborn Map is similar to the 1981 Map.

6.2 Historic Aerial Photographs

Environmental Data Resources

Aerial photographs from 1959-1995 were reviewed.

The subject building was present throughout the period of these photos. **Nothing of environmental concern relative to the subject is noted at the scale of the historic aerial photos.**

7.0 REGULATORY INFORMATION

Passero Associates acquired the Environmental Data Resources (EDR) Summary Report relative to the subject site and ASTM-specified search distances (Appendix 3).

National Priorities List (NPL)

There are no NPL sites identified within one-mile of the subject parcel.

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

There are no CERCLIS sites identified within a 0.5-mile of the subject parcel.

Resource Conservation and Recovery Act (RCRA)

There are no RCRA-listed facilities on the subject site, or on any of the adjacent parcels.

There is one RCRA-listed Treatment, Storage, Disposal Facilities (TSDF) with Corrective Actions (CORRACTS) identified within the ASTM-specified 1.0 mile search distance relative the Site. The Trico Corp. site at 817 Washington Street, approximately 0.5 mile from the subject site, is at a lower elevation than, and presumably downgradient from the subject site. The owners of this site are liable for any spills or releases relative to their handling of hazardous materials, and the area is serviced by public water. **This CORRACTS facility is not of environmental concern relative to the subject site.**

Emergency Response Notification System

The EDR database does not indicate any ERNS reports relative to the subject site.

State Priority List (SPL)

There is one NYSDEC-listed Inactive Hazardous Waste Site located within 1.0 mile of the subject site. The Osmose, Inc. site is approximately 0.25 mile northeast of the subject site. NYSDEC indicates that this site is "properly closed". The owner of this site was liable for remedial costs. The area is serviced by public water. **This NYSDEC-listed site is not of environmental concern relative to the subject site.**

Underground Storage Tank Listing (USTs)

There are no registered tanks on the subject site or on any of the adjacent parcels

Leaking Storage Tanks (LST)

EDR notes 27 reported LST or historic LST incidents within 0.5 mile of the subject site. The only one of these reported LST incidents that remains open is at Bradley Sunoco, approximately 0.3 mile southwest of the subject site. This gas station is at a lower elevation and hydraulically *downgradient* from the subject site. The respective tank owners are liable for cleanup costs, and the area is serviced by public water. **These reported LST incidents do not appear to be of environmental concern relative to the subject site.**

Solid Waste/Landfills (SWLF)

There is one SWLF site located within 0.5 mile of the subject site. Ernst Steel SLF is approximately 0.4 mile northeast of the subject site. No petroleum products or hazardous wastes are permitted for disposal at this landfill, and the area is serviced by public water. **This SWLF is not of environmental concern relative to the subject site.**

IMPACT OF IDENTIFIED SITES ON THE SUBJECT PROPERTY

As discussed above, the sites identified within the ASTM-specified search distances do not appear to be environmental concern relative to the subject site.

8.0 RADON

Radon, a naturally occurring, odorless, colorless, radioactive gas, is found throughout the country. Prolonged exposure to elevated indoor radon levels has been associated with increased risks of lung cancer.

In 2004, NYSDOH conducted a basement radon survey across New York State. A mean level of 0.7 picocuries per liter of radon (pCi/l) was measured in the City of Buffalo. (Appendix 4). USEPA has determined an annual average exposure of 4.0 pCi/l as a guidance level for corrective action. **Based on the above, radon does not appear to be of concern in the site area.**

The actual indoor radon level can only be determined through sampling and analysis, not included in the scope of this Phase I Site Assessment.

9.0 CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM practice E 1527-05 for the subject parcels located at 19 and 23 North Street in the City of Buffalo, New York. **This assessment has revealed no evidence of recognized environmental conditions in connection with the subject site except for the following:**

1. ASTM E 1527-05 states that asbestos-containing materials (ACM) are “non-scope considerations that persons may want to assess in connection with commercial real estate.” During this Phase I ESA, linoleum and mastic under the second floor carpet, and 9-inch tiles on the first floor were determined to be ACM.
2. ASTM E 1527-05 states that lead-based paints (LBP) are “non-scope considerations that persons may want to assess in connection with commercial real estate”. Based on the age of the subject building, LBP are presumed to be present.
3. ASTM E 1527-05 states that industrial hygienic conditions are “non-scope considerations that persons may want to assess in connection with commercial real estate”. During this site inspection, evidence of water incursion and mold growth was noted.

10.0 RECOMMENDATIONS

1. Prior to renovation or demolition of the subject building, an asbestos survey should be conducted in compliance with state and federal asbestos regulations. The non-friable organically bound (NOB) materials determined to be non-asbestos materials during this preliminary asbestos screening should be verified not to contain asbestos by transmission electron microscopy prior to disturbance.
2. When the subject building is renovated, the work should be carried out with “lead-safe work practices” in compliance with OSHA regulations.
3. Mold issues should be addressed during renovation in compliance with all applicable mold mitigation protocols.

11.0 DISCLAIMER

Passero Associates represents only that it provides services in accordance with generally accepted practices in the environmental audit field. No other representation, expressed or implied, is included or intended as part of its services, proposals, contracts or reports.

Passero Associates cannot provide guarantees, certifications or warranties that the property is or is not free of environmental impairment without a Phase II Site Assessment involving collection and laboratory analysis of environmental samples. Even with such a program, the data and samples from any given soil boring or monitoring will indicate conditions that apply only at that particular location, and such conditions may not necessarily apply to the general site as a whole.

12.0 LIMITATION OF LIABILITY

First Amherst Development Group and Passero Associates have discussed the risks, rewards and benefits of the project and Passero Associates' total fee for services. The risks have been allocated such that First Amherst Development Group agrees that to the fullest extent permitted by law, Passero Associates' total liability or claims expenses arising out of this agreement from any cause or causes shall not exceed \$100,000.

In addition, First Amherst Development Group agrees that the due diligence as described in ASTM Practice E1527-05 is acceptable to them, and that to the fullest extent permitted by law, Passero Associates shall not be liable for limiting its site assessment to the due diligence effort described.

Respectfully Submitted,

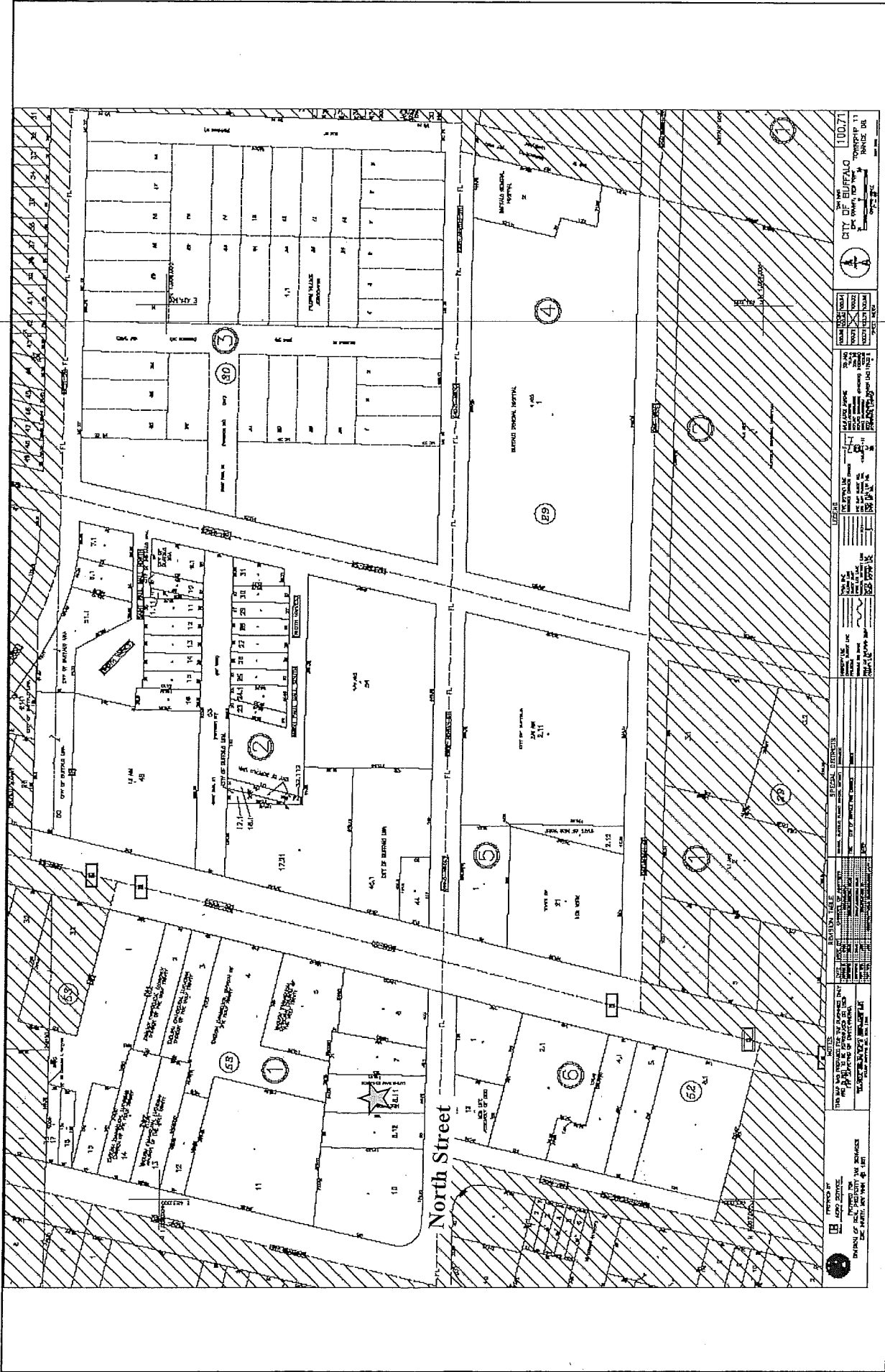


Peter S. Morton, C.P.G.
Certified Professional Geologist



Gary W. Passero, R.E.M.
Chairman and CEO

APPENDIX 1
Tax Map



REI Data Inc. reidi.propertyinfo.com - Map Name: maps/BUFF/100_71.tif

★ = 19 NORTH ST

APPENDIX 2
Owner Questionnaire

***The questionnaire was not completed and
returned by 5/15/06***

APPENDIX 3

Sanborn Maps



EDR® Environmental
Data Resources Inc

"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Pete Morton

Passero Associates

100 Liberty Pole Way

Rochester, NY 14604

Order Date: 5/8/2006

Completion Date: 5/10/2006

Inquiry #: 1671240.3s

P.O. #: 9999.99

Site Name: 19 23 North St

Address: 19 23 North St

City/State: Buffalo, NY 14209

Cross Streets:

Customer Project: 9999.99

1019138ERK

585-325-1000

Based on client-supplied information, fire insurance maps for the following years were identified

1889 - 1 Map

1899 - 1 Map

1925 - 1 Map

1951 - 1 Map

1981 - 1 Map

1986 - 1 Map

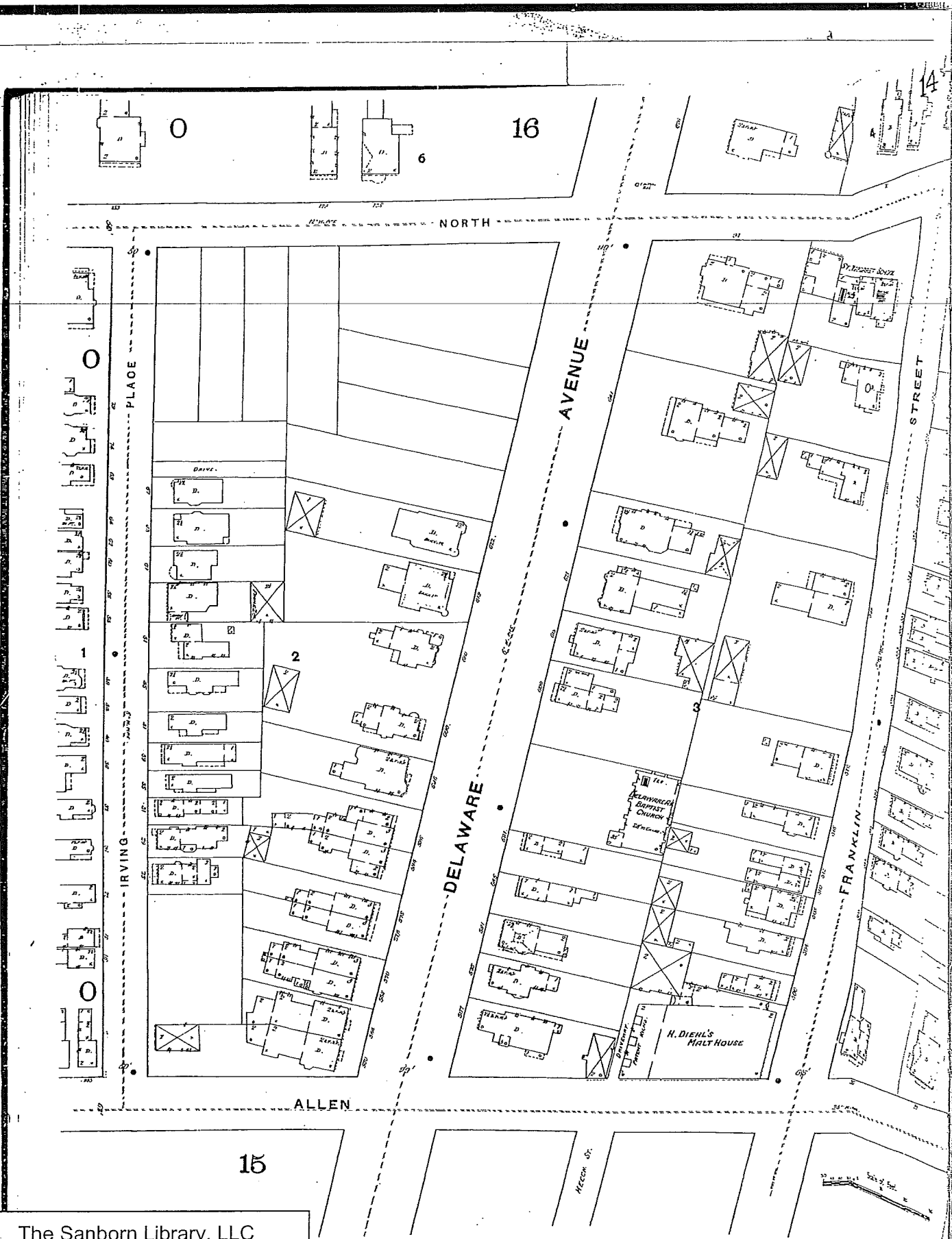
Limited Permission to Photocopy

Total Maps: 6

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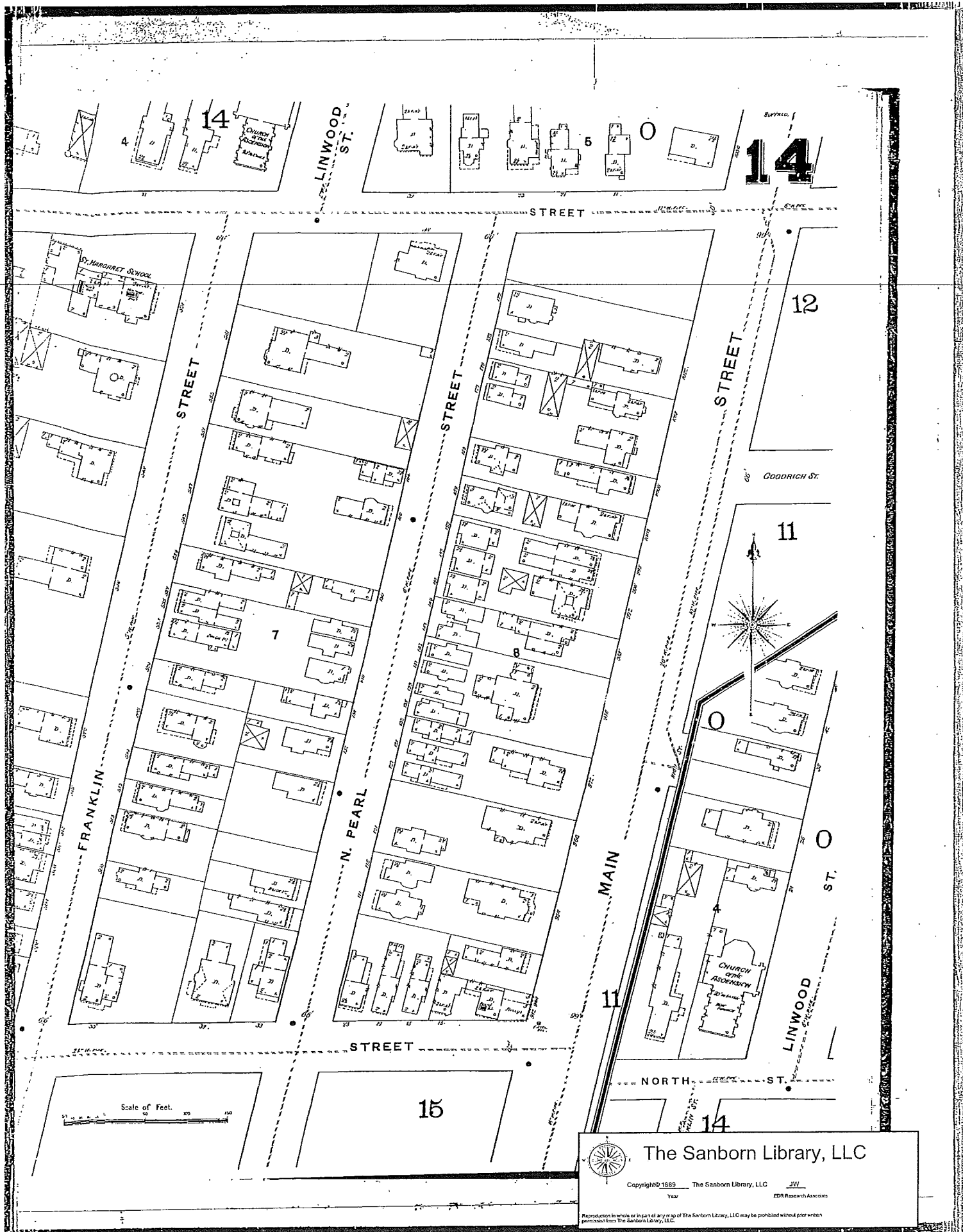
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Year EDR Research Associates

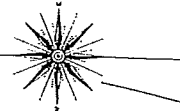
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SEE VOLUME THREE

56

MAIN



55

SUMMER

LINWOOD AV.

43

NORTH

DELAWARE AV.

Scale of Feet. 0 50 100 150

54



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73
68

104

DELAWARE AV.

SUMMER

74

LINWOOD AV

72
K. PEROL ST

MAIN

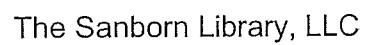
85

83

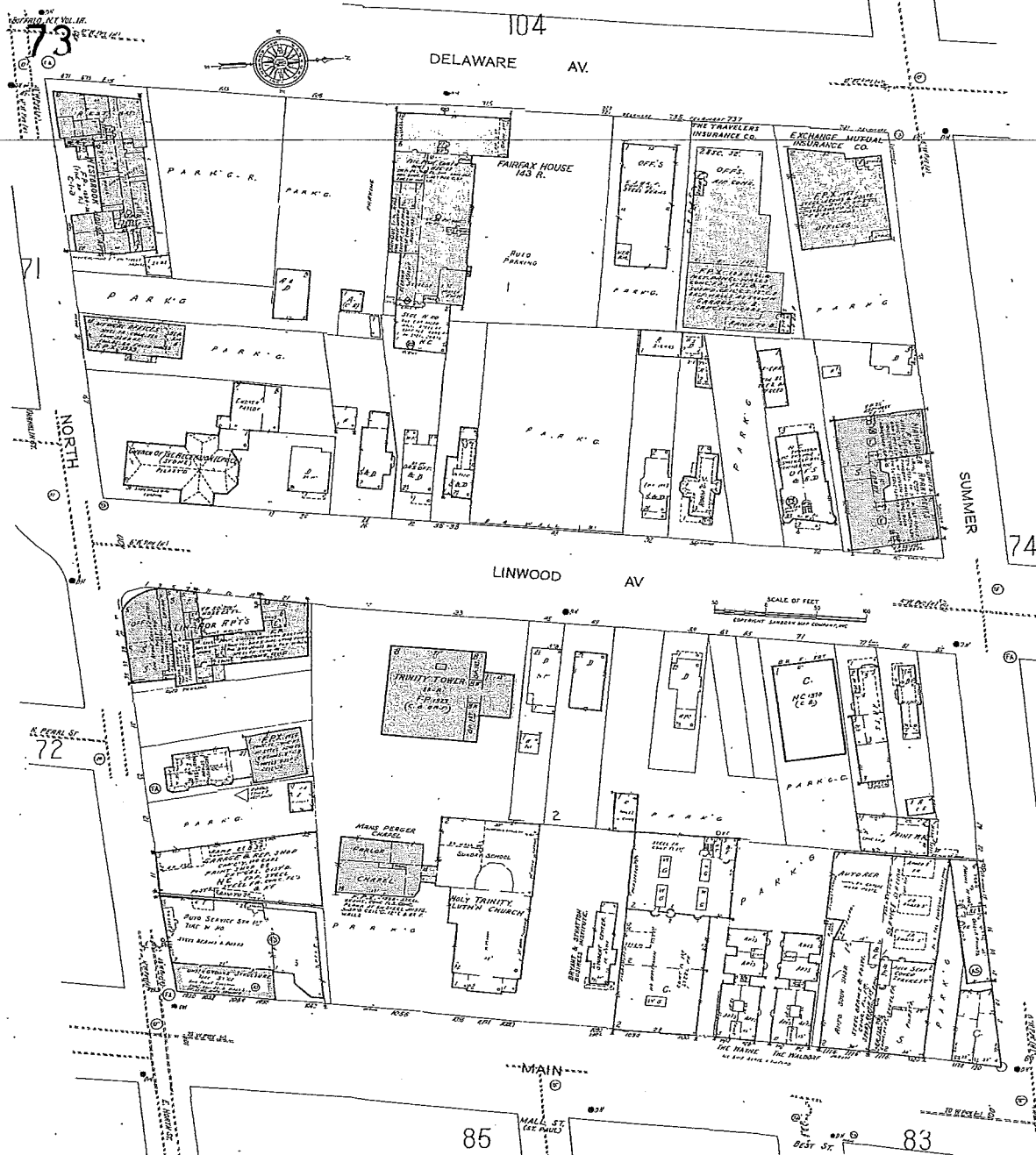
Scale of Feet.
0 50 100 150
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APPENDIX 4

PLM Analyses



179 Lake Avenue Rochester, New York 585-647-2530 FAX 585-647-3311

PLM BULK ASBESTOS REPORT

Client: **Passero Associates**
 Location: 19, 23 North Street
 Buffalo, New York
 Sample Date: 5/10/2006

Job No: 4894-06
 Page: 1 of 3

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	N O B	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
1	32679a	3rd Floor, Top of Stairs	Brown 9"x9" Floor Tile	Inconclusive No Asbestos Detected	0%	√	*	None Detected	100%
1	32679b	3rd Floor, Top of Stairs	Brown Fibrous Paper	None Detected	0%			Cellulose 85%	15%
2	32680a	3rd Floor, Top of Stairs	Black 9"x9" Floor Tile	Inconclusive No Asbestos Detected	0%	√	*	None Detected	100%
2	32680b	3rd Floor, Top of Stairs	Brown Fibrous Paper	None Detected	0%			Cellulose 85%	15%
3	32681a	3rd Floor, Wall Board	Gray Wall Board	None Detected	0%			None Detected	100%
3	32681b	3rd Floor, Wall Board	White Wall Board	None Detected	0%			None Detected	100%
4	32682a	3rd Floor, Wall Board	Tan 9"x9" Floor Tile	Inconclusive No Asbestos Detected	0%	√	*	None Detected	100%
4	32682b	3rd Floor, Wall Board	Black Felt Paper	Inconclusive No Asbestos Detected	0%	√	*	None Detected	100%
5	32683	3rd Floor, Plaster	Gray Wall Plaster	None Detected	0%			Animal Hair 2%	98%
6	32684a	2nd Floor, Under Carpet	Tan Fibrous Linoleum	Chrysotile 11%	11%	√		None Detected	89%

ELAP ID No.: 10958

NVLAP Lab Code 200530-0

New York State Department of Health, ELAP Method 198.1 and 198.6 ("Polarized Light Microscopy Methods for Identifying and Quantitating Asbestos in Bulk Samples and in Non-Friable Organically Bound Bulk Samples.").

√ NOB Classified for Analytical Purposes Only.

* Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Date Analyzed: 5/11/2006
 Microscope: Olympus BH-2 #232953
 Analyst: B. Weinman

Laboratory Results Approved By:
 Asbestos Technical Director

J. Peter Bonatti for
 Mary Dohr

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5/12/2006

File ID: 4894-06.xls



179 Lake Avenue Rochester, New York 585-647-2530 FAX 585-647-3311

PLM BULK ASBESTOS REPORT

Client: Passero Associates
 Location: 19, 23 North Street
 Buffalo, New York
 Sample Date: 5/10/2006

Job No: 4894-06
 Page: 2 of 3

Client ID	Lab ID	Sampling Location	Description	Asbestos Fibers Type & Percentage	Total Asbestos	N O B	T E M	Non-Asbestos Fibers Type & Percentage	Matrix Material %
6	32684b	2nd Floor, Under Carpet	Brown Linoleum Mastic	Chrysotile 3%	3%	✓		None Detected	97%
7	32685	2nd Floor, Under Carpet	Black Felt Paper	None Detected	0%			None Detected	100%
8	32686a	2nd Floor, Under Carpet	Tan/Gray Fibrous Paper	None Detected	0%			Cellulose 90%	10%
9	32688b	2nd Floor, Under Carpet	Black Felt Paper	None Detected	0%			None Detected	100%
10	32687a	2nd Floor, Under Carpet	Red Linoleum	Inconclusive No Asbestos Detected	0%	✓		None Detected	100%
10	32687b	2nd Floor, Under Carpet	Black Felt Paper	Inconclusive No Asbestos Detected	0%	✓		None Detected	100%
11	32688	2nd Floor	White Wall Material	None Detected	0%			None Detected	100%
12	32688a	1st Floor	Dark Green 9"x9" Floor Tile	Inconclusive No Asbestos Detected	0%	✓		None Detected	100%
12	32689b	1st Floor	Brown Floor Tile Mastic	None Detected	0%	✓		None Detected	100%
13	32690a	1st Floor	Light Green 9"x9" Floor Tile	Inconclusive No Asbestos Detected	0%	✓		None Detected	100%

ELAP ID No.: 10958**NVLAP** Lab Code 200530-0

New York State Department of Health, ELAP Method 198.1 and 198.6 ("Polarized Light Microscopy Methods for Identifying and Quantitating Asbestos in Bulk Samples and in Non-Friable Organically Bound Bulk Samples.").

✓ NOB Classified for Analytical Purposes Only.

Date Analyzed: 5/11/2006
 Microscope: Olympus BH-2 #232953
 Analyst: B. Weinman

Laboratory Results Approved By:
 Asbestos Technical Director

J. Peter Smith for
 Mary Dohr

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5/12/2006

File ID: 4894-06.xls



C&S Companies

141 Elm Street
Suite 100
Buffalo, NY 14203
p: (716) 847-1630
f: (716) 847-1454
www.cscos.com

July 2, 2015

Ben Oblatz
President
First Amherst Development Company
4508 Main Street
Amherst, New York 14226
ben@firstamherst.com

*Re: 19 North Street, Buffalo New York
Pre-development Soil Sampling Results Report*

Dear Ben,

In preparation for the development on the two adjacent properties located at 19 and 23 North Street, Buffalo, New York, First Amherst Development Company (First Amherst) requested C&S Engineers, Inc. (C&S) to conduct a subsurface investigation at 19 North Street (the Site). The adjacent parcel at 23 North Street was not assessed as the on-site building was recently demolished and clean fill was used to bring the former basement to grade.

This subsurface investigation assessed the current condition of soils beneath the Site and specifically targeted the condition of the urban fill placed on the Site prior to First Amherst's purchase of the property in 2006. The Site is planned for redevelopment as a residential apartment complex and the potential presence of contaminants in the fill would complicate that development.

The following letter report provides a summary of the subsurface investigation conducted on June 5, 2015 at the Site.

Site Background

The properties at 19 and 23 North Street were historically used for residential purposes. The residence at 19 North Street was demolished on or before 1981 and converted into a parking lot and radio tower site for the adjacent property at 23 North Street. The radio tower was removed around 2013.

Field investigation

To characterize the fill at the Site, C&S advanced six soil borings using direct-push drilling techniques. The borings were advanced to a depth of 12 feet below grade. Drilling was performed by Nature's Way Environmental using a SIMCO Earthprobe 200. Each boring location was continuously sampled in four-foot intervals using a one-inch by four-foot

steel sampling tube fitted with a disposable acetate liner. All non-disposable sampling equipment was decontaminated between runs and between drill locations to avoid potential cross contamination of samples.

A C&S scientist observed the drilling and described the soil cuttings, screened the soils, and recorded pertinent information on soil boring logs, which are attached. A Mini-Rae 2000 photo-ionization detector (PID) with an 11.7 volt lamp was used to measure total organic vapors and the PID screening measurements are also recorded on the soil boring logs.

Soil samples were selected for laboratory analysis based on staining, odor, PID readings or depth. The soil samples were analyzed for USEPA Target Compound List (TCL) semivolatile organic compounds (SVOCs) and USEPA Target Analyte List (TAL) metals.

Results

Soil/Fill Conditions

Site soils were generally defined as follows:

- Fill: Slag, gravel, clay, brick and dark sand.
- Native Materials
 - Silty Clay: Organic clays of medium to high plasticity. Generally appeared as soft moist reddish brown clay with variable silt content.
 - Silt: brown moist material with trace of fine Sand.
 - Silty Sand: brown to light brown fine Sand with 10 – 20% silt content.

In the borings, the fill material was present just below the asphalt and associated subbase and the native material was observed under the fill, with the exception of boring EB-4, in which no fill was observed. The following table summarizes the observed fill thicknesses:

<i>Boring #</i>	<i>Approx. Fill Thickness (feet)</i>
EB-1	0.75
EB-2	9
EB-3	6
EB-4	-
EB-5	4
EB-6	4

Water was observed at depths of approximately 5.5 feet below grade in each boring.

Analytical Results

A total of 5 samples were collected for analysis and the results were compared to the NYSDEC Soil Cleanup Objectives (SCOs) for the various possible uses of the Site. Table 1 summarizes the analytical results, and the full laboratory data package is attached to this letter.

Four of the five soil samples contained at least one contaminant at concentrations that exceeded Unrestricted Use SCOs. Two of the 5 samples contained compounds that exceeded Restricted Residential Use SCOs, which is the guidance for properties to be used for apartments or other high density residential developments.

<i>Sample ID</i>	<i>Sample Depth(ft)</i>	<i>SCO Exceeded</i>	<i>Contaminant</i>
EB-2	1-2	Unrestricted Use	Indeno[1,2,3-cd]pyrene Lead Mercury Zinc
		Restricted Residential	Indeno[1,2,3-cd]pyrene Lead
		Residential	Indeno[1,2,3-cd]pyrene Lead
EB-3	2	Unrestricted Use	Lead Mercury
EB-4	2-3	Unrestricted Use	Lead
		Restricted Residential	Lead
EB-5	2	Unrestricted Use	Lead

Summary

The Site is currently vacant and is being considered, along with an adjacent property, for development as a multi-tenant apartment complex. The Site contains urban fill across the site with thickness ranging up to more than eight feet.

The on-site fill was sampled and the resulting samples were analyzed for SVOCs and metals. The analytical results indicate that the Site's urban fill contains contaminants at concentrations above NYSDEC SCOs. While the concentrations of contaminants in the fill does not indicate that the Site is subject to regulatory action, their presence will complicate redevelopment of the Site for high density housing. Based on the contraventions of NYSDEC SCOs, the site appears to be eligible for inclusion in the NYSDEC Brownfield Cleanup Program (BCP). The BCP is a structured program for the remediation and redevelopment of brownfield sites and includes a liability release from the State as well as significant tax credits.

Please do not hesitate to contact me with any questions or comments. We appreciate the opportunity to work with you on this project.

Sincerely yours,
C&S ENGINEERS, INC.



Mark Colmerauer

Regional Environmental Services Manager

f:\project\p67 - first amherst development company\planning-study\reports\19 north street
report july 2015\final results letter.19 north street.docx



LEGEND

● SOIL BORING LOCATION



C&S Engineers, Inc.
141 Elm Street
Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.cscos.com



23 NORTH STREET

BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO:	063.001.001	
DATE:	APRIL 7, 2015	
DRAWN BY:	A. DeMARCHI	
DESIGNED BY:	A. DeMARCHI	
CHECKED BY:	D. RIKER	
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

SOIL BORING
LOCATIONS

FIGURE 1

Table 1
Summary of Analytical Results
19 North Street, Buffalo, New York

Contaminant	Unrestricted Use	Residential Use	Restricted-Residential	Commercial	Industrial	EB-1	EB-2	EB-3	EB-4	EB-5
Semivolatile organic compounds ppm=mg/kg										
Benz(a)anthracene	1	1	1	5.6	11	ND	0.67	ND	ND	0.036
Benzo(b)fluoranthene	1	1	1	5.6	11	ND	0.69	ND	ND	ND
Benzo(g,h,i)perylene	100	100	100	500	1,000	ND	2.0	ND	ND	0.089
bis2-ethylhexylphthalate	-	-	-	-	-	ND	ND	ND	ND	0.13
Fluoranthene	100	100	100	500	1,000	ND	1.2	ND	ND	0.039
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	11	ND	1.8	ND	ND	0.081
Phenanthrene	100	100	100	500	1,000	ND	0.8	ND	ND	0.033
Pyrene	100	100	100	500	1,000	ND	1.1	ND	ND	0.036
Metals ppm=mg/kg										
Aluminum	-	-	-	-	-	8230	6970	8140	6420	6750
Arsenic	13	16	16	16	16	2.8	5.9	3.2	2.1	3.5
Barium	350	350	400	400	10,000	32.7	86.8	52.3	29.1	45.4
Beryllium	7.2	14	72	590	2,700	0.33	0.4	0.31	0.26	0.32
Cadmium	2.5	2.5	4.3	9.3	60	0.21	0.51	0.27	0.22	0.21
Calcium	-	-	-	-	-	4790	68000	12500	17500	2060
Chromium	30	36	180	1,500	6,800	8.8	8.6	9.5	7	8.1
Cobalt	-	-	-	-	-	3.9	3.6	4.1	3	3.4
Copper	50	270	270	270	10,000	8.7	16.0	11.6	6.9	12.5
Iron	-	-	-	-	-	11300	8130	10800	8730	8850
Total Cyanide	27	27	27	27	10,000	ND	0.89	ND	ND	ND
Lead	63	400	400	1,000	3,900	14.7	557	67	676	81.1
Magnesium	-	-	-	-	-	4700	9120	7230	10400	11500
Manganese	1600	2,000	2,000	10,000	10,000	369	366	427	376	339
Total Mercury	0.18	0.81	0.81	2.8	5.7	0.028	0.22	0.34	0.13	0.16
Nickel	30	140	310	310	10,000	8.7	9.4	8.3	6	7.2
Potassium	-	-	-	-	-	1060	805	1020	891	878
Silver	2	36	180	1,500	6,800	ND	1.4	ND	ND	ND
Sodium	-	-	-	-	-	138	333	190	117	115
Vanadium	-	-	-	-	-	17.4	15.3	17.7	14.3	15.6
Zinc	109	2200	10,000	10,000	10,000	83.5	217	86	64.6	62.9

Notes:

Only contaminants detected in at least one sample are shown.

Contaminants at concentrations above Unrestricted Use SCOs are highlighted.

Contaminants at concentrations above Restricted Residential Use SCOs are bolded.

-¹ No SCO exists for analyte

 C&S Engineers, Inc. 141 Elm Street Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		BORING LOG		Boring No. EB-1	
				Sheet 1 of: 1	
				Project No.: P67.001.001	
Project Name: 19/23 North Street Soil Sampling				Surface Elev.:	
Location: 23 North Street, Buffalo, NY				Datum: Ground surface	
Client: 1st Amherst Development				Start Date: 6/5/15	
Drilling Firm: Nature's Way Environmental				Finish Date: 6/5/15	
Groundwater		Depth	Date & Time	Drill Rig: SIMCO Earthprobe 200	
While Drilling:				Casing: 2.125"	Rock Core:
Before Casing Removal:				Sampler: Acetate liner	Other:
After Casing Removal:				Hammer:	
(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)					
Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION	COMMENTS
			c - coarse m - medium f - fine	a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	(e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0-9" <u>Asphalt and Gravel Base</u>	0ppm 7:30 AM
2				9"-30" <u>Sandy SILT-brown-moist-fine Sand</u>	0ppm Weather: Clear, sunny, 70 F
3					30 " recovered
4					
5				0-8" <u>Slug</u>	36" recovered
6				8"-33" <u>Sandy SILT-brown-moist-fine to medium Sand-wet</u>	0ppm
7				<u>wet material at 22" below top of geoprobe sample</u>	0ppm
8				33"-36" <u>Silty CLAY-brown-soft</u>	0ppm
9					
10				0-10" <u>Slug</u>	48" recovered
11				10"-14" <u>Silty CLAY-brown-soft</u>	
12				14"-20" <u>Sandy SILT-fine Sand-water saturated</u>	
13				20"-25" <u>Silty CLAY-brown-soft</u>	
14				25"-26" <u>Silty SAND-medium Sand-brown-wet</u>	
15				26"-32" <u>Silty CLAY-brown-soft</u>	
16				32"-48" <u>SILT-brown-water saturated</u>	
17					
18					
19					
20					
21					
22					
23					
END OF BORING AT 12 FT					
Sample: EB-1-6-7ft					

 C&S Engineers, Inc. 141 Elm Street Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		BORING LOG		Boring No. EB-2	
				Sheet 1 of: 1	
				Project No.: P67.001.001	
Project Name: 19/23 North Street Soil Sampling				Surface Elev.:	
Location: 23 North Street, Buffalo, NY				Datum: Ground surface	
Client: 1st Amherst Development				Start Date: 6/5/15	
Drilling Firm: Nature's Way Environmental				Finish Date: 6/5/15	
Groundwater		Depth	Date & Time	Drill Rig: SIMCO Earthprobe 200	Inspector: CM
While Drilling:		Casing: 2.125"	Rock Core:		Undist:
Before Casing Removal:		Sampler: Acetate liner	Other:		
After Casing Removal:		Hammer:			
(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)					
Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION	COMMENTS
			c - coarse m - medium f - fine	a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	(e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0-10" <u>Asphalt and Gravel Base</u> 0ppm 10"-30" <u>FILL-dark grey Sand, Silt and trace Clay-brick and concrete pieces at 20"-30" below top of geoprobe sample-moist</u> 0ppm	9:00 AM Weather: Clear, sunny, 70 F 30 " recovered
2					
3					
4					
5				0-12" <u>FILL-dark grey Sand, Silt and trace Clay-brick and concrete</u> 0ppm <u>-wet</u>	12" recovered
6					
7					
8					
9				0-16" <u>FILL-Sand,Silt and trace Clay-trace coal pieces-wet</u> 16"-20" <u>Sandy SILT-brown-water saturated-loose</u>	20" recovered
10					
11					
12					
13					
14				<u>END OF BORING AT 12 FT</u>	
15				Sample: EB-2-1-2ft	
16					
17					
18					
19					
20					
21					
22					
23					

		C&S Engineers, Inc. 141 Elm Street Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		BORING LOG		Boring No.		EB-3	
		Sheet 1 of:				1			
		Project No.:				P67.001.001			
Project Name: 19/23 North Street Soil Sampling						Surface Elev.:			
Location: 23 North Street, Buffalo, NY						Datum:		Ground surface	
Client: 1st Amherst Development						Start Date:		6/5/15	
Drilling Firm: Nature's Way Environmental						Finish Date:		6/5/15	
Groundwater		Depth	Date & Time	Drill Rig: SIMCO Earthprobe 200		Inspector:		CM	
While Drilling:				Casing:	2.125"	Rock Core:	Undist:		
Before Casing Removal:				Sampler:	Acetate liner	Other:			
After Casing Removal:				Hammer:					
(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)									
Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION c - coarse m - medium f - fine S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey			COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)		
1			0-5"	<u>Asphalt and Gravel Base</u>			0ppm	9:30 AM	
			5"-21"	<u>Sandy SILT imbedded dark grey Silty Clay-soft-trace imbedded coal-moist-trace Gravel</u>			0ppm	Weather: Clear, sunny, 70 F	
2			21"-24"	<u>Sandy SILT-brown-moist</u>			0ppm	24 " recovered	
3									
4									
5			0-9"	<u>Slug</u>				34" recovered	
			9"-24"	<u>Sandy SILT-brown-wet to saturated at 21"-fine Sand-trace coal</u>			0ppm		
6			24"-30"	<u>Silty CLAY-dark brown-soft</u>			0ppm		
7			30"-34"	<u>Silty CLAY-brown-dense</u>			0ppm		
8									
9			0-11"	<u>Slug</u>				35" recovered	
			11"-18"	<u>Silty CLAY-brown-dense</u>			0ppm		
			18"-21"	<u>Silty SAND-medium-water saturated-brown</u>			0ppm		
10			21"-31"	<u>Silt and Clay-some Clay-moist-wet-soft</u>			0ppm		
			31"-35"	<u>Silty CLAY-soft-moist-brown</u>			0ppm		
11									
12									
13									
14				<u>END OF BORING AT 12 FT</u>					
15				Sample:					
16				EB-3-2ft					
17									
18									
19									
20									
21									
22									
23									

 C&S Engineers, Inc. 141 Elm Street Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		BORING LOG		Boring No. EB-4	
				Sheet 1 of: 1	
				Project No.: P67.001.001	
Project Name: 19/23 North Street Soil Sampling				Surface Elev.:	
Location: 23 North Street, Buffalo, NY				Datum: Ground surface	
Client: 1st Amherst Development				Start Date: 6/5/15	
Drilling Firm: Nature's Way Environmental				Finish Date: 6/5/15	
Groundwater		Depth	Date & Time	Drill Rig: SIMCO Earthprobe 200	Inspector: CM
While Drilling:				Casing: 2.125"	Rock Core:
Before Casing Removal:				Sampler: Acetate liner	Other:
After Casing Removal:				Hammer:	
(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)					
Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION	COMMENTS
			c - coarse m - medium f - fine	a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	(e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0-10" <u>Asphalt and Gravel Base</u> 0ppm	10:30 AM
2				10"-34" <u>Sandy SILT-moist-brown-fine Sand</u> 0ppm	Weather: Clear, sunny, 70 F
3					34 " recovered
4					
5				0-12" <u>Slug</u> 0ppm	48" recovered
6				12"-31" <u>Silt and Clay-brown-wet-trace Clay-imbedded Gravel</u> 0ppm	
7				<u>water saturated at 24" to 31"</u>	
8				31"-33" <u>Silty CLAY-brown-dense</u> 0ppm	
9				33"-43" <u>Silt and Clay-brown-wet-trace Clay-imbedded Gravel</u> 0ppm	
10				43"-48" <u>Silty CLAY-brown-dense</u> 0ppm	
11					
12				0-11" <u>Slug</u> 0ppm	46" recovered
13				12"-16" <u>Silty CLAY-brown-dense</u> 0ppm	
14				16"-46" <u>Silt and Clay-brown-water saturated-trace fine Sand</u> 0ppm	
15					
16					
17					
18					
19					
20					
21					
22					
23					
END OF BORING AT 12 FT					
Sample: EB-4-2-3ft					

 C&S Engineers, Inc. 141 Elm Street Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		BORING LOG		Boring No.		EB-5	
				Sheet 1 of:		1	
				Project No.:		P67.001.001	
Project Name: 19/23 North Street Soil Sampling				Surface Elev.:			
Location: 23 North Street, Buffalo, NY				Datum:		Ground surface	
Client: 1st Amherst Development				Start Date:		6/5/15	
Drilling Firm: Nature's Way Environmental				Finish Date:		6/5/15	
Groundwater		Depth	Date & Time	Drill Rig: SIMCO Earthprobe 200		Inspector:	
While Drilling:				Casing: 2.125"	Rock Core:	Undist:	
Before Casing Removal:				Sampler: Acetate liner	Other:		
After Casing Removal:				Hammer:			
(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)							
Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION c - coarse m - medium f - fine S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%		COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)	
1			0-11"	<u>Asphalt and Gravel Base</u>		0ppm	10:00 AM
			11"-27"	<u>FILL-crushed coal-Silt with trace fine Sand and Gravel trace</u>		0ppm	Weather: Clear, sunny, 70 F
2				<u>Clay-brown to dark brown-moist-brick pieces</u>			27" recovered
3							
4							
5			0-12"	<u>Slug</u>			26" recovered
			12"-26"	<u>Sandy SILT-brown-fine Sand-water saturated</u>		0ppm	
6							
7							
8							
9			0-8"	<u>Slug</u>			48" recovered
			8"-18"	<u>Silty CLAY-brown-soft</u>		0ppm	
			18"-32"	<u>Silt and Clay-brown-water saturated-trace fine Sand</u>		0ppm	
10			32"-48"	<u>Sandy SILT-grey-slight petroleum odor</u>		10 ppm	
11							
12							
13							
14				<u>END OF BORING AT 12 FT</u>			
15				Sample:			
16				EB-5-2ft			
17							
18							
19							
20							
21							
22							
23							

 C&S Engineers, Inc. 141 Elm Street Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		BORING LOG		Boring No. EB-6		
				Sheet 1 of: 1		
				Project No.: P67.001.001		
Project Name: 19/23 North Street Soil Sampling				Surface Elev.:		
Location: 23 North Street, Buffalo, NY				Datum: Ground surface		
Client: 1st Amherst Development				Start Date: 6/5/15		
Drilling Firm: Nature's Way Environmental				Finish Date: 6/5/15		
Groundwater		Depth	Date & Time	Drill Rig: SIMCO Earthprobe 200	Inspector: CM	
While Drilling:				Casing: 2.125"	Rock Core:	
Before Casing Removal:				Sampler: Acetate liner	Other:	
After Casing Removal:				Hammer:		
(N -- No. of blows to drive sampler 12" w/140 lb. hammer falling 30" ASTM D-1586, Standard Penetration Test)						
Depth (ft)	Sample No.	Symbol	Blows on Sampler per 6"	MATERIAL DESCRIPTION c - coarse m - medium f - fine S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	COMMENTS (e.g., N-value, recovery, relative moisture, core run, RQD, % recovered)	
1			0-12"	<u>Asphalt and Gravel Base</u>	0ppm	11:00 AM
		12"-24"	<u>FILL-Silt trace fine Sand trace crushed coal and Gravel</u>	0ppm	Weather: Clear, sunny, 70 F	
2				<u>moist to wet</u>		24" recovered
3						
4						
5			0-12"	<u>Slug</u>		36" recovered
			12"-32"	<u>Silt and Clay-brown-soft-wet to saturated</u>	0ppm	
			32"-36"	<u>Silty CLAY-some Silt-dark grey</u>	0ppm	
6						
7						
8						
9				<u>Silt and Clay -no petroleum odor</u>		
10				<u>Liner stuck in casing</u>		
11						
12						
13						
14				<u>END OF BORING AT 12 FT</u>		
15						
16				Sample:		
				No sample collected		
17						
18						
19						
20						
21						
22						
23						



C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

BORING LOG GENERAL INFORMATION & KEY

Casing, Sampling and Other Equipment

H.S.A: Hollow Stem Auger (record I.D.)

S.S.A: Solid Stem Auger (record O.D.)

Steel: Hollow Steel Flush Joint Casing (recorded I.D.)

Open: Open Hole / No Casing (record I.D.)

S.S.: Split Spoon (record I.D.)

Hammer: Auto - Automatic, Manual - Manual (rope & cat-head)

Undist: Tube - Shelby, Oste - Osteberg (record I.D. & length)

Rock Cores

Standard I.D.

Wire Line I.D.

EW / EX 1-13/32"

-- --

AW / AX 1-25/32"

AQ 1-1/8"

BW / BX 2-7/32"

BQ 1-1/2"

NW / NX 2-27/32"

NQ 1-31/32"

HW / HX 2-25/32"

HQ 2-5/8"

Symbol Legend & Abbreviations

Abbreviations		Color
	W.O.R. - Weight of Rods	br - brown
	W.O.H. - Weight of Rods & Hammer	rd - red
	N - Standard Penetration Test N-value	gr - gray
	N.W.E. - No Water Encountered	grn - green
	do - ditto (same as above)	blk - black
	Rec - Recovery	wht - white
	RQD - Rock Quality Designation	
	PP - Pocket Penetrometer	
Tor - Torvane		

Description of Soil Density

Relative Soil Density determined while advancing the soil boring by using ASTM Method D-1586, *Standard Penetration Test N-Value*. The N-Value is calculated by adding the hammer blow counts of the 2nd and 3rd sampling intervals together for driving a 2" O.D. sampler with a 140 lb. hammer falling 30" --OR-- by obtaining Pocket Penetrometer or Torvane Readings.

Course Grained Soils Greater than half the material larger than No. 200 Sieve (sand and gravel)		Fine Grained Soils					
		N-Value	Undrained Shear Strength (q _u)				Relative Density
			psi	psf	tsf or kg/cm ²	kN/m ²	
N-Value	Relative Density	< 2	< 2.5	< 375	< 0.2	< 20	Very Soft
< 4	Very Loose	2 to 4	2.5 - 5	375 - 750	0.20 - 0.40	20 - 40	Soft
4 to 10	Loose	5 to 8	5 -10	750 - 1,500	0.40 - 0.75	40 - 75	Firm -or- Medium Stiff
11 to 30	Medium Dense	9 to 15	10 - 20	1,500 - 3,000	0.75 - 1.50	75 - 150	Stiff
31 to 50	Dense	16 to 30	20 - 40	3,000 - 6,000	1.50 - 3.00	150 - 300	Very Stiff
> 50	Very Dense	> 30	> 40	> 6,000	> 3	> 3,000	Hard

Description of Soil Type

Material	Grain Size	Material	Grain Size	Material	Grain Size	Material	Grain Size
Boulder	> 8"	Gravel		Sand		Silt & Clay < #200	
Cobble	8" - 3"	Course	3" - 1-1/2"	Course	#4 - #10	Note: # indicates U.S. Standard Sieve with size shown.	
		Medium	1-1/2" - 3/4"	Medium	#10 - #40		
		Fine	3/4" - #4	Fine	#40 - #200		

Bed Rock Classification Terms & Field Test / Field Observation

Term	Field Test / Field Observation	Rock Mass Classification based on RQD	
Hardness		RQD	Rock Mass Quality
Soft	Can be Scratched by Fingernail	< 25%	very poor
Medium Hard	Easily Scratched by Pen Knife or Nail	25% - 50%	poor
Hard	Difficultly Scratched by Pen Knife or Nail	50% - 75%	fair
Very Hard	Cannot be Scratched by Pen Knife or Nail	75% - 90%	good
Weathering		90% - 100%	excellent
Very Weathered	Based on observations (e.g., amount of disintegration, iron staining, core recovery, clay seams, amount of material within joints, etc.)	RQD = $\frac{\Sigma \text{ of pieces } \geq 4''}{\text{total length of run}}$ ASTM Method D-6032, <i>Standard Test Method for Determining Rock Quality Designation (RQD) of Rock Cores</i>	
Weathered			
Sound			
Bedding (Natural Breaks in Rock Layers)			
Laminated	< 1 inch		
Thinly Bedded	1 inch to 4 inches		
Bedded	4 inches to 12 inches		
Thickly Bedded	12 inches to 36 inches		
Massive	> 36 inches		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-81689-1

Client Project/Site: 23 North Street Project

For:

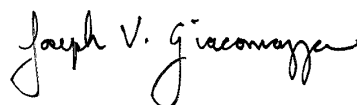
C&S Engineers, Inc.

141 Elm Street

Suite 100

Buffalo, New York 14203

Attn: Cody Martin



Authorized for release by:

6/16/2015 2:59:15 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Case Narrative

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Job ID: 480-81689-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-81689-1

Receipt

The samples were received on 6/5/2015 3:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC/MS VOA

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-246943 and analytical batch 480-247192 was outside control limits. .

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

GC/MS Semi VOA

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix : (480-81689-A-1-A MS) and (480-81689-A-1-B MSD). As such, surrogate and MS/MSD spike recoveries were diluted below the calibration range.

Method(s) 8270D: The following analyte recovered outside control limits for the LCS associated with preparation batch 480-246943 and analytical batch 480-247192: Acetophenone. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix : EB-2-1-2FT (480-81689-1). As such, surrogate recoveries are below the calibration range, and elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following samples were diluted due to appearance and viscosity: EB-3-2FT (480-81689-3) and EB-4-2-3FT (480-81689-5). Elevated reporting limits (RL) are provided.

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

Metals

Method(s) 6010C: The low level continuing calibration verifications (CCVL 480-247416/16 and 480-247416/26) associated with batch 480-247416 recovered above the upper control limit for total Barium. The samples associated with this CCVL contained this analyte at a concentration greater than 10X the result found in the CCVL; therefore, the data have been reported. (LCDSRM 480-246836/3-) and (LCSSRM 480-246836/2-)

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-247416/16) associated with batch 480-247416 recovered above the upper control limit for total Chromium and Iron. The samples associated with this CCVL contained this analyte at a concentration greater than 10X the result found in the CCVL; therefore, the data have been reported. (LCDSRM 480-246836/3-) and (LCSSRM 480-246836/2-)

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-247416/26) associated with batch 480-247416 recovered above the upper control limit for total Barium. The samples associated with this CCVL contained this analyte at a concentration greater than 10X the result found in the CCVL; therefore, the data have been reported. EB-2-1-2FT (480-81689-1), EB-1-6-2FT (480-81689-2) and EB-3-2FT (480-81689-3)

Method(s) 6010C: The continuing calibration blank (CCB) for analytical batch 480-247416 contained total Iron above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

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

Organic Prep

Case Narrative

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Job ID: 480-81689-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-2-1-2FT

Lab Sample ID: 480-81689-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	670	J	4100	410	ug/Kg	20		☼	8270D	Total/NA
Benzo[b]fluoranthene	690	J F1	4100	650	ug/Kg	20		☼	8270D	Total/NA
Benzo[g,h,i]perylene	2000	J	4100	430	ug/Kg	20		☼	8270D	Total/NA
Fluoranthene	1200	J F2	4100	430	ug/Kg	20		☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1800	J	4100	500	ug/Kg	20		☼	8270D	Total/NA
Phenanthrene	800	J F2	4100	600	ug/Kg	20		☼	8270D	Total/NA
Pyrene	1100	J	4100	480	ug/Kg	20		☼	8270D	Total/NA
Aluminum	6970	B	11.8	5.2	mg/Kg	1		☼	6010C	Total/NA
Arsenic	5.9		2.4	0.47	mg/Kg	1		☼	6010C	Total/NA
Barium	86.8	^	0.59	0.13	mg/Kg	1		☼	6010C	Total/NA
Beryllium	0.40		0.24	0.033	mg/Kg	1		☼	6010C	Total/NA
Cadmium	0.51		0.24	0.035	mg/Kg	1		☼	6010C	Total/NA
Calcium	68000	B	59.1	3.9	mg/Kg	1		☼	6010C	Total/NA
Chromium	8.6	B	0.59	0.24	mg/Kg	1		☼	6010C	Total/NA
Cobalt	3.6		0.59	0.059	mg/Kg	1		☼	6010C	Total/NA
Copper	16.0		1.2	0.25	mg/Kg	1		☼	6010C	Total/NA
Iron	8130	B	11.8	4.1	mg/Kg	1		☼	6010C	Total/NA
Lead	557		1.2	0.28	mg/Kg	1		☼	6010C	Total/NA
Magnesium	9120		23.6	1.1	mg/Kg	1		☼	6010C	Total/NA
Manganese	366	B	0.24	0.038	mg/Kg	1		☼	6010C	Total/NA
Nickel	9.4		5.9	0.27	mg/Kg	1		☼	6010C	Total/NA
Potassium	805		35.5	23.6	mg/Kg	1		☼	6010C	Total/NA
Silver	1.4		0.71	0.24	mg/Kg	1		☼	6010C	Total/NA
Sodium	333		165	15.4	mg/Kg	1		☼	6010C	Total/NA
Vanadium	15.3		0.59	0.13	mg/Kg	1		☼	6010C	Total/NA
Zinc	217		2.4	0.76	mg/Kg	1		☼	6010C	Total/NA
Mercury	0.22		0.024	0.0098	mg/Kg	1		☼	7471B	Total/NA
Cyanide, Total	0.59	J	1.2	0.58	mg/Kg	1		☼	9012B	Total/NA

Client Sample ID: EB-1-6-2FT

Lab Sample ID: 480-81689-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	8230	B	12.1	5.3	mg/Kg	1	☼	6010C	Total/NA	
Arsenic	2.8		2.4	0.49	mg/Kg	1	☼	6010C	Total/NA	
Barium	32.7	^	0.61	0.13	mg/Kg	1	☼	6010C	Total/NA	
Beryllium	0.33		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA	
Cadmium	0.21	J	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA	
Calcium	4790	B	60.6	4.0	mg/Kg	1	☼	6010C	Total/NA	
Chromium	8.8	B	0.61	0.24	mg/Kg	1	☼	6010C	Total/NA	
Cobalt	3.9		0.61	0.061	mg/Kg	1	☼	6010C	Total/NA	
Copper	8.7		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA	
Iron	11300	B	12.1	4.2	mg/Kg	1	☼	6010C	Total/NA	
Lead	14.7		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA	
Magnesium	3700		24.3	1.1	mg/Kg	1	☼	6010C	Total/NA	
Manganese	369	B	0.24	0.039	mg/Kg	1	☼	6010C	Total/NA	
Nickel	8.7		6.1	0.28	mg/Kg	1	☼	6010C	Total/NA	
Potassium	1060		36.4	24.3	mg/Kg	1	☼	6010C	Total/NA	
Sodium	138	J	170	15.8	mg/Kg	1	☼	6010C	Total/NA	
Vanadium	17.4		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA	
Zinc	83.5		2.4	0.78	mg/Kg	1	☼	6010C	Total/NA	

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-1-6-2FT (Continued)

Lab Sample ID: 480-81689-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Mercury	0.028		0.024	0.0097	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: EB-3-2FT

Lab Sample ID: 480-81689-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	8140	B	12.0	5.3	mg/Kg	1		✱	6010C	Total/NA
Arsenic	3.2		2.4	0.48	mg/Kg	1		✱	6010C	Total/NA
Barium	52.3	^	0.60	0.13	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.31		0.24	0.034	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.27		0.24	0.036	mg/Kg	1		✱	6010C	Total/NA
Calcium	12500	B	60.2	4.0	mg/Kg	1		✱	6010C	Total/NA
Chromium	9.5	B	0.60	0.24	mg/Kg	1		✱	6010C	Total/NA
Cobalt	4.1		0.60	0.060	mg/Kg	1		✱	6010C	Total/NA
Copper	11.6		1.2	0.25	mg/Kg	1		✱	6010C	Total/NA
Iron	10800	B	12.0	4.2	mg/Kg	1		✱	6010C	Total/NA
Lead	67.0		1.2	0.29	mg/Kg	1		✱	6010C	Total/NA
Magnesium	7230		24.1	1.1	mg/Kg	1		✱	6010C	Total/NA
Manganese	427	B	0.24	0.039	mg/Kg	1		✱	6010C	Total/NA
Nickel	8.3		6.0	0.28	mg/Kg	1		✱	6010C	Total/NA
Potassium	1020		36.1	24.1	mg/Kg	1		✱	6010C	Total/NA
Sodium	190		169	15.7	mg/Kg	1		✱	6010C	Total/NA
Vanadium	17.7		0.60	0.13	mg/Kg	1		✱	6010C	Total/NA
Zinc	86.0		2.4	0.77	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.34		0.025	0.010	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: EB-5-2FT

Lab Sample ID: 480-81689-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	36	J	190	19	ug/Kg	1		✱	8270D	Total/NA
Benzo[g,h,i]perylene	89	J	190	20	ug/Kg	1		✱	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	130	J	190	63	ug/Kg	1		✱	8270D	Total/NA
Fluoranthene	39	J	190	20	ug/Kg	1		✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	81	J	190	23	ug/Kg	1		✱	8270D	Total/NA
Phenanthrene	33	J	190	27	ug/Kg	1		✱	8270D	Total/NA
Pyrene	36	J	190	22	ug/Kg	1		✱	8270D	Total/NA
Aluminum	6750	B	11.1	4.9	mg/Kg	1		✱	6010C	Total/NA
Arsenic	3.5		2.2	0.44	mg/Kg	1		✱	6010C	Total/NA
Barium	45.4		0.55	0.12	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.32		0.22	0.031	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.21	J	0.22	0.033	mg/Kg	1		✱	6010C	Total/NA
Calcium	20600	B	55.5	3.7	mg/Kg	1		✱	6010C	Total/NA
Chromium	8.1	B	0.55	0.22	mg/Kg	1		✱	6010C	Total/NA
Cobalt	3.4		0.55	0.055	mg/Kg	1		✱	6010C	Total/NA
Copper	12.5		1.1	0.23	mg/Kg	1		✱	6010C	Total/NA
Iron	8850	B	11.1	3.9	mg/Kg	1		✱	6010C	Total/NA
Lead	81.1		1.1	0.27	mg/Kg	1		✱	6010C	Total/NA
Magnesium	11500		22.2	1.0	mg/Kg	1		✱	6010C	Total/NA
Manganese	339	B	0.22	0.035	mg/Kg	1		✱	6010C	Total/NA
Nickel	7.2		5.5	0.26	mg/Kg	1		✱	6010C	Total/NA
Potassium	878		33.3	22.2	mg/Kg	1		✱	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-5-2FT (Continued)

Lab Sample ID: 480-81689-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Sodium	115	J	155	14.4	mg/Kg	1		✱	6010C	Total/NA
Vanadium	15.6		0.55	0.12	mg/Kg	1		✱	6010C	Total/NA
Zinc	62.9		2.2	0.71	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.16		0.021	0.0086	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: EB-4-2-3FT

Lab Sample ID: 480-81689-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	6420	B	11.2	4.9	mg/Kg	1		✱	6010C	Total/NA
Arsenic	2.1	J	2.2	0.45	mg/Kg	1		✱	6010C	Total/NA
Barium	29.1		0.56	0.12	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.26		0.22	0.031	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.22		0.22	0.033	mg/Kg	1		✱	6010C	Total/NA
Calcium	17500	B	55.8	3.7	mg/Kg	1		✱	6010C	Total/NA
Chromium	7.0	B	0.56	0.22	mg/Kg	1		✱	6010C	Total/NA
Cobalt	3.0		0.56	0.056	mg/Kg	1		✱	6010C	Total/NA
Copper	6.9		1.1	0.23	mg/Kg	1		✱	6010C	Total/NA
Iron	8730	B	11.2	3.9	mg/Kg	1		✱	6010C	Total/NA
Lead	676		1.1	0.27	mg/Kg	1		✱	6010C	Total/NA
Magnesium	10400		22.3	1.0	mg/Kg	1		✱	6010C	Total/NA
Manganese	376	B	0.22	0.036	mg/Kg	1		✱	6010C	Total/NA
Nickel	6.0		5.6	0.26	mg/Kg	1		✱	6010C	Total/NA
Potassium	891		33.5	22.3	mg/Kg	1		✱	6010C	Total/NA
Sodium	117	J	156	14.5	mg/Kg	1		✱	6010C	Total/NA
Vanadium	14.3		0.56	0.12	mg/Kg	1		✱	6010C	Total/NA
Zinc	64.6		2.2	0.71	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.13		0.021	0.0086	mg/Kg	1		✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-2-1-2FT

Date Collected: 06/05/15 09:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-1

Matrix: Solid

Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4100	600	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
bis (2-chloroisopropyl) ether	ND		4100	810	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2,4,5-Trichlorophenol	ND		4100	1100	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2,4,6-Trichlorophenol	ND		4100	810	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2,4-Dichlorophenol	ND		4100	430	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2,4-Dimethylphenol	ND		4100	980	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2,4-Dinitrophenol	ND		40000	19000	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2,4-Dinitrotoluene	ND	F1 F2	4100	840	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2,6-Dinitrotoluene	ND	F2	4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2-Chloronaphthalene	ND		4100	670	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2-Chlorophenol	ND		4100	740	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2-Methylphenol	ND		4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2-Methylnaphthalene	ND		4100	810	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2-Nitroaniline	ND		7900	600	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
2-Nitrophenol	ND		4100	1100	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
3,3'-Dichlorobenzidine	ND		7900	4800	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
3-Nitroaniline	ND	F1	7900	1100	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4,6-Dinitro-2-methylphenol	ND		7900	4100	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4-Bromophenyl phenyl ether	ND		4100	570	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4-Chloro-3-methylphenol	ND		4100	1000	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4-Chloroaniline	ND		4100	1000	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4-Chlorophenyl phenyl ether	ND		4100	500	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4-Methylphenol	ND		7900	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4-Nitroaniline	ND		7900	2100	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
4-Nitrophenol	ND		7900	2800	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Acenaphthene	ND		4100	600	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Acenaphthylene	ND		4100	530	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Acetophenone	ND	*	4100	550	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Anthracene	ND		4100	1000	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Atrazine	ND		4100	1400	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Benzaldehyde	ND	F1	4100	3200	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Benzo[a]anthracene	670	J	4100	410	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Benzo[a]pyrene	ND		4100	600	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Benzo[b]fluoranthene	690	J F1	4100	650	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Benzo[g,h,i]perylene	2000	J	4100	430	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Benzo[k]fluoranthene	ND		4100	530	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Bis(2-chloroethoxy)methane	ND		4100	860	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Bis(2-chloroethyl)ether	ND		4100	530	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Bis(2-ethylhexyl) phthalate	ND	F2	4100	1400	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Butyl benzyl phthalate	ND		4100	670	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Caprolactam	ND		4100	1200	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Carbazole	ND		4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Chrysene	ND		4100	910	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Dibenz(a,h)anthracene	ND		4100	720	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Di-n-butyl phthalate	ND		4100	690	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Di-n-octyl phthalate	ND		4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Dibenzofuran	ND		4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Diethyl phthalate	ND		4100	530	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Dimethyl phthalate	ND		4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-2-1-2FT

Lab Sample ID: 480-81689-1

Date Collected: 06/05/15 09:00

Matrix: Solid

Date Received: 06/05/15 15:50

Percent Solids: 82.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1200	J F2	4100	430	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Fluorene	ND		4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Hexachlorobenzene	ND		4100	550	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Hexachlorobutadiene	ND		4100	600	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Hexachlorocyclopentadiene	ND		4100	550	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Hexachloroethane	ND		4100	530	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Indeno[1,2,3-cd]pyrene	1800	J	4100	500	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Isophorone	ND		4100	860	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
N-Nitrosodi-n-propylamine	ND		4100	690	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
N-Nitrosodiphenylamine	ND	F1	4100	3300	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Naphthalene	ND		4100	530	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Nitrobenzene	ND		4100	460	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Pentachlorophenol	ND		7900	4100	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Phenanthrene	800	J F2	4100	600	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Phenol	ND		4100	620	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Pyrene	1100	J	4100	480	ug/Kg	☼	06/09/15 08:23	06/10/15 17:50	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	67		34 - 132				06/09/15 08:23	06/10/15 17:50	20
Phenol-d5 (Surr)	71		11 - 120				06/09/15 08:23	06/10/15 17:50	20
p-Terphenyl-d14 (Surr)	89		65 - 153				06/09/15 08:23	06/10/15 17:50	20
2,4,6-Tribromophenol (Surr)	57		39 - 146				06/09/15 08:23	06/10/15 17:50	20
2-Fluorobiphenyl	84		37 - 120				06/09/15 08:23	06/10/15 17:50	20
2-Fluorophenol (Surr)	74		18 - 120				06/09/15 08:23	06/10/15 17:50	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6970	B	11.8	5.2	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Antimony	ND		17.7	0.47	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Arsenic	5.9		2.4	0.47	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Barium	86.8	^	0.59	0.13	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Beryllium	0.40		0.24	0.033	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Cadmium	0.51		0.24	0.035	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Calcium	68000	B	59.1	3.9	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Chromium	8.6	B	0.59	0.24	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Cobalt	3.6		0.59	0.059	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Copper	16.0		1.2	0.25	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Iron	8130	B	11.8	4.1	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Lead	557		1.2	0.28	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Magnesium	9120		23.6	1.1	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Manganese	366	B	0.24	0.038	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Nickel	9.4		5.9	0.27	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Potassium	805		35.5	23.6	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Selenium	ND		4.7	0.47	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Silver	1.4		0.71	0.24	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Sodium	333		165	15.4	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Thallium	ND		7.1	0.35	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Vanadium	15.3		0.59	0.13	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1
Zinc	217		2.4	0.76	mg/Kg	☼	06/09/15 08:34	06/10/15 14:24	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-2-1-2FT

Lab Sample ID: 480-81689-1

Date Collected: 06/05/15 09:00

Matrix: Solid

Date Received: 06/05/15 15:50

Percent Solids: 82.2

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.024	0.0098	mg/Kg	☼	06/09/15 14:15	06/09/15 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.59	J	1.2	0.58	mg/Kg	☼	06/10/15 14:40	06/11/15 12:53	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		0.10	0.10	%			06/11/15 08:42	1
Percent Solids	82		0.10	0.10	%			06/11/15 08:42	1

Client Sample ID: EB-1-6-2FT

Lab Sample ID: 480-81689-2

Date Collected: 06/05/15 09:30

Matrix: Solid

Date Received: 06/05/15 15:50

Percent Solids: 82.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	30	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
bis (2-chloroisopropyl) ether	ND		200	41	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2,4,6-Trichlorophenol	ND		200	41	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2,4-Dichlorophenol	ND		200	22	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2,4-Dinitrophenol	ND		2000	940	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2-Chloronaphthalene	ND		200	34	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2-Chlorophenol	ND		200	37	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2-Methylphenol	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2-Methylnaphthalene	ND		200	41	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2-Nitroaniline	ND		400	30	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
2-Nitrophenol	ND		200	58	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
3-Nitroaniline	ND		400	57	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4,6-Dinitro-2-methylphenol	ND		400	200	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4-Chloro-3-methylphenol	ND		200	51	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4-Chloroaniline	ND		200	51	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4-Methylphenol	ND		400	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
4-Nitrophenol	ND		400	140	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Acenaphthene	ND		200	30	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Acenaphthylene	ND		200	27	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Acetophenone	ND *		200	28	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Anthracene	ND		200	51	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Atrazine	ND		200	71	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Benzaldehyde	ND		200	160	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Benzo[a]pyrene	ND		200	30	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Benzo[b]fluoranthene	ND		200	33	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Benzo[g,h,i]perylene	ND		200	22	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-1-6-2FT

Lab Sample ID: 480-81689-2

Date Collected: 06/05/15 09:30

Matrix: Solid

Date Received: 06/05/15 15:50

Percent Solids: 82.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		200	27	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Bis(2-chloroethyl)ether	ND		200	27	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Bis(2-ethylhexyl) phthalate	ND		200	70	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Butyl benzyl phthalate	ND		200	34	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Caprolactam	ND		200	61	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Carbazole	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Chrysene	ND		200	46	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Dibenz(a,h)anthracene	ND		200	36	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Di-n-butyl phthalate	ND		200	35	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Dibenzofuran	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Diethyl phthalate	ND		200	27	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Fluoranthene	ND		200	22	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Fluorene	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Hexachlorobenzene	ND		200	28	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Hexachlorocyclopentadiene	ND		200	28	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Hexachloroethane	ND		200	27	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Indeno[1,2,3-cd]pyrene	ND		200	25	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Isophorone	ND		200	43	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
N-Nitrosodi-n-propylamine	ND		200	35	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
N-Nitrosodiphenylamine	ND		200	170	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Naphthalene	ND		200	27	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Nitrobenzene	ND		200	23	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Pentachlorophenol	ND		400	200	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Phenanthrene	ND		200	30	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Phenol	ND		200	31	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1
Pyrene	ND		200	24	ug/Kg	☼	06/09/15 08:23	06/10/15 18:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	69		34 - 132	06/09/15 08:23	06/10/15 18:16	1
Phenol-d5 (Surr)	72		11 - 120	06/09/15 08:23	06/10/15 18:16	1
p-Terphenyl-d14 (Surr)	92		65 - 153	06/09/15 08:23	06/10/15 18:16	1
2,4,6-Tribromophenol (Surr)	79		39 - 146	06/09/15 08:23	06/10/15 18:16	1
2-Fluorobiphenyl	80		37 - 120	06/09/15 08:23	06/10/15 18:16	1
2-Fluorophenol (Surr)	72		18 - 120	06/09/15 08:23	06/10/15 18:16	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8230	B	12.1	5.3	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Antimony	ND		18.2	0.49	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Arsenic	2.8		2.4	0.49	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Barium	32.7	^	0.61	0.13	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Beryllium	0.33		0.24	0.034	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Cadmium	0.21	J	0.24	0.036	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Calcium	4790	B	60.6	4.0	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Chromium	8.8	B	0.61	0.24	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Cobalt	3.9		0.61	0.061	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-1-6-2FT

Date Collected: 06/05/15 09:30

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-2

Matrix: Solid

Percent Solids: 82.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	8.7		1.2	0.25	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Iron	11300	B	12.1	4.2	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Lead	14.7		1.2	0.29	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Magnesium	3700		24.3	1.1	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Manganese	369	B	0.24	0.039	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Nickel	8.7		6.1	0.28	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Potassium	1060		36.4	24.3	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Selenium	ND		4.9	0.49	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Silver	ND		0.73	0.24	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Sodium	138	J	170	15.8	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Thallium	ND		7.3	0.36	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Vanadium	17.4		0.61	0.13	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1
Zinc	83.5		2.4	0.78	mg/Kg	☼	06/09/15 08:34	06/10/15 14:27	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.024	0.0097	mg/Kg	☼	06/09/15 14:15	06/09/15 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.2	0.59	mg/Kg	☼	06/10/15 14:40	06/11/15 12:59	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		0.10	0.10	%	—		06/11/15 08:42	1
Percent Solids	82		0.10	0.10	%	—		06/11/15 08:42	1

Client Sample ID: EB-3-2FT

Date Collected: 06/05/15 10:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-3

Matrix: Solid

Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		990	150	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
bis (2-chloroisopropyl) ether	ND		990	200	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2,4,5-Trichlorophenol	ND		990	270	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2,4,6-Trichlorophenol	ND		990	200	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2,4-Dichlorophenol	ND		990	110	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2,4-Dimethylphenol	ND		990	240	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2,4-Dinitrophenol	ND		9700	4600	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2,4-Dinitrotoluene	ND		990	200	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2,6-Dinitrotoluene	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2-Chloronaphthalene	ND		990	160	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2-Chlorophenol	ND		990	180	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2-Methylphenol	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2-Methylnaphthalene	ND		990	200	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2-Nitroaniline	ND		1900	150	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
2-Nitrophenol	ND		990	280	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
3,3'-Dichlorobenzidine	ND		1900	1200	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
3-Nitroaniline	ND		1900	270	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
4,6-Dinitro-2-methylphenol	ND		1900	990	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
4-Bromophenyl phenyl ether	ND		990	140	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-3-2FT

Date Collected: 06/05/15 10:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-3

Matrix: Solid

Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	ND		990	250	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
4-Chloroaniline	ND		990	250	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
4-Chlorophenyl phenyl ether	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
4-Methylphenol	ND		1900	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
4-Nitroaniline	ND		1900	520	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
4-Nitrophenol	ND		1900	700	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Acenaphthene	ND		990	150	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Acenaphthylene	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Acetophenone	ND	*	990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Anthracene	ND		990	250	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Atrazine	ND		990	350	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Benzaldehyde	ND		990	790	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Benzo[a]anthracene	ND		990	99	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Benzo[a]pyrene	ND		990	150	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Benzo[b]fluoranthene	ND		990	160	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Benzo[g,h,i]perylene	ND		990	110	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Benzo[k]fluoranthene	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Bis(2-chloroethoxy)methane	ND		990	210	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Bis(2-chloroethyl)ether	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Bis(2-ethylhexyl) phthalate	ND		990	340	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Butyl benzyl phthalate	ND		990	160	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Caprolactam	ND		990	300	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Carbazole	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Chrysene	ND		990	220	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Dibenz(a,h)anthracene	ND		990	180	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Di-n-butyl phthalate	ND		990	170	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Di-n-octyl phthalate	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Dibenzofuran	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Diethyl phthalate	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Dimethyl phthalate	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Fluoranthene	ND		990	110	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Fluorene	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Hexachlorobenzene	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Hexachlorobutadiene	ND		990	150	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Hexachlorocyclopentadiene	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Hexachloroethane	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Indeno[1,2,3-cd]pyrene	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Isophorone	ND		990	210	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
N-Nitrosodi-n-propylamine	ND		990	170	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
N-Nitrosodiphenylamine	ND		990	810	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Naphthalene	ND		990	130	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Nitrobenzene	ND		990	110	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Pentachlorophenol	ND		1900	990	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Phenanthrene	ND		990	150	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Phenol	ND		990	150	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5
Pyrene	ND		990	120	ug/Kg	☼	06/09/15 08:23	06/10/15 18:42	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	64		34 - 132	06/09/15 08:23	06/10/15 18:42	5
Phenol-d5 (Surr)	68		11 - 120	06/09/15 08:23	06/10/15 18:42	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-3-2FT

Date Collected: 06/05/15 10:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-3

Matrix: Solid

Percent Solids: 84.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14 (Surr)	89		65 - 153	06/09/15 08:23	06/10/15 18:42	5
2,4,6-Tribromophenol (Surr)	64		39 - 146	06/09/15 08:23	06/10/15 18:42	5
2-Fluorobiphenyl	80		37 - 120	06/09/15 08:23	06/10/15 18:42	5
2-Fluorophenol (Surr)	69		18 - 120	06/09/15 08:23	06/10/15 18:42	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8140	B	12.0	5.3	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Antimony	ND		18.1	0.48	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Arsenic	3.2		2.4	0.48	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Barium	52.3	^	0.60	0.13	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Beryllium	0.31		0.24	0.034	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Cadmium	0.27		0.24	0.036	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Calcium	12500	B	60.2	4.0	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Chromium	9.5	B	0.60	0.24	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Cobalt	4.1		0.60	0.060	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Copper	11.6		1.2	0.25	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Iron	10800	B	12.0	4.2	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Lead	67.0		1.2	0.29	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Magnesium	7230		24.1	1.1	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Manganese	427	B	0.24	0.039	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Nickel	8.3		6.0	0.28	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Potassium	1020		36.1	24.1	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Selenium	ND		4.8	0.48	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Silver	ND		0.72	0.24	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Sodium	190		169	15.7	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Thallium	ND		7.2	0.36	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Vanadium	17.7		0.60	0.13	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1
Zinc	86.0		2.4	0.77	mg/Kg	☼	06/09/15 08:34	06/10/15 14:29	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.34		0.025	0.010	mg/Kg	☼	06/09/15 14:15	06/09/15 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.2	0.56	mg/Kg	☼	06/10/15 14:40	06/11/15 13:02	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.10	0.10	%			06/11/15 08:42	1
Percent Solids	85		0.10	0.10	%			06/11/15 08:42	1

Client Sample ID: EB-5-2FT

Date Collected: 06/05/15 10:30

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-4

Matrix: Solid

Percent Solids: 89.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		190	27	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2,4,5-Trichlorophenol	ND		190	50	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-5-2FT

Date Collected: 06/05/15 10:30

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-4

Matrix: Solid

Percent Solids: 89.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2,4-Dinitrotoluene	ND		190	38	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2-Chlorophenol	ND		190	34	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2-Methylphenol	ND		190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4-Methylphenol	ND		360	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Acenaphthene	ND		190	27	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Acenaphthylene	ND		190	24	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Acetophenone	ND *		190	25	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Anthracene	ND		190	46	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Atrazine	ND		190	65	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Benzaldehyde	ND		190	150	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Benzo[a]anthracene	36 J		190	19	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Benzo[a]pyrene	ND		190	27	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Benzo[g,h,i]perylene	89 J		190	20	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Bis(2-chloroethoxy)methane	ND		190	39	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Bis(2-ethylhexyl) phthalate	130 J		190	63	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Caprolactam	ND		190	56	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Carbazole	ND		190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Chrysene	ND		190	42	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Dibenzofuran	ND		190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Fluoranthene	39 J		190	20	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Fluorene	ND		190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-5-2FT

Date Collected: 06/05/15 10:30

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-4

Matrix: Solid

Percent Solids: 89.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		190	27	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Hexachloroethane	ND		190	24	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Indeno[1,2,3-cd]pyrene	81	J	190	23	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Isophorone	ND		190	39	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Naphthalene	ND		190	24	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Nitrobenzene	ND		190	21	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Phenanthrene	33	J	190	27	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Phenol	ND		190	28	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1
Pyrene	36	J	190	22	ug/Kg	☼	06/09/15 08:23	06/10/15 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	73		34 - 132	06/09/15 08:23	06/10/15 19:09	1
Phenol-d5 (Surr)	78		11 - 120	06/09/15 08:23	06/10/15 19:09	1
p-Terphenyl-d14 (Surr)	96		65 - 153	06/09/15 08:23	06/10/15 19:09	1
2,4,6-Tribromophenol (Surr)	86		39 - 146	06/09/15 08:23	06/10/15 19:09	1
2-Fluorobiphenyl	85		37 - 120	06/09/15 08:23	06/10/15 19:09	1
2-Fluorophenol (Surr)	77		18 - 120	06/09/15 08:23	06/10/15 19:09	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6750	B	11.1	4.9	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Antimony	ND		16.6	0.44	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Arsenic	3.5		2.2	0.44	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Barium	45.4		0.55	0.12	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Beryllium	0.32		0.22	0.031	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Cadmium	0.21	J	0.22	0.033	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Calcium	20600	B	55.5	3.7	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Chromium	8.1	B	0.55	0.22	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Cobalt	3.4		0.55	0.055	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Copper	12.5		1.1	0.23	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Iron	8850	B	11.1	3.9	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Lead	81.1		1.1	0.27	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Magnesium	11500		22.2	1.0	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Manganese	339	B	0.22	0.035	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Nickel	7.2		5.5	0.26	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Potassium	878		33.3	22.2	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Selenium	ND		4.4	0.44	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Silver	ND		0.67	0.22	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Sodium	115	J	155	14.4	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Thallium	ND		6.7	0.33	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Vanadium	15.6		0.55	0.12	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1
Zinc	62.9		2.2	0.71	mg/Kg	☼	06/09/15 08:34	06/10/15 14:40	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.021	0.0086	mg/Kg	☼	06/09/15 14:15	06/09/15 16:27	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-5-2FT

Date Collected: 06/05/15 10:30

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-4

Matrix: Solid

Percent Solids: 89.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.1	0.54	mg/Kg	☼	06/10/15 14:40	06/11/15 13:03	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11		0.10	0.10	%			06/11/15 08:42	1
Percent Solids	89		0.10	0.10	%			06/11/15 08:42	1

Client Sample ID: EB-4-2-3FT

Date Collected: 06/05/15 11:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-5

Matrix: Solid

Percent Solids: 89.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		940	140	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
bis (2-chloroisopropyl) ether	ND		940	190	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2,4,5-Trichlorophenol	ND		940	250	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2,4,6-Trichlorophenol	ND		940	190	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2,4-Dichlorophenol	ND		940	100	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2,4-Dimethylphenol	ND		940	230	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2,4-Dinitrophenol	ND		9200	4300	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2,4-Dinitrotoluene	ND		940	190	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2,6-Dinitrotoluene	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2-Chloronaphthalene	ND		940	160	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2-Chlorophenol	ND		940	170	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2-Methylphenol	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2-Methylnaphthalene	ND		940	190	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
2-Nitrophenol	ND		940	270	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4,6-Dinitro-2-methylphenol	ND		1800	940	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4-Bromophenyl phenyl ether	ND		940	130	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4-Chloro-3-methylphenol	ND		940	230	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4-Chloroaniline	ND		940	230	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4-Chlorophenyl phenyl ether	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
4-Nitrophenol	ND		1800	660	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Acenaphthene	ND		940	140	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Acenaphthylene	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Acetophenone	ND	*	940	130	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Anthracene	ND		940	230	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Atrazine	ND		940	330	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Benzaldehyde	ND		940	750	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Benzo[a]anthracene	ND		940	94	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Benzo[a]pyrene	ND		940	140	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Benzo[b]fluoranthene	ND		940	150	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Benzo[g,h,i]perylene	ND		940	100	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Benzo[k]fluoranthene	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Bis(2-chloroethoxy)methane	ND		940	200	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Bis(2-chloroethyl)ether	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-4-2-3FT

Date Collected: 06/05/15 11:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-5

Matrix: Solid

Percent Solids: 89.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		940	320	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Butyl benzyl phthalate	ND		940	160	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Caprolactam	ND		940	280	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Carbazole	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Chrysene	ND		940	210	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Dibenz(a,h)anthracene	ND		940	170	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Di-n-butyl phthalate	ND		940	160	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Di-n-octyl phthalate	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Dibenzofuran	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Diethyl phthalate	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Dimethyl phthalate	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Fluoranthene	ND		940	100	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Fluorene	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Hexachlorobenzene	ND		940	130	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Hexachlorobutadiene	ND		940	140	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Hexachlorocyclopentadiene	ND		940	130	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Hexachloroethane	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Indeno[1,2,3-cd]pyrene	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Isophorone	ND		940	200	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
N-Nitrosodi-n-propylamine	ND		940	160	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
N-Nitrosodiphenylamine	ND		940	760	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Naphthalene	ND		940	120	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Nitrobenzene	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Pentachlorophenol	ND		1800	940	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Phenanthrene	ND		940	140	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Phenol	ND		940	140	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5
Pyrene	ND		940	110	ug/Kg	☼	06/09/15 08:23	06/10/15 19:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	71		34 - 132	06/09/15 08:23	06/10/15 19:35	5
Phenol-d5 (Surr)	73		11 - 120	06/09/15 08:23	06/10/15 19:35	5
p-Terphenyl-d14 (Surr)	99		65 - 153	06/09/15 08:23	06/10/15 19:35	5
2,4,6-Tribromophenol (Surr)	71		39 - 146	06/09/15 08:23	06/10/15 19:35	5
2-Fluorobiphenyl	86		37 - 120	06/09/15 08:23	06/10/15 19:35	5
2-Fluorophenol (Surr)	73		18 - 120	06/09/15 08:23	06/10/15 19:35	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6420	B	11.2	4.9	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Antimony	ND		16.7	0.45	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Arsenic	2.1	J	2.2	0.45	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Barium	29.1		0.56	0.12	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Beryllium	0.26		0.22	0.031	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Cadmium	0.22		0.22	0.033	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Calcium	17500	B	55.8	3.7	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Chromium	7.0	B	0.56	0.22	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Cobalt	3.0		0.56	0.056	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Copper	6.9		1.1	0.23	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Iron	8730	B	11.2	3.9	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Lead	676		1.1	0.27	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-4-2-3FT

Lab Sample ID: 480-81689-5

Date Collected: 06/05/15 11:00

Matrix: Solid

Date Received: 06/05/15 15:50

Percent Solids: 89.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	10400		22.3	1.0	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Manganese	376	B	0.22	0.036	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Nickel	6.0		5.6	0.26	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Potassium	891		33.5	22.3	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Selenium	ND		4.5	0.45	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Silver	ND		0.67	0.22	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Sodium	117	J	156	14.5	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Thallium	ND		6.7	0.33	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Vanadium	14.3		0.56	0.12	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1
Zinc	64.6		2.2	0.71	mg/Kg	☼	06/09/15 08:34	06/10/15 14:43	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.021	0.0086	mg/Kg	☼	06/09/15 14:15	06/09/15 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		1.1	0.53	mg/Kg	☼	06/10/15 14:40	06/11/15 13:04	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10		0.10	0.10	%	—		06/11/15 08:42	1
Percent Solids	90		0.10	0.10	%	—		06/11/15 08:42	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (34-132)	PHL (11-120)	TPH (65-153)	TBP (39-146)	FBP (37-120)	2FP (18-120)
480-81689-1	EB-2-1-2FT	67	71	89	57	84	74
480-81689-1 MS	EB-2-1-2FT	68	69	85	67	86	72
480-81689-1 MSD	EB-2-1-2FT	61	68	84	54	82	68
480-81689-2	EB-1-6-2FT	69	72	92	79	80	72
480-81689-3	EB-3-2FT	64	68	89	64	80	69
480-81689-4	EB-5-2FT	73	78	96	86	85	77
480-81689-5	EB-4-2-3FT	71	73	99	71	86	73
LCS 480-246943/2-A	Lab Control Sample	63	63	85	85	76	62
MB 480-246943/1-A	Method Blank	69	73	97	76	82	72

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-246943/1-A

Matrix: Solid

Analysis Batch: 247192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 246943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	24	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2-Chloronaphthalene	ND		170	27	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2-Chlorophenol	ND		170	30	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2-Methylphenol	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2-Methylnaphthalene	ND		170	33	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2-Nitroaniline	ND		320	24	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
2-Nitrophenol	ND		170	47	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
3-Nitroaniline	ND		320	46	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4-Chloroaniline	ND		170	41	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4-Chlorophenyl phenyl ether	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4-Methylphenol	ND		320	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4-Nitroaniline	ND		320	87	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
4-Nitrophenol	ND		320	120	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Acenaphthene	ND		170	24	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Acenaphthylene	ND		170	21	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Acetophenone	ND		170	22	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Anthracene	ND		170	41	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Atrazine	ND		170	58	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Benzaldehyde	ND		170	130	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Benzo[a]anthracene	ND		170	17	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Benzo[a]pyrene	ND		170	24	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Bis(2-chloroethyl)ether	ND		170	21	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Caprolactam	ND		170	50	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Carbazole	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Chrysene	ND		170	37	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Dibenzofuran	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Diethyl phthalate	ND		170	21	ug/Kg		06/09/15 08:23	06/10/15 16:04	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-246943/1-A

Matrix: Solid

Analysis Batch: 247192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 246943

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Fluoranthene	ND		170	18	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Fluorene	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Hexachlorobenzene	ND		170	22	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Hexachlorobutadiene	ND		170	24	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Hexachlorocyclopentadiene	ND		170	22	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Hexachloroethane	ND		170	21	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Isophorone	ND		170	35	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
N-Nitrosodiphenylamine	ND		170	130	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Naphthalene	ND		170	21	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Nitrobenzene	ND		170	19	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Pentachlorophenol	ND		320	170	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Phenanthrene	ND		170	24	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Phenol	ND		170	25	ug/Kg		06/09/15 08:23	06/10/15 16:04	1
Pyrene	ND		170	20	ug/Kg		06/09/15 08:23	06/10/15 16:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	69		34 - 132	06/09/15 08:23	06/10/15 16:04	1
Phenol-d5 (Surr)	73		11 - 120	06/09/15 08:23	06/10/15 16:04	1
p-Terphenyl-d14 (Surr)	97		65 - 153	06/09/15 08:23	06/10/15 16:04	1
2,4,6-Tribromophenol (Surr)	76		39 - 146	06/09/15 08:23	06/10/15 16:04	1
2-Fluorobiphenyl	82		37 - 120	06/09/15 08:23	06/10/15 16:04	1
2-Fluorophenol (Surr)	72		18 - 120	06/09/15 08:23	06/10/15 16:04	1

Lab Sample ID: LCS 480-246943/2-A

Matrix: Solid

Analysis Batch: 247192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 246943

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4-Dinitrotoluene	1660	1310		ug/Kg		79	55 - 125
2-Chlorophenol	1660	1050		ug/Kg		63	38 - 120
4-Chloro-3-methylphenol	1660	1170		ug/Kg		71	49 - 125
4-Nitrophenol	3310	2330		ug/Kg		70	43 - 137
Acenaphthene	1660	1220		ug/Kg		74	53 - 120
Atrazine	3310	2790		ug/Kg		84	60 - 164
Bis(2-ethylhexyl) phthalate	1660	1430		ug/Kg		86	61 - 133
Fluorene	1660	1270		ug/Kg		77	63 - 126
Hexachloroethane	1660	957		ug/Kg		58	41 - 120
N-Nitrosodi-n-propylamine	1660	997		ug/Kg		60	46 - 120
Pentachlorophenol	3310	2470		ug/Kg		74	33 - 136
Phenol	1660	1060		ug/Kg		64	36 - 120
Pyrene	1660	1410		ug/Kg		85	51 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	63		34 - 132

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-246943/2-A

Matrix: Solid

Analysis Batch: 247192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 246943

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Phenol-d5 (Surr)	63		11 - 120
p-Terphenyl-d14 (Surr)	85		65 - 153
2,4,6-Tribromophenol (Surr)	85		39 - 146
2-Fluorobiphenyl	76		37 - 120
2-Fluorophenol (Surr)	62		18 - 120

Lab Sample ID: 480-81689-1 MS

Matrix: Solid

Analysis Batch: 247192

Client Sample ID: EB-2-1-2FT

Prep Type: Total/NA

Prep Batch: 246943

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
2,4-Dinitrotoluene	ND	F1 F2	2000	1270	J	ug/Kg	☼	63	55 - 125
2-Chlorophenol	ND		2000	1430	J	ug/Kg	☼	71	38 - 120
4-Chloro-3-methylphenol	ND		2000	1290	J	ug/Kg	☼	64	49 - 125
4-Nitrophenol	ND		4010	3100	J	ug/Kg	☼	77	43 - 137
Acenaphthene	ND		2000	1800	J	ug/Kg	☼	90	53 - 120
Atrazine	ND		4010	3010	J	ug/Kg	☼	75	60 - 164
Bis(2-ethylhexyl) phthalate	ND	F2	2000	1680	J	ug/Kg	☼	84	61 - 133
Fluorene	ND		2000	1770	J	ug/Kg	☼	88	63 - 126
Hexachloroethane	ND		2000	1210	J	ug/Kg	☼	60	41 - 120
N-Nitrosodi-n-propylamine	ND		2000	1280	J	ug/Kg	☼	64	46 - 120
Pentachlorophenol	ND		4010	4570	J	ug/Kg	☼	NC	33 - 136
Phenol	ND		2000	1400	J	ug/Kg	☼	70	36 - 120
Pyrene	1100	J	2000	3050	J	ug/Kg	☼	98	51 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5 (Surr)	68		34 - 132
Phenol-d5 (Surr)	69		11 - 120
p-Terphenyl-d14 (Surr)	85		65 - 153
2,4,6-Tribromophenol (Surr)	67		39 - 146
2-Fluorobiphenyl	86		37 - 120
2-Fluorophenol (Surr)	72		18 - 120

Lab Sample ID: 480-81689-1 MSD

Matrix: Solid

Analysis Batch: 247192

Client Sample ID: EB-2-1-2FT

Prep Type: Total/NA

Prep Batch: 246943

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
2,4-Dinitrotoluene	ND	F1 F2	1990	998	J F1 F2	ug/Kg	☼	50	55 - 125	24	20
2-Chlorophenol	ND		1990	1420	J	ug/Kg	☼	72	38 - 120	1	25
4-Chloro-3-methylphenol	ND		1990	1300	J	ug/Kg	☼	65	49 - 125	1	27
4-Nitrophenol	ND		3980	2830	J	ug/Kg	☼	71	43 - 137	9	25
Acenaphthene	ND		1990	1640	J	ug/Kg	☼	82	53 - 120	9	35
Atrazine	ND		3980	2760	J	ug/Kg	☼	69	60 - 164	9	20
Bis(2-ethylhexyl) phthalate	ND	F2	1990	1440	J F2	ug/Kg	☼	72	61 - 133	16	15
Fluorene	ND		1990	1620	J	ug/Kg	☼	81	63 - 126	9	15
Hexachloroethane	ND		1990	1120	J	ug/Kg	☼	56	41 - 120	7	46
N-Nitrosodi-n-propylamine	ND		1990	1170	J	ug/Kg	☼	59	46 - 120	8	31

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-81689-1 MSD

Matrix: Solid

Analysis Batch: 247192

Client Sample ID: EB-2-1-2FT

Prep Type: Total/NA

Prep Batch: 246943

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol	ND		3980	4400	J	ug/Kg	☼	NC	33 - 136	4	35
Phenol	ND		1990	1400	J	ug/Kg	☼	71	36 - 120	0	35
Pyrene	1100	J	1990	2410	J	ug/Kg	☼	67	51 - 133	23	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	61		34 - 132
Phenol-d5 (Surr)	68		11 - 120
p-Terphenyl-d14 (Surr)	84		65 - 153
2,4,6-Tribromophenol (Surr)	54		39 - 146
2-Fluorobiphenyl	82		37 - 120
2-Fluorophenol (Surr)	68		18 - 120

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-246836/1-A

Matrix: Solid

Analysis Batch: 247416

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 246836

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6.21	J	10.0	4.4	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Antimony	ND		15.0	0.40	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Arsenic	ND		2.0	0.40	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Beryllium	ND		0.20	0.028	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Cadmium	ND		0.20	0.030	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Calcium	6.25	J	50.1	3.3	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Cobalt	ND		0.50	0.050	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Copper	ND		1.0	0.21	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Lead	ND		1.0	0.24	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Magnesium	ND		20.0	0.93	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Manganese	0.192	J	0.20	0.032	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Nickel	ND		5.0	0.23	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Potassium	ND		30.1	20.0	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Selenium	ND		4.0	0.40	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Silver	ND		0.60	0.20	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Sodium	ND		140	13.0	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Thallium	ND		6.0	0.30	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Vanadium	ND		0.50	0.11	mg/Kg		06/09/15 08:34	06/10/15 13:39	1
Zinc	ND		2.0	0.64	mg/Kg		06/09/15 08:34	06/10/15 13:39	1

Lab Sample ID: MB 480-246836/1-A

Matrix: Solid

Analysis Batch: 247730

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 246836

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.50	0.11	mg/Kg		06/09/15 08:34	06/12/15 03:59	1
Chromium	ND		0.50	0.20	mg/Kg		06/09/15 08:34	06/12/15 03:59	1
Iron	5.78	J	10.0	3.5	mg/Kg		06/09/15 08:34	06/12/15 03:59	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-246836/3-A
Matrix: Solid
Analysis Batch: 247416

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 246836

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	8100	8572		mg/Kg		105.8	39.6 - 160.5	0	20
Antimony	116	98.61		mg/Kg		85.0	22.1 - 252.6	2	20
Arsenic	122	109.1		mg/Kg		89.4	70.0 - 145.1	1	20
Barium	167	148.4	^	mg/Kg		88.9	73.1 - 126.9	3	20
Beryllium	54.3	48.65		mg/Kg		89.6	73.1 - 127.1	2	20
Cadmium	88.0	78.94		mg/Kg		89.7	73.3 - 127.3	1	20
Calcium	5920	5143		mg/Kg		86.9	73.6 - 126.4	2	20
Chromium	102	91.27	^	mg/Kg		89.5	69.4 - 130.4	0	20
Cobalt	99.4	101.4		mg/Kg		102.0	74.3 - 125.8	1	20
Copper	78.0	72.10		mg/Kg		92.4	73.7 - 132.1	1	20
Iron	15100	14320	^	mg/Kg		94.8	37.1 - 162.9	3	20
Lead	94.5	96.69		mg/Kg		102.3	70.5 - 129.1	1	20
Magnesium	3020	2724		mg/Kg		90.2	65.9 - 133.8	3	20
Manganese	401	348.7		mg/Kg		87.0	76.1 - 123.9	5	20
Nickel	56.3	57.92		mg/Kg		102.9	69.8 - 130.0	1	20
Potassium	2490	2415		mg/Kg		97.0	60.6 - 139.4	3	20
Selenium	157	142.5		mg/Kg		90.8	67.5 - 131.8	0	20
Silver	34.2	29.28		mg/Kg		85.6	65.5 - 134.2	1	20
Sodium	246	230.2		mg/Kg		93.6	32.0 - 168.3	1	20
Thallium	116	118.9		mg/Kg		102.5	67.4 - 132.8	0	20
Vanadium	67.1	64.90		mg/Kg		96.7	57.8 - 192.3	0	20
Zinc	207	175.9		mg/Kg		85.0	70.0 - 130.4	1	20

Lab Sample ID: LCSSRM 480-246836/2-A
Matrix: Solid
Analysis Batch: 247416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 246836

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	8100	8614		mg/Kg		106.3	39.6 - 160.5		
Antimony	116	100.2		mg/Kg		86.4	22.1 - 252.6		

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-246836/2-A
Matrix: Solid
Analysis Batch: 247416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 246836

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	122	110.5		mg/Kg		90.6	70.0 - 145.1
Barium	167	153.6	^	mg/Kg		92.0	73.1 - 126.9
Beryllium	54.3	49.50		mg/Kg		91.2	73.1 - 127.1
Cadmium	88.0	78.23		mg/Kg		88.9	73.3 - 127.3
Calcium	5920	5226		mg/Kg		88.3	73.6 - 126.4
Chromium	102	91.63	^	mg/Kg		89.8	69.4 - 130.4
Cobalt	99.4	102.4		mg/Kg		103.0	74.3 - 125.8
Copper	78.0	73.00		mg/Kg		93.6	73.7 - 132.1
Iron	15100	13930	^	mg/Kg		92.2	37.1 - 162.9
Lead	94.5	98.05		mg/Kg		103.8	70.5 - 129.1
Magnesium	3020	2799		mg/Kg		92.7	65.9 - 133.8
Manganese	401	367.6		mg/Kg		91.7	76.1 - 123.9
Nickel	56.3	58.40		mg/Kg		103.7	69.8 - 130.0
Potassium	2490	2499		mg/Kg		100.4	60.6 - 139.4
Selenium	157	142.9		mg/Kg		91.0	67.5 - 131.8
Silver	34.2	29.62		mg/Kg		86.6	65.5 - 134.2
Sodium	246	233.6		mg/Kg		94.9	32.0 - 168.3
Thallium	116	118.7		mg/Kg		102.3	67.4 - 132.8
Vanadium	67.1	65.13		mg/Kg		97.1	57.8 - 192.3
Zinc	207	178.0		mg/Kg		86.0	70.0 - 130.4

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 480-247011/1-A
Matrix: Solid
Analysis Batch: 247173

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 247011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg		06/09/15 14:15	06/09/15 15:41	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCSSRM 480-247011/2-A

Matrix: Solid

Analysis Batch: 247173

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 247011

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.98	3.60		mg/Kg		90.5	51.0 - 149.0

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-247373/1-A

Matrix: Solid

Analysis Batch: 247567

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 247373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.99	0.48	mg/Kg		06/10/15 14:40	06/11/15 12:47	1

Lab Sample ID: LCS 480-247373/2-A ^5

Matrix: Solid

Analysis Batch: 247567

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 247373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	101	99.08		mg/Kg		98	29 - 122

Lab Sample ID: 480-81689-1 MS

Matrix: Solid

Analysis Batch: 247567

Client Sample ID: EB-2-1-2FT

Prep Type: Total/NA

Prep Batch: 247373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.59	J	12.1	11.91		mg/Kg	✱	94	85 - 115

Lab Sample ID: 480-81689-2 DU

Matrix: Solid

Analysis Batch: 247567

Client Sample ID: EB-1-6-2FT

Prep Type: Total/NA

Prep Batch: 247373

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	ND		ND		mg/Kg	✱	NC	15

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

GC/MS Semi VOA

Prep Batch: 246943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	3550C	
480-81689-1 MS	EB-2-1-2FT	Total/NA	Solid	3550C	
480-81689-1 MSD	EB-2-1-2FT	Total/NA	Solid	3550C	
480-81689-2	EB-1-6-2FT	Total/NA	Solid	3550C	
480-81689-3	EB-3-2FT	Total/NA	Solid	3550C	
480-81689-4	EB-5-2FT	Total/NA	Solid	3550C	
480-81689-5	EB-4-2-3FT	Total/NA	Solid	3550C	
LCS 480-246943/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-246943/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 247192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	8270D	246943
480-81689-1 MS	EB-2-1-2FT	Total/NA	Solid	8270D	246943
480-81689-1 MSD	EB-2-1-2FT	Total/NA	Solid	8270D	246943
480-81689-2	EB-1-6-2FT	Total/NA	Solid	8270D	246943
480-81689-3	EB-3-2FT	Total/NA	Solid	8270D	246943
480-81689-4	EB-5-2FT	Total/NA	Solid	8270D	246943
480-81689-5	EB-4-2-3FT	Total/NA	Solid	8270D	246943
LCS 480-246943/2-A	Lab Control Sample	Total/NA	Solid	8270D	246943
MB 480-246943/1-A	Method Blank	Total/NA	Solid	8270D	246943

Metals

Prep Batch: 246836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	3050B	
480-81689-2	EB-1-6-2FT	Total/NA	Solid	3050B	
480-81689-3	EB-3-2FT	Total/NA	Solid	3050B	
480-81689-4	EB-5-2FT	Total/NA	Solid	3050B	
480-81689-5	EB-4-2-3FT	Total/NA	Solid	3050B	
LCDSRM 480-246836/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-246836/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-246836/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 247011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	7471B	
480-81689-2	EB-1-6-2FT	Total/NA	Solid	7471B	
480-81689-3	EB-3-2FT	Total/NA	Solid	7471B	
480-81689-4	EB-5-2FT	Total/NA	Solid	7471B	
480-81689-5	EB-4-2-3FT	Total/NA	Solid	7471B	
LCSSRM 480-247011/2-A	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-247011/1-A	Method Blank	Total/NA	Solid	7471B	

Analysis Batch: 247173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	7471B	247011
480-81689-2	EB-1-6-2FT	Total/NA	Solid	7471B	247011
480-81689-3	EB-3-2FT	Total/NA	Solid	7471B	247011

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Metals (Continued)

Analysis Batch: 247173 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-4	EB-5-2FT	Total/NA	Solid	7471B	247011
480-81689-5	EB-4-2-3FT	Total/NA	Solid	7471B	247011
LCSSRM 480-247011/2-A	Lab Control Sample	Total/NA	Solid	7471B	247011
MB 480-247011/1-A	Method Blank	Total/NA	Solid	7471B	247011

Analysis Batch: 247416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	6010C	246836
480-81689-2	EB-1-6-2FT	Total/NA	Solid	6010C	246836
480-81689-3	EB-3-2FT	Total/NA	Solid	6010C	246836
480-81689-4	EB-5-2FT	Total/NA	Solid	6010C	246836
480-81689-5	EB-4-2-3FT	Total/NA	Solid	6010C	246836
LCDSRM 480-246836/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	246836
LCSSRM 480-246836/2-A	Lab Control Sample	Total/NA	Solid	6010C	246836
MB 480-246836/1-A	Method Blank	Total/NA	Solid	6010C	246836

Analysis Batch: 247730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-246836/1-A	Method Blank	Total/NA	Solid	6010C	246836

General Chemistry

Prep Batch: 247373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	9012B	
480-81689-1 MS	EB-2-1-2FT	Total/NA	Solid	9012B	
480-81689-2	EB-1-6-2FT	Total/NA	Solid	9012B	
480-81689-2 DU	EB-1-6-2FT	Total/NA	Solid	9012B	
480-81689-3	EB-3-2FT	Total/NA	Solid	9012B	
480-81689-4	EB-5-2FT	Total/NA	Solid	9012B	
480-81689-5	EB-4-2-3FT	Total/NA	Solid	9012B	
LCS 480-247373/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	
MB 480-247373/1-A	Method Blank	Total/NA	Solid	9012B	

Analysis Batch: 247470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	Moisture	
480-81689-2	EB-1-6-2FT	Total/NA	Solid	Moisture	
480-81689-3	EB-3-2FT	Total/NA	Solid	Moisture	
480-81689-4	EB-5-2FT	Total/NA	Solid	Moisture	
480-81689-5	EB-4-2-3FT	Total/NA	Solid	Moisture	

Analysis Batch: 247567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-1	EB-2-1-2FT	Total/NA	Solid	9012B	247373
480-81689-1 MS	EB-2-1-2FT	Total/NA	Solid	9012B	247373
480-81689-2	EB-1-6-2FT	Total/NA	Solid	9012B	247373
480-81689-2 DU	EB-1-6-2FT	Total/NA	Solid	9012B	247373
480-81689-3	EB-3-2FT	Total/NA	Solid	9012B	247373
480-81689-4	EB-5-2FT	Total/NA	Solid	9012B	247373

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

General Chemistry (Continued)

Analysis Batch: 247567 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81689-5	EB-4-2-3FT	Total/NA	Solid	9012B	247373
LCS 480-247373/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	247373
MB 480-247373/1-A	Method Blank	Total/NA	Solid	9012B	247373

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-2-1-2FT

Date Collected: 06/05/15 09:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-1

Matrix: Solid

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			246943	06/09/15 08:23	CAM	TAL BUF
Total/NA	Analysis	8270D		20	247192	06/10/15 17:50	LMW	TAL BUF
Total/NA	Prep	3050B			246836	06/09/15 08:34	TAS	TAL BUF
Total/NA	Analysis	6010C		1	247416	06/10/15 14:24	SLB	TAL BUF
Total/NA	Prep	7471B			247011	06/09/15 14:15	LRK	TAL BUF
Total/NA	Analysis	7471B		1	247173	06/09/15 16:17	LRK	TAL BUF
Total/NA	Prep	9012B			247373	06/10/15 14:40	NDB	TAL BUF
Total/NA	Analysis	9012B		1	247567	06/11/15 12:53	KMF	TAL BUF
Total/NA	Analysis	Moisture		1	247470	06/11/15 08:42	CSW	TAL BUF

Client Sample ID: EB-1-6-2FT

Date Collected: 06/05/15 09:30

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-2

Matrix: Solid

Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			246943	06/09/15 08:23	CAM	TAL BUF
Total/NA	Analysis	8270D		1	247192	06/10/15 18:16	LMW	TAL BUF
Total/NA	Prep	3050B			246836	06/09/15 08:34	TAS	TAL BUF
Total/NA	Analysis	6010C		1	247416	06/10/15 14:27	SLB	TAL BUF
Total/NA	Prep	7471B			247011	06/09/15 14:15	LRK	TAL BUF
Total/NA	Analysis	7471B		1	247173	06/09/15 16:19	LRK	TAL BUF
Total/NA	Prep	9012B			247373	06/10/15 14:40	NDB	TAL BUF
Total/NA	Analysis	9012B		1	247567	06/11/15 12:59	KMF	TAL BUF
Total/NA	Analysis	Moisture		1	247470	06/11/15 08:42	CSW	TAL BUF

Client Sample ID: EB-3-2FT

Date Collected: 06/05/15 10:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-3

Matrix: Solid

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			246943	06/09/15 08:23	CAM	TAL BUF
Total/NA	Analysis	8270D		5	247192	06/10/15 18:42	LMW	TAL BUF
Total/NA	Prep	3050B			246836	06/09/15 08:34	TAS	TAL BUF
Total/NA	Analysis	6010C		1	247416	06/10/15 14:29	SLB	TAL BUF
Total/NA	Prep	7471B			247011	06/09/15 14:15	LRK	TAL BUF
Total/NA	Analysis	7471B		1	247173	06/09/15 16:24	LRK	TAL BUF
Total/NA	Prep	9012B			247373	06/10/15 14:40	NDB	TAL BUF
Total/NA	Analysis	9012B		1	247567	06/11/15 13:02	KMF	TAL BUF
Total/NA	Analysis	Moisture		1	247470	06/11/15 08:42	CSW	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Client Sample ID: EB-5-2FT

Date Collected: 06/05/15 10:30

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-4

Matrix: Solid

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			246943	06/09/15 08:23	CAM	TAL BUF
Total/NA	Analysis	8270D		1	247192	06/10/15 19:09	LMW	TAL BUF
Total/NA	Prep	3050B			246836	06/09/15 08:34	TAS	TAL BUF
Total/NA	Analysis	6010C		1	247416	06/10/15 14:40	SLB	TAL BUF
Total/NA	Prep	7471B			247011	06/09/15 14:15	LRK	TAL BUF
Total/NA	Analysis	7471B		1	247173	06/09/15 16:27	LRK	TAL BUF
Total/NA	Prep	9012B			247373	06/10/15 14:40	NDB	TAL BUF
Total/NA	Analysis	9012B		1	247567	06/11/15 13:03	KMF	TAL BUF
Total/NA	Analysis	Moisture		1	247470	06/11/15 08:42	CSW	TAL BUF

Client Sample ID: EB-4-2-3FT

Date Collected: 06/05/15 11:00

Date Received: 06/05/15 15:50

Lab Sample ID: 480-81689-5

Matrix: Solid

Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			246943	06/09/15 08:23	CAM	TAL BUF
Total/NA	Analysis	8270D		5	247192	06/10/15 19:35	LMW	TAL BUF
Total/NA	Prep	3050B			246836	06/09/15 08:34	TAS	TAL BUF
Total/NA	Analysis	6010C		1	247416	06/10/15 14:43	SLB	TAL BUF
Total/NA	Prep	7471B			247011	06/09/15 14:15	LRK	TAL BUF
Total/NA	Analysis	7471B		1	247173	06/09/15 16:28	LRK	TAL BUF
Total/NA	Prep	9012B			247373	06/10/15 14:40	NDB	TAL BUF
Total/NA	Analysis	9012B		1	247567	06/11/15 13:04	KMF	TAL BUF
Total/NA	Analysis	Moisture		1	247470	06/11/15 08:42	CSW	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Method	Method Description	Protocol	Laboratory
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street Project

TestAmerica Job ID: 480-81689-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-81689-1	EB-2-1-2FT	Solid	06/05/15 09:00	06/05/15 15:50
480-81689-2	EB-1-6-2FT	Solid	06/05/15 09:30	06/05/15 15:50
480-81689-3	EB-3-2FT	Solid	06/05/15 10:00	06/05/15 15:50
480-81689-4	EB-5-2FT	Solid	06/05/15 10:30	06/05/15 15:50
480-81689-5	EB-4-2-3FT	Solid	06/05/15 11:00	06/05/15 15:50

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

Chain of Custody Record

TAL-4124 (1007)

Client CPS Engineers, Inc		Project Manager Mark Calmerover		Date 6/5/15	Chain of Custody Number 274218
Address 141 Elm Street		Telephone Number (Area Code)/Fax Number 716-847-1630		Lab Number	
City Buffalo	State NY	Zip Code 14203	Site Contact	Page 1	of 1
Project Name and Location (State) 23 North Street			Special Instructions/ Conditions of Receipt		
Contract/Purchase Order/Quote No.					

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	NaCl	
EB-2-1-2Ft	6/5/15	9:00	X				X						Moisture SUOC TAL Metals Cynide
EB-1-6-7Ft	6/5/15	9:30	X				X						X
EB-3-2Ft	6/5/15	10:00	X				X						X
EB-5-2Ft	6/5/15	10:30	X				X						X
EB-4-2-3Ft	6/5/15	11:00	X				X						X



480-81689 Chain of Custody

Possible Hazard Identification		Sample Disposal		(A fee may be assessed if samples are retained longer than 1 month)	
☒ Non-Hazard	☐ Flammable	☐ Skin Irritant	☐ Poison B	☐ Unknown	☐ Archive For _____ Months
Turn Around Time Required		Disposal By Lab		QC Requirements (Specify)	
☐ 24 Hours	☐ 48 Hours	☒ 7 Days	☐ 14 Days	☐ 21 Days	☐ Other _____
1. Relinquished By <i>[Signature]</i>		1. Received By <i>[Signature]</i>		Date 6/5/15	Time 1520
2. Relinquished By <i>[Signature]</i>		2. Received By <i>[Signature]</i>		Date 6/5/15	Time 1530
3. Relinquished By <i>[Signature]</i>		3. Received By <i>[Signature]</i>		Date 6/5/15	Time 1530

Comments

1 2.9

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-81689-1

Login Number: 81689

List Number: 1

Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	C&S ENG.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	



C&S Companies

141 Elm Street
Suite 100
Buffalo, NY 14203
p: (716) 847-1630
f: (716) 847-1454
www.cscos.com

December 18, 2015

Ben Oblatz
President
23 North Street LLC
4508 Main Street
Amherst, New York 14226
ben@firstamherst.com

Re: 19/23 North Street, Buffalo New York
Additional Soil Sampling Results Report

Dear Ben,

In preparation for the development on the two adjacent properties located at 19 and 23 North Street, Buffalo, New York, 23 North Street, LLC requested C&S Engineers, Inc. (C&S) to conduct an additional subsurface investigation at 19 and 23 North Street (the Site).

This subsurface investigation supplemented information gathered during an initial subsurface investigation completed by C&S in July 2015. The investigation specifically targeted the condition of the urban fill placed on the Site prior the purchase of the property in 2006. The Site is planned for redevelopment as a residential apartment complex and the presence of contaminants in the fill would complicate that development.

The following letter report provides a summary of the subsurface investigation conducted on November 20, 2015 at the Site.

Site Background

The subject property is owned by 23 North Street, LLC (purchased in 2006) and is being considered for a residential (apartment) development. C&S performed a site investigation in July 2015 and determined there is some contamination in the urban fill present at the Site.

November 2015 Field investigation

To characterize the fill at the Site, C&S excavated five test pits on November 20, 2015. The test pits were generally advanced to a depth of four to seven feet below grade. Excavation was performed by Nature's Way Environmental using a Mini Excavator. A minimum of one sample was collected from each test pit. Figure 1, attached, shows test pit and sample locations.

A C&S scientist observed the excavation and described the soil cuttings, screened the soils, and recorded pertinent information on test pit logs, which are attached. A Mini-Rae 2000 photo-ionization detector (PID) with an 11.7 volt lamp was used to measure total organic

vapors and the PID screening measurements are also recorded on the test pit logs. Soil samples were selected for laboratory analysis based on staining, odor, PID readings or depth. The soil samples were analyzed for USEPA Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), USEPA Target Analyte List (TAL) metals including mercury, and pesticides.

Results

Soil/Fill Conditions

Site soils were generally defined as follows:

- Fill: brick, gravel, crushed coal, clay and dark sand.
- Native Materials
 - Silty Clay: Organic clays of medium to high plasticity. Generally appeared as soft moist reddish brown clay with variable silt content.
 - Silt: brown moist material with trace of fine Sand.
 - Silty Sand: brown to light brown fine Sand with 10 – 20% silt content.

In the test pits, the fill material was generally present just below a layer of topsoil and gravel subbase that is associated with the former parking lot and the native material was observed under the fill, with the exception of boring TP-5, in which the fill was present below a layer of topsoil. The following table summarizes the observed fill thicknesses:

<i>Test Pit</i>	<i>Approx. Fill Thickness (feet)</i>
TP1	3
TP2	2
TP3	6.5
TP4	2
TP5	3.5

In TP-3 and TP-5, fill extended beyond the terminal depth of the test pit. Water was not observed in the test pits. TP-4 was attempted in three locations but abandoned twice due to a flat cement/concrete floor approximately at one foot below grade.

Analytical Results

A total of 6 samples were collected for analysis and the results were compared to the NYSDEC Soil Cleanup Objectives (SCOs) for the possible use of the Site. Table 1, below, summarizes the analytical results. The full laboratory data package is attached to this letter.

All of the soil samples contained at least one contaminant at concentrations that exceeded Unrestricted Use SCOs and/or at least one contaminant that exceeded Restricted Residential

Use SCOs. Restricted Residential Use SCOs are the guidance for properties to be used for apartments or other high density residential developments. Two of the six samples contained benzo(a)pyrene at concentrations that exceeded Industrial Use SCOs.

Table 1: SCO Exceedances by Soil Sample.

<i>Sample ID</i>	<i>Sample Depth(ft)</i>	<i>SCO Exceeded</i>	<i>Contaminant (Concentration)</i>
TP1	2	Unrestricted Use	Zinc (212 ppm)
		Restricted Residential Use	Mercury (1.4 ppm) Lead (416 ppm)
TP2	3	Unrestricted Use	Lead (99.4 ppm) Zinc (110 ppm)
		Restricted Residential Use	Indeno (1,2,3-cd)pyrene (0.520 ppm)
TP3	1	Unrestricted Use	Lead (73.6 ppm)
		Residential Use	Benzo(k)fluoranthene (1.2 ppm) Chrysene (2.4 ppm)
		Restricted Residential Use	Benzo(a)anthracene (2.1 ppm) Benzo(b)fluoranthene (2.6 ppm) Indeno (1,2,3-cd)pyrene (1.1 ppm)
		Industrial Use	Benzo(a)pyrene (1.8 ppm)
TP 3	6	Unrestricted Use	Mercury (0.32 ppm) Zinc (315 ppm)
		Restricted Residential Use	Lead (715 ppm)
TP4	2	Unrestricted Use	Mercury (0.38 ppm) Arsenic (13.6 ppm) Zinc (430 ppm) 4,4'-DDT (0.0042 ppm) 4,4'-DDE (0.0036 ppm) 4,4'-DDD (0.010 ppm)
		Residential Use	Chrysene (1.2 ppm)
		Restricted Residential Use	Lead (868 ppm) Indeno (1,2,3-cd)pyrene (0.590 ppm)
TP5	4	Unrestricted Use	Mercury (0.21 ppm) Lead (115 ppm) Zinc (141 ppm)

	Residential Use	Benzo(k)fluoranthene (1.1 ppm) Chrysene (1.8 ppm)
	Restricted Residential Use	Benzo(a)anthracene (1.3 ppm) Benzo(b)fluoranthene (2.3 ppm) Indeno (1,2,3-cd)pyrene (1.3 ppm)
	Industrial Use	Benzo(a)pyrene (1.5 ppm)

Summary

The Site is currently vacant and is being considered for development as a multi-tenant apartment complex. The Site contains urban fill across the site with thickness ranging up to more than six feet.

The on-site fill was sampled and the resulting samples were analyzed for VOCs, SVOCs, metals and pesticides. The analytical results indicate that the Site's urban fill contains contaminants at concentrations above NYSDEC SCOs. All five test pits contained compounds above Restricted Residential Use SCOs. This further confirms the extent of contaminated fill found in the July 2015 subsurface investigation. In total, eight of eleven samples collected from the Site contain concentrations of compounds exceeding Restricted Residential Use.

While the concentrations of contaminants in the fill does not indicate that the Site is subject to regulatory action, their presence will complicate redevelopment of the Site for high density housing. Based on the contraventions of NYSDEC SCOs and considering both sampling events, the site is very likely to be eligible for inclusion in the NYSDEC Brownfield Cleanup Program (BCP).

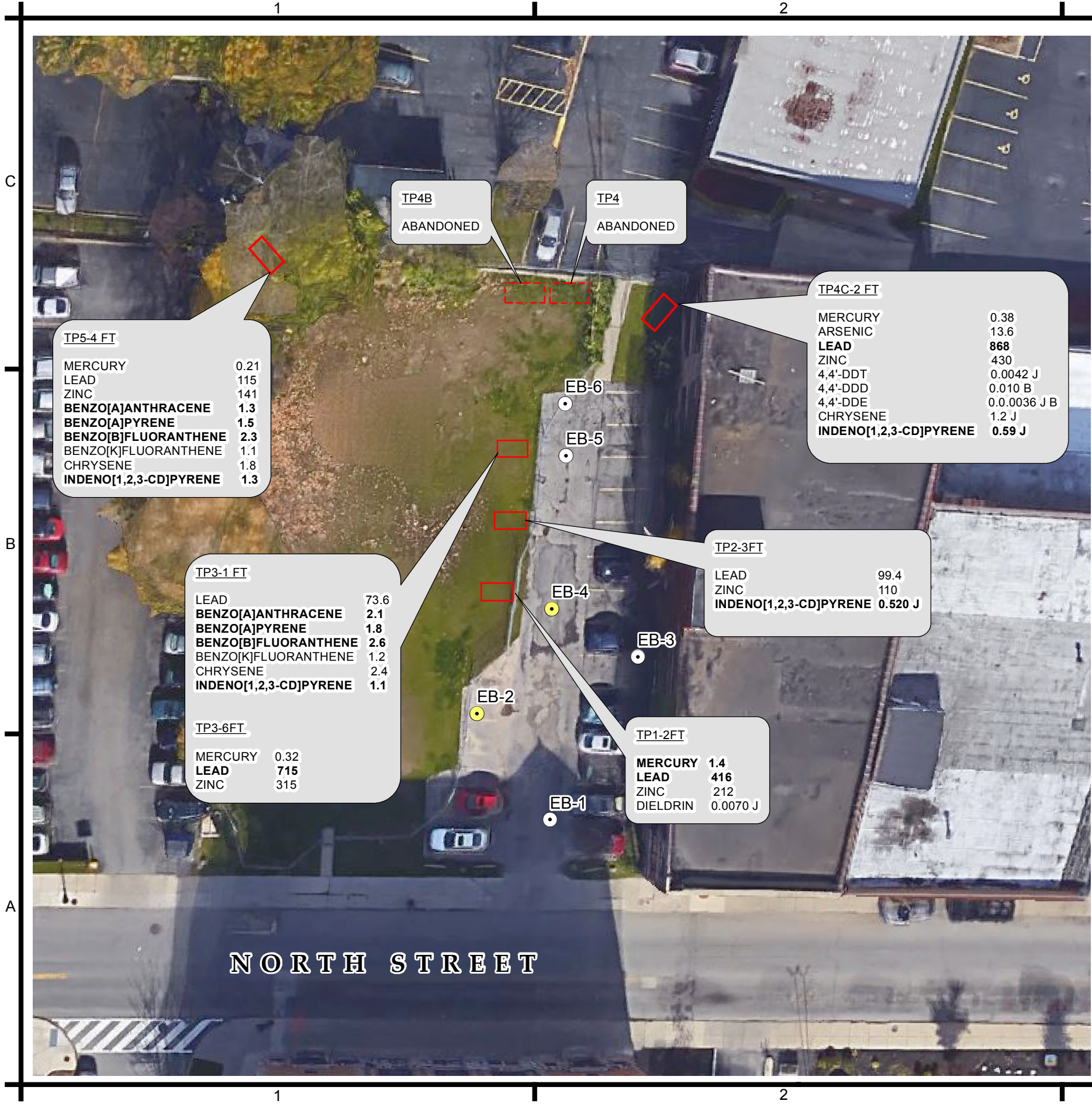
Please do not hesitate to contact me with any questions or comments. We appreciate the opportunity to work with you on this project.

Sincerely yours,
C&S ENGINEERS, INC.



Mark Colmerauer
Regional Environmental Services Manager

Path: F:\Project\P67 - First Amherst Development Company\P67.001.001 - BCP APP\Planning Study\GIS\FIGURE 1_AdditionalSampling.mxd



LEGEND

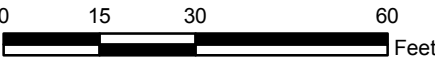
- NOVEMBER 2015 TEST PIT LOCATION
- JULY 2015 BORING LOCATION
- JULY 2015 BORING LOCATION WITH AT LEAST ONE CONTAMINATE EXCEEDING RESTRICTED RESIDENTIAL USE SCOS.

SAMPLE ID

ANALYTE
ANALYTE ABOVE RESTRICTED RESIDENTIAL CONCENTRATION (PPM)

NOTES

- SAMPLING DATE: NOVEMBER 20, 2015
- ANALYTES DETECTED AT CONCENTRATIONS ABOVE RESTRICTED RESIDENTIAL USE SCOS ARE **BOLDED**.
- QUALIFIER J INDICATES AN ESTIMATED CONCENTRATION. QUALIFIER B INDICATES THE ANALYTE WAS PRESENT IN THE BLANK.
- COORDINATE SYSTEM: NAD 1983 STATEPLANE NY
WEST FIPS 3103
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983
UNITS: FOOT US



C&S Engineers, Inc.
141 Elm Street
Suite 100
Buffalo, New York 14203
Phone: 716-847-1630
Fax: 716-847-1454
www.candse.com



19/23 NORTH STREET ADDITIONAL SOIL SAMPLING

BUFFALO, NEW YORK

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO:		P67.001.001
DATE:		December 18, 2015
DRAWN BY:		A. DeMARCHI
DESIGNED BY:		A. DeMARCHI
CHECKED BY:		M. COLMERAUER
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 2709 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

TEST PIT
LOCATIONS
AND RESULTS

FIGURE 1

TABLE 1
SUMMARY OF ANALYTICAL RESULTS - SOIL SAMPLES
19/23 NORTH STREET BUFFALO, NEW YORK

Analyte	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	TP1-2FT 11/20/2015	TP2-3FT 11/20/2015	TP3-1FT 11/20/2015	TP3-6FT 11/20/2015	TP4C-2FT 11/20/2015	TP5-4FT 11/20/2015
Volatile Organic Compounds											
Acetone	0.05	100	100	500	1000	.012 J B	ND	ND		ND	0.020 J B
Tetrachloroethene	1.3	5.5	19	150	300	ND	ND	ND		0.0016 J	ND
Semi-Volatile Organic Compounds											
2-Methylnaphthalene	N/S	N/S	N/S	N/S	N/S	ND	ND	ND		ND	.480 J
Acenaphthene	20	100	100	500	1000	ND	ND	.240 J		ND	
Anthracene	100	100	100	500	1000	ND	.230 J	.470 J		ND	.320 J
Benzo[a]anthracene	1	1	1	5.6	11	.400 J	.800 J	2.1		1.000 J	1.3
Benzo[a]pyrene	1	1	1	1	1.1	.380 J	.730 J	1.8		.910 J	1.5
Benzo[b]fluoranthene	1	1	1	5.6	11	.560 J	1	2.6		1.2 J	2.3
Benzo[g,h,i]perylene	100	100	100	500	1000	.330 J	.630 J	1.3		.700 J	1.8
Benzo[k]fluoranthene	0.8	1	3.9	56	110	.280 J	.620 J	1.2		.550 J	1.1
Butyl benzyl phthalate	N/S	N/S	N/S	N/S	N/S	ND	ND	ND		ND	.25 J
Carbazole	N/S	N/S	N/S	N/S	N/S	ND	.140 J	.310 J		.230 J	.250 J
Chrysene	1	1	3.9	56	110	.500 J	0.93	2.4		1.200 J	1.8
Dibenz(a,h)anthracene	0.33	0.33	0.33	0.56	1.1	ND	ND	ND		ND	.380 J
Fluoranthene	100	100	100	500	1000	1	2.1	5.6		2.6	3.4
Fluorene	30	100	100	500	1000	ND	.110 J	.220 J		ND	.140 J
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.5	5.6	11	.270 J	.520 J	1.1		.590 J	1.3
Naphthalene	12	100	100	500	1000	ND	ND	ND		ND	.610 J
Phenanthrene	100	100	100	500	1000	.520 J	1.3	3		2	1.7
Pyrene	100	100	100	500	1000	.770 J	1.5	3.8		1.9	2.7
Pesticides											
4,4'-DDT	0.0033	1.7	7.9	47	94	0.0012 J	0.0013 J	0.00074 J		0.0042 J	ND
4,4'-DDE	0.0033	1.8	8.9	62	120	ND	ND	ND		0.0036 J B	ND
4,4'-DDD	0.0033	2.6	13	92	180	ND	ND	ND		0.010 B	ND
alpha-BHC	0.02	0.097	0.48	3.4	6.8	ND	0.0021 J F2	ND		ND	ND
beta-BHC	0.036	0.072	0.36	3	14	0.0012 J B	0.0055 B	0.0019 B		0.0043 J B	ND
Dieldrin	0.005	0.039	0.2	1.4	2.8	0.0007 J	0.0015 J F2	0.00073 J		0.0037 J	ND
Endosulfan sulfate	2.4	4.8	24	200	920	0.0017 J	0.0076 F1	0.003		0.0046 J	ND
Endrin ketone	N/S	N/S	N/S	N/S	N/S	ND	0.0019 J	0.0074 J		ND	ND
Methoxychlor	N/S	N/S	N/S	N/S	N/S	ND	ND	ND		0.0032 J B	ND
Metals											
Mercury	0.18	0.81	0.81	2.8	5.7	1.4	0.16	0.13	0.32	0.38	0.21
Aluminum	N/S	N/S	N/S	N/S	N/S	6960	7730	6300	7760	6200	10500
Antimony	N/S	N/S	N/S	N/S	N/S	ND	ND	ND	ND	1.3 J	ND
Arsenic	13	16	16	16	16	4.5	3.3	3.7	3.4	13.6	4.7
Barium	350	350	400	400	10000	108	44.1	42.5	349	297	90.7
Beryllium	7.2	14	72	590	2700	0.31	0.37	0.31	0.36	0.48	0.47
Cadmium	2.5	2.5	4.3	9.3	60	0.34	0.27	0.29	0.81	0.78	0.35
Calcium	N/S	N/S	N/S	N/S	N/S	43600 B	22400 B	23800 B	74400 B	38800 B	18600 B
Chromium*	30	36	180	1500	6800	9.1	9.4	8.1	10.2	12.6	14.5
Cobalt	N/S	N/S	N/S	N/S	N/S	3.4	3.5	3.1	3.8	4.3	6.1
Copper	50	270	270	270	10000	14.3	12.1	12.9	11.9	63.7	23.4
Iron	N/S	N/S	N/S	N/S	N/S	8460	9330	8580	10200	11300	13200
Lead	63	400	400	1000	3900	416	99.4	73.6	715	868	115
Magnesium	N/S	N/S	N/S	N/S	N/S	5540	10100	3010	21500	16400	7690
Manganese	1600	2000	2000	10000	10000	292 B	304 B	271 B	362 B	262 B	329 B
Nickel	30	140	310	310	10000	8.3	8	7.5	9.1	12.8	12.9
Potassium	N/S	N/S	N/S	N/S	N/S	1080	1250	1030	1650	1050	2060
Selenium	3.9	36	180	1500	6800	ND	ND	ND	ND	0.75 J	ND
Sodium	N/S	N/S	N/S	N/S	N/S	161	163	98.7 J	160 J	134 J	184
Vanadium	N/S	N/S	N/S	N/S	N/S	17	15.3	14.2	16.9	16.2	22.1
Zinc	109	2200	10000	10000	1000	212	110	107	315	430	141

- Notes:
- TP3-6ft analyzed for metals only
 - Samples were analyzed for total chromium and compared to trivalent standards.
 - N/S indicates there is No Standard
 - Qualifiers:
 - B Compound was found in blank and sample.
 - J Result is less than the RL, but greater than or equal to the MDL and the concentration is an approximate value.
 - ND Not detected at the reporting limit.

 C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com			TEST PIT		Test Pit No.	TP1
					Sheet 1 of:	1
					Project No.:	P67
Project Name: 19/23 North Street Additional Soil Sampling					Start Date:	11/20/15
Location:			Operator: Natures Way	Finish Date:	11/20/15	
Client: 23 North Street LLC			Equipment: Mini Ex	Inspector:	AD	
Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse m - medium f - fine a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10% S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey		COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
						40 degrees, Cloudy
1			0-6"	brown topsoil		
			6"-12"	gravel subbase, crushed stone, large bricks, concrete blocks		0 ppm
2			12"-24"	crushed stone, large bricks, concrete blocks, Fill with Sand		
3			24"	crushed stone, large bricks, concrete blocks, Fill with Sand		0 ppm
			-			
4			40"	moist, red-brown Silty Clay		0 ppm
			-			
5			60"			
6				End of excavation at 5 ft		
7				Sample:		
				TP1-2ft 9:15 AM		
8						
9						
10						
11						
12						
13						
14						
15						
1 ft <u>Brown topsoil</u> 3 ft <u>FILL</u>						

 C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com			TEST PIT		Test Pit No.	TP2
					Sheet 1 of:	1
					Project No.:	P67
Project Name: 19/23 North Street Additional Soil Sampling					Start Date:	11/20/15
Location:			Operator: Natures Way	Finish Date:	11/20/15	
Client: 23 North Street LLC			Equipment: Mini Ex	Inspector:	AD	
Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse m - medium f - fine a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10% S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey		COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
						9:20 Start
1			0-6"	dr. brown topsoil		
			6"-10"	gravel subbase to former parking lot		0 ppm
2			10"	moist, grey-brown Sandy Silt and gravel		0 ppm
			-			
3			36"			
			36"-	moist, brown Silt		
4			48"			0 ppm
5						
6				End of excavation at 4 ft		
7				Sample:		
8				TP2-3ft 9:30 AM		
9						
10						
11						
12						
13						
14						
15						

1 ft	<u>Brown topsoil</u> <u>(More gravel)</u>
3 ft	<u>FILL</u> <u>(Less Gravel)</u>

 C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com			TEST PIT		Test Pit No.	TP3
					Sheet 1 of:	1
					Project No.:	P67
Project Name: 19/23 North Street Additional Soil Sampling					Start Date:	11/20/15
Location:			Operator: Natures Way	Finish Date:	11/20/15	
Client: 23 North Street LLC			Equipment: Mini Ex	Inspector:	AD	
Depth (ft)	Sample No.	Symbol	Exc. Depth	c - coarse m - medium f - fine MATERIAL DESCRIPTION S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey	a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
						9:40 Start
1			0-6"	dr. brown topsoil		
			6"-12"	Brown sand, brick, gravel		0 ppm
2			12"-24"	Yellow brown Sand, some gravel		0 ppm
3			24"-36"	dr. brown Sand		0 ppm
			26"-	brown Sand, some gravel		0 ppm
4						
5			60"			
6			60"	light grey coarse Sand and Gravel, Bricks		0 ppm
			-			
7			84"			
8				End of excavation at 7 ft		
9						
10				Sample:		
				TP3-1ft 11:20 AM		
				TP3-6ft 11:15 AM Metals only.		
11						
12						
13						
14						
15						
<u>Fill</u> <u>Yellow/brown sand</u> <u>More Fill</u>						

			C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		TEST PIT		Test Pit No.	TP4
							Sheet 1 of:	1
							Project No.:	P67
Project Name: 19/23 North Street Additional Soil Sampling							Start Date:	11/20/15
Location:					Operator:	Natures Way	Finish Date:	11/20/15
Client:			23 North Street LLC		Equipment:	Mini Ex	Inspector:	AD
Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse m - medium f - fine S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey			COMMENTS a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10% (e.g., caving of sidewalls, excavation difficulties, PID readings)	
				0-10" Topsoil			10:00 Start	
				10" - <u>Hit top of concrete/cement floor. Layer of dark material on top</u>			0 ppm	
1								
2								
3								
4				<u>No Sample</u>				
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

			C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		TEST PIT		Test Pit No.	TP4 B
							Sheet 1 of:	1
							Project No.:	P67
Project Name: 19/23 North Street Additional Soil Sampling							Start Date:	11/20/15
Location:					Operator:	Natures Way	Finish Date:	11/20/15
Client:			23 North Street LLC		Equipment:	Mini Ex	Inspector:	AD
Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse m - medium f - fine S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%			COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)	
				0-10" Topsoil			10:05 Start	
				10" - <u>Hit top of concrete/cement floor. Layer of dark material on top</u>			0 ppm	
1								
2								
3								
4				<u>No Sample</u>				
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

 C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com			TEST PIT		Test Pit No. TP4C
					Sheet 1 of: 1
					Project No.: P67
Project Name: 19/23 North Street Additional Soil Sampling					Start Date: 11/20/15
Location:			Operator: Natures Way	Finish Date: 11/20/15	
Client: 23 North Street LLC			Equipment: Mini Ex	Inspector: AD	
Depth (ft)	Sample No.	Symbol	Exc. Depth	c - coarse m - medium f - fine MATERIAL DESCRIPTION S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					10:25 Start
1			0"- 12"	Silty brown topsoil	0 ppm
2			12"-	Dr. brown sandy gravel fill, pieces of landscaping fabric, tree roots	0 ppm
3			36"		
4			36" - 48"	Yellow brown, moist, Sand	0 ppm
5					
6				Sample: <u>TP4-2ft</u> 10:45 AM	
7					
8					
9					
10					
11					
12					
13					
14					
15					

C&S COMPANIES C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com			TEST PIT		Test Pit No.	TP5
					Sheet 1 of:	1
					Project No.:	P67
Project Name: 19/23 North Street Additional Soil Sampling					Start Date:	11/20/15
Location:			Operator: Natures Way		Finish Date: 11/20/15	
Client: 23 North Street LLC			Equipment: Mini Ex		Inspector: AD	
Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION		COMMENTS
				c - coarse m - medium f - fine		(e.g., caving of sidewalls, excavation difficulties, PID readings)
				S - Sand, \$ - Silt, G - Gravel, C - Clay, cly - clayey		
				a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%		
						10:50 Start
1			0"-6"	Silty Clay Topsoil		0 ppm
2			6"	red brown Clay with bricks		0 ppm
			-			
3			36"			
4			36" - 48"	Grey brown, moist, Clay, large pieces of brick and cement/concrete, coal pieces		0 ppm
5						
6				Sample: TP5-4ft 10:45 AM		
7						
8						
9						
10						
11						
12						
13						
14						
15						





TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-91541-1

Client Project/Site: 23 North Street

For:

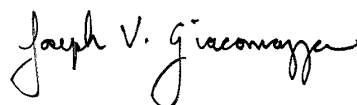
C&S Engineers, Inc.

141 Elm Street

Suite 100

Buffalo, New York 14203

Attn: Ms. Alayna DeMarchi



Authorized for release by:

12/8/2015 10:23:17 AM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Case Narrative

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Job ID: 480-91541-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-91541-1

Receipt

The samples were received on 11/20/2015 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-277316 recovered above the upper control limit for 2-Hexanone. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: TP1-2FT (480-91541-1), TP2-3FT (480-91541-2), TP3-1FT (480-91541-3) and TP5-4FT (480-91541-6).

Method(s) 8260C: The method blank for preparation batch 480-277318 and analytical batch 480-277316 contained 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, and Acetone above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-analysis of samples was not performed. The following samples are impacted: TP1-2FT (480-91541-1), TP2-3FT (480-91541-2), TP3-1FT (480-91541-3) and TP5-4FT (480-91541-6).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-277887 recovered above the upper control limit for Trichlorofluoromethane. The samples associated with this CCV was non-detect for the affected analyte; therefore, the data has been reported. The following sample is impacted: TP4C-2FT (480-91541-5).

Method(s) 8260C: The method blank for preparation batch 480-277888 and analytical batch 480-277887 contained 1,2,4-Trichlorobenzene and Acetone above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. The following sample is impacted: TP4C-2FT (480-91541-5).

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

GC/MS Semi VOA

Method(s) 8270D: The laboratory control sample (LCS) and for preparation batch 480-276639 and analytical batch 480-277133 recovered outside control limits for the following analytes: atrazine. The analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: TP1-2FT (480-91541-1), TP2-3FT (480-91541-2), TP3-1FT (480-91541-3), TP4C-2FT (480-91541-5), TP5-4FT (480-91541-6), (480-91541-B-1-A MS) and (480-91541-B-1-B MSD). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and %RPD limits were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: TP2-3FT (480-91541-2), (480-91541-B-2-B MS) and (480-91541-B-2-C MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The following sample was diluted due to the nature of the sample matrix: TP4C-2FT (480-91541-5). Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The following sample was diluted due to the nature of the sample matrix: TP5-4FT (480-91541-6). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

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

Case Narrative

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Job ID: 480-91541-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Metals

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

Organic Prep

Method(s) 3550C: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: TP1-2FT (480-91541-1), TP2-3FT (480-91541-2), TP3-1FT (480-91541-3), TP4C-2FT (480-91541-5), TP5-4FT (480-91541-6), (480-91541-B-2 MS) and (480-91541-B-2 MSD).

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

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP1-2FT

Lab Sample ID: 480-91541-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	12	J B	24	4.1	ug/Kg	1	☆	8260C	Total/NA	
Benzo[a]anthracene	400	J	950	95	ug/Kg	5	☆	8270D	Total/NA	
Benzo[a]pyrene	380	J	950	140	ug/Kg	5	☆	8270D	Total/NA	
Benzo[b]fluoranthene	560	J	950	150	ug/Kg	5	☆	8270D	Total/NA	
Benzo[g,h,i]perylene	330	J	950	100	ug/Kg	5	☆	8270D	Total/NA	
Benzo[k]fluoranthene	280	J	950	120	ug/Kg	5	☆	8270D	Total/NA	
Chrysene	500	J	950	210	ug/Kg	5	☆	8270D	Total/NA	
Fluoranthene	1000		950	100	ug/Kg	5	☆	8270D	Total/NA	
Indeno[1,2,3-cd]pyrene	270	J	950	120	ug/Kg	5	☆	8270D	Total/NA	
Phenanthrene	520	J	950	140	ug/Kg	5	☆	8270D	Total/NA	
Pyrene	770	J	950	110	ug/Kg	5	☆	8270D	Total/NA	
4,4'-DDT	1.2	J	1.9	0.44	ug/Kg	1	☆	8081B	Total/NA	
beta-BHC	1.2	J B	1.9	0.34	ug/Kg	1	☆	8081B	Total/NA	
Dieldrin	0.70	J	1.9	0.45	ug/Kg	1	☆	8081B	Total/NA	
Endosulfan sulfate	1.7	J	1.9	0.35	ug/Kg	1	☆	8081B	Total/NA	
Aluminum	6960		11.2	4.9	mg/Kg	1	☆	6010C	Total/NA	
Arsenic	4.5		2.2	0.45	mg/Kg	1	☆	6010C	Total/NA	
Barium	108		0.56	0.12	mg/Kg	1	☆	6010C	Total/NA	
Beryllium	0.31		0.22	0.031	mg/Kg	1	☆	6010C	Total/NA	
Cadmium	0.34		0.22	0.034	mg/Kg	1	☆	6010C	Total/NA	
Calcium	43600	B	56.0	3.7	mg/Kg	1	☆	6010C	Total/NA	
Chromium	9.1		0.56	0.22	mg/Kg	1	☆	6010C	Total/NA	
Cobalt	3.4		0.56	0.056	mg/Kg	1	☆	6010C	Total/NA	
Copper	14.3		1.1	0.24	mg/Kg	1	☆	6010C	Total/NA	
Iron	8460		11.2	3.9	mg/Kg	1	☆	6010C	Total/NA	
Lead	416		1.1	0.27	mg/Kg	1	☆	6010C	Total/NA	
Magnesium	5540		22.4	1.0	mg/Kg	1	☆	6010C	Total/NA	
Manganese	292	B	0.22	0.036	mg/Kg	1	☆	6010C	Total/NA	
Nickel	8.3		5.6	0.26	mg/Kg	1	☆	6010C	Total/NA	
Potassium	1080		33.6	22.4	mg/Kg	1	☆	6010C	Total/NA	
Sodium	161		157	14.6	mg/Kg	1	☆	6010C	Total/NA	
Vanadium	17.0		0.56	0.12	mg/Kg	1	☆	6010C	Total/NA	
Zinc	212		2.2	0.72	mg/Kg	1	☆	6010C	Total/NA	
Mercury	1.4		0.099	0.040	mg/Kg	5		7471B	Total/NA	

Client Sample ID: TP2-3FT

Lab Sample ID: 480-91541-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Anthracene	230	J	930	230	ug/Kg	5	☆	8270D	Total/NA	
Benzo[a]anthracene	800	J	930	93	ug/Kg	5	☆	8270D	Total/NA	
Benzo[a]pyrene	730	J	930	140	ug/Kg	5	☆	8270D	Total/NA	
Benzo[b]fluoranthene	1000		930	150	ug/Kg	5	☆	8270D	Total/NA	
Benzo[g,h,i]perylene	630	J	930	98	ug/Kg	5	☆	8270D	Total/NA	
Benzo[k]fluoranthene	620	J	930	120	ug/Kg	5	☆	8270D	Total/NA	
Carbazole	140	J	930	110	ug/Kg	5	☆	8270D	Total/NA	
Chrysene	930		930	210	ug/Kg	5	☆	8270D	Total/NA	
Fluoranthene	2100		930	98	ug/Kg	5	☆	8270D	Total/NA	
Fluorene	110	J	930	110	ug/Kg	5	☆	8270D	Total/NA	
Indeno[1,2,3-cd]pyrene	520	J	930	110	ug/Kg	5	☆	8270D	Total/NA	
Phenanthrene	1300		930	140	ug/Kg	5	☆	8270D	Total/NA	

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP2-3FT (Continued)

Lab Sample ID: 480-91541-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Pyrene	1500		930	110	ug/Kg	5	✱		8270D	Total/NA
4,4'-DDT	1.3	J	3.7	0.88	ug/Kg	2	✱		8081B	Total/NA
alpha-BHC	2.1	J F2	3.7	0.67	ug/Kg	2	✱		8081B	Total/NA
beta-BHC	5.5	B F1 F2	3.7	0.67	ug/Kg	2	✱		8081B	Total/NA
Dieldrin	1.5	J F2	3.7	0.90	ug/Kg	2	✱		8081B	Total/NA
Endosulfan sulfate	7.6	F1	3.7	0.70	ug/Kg	2	✱		8081B	Total/NA
Endrin ketone	1.9	J	3.7	0.92	ug/Kg	2	✱		8081B	Total/NA
Aluminum	7730		11.0	4.8	mg/Kg	1	✱		6010C	Total/NA
Arsenic	3.3		2.2	0.44	mg/Kg	1	✱		6010C	Total/NA
Barium	44.1		0.55	0.12	mg/Kg	1	✱		6010C	Total/NA
Beryllium	0.37		0.22	0.031	mg/Kg	1	✱		6010C	Total/NA
Cadmium	0.27		0.22	0.033	mg/Kg	1	✱		6010C	Total/NA
Calcium	22400	B	55.0	3.6	mg/Kg	1	✱		6010C	Total/NA
Chromium	9.4		0.55	0.22	mg/Kg	1	✱		6010C	Total/NA
Cobalt	3.5		0.55	0.055	mg/Kg	1	✱		6010C	Total/NA
Copper	12.1		1.1	0.23	mg/Kg	1	✱		6010C	Total/NA
Iron	9330		11.0	3.9	mg/Kg	1	✱		6010C	Total/NA
Lead	99.4		1.1	0.26	mg/Kg	1	✱		6010C	Total/NA
Magnesium	10100		22.0	1.0	mg/Kg	1	✱		6010C	Total/NA
Manganese	304	B	0.22	0.035	mg/Kg	1	✱		6010C	Total/NA
Nickel	8.0		5.5	0.25	mg/Kg	1	✱		6010C	Total/NA
Potassium	1250		33.0	22.0	mg/Kg	1	✱		6010C	Total/NA
Sodium	163		154	14.3	mg/Kg	1	✱		6010C	Total/NA
Vanadium	15.3		0.55	0.12	mg/Kg	1	✱		6010C	Total/NA
Zinc	110		2.2	0.70	mg/Kg	1	✱		6010C	Total/NA
Mercury	0.16		0.020	0.0082	mg/Kg	1			7471B	Total/NA

Client Sample ID: TP3-1FT

Lab Sample ID: 480-91541-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	240	J	920	140	ug/Kg	5	✱		8270D	Total/NA
Anthracene	470	J	920	230	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]anthracene	2100		920	92	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]pyrene	1800		920	140	ug/Kg	5	✱		8270D	Total/NA
Benzo[b]fluoranthene	2600		920	150	ug/Kg	5	✱		8270D	Total/NA
Benzo[g,h,i]perylene	1300		920	98	ug/Kg	5	✱		8270D	Total/NA
Benzo[k]fluoranthene	1200		920	120	ug/Kg	5	✱		8270D	Total/NA
Carbazole	310	J	920	110	ug/Kg	5	✱		8270D	Total/NA
Chrysene	2400		920	210	ug/Kg	5	✱		8270D	Total/NA
Fluoranthene	5600		920	98	ug/Kg	5	✱		8270D	Total/NA
Fluorene	220	J	920	110	ug/Kg	5	✱		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1100		920	110	ug/Kg	5	✱		8270D	Total/NA
Phenanthrene	3000		920	140	ug/Kg	5	✱		8270D	Total/NA
Pyrene	3800		920	110	ug/Kg	5	✱		8270D	Total/NA
4,4'-DDT	0.74	J	1.8	0.43	ug/Kg	1	✱		8081B	Total/NA
beta-BHC	1.9	B	1.8	0.33	ug/Kg	1	✱		8081B	Total/NA
Dieldrin	0.73	J	1.8	0.44	ug/Kg	1	✱		8081B	Total/NA
Endosulfan sulfate	3.0		1.8	0.34	ug/Kg	1	✱		8081B	Total/NA
Endrin ketone	0.74	J	1.8	0.45	ug/Kg	1	✱		8081B	Total/NA
Aluminum	6300		11.0	4.9	mg/Kg	1	✱		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP3-1FT (Continued)

Lab Sample ID: 480-91541-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.7		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	42.5		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.31		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.29		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	23800	B	55.2	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	8.1		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.1		0.55	0.055	mg/Kg	1	☼	6010C	Total/NA
Copper	12.9		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	8580		11.0	3.9	mg/Kg	1	☼	6010C	Total/NA
Lead	73.6		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3010		22.1	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	271	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	7.5		5.5	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1030		33.1	22.1	mg/Kg	1	☼	6010C	Total/NA
Sodium	98.7	J	154	14.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14.2		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	107		2.2	0.71	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.13		0.020	0.0080	mg/Kg	1		7471B	Total/NA

Client Sample ID: TP3-6FT

Lab Sample ID: 480-91541-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7760		11.9	5.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.4		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	349		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.36		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.81		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	74400	B	59.5	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	10.2		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.8		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	11.9		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	10200		11.9	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	715		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	21500		23.8	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	362	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	9.1		6.0	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	1650		35.7	23.8	mg/Kg	1	☼	6010C	Total/NA
Sodium	160	J	167	15.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.9		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	315		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.32		0.020	0.0081	mg/Kg	1		7471B	Total/NA

Client Sample ID: TP4C-2FT

Lab Sample ID: 480-91541-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.6	J	6.2	0.83	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	1000	J	1900	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	910	J	1900	280	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	1200	J	1900	310	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	700	J	1900	200	ug/Kg	10	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP4C-2FT (Continued)

Lab Sample ID: 480-91541-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[k]fluoranthene	550	J	1900	250	ug/Kg	10	✱		8270D	Total/NA
Carbazole	230	J	1900	230	ug/Kg	10	✱		8270D	Total/NA
Chrysene	1200	J	1900	430	ug/Kg	10	✱		8270D	Total/NA
Fluoranthene	2600		1900	200	ug/Kg	10	✱		8270D	Total/NA
Indeno[1,2,3-cd]pyrene	590	J	1900	240	ug/Kg	10	✱		8270D	Total/NA
Phenanthrene	2000		1900	280	ug/Kg	10	✱		8270D	Total/NA
Pyrene	1900		1900	230	ug/Kg	10	✱		8270D	Total/NA
4,4'-DDD	10	B	9.5	1.8	ug/Kg	5	✱		8081B	Total/NA
4,4'-DDE	3.6	J B	9.5	2.0	ug/Kg	5	✱		8081B	Total/NA
4,4'-DDT	4.2	J	9.5	2.2	ug/Kg	5	✱		8081B	Total/NA
beta-BHC	4.3	J B	9.5	1.7	ug/Kg	5	✱		8081B	Total/NA
Dieldrin	3.7	J	9.5	2.3	ug/Kg	5	✱		8081B	Total/NA
Endosulfan sulfate	4.6	J	9.5	1.8	ug/Kg	5	✱		8081B	Total/NA
Methoxychlor	3.2	J B	9.5	1.9	ug/Kg	5	✱		8081B	Total/NA
Aluminum	6200		11.4	5.0	mg/Kg	1	✱		6010C	Total/NA
Antimony	1.3	J	17.1	0.46	mg/Kg	1	✱		6010C	Total/NA
Arsenic	13.6		2.3	0.46	mg/Kg	1	✱		6010C	Total/NA
Barium	297		0.57	0.13	mg/Kg	1	✱		6010C	Total/NA
Beryllium	0.48		0.23	0.032	mg/Kg	1	✱		6010C	Total/NA
Cadmium	0.78		0.23	0.034	mg/Kg	1	✱		6010C	Total/NA
Calcium	38800	B	57.0	3.8	mg/Kg	1	✱		6010C	Total/NA
Chromium	12.6		0.57	0.23	mg/Kg	1	✱		6010C	Total/NA
Cobalt	4.3		0.57	0.057	mg/Kg	1	✱		6010C	Total/NA
Copper	63.7		1.1	0.24	mg/Kg	1	✱		6010C	Total/NA
Iron	11300		11.4	4.0	mg/Kg	1	✱		6010C	Total/NA
Lead	868		1.1	0.27	mg/Kg	1	✱		6010C	Total/NA
Magnesium	16400		22.8	1.1	mg/Kg	1	✱		6010C	Total/NA
Manganese	262	B	0.23	0.036	mg/Kg	1	✱		6010C	Total/NA
Nickel	12.8		5.7	0.26	mg/Kg	1	✱		6010C	Total/NA
Potassium	1050		34.2	22.8	mg/Kg	1	✱		6010C	Total/NA
Selenium	0.75	J	4.6	0.46	mg/Kg	1	✱		6010C	Total/NA
Sodium	134	J	159	14.8	mg/Kg	1	✱		6010C	Total/NA
Vanadium	16.2		0.57	0.13	mg/Kg	1	✱		6010C	Total/NA
Zinc	430		2.3	0.73	mg/Kg	1	✱		6010C	Total/NA
Mercury	0.38		0.019	0.0077	mg/Kg	1			7471B	Total/NA

Client Sample ID: TP5-4FT

Lab Sample ID: 480-91541-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	20	J B	23	3.9	ug/Kg	1	✱		8260C	Total/NA
2-Methylnaphthalene	480	J	1000	200	ug/Kg	5	✱		8270D	Total/NA
Anthracene	320	J	1000	250	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]anthracene	1300		1000	100	ug/Kg	5	✱		8270D	Total/NA
Benzo[a]pyrene	1500		1000	150	ug/Kg	5	✱		8270D	Total/NA
Benzo[b]fluoranthene	2300		1000	160	ug/Kg	5	✱		8270D	Total/NA
Benzo[g,h,i]perylene	1800		1000	110	ug/Kg	5	✱		8270D	Total/NA
Benzo[k]fluoranthene	1100		1000	130	ug/Kg	5	✱		8270D	Total/NA
Butyl benzyl phthalate	250	J	1000	160	ug/Kg	5	✱		8270D	Total/NA
Carbazole	250	J	1000	120	ug/Kg	5	✱		8270D	Total/NA
Chrysene	1800		1000	220	ug/Kg	5	✱		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP5-4FT (Continued)

Lab Sample ID: 480-91541-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	380	J	1000	180	ug/Kg		5	☼	8270D	Total/NA
Fluoranthene	3400		1000	110	ug/Kg		5	☼	8270D	Total/NA
Fluorene	140	J	1000	120	ug/Kg		5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1300		1000	120	ug/Kg		5	☼	8270D	Total/NA
Naphthalene	610	J	1000	130	ug/Kg		5	☼	8270D	Total/NA
Phenanthrene	1700		1000	150	ug/Kg		5	☼	8270D	Total/NA
Pyrene	2700		1000	120	ug/Kg		5	☼	8270D	Total/NA
Aluminum	10500		11.4	5.0	mg/Kg		1	☼	6010C	Total/NA
Arsenic	4.7		2.3	0.46	mg/Kg		1	☼	6010C	Total/NA
Barium	90.7		0.57	0.13	mg/Kg		1	☼	6010C	Total/NA
Beryllium	0.47		0.23	0.032	mg/Kg		1	☼	6010C	Total/NA
Cadmium	0.35		0.23	0.034	mg/Kg		1	☼	6010C	Total/NA
Calcium	18600	B	56.9	3.8	mg/Kg		1	☼	6010C	Total/NA
Chromium	14.5		0.57	0.23	mg/Kg		1	☼	6010C	Total/NA
Cobalt	6.1		0.57	0.057	mg/Kg		1	☼	6010C	Total/NA
Copper	23.4		1.1	0.24	mg/Kg		1	☼	6010C	Total/NA
Iron	13200		11.4	4.0	mg/Kg		1	☼	6010C	Total/NA
Lead	115		1.1	0.27	mg/Kg		1	☼	6010C	Total/NA
Magnesium	7690		22.8	1.1	mg/Kg		1	☼	6010C	Total/NA
Manganese	329	B	0.23	0.036	mg/Kg		1	☼	6010C	Total/NA
Nickel	12.9		5.7	0.26	mg/Kg		1	☼	6010C	Total/NA
Potassium	2060		34.1	22.8	mg/Kg		1	☼	6010C	Total/NA
Sodium	184		159	14.8	mg/Kg		1	☼	6010C	Total/NA
Vanadium	22.1		0.57	0.13	mg/Kg		1	☼	6010C	Total/NA
Zinc	141		2.3	0.73	mg/Kg		1	☼	6010C	Total/NA
Mercury	0.21		0.019	0.0077	mg/Kg		1		7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP1-2FT

Date Collected: 11/20/15 09:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-1

Matrix: Solid

Percent Solids: 88.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.79	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,1,2-Trichloroethane	ND		4.9	0.63	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,1-Dichloroethane	ND		4.9	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,1-Dichloroethene	ND		4.9	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,2-Dibromo-3-Chloropropane	ND		4.9	2.4	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,2-Dichloroethane	ND		4.9	0.24	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,2-Dichloropropane	ND		4.9	2.4	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,4-Dichlorobenzene	ND		4.9	0.68	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Acetone	12	J B	24	4.1	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Benzene	ND		4.9	0.24	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Bromodichloromethane	ND		4.9	0.65	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Bromoform	ND		4.9	2.4	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Bromomethane	ND		4.9	0.44	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Carbon disulfide	ND		4.9	2.4	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Chlorobenzene	ND		4.9	0.64	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Dibromochloromethane	ND		4.9	0.62	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Chloroethane	ND		4.9	1.1	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Chloromethane	ND		4.9	0.29	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
cis-1,2-Dichloroethene	ND		4.9	0.62	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
cis-1,3-Dichloropropene	ND		4.9	0.70	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Cyclohexane	ND		4.9	0.68	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Dichlorodifluoromethane	ND		4.9	0.40	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
1,2-Dibromoethane	ND		4.9	0.62	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Isopropylbenzene	ND		4.9	0.73	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Methyl acetate	ND		4.9	2.9	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Methylcyclohexane	ND		4.9	0.74	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Methylene Chloride	ND		4.9	2.2	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Styrene	ND		4.9	0.24	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Tetrachloroethene	ND		4.9	0.65	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Toluene	ND		4.9	0.37	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
trans-1,3-Dichloropropene	ND		4.9	2.1	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Trichlorofluoromethane	ND		4.9	0.46	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Vinyl chloride	ND		4.9	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1
Xylenes, Total	ND		9.7	0.82	ug/Kg	☼	11/20/15 17:30	11/30/15 00:51	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP1-2FT

Date Collected: 11/20/15 09:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-1

Matrix: Solid

Percent Solids: 88.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		71 - 125	11/20/15 17:30	11/30/15 00:51	1
1,2-Dichloroethane-d4 (Surr)	86		64 - 126	11/20/15 17:30	11/30/15 00:51	1
4-Bromofluorobenzene (Surr)	78		72 - 126	11/20/15 17:30	11/30/15 00:51	1
Dibromofluoromethane (Surr)	86		60 - 140	11/20/15 17:30	11/30/15 00:51	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		950	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
bis (2-chloroisopropyl) ether	ND		950	190	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2,4,5-Trichlorophenol	ND		950	260	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2,4,6-Trichlorophenol	ND		950	190	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2,4-Dichlorophenol	ND		950	100	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2,4-Dimethylphenol	ND		950	230	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2,4-Dinitrophenol	ND		9300	4400	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2,4-Dinitrotoluene	ND		950	200	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2,6-Dinitrotoluene	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2-Chloronaphthalene	ND		950	160	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2-Chlorophenol	ND		950	170	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2-Methylphenol	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2-Methylnaphthalene	ND		950	190	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
2-Nitrophenol	ND		950	270	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4,6-Dinitro-2-methylphenol	ND		1800	950	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4-Bromophenyl phenyl ether	ND		950	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4-Chloro-3-methylphenol	ND		950	240	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4-Chloroaniline	ND		950	240	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4-Chlorophenyl phenyl ether	ND		950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4-Nitroaniline	ND		1800	500	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
4-Nitrophenol	ND		1800	670	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Acenaphthene	ND		950	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Acenaphthylene	ND		950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Acetophenone	ND		950	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Anthracene	ND		950	240	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Atrazine	ND		950	330	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Benzaldehyde	ND		950	760	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Benzo[a]anthracene	400	J	950	95	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Benzo[a]pyrene	380	J	950	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Benzo[b]fluoranthene	560	J	950	150	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Benzo[g,h,i]perylene	330	J	950	100	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Benzo[k]fluoranthene	280	J	950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Bis(2-chloroethoxy)methane	ND		950	200	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Bis(2-chloroethyl)ether	ND		950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Bis(2-ethylhexyl) phthalate	ND		950	320	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Butyl benzyl phthalate	ND		950	160	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Caprolactam	ND		950	290	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Carbazole	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Chrysene	500	J	950	210	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP1-2FT

Date Collected: 11/20/15 09:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-1

Matrix: Solid

Percent Solids: 88.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		950	170	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Di-n-butyl phthalate	ND		950	160	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Di-n-octyl phthalate	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Dibenzofuran	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Diethyl phthalate	ND		950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Dimethyl phthalate	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Fluoranthene	1000		950	100	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Fluorene	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Hexachlorobenzene	ND		950	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Hexachlorobutadiene	ND		950	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Hexachlorocyclopentadiene	ND		950	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Hexachloroethane	ND		950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Indeno[1,2,3-cd]pyrene	270 J		950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Isophorone	ND		950	200	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
N-Nitrosodi-n-propylamine	ND		950	160	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
N-Nitrosodiphenylamine	ND		950	770	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Naphthalene	ND		950	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Nitrobenzene	ND		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Pentachlorophenol	ND		1800	950	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Phenanthrene	520 J		950	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Phenol	ND		950	150	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5
Pyrene	770 J		950	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:26	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	77		34 - 132	11/24/15 08:25	11/27/15 20:26	5
Phenol-d5 (Surr)	85		11 - 120	11/24/15 08:25	11/27/15 20:26	5
p-Terphenyl-d14 (Surr)	91		65 - 153	11/24/15 08:25	11/27/15 20:26	5
2,4,6-Tribromophenol (Surr)	72		39 - 146	11/24/15 08:25	11/27/15 20:26	5
2-Fluorobiphenyl	91		37 - 120	11/24/15 08:25	11/27/15 20:26	5
2-Fluorophenol (Surr)	81		18 - 120	11/24/15 08:25	11/27/15 20:26	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.36	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
4,4'-DDE	ND		1.9	0.39	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
4,4'-DDT	1.2 J		1.9	0.44	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Aldrin	ND		1.9	0.46	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
alpha-BHC	ND		1.9	0.34	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
alpha-Chlordane	ND		1.9	0.93	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
beta-BHC	1.2 J B		1.9	0.34	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
delta-BHC	ND		1.9	0.35	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Dieldrin	0.70 J		1.9	0.45	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Endosulfan I	ND		1.9	0.36	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Endosulfan II	ND		1.9	0.34	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Endosulfan sulfate	1.7 J		1.9	0.35	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Endrin	ND		1.9	0.37	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Endrin aldehyde	ND		1.9	0.48	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Endrin ketone	ND		1.9	0.46	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
gamma-BHC (Lindane)	ND		1.9	0.34	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
gamma-Chlordane	ND		1.9	0.59	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP1-2FT

Date Collected: 11/20/15 09:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-1

Matrix: Solid

Percent Solids: 88.0

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		1.9	0.40	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Heptachlor epoxide	ND		1.9	0.48	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Methoxychlor	ND		1.9	0.38	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Toxaphene	ND		19	11	ug/Kg	☼	11/25/15 07:49	11/27/15 12:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	67		32 - 136				11/25/15 07:49	11/27/15 12:32	1
Tetrachloro-m-xylene	80		30 - 124				11/25/15 07:49	11/27/15 12:32	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6960		11.2	4.9	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Antimony	ND		16.8	0.45	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Arsenic	4.5		2.2	0.45	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Barium	108		0.56	0.12	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Beryllium	0.31		0.22	0.031	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Cadmium	0.34		0.22	0.034	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Calcium	43600	B	56.0	3.7	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Chromium	9.1		0.56	0.22	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Cobalt	3.4		0.56	0.056	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Copper	14.3		1.1	0.24	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Iron	8460		11.2	3.9	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Lead	416		1.1	0.27	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Magnesium	5540		22.4	1.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Manganese	292	B	0.22	0.036	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Nickel	8.3		5.6	0.26	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Potassium	1080		33.6	22.4	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Selenium	ND		4.5	0.45	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Silver	ND		0.67	0.22	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Sodium	161		157	14.6	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Thallium	ND		6.7	0.34	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Vanadium	17.0		0.56	0.12	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1
Zinc	212		2.2	0.72	mg/Kg	☼	11/23/15 15:30	11/24/15 15:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.4		0.099	0.040	mg/Kg	—	11/25/15 12:10	11/25/15 16:15	5

Client Sample ID: TP2-3FT

Date Collected: 11/20/15 09:30

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-2

Matrix: Solid

Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,1,2,2-Tetrachloroethane	ND		4.5	0.73	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP2-3FT

Date Collected: 11/20/15 09:30

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-2

Matrix: Solid

Percent Solids: 88.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		4.5	0.27	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,2-Dibromo-3-Chloropropane	ND		4.5	2.2	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,2-Dichlorobenzene	ND		4.5	0.35	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,4-Dichlorobenzene	ND		4.5	0.63	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Acetone	ND		22	3.8	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Benzene	ND		4.5	0.22	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Bromoform	ND		4.5	2.2	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Bromomethane	ND		4.5	0.40	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Carbon disulfide	ND		4.5	2.2	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Dibromochloromethane	ND		4.5	0.58	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
cis-1,2-Dichloroethene	ND		4.5	0.58	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
cis-1,3-Dichloropropene	ND		4.5	0.65	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Cyclohexane	ND		4.5	0.63	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
1,2-Dibromoethane	ND		4.5	0.58	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Isopropylbenzene	ND		4.5	0.68	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Methyl acetate	ND		4.5	2.7	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Methylcyclohexane	ND		4.5	0.68	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Styrene	ND		4.5	0.22	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Toluene	ND		4.5	0.34	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Trichloroethene	ND		4.5	0.99	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Trichlorofluoromethane	ND		4.5	0.43	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1
Xylenes, Total	ND		9.0	0.75	ug/Kg	☼	11/20/15 17:30	11/30/15 01:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86		71 - 125	11/20/15 17:30	11/30/15 01:18	1
1,2-Dichloroethane-d4 (Surr)	89		64 - 126	11/20/15 17:30	11/30/15 01:18	1
4-Bromofluorobenzene (Surr)	83		72 - 126	11/20/15 17:30	11/30/15 01:18	1
Dibromofluoromethane (Surr)	87		60 - 140	11/20/15 17:30	11/30/15 01:18	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP2-3FT

Date Collected: 11/20/15 09:30

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-2

Matrix: Solid

Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		930	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
bis (2-chloroisopropyl) ether	ND		930	190	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2,4,5-Trichlorophenol	ND		930	250	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2,4,6-Trichlorophenol	ND		930	190	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2,4-Dichlorophenol	ND		930	98	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2,4-Dimethylphenol	ND		930	220	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2,4-Dinitrophenol	ND		9100	4300	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2,4-Dinitrotoluene	ND		930	190	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2,6-Dinitrotoluene	ND		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2-Chloronaphthalene	ND		930	150	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2-Chlorophenol	ND		930	170	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2-Methylphenol	ND		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2-Methylnaphthalene	ND		930	190	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
2-Nitrophenol	ND		930	260	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4,6-Dinitro-2-methylphenol	ND		1800	930	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4-Bromophenyl phenyl ether	ND		930	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4-Chloro-3-methylphenol	ND		930	230	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4-Chloroaniline	ND		930	230	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4-Chlorophenyl phenyl ether	ND		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
4-Nitrophenol	ND		1800	650	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Acenaphthene	ND		930	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Acenaphthylene	ND		930	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Acetophenone	ND		930	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Anthracene	230 J		930	230	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Atrazine	ND		930	320	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Benzaldehyde	ND		930	740	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Benzo[a]anthracene	800 J		930	93	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Benzo[a]pyrene	730 J		930	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Benzo[b]fluoranthene	1000		930	150	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Benzo[g,h,i]perylene	630 J		930	98	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Benzo[k]fluoranthene	620 J		930	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Bis(2-chloroethoxy)methane	ND		930	200	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Bis(2-chloroethyl)ether	ND		930	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Bis(2-ethylhexyl) phthalate	ND		930	320	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Butyl benzyl phthalate	ND		930	150	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Caprolactam	ND		930	280	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Carbazole	140 J		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Chrysene	930		930	210	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Dibenz(a,h)anthracene	ND		930	160	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Di-n-butyl phthalate	ND		930	160	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Di-n-octyl phthalate	ND		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Dibenzofuran	ND		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Diethyl phthalate	ND		930	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Dimethyl phthalate	ND		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP2-3FT

Date Collected: 11/20/15 09:30

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-2

Matrix: Solid

Percent Solids: 88.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	2100		930	98	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Fluorene	110	J	930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Hexachlorobenzene	ND		930	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Hexachlorobutadiene	ND		930	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Hexachlorocyclopentadiene	ND		930	130	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Hexachloroethane	ND		930	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Indeno[1,2,3-cd]pyrene	520	J	930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Isophorone	ND		930	200	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
N-Nitrosodi-n-propylamine	ND		930	160	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
N-Nitrosodiphenylamine	ND		930	750	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Naphthalene	ND		930	120	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Nitrobenzene	ND		930	100	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Pentachlorophenol	ND		1800	930	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Phenanthrene	1300		930	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Phenol	ND		930	140	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5
Pyrene	1500		930	110	ug/Kg	☼	11/24/15 08:25	11/27/15 20:52	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	77		34 - 132	11/24/15 08:25	11/27/15 20:52	5
Phenol-d5 (Surr)	82		11 - 120	11/24/15 08:25	11/27/15 20:52	5
p-Terphenyl-d14 (Surr)	84		65 - 153	11/24/15 08:25	11/27/15 20:52	5
2,4,6-Tribromophenol (Surr)	69		39 - 146	11/24/15 08:25	11/27/15 20:52	5
2-Fluorobiphenyl	96		37 - 120	11/24/15 08:25	11/27/15 20:52	5
2-Fluorophenol (Surr)	79		18 - 120	11/24/15 08:25	11/27/15 20:52	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.7	0.73	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
4,4'-DDE	ND		3.7	0.79	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
4,4'-DDT	1.3	J	3.7	0.88	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Aldrin	ND		3.7	0.92	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
alpha-BHC	2.1	J F2	3.7	0.67	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
alpha-Chlordane	ND		3.7	1.9	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
beta-BHC	5.5	B F1 F2	3.7	0.67	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
delta-BHC	ND		3.7	0.70	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Dieldrin	1.5	J F2	3.7	0.90	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Endosulfan I	ND		3.7	0.72	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Endosulfan II	ND		3.7	0.67	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Endosulfan sulfate	7.6	F1	3.7	0.70	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Endrin	ND		3.7	0.74	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Endrin aldehyde	ND		3.7	0.96	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Endrin ketone	1.9	J	3.7	0.92	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
gamma-BHC (Lindane)	ND	F2	3.7	0.69	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
gamma-Chlordane	ND		3.7	1.2	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Heptachlor	ND		3.7	0.81	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Heptachlor epoxide	ND		3.7	0.97	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Methoxychlor	ND		3.7	0.76	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2
Toxaphene	ND		37	22	ug/Kg	☼	11/25/15 07:49	11/27/15 12:13	2

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP2-3FT

Date Collected: 11/20/15 09:30

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-2

Matrix: Solid

Percent Solids: 88.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	65		32 - 136	11/25/15 07:49	11/27/15 12:13	2
Tetrachloro-m-xylene	87		30 - 124	11/25/15 07:49	11/27/15 12:13	2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7730		11.0	4.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Antimony	ND		16.5	0.44	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Arsenic	3.3		2.2	0.44	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Barium	44.1		0.55	0.12	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Beryllium	0.37		0.22	0.031	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Cadmium	0.27		0.22	0.033	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Calcium	22400	B	55.0	3.6	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Chromium	9.4		0.55	0.22	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Cobalt	3.5		0.55	0.055	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Copper	12.1		1.1	0.23	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Iron	9330		11.0	3.9	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Lead	99.4		1.1	0.26	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Magnesium	10100		22.0	1.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Manganese	304	B	0.22	0.035	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Nickel	8.0		5.5	0.25	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Potassium	1250		33.0	22.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Selenium	ND		4.4	0.44	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Silver	ND		0.66	0.22	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Sodium	163		154	14.3	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Thallium	ND		6.6	0.33	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Vanadium	15.3		0.55	0.12	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1
Zinc	110		2.2	0.70	mg/Kg	☼	11/23/15 15:30	11/24/15 15:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.020	0.0082	mg/Kg	☼	11/25/15 12:10	11/25/15 15:57	1

Client Sample ID: TP3-1FT

Date Collected: 11/20/15 11:20

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-3

Matrix: Solid

Percent Solids: 89.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.33	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.74	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,1,2-Trichloroethane	ND		4.6	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.0	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,1-Dichloroethene	ND		4.6	0.56	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,2,4-Trichlorobenzene	ND		4.6	0.28	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,2-Dibromo-3-Chloropropane	ND		4.6	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,2-Dichloropropane	ND		4.6	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,3-Dichlorobenzene	ND		4.6	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,4-Dichlorobenzene	ND		4.6	0.64	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP3-1FT

Lab Sample ID: 480-91541-3

Date Collected: 11/20/15 11:20

Matrix: Solid

Date Received: 11/20/15 14:40

Percent Solids: 89.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Acetone	ND		23	3.8	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Benzene	ND		4.6	0.22	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Bromodichloromethane	ND		4.6	0.61	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Bromoform	ND		4.6	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Bromomethane	ND		4.6	0.41	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Carbon disulfide	ND		4.6	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Carbon tetrachloride	ND		4.6	0.44	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Chlorobenzene	ND		4.6	0.60	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Dibromochloromethane	ND		4.6	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Chloroethane	ND		4.6	1.0	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Chloroform	ND		4.6	0.28	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Chloromethane	ND		4.6	0.28	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
cis-1,2-Dichloroethene	ND		4.6	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
cis-1,3-Dichloropropene	ND		4.6	0.66	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Cyclohexane	ND		4.6	0.64	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Dichlorodifluoromethane	ND		4.6	0.38	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
1,2-Dibromoethane	ND		4.6	0.59	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Isopropylbenzene	ND		4.6	0.69	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Methyl acetate	ND		4.6	2.8	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Methylcyclohexane	ND		4.6	0.69	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Styrene	ND		4.6	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Tetrachloroethene	ND		4.6	0.61	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Toluene	ND		4.6	0.35	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
trans-1,2-Dichloroethene	ND		4.6	0.47	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
trans-1,3-Dichloropropene	ND		4.6	2.0	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Trichlorofluoromethane	ND		4.6	0.43	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1
Xylenes, Total	ND		9.1	0.77	ug/Kg	☼	11/20/15 17:30	11/30/15 01:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		71 - 125	11/20/15 17:30	11/30/15 01:43	1
1,2-Dichloroethane-d4 (Surr)	89		64 - 126	11/20/15 17:30	11/30/15 01:43	1
4-Bromofluorobenzene (Surr)	80		72 - 126	11/20/15 17:30	11/30/15 01:43	1
Dibromofluoromethane (Surr)	86		60 - 140	11/20/15 17:30	11/30/15 01:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		920	140	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
bis (2-chloroisopropyl) ether	ND		920	180	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2,4,5-Trichlorophenol	ND		920	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2,4,6-Trichlorophenol	ND		920	180	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2,4-Dichlorophenol	ND		920	98	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2,4-Dimethylphenol	ND		920	220	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP3-1FT

Date Collected: 11/20/15 11:20

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-3

Matrix: Solid

Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		9000	4300	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2,4-Dinitrotoluene	ND		920	190	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2,6-Dinitrotoluene	ND		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2-Chloronaphthalene	ND		920	150	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2-Chlorophenol	ND		920	170	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2-Methylphenol	ND		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2-Methylnaphthalene	ND		920	180	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
2-Nitrophenol	ND		920	260	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
3-Nitroaniline	ND		1800	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4,6-Dinitro-2-methylphenol	ND		1800	920	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4-Bromophenyl phenyl ether	ND		920	130	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4-Chloro-3-methylphenol	ND		920	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4-Chloroaniline	ND		920	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4-Chlorophenyl phenyl ether	ND		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
4-Nitrophenol	ND		1800	650	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Acenaphthene	240	J	920	140	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Acenaphthylene	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Acetophenone	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Anthracene	470	J	920	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Atrazine	ND		920	320	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Benzaldehyde	ND		920	730	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Benzo[a]anthracene	2100		920	92	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Benzo[a]pyrene	1800		920	140	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Benzo[b]fluoranthene	2600		920	150	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Benzo[g,h,i]perylene	1300		920	98	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Benzo[k]fluoranthene	1200		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Bis(2-chloroethoxy)methane	ND		920	200	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Bis(2-chloroethyl)ether	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Bis(2-ethylhexyl) phthalate	ND		920	310	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Butyl benzyl phthalate	ND		920	150	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Caprolactam	ND		920	280	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Carbazole	310	J	920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Chrysene	2400		920	210	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Dibenz(a,h)anthracene	ND		920	160	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Di-n-butyl phthalate	ND		920	160	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Di-n-octyl phthalate	ND		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Dibenzofuran	ND		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Diethyl phthalate	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Dimethyl phthalate	ND		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Fluoranthene	5600		920	98	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Fluorene	220	J	920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Hexachlorobenzene	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Hexachlorobutadiene	ND		920	140	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Hexachlorocyclopentadiene	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Hexachloroethane	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP3-1FT

Date Collected: 11/20/15 11:20

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-3

Matrix: Solid

Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	1100		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Isophorone	ND		920	200	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
N-Nitrosodi-n-propylamine	ND		920	160	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
N-Nitrosodiphenylamine	ND		920	750	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Naphthalene	ND		920	120	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Nitrobenzene	ND		920	100	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Pentachlorophenol	ND		1800	920	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Phenanthrene	3000		920	140	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Phenol	ND		920	140	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5
Pyrene	3800		920	110	ug/Kg	☼	11/24/15 08:25	11/27/15 21:18	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	71		34 - 132	11/24/15 08:25	11/27/15 21:18	5
Phenol-d5 (Surr)	77		11 - 120	11/24/15 08:25	11/27/15 21:18	5
p-Terphenyl-d14 (Surr)	88		65 - 153	11/24/15 08:25	11/27/15 21:18	5
2,4,6-Tribromophenol (Surr)	71		39 - 146	11/24/15 08:25	11/27/15 21:18	5
2-Fluorobiphenyl	89		37 - 120	11/24/15 08:25	11/27/15 21:18	5
2-Fluorophenol (Surr)	74		18 - 120	11/24/15 08:25	11/27/15 21:18	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.8	0.35	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
4,4'-DDE	ND		1.8	0.38	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
4,4'-DDT	0.74	J	1.8	0.43	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Aldrin	ND		1.8	0.45	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
alpha-BHC	ND		1.8	0.33	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
alpha-Chlordane	ND		1.8	0.91	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
beta-BHC	1.9	B	1.8	0.33	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
delta-BHC	ND		1.8	0.34	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Dieldrin	0.73	J	1.8	0.44	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Endosulfan I	ND		1.8	0.35	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Endosulfan II	ND		1.8	0.33	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Endosulfan sulfate	3.0		1.8	0.34	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Endrin	ND		1.8	0.36	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Endrin aldehyde	ND		1.8	0.47	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Endrin ketone	0.74	J	1.8	0.45	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
gamma-BHC (Lindane)	ND		1.8	0.33	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
gamma-Chlordane	ND		1.8	0.58	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Heptachlor	ND		1.8	0.40	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Heptachlor epoxide	ND		1.8	0.47	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Methoxychlor	ND		1.8	0.37	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1
Toxaphene	ND		18	11	ug/Kg	☼	11/25/15 07:49	11/27/15 12:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	68		32 - 136	11/25/15 07:49	11/27/15 12:50	1
Tetrachloro-m-xylene	87		30 - 124	11/25/15 07:49	11/27/15 12:50	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6300		11.0	4.9	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP3-1FT

Date Collected: 11/20/15 11:20

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-3

Matrix: Solid

Percent Solids: 89.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		16.6	0.44	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Arsenic	3.7		2.2	0.44	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Barium	42.5		0.55	0.12	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Beryllium	0.31		0.22	0.031	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Cadmium	0.29		0.22	0.033	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Calcium	23800	B	55.2	3.6	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Chromium	8.1		0.55	0.22	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Cobalt	3.1		0.55	0.055	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Copper	12.9		1.1	0.23	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Iron	8580		11.0	3.9	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Lead	73.6		1.1	0.26	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Magnesium	3010		22.1	1.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Manganese	271	B	0.22	0.035	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Nickel	7.5		5.5	0.25	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Potassium	1030		33.1	22.1	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Selenium	ND		4.4	0.44	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Silver	ND		0.66	0.22	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Sodium	98.7	J	154	14.3	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Thallium	ND		6.6	0.33	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Vanadium	14.2		0.55	0.12	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1
Zinc	107		2.2	0.71	mg/Kg	☼	11/23/15 15:30	11/24/15 15:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.020	0.0080	mg/Kg	☼	11/25/15 12:10	11/25/15 15:59	1

Client Sample ID: TP3-6FT

Date Collected: 11/20/15 11:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-4

Matrix: Solid

Percent Solids: 82.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7760		11.9	5.2	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Antimony	ND		17.9	0.48	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Arsenic	3.4		2.4	0.48	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Barium	349		0.60	0.13	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Beryllium	0.36		0.24	0.033	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Cadmium	0.81		0.24	0.036	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Calcium	74400	B	59.5	3.9	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Chromium	10.2		0.60	0.24	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Cobalt	3.8		0.60	0.060	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Copper	11.9		1.2	0.25	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Iron	10200		11.9	4.2	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Lead	715		1.2	0.29	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Magnesium	21500		23.8	1.1	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Manganese	362	B	0.24	0.038	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Nickel	9.1		6.0	0.27	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Potassium	1650		35.7	23.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Selenium	ND		4.8	0.48	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Silver	ND		0.71	0.24	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP3-6FT

Date Collected: 11/20/15 11:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-4

Matrix: Solid

Percent Solids: 82.5

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	160	J	167	15.5	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Thallium	ND		7.1	0.36	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Vanadium	16.9		0.60	0.13	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1
Zinc	315		2.4	0.76	mg/Kg	☼	11/23/15 15:30	11/24/15 15:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32		0.020	0.0081	mg/Kg	—	11/25/15 12:10	11/25/15 16:01	1

Client Sample ID: TP4C-2FT

Date Collected: 11/20/15 10:45

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-5

Matrix: Solid

Percent Solids: 87.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.2	0.45	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,1,2,2-Tetrachloroethane	ND		6.2	1.0	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,1,2-Trichloroethane	ND		6.2	0.81	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.2	1.4	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,1-Dichloroethane	ND		6.2	0.76	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,1-Dichloroethene	ND		6.2	0.76	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,2,4-Trichlorobenzene	ND		6.2	0.38	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,2-Dibromo-3-Chloropropane	ND		6.2	3.1	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,2-Dichlorobenzene	ND		6.2	0.49	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,2-Dichloroethane	ND		6.2	0.31	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,2-Dichloropropane	ND		6.2	3.1	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,3-Dichlorobenzene	ND		6.2	0.32	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,4-Dichlorobenzene	ND		6.2	0.87	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
2-Butanone (MEK)	ND		31	2.3	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
2-Hexanone	ND		31	3.1	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
4-Methyl-2-pentanone (MIBK)	ND		31	2.0	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Acetone	ND		31	5.2	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Benzene	ND		6.2	0.30	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Bromodichloromethane	ND		6.2	0.83	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Bromoform	ND		6.2	3.1	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Bromomethane	ND		6.2	0.56	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Carbon disulfide	ND		6.2	3.1	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Carbon tetrachloride	ND		6.2	0.60	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Chlorobenzene	ND		6.2	0.82	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Dibromochloromethane	ND		6.2	0.80	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Chloroethane	ND		6.2	1.4	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Chloroform	ND		6.2	0.38	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Chloromethane	ND		6.2	0.38	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
cis-1,2-Dichloroethene	ND		6.2	0.80	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
cis-1,3-Dichloropropene	ND		6.2	0.89	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Cyclohexane	ND		6.2	0.87	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Dichlorodifluoromethane	ND		6.2	0.51	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Ethylbenzene	ND		6.2	0.43	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
1,2-Dibromoethane	ND		6.2	0.80	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Isopropylbenzene	ND		6.2	0.94	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP4C-2FT

Lab Sample ID: 480-91541-5

Date Collected: 11/20/15 10:45

Matrix: Solid

Date Received: 11/20/15 14:40

Percent Solids: 87.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		6.2	3.8	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Methyl tert-butyl ether	ND		6.2	0.61	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Methylcyclohexane	ND		6.2	0.94	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Methylene Chloride	ND		6.2	2.9	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Styrene	ND		6.2	0.31	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Tetrachloroethene	1.6	J	6.2	0.83	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Toluene	ND		6.2	0.47	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
trans-1,2-Dichloroethene	ND		6.2	0.64	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
trans-1,3-Dichloropropene	ND		6.2	2.7	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Trichloroethene	ND		6.2	1.4	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Trichlorofluoromethane	ND		6.2	0.59	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Vinyl chloride	ND		6.2	0.76	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	11/20/15 17:30	12/03/15 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	112		71 - 125	11/20/15 17:30	12/03/15 02:23	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	11/20/15 17:30	12/03/15 02:23	1
<i>4-Bromofluorobenzene (Surr)</i>	87		72 - 126	11/20/15 17:30	12/03/15 02:23	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	11/20/15 17:30	12/03/15 02:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1900	280	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
bis (2-chloroisopropyl) ether	ND		1900	390	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2,4,5-Trichlorophenol	ND		1900	520	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2,4,6-Trichlorophenol	ND		1900	390	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2,4-Dichlorophenol	ND		1900	200	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2,4-Dimethylphenol	ND		1900	460	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2,4-Dinitrophenol	ND		19000	8900	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2,4-Dinitrotoluene	ND		1900	400	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2,6-Dinitrotoluene	ND		1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2-Chloronaphthalene	ND		1900	320	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2-Chlorophenol	ND		1900	350	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2-Methylphenol	ND		1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2-Methylnaphthalene	ND		1900	390	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2-Nitroaniline	ND		3700	280	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
2-Nitrophenol	ND		1900	540	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
3,3'-Dichlorobenzidine	ND		3700	2300	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
3-Nitroaniline	ND		3700	530	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4,6-Dinitro-2-methylphenol	ND		3700	1900	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4-Bromophenyl phenyl ether	ND		1900	270	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4-Chloro-3-methylphenol	ND		1900	480	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4-Chloroaniline	ND		1900	480	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4-Chlorophenyl phenyl ether	ND		1900	240	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4-Methylphenol	ND		3700	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4-Nitroaniline	ND		3700	1000	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
4-Nitrophenol	ND		3700	1300	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Acenaphthene	ND		1900	280	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Acenaphthylene	ND		1900	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Acetophenone	ND		1900	260	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP4C-2FT

Lab Sample ID: 480-91541-5

Date Collected: 11/20/15 10:45

Matrix: Solid

Date Received: 11/20/15 14:40

Percent Solids: 87.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		1900	480	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Atrazine	ND		1900	670	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Benzaldehyde	ND		1900	1500	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Benzo[a]anthracene	1000	J	1900	190	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Benzo[a]pyrene	910	J	1900	280	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Benzo[b]fluoranthene	1200	J	1900	310	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Benzo[g,h,i]perylene	700	J	1900	200	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Benzo[k]fluoranthene	550	J	1900	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Bis(2-chloroethoxy)methane	ND		1900	410	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Bis(2-chloroethyl)ether	ND		1900	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Bis(2-ethylhexyl) phthalate	ND		1900	660	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Butyl benzyl phthalate	ND		1900	320	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Caprolactam	ND		1900	580	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Carbazole	230	J	1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Chrysene	1200	J	1900	430	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Dibenz(a,h)anthracene	ND		1900	340	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Di-n-butyl phthalate	ND		1900	330	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Di-n-octyl phthalate	ND		1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Dibenzofuran	ND		1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Diethyl phthalate	ND		1900	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Dimethyl phthalate	ND		1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Fluoranthene	2600		1900	200	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Fluorene	ND		1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Hexachlorobenzene	ND		1900	260	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Hexachlorobutadiene	ND		1900	280	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Hexachlorocyclopentadiene	ND		1900	260	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Hexachloroethane	ND		1900	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Indeno[1,2,3-cd]pyrene	590	J	1900	240	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Isophorone	ND		1900	410	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
N-Nitrosodi-n-propylamine	ND		1900	330	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
N-Nitrosodiphenylamine	ND		1900	1600	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Naphthalene	ND		1900	250	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Nitrobenzene	ND		1900	220	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Pentachlorophenol	ND		3700	1900	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Phenanthrene	2000		1900	280	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Phenol	ND		1900	290	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10
Pyrene	1900		1900	230	ug/Kg	☼	11/24/15 08:25	11/27/15 21:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	86		34 - 132	11/24/15 08:25	11/27/15 21:44	10
Phenol-d5 (Surr)	90		11 - 120	11/24/15 08:25	11/27/15 21:44	10
p-Terphenyl-d14 (Surr)	92		65 - 153	11/24/15 08:25	11/27/15 21:44	10
2,4,6-Tribromophenol (Surr)	76		39 - 146	11/24/15 08:25	11/27/15 21:44	10
2-Fluorobiphenyl	98		37 - 120	11/24/15 08:25	11/27/15 21:44	10
2-Fluorophenol (Surr)	90		18 - 120	11/24/15 08:25	11/27/15 21:44	10

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	10	B	9.5	1.8	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
4,4'-DDE	3.6	J B	9.5	2.0	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP4C-2FT

Lab Sample ID: 480-91541-5

Date Collected: 11/20/15 10:45

Matrix: Solid

Date Received: 11/20/15 14:40

Percent Solids: 87.2

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	4.2	J	9.5	2.2	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Aldrin	ND		9.5	2.3	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
alpha-BHC	ND		9.5	1.7	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
alpha-Chlordane	ND		9.5	4.7	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
beta-BHC	4.3	J B	9.5	1.7	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
delta-BHC	ND		9.5	1.8	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Dieldrin	3.7	J	9.5	2.3	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Endosulfan I	ND		9.5	1.8	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Endosulfan II	ND		9.5	1.7	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Endosulfan sulfate	4.6	J	9.5	1.8	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Endrin	ND		9.5	1.9	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Endrin aldehyde	ND		9.5	2.4	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Endrin ketone	ND		9.5	2.3	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
gamma-BHC (Lindane)	ND		9.5	1.7	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
gamma-Chlordane	ND		9.5	3.0	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Heptachlor	ND		9.5	2.1	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Heptachlor epoxide	ND		9.5	2.4	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Methoxychlor	3.2	J B	9.5	1.9	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Toxaphene	ND		95	55	ug/Kg	☼	11/25/15 07:49	11/28/15 12:36	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	54		32 - 136				11/25/15 07:49	11/28/15 12:36	5
Tetrachloro-m-xylene	91		30 - 124				11/25/15 07:49	11/28/15 12:36	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6200		11.4	5.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Antimony	1.3	J	17.1	0.46	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Arsenic	13.6		2.3	0.46	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Barium	297		0.57	0.13	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Beryllium	0.48		0.23	0.032	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Cadmium	0.78		0.23	0.034	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Calcium	38800	B	57.0	3.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Chromium	12.6		0.57	0.23	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Cobalt	4.3		0.57	0.057	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Copper	63.7		1.1	0.24	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Iron	11300		11.4	4.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Lead	868		1.1	0.27	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Magnesium	16400		22.8	1.1	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Manganese	262	B	0.23	0.036	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Nickel	12.8		5.7	0.26	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Potassium	1050		34.2	22.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Selenium	0.75	J	4.6	0.46	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Silver	ND		0.68	0.23	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Sodium	134	J	159	14.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Thallium	ND		6.8	0.34	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Vanadium	16.2		0.57	0.13	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1
Zinc	430		2.3	0.73	mg/Kg	☼	11/23/15 15:30	11/24/15 15:46	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP4C-2FT

Date Collected: 11/20/15 10:45

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-5

Matrix: Solid

Percent Solids: 87.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38		0.019	0.0077	mg/Kg		11/25/15 12:10	11/25/15 16:03	1

Client Sample ID: TP5-4FT

Date Collected: 11/20/15 11:10

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-6

Matrix: Solid

Percent Solids: 82.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,1,2,2-Tetrachloroethane	ND		4.7	0.76	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,1,2-Trichloroethane	ND		4.7	0.61	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.1	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,1-Dichloroethane	ND		4.7	0.57	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,1-Dichloroethene	ND		4.7	0.57	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,2,4-Trichlorobenzene	ND		4.7	0.28	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,2-Dibromo-3-Chloropropane	ND		4.7	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,2-Dichlorobenzene	ND		4.7	0.37	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,2-Dichloroethane	ND		4.7	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,2-Dichloropropane	ND		4.7	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,3-Dichlorobenzene	ND		4.7	0.24	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,4-Dichlorobenzene	ND		4.7	0.65	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Acetone	20	J B	23	3.9	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Benzene	ND		4.7	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Bromodichloromethane	ND		4.7	0.63	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Bromoform	ND		4.7	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Bromomethane	ND		4.7	0.42	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Carbon disulfide	ND		4.7	2.3	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Carbon tetrachloride	ND		4.7	0.45	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Chlorobenzene	ND		4.7	0.62	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Dibromochloromethane	ND		4.7	0.60	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Chloroethane	ND		4.7	1.1	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Chloromethane	ND		4.7	0.28	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
cis-1,2-Dichloroethene	ND		4.7	0.60	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
cis-1,3-Dichloropropene	ND		4.7	0.67	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Cyclohexane	ND		4.7	0.65	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Dichlorodifluoromethane	ND		4.7	0.39	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Ethylbenzene	ND		4.7	0.32	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
1,2-Dibromoethane	ND		4.7	0.60	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Isopropylbenzene	ND		4.7	0.70	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Methyl acetate	ND		4.7	2.8	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Methyl tert-butyl ether	ND		4.7	0.46	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Methylcyclohexane	ND		4.7	0.71	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Methylene Chloride	ND		4.7	2.1	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Styrene	ND		4.7	0.23	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Toluene	ND		4.7	0.35	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP5-4FT

Date Collected: 11/20/15 11:10

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-6

Matrix: Solid

Percent Solids: 82.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		4.7	0.48	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
trans-1,3-Dichloropropene	ND		4.7	2.1	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Trichlorofluoromethane	ND		4.7	0.44	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Vinyl chloride	ND		4.7	0.57	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1
Xylenes, Total	ND		9.3	0.79	ug/Kg	☼	11/20/15 17:30	11/30/15 02:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	88		71 - 125	11/20/15 17:30	11/30/15 02:35	1
1,2-Dichloroethane-d4 (Surr)	91		64 - 126	11/20/15 17:30	11/30/15 02:35	1
4-Bromofluorobenzene (Surr)	85		72 - 126	11/20/15 17:30	11/30/15 02:35	1
Dibromofluoromethane (Surr)	88		60 - 140	11/20/15 17:30	11/30/15 02:35	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1000	150	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2,4,5-Trichlorophenol	ND		1000	270	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2,4-Dimethylphenol	ND		1000	240	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2,4-Dinitrophenol	ND		9800	4600	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2-Chloronaphthalene	ND		1000	160	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2-Chlorophenol	ND		1000	180	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2-Methylnaphthalene	480	J	1000	200	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2-Nitroaniline	ND		1900	150	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
2-Nitrophenol	ND		1000	280	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
3,3'-Dichlorobenzidine	ND		1900	1200	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
3-Nitroaniline	ND		1900	280	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4,6-Dinitro-2-methylphenol	ND		1900	1000	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4-Chlorophenyl phenyl ether	ND		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4-Methylphenol	ND		1900	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4-Nitroaniline	ND		1900	520	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
4-Nitrophenol	ND		1900	700	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Acenaphthene	ND		1000	150	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Acetophenone	ND		1000	140	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Anthracene	320	J	1000	250	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Atrazine	ND		1000	350	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Benzaldehyde	ND		1000	790	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Benzo[a]anthracene	1300		1000	100	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Benzo[a]pyrene	1500		1000	150	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Benzo[b]fluoranthene	2300		1000	160	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Benzo[g,h,i]perylene	1800		1000	110	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP5-4FT

Date Collected: 11/20/15 11:10

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-6

Matrix: Solid

Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	1100		1000	130	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Bis(2-chloroethoxy)methane	ND		1000	210	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Bis(2-ethylhexyl) phthalate	ND		1000	340	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Butyl benzyl phthalate	250	J	1000	160	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Caprolactam	ND		1000	300	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Carbazole	250	J	1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Chrysene	1800		1000	220	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Dibenz(a,h)anthracene	380	J	1000	180	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Fluoranthene	3400		1000	110	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Fluorene	140	J	1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Indeno[1,2,3-cd]pyrene	1300		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Isophorone	ND		1000	210	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
N-Nitrosodiphenylamine	ND		1000	810	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Naphthalene	610	J	1000	130	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Pentachlorophenol	ND		1900	1000	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Phenanthrene	1700		1000	150	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Phenol	ND		1000	150	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5
Pyrene	2700		1000	120	ug/Kg	☼	11/24/15 08:25	11/27/15 22:11	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	84		34 - 132	11/24/15 08:25	11/27/15 22:11	5
Phenol-d5 (Surr)	84		11 - 120	11/24/15 08:25	11/27/15 22:11	5
p-Terphenyl-d14 (Surr)	87		65 - 153	11/24/15 08:25	11/27/15 22:11	5
2,4,6-Tribromophenol (Surr)	78		39 - 146	11/24/15 08:25	11/27/15 22:11	5
2-Fluorobiphenyl	90		37 - 120	11/24/15 08:25	11/27/15 22:11	5
2-Fluorophenol (Surr)	81		18 - 120	11/24/15 08:25	11/27/15 22:11	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		40	7.7	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
4,4'-DDE	ND		40	8.4	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
4,4'-DDT	ND		40	9.3	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Aldrin	ND		40	9.8	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
alpha-BHC	ND		40	7.2	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
alpha-Chlordane	ND		40	20	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
beta-BHC	ND		40	7.2	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
delta-BHC	ND		40	7.4	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Dieldrin	ND		40	9.6	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP5-4FT

Date Collected: 11/20/15 11:10

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-6

Matrix: Solid

Percent Solids: 82.6

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND		40	7.6	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Endosulfan II	ND		40	7.2	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Endosulfan sulfate	ND		40	7.4	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Endrin	ND		40	7.9	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Endrin aldehyde	ND		40	10	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Endrin ketone	ND		40	9.8	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
gamma-BHC (Lindane)	ND		40	7.3	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
gamma-Chlordane	ND		40	13	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Heptachlor	ND		40	8.6	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Heptachlor epoxide	ND		40	10	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Methoxychlor	ND		40	8.1	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20
Toxaphene	ND		400	230	ug/Kg	☼	11/25/15 07:49	11/28/15 12:54	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	32 - 136	11/25/15 07:49	11/28/15 12:54	20
Tetrachloro-m-xylene	167	X	30 - 124	11/25/15 07:49	11/28/15 12:54	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10500		11.4	5.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Antimony	ND		17.1	0.46	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Arsenic	4.7		2.3	0.46	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Barium	90.7		0.57	0.13	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Beryllium	0.47		0.23	0.032	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Cadmium	0.35		0.23	0.034	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Calcium	18600	B	56.9	3.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Chromium	14.5		0.57	0.23	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Cobalt	6.1		0.57	0.057	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Copper	23.4		1.1	0.24	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Iron	13200		11.4	4.0	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Lead	115		1.1	0.27	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Magnesium	7690		22.8	1.1	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Manganese	329	B	0.23	0.036	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Nickel	12.9		5.7	0.26	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Potassium	2060		34.1	22.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Selenium	ND		4.6	0.46	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Silver	ND		0.68	0.23	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Sodium	184		159	14.8	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Thallium	ND		6.8	0.34	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Vanadium	22.1		0.57	0.13	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1
Zinc	141		2.3	0.73	mg/Kg	☼	11/23/15 15:30	11/24/15 15:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.019	0.0077	mg/Kg	☼	11/25/15 12:10	11/25/15 16:05	1

TestAmerica Buffalo

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (71-125)	12DCE (64-126)	BFB (72-126)	DBFM (60-140)
480-91541-1	TP1-2FT	88	86	78	86
480-91541-2	TP2-3FT	86	89	83	87
480-91541-3	TP3-1FT	88	89	80	86
480-91541-5	TP4C-2FT	112	103	87	102
480-91541-6	TP5-4FT	88	91	85	88
LCS 480-277318/1-A	Lab Control Sample	88	86	87	87
LCS 480-277888/1-A	Lab Control Sample	100	102	100	99
MB 480-277318/2-A	Method Blank	86	86	84	85
MB 480-277888/2-A	Method Blank	100	102	101	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (34-132)	PHL (11-120)	TPH (65-153)	TBP (39-146)	FBP (37-120)	2FP (18-120)
480-91541-1	TP1-2FT	77	85	91	72	91	81
480-91541-1 MS	TP1-2FT	79	78	92	87	89	75
480-91541-1 MSD	TP1-2FT	85	85	87	83	95	82
480-91541-2	TP2-3FT	77	82	84	69	96	79
480-91541-3	TP3-1FT	71	77	88	71	89	74
480-91541-5	TP4C-2FT	86	90	92	76	98	90
480-91541-6	TP5-4FT	84	84	87	78	90	81
LCS 480-276639/2-A	Lab Control Sample	85	83	96	100	94	83
MB 480-276639/1-A	Method Blank	89	89	97	85	96	90

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (32-136)	TCX1 (30-124)
480-91541-1	TP1-2FT	67	80
480-91541-2	TP2-3FT	65	87
480-91541-2 MS	TP2-3FT	97	101
480-91541-2 MSD	TP2-3FT	66	90

TestAmerica Buffalo

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCB1 (32-136)	TCX1 (30-124)
480-91541-3	TP3-1FT	68	87
480-91541-5	TP4C-2FT	54	91
480-91541-6	TP5-4FT	0 X	167 X
LCS 480-276841/2-A	Lab Control Sample	81	86
MB 480-276841/1-A	Method Blank	79	80

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-277318/2-A

Matrix: Solid

Analysis Batch: 277316

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 277318

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,1,2,2-Tetrachloroethane	ND		4.7	0.77	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,1,2-Trichloroethane	ND		4.7	0.61	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.1	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,1-Dichloroethane	ND		4.7	0.58	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,2,4-Trichlorobenzene	0.927	J	4.7	0.29	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,2-Dibromo-3-Chloropropane	ND		4.7	2.4	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,2-Dichlorobenzene	0.492	J	4.7	0.37	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,2-Dichloropropane	ND		4.7	2.4	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,3-Dichlorobenzene	0.288	J	4.7	0.24	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
2-Butanone (MEK)	ND		24	1.7	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
2-Hexanone	ND		24	2.4	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.5	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Acetone	20.3	J	24	4.0	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Benzene	ND		4.7	0.23	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Bromodichloromethane	ND		4.7	0.63	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Bromoform	ND		4.7	2.4	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Bromomethane	ND		4.7	0.42	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Carbon disulfide	ND		4.7	2.4	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Carbon tetrachloride	ND		4.7	0.46	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Chlorobenzene	ND		4.7	0.62	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Dibromochloromethane	ND		4.7	0.60	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Chloroethane	ND		4.7	1.1	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Chloroform	ND		4.7	0.29	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Chloromethane	ND		4.7	0.28	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
cis-1,2-Dichloroethene	ND		4.7	0.60	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
cis-1,3-Dichloropropene	ND		4.7	0.68	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Cyclohexane	ND		4.7	0.66	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Dichlorodifluoromethane	ND		4.7	0.39	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Ethylbenzene	ND		4.7	0.33	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
1,2-Dibromoethane	ND		4.7	0.61	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Isopropylbenzene	ND		4.7	0.71	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Methyl acetate	ND		4.7	2.8	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Methyl tert-butyl ether	ND		4.7	0.46	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Methylcyclohexane	ND		4.7	0.72	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Methylene Chloride	ND		4.7	2.2	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Styrene	ND		4.7	0.24	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Toluene	ND		4.7	0.36	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
trans-1,2-Dichloroethene	ND		4.7	0.49	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
trans-1,3-Dichloropropene	ND		4.7	2.1	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Trichloroethene	ND		4.7	1.0	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Trichlorofluoromethane	ND		4.7	0.45	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Vinyl chloride	ND		4.7	0.58	ug/Kg		11/29/15 21:43	11/29/15 23:09	1
Xylenes, Total	ND		9.4	0.79	ug/Kg		11/29/15 21:43	11/29/15 23:09	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86		71 - 125	11/29/15 21:43	11/29/15 23:09	1
1,2-Dichloroethane-d4 (Surr)	86		64 - 126	11/29/15 21:43	11/29/15 23:09	1
4-Bromofluorobenzene (Surr)	84		72 - 126	11/29/15 21:43	11/29/15 23:09	1
Dibromofluoromethane (Surr)	85		60 - 140	11/29/15 21:43	11/29/15 23:09	1

Lab Sample ID: LCS 480-277318/1-A

Matrix: Solid

Analysis Batch: 277316

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277318

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	49.5	47.6		ug/Kg		96	77 - 121
1,1,2,2-Tetrachloroethane	49.5	54.3		ug/Kg		110	80 - 120
1,1,2-Trichloroethane	49.5	51.1		ug/Kg		103	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	49.5	49.4		ug/Kg		100	60 - 140
1,1-Dichloroethane	49.5	48.8		ug/Kg		99	73 - 126
1,1-Dichloroethene	49.5	50.8		ug/Kg		103	59 - 125
1,2,4-Trichlorobenzene	49.5	51.8		ug/Kg		105	64 - 120
1,2-Dibromo-3-Chloropropane	49.5	52.1		ug/Kg		105	63 - 124
1,2-Dichlorobenzene	49.5	49.8		ug/Kg		101	75 - 120
1,2-Dichloroethane	49.5	45.9		ug/Kg		93	77 - 122
1,2-Dichloropropane	49.5	50.1		ug/Kg		101	75 - 124
1,3-Dichlorobenzene	49.5	50.0		ug/Kg		101	74 - 120
1,4-Dichlorobenzene	49.5	50.1		ug/Kg		101	73 - 120
2-Butanone (MEK)	248	281		ug/Kg		113	70 - 134
2-Hexanone	248	282		ug/Kg		114	59 - 130
4-Methyl-2-pentanone (MIBK)	248	272		ug/Kg		110	65 - 133
Acetone	248	280		ug/Kg		113	61 - 137
Benzene	49.5	49.5		ug/Kg		100	79 - 127
Bromodichloromethane	49.5	48.6		ug/Kg		98	80 - 122
Bromoform	49.5	49.2		ug/Kg		99	68 - 126
Bromomethane	49.5	45.0		ug/Kg		91	37 - 149
Carbon disulfide	49.5	52.6		ug/Kg		106	64 - 131
Carbon tetrachloride	49.5	47.7		ug/Kg		96	75 - 135
Chlorobenzene	49.5	48.5		ug/Kg		98	76 - 124
Dibromochloromethane	49.5	50.7		ug/Kg		102	76 - 125
Chloroethane	49.5	46.8		ug/Kg		95	69 - 135
Chloroform	49.5	47.4		ug/Kg		96	80 - 118
Chloromethane	49.5	50.3		ug/Kg		102	63 - 127
cis-1,2-Dichloroethene	49.5	49.3		ug/Kg		100	81 - 117
cis-1,3-Dichloropropene	49.5	50.9		ug/Kg		103	82 - 120
Cyclohexane	49.5	51.9		ug/Kg		105	65 - 106
Dichlorodifluoromethane	49.5	46.3		ug/Kg		94	57 - 142
Ethylbenzene	49.5	49.8		ug/Kg		101	80 - 120
1,2-Dibromoethane	49.5	50.7		ug/Kg		102	78 - 120
Isopropylbenzene	49.5	50.8		ug/Kg		103	72 - 120
Methyl acetate	248	261		ug/Kg		105	55 - 136
Methyl tert-butyl ether	49.5	47.8		ug/Kg		97	63 - 125
Methylcyclohexane	49.5	50.7		ug/Kg		102	60 - 140
Methylene Chloride	49.5	44.8		ug/Kg		90	61 - 127
Styrene	49.5	51.7		ug/Kg		104	80 - 120
Tetrachloroethene	49.5	48.9		ug/Kg		99	74 - 122
Toluene	49.5	50.1		ug/Kg		101	74 - 128
trans-1,2-Dichloroethene	49.5	50.7		ug/Kg		102	78 - 126

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-277318/1-A

Matrix: Solid

Analysis Batch: 277316

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277318

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	49.5	48.6		ug/Kg		98	77 - 129
Trichlorofluoromethane	49.5	44.8		ug/Kg		90	65 - 146
Vinyl chloride	49.5	49.3		ug/Kg		100	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	88		71 - 125
1,2-Dichloroethane-d4 (Surr)	86		64 - 126
4-Bromofluorobenzene (Surr)	87		72 - 126
Dibromofluoromethane (Surr)	87		60 - 140

Lab Sample ID: MB 480-277888/2-A

Matrix: Solid

Analysis Batch: 277887

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 277888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,1,2,2-Tetrachloroethane	ND		4.8	0.78	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,1,2-Trichloroethane	ND		4.8	0.63	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,1-Dichloroethane	ND		4.8	0.59	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,2,4-Trichlorobenzene	0.563	J	4.8	0.29	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,2-Dibromo-3-Chloropropane	ND		4.8	2.4	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,2-Dichlorobenzene	ND		4.8	0.38	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
2-Hexanone	ND		24	2.4	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Acetone	14.2	J	24	4.0	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Benzene	ND		4.8	0.24	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Bromodichloromethane	ND		4.8	0.64	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Bromoform	ND		4.8	2.4	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Bromomethane	ND		4.8	0.43	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Carbon disulfide	ND		4.8	2.4	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Carbon tetrachloride	ND		4.8	0.47	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Chlorobenzene	ND		4.8	0.63	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Dibromochloromethane	ND		4.8	0.62	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Chloroethane	ND		4.8	1.1	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Chloroform	ND		4.8	0.30	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Chloromethane	ND		4.8	0.29	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
cis-1,2-Dichloroethene	ND		4.8	0.62	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Cyclohexane	ND		4.8	0.67	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Dichlorodifluoromethane	ND		4.8	0.40	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Ethylbenzene	ND		4.8	0.33	ug/Kg		12/02/15 22:36	12/03/15 01:56	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-277888/2-A

Matrix: Solid

Analysis Batch: 277887

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 277888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		4.8	0.62	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Isopropylbenzene	ND		4.8	0.73	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Methyl acetate	ND		4.8	2.9	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Methylcyclohexane	ND		4.8	0.73	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Methylene Chloride	ND		4.8	2.2	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Styrene	ND		4.8	0.24	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Tetrachloroethene	ND		4.8	0.65	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Toluene	ND		4.8	0.36	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
trans-1,2-Dichloroethene	ND		4.8	0.50	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Trichloroethene	ND		4.8	1.1	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Vinyl chloride	ND		4.8	0.59	ug/Kg		12/02/15 22:36	12/03/15 01:56	1
Xylenes, Total	ND		9.6	0.81	ug/Kg		12/02/15 22:36	12/03/15 01:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 125	12/02/15 22:36	12/03/15 01:56	1
1,2-Dichloroethane-d4 (Surr)	102		64 - 126	12/02/15 22:36	12/03/15 01:56	1
4-Bromofluorobenzene (Surr)	101		72 - 126	12/02/15 22:36	12/03/15 01:56	1
Dibromofluoromethane (Surr)	101		60 - 140	12/02/15 22:36	12/03/15 01:56	1

Lab Sample ID: LCS 480-277888/1-A

Matrix: Solid

Analysis Batch: 277887

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	50.0	56.4		ug/Kg		113	77 - 121
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/Kg		105	80 - 120
1,1,2-Trichloroethane	50.0	50.4		ug/Kg		101	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.8		ug/Kg		104	60 - 140
1,1-Dichloroethane	50.0	49.0		ug/Kg		98	73 - 126
1,1-Dichloroethene	50.0	49.2		ug/Kg		98	59 - 125
1,2,4-Trichlorobenzene	50.0	51.8		ug/Kg		104	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	56.1		ug/Kg		112	63 - 124
1,2-Dichlorobenzene	50.0	48.9		ug/Kg		98	75 - 120
1,2-Dichloroethane	50.0	47.5		ug/Kg		95	77 - 122
1,2-Dichloropropane	50.0	49.0		ug/Kg		98	75 - 124
1,3-Dichlorobenzene	50.0	48.6		ug/Kg		97	74 - 120
1,4-Dichlorobenzene	50.0	47.8		ug/Kg		96	73 - 120
2-Butanone (MEK)	250	274		ug/Kg		110	70 - 134
2-Hexanone	250	279		ug/Kg		112	59 - 130
4-Methyl-2-pentanone (MIBK)	250	281		ug/Kg		113	65 - 133
Acetone	250	271		ug/Kg		109	61 - 137
Benzene	50.0	49.2		ug/Kg		98	79 - 127
Bromodichloromethane	50.0	49.5		ug/Kg		99	80 - 122
Bromoform	50.0	55.0		ug/Kg		110	68 - 126

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-277888/1-A

Matrix: Solid

Analysis Batch: 277887

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	50.0	50.1		ug/Kg		100	37 - 149
Carbon disulfide	50.0	53.0		ug/Kg		106	64 - 131
Carbon tetrachloride	50.0	54.7		ug/Kg		109	75 - 135
Chlorobenzene	50.0	48.6		ug/Kg		97	76 - 124
Dibromochloromethane	50.0	52.5		ug/Kg		105	76 - 125
Chloroethane	50.0	53.2		ug/Kg		106	69 - 135
Chloroform	50.0	47.7		ug/Kg		95	80 - 118
Chloromethane	50.0	52.0		ug/Kg		104	63 - 127
cis-1,2-Dichloroethene	50.0	48.3		ug/Kg		97	81 - 117
cis-1,3-Dichloropropene	50.0	50.6		ug/Kg		101	82 - 120
Cyclohexane	50.0	52.6		ug/Kg		105	65 - 106
Dichlorodifluoromethane	50.0	56.6		ug/Kg		113	57 - 142
Ethylbenzene	50.0	50.5		ug/Kg		101	80 - 120
1,2-Dibromoethane	50.0	50.4		ug/Kg		101	78 - 120
Isopropylbenzene	50.0	53.1		ug/Kg		106	72 - 120
Methyl acetate	250	265		ug/Kg		106	55 - 136
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	63 - 125
Methylcyclohexane	50.0	53.3		ug/Kg		107	60 - 140
Methylene Chloride	50.0	53.0		ug/Kg		106	61 - 127
Styrene	50.0	50.1		ug/Kg		100	80 - 120
Tetrachloroethene	50.0	50.0		ug/Kg		100	74 - 122
Toluene	50.0	46.3		ug/Kg		93	74 - 128
trans-1,2-Dichloroethene	50.0	48.6		ug/Kg		97	78 - 126
Trichloroethene	50.0	49.5		ug/Kg		99	77 - 129
Trichlorofluoromethane	50.0	57.6		ug/Kg		115	65 - 146
Vinyl chloride	50.0	56.0		ug/Kg		112	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 125
1,2-Dichloroethane-d4 (Surr)	102		64 - 126
4-Bromofluorobenzene (Surr)	100		72 - 126
Dibromofluoromethane (Surr)	99		60 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-276639/1-A

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 276639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		11/24/15 08:25	11/27/15 16:30	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-276639/1-A

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 276639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2-Chloronaphthalene	ND		170	28	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2-Chlorophenol	ND		170	31	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2-Methylphenol	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2-Methylnaphthalene	ND		170	34	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2-Nitroaniline	ND		330	25	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
2-Nitrophenol	ND		170	48	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
3-Nitroaniline	ND		330	47	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4-Chloroaniline	ND		170	42	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4-Methylphenol	ND		330	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4-Nitroaniline	ND		330	89	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
4-Nitrophenol	ND		330	120	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Acenaphthene	ND		170	25	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Acenaphthylene	ND		170	22	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Acetophenone	ND		170	23	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Anthracene	ND		170	42	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Atrazine	ND		170	59	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Benzaldehyde	ND		170	130	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Benzo[a]anthracene	ND		170	17	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Benzo[a]pyrene	ND		170	25	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Caprolactam	ND		170	51	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Carbazole	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Chrysene	ND		170	38	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Dibenzofuran	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Diethyl phthalate	ND		170	22	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Dimethyl phthalate	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Fluoranthene	ND		170	18	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Fluorene	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Hexachlorobenzene	ND		170	23	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Hexachlorobutadiene	ND		170	25	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Hexachloroethane	ND		170	22	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		11/24/15 08:25	11/27/15 16:30	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-276639/1-A

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 276639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		170	36	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Naphthalene	ND		170	22	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Nitrobenzene	ND		170	19	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Pentachlorophenol	ND		330	170	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Phenanthrene	ND		170	25	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Phenol	ND		170	26	ug/Kg		11/24/15 08:25	11/27/15 16:30	1
Pyrene	ND		170	20	ug/Kg		11/24/15 08:25	11/27/15 16:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	89		34 - 132	11/24/15 08:25	11/27/15 16:30	1
Phenol-d5 (Surr)	89		11 - 120	11/24/15 08:25	11/27/15 16:30	1
p-Terphenyl-d14 (Surr)	97		65 - 153	11/24/15 08:25	11/27/15 16:30	1
2,4,6-Tribromophenol (Surr)	85		39 - 146	11/24/15 08:25	11/27/15 16:30	1
2-Fluorobiphenyl	96		37 - 120	11/24/15 08:25	11/27/15 16:30	1
2-Fluorophenol (Surr)	90		18 - 120	11/24/15 08:25	11/27/15 16:30	1

Lab Sample ID: LCS 480-276639/2-A

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Biphenyl	1660	1520		ug/Kg		92	71 - 120
bis (2-chloroisopropyl) ether	1660	1390		ug/Kg		84	44 - 120
2,4,5-Trichlorophenol	1660	1620		ug/Kg		98	59 - 126
2,4,6-Trichlorophenol	1660	1580		ug/Kg		96	59 - 123
2,4-Dichlorophenol	1660	1430		ug/Kg		86	52 - 120
2,4-Dimethylphenol	1660	1450		ug/Kg		88	36 - 120
2,4-Dinitrophenol	3310	3060		ug/Kg		92	35 - 146
2,4-Dinitrotoluene	1660	1640		ug/Kg		99	55 - 125
2,6-Dinitrotoluene	1660	1570		ug/Kg		95	66 - 128
2-Chloronaphthalene	1660	1520		ug/Kg		92	57 - 120
2-Chlorophenol	1660	1340		ug/Kg		81	38 - 120
2-Methylphenol	1660	1370		ug/Kg		83	48 - 120
2-Methylnaphthalene	1660	1420		ug/Kg		86	47 - 120
2-Nitroaniline	1660	1600		ug/Kg		97	61 - 130
2-Nitrophenol	1660	1360		ug/Kg		82	50 - 120
3,3'-Dichlorobenzidine	3310	3060		ug/Kg		92	48 - 126
3-Nitroaniline	1660	1410		ug/Kg		85	61 - 127
4,6-Dinitro-2-methylphenol	3310	3460		ug/Kg		104	49 - 155
4-Bromophenyl phenyl ether	1660	1610		ug/Kg		97	58 - 131
4-Chloro-3-methylphenol	1660	1440		ug/Kg		87	49 - 125
4-Chloroaniline	1660	1180		ug/Kg		71	49 - 120
4-Chlorophenyl phenyl ether	1660	1560		ug/Kg		94	63 - 124
4-Methylphenol	1660	1370		ug/Kg		83	50 - 119
4-Nitroaniline	1660	1560		ug/Kg		94	63 - 128
4-Nitrophenol	3310	3490		ug/Kg		105	43 - 137

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-276639/2-A

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1660	1530		ug/Kg		92	53 - 120
Acenaphthylene	1660	1560		ug/Kg		94	58 - 121
Acetophenone	1660	1380		ug/Kg		84	66 - 120
Anthracene	1660	1680		ug/Kg		101	62 - 129
Atrazine	3310	3480	E	ug/Kg		105	60 - 164
Benzaldehyde	3310	1910		ug/Kg		58	21 - 120
Benzo[a]anthracene	1660	1680		ug/Kg		101	65 - 133
Benzo[a]pyrene	1660	1620		ug/Kg		98	64 - 127
Benzo[b]fluoranthene	1660	1640		ug/Kg		99	64 - 135
Benzo[g,h,i]perylene	1660	1750		ug/Kg		106	50 - 152
Benzo[k]fluoranthene	1660	1600		ug/Kg		97	58 - 138
Bis(2-chloroethoxy)methane	1660	1430		ug/Kg		87	61 - 133
Bis(2-chloroethyl)ether	1660	1380		ug/Kg		83	45 - 120
Bis(2-ethylhexyl) phthalate	1660	1720		ug/Kg		104	61 - 133
Butyl benzyl phthalate	1660	1720		ug/Kg		104	61 - 129
Caprolactam	3310	3120		ug/Kg		94	54 - 133
Carbazole	1660	1690		ug/Kg		102	59 - 129
Chrysene	1660	1690		ug/Kg		102	64 - 131
Dibenz(a,h)anthracene	1660	1710		ug/Kg		103	54 - 148
Di-n-butyl phthalate	1660	1770		ug/Kg		107	58 - 130
Di-n-octyl phthalate	1660	1780		ug/Kg		108	62 - 133
Dibenzofuran	1660	1560		ug/Kg		94	56 - 120
Diethyl phthalate	1660	1640		ug/Kg		99	66 - 126
Dimethyl phthalate	1660	1610		ug/Kg		97	65 - 124
Fluoranthene	1660	1730		ug/Kg		105	62 - 131
Fluorene	1660	1580		ug/Kg		96	63 - 126
Hexachlorobenzene	1660	1610		ug/Kg		97	60 - 132
Hexachlorobutadiene	1660	1370		ug/Kg		83	45 - 120
Hexachlorocyclopentadiene	1660	1460		ug/Kg		88	31 - 120
Hexachloroethane	1660	1290		ug/Kg		78	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1730		ug/Kg		104	56 - 149
Isophorone	1660	1490		ug/Kg		90	56 - 120
N-Nitrosodi-n-propylamine	1660	1440		ug/Kg		87	46 - 120
Naphthalene	1660	1420		ug/Kg		86	46 - 120
Nitrobenzene	1660	1420		ug/Kg		86	49 - 120
Pentachlorophenol	3310	3230		ug/Kg		98	33 - 136
Phenanthrene	1660	1690		ug/Kg		102	60 - 130
Phenol	1660	1380		ug/Kg		83	36 - 120
Pyrene	1660	1690		ug/Kg		102	51 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	85		34 - 132
Phenol-d5 (Surr)	83		11 - 120
p-Terphenyl-d14 (Surr)	96		65 - 153
2,4,6-Tribromophenol (Surr)	100		39 - 146
2-Fluorobiphenyl	94		37 - 120
2-Fluorophenol (Surr)	83		18 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-91541-1 MS

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: TP1-2FT

Prep Type: Total/NA

Prep Batch: 276639

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Biphenyl	ND		1880	1660		ug/Kg	✱	88	71 - 120
bis (2-chloroisopropyl) ether	ND		1880	1490		ug/Kg	✱	79	44 - 120
2,4,5-Trichlorophenol	ND		1880	1750		ug/Kg	✱	93	59 - 126
2,4,6-Trichlorophenol	ND		1880	1660		ug/Kg	✱	88	59 - 123
2,4-Dichlorophenol	ND		1880	1580		ug/Kg	✱	84	52 - 120
2,4-Dimethylphenol	ND		1880	1500		ug/Kg	✱	80	36 - 120
2,4-Dinitrophenol	ND		3770	ND		ug/Kg	✱	NC	35 - 146
2,4-Dinitrotoluene	ND		1880	1680		ug/Kg	✱	89	55 - 125
2,6-Dinitrotoluene	ND		1880	1690		ug/Kg	✱	90	66 - 128
2-Chloronaphthalene	ND		1880	1650		ug/Kg	✱	87	57 - 120
2-Chlorophenol	ND		1880	1440		ug/Kg	✱	76	38 - 120
2-Methylphenol	ND		1880	1460		ug/Kg	✱	77	48 - 120
2-Methylnaphthalene	ND		1880	1570		ug/Kg	✱	83	47 - 120
2-Nitroaniline	ND		1880	1680	J	ug/Kg	✱	89	61 - 130
2-Nitrophenol	ND		1880	1450		ug/Kg	✱	77	50 - 120
3,3'-Dichlorobenzidine	ND		3770	3620		ug/Kg	✱	96	48 - 126
3-Nitroaniline	ND		1880	1600	J	ug/Kg	✱	85	61 - 127
4,6-Dinitro-2-methylphenol	ND		3770	2440		ug/Kg	✱	65	49 - 155
4-Bromophenyl phenyl ether	ND		1880	1760		ug/Kg	✱	94	58 - 131
4-Chloro-3-methylphenol	ND		1880	1650		ug/Kg	✱	87	49 - 125
4-Chloroaniline	ND		1880	1210		ug/Kg	✱	64	49 - 120
4-Chlorophenyl phenyl ether	ND		1880	1860		ug/Kg	✱	99	63 - 124
4-Methylphenol	ND		1880	1470	J	ug/Kg	✱	78	50 - 119
4-Nitroaniline	ND		1880	1780	J	ug/Kg	✱	95	63 - 128
4-Nitrophenol	ND		3770	3280		ug/Kg	✱	87	43 - 137
Acenaphthene	ND		1880	1730		ug/Kg	✱	92	53 - 120
Acenaphthylene	ND		1880	1700		ug/Kg	✱	90	58 - 121
Acetophenone	ND		1880	1450		ug/Kg	✱	77	66 - 120
Anthracene	ND		1880	1890		ug/Kg	✱	101	62 - 129
Atrazine	ND		3770	4180		ug/Kg	✱	111	60 - 164
Benzaldehyde	ND		3770	2040		ug/Kg	✱	54	21 - 120
Benzo[a]anthracene	400	J	1880	2240		ug/Kg	✱	98	65 - 133
Benzo[a]pyrene	380	J	1880	2070		ug/Kg	✱	90	64 - 127
Benzo[b]fluoranthene	560	J	1880	2040		ug/Kg	✱	78	64 - 135
Benzo[g,h,i]perylene	330	J	1880	2380		ug/Kg	✱	109	50 - 152
Benzo[k]fluoranthene	280	J	1880	2080		ug/Kg	✱	96	58 - 138
Bis(2-chloroethoxy)methane	ND		1880	1510		ug/Kg	✱	80	61 - 133
Bis(2-chloroethyl)ether	ND		1880	1440		ug/Kg	✱	77	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1880	1960		ug/Kg	✱	104	61 - 133
Butyl benzyl phthalate	ND		1880	1800		ug/Kg	✱	95	61 - 129
Caprolactam	ND		3770	3450		ug/Kg	✱	92	54 - 133
Carbazole	ND		1880	1920		ug/Kg	✱	102	59 - 129
Chrysene	500	J	1880	2240		ug/Kg	✱	92	64 - 131
Dibenz(a,h)anthracene	ND		1880	2050		ug/Kg	✱	109	54 - 148
Di-n-butyl phthalate	ND		1880	1890		ug/Kg	✱	100	58 - 130
Di-n-octyl phthalate	ND		1880	2080		ug/Kg	✱	110	62 - 133
Dibenzofuran	ND		1880	1810		ug/Kg	✱	96	56 - 120
Diethyl phthalate	ND		1880	1840		ug/Kg	✱	98	66 - 126

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-91541-1 MS

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: TP1-2FT

Prep Type: Total/NA

Prep Batch: 276639

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Dimethyl phthalate	ND		1880	1790		ug/Kg	☼	95	65 - 124
Fluoranthene	1000		1880	2490		ug/Kg	☼	77	62 - 131
Fluorene	ND		1880	1810		ug/Kg	☼	96	63 - 126
Hexachlorobenzene	ND		1880	1770		ug/Kg	☼	94	60 - 132
Hexachlorobutadiene	ND		1880	1440		ug/Kg	☼	76	45 - 120
Hexachlorocyclopentadiene	ND		1880	1280		ug/Kg	☼	68	31 - 120
Hexachloroethane	ND		1880	1370		ug/Kg	☼	73	41 - 120
Indeno[1,2,3-cd]pyrene	270	J	1880	2270		ug/Kg	☼	106	56 - 149
Isophorone	ND		1880	1580		ug/Kg	☼	84	56 - 120
N-Nitrosodi-n-propylamine	ND		1880	1440		ug/Kg	☼	76	46 - 120
Naphthalene	ND		1880	1560		ug/Kg	☼	83	46 - 120
Nitrobenzene	ND		1880	1510		ug/Kg	☼	80	49 - 120
Pentachlorophenol	ND		3770	3470		ug/Kg	☼	92	33 - 136
Phenanthrene	520	J	1880	2180		ug/Kg	☼	88	60 - 130
Phenol	ND		1880	1510		ug/Kg	☼	80	36 - 120
Pyrene	770	J	1880	2340		ug/Kg	☼	83	51 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5 (Surr)	79		34 - 132
Phenol-d5 (Surr)	78		11 - 120
p-Terphenyl-d14 (Surr)	92		65 - 153
2,4,6-Tribromophenol (Surr)	87		39 - 146
2-Fluorobiphenyl	89		37 - 120
2-Fluorophenol (Surr)	75		18 - 120

Lab Sample ID: 480-91541-1 MSD

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: TP1-2FT

Prep Type: Total/NA

Prep Batch: 276639

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Biphenyl	ND		1870	1750		ug/Kg	☼	94	71 - 120	6	20
bis (2-chloroisopropyl) ether	ND		1870	1550		ug/Kg	☼	83	44 - 120	4	24
2,4,5-Trichlorophenol	ND		1870	1710		ug/Kg	☼	91	59 - 126	2	18
2,4,6-Trichlorophenol	ND		1870	1700		ug/Kg	☼	91	59 - 123	3	19
2,4-Dichlorophenol	ND		1870	1690		ug/Kg	☼	90	52 - 120	7	19
2,4-Dimethylphenol	ND		1870	1570		ug/Kg	☼	84	36 - 120	4	42
2,4-Dinitrophenol	ND		3740	ND		ug/Kg	☼	NC	35 - 146	NC	22
2,4-Dinitrotoluene	ND		1870	1710		ug/Kg	☼	92	55 - 125	2	20
2,6-Dinitrotoluene	ND		1870	1680		ug/Kg	☼	90	66 - 128	1	15
2-Chloronaphthalene	ND		1870	1710		ug/Kg	☼	91	57 - 120	4	21
2-Chlorophenol	ND		1870	1530		ug/Kg	☼	82	38 - 120	6	25
2-Methylphenol	ND		1870	1540		ug/Kg	☼	82	48 - 120	6	27
2-Methylnaphthalene	ND		1870	1620		ug/Kg	☼	87	47 - 120	4	21
2-Nitroaniline	ND		1870	1650	J	ug/Kg	☼	88	61 - 130	2	15
2-Nitrophenol	ND		1870	1590		ug/Kg	☼	85	50 - 120	9	18
3,3'-Dichlorobenzidine	ND		3740	3520		ug/Kg	☼	94	48 - 126	3	25
3-Nitroaniline	ND		1870	1550	J	ug/Kg	☼	83	61 - 127	3	19
4,6-Dinitro-2-methylphenol	ND		3740	2470		ug/Kg	☼	66	49 - 155	1	15

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-91541-1 MSD

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: TP1-2FT

Prep Type: Total/NA

Prep Batch: 276639

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Bromophenyl phenyl ether	ND		1870	1800		ug/Kg	☼	96	58 - 131	2	15
4-Chloro-3-methylphenol	ND		1870	1680		ug/Kg	☼	90	49 - 125	2	27
4-Chloroaniline	ND		1870	1270		ug/Kg	☼	68	49 - 120	5	22
4-Chlorophenyl phenyl ether	ND		1870	1810		ug/Kg	☼	97	63 - 124	2	16
4-Methylphenol	ND		1870	1620	J	ug/Kg	☼	87	50 - 119	10	24
4-Nitroaniline	ND		1870	1740	J	ug/Kg	☼	93	63 - 128	3	24
4-Nitrophenol	ND		3740	3370		ug/Kg	☼	90	43 - 137	3	25
Acenaphthene	ND		1870	1770		ug/Kg	☼	95	53 - 120	3	35
Acenaphthylene	ND		1870	1750		ug/Kg	☼	94	58 - 121	3	18
Acetophenone	ND		1870	1580		ug/Kg	☼	84	66 - 120	8	20
Anthracene	ND		1870	1870		ug/Kg	☼	100	62 - 129	1	15
Atrazine	ND		3740	4170		ug/Kg	☼	111	60 - 164	0	20
Benzaldehyde	ND		3740	2080		ug/Kg	☼	55	21 - 120	2	20
Benzo[a]anthracene	400	J	1870	2030		ug/Kg	☼	87	65 - 133	9	15
Benzo[a]pyrene	380	J	1870	1970		ug/Kg	☼	85	64 - 127	5	15
Benzo[b]fluoranthene	560	J	1870	1930		ug/Kg	☼	73	64 - 135	5	15
Benzo[g,h,i]perylene	330	J	1870	2280		ug/Kg	☼	104	50 - 152	4	15
Benzo[k]fluoranthene	280	J	1870	2010		ug/Kg	☼	92	58 - 138	4	22
Bis(2-chloroethoxy)methane	ND		1870	1680		ug/Kg	☼	90	61 - 133	11	17
Bis(2-chloroethyl)ether	ND		1870	1560		ug/Kg	☼	83	45 - 120	8	21
Bis(2-ethylhexyl) phthalate	ND		1870	1880		ug/Kg	☼	101	61 - 133	4	15
Butyl benzyl phthalate	ND		1870	1790		ug/Kg	☼	95	61 - 129	0	16
Caprolactam	ND		3740	3600		ug/Kg	☼	96	54 - 133	4	20
Carbazole	ND		1870	1940		ug/Kg	☼	104	59 - 129	1	20
Chrysene	500	J	1870	2170		ug/Kg	☼	89	64 - 131	3	15
Dibenz(a,h)anthracene	ND		1870	2030		ug/Kg	☼	108	54 - 148	1	15
Di-n-butyl phthalate	ND		1870	1880		ug/Kg	☼	101	58 - 130	0	15
Di-n-octyl phthalate	ND		1870	2040		ug/Kg	☼	109	62 - 133	2	16
Dibenzofuran	ND		1870	1830		ug/Kg	☼	97	56 - 120	1	15
Diethyl phthalate	ND		1870	1840		ug/Kg	☼	98	66 - 126	0	15
Dimethyl phthalate	ND		1870	1810		ug/Kg	☼	97	65 - 124	1	15
Fluoranthene	1000		1870	2330		ug/Kg	☼	69	62 - 131	7	15
Fluorene	ND		1870	1830		ug/Kg	☼	98	63 - 126	1	15
Hexachlorobenzene	ND		1870	1770		ug/Kg	☼	94	60 - 132	0	15
Hexachlorobutadiene	ND		1870	1570		ug/Kg	☼	84	45 - 120	9	44
Hexachlorocyclopentadiene	ND		1870	1290		ug/Kg	☼	69	31 - 120	1	49
Hexachloroethane	ND		1870	1360		ug/Kg	☼	73	41 - 120	0	46
Indeno[1,2,3-cd]pyrene	270	J	1870	2130		ug/Kg	☼	99	56 - 149	6	15
Isophorone	ND		1870	1680		ug/Kg	☼	90	56 - 120	6	17
N-Nitrosodi-n-propylamine	ND		1870	1570		ug/Kg	☼	84	46 - 120	9	31
Naphthalene	ND		1870	1640		ug/Kg	☼	88	46 - 120	5	29
Nitrobenzene	ND		1870	1580		ug/Kg	☼	85	49 - 120	4	24
Pentachlorophenol	ND		3740	3620		ug/Kg	☼	97	33 - 136	4	35
Phenanthrene	520	J	1870	2080		ug/Kg	☼	83	60 - 130	5	15
Phenol	ND		1870	1600		ug/Kg	☼	85	36 - 120	6	35
Pyrene	770	J	1870	2100		ug/Kg	☼	71	51 - 133	11	35

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-91541-1 MSD

Matrix: Solid

Analysis Batch: 277133

Client Sample ID: TP1-2FT

Prep Type: Total/NA

Prep Batch: 276639

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	85		34 - 132
Phenol-d5 (Surr)	85		11 - 120
p-Terphenyl-d14 (Surr)	87		65 - 153
2,4,6-Tribromophenol (Surr)	83		39 - 146
2-Fluorobiphenyl	95		37 - 120
2-Fluorophenol (Surr)	82		18 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-276841/1-A

Matrix: Solid

Analysis Batch: 277103

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 276841

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.587	J	1.7	0.32	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
4,4'-DDE	0.365	J	1.7	0.35	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
4,4'-DDT	ND		1.7	0.39	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Aldrin	ND		1.7	0.41	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
alpha-BHC	ND		1.7	0.30	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
alpha-Chlordane	ND		1.7	0.82	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
beta-BHC	0.601	J	1.7	0.30	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
delta-BHC	ND		1.7	0.31	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Dieldrin	ND		1.7	0.40	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Endosulfan I	ND		1.7	0.32	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Endosulfan II	ND		1.7	0.30	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Endrin	ND		1.7	0.33	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Endrin aldehyde	ND		1.7	0.42	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Endrin ketone	ND		1.7	0.41	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
gamma-BHC (Lindane)	ND		1.7	0.30	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
gamma-Chlordane	ND		1.7	0.53	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Heptachlor	ND		1.7	0.36	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Heptachlor epoxide	ND		1.7	0.43	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Methoxychlor	0.561	J	1.7	0.34	ug/Kg		11/25/15 07:49	11/27/15 10:21	1
Toxaphene	ND		17	9.6	ug/Kg		11/25/15 07:49	11/27/15 10:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	79		32 - 136	11/25/15 07:49	11/27/15 10:21	1
Tetrachloro-m-xylene	80		30 - 124	11/25/15 07:49	11/27/15 10:21	1

Lab Sample ID: LCS 480-276841/2-A

Matrix: Solid

Analysis Batch: 277103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276841

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.2	14.3		ug/Kg		88	52 - 138
4,4'-DDE	16.2	12.6		ug/Kg		77	52 - 131

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 480-276841/2-A

Matrix: Solid

Analysis Batch: 277103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276841

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDT	16.2	13.6		ug/Kg		84	50 - 131
Aldrin	16.2	10.7		ug/Kg		66	35 - 120
alpha-BHC	16.2	8.67		ug/Kg		53	49 - 120
alpha-Chlordane	16.2	12.4		ug/Kg		76	40 - 133
beta-BHC	16.2	10.0		ug/Kg		62	52 - 127
delta-BHC	16.2	11.1		ug/Kg		68	45 - 123
Dieldrin	16.2	12.0		ug/Kg		74	50 - 131
Endosulfan I	16.2	12.7		ug/Kg		78	43 - 121
Endosulfan II	16.2	14.1		ug/Kg		87	48 - 134
Endosulfan sulfate	16.2	10.3		ug/Kg		64	46 - 144
Endrin	16.2	14.2		ug/Kg		87	46 - 134
Endrin aldehyde	16.2	8.13		ug/Kg		50	31 - 137
Endrin ketone	16.2	13.2		ug/Kg		81	44 - 140
gamma-BHC (Lindane)	16.2	9.91		ug/Kg		61	50 - 120
gamma-Chlordane	16.2	11.2		ug/Kg		69	52 - 129
Heptachlor	16.2	11.4		ug/Kg		70	51 - 121
Heptachlor epoxide	16.2	12.0		ug/Kg		74	52 - 129
Methoxychlor	16.2	14.7		ug/Kg		90	50 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	81		32 - 136
Tetrachloro-m-xylene	86		30 - 124

Lab Sample ID: 480-91541-2 MS

Matrix: Solid

Analysis Batch: 277103

Client Sample ID: TP2-3FT

Prep Type: Total/NA

Prep Batch: 276841

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND		18.6	15.2		ug/Kg	☼	82	26 - 162
4,4'-DDE	ND		18.6	13.0		ug/Kg	☼	70	34 - 138
4,4'-DDT	1.3	J	18.6	16.8		ug/Kg	☼	83	43 - 131
Aldrin	ND		18.6	15.4		ug/Kg	☼	83	37 - 125
alpha-BHC	2.1	J F2	18.6	16.3		ug/Kg	☼	76	39 - 117
alpha-Chlordane	ND		18.6	13.9		ug/Kg	☼	75	29 - 141
beta-BHC	5.5	B F1 F2	18.6	10.7	F1	ug/Kg	☼	28	36 - 139
delta-BHC	ND		18.6	14.6		ug/Kg	☼	78	23 - 132
Dieldrin	1.5	J F2	18.6	14.4		ug/Kg	☼	70	38 - 135
Endosulfan I	ND		18.6	13.9		ug/Kg	☼	75	39 - 128
Endosulfan II	ND		18.6	15.4		ug/Kg	☼	83	24 - 134
Endosulfan sulfate	7.6	F1	18.6	11.6		ug/Kg	☼	21	19 - 137
Endrin	ND		18.6	17.4		ug/Kg	☼	94	41 - 147
Endrin aldehyde	ND		18.6	13.6		ug/Kg	☼	73	20 - 120
Endrin ketone	1.9	J	18.6	19.1		ug/Kg	☼	93	31 - 139
gamma-BHC (Lindane)	ND	F2	18.6	15.2		ug/Kg	☼	82	50 - 120
gamma-Chlordane	ND		18.6	13.6		ug/Kg	☼	73	31 - 140
Heptachlor	ND		18.6	16.8		ug/Kg	☼	90	42 - 128
Heptachlor epoxide	ND		18.6	15.5		ug/Kg	☼	83	26 - 141
Methoxychlor	ND		18.6	18.2		ug/Kg	☼	98	44 - 157

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	97		32 - 136
Tetrachloro-m-xylene	101		30 - 124

Lab Sample ID: 480-91541-2 MSD
Matrix: Solid
Analysis Batch: 277103

Client Sample ID: TP2-3FT
Prep Type: Total/NA
Prep Batch: 276841

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND		18.5	17.3		ug/Kg	☼	93	26 - 162	13	21
4,4'-DDE	ND		18.5	12.0		ug/Kg	☼	65	34 - 138	8	18
4,4'-DDT	1.3	J	18.5	15.6		ug/Kg	☼	77	43 - 131	7	25
Aldrin	ND		18.5	13.6		ug/Kg	☼	73	37 - 125	12	12
alpha-BHC	2.1	J F2	18.5	13.8	F2	ug/Kg	☼	63	39 - 117	16	15
alpha-Chlordane	ND		18.5	12.7		ug/Kg	☼	68	29 - 141	9	23
beta-BHC	5.5	B F1 F2	18.5	8.79	F1 F2	ug/Kg	☼	17	36 - 139	20	19
delta-BHC	ND		18.5	12.8		ug/Kg	☼	69	23 - 132	13	14
Dieldrin	1.5	J F2	18.5	12.6	F2	ug/Kg	☼	60	38 - 135	13	12
Endosulfan I	ND		18.5	12.3		ug/Kg	☼	66	39 - 128	12	18
Endosulfan II	ND		18.5	13.5		ug/Kg	☼	73	24 - 134	13	26
Endosulfan sulfate	7.6	F1	18.5	9.75	F1	ug/Kg	☼	12	19 - 137	17	35
Endrin	ND		18.5	15.2		ug/Kg	☼	82	41 - 147	14	20
Endrin aldehyde	ND		18.5	10.9		ug/Kg	☼	59	20 - 120	22	47
Endrin ketone	1.9	J	18.5	15.6		ug/Kg	☼	74	31 - 139	21	37
gamma-BHC (Lindane)	ND	F2	18.5	13.1	F2	ug/Kg	☼	71	50 - 120	15	12
gamma-Chlordane	ND		18.5	12.1		ug/Kg	☼	65	31 - 140	12	15
Heptachlor	ND		18.5	15.0		ug/Kg	☼	81	42 - 128	11	22
Heptachlor epoxide	ND		18.5	14.1		ug/Kg	☼	76	26 - 141	9	15
Methoxychlor	ND		18.5	18.0		ug/Kg	☼	97	44 - 157	1	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	66		32 - 136
Tetrachloro-m-xylene	90		30 - 124

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-276499/1-A
Matrix: Solid
Analysis Batch: 276872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.9	4.3	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Antimony	ND		14.8	0.39	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Arsenic	ND		2.0	0.39	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Barium	ND		0.49	0.11	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Beryllium	ND		0.20	0.028	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Cadmium	ND		0.20	0.030	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Calcium	3.79	J	49.4	3.3	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Chromium	ND		0.49	0.20	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Cobalt	ND		0.49	0.049	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Copper	ND		0.99	0.21	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Iron	ND		9.9	3.5	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Lead	ND		0.99	0.24	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Magnesium	ND		19.7	0.92	mg/Kg		11/23/15 15:30	11/24/15 14:38	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-276499/1-A
Matrix: Solid
Analysis Batch: 276872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276499

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.0326	J	0.20	0.032	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Nickel	ND		4.9	0.23	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Potassium	ND		29.6	19.7	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Selenium	ND		3.9	0.39	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Silver	ND		0.59	0.20	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Sodium	ND		138	12.8	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Thallium	ND		5.9	0.30	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Vanadium	ND		0.49	0.11	mg/Kg		11/23/15 15:30	11/24/15 14:38	1
Zinc	ND		2.0	0.63	mg/Kg		11/23/15 15:30	11/24/15 14:38	1

Lab Sample ID: LCSSRM 480-276499/2-A
Matrix: Solid
Analysis Batch: 276872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276499

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7930	8248		mg/Kg		104.0	39.0 - 161.4
Antimony	105	89.30		mg/Kg		85.0	20.4 - 254.3
Arsenic	98.5	87.80		mg/Kg		89.1	69.3 - 145.2
Barium	308	279.2		mg/Kg		90.7	74.0 - 126.0
Beryllium	66.0	58.70		mg/Kg		88.9	73.6 - 126.4
Cadmium	146	129.7		mg/Kg		88.8	73.3 - 126.7
Calcium	6610	5929		mg/Kg		89.7	74.1 - 125.9
Chromium	182	165.0		mg/Kg		90.7	70.9 - 129.7
Cobalt	162	158.4		mg/Kg		97.8	74.1 - 125.3
Copper	106	98.30		mg/Kg		92.7	74.5 - 125.5
Iron	14400	12530		mg/Kg		87.0	35.6 - 163.9
Lead	130	125.1		mg/Kg		96.3	72.5 - 126.9
Magnesium	2640	2433		mg/Kg		92.2	64.4 - 136.0
Manganese	410	380.5		mg/Kg		92.8	76.3 - 123.9
Nickel	149	143.5		mg/Kg		96.3	73.2 - 126.8
Potassium	2550	2474		mg/Kg		97.0	60.8 - 138.8
Selenium	154	141.0		mg/Kg		91.6	67.5 - 132.5
Silver	40.9	36.56		mg/Kg		89.4	66.0 - 133.7
Sodium	2480	2262		mg/Kg		91.2	65.3 - 134.3

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-276499/2-A
Matrix: Solid
Analysis Batch: 276872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276499

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	175	171.8		mg/Kg		98.2	68.6 - 130.9
Vanadium	96.7	89.58		mg/Kg		92.6	64.4 - 135.5
Zinc	191	172.1		mg/Kg		90.1	69.6 - 130.4

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-276738/1-A
Matrix: Solid
Analysis Batch: 277005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg		11/25/15 12:10	11/25/15 15:06	1

Lab Sample ID: LCDSRM 480-276738/3-A ^5
Matrix: Solid
Analysis Batch: 277005

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 276738

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	7.10	8.03		mg/Kg		113.1	51.3 - 149.3	0	20

Lab Sample ID: LCSSRM 480-276738/2-A ^5
Matrix: Solid
Analysis Batch: 277005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276738

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	7.10	8.00		mg/Kg		112.7	51.3 - 149.3

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

GC/MS VOA

Analysis Batch: 277316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	8260C	277318
480-91541-2	TP2-3FT	Total/NA	Solid	8260C	277318
480-91541-3	TP3-1FT	Total/NA	Solid	8260C	277318
480-91541-6	TP5-4FT	Total/NA	Solid	8260C	277318
LCS 480-277318/1-A	Lab Control Sample	Total/NA	Solid	8260C	277318
MB 480-277318/2-A	Method Blank	Total/NA	Solid	8260C	277318

Prep Batch: 277318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	5035A	
480-91541-2	TP2-3FT	Total/NA	Solid	5035A	
480-91541-3	TP3-1FT	Total/NA	Solid	5035A	
480-91541-6	TP5-4FT	Total/NA	Solid	5035A	
LCS 480-277318/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-277318/2-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 277887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-5	TP4C-2FT	Total/NA	Solid	8260C	277888
LCS 480-277888/1-A	Lab Control Sample	Total/NA	Solid	8260C	277888
MB 480-277888/2-A	Method Blank	Total/NA	Solid	8260C	277888

Prep Batch: 277888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-5	TP4C-2FT	Total/NA	Solid	5035A	
LCS 480-277888/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-277888/2-A	Method Blank	Total/NA	Solid	5035A	

GC/MS Semi VOA

Prep Batch: 276639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	3550C	
480-91541-1 MS	TP1-2FT	Total/NA	Solid	3550C	
480-91541-1 MSD	TP1-2FT	Total/NA	Solid	3550C	
480-91541-2	TP2-3FT	Total/NA	Solid	3550C	
480-91541-3	TP3-1FT	Total/NA	Solid	3550C	
480-91541-5	TP4C-2FT	Total/NA	Solid	3550C	
480-91541-6	TP5-4FT	Total/NA	Solid	3550C	
LCS 480-276639/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-276639/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 277133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	8270D	276639
480-91541-1 MS	TP1-2FT	Total/NA	Solid	8270D	276639
480-91541-1 MSD	TP1-2FT	Total/NA	Solid	8270D	276639
480-91541-2	TP2-3FT	Total/NA	Solid	8270D	276639
480-91541-3	TP3-1FT	Total/NA	Solid	8270D	276639
480-91541-5	TP4C-2FT	Total/NA	Solid	8270D	276639

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

GC/MS Semi VOA (Continued)

Analysis Batch: 277133 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-6	TP5-4FT	Total/NA	Solid	8270D	276639
LCS 480-276639/2-A	Lab Control Sample	Total/NA	Solid	8270D	276639
MB 480-276639/1-A	Method Blank	Total/NA	Solid	8270D	276639

GC Semi VOA

Prep Batch: 276841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	3550C	
480-91541-2	TP2-3FT	Total/NA	Solid	3550C	
480-91541-2 MS	TP2-3FT	Total/NA	Solid	3550C	
480-91541-2 MSD	TP2-3FT	Total/NA	Solid	3550C	
480-91541-3	TP3-1FT	Total/NA	Solid	3550C	
480-91541-5	TP4C-2FT	Total/NA	Solid	3550C	
480-91541-6	TP5-4FT	Total/NA	Solid	3550C	
LCS 480-276841/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-276841/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 277103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	8081B	276841
480-91541-2	TP2-3FT	Total/NA	Solid	8081B	276841
480-91541-2 MS	TP2-3FT	Total/NA	Solid	8081B	276841
480-91541-2 MSD	TP2-3FT	Total/NA	Solid	8081B	276841
480-91541-3	TP3-1FT	Total/NA	Solid	8081B	276841
LCS 480-276841/2-A	Lab Control Sample	Total/NA	Solid	8081B	276841
MB 480-276841/1-A	Method Blank	Total/NA	Solid	8081B	276841

Analysis Batch: 277263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-5	TP4C-2FT	Total/NA	Solid	8081B	276841
480-91541-6	TP5-4FT	Total/NA	Solid	8081B	276841

Metals

Prep Batch: 276499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	3050B	
480-91541-2	TP2-3FT	Total/NA	Solid	3050B	
480-91541-3	TP3-1FT	Total/NA	Solid	3050B	
480-91541-4	TP3-6FT	Total/NA	Solid	3050B	
480-91541-5	TP4C-2FT	Total/NA	Solid	3050B	
480-91541-6	TP5-4FT	Total/NA	Solid	3050B	
LCSSRM 480-276499/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-276499/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 276738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	7471B	
480-91541-2	TP2-3FT	Total/NA	Solid	7471B	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Metals (Continued)

Prep Batch: 276738 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-3	TP3-1FT	Total/NA	Solid	7471B	
480-91541-4	TP3-6FT	Total/NA	Solid	7471B	
480-91541-5	TP4C-2FT	Total/NA	Solid	7471B	
480-91541-6	TP5-4FT	Total/NA	Solid	7471B	
LCDSRM 480-276738/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-276738/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-276738/1-A	Method Blank	Total/NA	Solid	7471B	

Analysis Batch: 276872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	6010C	276499
480-91541-2	TP2-3FT	Total/NA	Solid	6010C	276499
480-91541-3	TP3-1FT	Total/NA	Solid	6010C	276499
480-91541-4	TP3-6FT	Total/NA	Solid	6010C	276499
480-91541-5	TP4C-2FT	Total/NA	Solid	6010C	276499
480-91541-6	TP5-4FT	Total/NA	Solid	6010C	276499
LCSSRM 480-276499/2-A	Lab Control Sample	Total/NA	Solid	6010C	276499
MB 480-276499/1-A	Method Blank	Total/NA	Solid	6010C	276499

Analysis Batch: 277005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	7471B	276738
480-91541-2	TP2-3FT	Total/NA	Solid	7471B	276738
480-91541-3	TP3-1FT	Total/NA	Solid	7471B	276738
480-91541-4	TP3-6FT	Total/NA	Solid	7471B	276738
480-91541-5	TP4C-2FT	Total/NA	Solid	7471B	276738
480-91541-6	TP5-4FT	Total/NA	Solid	7471B	276738
LCDSRM 480-276738/3-A ^5	Lab Control Sample Dup	Total/NA	Solid	7471B	276738
LCSSRM 480-276738/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	276738
MB 480-276738/1-A	Method Blank	Total/NA	Solid	7471B	276738

General Chemistry

Analysis Batch: 276258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-91541-1	TP1-2FT	Total/NA	Solid	Moisture	
480-91541-2	TP2-3FT	Total/NA	Solid	Moisture	
480-91541-3	TP3-1FT	Total/NA	Solid	Moisture	
480-91541-4	TP3-6FT	Total/NA	Solid	Moisture	
480-91541-5	TP4C-2FT	Total/NA	Solid	Moisture	
480-91541-6	TP5-4FT	Total/NA	Solid	Moisture	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP1-2FT

Date Collected: 11/20/15 09:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			276738	11/25/15 12:10	TAS	TAL BUF
Total/NA	Analysis	7471B		5	277005	11/25/15 16:15	TAS	TAL BUF
Total/NA	Analysis	Moisture		1	276258	11/20/15 20:50	CMK	TAL BUF

Client Sample ID: TP1-2FT

Date Collected: 11/20/15 09:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-1

Matrix: Solid

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			277318	11/20/15 17:30	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	277316	11/30/15 00:51	CDC	TAL BUF
Total/NA	Prep	3550C			276639	11/24/15 08:25	CAM	TAL BUF
Total/NA	Analysis	8270D		5	277133	11/27/15 20:26	CAS	TAL BUF
Total/NA	Prep	3550C			276841	11/25/15 07:49	TRG	TAL BUF
Total/NA	Analysis	8081B		1	277103	11/27/15 12:32	MAN	TAL BUF
Total/NA	Prep	3050B			276499	11/23/15 15:30	CNS	TAL BUF
Total/NA	Analysis	6010C		1	276872	11/24/15 15:23	AMH	TAL BUF

Client Sample ID: TP2-3FT

Date Collected: 11/20/15 09:30

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			276738	11/25/15 12:10	TAS	TAL BUF
Total/NA	Analysis	7471B		1	277005	11/25/15 15:57	TAS	TAL BUF
Total/NA	Analysis	Moisture		1	276258	11/20/15 20:50	CMK	TAL BUF

Client Sample ID: TP2-3FT

Date Collected: 11/20/15 09:30

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-2

Matrix: Solid

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			277318	11/20/15 17:30	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	277316	11/30/15 01:18	CDC	TAL BUF
Total/NA	Prep	3550C			276639	11/24/15 08:25	CAM	TAL BUF
Total/NA	Analysis	8270D		5	277133	11/27/15 20:52	CAS	TAL BUF
Total/NA	Prep	3550C			276841	11/25/15 07:49	TRG	TAL BUF
Total/NA	Analysis	8081B		2	277103	11/27/15 12:13	MAN	TAL BUF
Total/NA	Prep	3050B			276499	11/23/15 15:30	CNS	TAL BUF
Total/NA	Analysis	6010C		1	276872	11/24/15 15:27	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP3-1FT

Date Collected: 11/20/15 11:20

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			276738	11/25/15 12:10	TAS	TAL BUF
Total/NA	Analysis	7471B		1	277005	11/25/15 15:59	TAS	TAL BUF
Total/NA	Analysis	Moisture		1	276258	11/20/15 20:50	CMK	TAL BUF

Client Sample ID: TP3-1FT

Date Collected: 11/20/15 11:20

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-3

Matrix: Solid

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			277318	11/20/15 17:30	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	277316	11/30/15 01:43	CDC	TAL BUF
Total/NA	Prep	3550C			276639	11/24/15 08:25	CAM	TAL BUF
Total/NA	Analysis	8270D		5	277133	11/27/15 21:18	CAS	TAL BUF
Total/NA	Prep	3550C			276841	11/25/15 07:49	TRG	TAL BUF
Total/NA	Analysis	8081B		1	277103	11/27/15 12:50	MAN	TAL BUF
Total/NA	Prep	3050B			276499	11/23/15 15:30	CNS	TAL BUF
Total/NA	Analysis	6010C		1	276872	11/24/15 15:40	AMH	TAL BUF

Client Sample ID: TP3-6FT

Date Collected: 11/20/15 11:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			276738	11/25/15 12:10	TAS	TAL BUF
Total/NA	Analysis	7471B		1	277005	11/25/15 16:01	TAS	TAL BUF
Total/NA	Analysis	Moisture		1	276258	11/20/15 20:50	CMK	TAL BUF

Client Sample ID: TP3-6FT

Date Collected: 11/20/15 11:15

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-4

Matrix: Solid

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			276499	11/23/15 15:30	CNS	TAL BUF
Total/NA	Analysis	6010C		1	276872	11/24/15 15:43	AMH	TAL BUF

Client Sample ID: TP4C-2FT

Date Collected: 11/20/15 10:45

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			276738	11/25/15 12:10	TAS	TAL BUF
Total/NA	Analysis	7471B		1	277005	11/25/15 16:03	TAS	TAL BUF
Total/NA	Analysis	Moisture		1	276258	11/20/15 20:50	CMK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Client Sample ID: TP4C-2FT

Date Collected: 11/20/15 10:45

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-5

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			277888	11/20/15 17:30	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	277887	12/03/15 02:23	CDC	TAL BUF
Total/NA	Prep	3550C			276639	11/24/15 08:25	CAM	TAL BUF
Total/NA	Analysis	8270D		10	277133	11/27/15 21:44	CAS	TAL BUF
Total/NA	Prep	3550C			276841	11/25/15 07:49	TRG	TAL BUF
Total/NA	Analysis	8081B		5	277263	11/28/15 12:36	MAN	TAL BUF
Total/NA	Prep	3050B			276499	11/23/15 15:30	CNS	TAL BUF
Total/NA	Analysis	6010C		1	276872	11/24/15 15:46	AMH	TAL BUF

Client Sample ID: TP5-4FT

Date Collected: 11/20/15 11:10

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			276738	11/25/15 12:10	TAS	TAL BUF
Total/NA	Analysis	7471B		1	277005	11/25/15 16:05	TAS	TAL BUF
Total/NA	Analysis	Moisture		1	276258	11/20/15 20:50	CMK	TAL BUF

Client Sample ID: TP5-4FT

Date Collected: 11/20/15 11:10

Date Received: 11/20/15 14:40

Lab Sample ID: 480-91541-6

Matrix: Solid

Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			277318	11/20/15 17:30	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	277316	11/30/15 02:35	CDC	TAL BUF
Total/NA	Prep	3550C			276639	11/24/15 08:25	CAM	TAL BUF
Total/NA	Analysis	8270D		5	277133	11/27/15 22:11	CAS	TAL BUF
Total/NA	Prep	3550C			276841	11/25/15 07:49	TRG	TAL BUF
Total/NA	Analysis	8081B		20	277263	11/28/15 12:54	MAN	TAL BUF
Total/NA	Prep	3050B			276499	11/23/15 15:30	CNS	TAL BUF
Total/NA	Analysis	6010C		1	276872	11/24/15 15:50	AMH	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TestAmerica Buffalo

Certification Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: C&S Engineers, Inc.
Project/Site: 23 North Street

TestAmerica Job ID: 480-91541-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-91541-1	TP1-2FT	Solid	11/20/15 09:15	11/20/15 14:40
480-91541-2	TP2-3FT	Solid	11/20/15 09:30	11/20/15 14:40
480-91541-3	TP3-1FT	Solid	11/20/15 11:20	11/20/15 14:40
480-91541-4	TP3-6FT	Solid	11/20/15 11:15	11/20/15 14:40
480-91541-5	TP4C-2FT	Solid	11/20/15 10:45	11/20/15 14:40
480-91541-6	TP5-4FT	Solid	11/20/15 11:10	11/20/15 14:40

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Chain of Custody Record

TAL-4124 (1007)

Client C&S Engineers Inc		Project Manager Mark Colmerover		Date 11/20/15		Chain of Custody Number 292149	
Address 141 Elm Street Suite 100		Telephone Number (Area Code)/Fax Number 716-847-1630		Lab Number		Page 1 of 1	
City Buffalo		State NY		Zip Code 14203		Analysis (Attach list if more space is needed)	
Project Name and Location (State) 33 Naxon Street - New York		Carrier/Waybill Number		Lab Contact		Special Instructions/Conditions of Receipt	
Contact/Purchase Order/Quote No. 1610		Site Contact		Lab Contact			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Matrix	Time	Date	Time	Date	Time	
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH							DE/MECH
TP1-2ft	11/20/15	9:15				X	3												
TP2-3ft	11/20/15	9:30				X	3												
TP3-1ft	11/20/15	11:20				X	3												
TP3-6ft	11/20/15	11:15				X	3												
TP4C-2ft	11/20/15	10:45				X	3												
TP5-4ft	11/20/15	11:10				X	3												

Barcode: 480-91541 Chain of Custody

Possible Hazard Identification		Sample Disposal		Disposal By Lab		Archive For		Months	
☒ Non-Hazard	☐ Flammable	☐ Skin Irritant	☐ Poison B	☐ Unknown	☒ Return To Client	☐ Disposal By Lab	☐ Archive For	☐ Months	(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required		QC Requirements (Specify)	
☐ 24 Hours	☐ 48 Hours	☒ 14 Days	☐ 21 Days

1. Relinquished By Clare Delmar		Date 11/20/15		Time 14:13	
2. Relinquished By Bob Sil		Date 11/20/15		Time 1440	
3. Relinquished By		Date		Time	

Comments: Temp 4.3 #1 ICE

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-91541-1

Login Number: 91541

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	terra core vials placed into frozen storage on 11/20/15 @ 1730
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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	c&s eng
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	