

REMEDIAL INVESTIGATION REPORT
FOR
SIMS MATCHPLATE BROWNFIELD SITE
2176 ERIE BOULEVARD EAST
ENVIRONMENTAL RESTORATION PROGRAM (ERP)
NYSDEC SITE NO. B00072

Prepared by:



C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, NY 13212

Prepared for:

City of Syracuse
233 East Washington Street
Syracuse, New York 13202

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C&S Project No: 119.412.008

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EXECUTIVE SUMMARY

At the request of City of Syracuse, C&S Engineers, Inc. (C&S) has prepared this Remedial Investigation (RI or Investigation) Report for the former SIMS Matchplate Site located at 2176 Erie Boulevard East in Syracuse, Onondaga County, New York. The scope of services for the Investigation was based on our January 25, 2019, proposal. The location of the Site is shown on **Figure 1**.

The objective of the Investigation is to complete the investigative phase of the Environmental Restoration Program (ERP) so that the City of Syracuse can complete its obligations under the existing State Assistance Contract (SAC). The fieldwork and related reporting are ultimately being completed in order to provide a basis for the New York State Department of Environmental Conservation (NYSDEC) to issue a Record of Decision (ROD) for the site.

Under the ERP, a Supplemental Site Investigation (SSI), Remedial Alternatives Analysis (RAA) and Interim Remedial Measures (IRM) were completed in 2003, 2005, and 2006-2008, respectively.

As part of the IRM, demolition of all site buildings and rough surface restoration was completed in 2008.

The scope of services for this Investigation included the following tasks:

- Review of historical environmental reports / documentation;
- Subsurface investigation of the geologic and hydrogeologic conditions of the Site;
- Collection and laboratory analytical testing of soil and groundwater samples;
- Evaluation of the findings of the investigation and analytical testing; and
- Discussion of the observed conditions on the Site.

C&S' Investigation was conducted on January 8, 9, 10, 11, 14, and 15 and February 7, 2019. The following summarizes and discusses the results of this Investigation:

Surface Soil

Eight surface soil samples were collected and analyzed for a combination of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, poly-chlorinated biphenyls (PCBs), and metals. The purpose of the samples was to obtain a general level of information regarding contaminants present in the shallow soils across the Site.

One VOC, nine SVOCs, nine pesticides, and one PCB, exceeded the NYSDEC Part 375 Unrestricted Use soil cleanup objectives (SCOs). Six SVOCs exceeded Commercial

SCOs. Pesticides were detected in nine soil samples and exceeded Unrestricted Use SCO but were well below the Commercial Use SCOs. Metals were detected in six of the 15 samples above the Unrestricted Use SCO but none of the concentrations exceeded the Commercial SCOs. The types and concentrations of SVOCs and metals identified are characteristic of a commercial / industrial area. No physical indications of contamination such as staining or odors were noted.

Surface soil sample locations and lab data are shown on **Figure 3**.

Subsurface Soil

A total of twenty-six soil borings were advanced and 63 soil samples were collected and analyzed for a combination of VOC, SVOC, pesticides, herbicides, and metals. The general purpose of the sampling was to delineate the extent of the TCE contamination previously delineated in the completed IRMs.

During the soil sampling some samples exhibited strong chemical odors. The soil samples that exhibited these odors were limited to the northeast portion of the parcel in particular SB-7 & SB-12. VOCs were detected at concentrations greater than laboratory detection limits in all but two out of the 63 samples. Nine VOCs exceeded the Unrestricted Use SCOs and two VOCs exceeded the Commercial Use SCO. The Unrestricted Use SCO is 50 ppb. Trichloroethene (TCE) exceeded the Unrestricted Use SCO of 470 ppb in three samples and ranged from 51,000 to 190,000 ppb. The Commercial Use SCO of 200,000 ppb was exceeded in two samples and ranged from 200,000 ppb to 620,000 ppb. 1,1,1-Trichloroethene was present in the SB-12, 5-10' sample at 1,200 ppb, compared to the Unrestricted SCO of 680 ppb.

SVOCs were only sampled at 10 locations across the site. Only four of the 10 samples locations had SVOCs detected at concentrations greater than laboratory detection limits. In SB-2, two analytes were detected above the Unrestricted Use SCO and none were above the Commercial Use SCO. In SB-6, six analytes were above the Unrestricted Use SCO, and none were above the Commercial Use SCO.

Metals were detected at concentrations greater than laboratory detection limits in each of the ten samples collected. However, none of the concentrations exceeded any of the SCOs.

Soil borings / subsurface soil sample locations and lab data are shown on **Figure 4**.

Groundwater

A total of three temporary groundwater monitoring wells were installed, five previously installed wells were located, and seven total wells were sampled and

analyzed for VOCs. One of the temporary monitoring wells, TW-2, did not produce sufficient water to be sampled.

Comparison of the groundwater analytical data to the TOGs 1.1.1 Class GA Ambient Water Quality Standards indicates that VOCs were detected at concentrations greater than laboratory detection limits in six out of the 7 samples. MW-1, TW-3, and MW-6 did not have any VOC concentrations exceeding TOGS standards. TW-1, MW-3, and MW-7 all had exceedances for TOGS standards in Trichloroethene (5 ppb) and ranged from 130 to 37,000 ppb. MW-3 and MW-7 also had exceedances in cis-1,2-DCE (5 ppb) and ranged from 33 to 1,600 ppb. All three of these wells are located in the northeast quadrant of the site.

Monitoring wells and lab data are shown on **Figure 4**.

1.0 INTRODUCTION

At the request of City of Syracuse, C&S Engineers, Inc. (C&S) has prepared this Remedial Investigation (RI or Investigation) Report for the former SIMS Matchplate Site located at 2176 Erie Boulevard East in Syracuse, Onondaga County, New York. The scope of services for the Investigation was based on our January 25, 2019, proposal. The location of the Site is shown on **Figure 1**. The investigation was performed generally consistent with 6 NYCRR Part 375, Environmental Remediation Programs and DER-10 Technical Guidance for Site Investigation and Remediation.

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- Discussion of the observed conditions on the Site.

2.0 SITE DESCRIPTION

The following sections include a description of the location, site characteristics, and land use in the vicinity of the Site.

2.1 Location and Legal Description

The Site is 1.74 acres, identified as tax parcel 036.-03-07.0, and is owned by the City of Syracuse. The property is located at 2176 Erie Boulevard East along the eastern side of the City of Syracuse. The Site is located along a commercial corridor with a number of businesses along the Erie Boulevard corridor. A residential area is located to the south. The location of the Site is shown on **Figure 1**.

The list below describes the roads located immediately surrounding the Site:

<i>North-</i>	Erie Boulevard
<i>East-</i>	Beattie Street
<i>South-</i>	Dakin Street
<i>West-</i>	Bruce Street

2.2 Site Characteristics

The Site is generally characterized as a relatively flat and vacant lot with elevations slightly increasing to the south. There are multiple driveways that provide access to the site from the west and to the east along Beattie Street.

2.3 Background / Contamination Concerns

The following is a brief narrative of the investigation and remedial work that has previously been performed at the Site by C&S and by others:

- In 1995, the NYSDEC was involved in a hazardous waste cleanup at the site to remove abandoned containers of waste materials.
- Between 1999 and 2003, C&S completed a series of subsurface investigations including test pits, surface sampling, soil borings, and groundwater monitoring wells to identify areas of environmental concern.
- In 2005, an IRM was conducted to remove containerized wastes from the property consisting of the disposal of 445 gallons of hazardous liquids, 3.2 tons of non-hazardous solids, and 700 pounds of non-hazardous liquids.

- In 2008, an IRM was completed for the demolition of the site buildings and rough surface restoration.

Previous investigations indicate that trichloroethene (TCE) is present within the subsurface in the former courtyard area at the northern area of the site along Erie Boulevard. Soil TCE concentrations exceeded TAGM 4046 Recommended Soil Cleanup Objectives (RSCO) effective at the time of sampling, and TCE and cis-1,2-dichloroethene (cis-1,2-DCE) in the groundwater exceeded standards along the northern boundary of the Site.

3.0 ENVIRONMENTAL SITE ASSESSMENT RATIONALE AND METHODS

3.1 Remedial Investigation Scope and Objectives

This Investigation was intended to document current subsurface conditions. The scope of services included:

- A subsurface investigation, which included the advancement of soil borings and installation of temporary groundwater monitoring wells.
- The collection of surface soil, subsurface soil, and groundwater samples.
- The laboratory analysis of the surface soil, subsurface soil, and groundwater samples.

Samples were collected to characterize surface soil, subsurface soil, and groundwater conditions and determine potential contaminant impacts in each medium.

Field activities were conducted on January 8, 9, 10, 11, 14, and 15 and February 7, 2019.

3.2 Site Investigation Methods

3.2.1 Utility Clearing

Prior to intrusive investigation activities, DigSafe NY was notified to mark out public utilities that are located at the Site. Utilities were painted in the appropriate color, marked with flags and depths provided where possible. C&S endeavored to maintain a minimum setback of at least three feet from these utilities during our investigation.

3.2.2 Surface Soil Sample Collection

C&S collected surface soil samples representing the upper two inches as well as the 6-inch to 12-inch interval of soil below the hardscape or vegetative layer. Samples were collected with decontaminated stainless steel spoons or steel shovel. Non-disposable sampling equipment was decontaminated between sample locations to avoid potential cross contamination of samples. **Figure 2** shows the sample locations.

3.2.2.1 Field Screening

Each sample was scanned in the field with a Mini-Rae 3000 photo-ionization detector ("PID") with a 10.6-volt lamp and the readings were recorded in a field notebook. Soil that was collected and set aside on ice for potential subsequent lab analysis was placed in air-tight plastic zip lock bags. Prior to collecting the sample,

the soil was screened in-situ and head space readings were collected to represent the interval being sampled.

3.2.2.2 Surface Soil Sample Collection

Surface soil samples were selected for lab analysis at pre-selected locations defined in C&S' work plan, dated December 13, 2018. The samples were placed into glassware provided by the laboratory and put on ice in a cooler. A total of fifteen surface soil samples were collected by C&S on February 7 and 8, 2019. The samples were submitted for the following analysis:

<i>Sample ID</i>	<i>Analysis</i>
<i>SS-1 through SS-8 0" to 2"</i>	USEPA Target Compound List (TCL) semi-volatile organic compounds (SVOCs), Target Analyte List (TAL) metals
<i>SS-1 through SS-5, SS-7, SS-8 6" to 12"</i>	USEPA TCL volatile organic compounds (VOCs), SVOCs, Herbicides/Pesticides, PCBs and TAL metals

The samples were analyzed by TestAmerica of Buffalo, New York.

3.2.3 Soil Boring Advancement

C&S observed the drilling of soil borings by Northeast Specialized Drilling (NSD) on January 8, 9, 10, 14, and 15, 2019. A total of 27 soil borings were advanced (boring ID numbers SB-1 through SB-16, SB-18, SB-20, SB-21, and SB-25 through SB-32). To ensure complete coverage of the site, 20-foot by 20-foot grids were established across the Site, as shown on **Figure 2**. At five of the grid locations, the surface was saturated and unable to be safely accessed with the drilling rig. Therefore, those locations were abandoned. Soil borings were advanced from the ground surface to approximately 20 feet below ground surface (bgs). Drilling was conducted using a track-mounted Geoprobe® drilling unit. Each boring location was continuously sampled using a two-inch by five-foot steel sampling tube fitted with a disposable acetate liner. Non-disposable sampling equipment was decontaminated between runs and between drill locations to avoid potential cross contamination of samples. **Figure 2** shows the boring locations.

Material description and physical evidence of petroleum contamination (staining or odors) of each direct push sample was recorded and organized into soil boring logs provided in **Appendix A**.

3.2.3.1 Field Screening

Each direct push sample was scanned in the field with a Mini-Rae 3000 photo-ionization detector (“PID”) with a 10.6-volt lamp. The readings and corresponding depths are recorded on the soil boring logs provided in **Appendix A**. Soil that was collected and set aside on ice for potential subsequent lab analysis was placed in air-tight plastic zip lock bags. Prior to collecting the sample, head space readings were conducted to represent the specific interval being sampled.

3.2.3.2 Soil Sample Collection

Soil samples were selected for laboratory analysis to help further delineate the vertical and areal extent of the TCE. The samples were placed into glassware provided by the laboratory and put on ice in a cooler. A total of 63 soil samples were collected by C&S and submitted for analysis. The samples were analyzed by TestAmerica of Buffalo, New York.

3.2.4 Groundwater Monitoring Well Installation

C&S observed the drilling and installation of temporary groundwater monitoring wells by NSD during the drilling of the borings. A total of three one-inch groundwater monitoring wells were installed (TW-1 through TW-3). Drilling was conducted by advancing an approximate 2.5-inch diameter macrocore with a track-mounted Geoprobe® drilling unit. Non-disposable sampling equipment was decontaminated between runs and between drill locations to avoid potential cross contamination of samples.

In addition to the installed wells, C&S also sampled previously installed wells. The additional wells sampled were MW-1, MW-2, MW-3, and MW-7.

Figure 5 shows the well locations.

3.2.4.1 Well Construction

The temporary wells were installed within an approximate 2.5-inch diameter borehole, resulting from the completion of the test boring by the Geoprobe®. The screened interval consisted of 1-inch diameter 0.01 inch slotted PVC, positioned to straddle both the anticipated level of the water table and physical evidence of contamination, if applicable. Due to their temporary nature, the screened interval was not packed with sand and the wells were not sealed with bentonite. Groundwater was present at approximately five to 10 feet bgs.

3.2.4.2 Well Development and Sampling

Due to the temporary nature of the wells, well development was not attempted. However, approximately two to three well volumes of groundwater were removed

prior to sampling in order to promote the infiltration of new groundwater through the well screen. The water remained turbid during sampling. Free product was not present.

Water quality parameters were measured with a Horiba U-52-2 water meter during development / purging activities. Groundwater quality data stabilized prior to well sampling. The wells were sampled by hand bailing with a dedicated bailer for each well. The water quality field data is provided in **Appendix B**.

The samples were placed into glassware provided by the laboratory and put on ice in a cooler. A total of six groundwater samples were collected by C&S from the new and previously installed wells on January 17, 2019 and submitted for VOC analysis. The samples were analyzed by TestAmerica of Buffalo, New York.

3.3 Quality Control / Quality Assurance

Quality Assurance / Quality Control (QA/QC) samples were collected based on the following minimum number of samples per media type as defined in the work plan:

- Soil samples
 - o Matrix Spike / Matrix Spike Duplicate (MS/MSD) – 5%
- Groundwater samples
 - o Trip blank – 1 per shipment
 - o Blind Duplicate – 5%
 - o MS / MSD – 5%

A total of 63 soil samples were collected during the RI activities and three MS / MSD were collected meeting the 5% criteria.

A total of seven groundwater samples were taken and one blind duplicate, one trip blank, and one MS / MSD were collected; also meeting the 5% criteria.

A third-party data consultant, Environmental Data Usability, prepared the Data Usability and Summary Report (“DUSR”) as required in the work plan. The DUSR is included as **Appendix D**. The following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate Standard Recoveries
- Matrix Spike Recoveries. Duplicate Recoveries
- Blind Field Duplicate Correlations
- Preparation/calibration Blanks
- Laboratory Control Samples (LCSs)

- Calibration/Low Level Standards
- ICP Serial Dilution
- Instrument MDLs
- Sample Result Verification.

TestAmerica, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory, performed the analytical testing. The laboratory results for the samples were reported in a Category B deliverables package to facilitate validation of the data, and a third party validator reviewed the laboratory data and prepared a Data Usability and Summary Report (DUSR). The validator evaluated the analytical results for the field samples and quality assurance / quality control samples and compared the findings to USEPA guidance to determine the accuracy and validity of the results.

4.0 **RESULTS**

4.1 **Site Geology and Hydrogeology**

4.1.1 **Site Geology**

Each soil sample retrieved from the Geoprobe® was observed for general soil type, estimated moisture content, and other pertinent features. The soil from the borings was consistent across the site consisting of silt with varying amounts of sand and gravel to approximately 15 feet below ground surface and then hard till was encountered at depths generally below 15 feet.

4.1.2 **Site Hydrogeology**

Due to the presence of coarse-grained materials, the monitoring wells generally produce plentiful groundwater with the exception of the northeast corner of the site at TW-2. There was not sufficient groundwater to collect a sample from that location. Groundwater elevation data was not collected to create a groundwater gradient map. However, previous studies indicate that groundwater flow is to the north toward Erie Boulevard, which coincides with the local topography and locations of surface waters.

4.2 **Field Screening Results**

Physical observations of impacts were observed in some of the borings. These observations were identified at the following locations and depths (see **Figure 2** for locations):

<i>Boring No</i>	<i>Depth</i>	<i>Detectable PID Readings</i>	<i>Odors</i>
<i>SB-7</i>	5'-10'	>15,000 ppm	Chemical
<i>SB-7</i>	10'-15'	614 ppm	Chemical
<i>SB-12</i>	5'-10'	>15,000 ppm	Chemical
<i>SB-12</i>	10'-15'	150 ppm	Chemical

4.3 Laboratory Analytical Data

As discussed above, 15 surface soil samples, 63 subsurface soil samples, and 7 groundwater samples were collected and analyzed. Summaries of the lab data as well as complete laboratory analytical reports are provided in **Appendix C**.

Soil Analytical Data

6 NYCRR Part 375-6, Remediation Program Soil Cleanup Objectives (SCO), effective December 14, 2006, includes SCOs that are based on protection of human health, groundwater, and ecological resources. The SCOs are based on the actual or intended site use.

The Unrestricted Use SCOs are considered to be representative of pre-release conditions unless an impact to ecological resources has been identified.

The Commercial Use SCOs apply to businesses with the primary purpose of buying, selling or trading of merchandise or services.

As a means of assessing environmental conditions at the site, the soil laboratory data generated as part of our Investigation was compared to 6 NYCRR Part 375-6 Commercial Use SCOs due to the site's future likely use for commercial purposes.

Surface Soil Analytical Data

Comparison of the surface soil analytical data indicates:

- Only six VOCs were detected at concentrations greater than laboratory detection limits. Acetone is the only VOC that exceeded a SCO. The acetone concentration of 53 parts per billion (ppb) in the 6" – 12" interval in SS-3 slightly exceeded the Unrestricted Use SCO of 50 ppb.
- SVOCs were detected in fourteen out of 15 soil samples. SVOCs, mainly polycyclic aromatic hydrocarbons (PAHs), with concentrations exceeding Unrestricted Use occurred in nine out of the 15 samples and Commercial Use SCOs were exceeded in six out of the 15 samples.
- Pesticides were detected in fourteen out of the 15 soil samples. 4,4-DDE was detected at a concentration of 4.1 ppb in SS-2 in the 0 - 2" interval and 4,4-DDT was detected in eight samples ranging from 3.7 ppb in SS-5 at the 0" - 2" interval to 15 ppm in SS-4 at the 6" - 12" interval, which exceeds the Unrestricted Use SCO of 3.3 ppb.
- Herbicides were not detected at concentrations greater than laboratory detection limits.

- PCBs were detected in one sample, SS-1 6" - 12" interval, at a level slightly above the Unrestricted Use SCO but well below the Commercial SCO of 1 ppb.
- Metals were detected at concentrations greater than the Unrestricted SCO in six out of the 15 samples. However, none of the concentrations exceeded the Commercial Use SCOs.

The locations of the surface soil samples and corresponding lab data are shown on **Figure 3**. Summaries of the laboratory data and laboratory analytical reports are provided in **Appendix C**.

Subsurface Soil Analytical Data

Comparison of the subsurface soil analytical data indicates:

- VOCs were detected at concentrations greater than laboratory detection limits in all but two of the 63 samples. Seven VOCs exceeded the Unrestricted Use SCO and two exceeded the Commercial Use SCO.
 - o Acetone exceeded the Unrestricted Use SCO in six samples and ranged in concentration from 56 to 90 ppb. The Unrestricted Use SCO is 50 ppb.
 - o TCE exceeded the Unrestricted Use SCO of 470 ppb in three samples and ranged from 51,000 to 190,000 ppb. The Commercial Use SCO of 200,000 ppb was exceeded in one sample at 620,000 ppb.
 - o 1,1,1-Trichloroethene was present in the SB-12, 5' - 10' sample at 1,200 ppb, compared to the Unrestricted SCO of 680 ppb.
- SVOCs were sampled at 10 locations across the site. Only four of the 10 sample locations had SVOCs detected at concentrations greater than laboratory detection limits. In SB-2, two analytes were detected above the Unrestricted Use SCO and none were above the Commercial Use SCO.
- Metals were detected at concentrations greater than laboratory detection limits in each of the 10 samples collected. However, none of the concentrations exceeded a SCO.

The locations of the soil borings / samples and corresponding lab data are shown on **Figure 4**. Summaries of the laboratory data and laboratory analytical reports are provided in **Appendix C**.

Groundwater Analytical Data

Technical and Operational Guidance Series 1.1.1 (TOGS 1.1.1) presents the NYSDEC Division of Water ambient water quality standards and guidance values and groundwater effluent limitations. The authority for these values is derived from Article 17 of the Environmental Conservation Law and 6 NYCRR Parts 700-706, Water Quality Regulations. The groundwater analytical data generated from this Investigation was compared to TOGS 1.1.1 Part I ambient standards and guidance values. Part II of the document describes and lists groundwater effluent limitations.

Comparison of the groundwater analytical data to the TOGS 1.1.1 Class GA Ambient Water Quality Standards indicates:

- VOCs were detected at concentrations greater than laboratory detection limits in six of the seven samples.
 - o MW-1, TW-3, and MW-6: VOC concentrations did not exceed TOGS standards.
 - o TW-1, MW-3, and MW-7: Trichloroethene exceeded the TOGS standard of 5 ppb and ranges from 130 to 37,000 ppb. These concentrations are consistent with the previous sampling of MW-3 and MW-7 in 2006. The area is concentrated in the northwest quadrant of the site.
 - o MW-3 and MW-7: cis-1,2-DCE exceeds the TOGS standard of 5 ppb and ranges from 33 to 1,600 ppb.

The locations of the groundwater wells and corresponding lab data are shown on **Figure 5**. Summaries of the laboratory data and laboratory analytical reports are provided in **Appendix C**.

5.0 DISCUSSION AND CONCLUSIONS

At the request of City of Syracuse, C&S Engineers, Inc. (C&S) has prepared this Remedial Investigation (RI or Investigation) Report for the former SIMS Matchplate Site located at 2176 Erie Boulevard East in Syracuse, Onondaga County, New York. The scope of services for the Investigation was based on our January 25, 2019, proposal. The location of the Site is shown on **Figure 1**.

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SVOCs were only sampled at 10 locations across the site. Only four of the 10 samples locations had SVOCs detected at concentrations greater than laboratory detection limits. In SB-2, two analytes were detected above the Unrestricted Use SCO and none were above the Commercial Use SCO. In SB-6, six analytes were above the Unrestricted Use SCO, and none were above the Commercial Use SCO.

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Soil borings / subsurface soil sample locations and lab data are shown on **Figure 4**.

Groundwater

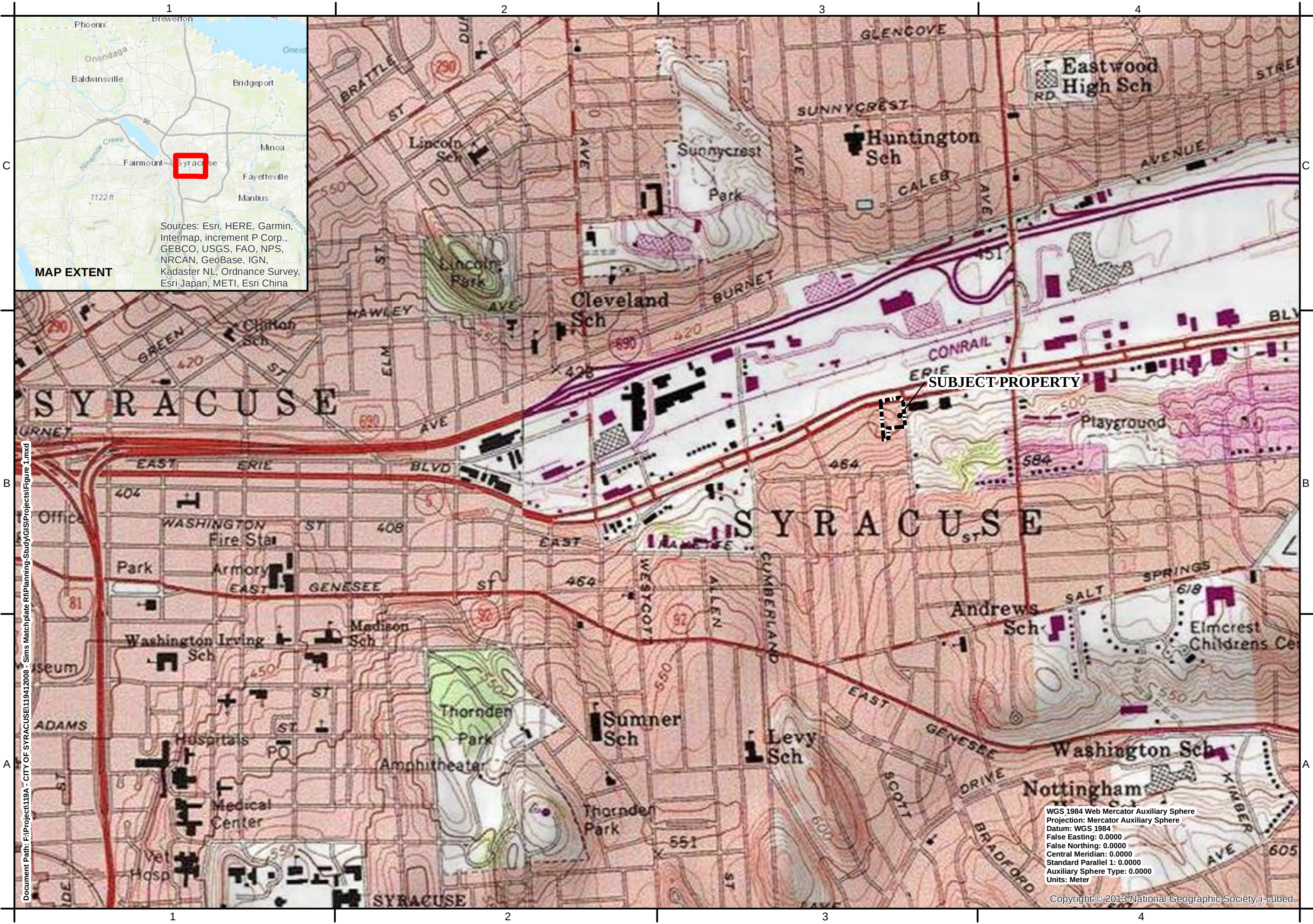
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Monitoring wells and lab data are shown on **Figure 4**.

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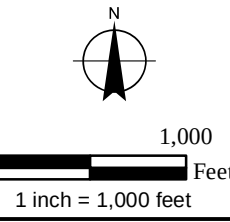
Figures



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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China



Sims Matchplate ERP Site
NYSDC Site No. B-00072-7
City of Syracuse, Onondaga County, New York

PROJECT NO:	119.412.008
DATE:	March 2019
SCALE:	AS SHOWN
DRAWN BY:	JTB
DESIGNED BY:	JTB
CHECKED BY:	WNR

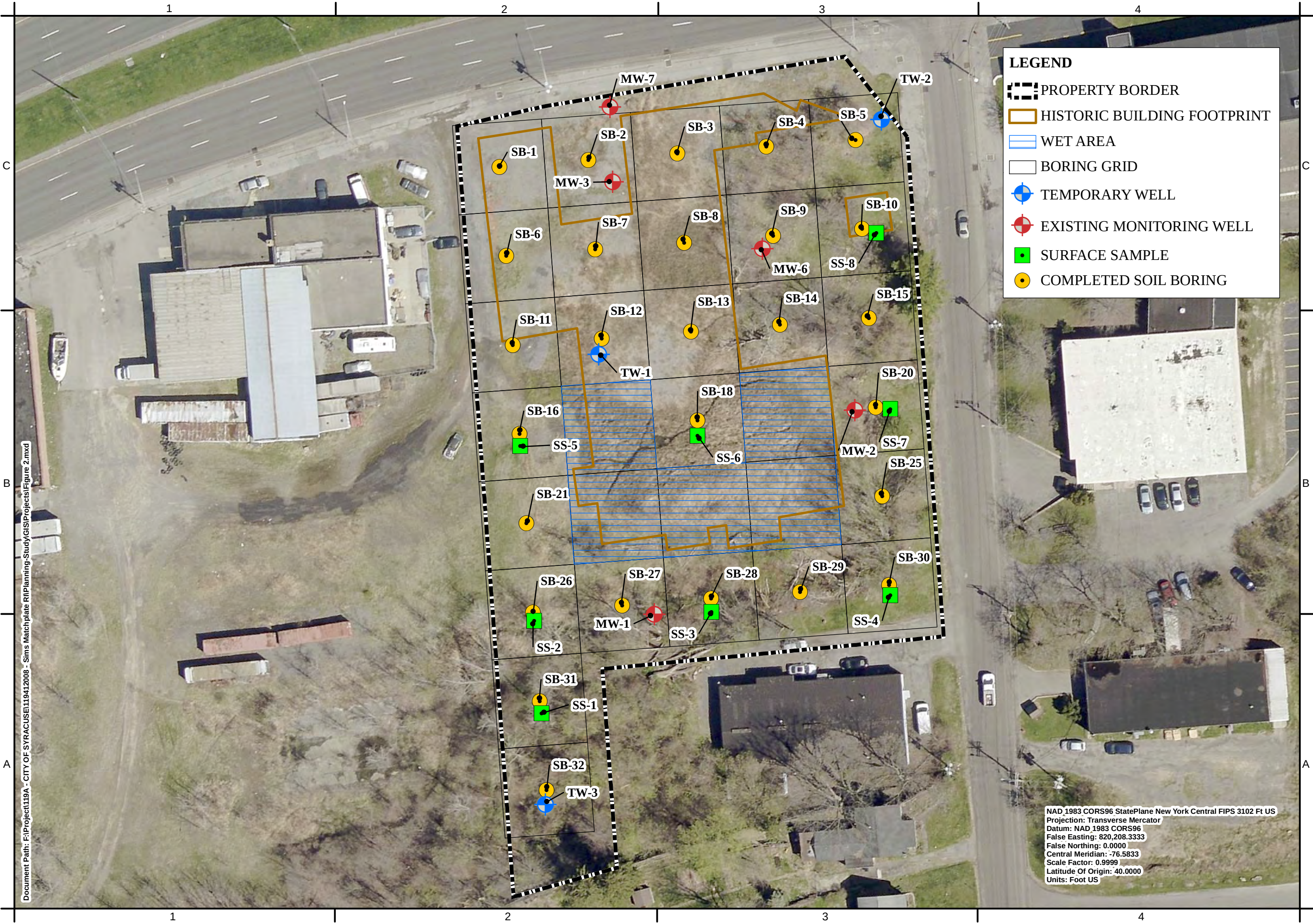
Modified: 3/10/2019 @ 9:51:20 AM

SITE
LOCATION

Figure 1

WGS 1984 Web Mercator Auxiliary Sphere
Projection: Mercator Auxiliary Sphere
Datum: WGS 1984
False Easting: 0.0000
False Northing: 0.0000
Central Meridian: 0.0000
Standard Parallel 1: 0.0000
Auxiliary Sphere Type: 0.0000
Units: Meter

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LEGEND

- PROPERTY BORDER
- HISTORIC BUILDING FOOTPRINT
- WET AREA
- BORING GRID
- TEMPORARY WELL
- EXISTING MONITORING WELL
- SURFACE SAMPLE
- COMPLETED SOIL BORING

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N

0 50 Feet

1 inch = 50 feet

Sims Matchplate ERP Site
NYSDEC Site No. B-00072-7
City of Syracuse, Onondaga County, New York

PROJECT NO:	119.412.008
DATE:	March 2019
SCALE:	AS SHOWN
DRAWN BY:	JTB
DESIGNED BY:	JTB
CHECKED BY:	WNR

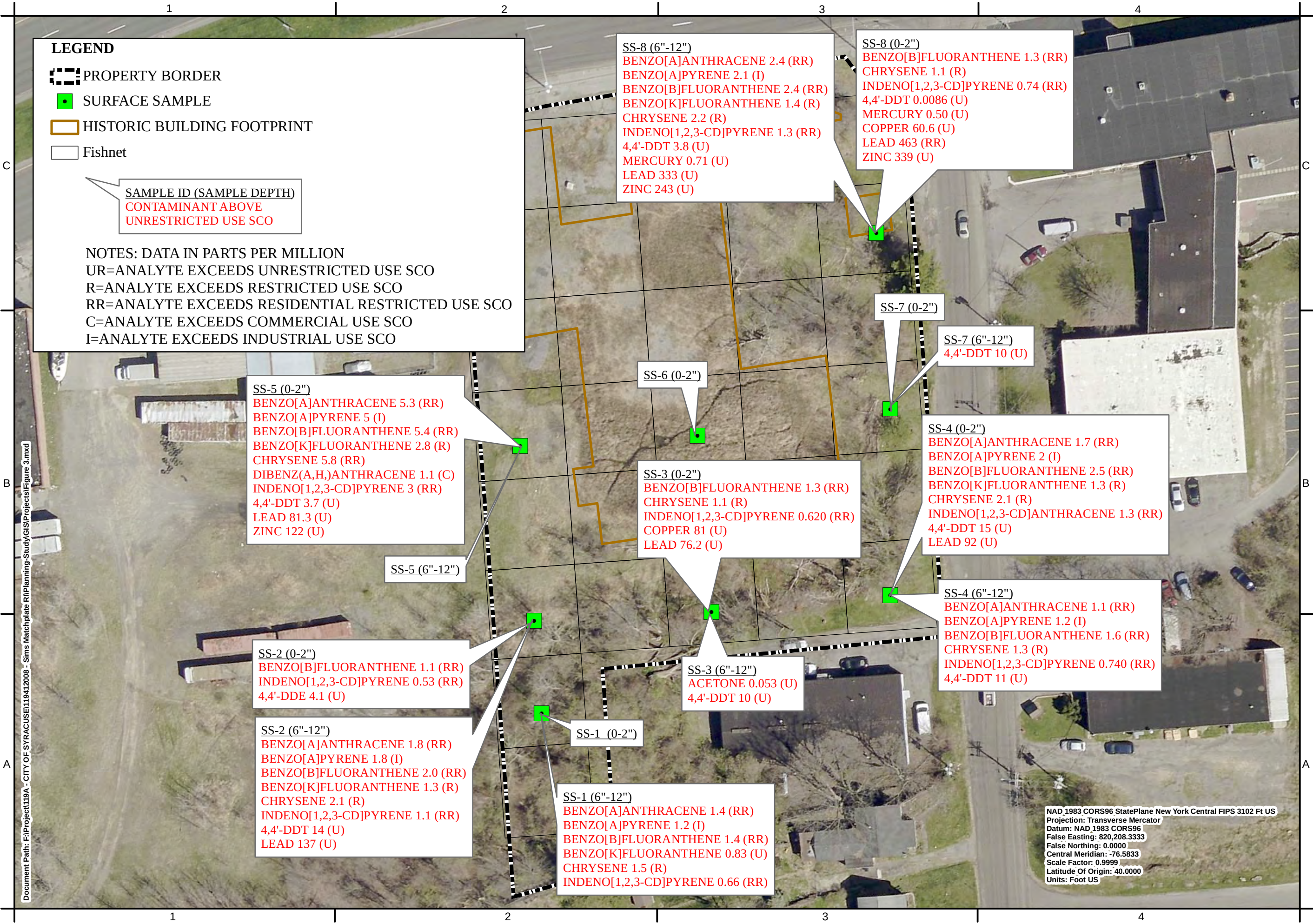
Modified: 3/20/2019 @ 10:25:00 AM

SITE MAP

Figure 2

NAD 1983 CORS96 StatePlane New York Central FIPS 3102 Ft US
Projection: Transverse Mercator
Datum: NAD 1983 CORS96
False Easting: 820,208.3333
False Northing: 0.0000
Central Meridian: -76.5833
Scale Factor: 0.9999
Latitude Of Origin: 40.0000
Units: Foot US

Document Path: F:\Project\119A - CITY OF SYRACUSE\119412008 - Sims Matchplate ERP\Planning-Study\GIS\Projects\Figure 2.mxd



Document Path: F:\Project119A - CITY OF SYRACUSE\119412008 - Sims Matchplate RI\Planning-Study\GIS\Projects\Figure 3.mxd



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0 50
Feet
1 inch = 50 feet

Sims Matchplate ERP Site
NYSDEC Site No. B-00072-7
City of Syracuse, Onondaga County, New York

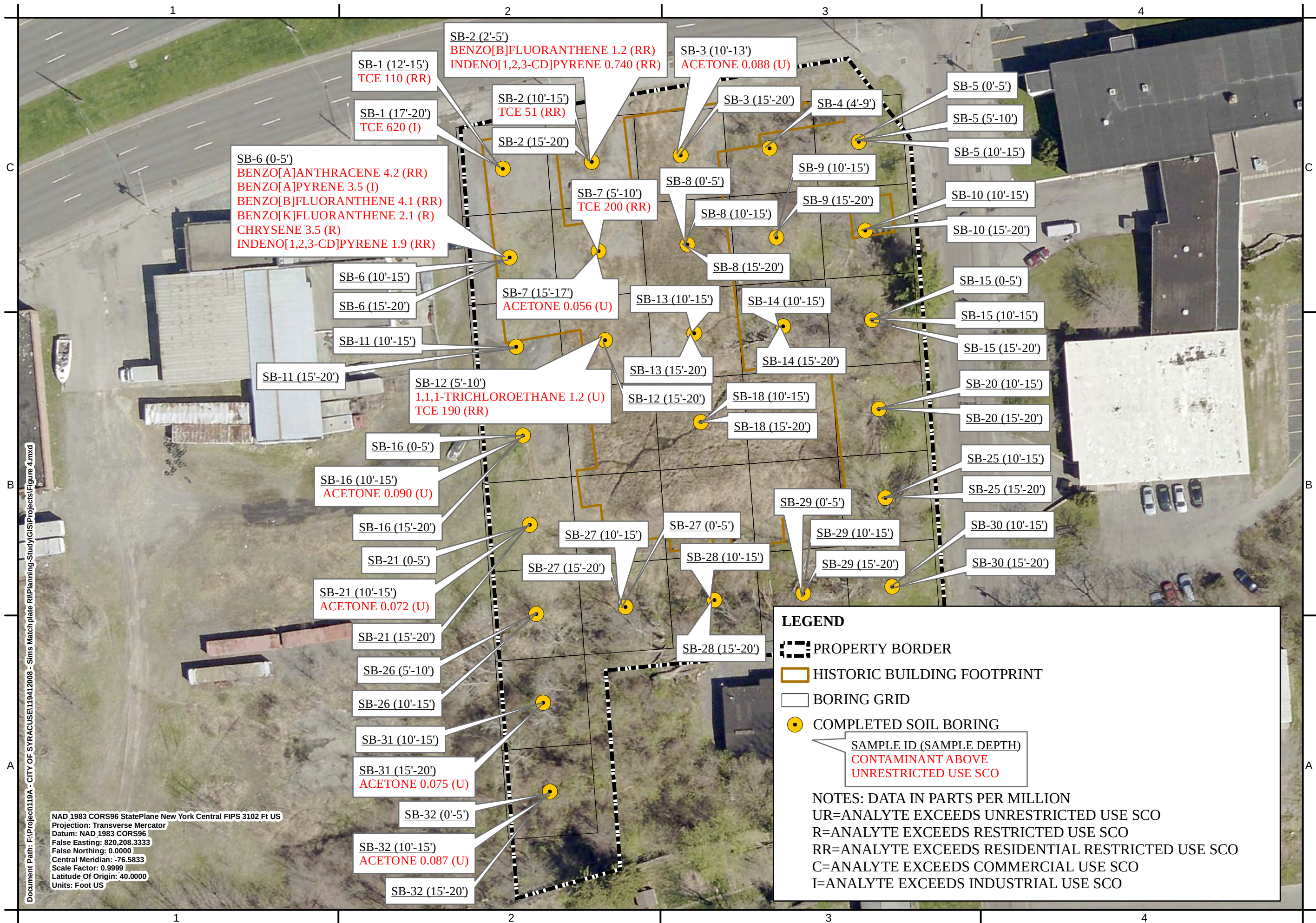
PROJECT NO:	119.412.008
DATE:	March 2019
SCALE:	AS SHOWN
DRAWN BY:	JTB
DESIGNED BY:	JTB
CHECKED BY:	WNR

Modified: 3/20/2019 @ 1:58:30 PM

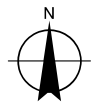
SURFACE SOIL SAMPLE MAP

Figure 3

NAD 1983 CORS96 StatePlane New York Central FIPS 3102 Ft US
Projection: Transverse Mercator
Datum: NAD 1983 CORS96
False Easting: 820,208.3333
False Northing: 0.0000
Central Meridian: -76.5833
Scale Factor: 0.9999
Latitude Of Origin: 40.0000
Units: Foot US



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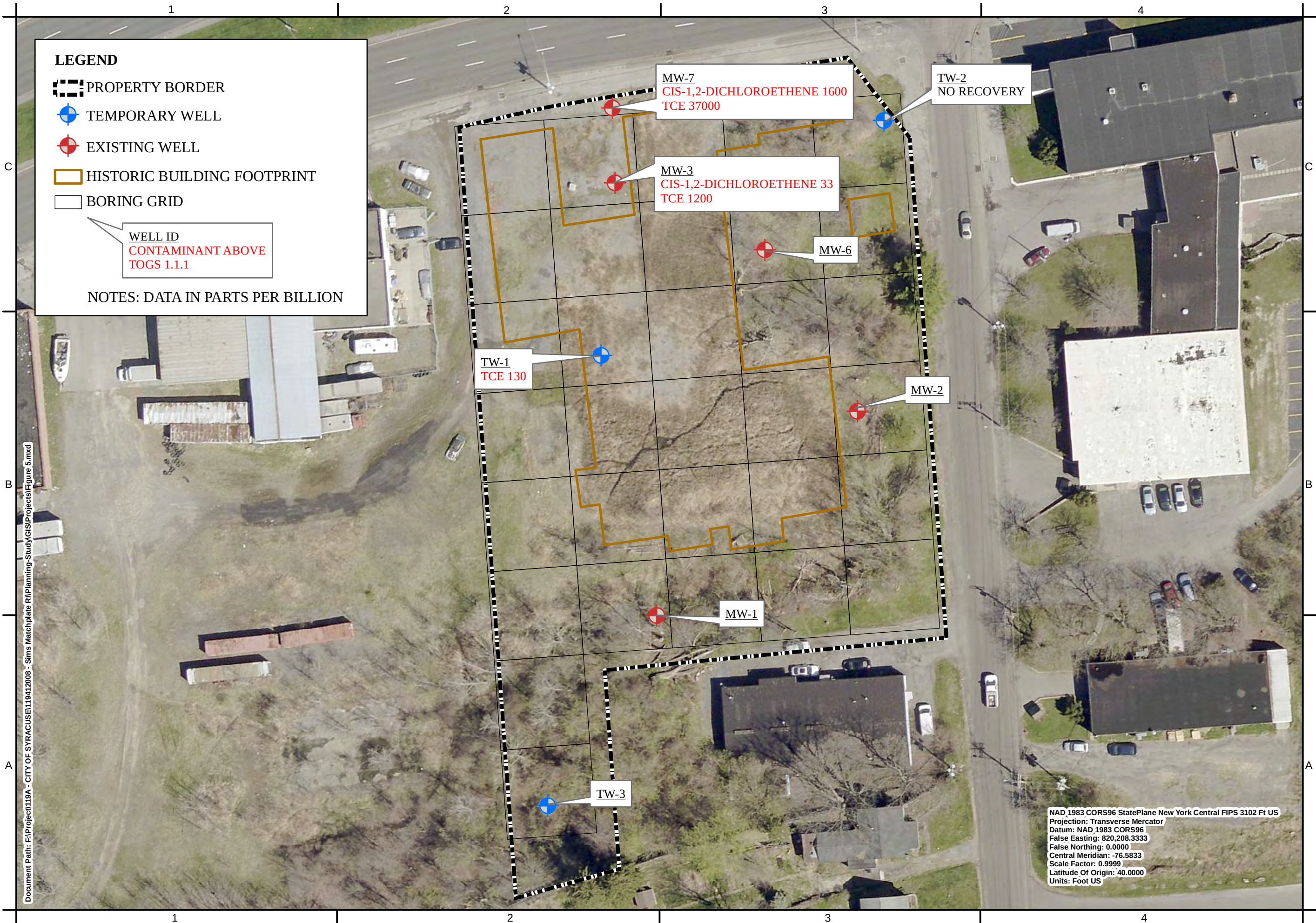
0 50 Feet
1 inch = 50 feet

Sims Matchplate ERP Site
NYSDEC Site No. B-00072-7
City of Syracuse, Onondaga County, New York

PROJECT NO:	119.412.008
DATE:	March 2019
SCALE:	AS SHOWN
DRAWN BY:	JTB
DESIGNED BY:	JTB
CHECKED BY:	WNR

SOIL BORING MAP

Figure 4



Document Path: F:\Project119A - CITY OF SYRACUSE\119412008 - Sims Matchplate ERP\Planning-Study\GIS\Projects\Figure 5.mxd

LEGEND

- PROPERTY BORDER
- TEMPORARY WELL
- EXISTING WELL
- HISTORIC BUILDING FOOTPRINT
- BORING GRID

WELL ID
CONTAMINANT ABOVE
TOGS 1.1.1

NOTES: DATA IN PARTS PER BILLION



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0 50
Feet
1 inch = 50 feet

Sims Matchplate ERP Site
NYSDEC Site No. B-00072-7
City of Syracuse, Onondaga County, New York

PROJECT NO:	119.412.008
DATE:	March 2019
SCALE:	AS SHOWN
DRAWN BY:	JTB
DESIGNED BY:	JTB
CHECKED BY:	WNR

Modified: 3/20/2019 @ 2:02:40 PM

**GROUNDWATER
SAMPLE
MAP**

Figure 5

NAD 1983 CORS96 StatePlane New York Central FIPS 3102 Ft US
Projection: Transverse Mercator
Datum: NAD 1983 CORS96
False Easting: 820,208.3333
False Northing: 0.0000
Central Meridian: -76.5833
Scale Factor: 0.9999
Latitude Of Origin: 40.0000
Units: Foot US

Appendix A

Soil Boring Logs

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-01	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/8/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/8/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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 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., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0'-1' Organics (topsoil & leaves)		2.5' Recovery
2				1'-3' Tan silt (moist)		0'-2' 0.4 PID reading
3				4'-5' Gray fmc gravel (dry)		2'-5' 1.4 PID reading
4						No odor
5						No visual
6				5'-8' Gray to brown silt and gravel (moist)		5' Recovery
7				8'-10' brown fmc gravel and fm silty sand (moist)		5'-8' 1.0 PID reading
8						8'-10' 1.6 PID reading
9						No odor
10						No visual
11				10'-12' fm sand, silt and gravel (moist)		5' Recovery
12				12'-15' Pink tint fmc gravel and silt (wet)		10'-12' 741 PID reading
13						12'-15' 6,302 PID reading
14						No odor
15						No visual
16				15'-17' Gray dense and hard silt (dry)		Sampled 12'-15'
17				17'-20' Gray dense and hard silt, some gravel (dry)		
18						5' Recovery
19						15'-17' 5,509 PID reading
20						17'-20' 1,012 PID reading
21						No odor
22						No visual
23						Sampled 17'-20'

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No. SB-02	
		Sheet 1 of: 1					
		Project No.: 119.412.008					
Project Name: Sims Matchplate RI						Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY						Datum:	
Client: City of Syracuse						Start Date: 1/8/19	
Drilling Firm: North East Specialized Drilling						Finish Date: 1/8/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:		
While Drilling:				Casing:	Rock Core:	Undist:	
Before Casing Removal:				Sampler:	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'-2' Fill material: red brick and fm gravel (dry)			4' Recovery
2				2-5' Black ash and gray silt mixed with some fm gravel (dry)			0'-2' 1.8 PID reading
3							2'-5' 2.8 PID reading
4							No odor
5							No visual
6				5'-7' Gray fm silt and gravel (dry)			2'-5' Sampled metals
7				7'-10' Gray fm gravel and sand (dry)			
8							5' Recovery
9							5'-7' 5.6 PID reading
10							7'-10' 11.9 PID reading
11				10'-15' Gray hard gravel and silt (wet)			No odor
12							No visual
13							Sampled 10'-15'
14							
15							
16				15'-20' Gray hard till and fm gravel silt (dry)			5' Recovery
17							1.0 PID reading
18							No odor
19							No visual
20							Sampled 15'-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		BORING LOG			Boring No. SB-03	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/8/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/8/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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"-5" Organics		
2				0'-2' Gray fm gravel fill (dry)		2' Recovery
3				2'-5' Brown silt and some gravel (dry)		1.0 PID reading
4						No odor
5						No visual
6						
7				5'-10' Brown fmc gravel silt and sand (wet)		4' Recovery
8						1.8 PID reading
9						No odor
10						No visual
11				10'-13' fm sand (wet)		5' Recovery
12				13'-15' Gray hard silt (wet)		10'-13' 0.5 PID reading
13						13'-15' 0.5 PID reading
14						No odor
15						No visual
16						Sampled 10'-13' + MS/MSD
17				15'-20' Gray hard silt and gravel mix (wet)		5' Recovery
18						0.5 PID reading
19						No odor
20						No visual
21						Sampled 15'-20'
22						
23						

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG				Boring No. SB-04	
						Sheet 1 of: 1	
						Project No.: 119.412.008	
Project Name: Sims Matchplate RI						Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY						Datum:	
Client: City of Syracuse						Start Date: 1/8/19	
Drilling Firm: North East Specialized Drilling						Finish Date: 1/8/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:		
While Drilling:				Casing:	Rock Core:	Undist:	
Before Casing Removal:				Sampler:	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'-4' fmc gravel fill with some silt (dry)			4' Recovery
2				4'-5' Gray silt with some gravel (dry)			0.0 PID reading
3							No odor
4							No visual
5							
6				5'-10' Gray pink silt with fmc gravel (dry)			5' Recovery
7							0.4 PID reading
8							No odor
9							No visual
10							Sampled
11				10'-15' Gray hard compact silt with some fm gravel (wet)			5' Recovery
12							1.6 PID reading
13							No odor
14							No visual
15							Sampled
16				15'-20' Gray hard compact silt with some fm gravel (wet)			5' Recovery
17							0.4 PID reading
18							No odor
19							No visual
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		BORING LOG		Boring No. SB-05	
		Sheet 1 of: 1					
		Project No.: 119.412.008					
Project Name: Sims Matchplate RI						Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY						Datum:	
Client: City of Syracuse						Start Date: 1/8/19	
Drilling Firm: North East Specialized Drilling						Finish Date: 1/8/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:		
While Drilling:				Casing:	Rock Core:	Undist:	
Before Casing Removal:				Sampler:	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'-1' Organics			2' Recovery
2				1'-5' Brown fmc sand and gravel (dry)			1.1 PID reading
3							No odor
4							No visual
5							Sampled metals
6				5'-10' Brown fine silt and fm gravel (dry)			1' Recovery
7							2.1 PID reading
8							No odor
9							No visual
10							Sampled
11				10'-15' Brown pink hard fine silt with some fm gravel (dry)			5' Recovery
12							0.5 PID reading
13							No odor
14							No visual
15							Sampled
16				15'-20' Gray fm gravel till (dry)			5' Recovery
17							0.6 PID reading
18							No odor
19							No visual
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		BORING LOG		Boring No.	SB-06	
				Sheet 1 of:	1	
				Project No.:	119.412.008	
Project Name:		Sims Matchplate RI		Surface Elev.:		
Location:		Erie Blvd. East, Syracuse NY		Datum:		
Client:		City of Syracuse		Start Date:		
Drilling Firm:		North East Specialized Drilling		Finish Date:		
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6712DT	Inspector:	
While Drilling:			Casing:		Rock Core:	
Before Casing Removal:			Sampler:		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"	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., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0'-4' Coarse sand and gravel fill (dry)		5' Recovery
2				4'-4.5' Black pavement fill (dry)		0.5 PID reading
3				4.5'-5' Silty sand (dry)		No odor
4						No visual
5						
6				5'-7' Brown fine sand mixed with gravel (dry)		5' Recovery
7				7'-10' Brown coarse sand mixed with gravel (wet)		0.5 PID reading
8						No odor
9						No visual
10						
11				10'-15' Dark brown coarse sand and gravel (wet)		5' Recovery
12						0.5 PID reading
13						No odor
14						No visual
15						Sampled
16				15'-20' Dark brown coarse sand and gravel (wet)		5' Recovery
17						0.5 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

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		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/9/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/9/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT		Inspector:			
While Drilling:				Casing:		Rock Core:		Undist:	
Before Casing Removal:				Sampler:		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' Dark brown coarse sand and gravel (dry)			3' Recovery 0.5 PID reading No odor No visual		
2									
3									
4									
5									
6				5'-10' Light brown fine silty sand with gravel (moist)			5' Recovery 15,000 PID reading Strong odor No visual Sampled		
7									
8									
9									
10									
11				10'-15' Brown fmc sand and gravel (wet)			5' Recovery 614 PID reading some odor No visual		
12									
13									
14									
15									
16				15'-17.4' (refusal at 17.4') Brown very dense silty sand with intermittent gravel			2.5' Recovery 12 PID reading No odor No visual Sampled		
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		BORING LOG			Boring No.	SB-08
					Sheet 1 of:	1
					Project No.:	119.412.008
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/10/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/10/19	
Groundwater	Depth	Date & Time	Drill Rig:	Geoprobe 6712DT		Inspector:
While Drilling:			Casing:		Rock Core:	Undist:
Before Casing Removal:			Sampler:		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"	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., N-value, recovery, relative moisture, core run, RQD, % recovered)
1			0"-6" Organics	5' Recovery 0.0 PID reading No odor No visual Sampled metals		
2			6"-5' Brown silt with fm gravel (moist)			
3						
4						
5						
6			5'-10' Brown silt with some gravel (dry)	5' Recovery 0.0 PID reading No odor No visual		
7						
8						
9						
10						
11			10'-12' Same as above (dry)	5' Recovery 0.0 PID reading No odor No visual Sampled		
12			12'-15' Gray silt with an increased amount of gravel (dry)			
13						
14						
15						
16			15'-20' fm gravel and fine sand, some silt (dry)	5' Recovery 0.0 PID reading No odor No visual Sampled		
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		BORING LOG		Boring No.		SB-09	
		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/8/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/8/19	
Groundwater		Depth	Date & Time	Drill Rig:	Geoprobe 6712DT		Inspector:		
While Drilling:				Casing:		Rock Core:		Undist:	
Before Casing Removal:				Sampler:		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 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'-1' Organics			5' Recovery		
2				1'-5' Brown silt with some fm sand and mottling (dry)			0.5 PID reading		
3							No odor		
4							No visual		
5									
6				5'-7' Tan silt with some fm gravel (dry)			2.5' Recovery		
7				7'-10' Tan pink tinted silt with some fm gravel (dry)			1.8 PID reading		
8							No odor		
9							No visual		
10									
11				10'-15' Tan fmc gravel and sand (wet)			5' Recovery		
12							2.0 PID reading		
13							No odor		
14							No visual		
15							Sampled		
16				15'-20' fmc gravel till (wet)			5' Recovery		
17							0.5 PID reading		
18							No odor		
19							No visual		
20							Sampled		
21									
22									
23									

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No. SB-10	
		Sheet 1 of: 1					
		Project No.: 119.412.008					
Project Name: Sims Matchplate RI						Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY						Datum:	
Client: City of Syracuse						Start Date: 1/8/19	
Drilling Firm: North East Specialized Drilling						Finish Date: 1/8/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:		
While Drilling:				Casing:	Rock Core:	Undist:	
Before Casing Removal:				Sampler:	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'-1' Organics (topsoil & leaves)			5' Recovery
2				1'-5' Tan brown fm silt and gravel, mottling (moist)			0.1 PID reading
3							No odor
4							No visual
5							
6				5'-10' Tan brown fine silt, sand & gravel (moist)			5' Recovery
7							0.4 PID reading
8							No odor
9							No visual
10							
11				10'-15' Tan fm silt with gravel (moist)			5' Recovery
12							0.2 PID reading
13							No odor
14							No visual
15							Sampled
16				15'-20' Tan silt and clay with intermittent gravel (dry)			5' Recovery
17							0.3 PID reading
18							No odor
19							No visual
20							Sampled
21							
22							
23							

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-11	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/10/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/10/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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 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., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0'-2.5' Gravel fill		5' Recovery
2				2.5'-5' Brown silt sand densely compacted with intermittent gravel (dry)		0.0 PID reading
3						No odor
4						No visual
5						
6				5'-10' Brown loosely packed mc gravel and sand (wet)		5' Recovery
7						0.0 PID reading
8						No odor
9						No visual
10						
11				10'-15' Gray dense silt with some fmc gravel (wet)		5' Recovery
12						0.0 PID reading
13						No odor
14						No visual
15						Sampled
16				15'-20' Gray loosely packed fmc gravel with some silt (wet)		5' Recovery
17						0.0 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No.		SB-12	
		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/10/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/10/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT		Inspector:			
While Drilling:				Casing:	Rock Core:	Undist:			
Before Casing Removal:				Sampler:	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 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., N-value, recovery, relative moisture, core run, RQD, % recovered)		
1				0'-5' Brown hard dense silt and sand with intermittent gravel (dry)			4' Recovery		
2							3.5 PID reading		
3							No odor		
4							No visual		
5									
6				5'-10' Brown fmc gravel packed with silty sand (very wet)			5' Recovery		
7							>15,000 PID reading		
8							Strong odor		
9							No visual		
10							Sampled		
11				10'-15' Gray fmc gravel and sand (very wet)			5' Recovery		
12							150 PID reading		
13							No odor		
14							No visual		
15									
16				15'-20' Gray dense hard silt with fmc gravel (dry)			5' Recovery		
17							0.0 PID reading		
18							No odor		
19							No visual		
20							Sampled + MS/MSD		
21									
22									
23									

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-13	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/10/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/10/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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						3' Recovery
2				0'-1' Gravel fill (dry)		0.0 PID reading
3				1'-3' Silty gravel sand (dry)		No odor
4				3'-5' Brown fmc gravel with some sand and silt (dry)		No visual
5						
6						5' Recovery
7				5'-10' Brown silty sand with some gravel (dry)		0.0 PID reading
8						No odor
9						No visual
10						
11						5' Recovery
12				10'-15' Brown silty sand very dense / hard with intermittent gravel (dry)		0.0 PID reading
13						No odor
14						No visual
15						Sampled
16						5' Recovery
17				15'-17' Same as above (dry)		0.0 PID reading
18				17'-20' Dark gray silt very soft (dry)		No odor
19						No visual
20						Sampled
21						
22						
23						

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No. SB-14	
		Sheet 1 of: 1					
		Project No.: 119.412.008					
Project Name: Sims Matchplate RI				Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY				Datum:			
Client: City of Syracuse				Start Date: 1/9/19			
Drilling Firm: North East Specialized Drilling				Finish Date: 1/9/19			
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT		Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:	
Before Casing Removal:				Sampler:	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'-1' Black ash fill mixed with sandy soil (dry)			2.5' Recovery	
2			1'-5' Black sandy soil (dry)			.5 PID reading	
3						No odor	
4						No visual	
5							
6			5'-10' Brown red sandy silt clay (dry)			6" Recovery	
7						.5 PID reading	
8						No odor	
9						No visual	
10							
11			10'-15' Brown red sandy silt clay with intermmittent gravel (dry)			5' Recovery	
12						.5 PID reading	
13						No odor	
14						No visual	
15						Sampled	
16			15'-20' Gray silt and fine sand with Intermittent gravel (wet)			5' Recovery	
17						.5 PID reading	
18						No odor	
19						No visual	
20						Sampled	
21							
22							
23							

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No.		SB-15	
		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/9/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/9/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT		Inspector:			
While Drilling:				Casing:		Rock Core:		Undist:	
Before Casing Removal:				Sampler:		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'-1' Organics (dry)			4' Recovery		
2				1'-5' Brown silt with some gravel (dry)			.5 PID reading		
3							No odor		
4							No visual		
5							Sampled		
6				5'-10' Brown dense FMC sand and gravel (moist)			5' Recovery		
7							.5 PID reading		
8							No odor		
9							No visual		
10									
11				10'-15' Brown dense FMC sand and gravel, 2" lense of glacial till (dry)			5' Recovery		
12							.5 PID reading		
13							No odor		
14							No visual		
15							Sampled		
16				15'-20' Gray hard silt with some sand (dry)			5' Recovery		
17							.5 PID reading		
18							No odor		
19							No visual		
20							Sampled		
21									
22									
23									

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-16	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/10/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/10/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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'-5' Brown silt with some gravel (dry)		5' Recovery
2						0.0 PID reading
3						No odor
4						No visual
5						Sampled metals
6				5'-10' Same as above until last 6", transitions to gray (dry)		5' Recovery
7						0.0 PID reading
8						No odor
9						No visual
10						
11				10'-15' Gray very hard silt with some fmc gravel (dry)		5' Recovery
12						0.0 PID reading
13						No odor
14						No visual
15						Sampled
16				15'-20' Gray to brown gravel with fm sand and silt (dry)		5' Recovery
17						0.0 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No.		SB-18	
		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/10/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/10/19	
Groundwater		Depth		Date & Time		Drill Rig: Geoprobe 6712DT		Inspector:	
While Drilling:				Casing:		Rock Core:		Undist:	
Before Casing Removal:				Sampler:		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 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'-1' Black ashey fill (dry) 1'-5' Brown fmc gravel in packed silty sand (wet)			5' Recovery		
2							0.0 PID reading		
3							No odor		
4							No visual		
5									
6				5'-10' Brown fmc gravel in packed silty sand (wet)			5' Recovery		
7							2.0 PID reading		
8							No odor		
9							No visual		
10									
11				10'-15' Brown fmc gravel with some silt (wet)			5' Recovery		
12							0.0 PID reading		
13							No odor		
14							No visual		
15							Sampled		
16				15'-20' Dark gray silt with some fmc gravel, few chunks of granite rock in shoe at 20' (wet)			5' Recovery		
17							0.0 PID reading		
18							No odor		
19							No visual		
20							Sampled		
21									
22									
23									

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667			BORING LOG			Boring No. SB-20			
						Sheet 1 of: 1			
						Project No.: 119.412.008			
Project Name: Sims Matchplate RI					Surface Elev.:				
Location: Erie Blvd. East, Syracuse NY					Datum:				
Client: City of Syracuse					Start Date: 1/9/19				
Drilling Firm: North East Specialized Drilling					Finish Date: 1/9/19				
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:				
While Drilling:				Casing:	Rock Core:	Undist:			
Before Casing Removal:				Sampler:	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'-5' Gray mix of silt gravel sand (dry)			5' Recovery		
2							2.0 PID reading		
3							No odor		
4							No visual		
5									
6				5'-10' Brown sandy clay with intermittent gravel (moist)			5' Recovery		
7							0.5 PID reading		
8							No odor		
9							No visual		
10									
11				10'-15' Brown red silty/sandy clay (wet)			5' Recovery		
12							1.0 PID reading		
13							No odor		
14							No visual		
15							Sampled + MS/MSD		
16				15'-20' Medium sand and gravel (wet)			2.5' Recovery		
17							3.4 PID reading		
18							No odor		
19							No visual		
20							Sampled		
21									
22									
23									

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-21	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/15/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/15/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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'-3' Brown fmc gravel and silt (moist) 3'-5' Brown fmc sand and silt (moist)		5' Recovery
2						0.0 PID reading
3						No odor
4						No visual
5						
6				5'-10' Brown fmc sand and silt (moist)		5' Recovery
7						0.0 PID reading
8						No odor
9						No visual
10						
11				10'-15' Brown hard silt (wet)		5' Recovery
12						0.0 PID reading
13						No odor
14						No visual
15						Sampled
16				15'-20' Brown hard silt, trace fmc gravel (wet)		5' Recovery
17						0.0 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-25	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/9/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/9/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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'-5' Brown silt mixed with fine and medium gravel (dry)		4' Recovery
2						0.5 PID reading
3						No odor
4						No visual
5						
6				5'-10' Brown silt mixed with fine gravel and traces of sand (dry)		5' Recovery
7						0.5 PID reading
8						No odor
9						No visual
10						
11				10'-15' Brown red silt with fine gravel and sand (moist)		5' Recovery
12						1.5 PID reading
13						No odor
14						No visual
15						Sampled
16				15'-20' Brown red silt with fine gravel and sand (wet)		5' Recovery
17						1.0 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No. SB-26	
		Sheet 1 of: 1					
		Project No.: 119.412.008					
Project Name: Sims Matchplate RI						Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY						Datum:	
Client: City of Syracuse						Start Date: 1/14/19	
Drilling Firm: North East Specialized Drilling						Finish Date: 1/14/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:		
While Drilling:				Casing:	Rock Core:	Undist:	
Before Casing Removal:				Sampler:	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 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., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0'-5' Dark brown soft silt with fmc gravel, mottling (dry)			4' Recovery
2							0.0 PID reading
3							No odor
4							No visual
5							
6				5'-10' Brown fm silty sand with some gravel (wet)			5' Recovery
7							0.0 PID reading
8							No odor
9							No visual
10							Sampled
11				10'-15' Brown fmc sand with some fine gravel (wet)			5' Recovery
12							0.0 PID reading
13							No odor
14							No visual
15							Sampled
16				15'-20' Brown hard silt some fmc gravel and sand (wet)			5' Recovery
17							0.0 PID reading
18							No odor
19							No visual
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		BORING LOG		Boring No.		SB-27	
		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/14/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/14/19	
Groundwater		Depth	Date & Time	Drill Rig:	Geoprobe 6712DT		Inspector:		
While Drilling:				Casing:		Rock Core:		Undist:	
Before Casing Removal:				Sampler:		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' Brown soft silt with 3" layer of organics (moist)			4' Recovery 0.0 PID reading No odor No visual Sampled metals		
2									
3									
4									
5									
6				5'-10' Brown fmc gravel and sand, some silt (moist)			5' Recovery 0.0 PID reading No odor No visual		
7									
8									
9									
10									
11				10'-15' fm sand and gravel, some silt (wet)			5' Recovery 0.0 PID reading No odor No visual Sampled		
12									
13									
14									
15									
16				15'-20' Hard fine sand with silt and some gravel (wet)			4' Recovery 0.0 PID reading No odor No visual Sampled		
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		BORING LOG		Boring No.		SB-28	
		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/14/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/14/19	
Groundwater		Depth	Date & Time	Drill Rig:	Geoprobe 6712DT		Inspector:		
While Drilling:				Casing:		Rock Core:		Undist:	
Before Casing Removal:				Sampler:		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' Brown soft silty clay with trace gravel (dry)			4' Recovery		
2							0.0 PID reading		
3							No odor		
4							No visual		
5									
6				5'-10' Same as above			5' Recovery		
7							0.0 PID reading		
8							No odor		
9							No visual		
10									
11				10'-15' Brown red fmc gravel hard at 13' (wet)			5' Recovery		
12							0.0 PID reading		
13							No odor		
14							No visual		
15							Sampled		
16				15'-20' Gray pink hard till (wet)			5' Recovery		
17							0.0 PID reading		
18							No odor		
19							No visual		
20							Sampled		
21									
22									
23									

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-29	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/14/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/14/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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'-2" Organics		4' Recovery
2				2"-5' Brown fmc gravel with some silt (moist)		0.0 PID reading
3						No odor
4						No visual
5						Sampled metals
6				5'-10' Brown fmc gravel with some silt (moist)		5' Recovery
7						0.0 PID reading
8						No odor
9						No visual
10						
11				10'-15' Brown silt and trace sand (wet), mottling		5' Recovery
12						0.0 PID reading
13						No odor
14						No visual
15						Sampled
16				15'-20' Brown loose fmc gravel and silt (wet)		4' Recovery
17						0.0 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

 C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG			Boring No. SB-30	
					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/9/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/9/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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 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., N-value, recovery, relative moisture, core run, RQD, % recovered)
1				0'-5' Brown medium coarse sand and gravel with intermittent city fill (dry)		4' Recovery
2						2.0 PID reading
3						No odor
4						No visual
5						
6				5'-10' Brown red silty sand with intermittent gravel (dry)		5' Recovery
7						2.0 PID reading
8						No odor
9						No visual
10						
11				10'-15' Brown red silty sand with intermittent gravel (wet)		5' Recovery
12						1.4 PID reading
13						No odor
14						No visual
15						Sampled
16				15'-20' Brown red medium coarse gravel and sand (wet)		5' Recovery
17						0.5 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

		C&S Engineers, Inc. 499 Col. Eileen Collins Blvd. Syracuse, New York 13212 Phone: 315-455-2000 Fax: 315-455-9667		BORING LOG		Boring No.		SB-31	
		Sheet 1 of:				1			
		Project No.:				119.412.008			
Project Name: Sims Matchplate RI						Surface Elev.:			
Location: Erie Blvd. East, Syracuse NY						Datum:			
Client: City of Syracuse						Start Date:		1/15/19	
Drilling Firm: North East Specialized Drilling						Finish Date:		1/15/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT		Inspector:			
While Drilling:				Casing:		Rock Core:		Undist:	
Before Casing Removal:				Sampler:		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'-3' Brown fmc gravel and sand (moist) 3'-5' Brown fmc sand and gravel (moist)			5' Recovery		
2							0.0 PID reading		
3							slight petrol odor		
4							No visual		
5									
6				5'-10' Brown fmc sand and some gravel (moist)			4' Recovery		
7							0.0 PID reading		
8							No odor		
9							No visual		
10									
11				10'-15' Gray fmc sand with some gravel (wet)			5' Recovery		
12							0.0 PID reading		
13							No odor		
14							No visual		
15							Sampled		
16				15'-20' Dark brown soft silt (wet)			5' Recovery		
17							0.0 PID reading		
18							No odor		
19							No visual		
20							Sampled		
21									
22									
23									

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					Sheet 1 of: 1	
					Project No.: 119.412.008	
Project Name: Sims Matchplate RI					Surface Elev.:	
Location: Erie Blvd. East, Syracuse NY					Datum:	
Client: City of Syracuse					Start Date: 1/15/19	
Drilling Firm: North East Specialized Drilling					Finish Date: 1/15/19	
Groundwater		Depth	Date & Time	Drill Rig: Geoprobe 6712DT	Inspector:	
While Drilling:				Casing:	Rock Core:	Undist:
Before Casing Removal:				Sampler:	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						5' Recovery
2				0'-2' Organics, dark brown silt (wet)		0.0 PID reading
3				2'-5' Gray hard silt and some gravel (dry)		slight petrol odor
4						No visual
5						
6						5' Recovery
7				5'-10' Gray hard silt and some gravel (dry)		0.0 PID reading
8						No odor
9						No visual
10						
11						5' Recovery
12				10'-15' Gray hard silt till and fine gravel (dry)		0.0 PID reading
13						No odor
14						No visual
15						Sampled
16						5' Recovery
17				15'-20' Same as above		0.0 PID reading
18						No odor
19						No visual
20						Sampled
21						
22						
23						

Appendix B

Water Quality Field Data



C&S Engineers, Inc.
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Well Sampling Field Data Sheet

Well Casing Unit Volume

(gal/l.f.)

1 1/4" = 0.08 2" = 0.17 3" = 0.38
4" = 0.66 6" = 1.5 8" = 2.6

Client Name: _____ City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		MW-1							
Diameter (inches)		2							
Total Sounded Depth (feet)		27.9							
Static Water Level (feet)		2.3							
H ₂ O Column (feet)		25.6							
Pump Intake (feet)		na							
Well Volume (gallons)		4.3							
Amount to Evacuate (gallons)		1.94							
Amount Evacuated (gallons)		2							

FIELD READINGS

Date	Stabilization	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/17/2019			
Time	Criteria	900	905	936	945	950			
Volume Extracted	gallons	13	0.5	1	1.5	2			
pH (Std. Units)	+/-0.1	7.29	7.67	6.9	6.87	6.96			
Conductivity (mS/cm)	3%	3.14	3.43	3.48	3.68	3.7			
Turbidity (NTU)	10%	17.6	22	159	83	80.5			
D.O. (mg/L)	10%	38.68	7.75	3.87	4	3.8			
Temperature (°C) (°F)	3%	11.73	10.6	8.82	8.63	8.63			
ORP ³ (mV)	+/-10 mv	150	106	24	3	4			
Appearance		clear	clear	st	st	st			
Free Product (Yes/No)		no	no	no	no	no			
Odor		no	burnt smell	no	no	no			
Comments									

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid



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(gal/l.f.)

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4" = 0.66 6" = 1.5 8" = 2.6

Client Name: _____ City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		MW-2							
Diameter (inches)		2							
Total Sounded Depth (feet)		22.2							
Static Water Level (feet)		6.8							
H ₂ O Column (feet)		15.6							
Pump Intake (feet)		na							
Well Volume (gallons)		2.6							
Amount to Evacuate (gallons)		7.96							
Amount Evacuated (gallons)		4							

FIELD READINGS

Date	Stabilization	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/17/2019		
Time	Criteria	1410					1435		
Volume Extracted	gallons								
pH (Std. Units)	+/-0.1	6.72	6.81	6.84	6.97	7.05	7.05		
Conductivity (mS/cm)	3%	9.89	10.3	10.2	9.14	10.5	10.6		
Turbidity (NTU)	10%	120	124	153	120	103	105		
D.O. (mg/L)	10%	16	4.96	4.59	4.3	4.2	4.3		
Temperature (°C) (°F)	3%	7.02	7.66	8.35	7.17	8.21	8		
ORP ³ (mV)	+/-10 mv	119	99	93	94	83	81		
Appearance		Clear	Clear	Clear	Clear	Clear	Clear		
Free Product (Yes/No)		no	no	no	no	no	no		
Odor		no	no	no	no	no	no		
Comments									

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(gal/l.f.)

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4" = 0.66 6" = 1.5 8" = 2.6

Client Name: City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		MW-3							
Diameter (inches)		2							
Total Sounded Depth (feet)		7.15							
Static Water Level (feet)		16.3							
H ₂ O Column (feet)		8.15							
Pump Intake (feet)		1.36							
Well Volume (gallons)		4.67							
Amount to Evacuate (gallons)		15							
Amount Evacuated (gallons)		15							

FIELD READINGS

Date	Stabilization	1/17/2019	1/17/2019	1/17/2019	1/17/2019				
Time	Criteria	12:05	12:10	12:15	12:20				
Volume Extracted	gallons								
pH (Std. Units)	+/-0.1	6.99	6.98	6.95	6.95				
Conductivity (mS/cm)	3%	1.9	1.92	2.02	1.99				
Turbidity (NTU)	10%	100	99	100	98				
D.O. (mg/L)	10%	6.77	4.2	4.2	4.39				
Temperature (°C) (°F)	3%	8.66	8.86	8.9	8.9				
ORP ³ (mV)	+/-10 mv	45	36	50	44				
Appearance		Clear	Clear	Clear	Clear				
Free Product (Yes/No)		no	no	no	no				
Odor		no	no	no	no				
Comments									

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(gal/l.f.)

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4" = 0.66 6" = 1.5 8" = 2.6

Client Name: City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		MW-6							
Diameter (inches)		2							
Total Sounded Depth (feet)		18							
Static Water Level (feet)		9							
H ₂ O Column (feet)		9							
Pump Intake (feet)									
Well Volume (gallons)		1.53							
Amount to Evacuate (gallons)		4.6							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization	1/17/2019	1/17/2019	1/17/2019	1/17/2019				
Time	Criteria	13:30	13:35	13:40	13:48	13:50			
Volume Extracted	gallons								
pH (Std. Units)	+/-0.1	7.14	7.02	7.03	7.04	7.04			
Conductivity (mS/cm)	3%	3.56	3.73	3.52	3.98	3.98			
Turbidity (NTU)	10%	100	99	100	98	100			
D.O. (mg/L)	10%	4.08	4	4.2	4.2	4.2			
Temperature (°C) (°F)	3%	7.8	7.53	7.52	7.81	7.81			
ORP ³ (mV)	+/-10 mv	85	114	116	116	112			
Appearance		Clear	Clear	Clear	Clear	Clear			
Free Product (Yes/No)		no	no	no	no	no			
Odor		no	no	no	no	no			
Comments									

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(gal/l.f.)

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4" = 0.66 6" = 1.5 8" = 2.6

Client Name: _____ City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		MW-7							
Diameter (inches)		2							
Total Sounded Depth (feet)		20.7							
Static Water Level (feet)		6.7							
H ₂ O Column (feet)		14							
Pump Intake (feet)									
Well Volume (gallons)		2.38							
Amount to Evacuate (gallons)									
Amount Evacuated (gallons)									

FIELD READINGS

Date		1/17/2019	1/17/2019	1/17/2019	1/17/2019				
Time	Stabilization Criteria	9:14	9:29	9:33	9:36	9:40	9:45	9:47	9:50
Volume Extracted	gallons								
pH (Std. Units)	+/-0.1	8.31	7.13	7.19	7.19	7.2	7.33	7.32	7.3
Conductivity (mS/cm)	3%	2.39	2.47	2.6	2.57	2.63	2.71	2.71	2.71
Turbidity (NTU)	10%	136	152	250	227	397	0	0	0
D.O. (mg/L)	10%	7.25	13.29	1.91	4.64	11.96	10.31	8.43	8.4
Temperature (°C) (°F)	3%	12.14	11.3	10.54	10.65	10.02	10.95	11.04	11.05
ORP ³ (mV)	+/-10 mv	148	148	-110	-128	-125	-153	-175	-184
Appearance		Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Free Product (Yes/No)		no	no	no	no	no	no	no	no
Odor		no	no	no	no	no	no	no	no
Comments									

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Well Sampling Field Data Sheet

Well Casing Unit Volume

(gal/l.f.)

1 1/4" = 0.08 2" = 0.17 3" = 0.38

4" = 0.66 6" = 1.5 8" = 2.6

Client Name: City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		TW-1							
Diameter (inches)		1 1/4"							
Total Sounded Depth (feet)		13							
Static Water Level (feet)		0.2							
H ₂ O Column (feet)		13.6							
Pump Intake (feet)		na							
Well Volume (gallons)		1.08							
Amount to Evacuate (gallons)		3.3							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/17/2019			
Time	Criteria	1130	11:33	11:40	1145	11:50			
Volume Extracted	gallons								
pH (Std. Units)	+/-0.1	6.83	6.84	6.76	6.79	6.81			
Conductivity (mS/cm)	3%	3.39	3.39	3.39	3.4	3.42			
Turbidity (NTU)	10%	120	124	153	120	103			
D.O. (mg/L)	10%	5.86	5.63	3.43	3.99	3.99			
Temperature (°C) (°F)	3%	3.13	3.47	3.1	3.09	2.89			
ORP ³ (mV)	+/-10 mv	0	20	20	29	33			
Appearance		Clear	Clear	Clear	Clear	Clear			
Free Product (Yes/No)		no	no	no	no	no			
Odor		no	no	no	no	no			
Comments									

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Well Sampling Field Data Sheet

Well Casing Unit Volume

(gal/l.f.)

1 1/4" = 0.08 2" = 0.17 3" = 0.38

4" = 0.66 6" = 1.5 8" = 2.6

Client Name: _____ City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		TW-2							
Diameter (inches)		1 1/4							
Total Sounded Depth (feet)		14.9							
Static Water Level (feet)		4.4							
H ₂ O Column (feet)		5.5							
Pump Intake (feet)									
Well Volume (gallons)		0.44							
Amount to Evacuate (gallons)		1.32							
Amount Evacuated (gallons)									

FIELD READINGS

Date	Stabilization	1/17/2019	1/17/2019						
Time	Criteria	13:10	13:14						
Volume Extracted	gallons								
pH (Std. Units)	+/-0.1	7.34	7.14						
Conductivity (mS/cm)	3%	1.27	1.26						
Turbidity (NTU)	10%								
D.O. (mg/L)	10%	11.7	6.58						
Temperature (°C) (°F)	3%	8.69	8.78						
ORP ³ (mV)	+/-10 mv	49	52						
Appearance		Clear	Clear						
Free Product (Yes/No)		no	no						
Odor		no	no						
Comments									

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Well Sampling Field Data Sheet

Well Casing Unit Volume

(gal/l.f.)

1 1/4" = 0.08 2" = 0.17 3" = 0.38

4" = 0.66 6" = 1.5 8" = 2.6

Client Name: City of Syracuse

Site Name: SIMS

Project No.: 119.412.008

Field Staff: JBT/Angel Alejo

WELL DATA

Date		1/17/2019							
Well Number		TW-3							
Diameter (inches)		1 1/4"							
Total Sounded Depth (feet)		11.1							
Static Water Level (feet)		0.5							
H ₂ O Column (feet)		10.6							
Pump Intake (feet)		na							
Well Volume (gallons)		0.84							
Amount to Evacuate (gallons)		2.5							
Amount Evacuated (gallons)		3.5							

FIELD READINGS

Date	Stabilization	1/17/2019	1/17/2019	1/17/2019	1/17/2019	1/17/2019			
Time	Criteria	1030	10:40	10:45	10:50	10:51	10:55		
Volume Extracted	gallons								
pH (Std. Units)	+/-0.1	6.6	6.6	6.6	6.58	6.6	6.6		
Conductivity (mS/cm)	3%	3.76	3.72	3.79	3.77	3.72	3.76		
Turbidity (NTU)	10%	100	99	100	98	85	86		
D.O. (mg/L)	10%	4.63	5.02	5.19	4.53	4.59	5		
Temperature (°C) (°F)	3%	6.5	7.6	8.18	9	9.15	9		
ORP ³ (mV)	+/-10 mv	15	30	37	43	51	53		
Appearance		Clear	Clear	Clear	Clear	Clear	Clear		
Free Product (Yes/No)		no	no	no	no	no	no		
Odor		no	no	no	no	no	no		
Comments									

C = Clear T = Turbid ST = Semi Turbid VT = Very Turbid

Appendix C
Summaries of Lab Data & Laboratory
Analytical Reports

Table 1
Sims Matchplate
Surface and Near Surface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SS - 1	SS - 1	SS - 2	SS - 2	SS - 3	SS - 3	SS - 4	SS - 4	SS - 5	SS - 5	SS - 6	SS - 7	SS - 7	SS - 8	SS - 8
Sample Depth						0-2"	6"-12"	0-2"	6-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	0-2"	6"-12"	0-2"	6"-12"
Date Sampled						02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Sample Matrix						Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil
VOCs																				
1,1,1-Trichloroethane	680	100000	100000	500000	1000000		ND		ND		ND		ND		0.59 J			ND		ND
1,1,2,2-Tetrachloroethane							ND		ND		ND		ND		ND			ND		ND
1,1,2-Trichloroethane							ND		ND		ND		ND		ND			ND		ND
1,1,2-Trichloro-1,2,2-trifluoroethane							ND		ND		ND		ND		ND			ND		ND
1,1-Dichloroethane	270	19000	26000	240000	480000		ND		ND		ND		ND		ND			ND		ND
1,1-Dichloroethene	330	100000	100000	500000	1000000		ND		ND		ND		ND		ND			ND		ND
1,2,4-Trichlorobenzene							ND		ND		ND		ND		ND			ND		ND
1,2-Dibromo-3-Chloropropane							ND		ND		ND		ND		ND			ND		ND
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000		ND		ND		ND		ND		ND			ND		ND
1,2-Dichloroethane	20	2300	3100	30000	60000		ND		ND		ND		ND		ND			ND		ND
1,2-Dichloropropane							ND		ND		ND		ND		ND			ND		ND
1,3-Dichlorobenzene	2400	17000	49000	280000	560000		ND		ND		ND		ND		ND			ND		ND
1,4-Dichlorobenzene	1800	9800	13000	130000	250000		ND		ND		ND		ND		ND			ND		ND
2-Butanone (MEK)	120	100000	100000	500000	1000000		ND		ND		ND		ND		ND			ND		ND
2-Hexanone							ND		ND		ND		ND		ND			ND		ND
4-Methyl-2-pentanone (MIBK)							ND		ND				ND		ND			ND		ND
Acetone	50	100000	100000	500000	1000000		35		9.8 J		53		12 J		ND			4.6 J		ND
Benzene	60	2900	4800	44000	89000		ND		0.26 J		ND		ND		ND			ND		ND
Bromodichloromethane							ND		ND		ND		ND		ND			ND		ND
Bromoform							ND		ND		ND		ND		ND			ND		ND
Bromomethane							ND		ND		ND		ND		ND			ND		ND
Carbon disulfide							ND		ND		ND		ND		ND			ND		ND
Carbon tetrachloride	760	1400	2400	22000	44000		ND		ND		ND		ND		ND			ND		ND
Chlorobenzene	1100	100000	100000	500000	1000000		ND		ND		ND		ND		ND			ND		ND
Dibromochloromethane							ND		ND		ND		ND		ND			ND		ND
Chloroethane							ND		ND		ND		ND		ND			ND		ND
Chloroform	370	10000	49000	350000	700000		ND		ND		ND		ND		ND			ND		ND
Chloromethane							ND		ND		ND		ND		ND			ND		ND
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000		ND		1.3 J		ND		ND		ND			ND		ND
cis-1,3-Dichloropropene							ND		ND		ND		ND		ND			ND		ND
Cyclohexane							ND		ND		ND		ND		ND			ND		ND
Dichlorodifluoromethane							ND		ND		ND		ND		ND			ND		ND
Ethylbenzene	1000	30000	41000	390000	780000		ND		ND		ND		ND		ND			ND		ND
1,2-Dibromoethane							ND		ND		ND		ND		ND			ND		ND
Isopropylbenzene							ND		ND		ND		ND		ND			ND		ND
Methyl acetate							ND		ND		ND		ND		ND			ND		ND
Methyl tert-butyl ether	930	62000	100000	500000	1000000		ND		ND		ND		ND		ND			ND		ND
Methylcyclohexane							ND		ND		ND		ND		ND			ND		ND
Methylene Chloride	50	51000	100000	500000	1000000		2.5 J		ND		ND		ND		ND			ND		ND
Styrene							ND		ND		ND		ND		ND			ND		ND
Tetrachloroethene	1300	5500	19000	150000	300000		ND				ND		ND		ND			ND		ND
Toluene	700	100000	100000	500000	1000000		ND		0.90 J		ND		ND		ND			ND		ND
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000		ND		ND		ND		ND		ND			ND		ND
trans-1,3-Dichloropropene							ND		ND		ND		ND		ND			ND		ND
Trichloroethene	470	10000	21000	200000	400000		ND		8.4		ND		ND		ND			ND		ND
Trichlorofluoromethane							ND		ND		ND		ND		ND			ND		ND
Vinyl chloride	20	210	900	13000	27000		ND		ND		ND		ND		ND			ND		ND
Xylenes, Total	260	100000	100000	500000	1000000		ND		ND		ND		ND		ND			ND		ND

Table 1
Sims Matchplate
Surface and Near Surface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SS - 1	SS - 1	SS - 2	SS - 2	SS - 3	SS - 3	SS - 4	SS - 4	SS - 5	SS - 5	SS - 6	SS - 7	SS - 7	SS - 8	SS - 8
Sample Depth						0-2"	6"-12"	0-2"	6-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	0-2"	6"-12"	0-2"	6"-12"
Date Sampled						02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Sample Matrix						Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil
SVOCs																				
Biphenyl						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroisopropyl) ether						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene						ND	ND	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene						ND	ND	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	330	100000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	330	34000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20000	100000	100000	500000	1000000	ND	ND	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	220 J
Acenaphthylene	100000	100000	100000	500000	1000000	ND	ND	ND F1	180 J	200 J	ND	500 J	340 J	490 J	ND	ND	ND	200 J	200 J	220 J
Acetophenone						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100000	100000	100000	500000	1000000	260 J	590 J	ND F2	550 J	330 J	ND	ND	340 J	1300	ND	ND	ND	ND	ND	1100
Atrazine						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1000	1000	1000	5600	11000	610 J	1400	520 JF	1800	990 J	250 J	1700 J	1100	5300	340 J	ND	ND	540 J	950 J	2400
Benzo[a]pyrene	1000	1000	1000	1000	1100	540 J	1200	820 JF	1800	1000 J	260 J	2000 J	1200	5000	330 J	ND	ND	570 J	1000 J	2100
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	560 J	1400	1100 F1	2000	1300	360 J	2500	1600	5400	360 J	ND	ND	630 J	1300	2400
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	340 J	700 J	750 J	1400	740 J	210 J	1600 J	880 J	3500	230 J	ND	260 J	440 J	820 J	1300
Benzo[k]fluoranthene	800	1000	3900	56000	110000	330 J	830 J	400 JF	1300	570 J	130 J	1300 J	530 J	2800	160 J	ND	ND	400 J	720 J	1400
Bis(2-chloroethoxy)methane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate						ND	2600	ND F1	ND	440 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	760 J
Butyl benzyl phthalate						ND	1100	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole						ND	160 J	ND	150 J	140 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	600 J
Chrysene	1000	1000	3900	56000	110000	640 J	1500	630 JF	2100	1100	200 J	2100 J	1300	5800	260 J	ND	ND	650 J	1100	2200
Dibenz(a,h)anthracene	330	330	330	560	1100	ND	ND	ND	ND	ND	ND	ND	240 J	1100	ND	ND	ND	ND	250 J	ND
Di-n-butyl phthalate						ND	690 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate						ND	ND	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	7000	14000	59000	350000	1000000	ND	ND	ND F2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	320 J
Diethyl phthalate						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100000	100000	100000	500000	1000000	1400	3000	950 JF	3600	2300	500 J	3800	2400	6500	440 J	ND	530 J	1100	2000	5300
Fluorene	30000	100000	100000	500000	1000000	130 J	130 J	ND F2	130 J	ND	ND	ND	ND	160 J	ND	ND	ND	ND	ND	470 J
Hexachlorobenzene	330	330	1200	6000	12000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	300 J	660 J	530 J	1100	620 J	190 J	1300 J	740 J	3000	190 J	ND	ND	370 J	740 J	1300
Isophorone						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12000	100000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	800	2400	6700	6700	55000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100000	100000	100000	500000	1000000	1100	1800	290 JF	1500	1500	170 J	1300 J	1000	1200	ND	ND	ND	470 J	890 J	4300
Phenol	330	100000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100000	100000	100000	500000	1000000	1300	2700	860 JF	3200	2100	460 J	3300	2200	8700	510 J	ND	490 J	1100	1900	3900

Table 1
Sims Matchplate
Surface and Near Surface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SS - 1	SS - 1	SS - 2	SS - 2	SS - 3	SS - 3	SS - 4	SS - 4	SS - 5	SS - 5	SS - 6	SS - 7	SS - 7	SS - 8	SS - 8				
Sample Depth						0-2"	6"-12"	0-2"	6-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	6"-12"	0-2"	6"-12"	
Date Sampled						02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019	02/07/2019
Sample Matrix						Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil	Surface Soil
Pesticidies																								
4,4'-DDD	3.3	2600	13000	92000	180000	ND	ND	ND	ND	0.88 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	0.53 JB			
4,4'-DDE	3.3	1800	8900	62000	120000	ND	ND	4.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9 JF	0.77 J				
4,4'-DDT	3.3	1700	7900	47000	94000	1.9	ND	ND	14 J	2.1 J	10 J	15 J	11 J	3.7	2.7 J	2.4 J	2.6 J	10 J	8.6 F2	3.8				
Aldrin	5	19	97	680	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
alpha-BHC	20	97	480	3400	6800	ND	ND	ND	ND	0.41 J	ND	ND	ND	ND	ND	ND	ND	ND	0.53 JF	ND				
cis-Chlordane	94	910	4200	24000	47000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
beta-BHC	36	72	360	3000	14000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
delta-BHC	40	100000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	F2	ND			
Dieldrin	5	39	200	1400	2800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
Endosulfan I	2400	4800	24000	200000	920000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
Endosulfan II	2400	4800	24000	200000	920000	ND	ND	ND	ND	0.50 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Endosulfan sulfate	2400	4800	24000	200000	920000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Endrin	14	2200	11000	89000	410000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
Endrin aldehyde						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Endrin ketone						ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	ND	ND	ND	ND	ND	ND	ND			
gamma-BHC (Lindane)	100	280	1300	9200	23000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
trans-Chlordane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
Heptachlor	42	420	2100	15000	29000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
Heptachlor epoxide						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	F2	ND			
Methoxychlor						ND	ND	ND	ND	ND	22	ND	30	ND	ND	ND	ND	ND	ND	F1	ND			
Toxaphene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PCBs																								
PCB-1016	0.1	1	1	1	25	ND	0.087 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PCB-1221	0.1	1	1	1	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PCB-1232	0.1	1	1	1	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PCB-1242	0.1	1	1	1	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PCB-1248	0.1	1	1	1	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PCB-1254	0.1	1	1	1	25	ND	0.17 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PCB-1260	0.1	1	1	1	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Herbicides																								
2,4,5-T						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
2,4-D						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Silvex (2,4,5-TP)	3800	58000	100000	500000	1000000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Metals																								
Aluminum						6500 F1	6300	8580	6950	12700	6860	9920	9080	5810	9010	7970	10600	11900	11700	12100				
Mercury	0.18	0.81	0.81	2.8	5.7	0.036	0.050	0.039	0.054	0.077	0.018 J	0.081	0.072	0.034	0.022 J	ND	0.036 J	0.096	0.50	0.71				
Antimony						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Arsenic	13	16	16	16	16	4.2	3.8	5.7	7.4	6.3	2.6	5.4	5.2	3.2	3.9	3.0 J	4.5 J	5.4	12.0	9.1				
Barium	350	350	400	400	10000	31.0	67.7	63.8	92.6	64.9	67.7	68.0	56.8	73.3	63.9	45.9	128	94.3	190	170				
Beryllium	7.2	14	72	590	2700	0.28	0.28	0.42	0.27	0.54	0.27	0.47	0.51	0.24	0.35	0.56	0.44 J	0.47	0.52	0.52				
Cadmium	2.5	2.5	4.3	9.3	60	0.54	1.2	0.59	0.67	0.85	0.25	0.53	0.32	0.75	0.84	0.26 J	0.26 J	0.41	1.4	0.96				
Calcium						103000 F2	148000 B	144000 B	212000 B	47800 B	144000 B	57200 B	53800 B	130000 B	140000 B	203000 B	454000 B	133000 B	20500 B	14100 B				
Chromium						11.2	11.3	13.4	11.1	19.1	9.9	17.0	13.8	14.3	12.1	42.7	17.8	15.2	20.2	18.9				
Cobalt						4.2	4.2	5.6	5.4	7.5	3.8	6.6	6.0	3.8	5.1	3.4	5.4	7.3	7.9	8.5				
Copper	50	270	270	270	10000	21.4	18.2	33.6	17.5	81.0	14.3	28.9	21.9	33.2	20.9	9.5	14.2	21.6	60.6	49.5				
Iron						12700 F2	10700	16300	9470	17300	9830	14000	13200	9200	10600	7900	14700	13500	15900	19400				
Lead	63	400	400	1000	3900	55.7 F1	52.2	54.8	137	76.2	15.5	92.0	52.3	81.3	44.0	9.6	6.7	40.5	463	333				
Magnesium						39100 F2	69200 B	47000 B	47500 B	24700 B	53400 B	27800 B	21700 B	34600 B	36800 B	33700 B	184000 B	68000 B	7280 B	8290 B				
Manganese	1600	2000	2000	10000	10000	201 B	395 B	522 B	705 B	384 B	257 B	355 B	308 B	224 B	294 B	167 B	610 B	540 B	393 B	494 B				
Nickel	30	140	310	310	10000	13.7	12.1	19.0	13.2	25.7	10.7	19.6	16.6	14.0	13.1	15.2	15.4	18.1	19.7	21.0				
Potassium						2340 F1	2150	3170	2170	3770	2570	3180	2890	1840	3610	3390	4590	4390	2400	2620				
Selenium	3.9	36	180	1500	6800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND				
Silver	2	36	180	1500	6800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Sodium						131 JF	203	170 J	233	120 J	170	169 J	123 J	137 J	195	792	468	174	129 J	127 J				
Thallium						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Vanadium						13.7	13.3	17.0	13.6	22.3	12.7	20.4	20.1	12.8	15.4	73.3	21.0	19.7	27.6	27.2				
Zinc	109	2200	10000	10000	10000	38.0 F1	39.8	72.3	47.1	105	25.7	76.1	47.8	122	71.6	36.9	28.5	52.2	339	243				

Notes:
VOC, SVOC, Pesticide, and Herbicide results and associated soil cleanup objectives (SCO) in parts per billion
PCB and Metal results and associated soil cleanup objectives (SCO) in parts per million
Analytical Data compared to Part 375 Standards and DER-10
ND indicates analyte was not detected.
Blank space indicates analyte was not analyzed for in that sample.
B - Compound was found in the blank and sample.
F1 - MS and/or MSD Recovery is outside acceptance limits.
F2 - MS/MSD RPD exceeds control limits
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-1 12'-15' 01/08/2019		SB-1 17'-20' 01/08/2019		SB-2 2'-5' 01/08/2019		SB-2 DL 10'-15' 01/08/2019		SB-2 15'-20' 01/08/2019		SB-3 10'-13' 01/08/2019		SB-3 15'-20' 01/08/2019		SB-4 4'-9' 01/08/2019		SB-5 0'-5' 01/08/2019		SB-5 5'-10' 01/08/2019		SB-5 10'-15' 01/08/2019		SB-6 0'-5' 01/09/2019		SB-6 10'-15' 01/09/2019		SB-6 15'-20' 01/09/2019		SB-7 DL 5'-10' 01/09/2019					
Sample Depth						Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Date Sampled						Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Sample Matrix																																							
VOCs																																							
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2,2-Tetrachloroethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2-Trichloroethane						ND		ND		ND		ND		ND		ND	F1	ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,1,2-Trichloro-1,2,2-trifluoroethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,1-Dichloroethane	270	19000	26000	240000	480000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,1-Dichloroethene	330	100000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,2,4-Trichlorobenzene						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dibromo-3-Chloropropane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dichloroethane	20	2300	3100	30000	60000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dichloropropane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
2-Butanone (MEK)	120	100000	100000	500000	1000000	ND		ND		ND		ND		ND	3.2	JF1	ND		ND				ND		ND		ND		ND		ND		ND		ND		ND		
2-Hexanone						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
4-Methyl-2-pentanone (MIBK)						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Acetone	50	100000	100000	500000	1000000	ND		ND		ND		ND	43	88	F1	ND		19					20	J	15	J	ND		5.0	J	6.7	J		ND					
Benzene	60	2900	4800	44000	89000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Bromodichloromethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Bromoform						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Bromomethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Carbon disulfide						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Carbon tetrachloride	760	1400	2400	22000	44000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Chlorobenzene	1100	100000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Dibromochloromethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Chloroethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Chloroform	370	10000	49000	350000	700000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Chloromethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	ND		ND		ND		ND		ND	12	F1	ND		ND				ND		ND		ND		ND		ND		ND		ND		ND		ND
cis-1,3-Dichloropropene						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Cyclohexane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Dichlorodifluoromethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Ethylbenzene	1000	30000	41000	390000	780000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
1,2-Dibromoethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Isopropylbenzene						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Methyl acetate						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Methyl tert-butyl ether	930	62000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Methylcyclohexane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Methylene Chloride	50	51000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND	1.9	J				1.9	J	1.7	J	ND		ND		ND		ND		ND		ND	
Styrene						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Tetrachloroethene	1300	5500	19000	150000	300000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Toluene	700	100000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	ND		ND		ND		ND		ND	0.80	J	ND		ND				ND		ND		ND		ND		ND		ND		ND		ND		ND
trans-1,3-Dichloropropene						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Trichloroethene	470	10000	21000	200000	400000	110000		620000		ND		51000		2.4	J	6.4		1.5	J	0.90	J			ND		ND		ND		ND		ND		ND		ND		200000	
Trichlorofluoromethane						ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Vinyl chloride	20	210	900	13000	27000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	
Xylenes, Total	260	100000	100000	500000	1000000	ND		ND		ND		ND		ND		ND		ND		ND				ND		ND		ND		ND		ND		ND		ND		ND	

Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

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Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-1		SB-1		SB-2		SB-2 DL		SB-2		SB-3		SB-3		SB-4		SB-5		SB-5		SB-5		SB-6		SB-6		SB-6		SB-7 DL	
Sample Depth						12'-15'		17'-20'		2'-5'		10'-15'		15'-20'		10'-13'		15'-20'		4'-9'		0'-5'		5'-10'		10'-15'		0'-5'		10'-15'		15'-20'		5'-10'	
Date Sampled						01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/08/2019		01/09/2019		01/09/2019		01/09/2019	
Sample Matrix	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil				
PCBs																																			
PCB-1016																																			
PCB-1221																																			
PCB-1232																																			
PCB-1242																																			
PCB-1248																																			
PCB-1254																																			
PCB-1260																																			
Metals																																			
Aluminum										9650												7350						15300							
Mercury	0.18	0.81	0.81	2.8	5.7					0.059											0.018	J					0.13								
Antimony										ND											ND					0.59	J								
Arsenic	13	16	16	16	16					5.8											6.0					6.6									
Barium	350	350	400	400	10000					60.9											24.7					60.7									
Beryllium	7.2	14	72	590	2700					0.44											0.31					0.58									
Cadmium	2.5	2.5	4.3	9.3	60					0.41											0.13	J				1.1									
Calcium										54300	B										81600	B				54300	B								
Chromium										13.1											10.3					18.4									
Cobalt										6.5											7.4					8.3									
Copper	50	270	270	270	10000					32.5											41.8					28.2									
Iron										14300											11000					18000	B								
Lead	63	400	400	1000	3900					52.0											6.6					45.1									
Magnesium										21800											43200					25100									
Manganese	1600	2000	2000	10000	10000					328	B										404	B				556	B								
Nickel	30	140	310	310	10000					18.3											12.7					28.7									
Potassium										3060											2990					4310	B								
Selenium	3.9	36	180	1500	6800					ND											ND					ND									
Silver	2	36	180	1500	6800					0.39	J										ND					ND									
Sodium										108	JB										133	JB				174	JB								
Thallium										ND											ND					ND									
Vanadium										19.6											13.2					24.2									
Zinc	109	2200	10000	10000	10000					62.1											19.5					70.7									

Notes:
VOC, SVOC, Pesticide, and Herbicide results and associated soil cleanup objectives (SCO) in parts per billion
PCB and Metal results and associated soil cleanup objectives (SCO) in parts per million
Analytical Data compared to Part 375 Standards and DER-10
ND indicates analyte was not detected.
Blank space indicates analyte was not analyzed for in that sample.
* - LCS or LCSD is outside acceptance limits.
DL - Sample Dilluted
B - Compound was found in the blank and sample.
E - Result exceeded calibration range.
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Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

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Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-7	SB-8	SB-8	SB-8	SB-9	SB-9	SB-10	SB-10	SB-11	SB-11	SB-12	SB-12	SB-13	SB-13	SB-14	SB-14
Sample Depth						15'-17'	0'-5'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	5'-10'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'
Date Sampled						01/09/2019	01/10/2019	01/10/2019	01/10/2019	01/08/2019	01/08/2019	01/08/2019	01/08/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/09/2019	01/09/2019
Sample Matrix						Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil
PCBs																					
PCB-1016																					
PCB-1221																					
PCB-1232																					
PCB-1242																					
PCB-1248																					
PCB-1254																					
PCB-1260																					
Metals																					
Aluminum							10800														
Mercury	0.18	0.81	0.81	2.8	5.7		0.045														
Antimony							0.48	J													
Arsenic	13	16	16	16	16		3.3														
Barium	350	350	400	400	10000		28.5														
Beryllium	7.2	14	72	590	2700		0.43														
Cadmium	2.5	2.5	4.3	9.3	60		0.17	J													
Calcium							33500	B													
Chromium							13.0														
Cobalt							6.4														
Copper	50	270	270	270	10000		21.6														
Iron							13500														
Lead	63	400	400	1000	3900		6.9														
Magnesium							24700														
Manganese	1600	2000	2000	10000	10000		401	B													
Nickel	30	140	310	310	10000		16.8														
Potassium							3680														
Selenium	3.9	36	180	1500	6800		ND														
Silver	2	36	180	1500	6800		ND														
Sodium							190														
Thallium							ND														
Vanadium							17.7														
Zinc	109	2200	10000	10000	10000		21.1														

Notes:
VOC, SVOC, Pesticide, and Herbicide results and associated soil cleanup objectives (SCO) in parts per billion
PCB and Metal results and associated soil cleanup objectives (SCO) in parts per million
Analytical Data compared to Part 375 Standards and DER-10
ND indicates analyte was not detected.
Blank space indicates analyte was not analyzed for in that sample.
* - LCS or LCSD is outside acceptance limits.
DL - Sample Dilluted
B - Compound was found in the blank and sample.
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Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-15 0'-5'		SB-15 10'-15'		SB-15 15'-20'		SB-16 0'-5'		SB-16 10'-15'		SB-16 15'-20'		SB-18 10'-15'		SB-18 15'-20'		SB-20 10'-15'		SB-20 15'-20'		SB- 21 0'-5'		SB- 21 10'-15'		SB- 21 15'-20'		SB-25 10'-15'		SB-25 15'-20'		SB-26 5'-10'		SB-26 10'-15'			
Sample Depth						01/09/2019		01/09/2019		01/09/2019		01/10/2019		01/10/2019		01/10/2019		01/10/2019		01/10/2019		01/09/2019		01/09/2019		01/09/2019		01/09/2019		01/15/2019		01/15/2019		01/09/2019		01/09/2019		01/14/2019		01/14/2019	
Date Sampled						Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Sample Matrix																																									
VOCs																																									
1,1,1-Trichloroethane	680	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,1,2,2-Tetrachloroethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,1,2-Trichloroethane								ND		ND		ND		ND		ND		ND	*	ND	F1	ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,1,2-Trichloro-1,2,2-trifluoroethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,1-Dichloroethane	270	19000	26000	240000	480000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,1-Dichloroethene	330	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,2,4-Trichlorobenzene								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,2-Dibromo-3-Chloropropane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,2-Dichloroethane	20	2300	3100	30000	60000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,2-Dichloropropane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,3-Dichlorobenzene	2400	17000	49000	280000	560000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,4-Dichlorobenzene	1800	9800	13000	130000	250000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
2-Butanone (MEK)	120	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND	F1	ND		ND		ND		ND		ND		ND		ND		ND			
2-Hexanone								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
4-Methyl-2-pentanone (MIBK)								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Acetone	50	100000	100000	500000	1000000			28		ND		ND		90		23	J	4.2	J	45		8.6	J	11	J			72		11	J	22		24		6.4	J	11	J		
Benzene	60	2900	4800	44000	89000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Bromodichloromethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Bromoform								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Bromomethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Carbon disulfide								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Carbon tetrachloride	760	1400	2400	22000	44000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Chlorobenzene	1100	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Dibromochloromethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Chloroethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Chloroform	370	10000	49000	350000	700000			ND		0.59	J	ND		ND		ND		0.80	J	ND		ND		ND		ND		ND		0.76	JB	ND		ND		0.64	J	0.74	J		
Chloromethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND	F1	ND		ND		ND		ND		ND		ND		ND		ND			
cis-1,3-Dichloropropene								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Cyclohexane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Dichlorodifluoromethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Ethylbenzene	1000	30000	41000	390000	780000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
1,2-Dibromoethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Isopropylbenzene								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Methyl acetate								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Methyl tert-butyl ether	930	62000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Methylcyclohexane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Methylene Chloride	50	51000	100000	500000	1000000			2.4	J	ND		ND		ND		ND		ND		ND		ND		2.0	J			ND		ND		2.1	J	ND		ND		ND			
Styrene								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Tetrachloroethene	1300	5500	19000	150000	300000			ND		ND		ND		ND		ND		ND	*	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Toluene	700	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND	*	0.29	J	ND		ND		ND		ND		0.35	J	0.48	J	ND		ND		ND			
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
trans-1,3-Dichloropropene								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Trichloroethene	470	10000	21000	200000	400000			ND		ND		ND		ND		ND		ND		ND		ND		ND		35		22		ND		ND		ND		ND		ND			
Trichlorofluoromethane								ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Vinyl chloride	20	210	900	13000	27000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Xylenes, Total	260	100000	100000	500000	1000000			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			

Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-15	SB-15	SB-15	SB-16	SB-16	SB-16	SB-18	SB-18	SB-18	SB-20	SB-20	SB - 21	SB - 21	SB-25	SB-25	SB-26	SB-26				
Sample Depth						0'-5'	10'-15'	15'-20'	0'-5'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	0'-5'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	5'-10'	10'-15'
Date Sampled						01/09/2019	01/09/2019	01/09/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/09/2019	01/09/2019	01/15/2019	01/15/2019	01/15/2019	01/09/2019	01/09/2019	01/15/2019	01/09/2019	01/09/2019	01/14/2019	01/14/2019	
Sample Matrix						Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil
SVOCs																										
Biphenyl									ND																	
bis (2-chloroisopropyl) ether									ND																	
2,4,5-Trichlorophenol									ND																	
2,4,6-Trichlorophenol									ND																	
2,4-Dichlorophenol									ND																	
2,4-Dimethylphenol									ND																	
2,4-Dinitrophenol									ND																	
2,4-Dinitrotoluene									ND																	
2,6-Dinitrotoluene									ND																	
2-Chloronaphthalene									ND																	
2-Chlorophenol									ND																	
2-Methylphenol	330	100000	100000	500000	1000000				ND																	
2-Methylnaphthalene									ND																	
2-Nitroaniline									ND																	
2-Nitrophenol									ND																	
3,3'-Dichlorobenzidine									ND																	
3-Nitroaniline									ND																	
4,6-Dinitro-2-methylphenol									ND																	
4-Bromophenyl phenyl ether									ND																	
4-Chloro-3-methylphenol									ND																	
4-Chloroaniline									ND																	
4-Chlorophenyl phenyl ether									ND																	
4-Methylphenol	330	34000	100000	500000	1000000				ND																	
4-Nitroaniline									ND																	
4-Nitrophenol									ND																	
Acenaphthene	20000	100000	100000	500000	1000000				ND																	
Acenaphthylene	100000	100000	100000	500000	1000000				ND																	
Acetophenone									ND																	
Anthracene	100000	100000	100000	500000	1000000				ND																	
Atrazine									ND																	
Benzaldehyde									ND																	
Benzo[a]anthracene	1000	1000	1000	5600	11000				48 J																	
Benzo[a]pyrene	1000	1000	1000	1000	1100				45 J																	
Benzo[b]fluoranthene	1000	1000	1000	5600	11000				59 J																	
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000				47 J																	
Benzo[k]fluoranthene	800	1000	3900	56000	110000				27 J																	
Bis(2-chloroethoxy)methane									ND																	
Bis(2-chloroethyl)ether									ND																	
Bis(2-ethylhexyl) phthalate									89 J																	
Butyl benzyl phthalate									ND																	
Caprolactam									ND																	
Carbazole									ND																	
Chrysene	1000	1000	3900	56000	110000				56 J																	
Dibenz(a,h)anthracene	330	330	330	560	1100				ND																	
Di-n-butyl phthalate									ND																	
Di-n-octyl phthalate									ND																	
Dibenzofuran	7000	14000	59000	350000	1000000				ND																	
Diethyl phthalate									ND																	
Dimethyl phthalate									ND																	
Fluoranthene	100000	100000	100000	500000	1000000				61 J																	
Fluorene	30000	100000	100000	500000	1000000				ND																	
Hexachlorobenzene	330	330	1200	6000	12000				ND																	
Hexachlorobutadiene									ND																	
Hexachlorocyclopentadiene									ND																	
Hexachloroethane									ND																	
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000				38 J																	
Isophorone									ND																	
N-Nitrosodi-n-propylamine									ND																	
N-Nitrosodiphenylamine									ND																	
Naphthalene	12000	100000	100000	500000	1000000				ND																	
Nitrobenzene									ND																	
Pentachlorophenol	800	2400	6700	6700	55000				ND																	
Phenanthrene	100000	100000	100000	500000	1000000				29 J																	
Phenol	330	100000	100000	500000	1000000				ND																	
Pyrene	100000	100000	100000	500000	1000000				75 J																	

Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-15	SB-15	SB-15	SB-16	SB-16	SB-16	SB-18	SB-18	SB-20	SB-20	SB - 21	SB - 21	SB - 21	SB-25	SB-25	SB-26	SB-26
Sample Depth						0'-5'	10'-15'	15'-20'	0'-5'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	0'-5'	10'-15'	15'-20'	10'-15'	15'-20'	5'-10'	10'-15'
Date Sampled						01/09/2019	01/09/2019	01/09/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/09/2019	01/09/2019	01/15/2019	01/15/2019	01/15/2019	01/09/2019	01/09/2019	01/14/2019	01/14/2019
Sample Matrix						Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil
PCBs																						
PCB-1016																						
PCB-1221																						
PCB-1232																						
PCB-1242																						
PCB-1248																						
PCB-1254																						
PCB-1260																						
Metals																						
Aluminum						13400					12000							11300	B			
Mercury	0.18	0.81	0.81	2.8	5.7	0.042					0.026							0.018	J			
Antimony						ND					ND							ND				
Arsenic	13	16	16	16	16	4.1					3.6							3.4				
Barium	350	350	400	400	10000	48.6					63.1							50.5				
Beryllium	7.2	14	72	590	2700	0.49					0.47							0.43				
Cadmium	2.5	2.5	4.3	9.3	60	0.17	J				0.19	J						0.12	J			
Calcium						78600	B				85800	B						82700	B			
Chromium						15.4					14.3							12.8				
Cobalt						7.7					6.3							5.6				
Copper	50	270	270	270	10000	19.8					22.7							19.7				
Iron						14400	B				13200							12300				
Lead	63	400	400	1000	3900	7.0					8.4							5.0				
Magnesium						48900					49600							42900	B			
Manganese	1600	2000	2000	10000	10000	338	B				307	B						273				
Nickel	30	140	310	310	10000	16.0					14.7							13.9	B			
Potassium						5040	B				4560							4520	B			
Selenium	3.9	36	180	1500	6800	ND					ND							ND				
Silver	2	36	180	1500	6800	ND					ND							ND				
Sodium						171	JB				192							212	B			
Thallium						ND					ND							ND				
Vanadium						20.6					18.7							17.5				
Zinc	109	2200	10000	10000	10000	22.8					24.4							19.8				

Notes:
VOC, SVOC, Pesticide, and Herbicide results and associated soil cleanup objectives (SCO) in parts per billion
PCB and Metal results and associated soil cleanup objectives (SCO) in parts per million
Analytical Data compared to Part 375 Standards and DER-10
ND indicates analyte was not detected.
Blank space indicates analyte was not analyzed for in that sample.
*- LCS or LCSD is outside acceptance limits.
DL - Sample Dilluted
B - Compound was found in the blank and sample.
E - Result exceeded calibration range.
F1 - MS and/or MSD Recovery 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.

Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-27 0'-5'		SB-27 10'-15'		SB-27 15'-20'		SB-28 10'-15'		SB-28 15'-20'		SB-29 0'-5'		SB-29 10'-15'		SB-29 15'-20'		SB-30 10'-15'		SB-30 15'-20'		SB - 31 10'-15'		SB - 31 15'-20'		SB - 32 0'-5'		SB - 32 10'-15'		SB - 32 15'-20'			
Sample Depth						01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/09/2019		01/09/2019		01/15/2019		01/15/2019		01/15/2019		01/15/2019		01/15/2019		01/15/2019			
Date Sampled						Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil			
Sample Matrix																																					
VOCs																																					
1,1,1-Trichloroethane	680	100000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		0.75	J		
1,1,2,2-Tetrachloroethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,1,2-Trichloroethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,1,2-Trichloro-1,2,2-trifluoroethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,1-Dichloroethane	270	19000	26000	240000	480000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,1-Dichloroethene	330	100000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,2,4-Trichlorobenzene								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,2-Dibromo-3-Chloropropane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,2-Dichloroethane	20	2300	3100	30000	60000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,2-Dichloropropane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,3-Dichlorobenzene	2400	17000	49000	280000	560000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,4-Dichlorobenzene	1800	9800	13000	130000	250000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
2-Butanone (MEK)	120	100000	100000	500000	1000000			ND	F1	ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
2-Hexanone								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
4-Methyl-2-pentanone (MIBK)								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Acetone	50	100000	100000	500000	1000000			6.9	J	5.3	J	ND		ND				9.5	J	8.4	J	21		ND		39		75				87		4.3	J		
Benzene	60	2900	4800	44000	89000			ND		ND		ND		ND				0.34	J	ND		ND		ND		ND		ND				ND		ND			
Bromodichloromethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Bromoform								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Bromomethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Carbon disulfide								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Carbon tetrachloride	760	1400	2400	22000	44000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Chlorobenzene	1100	100000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Dibromochloromethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Chloroethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Chloroform	370	10000	49000	350000	700000			0.86	J	1.1	J	0.62	J	0.91	J			0.68	J	0.69	J	ND		ND		0.44	JB	0.35	JB			0.42	JB	1.5	JB		
Chloromethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		1.6	J	ND		ND				ND		ND			
cis-1,3-Dichloropropene								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Cyclohexane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Dichlorodifluoromethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Ethylbenzene	1000	30000	41000	390000	780000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
1,2-Dibromoethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Isopropylbenzene								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Methyl acetate								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Methyl tert-butyl ether	930	62000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Methylcyclohexane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Methylene Chloride	50	51000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Styrene								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Tetrachloroethene	1300	5500	19000	150000	300000			ND		ND		ND		ND				1.0	J	ND		1.4	J	1.2	J	ND		ND				ND		ND			
Toluene	700	100000	100000	500000	1000000			ND		ND		ND		ND				0.99	J	ND		ND		ND		ND		ND				ND		ND			
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
trans-1,3-Dichloropropene								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Trichloroethene	470	10000	21000	200000	400000			ND		1.7	J	ND		1.2	J			ND		ND		ND		ND		ND		ND				ND		ND			
Trichlorofluoromethane								ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Vinyl chloride	20	210	900	13000	27000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			
Xylenes, Total	260	100000	100000	500000	1000000			ND		ND		ND		ND				ND		ND		ND		ND		ND		ND				ND		ND			

Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-27	SB-27	SB-27	SB-28	SB-28	SB-29	SB-29	SB-29	SB-29	SB-30	SB-30	SB - 31	SB - 31	SB - 32	SB - 32	SB - 32				
Sample Depth						0'-5'	10'-15'	15'-20'	10'-15'	15'-20'	0'-5'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	10'-15'	15'-20'	0'-5'	10'-15'	15'-20'	
Date Sampled						01/14/2019	01/14/2019	01/14/2019	01/14/2019	01/14/2019	01/14/2019	01/14/2019	01/14/2019	01/14/2019	01/14/2019	01/09/2019	01/09/2019	01/15/2019	01/15/2019	01/15/2019	01/15/2019	01/15/2019	01/15/2019	01/15/2019	01/15/2019
Sample Matrix						Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil
SVOCs																									
Biphenyl						ND																			
bis (2-chloroisopropyl) ether						ND																			
2,4,5-Trichlorophenol						ND																			
2,4,6-Trichlorophenol						ND																			
2,4-Dichlorophenol						ND																			
2,4-Dimethylphenol						ND																			
2,4-Dinitrophenol						ND																			
2,4-Dinitrotoluene						ND																			
2,6-Dinitrotoluene						ND																			
2-Chloronaphthalene						ND																			
2-Chlorophenol						ND																			
2-Methylphenol	330	100000	100000	500000	1000000	ND																			
2-Methylnaphthalene						ND																			
2-Nitroaniline						ND																			
2-Nitrophenol						ND																			
3,3'-Dichlorobenzidine						ND																			
3-Nitroaniline						ND																			
4,6-Dinitro-2-methylphenol						ND																			
4-Bromophenyl phenyl ether						ND																			
4-Chloro-3-methylphenol						ND																			
4-Chloroaniline						ND																			
4-Chlorophenyl phenyl ether						ND																			
4-Methylphenol	330	34000	100000	500000	1000000	ND																			
4-Nitroaniline						ND																			
4-Nitrophenol						ND																			
Acenaphthene	20000	100000	100000	500000	1000000	ND																			
Acenaphthylene	100000	100000	100000	500000	1000000	ND																			
Acetophenone						ND																			
Anthracene	100000	100000	100000	500000	1000000	ND																			
Atrazine						ND																			
Benzaldehyde						ND																			
Benzo[a]anthracene	1000	1000	1000	5600	11000	ND																			
Benzo[a]pyrene	1000	1000	1000	1000	1100	ND																			
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	ND																			
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	ND																			
Benzo[k]fluoranthene	800	1000	3900	56000	110000	ND																			
Bis(2-chloroethoxy)methane						ND																			
Bis(2-chloroethyl)ether						ND																			
Bis(2-ethylhexyl) phthalate						ND																			
Butyl benzyl phthalate						ND																			
Caprolactam						ND																			
Carbazole						ND																			
Chrysene	1000	1000	3900	56000	110000	ND																			
Dibenz(a,h)anthracene	330	330	330	560	1100	ND																			
Di-n-butyl phthalate						ND																			
Di-n-octyl phthalate						ND																			
Dibenzofuran	7000	14000	59000	350000	1000000	ND																			
Diethyl phthalate						ND																			
Dimethyl phthalate						ND																			
Fluoranthene	100000	100000	100000	500000	1000000	45 J																			
Fluorene	30000	100000	100000	500000	1000000	ND																			
Hexachlorobenzene	330	330	1200	6000	12000	ND																			
Hexachlorobutadiene						ND																			
Hexachlorocyclopentadiene						ND																			
Hexachloroethane						ND																			
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	ND																			
Isophorone						ND																			
N-Nitrosodi-n-propylamine						ND																			
N-Nitrosodiphenylamine						ND																			
Naphthalene	12000	100000	100000	500000	1000000	ND																			
Nitrobenzene						ND																			
Pentachlorophenol	800	2400	6700	6700	55000	ND																			
Phenanthrene	100000	100000	100000	500000	1000000	ND																			
Phenol	330	100000	100000	500000	1000000	ND																			
Pyrene	100000	100000	100000	500000	1000000	40 J																			

Table 2
Sims Matchplate ERP Site
Subsurface Soil Data Summary

Location ID	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial Use	Industrial Use	SB-27		SB-27		SB-27		SB-28		SB-28		SB-29		SB-29		SB-29		SB-30		SB-30		SB - 31		SB - 31		SB - 32		SB - 32		SB - 32					
Sample Depth						0'-5'		10'-15'		15'-20'		10'-15'		15'-20'		0'-5'		10'-15'		15'-20'		10'-15'		15'-20'		10'-15'		15'-20'		10'-15'		15'-20'		0'-5'		10'-15'		15'-20'	
Date Sampled						01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/14/2019		01/09/2019		01/09/2019		01/15/2019		01/15/2019		01/15/2019		01/15/2019		01/15/2019		01/15/2019	
Sample Matrix						Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
PCBs																																							
PCB-1016																																							
PCB-1221																																							
PCB-1232																																							
PCB-1242																																							
PCB-1248																																							
PCB-1254																																							
PCB-1260																																							
Metals																																							
Aluminum						12900	B									13500	B														2980	B							
Mercury	0.18	0.81	0.81	2.8	5.7	0.035										0.046															0.018	J							
Antimony						0.61	J									ND															ND								
Arsenic	13	16	16	16	16	3.5										3.2															1.1	J							
Barium	350	350	400	400	10000	27.4										42.4															11.4								
Beryllium	7.2	14	72	590	2700	0.51										0.51															0.14	J							
Cadmium	2.5	2.5	4.3	9.3	60	0.13	J									0.16	J														0.059	J							
Calcium						16800	B									81600	B														233000	B							
Chromium						15.8										15.0															3.1								
Cobalt						7.1										7.2															1.1								
Copper	50	270	270	270	10000	16.3										15.6															1.5	J							
Iron						15800										13500															4700								
Lead	63	400	400	1000	3900	7.0										6.6															3.6								
Magnesium						13900	B									49500	B														149000	B							
Manganese	1600	2000	2000	10000	10000	251										390															103								
Nickel	30	140	310	310	10000	21.3	B									16.4	B														3.8	JB							
Potassium						3830	B									4970	B														1470	B							
Selenium	3.9	36	180	1500	6800	ND										ND															ND								
Silver	2	36	180	1500	6800	ND										ND															ND								
Sodium						180	B									214	B														330	B							
Thallium						ND										ND															ND								
Vanadium						21.0										21.0															8.3								
Zinc	109	2200	10000	10000	10000	27.4										23.6															6.4								

Notes:
VOC, SVOC, Pesticide, and Herbicide results and associated soil cleanup objectives (SCO) in parts per billion
PCB and Metal results and associated soil cleanup objectives (SCO) in parts per million
Analytical Data compared to Part 375 Standards and DER-10
ND indicates analyte was not detected.
Blank space indicates analyte was not analyzed for in that sample.
* - LCS or LCSD is outside acceptance limits.
DL - Sample Dilluted
B - Compound was found in the blank and sample.
E - Result exceeded calibration range.
F1 - MS and/or MSD Recovery 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.

Table 3
Sims Matchplate ERP Site
Groundwater Data Summary

Location ID	TOGS 1.1.1 Standard	MW-1	TW-1	MW-2	TW-3	MW-3	MW-6	DUPE	TRIP RI ANK	MW-7	TRIP RI ANK
Date Sampled		01/17/2019	01/17/2019	01/17/2019	01/17/2019	01/17/2019	01/17/2019	01/17/2019	01/17/2019	02/07/2019	02/07/2019
Sample Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
VOCs											
1,1,1-Trichloroethane	5	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	33	ND	35	ND	1600	ND
cis-1,3-Dichloropropene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND *	ND *
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.0006	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	930	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND F1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	0.62 J	130	ND	0.60 J	1200 F1	0.65 J	1200	ND	37000	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND indicates analyte was not detected.

Analytes and Standards in ppb

Blank space indicates analyte was not analyzed for in that sample.

F1 - MS and/or MSD Recovery 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.

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-147622-1

Client Project/Site: Former Sims Matchplate Site

For:

C&S Engineers, Inc.

499 Col. Eileen Collins Blvd

Syracuse, New York 13212

Attn: Matt Walker



Authorized for release by:

1/16/2019 4:50:50 PM

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	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.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.

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.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Metals

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Job ID: 480-147622-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-147622-1

Receipt

The samples were received on 1/9/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-455001 and analytical batch 480-454994 recovered outside control limits for the following analyte: Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. The following samples are affected: SB-2 (15'-20') (480-147622-6), SB-3 (10'-13') (480-147622-7), SB-3 (15'-20') (480-147622-8), SB-4 (9'-15') (480-147622-10), SB-5 (5'-10') (480-147622-13), SB-5 (10'-15') (480-147622-14), SB-10 (10'-15') (480-147622-15), SB-10 (15'-20') (480-147622-16) and SB-9 (10'-15') (480-147622-17).

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-455051 and analytical batch 480-455192 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following samples were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-1 (12'-15') (480-147622-1), SB-1 (17'-20') (480-147622-2) and SB-2 (10'-15') (480-147622-5). 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/MS Semi VOA

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

GC Semi VOA

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-454528/5 and 480-454528/31) that had recoveries for the surrogate Decachlorobiphenyl above acceptance limits: SB-2 (2'-5') (480-147622-4) and SB-5 (0'-5') (480-147622-12). The secondary surrogate Tetrachloro-m-xylene is within limits. Therefore, the data have been reported.

Method(s) 8082A: The following samples are associated with a laboratory control sample (LCS 480-454399/2) that had recoveries for the surrogate Decachlorobiphenyl that were slightly below acceptance limits: SB-2 (2'-5') (480-147622-4) and SB-5 (0'-5') (480-147622-12). The secondary surrogate Tetrachloro-m-xylene and all analyte recoveries were within limits. Therefore, the data have been reported.

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

Metals

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

Organic Prep

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

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-1 (12'-15')

Lab Sample ID: 480-147622-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	110000		2200	600	ug/Kg	50	✱	8260C	Total/NA

Client Sample ID: SB-1 (17'-20')

Lab Sample ID: 480-147622-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	620000		9200	2500	ug/Kg	200	✱	8260C	Total/NA

Client Sample ID: SB-2 (2'-5')

Lab Sample ID: 480-147622-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9650		11.1	4.9	mg/Kg	1	✱	6010C	Total/NA
Arsenic	5.8		2.2	0.44	mg/Kg	1	✱	6010C	Total/NA
Barium	60.9		0.56	0.12	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.44		0.22	0.031	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.41		0.22	0.033	mg/Kg	1	✱	6010C	Total/NA
Calcium	54300	B	55.6	3.7	mg/Kg	1	✱	6010C	Total/NA
Chromium	13.1		0.56	0.22	mg/Kg	1	✱	6010C	Total/NA
Cobalt	6.5		0.56	0.056	mg/Kg	1	✱	6010C	Total/NA
Copper	32.5		1.1	0.23	mg/Kg	1	✱	6010C	Total/NA
Iron	14300		11.1	3.9	mg/Kg	1	✱	6010C	Total/NA
Lead	52.0		1.1	0.27	mg/Kg	1	✱	6010C	Total/NA
Magnesium	21800		22.2	1.0	mg/Kg	1	✱	6010C	Total/NA
Manganese	328	B	0.22	0.036	mg/Kg	1	✱	6010C	Total/NA
Nickel	18.3		5.6	0.26	mg/Kg	1	✱	6010C	Total/NA
Potassium	3060		33.4	22.2	mg/Kg	1	✱	6010C	Total/NA
Silver	0.39	J	0.67	0.22	mg/Kg	1	✱	6010C	Total/NA
Sodium	108	J B	156	14.5	mg/Kg	1	✱	6010C	Total/NA
Vanadium	19.6		0.56	0.12	mg/Kg	1	✱	6010C	Total/NA
Zinc	62.1		2.2	0.71	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.059		0.023	0.0091	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: SB-2 (2'-5')

Lab Sample ID: 480-147622-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	210	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]anthracene	910	J	950	95	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]pyrene	1000		950	140	ug/Kg	5	✱	8270D	Total/NA
Benzo[b]fluoranthene	1200		950	150	ug/Kg	5	✱	8270D	Total/NA
Benzo[g,h,i]perylene	840	J	950	100	ug/Kg	5	✱	8270D	Total/NA
Benzo[k]fluoranthene	610	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Chrysene	900	J	950	210	ug/Kg	5	✱	8270D	Total/NA
Fluoranthene	1500		950	100	ug/Kg	5	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	740	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Phenanthrene	900	J	950	140	ug/Kg	5	✱	8270D	Total/NA
Pyrene	1400		950	110	ug/Kg	5	✱	8270D	Total/NA

Client Sample ID: SB-2 (10'-15')

Lab Sample ID: 480-147622-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.35	J	3.5	0.25	ug/Kg	1	✱	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (10'-15') (Continued)

Lab Sample ID: 480-147622-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1-Dichloroethene	0.68	J	3.5	0.43	ug/Kg	1		✱	8260C	Total/NA
Acetone	18		18	2.9	ug/Kg	1		✱	8260C	Total/NA
Chloroform	1.5	J	3.5	0.22	ug/Kg	1		✱	8260C	Total/NA
cis-1,2-Dichloroethene	14		3.5	0.45	ug/Kg	1		✱	8260C	Total/NA
Methylene Chloride	1.8	J	3.5	1.6	ug/Kg	1		✱	8260C	Total/NA
Tetrachloroethene	1.3	J	3.5	0.47	ug/Kg	1		✱	8260C	Total/NA
Toluene	0.33	J	3.5	0.26	ug/Kg	1		✱	8260C	Total/NA
trans-1,2-Dichloroethene	0.61	J	3.5	0.36	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene	1900	E	3.5	0.77	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene - DL	51000		970	270	ug/Kg	20		✱	8260C	Total/NA

Client Sample ID: SB-2 (15'-20')

Lab Sample ID: 480-147622-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	43		21	3.6	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene	2.4	J	4.3	0.94	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB-3 (10'-13')

Lab Sample ID: 480-147622-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	3.2	J F1	21	1.6	ug/Kg	1		✱	8260C	Total/NA
Acetone	88	F1	21	3.6	ug/Kg	1		✱	8260C	Total/NA
cis-1,2-Dichloroethene	12	F1	4.3	0.54	ug/Kg	1		✱	8260C	Total/NA
trans-1,2-Dichloroethene	0.80	J	4.3	0.44	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene	6.4		4.3	0.94	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB-3 (15'-20')

Lab Sample ID: 480-147622-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Trichloroethene	1.5	J	3.5	0.77	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB-4 (4'-9')

Lab Sample ID: 480-147622-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	19		19	3.2	ug/Kg	1		✱	8260C	Total/NA
Methylene Chloride	1.9	J	3.8	1.7	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene	0.90	J	3.8	0.83	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB-4 (9'-15')

Lab Sample ID: 480-147622-10

No Detections.

Client Sample ID: SB-5 (0'-5')

Lab Sample ID: 480-147622-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	7350		10.9	4.8	mg/Kg	1		✱	6010C	Total/NA
Arsenic	6.0		2.2	0.43	mg/Kg	1		✱	6010C	Total/NA
Barium	24.7		0.54	0.12	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.31		0.22	0.030	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.13	J	0.22	0.033	mg/Kg	1		✱	6010C	Total/NA
Calcium	81600	B	54.3	3.6	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (0'-5') (Continued)

Lab Sample ID: 480-147622-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	10.3		0.54	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.4		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	41.8		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	11000		10.9	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	6.6		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	43200		21.7	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	404	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	12.7		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	2990		32.6	21.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	133	J B	152	14.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13.2		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	19.5		2.2	0.70	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.018	J	0.021	0.0083	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-5 (0'-5')

Lab Sample ID: 480-147622-12

No Detections.

Client Sample ID: SB-5 (5'-10')

Lab Sample ID: 480-147622-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	J	21	3.5	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	1.9	J	4.2	1.9	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-5 (10'-15')

Lab Sample ID: 480-147622-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15	J	19	3.2	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	1.7	J	3.8	1.7	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-10 (10'-15')

Lab Sample ID: 480-147622-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.1	J	4.4	2.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-10 (15'-20')

Lab Sample ID: 480-147622-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.0	J	4.4	2.0	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.65	J	4.4	0.33	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-9 (10'-15')

Lab Sample ID: 480-147622-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	22	J	24	4.0	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	2.9	J	4.8	2.2	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-9 (15'-20')

Lab Sample ID: 480-147622-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.0	J	20	3.4	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-1 (12'-15')

Lab Sample ID: 480-147622-1

Date Collected: 01/08/19 09:00

Matrix: Solid

Date Received: 01/09/19 01:00

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2200	600	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,1,2,2-Tetrachloroethane	ND		2200	350	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,1,2-Trichloroethane	ND		2200	460	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2200	1100	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,1-Dichloroethane	ND		2200	670	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,1-Dichloroethene	ND		2200	750	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,2,4-Trichlorobenzene	ND		2200	820	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,2-Dibromo-3-Chloropropane	ND		2200	1100	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,2-Dichlorobenzene	ND		2200	550	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,2-Dichloroethane	ND		2200	890	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,2-Dichloropropane	ND		2200	350	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,3-Dichlorobenzene	ND		2200	580	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,4-Dichlorobenzene	ND		2200	300	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
2-Butanone (MEK)	ND		11000	6500	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
2-Hexanone	ND		11000	4500	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
4-Methyl-2-pentanone (MIBK)	ND		11000	690	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Acetone	ND		11000	8900	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Benzene	ND		2200	410	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Bromodichloromethane	ND		2200	430	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Bromoform	ND	*	2200	1100	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Bromomethane	ND		2200	480	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Carbon disulfide	ND		2200	990	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Carbon tetrachloride	ND		2200	550	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Chlorobenzene	ND		2200	290	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Dibromochloromethane	ND		2200	1100	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Chloroethane	ND		2200	450	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Chloroform	ND		2200	1500	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Chloromethane	ND		2200	520	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
cis-1,2-Dichloroethene	ND		2200	600	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
cis-1,3-Dichloropropene	ND		2200	520	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Cyclohexane	ND		2200	480	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Dichlorodifluoromethane	ND		2200	950	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Ethylbenzene	ND		2200	630	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
1,2-Dibromoethane	ND		2200	380	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Isopropylbenzene	ND		2200	330	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Methyl acetate	ND		11000	1000	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Methyl tert-butyl ether	ND		2200	820	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Methylcyclohexane	ND		2200	1000	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Methylene Chloride	ND		2200	430	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Styrene	ND		2200	520	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Tetrachloroethene	ND		2200	290	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Toluene	ND		2200	580	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
trans-1,2-Dichloroethene	ND		2200	510	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
trans-1,3-Dichloropropene	ND		2200	210	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Trichloroethene	110000		2200	600	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Trichlorofluoromethane	ND		2200	1000	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Vinyl chloride	ND		2200	730	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50
Xylenes, Total	ND		4300	1200	ug/Kg	☼	01/15/19 08:37	01/15/19 23:39	50

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-1 (12'-15')

Date Collected: 01/08/19 09:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-1

Matrix: Solid

Percent Solids: 88.3

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	<i>100</i>		<i>50 - 149</i>	<i>01/15/19 08:37</i>	<i>01/15/19 23:39</i>	<i>50</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	<i>105</i>		<i>53 - 146</i>	<i>01/15/19 08:37</i>	<i>01/15/19 23:39</i>	<i>50</i>
<i>4-Bromofluorobenzene (Surr)</i>	<i>103</i>		<i>49 - 148</i>	<i>01/15/19 08:37</i>	<i>01/15/19 23:39</i>	<i>50</i>
<i>Dibromofluoromethane (Surr)</i>	<i>103</i>		<i>60 - 140</i>	<i>01/15/19 08:37</i>	<i>01/15/19 23:39</i>	<i>50</i>

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-1 (17'-20')

Lab Sample ID: 480-147622-2

Date Collected: 01/08/19 09:20

Matrix: Solid

Date Received: 01/09/19 01:00

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		9200	2500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,1,2,2-Tetrachloroethane	ND		9200	1500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,1,2-Trichloroethane	ND		9200	1900	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		9200	4600	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,1-Dichloroethane	ND		9200	2800	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,1-Dichloroethene	ND		9200	3200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,2,4-Trichlorobenzene	ND		9200	3500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,2-Dibromo-3-Chloropropane	ND		9200	4600	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,2-Dichlorobenzene	ND		9200	2300	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,2-Dichloroethane	ND		9200	3700	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,2-Dichloropropane	ND		9200	1500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,3-Dichlorobenzene	ND		9200	2400	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,4-Dichlorobenzene	ND		9200	1300	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
2-Butanone (MEK)	ND		46000	27000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
2-Hexanone	ND		46000	19000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
4-Methyl-2-pentanone (MIBK)	ND		46000	2900	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Acetone	ND		46000	38000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Benzene	ND		9200	1700	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Bromodichloromethane	ND		9200	1800	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Bromoform	ND	*	9200	4600	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Bromomethane	ND		9200	2000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Carbon disulfide	ND		9200	4200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Carbon tetrachloride	ND		9200	2300	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Chlorobenzene	ND		9200	1200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Dibromochloromethane	ND		9200	4400	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Chloroethane	ND		9200	1900	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Chloroform	ND		9200	6300	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Chloromethane	ND		9200	2200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
cis-1,2-Dichloroethene	ND		9200	2500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
cis-1,3-Dichloropropene	ND		9200	2200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Cyclohexane	ND		9200	2000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Dichlorodifluoromethane	ND		9200	4000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Ethylbenzene	ND		9200	2700	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
1,2-Dibromoethane	ND		9200	1600	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Isopropylbenzene	ND		9200	1400	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Methyl acetate	ND		46000	4400	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Methyl tert-butyl ether	ND		9200	3500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Methylcyclohexane	ND		9200	4300	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Methylene Chloride	ND		9200	1800	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Styrene	ND		9200	2200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Tetrachloroethene	ND		9200	1200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Toluene	ND		9200	2500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
trans-1,2-Dichloroethene	ND		9200	2200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
trans-1,3-Dichloropropene	ND		9200	900	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Trichloroethene	620000		9200	2500	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Trichlorofluoromethane	ND		9200	4300	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Vinyl chloride	ND		9200	3100	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200
Xylenes, Total	ND		18000	5100	ug/Kg	☼	01/15/19 08:38	01/16/19 00:06	200

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-1 (17'-20')

Date Collected: 01/08/19 09:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-2

Matrix: Solid

Percent Solids: 89.7

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		50 - 149	01/15/19 08:38	01/16/19 00:06	200
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		53 - 146	01/15/19 08:38	01/16/19 00:06	200
<i>4-Bromofluorobenzene (Surr)</i>	103		49 - 148	01/15/19 08:38	01/16/19 00:06	200
<i>Dibromofluoromethane (Surr)</i>	103		60 - 140	01/15/19 08:38	01/16/19 00:06	200

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (2'-5')

Date Collected: 01/08/19 09:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-3

Matrix: Solid

Percent Solids: 90.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9650		11.1	4.9	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Antimony	ND		16.7	0.44	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Arsenic	5.8		2.2	0.44	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Barium	60.9		0.56	0.12	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Beryllium	0.44		0.22	0.031	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Cadmium	0.41		0.22	0.033	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Calcium	54300	B	55.6	3.7	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Chromium	13.1		0.56	0.22	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Cobalt	6.5		0.56	0.056	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Copper	32.5		1.1	0.23	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Iron	14300		11.1	3.9	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Lead	52.0		1.1	0.27	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Magnesium	21800		22.2	1.0	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Manganese	328	B	0.22	0.036	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Nickel	18.3		5.6	0.26	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Potassium	3060		33.4	22.2	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Selenium	ND		4.4	0.44	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Silver	0.39	J	0.67	0.22	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Sodium	108	J B	156	14.5	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Thallium	ND		6.7	0.33	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Vanadium	19.6		0.56	0.12	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1
Zinc	62.1		2.2	0.71	mg/Kg	☼	01/10/19 08:56	01/10/19 20:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.059		0.023	0.0091	mg/Kg	☼	01/09/19 13:10	01/09/19 15:39	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (2'-5')

Date Collected: 01/08/19 10:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-4

Matrix: Solid

Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		950	140	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
bis (2-chloroisopropyl) ether	ND		950	190	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2,4,5-Trichlorophenol	ND		950	260	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2,4,6-Trichlorophenol	ND		950	190	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2,4-Dichlorophenol	ND		950	100	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2,4-Dimethylphenol	ND		950	230	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2,4-Dinitrophenol	ND		9300	4400	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2,4-Dinitrotoluene	ND		950	200	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2,6-Dinitrotoluene	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2-Chloronaphthalene	ND		950	160	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2-Chlorophenol	ND		950	170	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2-Methylphenol	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2-Methylnaphthalene	ND		950	190	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
2-Nitrophenol	ND		950	270	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4,6-Dinitro-2-methylphenol	ND		1800	950	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4-Bromophenyl phenyl ether	ND		950	130	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4-Chloro-3-methylphenol	ND		950	230	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4-Chloroaniline	ND		950	230	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4-Chlorophenyl phenyl ether	ND		950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4-Nitroaniline	ND		1800	500	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
4-Nitrophenol	ND		1800	660	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Acenaphthene	ND		950	140	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Acenaphthylene	210	J	950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Acetophenone	ND		950	130	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Anthracene	ND		950	230	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Atrazine	ND		950	330	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Benzaldehyde	ND		950	750	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Benzo[a]anthracene	910	J	950	95	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Benzo[a]pyrene	1000		950	140	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Benzo[b]fluoranthene	1200		950	150	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Benzo[g,h,i]perylene	840	J	950	100	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Benzo[k]fluoranthene	610	J	950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Bis(2-chloroethoxy)methane	ND		950	200	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Bis(2-chloroethyl)ether	ND		950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Bis(2-ethylhexyl) phthalate	ND		950	320	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Butyl benzyl phthalate	ND		950	160	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Caprolactam	ND		950	280	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Carbazole	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Chrysene	900	J	950	210	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Dibenz(a,h)anthracene	ND		950	170	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Di-n-butyl phthalate	ND		950	160	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Di-n-octyl phthalate	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Dibenzofuran	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Diethyl phthalate	ND		950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Dimethyl phthalate	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (2'-5')

Date Collected: 01/08/19 10:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-4

Matrix: Solid

Percent Solids: 89.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1500		950	100	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Fluorene	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Hexachlorobenzene	ND		950	130	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Hexachlorobutadiene	ND		950	140	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Hexachlorocyclopentadiene	ND		950	130	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Hexachloroethane	ND		950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Indeno[1,2,3-cd]pyrene	740 J		950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Isophorone	ND		950	200	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
N-Nitrosodi-n-propylamine	ND		950	160	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
N-Nitrosodiphenylamine	ND		950	770	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Naphthalene	ND		950	120	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Nitrobenzene	ND		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Pentachlorophenol	ND		1800	950	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Phenanthrene	900 J		950	140	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Phenol	ND		950	150	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5
Pyrene	1400		950	110	ug/Kg	☼	01/09/19 14:14	01/11/19 10:16	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	84		53 - 120	01/09/19 14:14	01/11/19 10:16	5
Phenol-d5 (Surr)	93		54 - 120	01/09/19 14:14	01/11/19 10:16	5
p-Terphenyl-d14 (Surr)	92		65 - 121	01/09/19 14:14	01/11/19 10:16	5
2,4,6-Tribromophenol (Surr)	87		54 - 120	01/09/19 14:14	01/11/19 10:16	5
2-Fluorobiphenyl	91		60 - 120	01/09/19 14:14	01/11/19 10:16	5
2-Fluorophenol (Surr)	93		52 - 120	01/09/19 14:14	01/11/19 10:16	5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg	☼	01/09/19 14:25	01/10/19 14:41	1
PCB-1221	ND		0.23	0.045	mg/Kg	☼	01/09/19 14:25	01/10/19 14:41	1
PCB-1232	ND		0.23	0.045	mg/Kg	☼	01/09/19 14:25	01/10/19 14:41	1
PCB-1242	ND		0.23	0.045	mg/Kg	☼	01/09/19 14:25	01/10/19 14:41	1
PCB-1248	ND		0.23	0.045	mg/Kg	☼	01/09/19 14:25	01/10/19 14:41	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	01/09/19 14:25	01/10/19 14:41	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	01/09/19 14:25	01/10/19 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		60 - 154	01/09/19 14:25	01/10/19 14:41	1
Tetrachloro-m-xylene	101		60 - 154	01/09/19 14:25	01/10/19 14:41	1
DCB Decachlorobiphenyl	110		65 - 174	01/09/19 14:25	01/10/19 14:41	1
DCB Decachlorobiphenyl	129		65 - 174	01/09/19 14:25	01/10/19 14:41	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (10'-15')

Date Collected: 01/08/19 10:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-5

Matrix: Solid

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.35	J	3.5	0.25	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,1,2,2-Tetrachloroethane	ND		3.5	0.57	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,1,2-Trichloroethane	ND		3.5	0.46	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	0.80	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,1-Dichloroethane	ND		3.5	0.43	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,1-Dichloroethene	0.68	J	3.5	0.43	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,2,4-Trichlorobenzene	ND		3.5	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,2-Dibromo-3-Chloropropane	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,2-Dichlorobenzene	ND		3.5	0.27	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,2-Dichloroethane	ND		3.5	0.18	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,2-Dichloropropane	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,3-Dichlorobenzene	ND		3.5	0.18	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,4-Dichlorobenzene	ND		3.5	0.49	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
2-Butanone (MEK)	ND		18	1.3	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
2-Hexanone	ND		18	1.8	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
4-Methyl-2-pentanone (MIBK)	ND		18	1.1	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Acetone	18		18	2.9	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Benzene	ND		3.5	0.17	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Bromodichloromethane	ND		3.5	0.47	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Bromoform	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Bromomethane	ND		3.5	0.32	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Carbon disulfide	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Carbon tetrachloride	ND		3.5	0.34	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Chlorobenzene	ND		3.5	0.46	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Dibromochloromethane	ND		3.5	0.45	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Chloroethane	ND		3.5	0.79	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Chloroform	1.5	J	3.5	0.22	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Chloromethane	ND		3.5	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
cis-1,2-Dichloroethene	14		3.5	0.45	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
cis-1,3-Dichloropropene	ND		3.5	0.50	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Cyclohexane	ND		3.5	0.49	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Dichlorodifluoromethane	ND		3.5	0.29	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Ethylbenzene	ND		3.5	0.24	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
1,2-Dibromoethane	ND		3.5	0.45	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Isopropylbenzene	ND		3.5	0.53	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Methyl acetate	ND		18	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Methyl tert-butyl ether	ND		3.5	0.34	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Methylcyclohexane	ND		3.5	0.53	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Methylene Chloride	1.8	J	3.5	1.6	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Styrene	ND		3.5	0.18	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Tetrachloroethene	1.3	J	3.5	0.47	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Toluene	0.33	J	3.5	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
trans-1,2-Dichloroethene	0.61	J	3.5	0.36	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
trans-1,3-Dichloropropene	ND		3.5	1.5	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Trichloroethene	1900	E	3.5	0.77	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Trichlorofluoromethane	ND		3.5	0.33	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Vinyl chloride	ND		3.5	0.43	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1
Xylenes, Total	ND		7.0	0.59	ug/Kg	☼	01/09/19 07:20	01/14/19 17:18	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (10'-15')

Date Collected: 01/08/19 10:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-5

Matrix: Solid

Percent Solids: 89.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 125	01/09/19 07:20	01/14/19 17:18	1
1,2-Dichloroethane-d4 (Surr)	104		64 - 126	01/09/19 07:20	01/14/19 17:18	1
4-Bromofluorobenzene (Surr)	99		72 - 126	01/09/19 07:20	01/14/19 17:18	1
Dibromofluoromethane (Surr)	102		60 - 140	01/09/19 07:20	01/14/19 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		970	270	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,1,2,2-Tetrachloroethane	ND		970	160	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,1,2-Trichloroethane	ND		970	200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		970	480	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,1-Dichloroethane	ND		970	300	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,1-Dichloroethene	ND		970	330	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,2,4-Trichlorobenzene	ND		970	370	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,2-Dibromo-3-Chloropropane	ND		970	480	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,2-Dichlorobenzene	ND		970	250	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,2-Dichloroethane	ND		970	390	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,2-Dichloropropane	ND		970	160	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,3-Dichlorobenzene	ND		970	260	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,4-Dichlorobenzene	ND		970	140	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
2-Butanone (MEK)	ND		4800	2900	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
2-Hexanone	ND		4800	2000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
4-Methyl-2-pentanone (MIBK)	ND		4800	310	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Acetone	ND		4800	4000	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Benzene	ND		970	180	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Bromodichloromethane	ND		970	190	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Bromoform	ND *		970	480	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Bromomethane	ND		970	210	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Carbon disulfide	ND		970	440	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Carbon tetrachloride	ND		970	250	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Chlorobenzene	ND		970	130	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Dibromochloromethane	ND		970	470	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Chloroethane	ND		970	200	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Chloroform	ND		970	660	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Chloromethane	ND		970	230	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
cis-1,2-Dichloroethene	ND		970	270	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
cis-1,3-Dichloropropene	ND		970	230	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Cyclohexane	ND		970	210	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Dichlorodifluoromethane	ND		970	420	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Ethylbenzene	ND		970	280	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
1,2-Dibromoethane	ND		970	170	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Isopropylbenzene	ND		970	140	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Methyl acetate	ND		4800	460	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Methyl tert-butyl ether	ND		970	370	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Methylcyclohexane	ND		970	450	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Methylene Chloride	ND		970	190	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Styrene	ND		970	230	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Tetrachloroethene	ND		970	130	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Toluene	ND		970	260	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
trans-1,2-Dichloroethene	ND		970	230	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (10'-15')

Date Collected: 01/08/19 10:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-5

Matrix: Solid

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		970	95	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Trichloroethene	51000		970	270	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Trichlorofluoromethane	ND		970	450	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Vinyl chloride	ND		970	320	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20
Xylenes, Total	ND		1900	540	ug/Kg	☼	01/15/19 08:38	01/16/19 00:33	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		50 - 149	01/15/19 08:38	01/16/19 00:33	20
1,2-Dichloroethane-d4 (Surr)	106		53 - 146	01/15/19 08:38	01/16/19 00:33	20
4-Bromofluorobenzene (Surr)	106		49 - 148	01/15/19 08:38	01/16/19 00:33	20
Dibromofluoromethane (Surr)	104		60 - 140	01/15/19 08:38	01/16/19 00:33	20

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (15'-20')

Date Collected: 01/08/19 10:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-6

Matrix: Solid

Percent Solids: 93.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,1,2,2-Tetrachloroethane	ND		4.3	0.69	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,1,2-Trichloroethane	ND		4.3	0.56	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	0.97	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,2,4-Trichlorobenzene	ND		4.3	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,2-Dibromo-3-Chloropropane	ND		4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,2-Dichloropropane	ND		4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
2-Butanone (MEK)	ND		21	1.6	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Acetone	43		21	3.6	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Benzene	ND		4.3	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Bromodichloromethane	ND		4.3	0.57	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Bromoform	ND		4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Bromomethane	ND		4.3	0.38	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Carbon disulfide	ND		4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Dibromochloromethane	ND		4.3	0.55	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Chloroethane	ND	*	4.3	0.97	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Chloromethane	ND		4.3	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
cis-1,2-Dichloroethene	ND		4.3	0.55	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
cis-1,3-Dichloropropene	ND		4.3	0.62	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Cyclohexane	ND		4.3	0.60	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Dichlorodifluoromethane	ND		4.3	0.35	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Ethylbenzene	ND		4.3	0.30	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
1,2-Dibromoethane	ND		4.3	0.55	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Isopropylbenzene	ND		4.3	0.64	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Methyl acetate	ND		21	2.6	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Methylcyclohexane	ND		4.3	0.65	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Styrene	ND		4.3	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Toluene	ND		4.3	0.32	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
trans-1,2-Dichloroethene	ND		4.3	0.44	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
trans-1,3-Dichloropropene	ND		4.3	1.9	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Trichloroethene	2.4	J	4.3	0.94	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Trichlorofluoromethane	ND		4.3	0.40	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1
Xylenes, Total	ND		8.6	0.72	ug/Kg	☼	01/09/19 07:20	01/14/19 23:32	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (15'-20')

Date Collected: 01/08/19 10:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-6

Matrix: Solid

Percent Solids: 93.0

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	103		71 - 125	01/09/19 07:20	01/14/19 23:32	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	01/09/19 07:20	01/14/19 23:32	1
<i>4-Bromofluorobenzene (Surr)</i>	86		72 - 126	01/09/19 07:20	01/14/19 23:32	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/09/19 07:20	01/14/19 23:32	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-3 (10'-13')

Date Collected: 01/08/19 11:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-7

Matrix: Solid

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,1,2,2-Tetrachloroethane	ND	F1	4.3	0.69	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,1,2-Trichloroethane	ND	F1	4.3	0.55	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	0.97	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,2,4-Trichlorobenzene	ND		4.3	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,2-Dibromo-3-Chloropropane	ND	F1	4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,2-Dichloropropane	ND		4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
2-Butanone (MEK)	3.2	J F1	21	1.6	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
4-Methyl-2-pentanone (MIBK)	ND	F1	21	1.4	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Acetone	88	F1	21	3.6	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Benzene	ND		4.3	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Bromodichloromethane	ND		4.3	0.57	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Bromoform	ND		4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Bromomethane	ND		4.3	0.38	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Carbon disulfide	ND		4.3	2.1	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Dibromochloromethane	ND		4.3	0.54	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Chloroethane	ND	*	4.3	0.96	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Chloromethane	ND		4.3	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
cis-1,2-Dichloroethene	12	F1	4.3	0.54	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
cis-1,3-Dichloropropene	ND		4.3	0.61	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Cyclohexane	ND		4.3	0.60	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Dichlorodifluoromethane	ND		4.3	0.35	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
1,2-Dibromoethane	ND	F1	4.3	0.55	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Isopropylbenzene	ND		4.3	0.64	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Methyl acetate	ND		21	2.6	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Methylcyclohexane	ND		4.3	0.65	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Styrene	ND		4.3	0.21	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Toluene	ND		4.3	0.32	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
trans-1,2-Dichloroethene	0.80	J	4.3	0.44	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
trans-1,3-Dichloropropene	ND		4.3	1.9	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Trichloroethene	6.4		4.3	0.94	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Trichlorofluoromethane	ND		4.3	0.40	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1
Xylenes, Total	ND		8.5	0.71	ug/Kg	☼	01/09/19 07:20	01/14/19 23:58	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-3 (10'-13')

Date Collected: 01/08/19 11:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-7

Matrix: Solid

Percent Solids: 87.3

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		71 - 125	01/09/19 07:20	01/14/19 23:58	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		64 - 126	01/09/19 07:20	01/14/19 23:58	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/09/19 07:20	01/14/19 23:58	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/09/19 07:20	01/14/19 23:58	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-3 (15'-20')

Date Collected: 01/08/19 11:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-8

Matrix: Solid

Percent Solids: 91.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.5	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,1,2,2-Tetrachloroethane	ND		3.5	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,1,2-Trichloroethane	ND		3.5	0.46	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	0.80	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,1-Dichloroethane	ND		3.5	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,1-Dichloroethene	ND		3.5	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,2,4-Trichlorobenzene	ND		3.5	0.21	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,2-Dibromo-3-Chloropropane	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,2-Dichlorobenzene	ND		3.5	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,2-Dichloroethane	ND		3.5	0.18	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,2-Dichloropropane	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,3-Dichlorobenzene	ND		3.5	0.18	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,4-Dichlorobenzene	ND		3.5	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
2-Butanone (MEK)	ND		18	1.3	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
2-Hexanone	ND		18	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
4-Methyl-2-pentanone (MIBK)	ND		18	1.2	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Acetone	ND		18	3.0	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Benzene	ND		3.5	0.17	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Bromodichloromethane	ND		3.5	0.47	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Bromoform	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Bromomethane	ND		3.5	0.32	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Carbon disulfide	ND		3.5	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Carbon tetrachloride	ND		3.5	0.34	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Chlorobenzene	ND		3.5	0.46	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Dibromochloromethane	ND		3.5	0.45	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Chloroethane	ND	*	3.5	0.79	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Chloroform	ND		3.5	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Chloromethane	ND		3.5	0.21	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
cis-1,2-Dichloroethene	ND		3.5	0.45	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
cis-1,3-Dichloropropene	ND		3.5	0.51	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Cyclohexane	ND		3.5	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Dichlorodifluoromethane	ND		3.5	0.29	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Ethylbenzene	ND		3.5	0.24	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
1,2-Dibromoethane	ND		3.5	0.45	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Isopropylbenzene	ND		3.5	0.53	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Methyl acetate	ND		18	2.1	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Methyl tert-butyl ether	ND		3.5	0.34	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Methylcyclohexane	ND		3.5	0.53	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Methylene Chloride	ND		3.5	1.6	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Styrene	ND		3.5	0.18	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Tetrachloroethene	ND		3.5	0.47	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Toluene	ND		3.5	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
trans-1,2-Dichloroethene	ND		3.5	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
trans-1,3-Dichloropropene	ND		3.5	1.5	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Trichloroethene	1.5	J	3.5	0.77	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Trichlorofluoromethane	ND		3.5	0.33	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Vinyl chloride	ND		3.5	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1
Xylenes, Total	ND		7.0	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 00:25	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-3 (15'-20')

Date Collected: 01/08/19 11:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-8

Matrix: Solid

Percent Solids: 91.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	102		71 - 125	01/09/19 07:20	01/15/19 00:25	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	01/09/19 07:20	01/15/19 00:25	1
<i>4-Bromofluorobenzene (Surr)</i>	94		72 - 126	01/09/19 07:20	01/15/19 00:25	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/09/19 07:20	01/15/19 00:25	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-4 (4'-9')

Date Collected: 01/08/19 11:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-9

Matrix: Solid

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.8	0.27	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,1,2,2-Tetrachloroethane	ND		3.8	0.61	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,1,2-Trichloroethane	ND		3.8	0.49	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	0.86	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,1-Dichloroethane	ND		3.8	0.46	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,1-Dichloroethene	ND		3.8	0.46	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,2,4-Trichlorobenzene	ND		3.8	0.23	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,2-Dibromo-3-Chloropropane	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,2-Dichlorobenzene	ND		3.8	0.29	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,2-Dichloroethane	ND		3.8	0.19	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,2-Dichloropropane	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,3-Dichlorobenzene	ND		3.8	0.19	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
2-Butanone (MEK)	ND		19	1.4	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
2-Hexanone	ND		19	1.9	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
4-Methyl-2-pentanone (MIBK)	ND		19	1.2	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Acetone	19		19	3.2	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Benzene	ND		3.8	0.18	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Bromodichloromethane	ND		3.8	0.50	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Bromoform	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Bromomethane	ND		3.8	0.34	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Carbon disulfide	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Carbon tetrachloride	ND		3.8	0.36	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Chlorobenzene	ND		3.8	0.50	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Dibromochloromethane	ND		3.8	0.48	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Chloroethane	ND		3.8	0.85	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Chloroform	ND		3.8	0.23	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Chloromethane	ND		3.8	0.23	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
cis-1,2-Dichloroethene	ND		3.8	0.48	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
cis-1,3-Dichloropropene	ND		3.8	0.54	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Cyclohexane	ND		3.8	0.53	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Dichlorodifluoromethane	ND		3.8	0.31	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Ethylbenzene	ND		3.8	0.26	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
1,2-Dibromoethane	ND		3.8	0.48	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Isopropylbenzene	ND		3.8	0.57	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Methyl acetate	ND		19	2.3	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Methyl tert-butyl ether	ND		3.8	0.37	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Methylcyclohexane	ND		3.8	0.57	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Methylene Chloride	1.9 J		3.8	1.7	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Styrene	ND		3.8	0.19	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Tetrachloroethene	ND		3.8	0.50	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Toluene	ND		3.8	0.28	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
trans-1,2-Dichloroethene	ND		3.8	0.39	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
trans-1,3-Dichloropropene	ND		3.8	1.7	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Trichloroethene	0.90 J		3.8	0.83	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Trichlorofluoromethane	ND		3.8	0.36	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Vinyl chloride	ND		3.8	0.46	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1
Xylenes, Total	ND		7.5	0.63	ug/Kg	☼	01/09/19 07:20	01/14/19 19:02	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-4 (4'-9')

Date Collected: 01/08/19 11:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-9

Matrix: Solid

Percent Solids: 89.6

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/09/19 07:20	01/14/19 19:02	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/09/19 07:20	01/14/19 19:02	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/09/19 07:20	01/14/19 19:02	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/09/19 07:20	01/14/19 19:02	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-4 (9'-15')

Lab Sample ID: 480-147622-10

Date Collected: 01/08/19 12:00

Matrix: Solid

Date Received: 01/09/19 01:00

Percent Solids: 93.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.29	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,1,2,2-Tetrachloroethane	ND		4.1	0.66	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,1,2-Trichloroethane	ND		4.1	0.53	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.92	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,1-Dichloroethane	ND		4.1	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,2,4-Trichlorobenzene	ND		4.1	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,2-Dibromo-3-Chloropropane	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,2-Dichloropropane	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
2-Butanone (MEK)	ND		20	1.5	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Acetone	ND		20	3.4	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Benzene	ND		4.1	0.20	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Bromodichloromethane	ND		4.1	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Bromoform	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Bromomethane	ND		4.1	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Carbon disulfide	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Carbon tetrachloride	ND		4.1	0.39	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Dibromochloromethane	ND		4.1	0.52	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Chloroethane	ND	*	4.1	0.92	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Chloromethane	ND		4.1	0.24	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
cis-1,2-Dichloroethene	ND		4.1	0.52	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
cis-1,3-Dichloropropene	ND		4.1	0.58	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Cyclohexane	ND		4.1	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Dichlorodifluoromethane	ND		4.1	0.33	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
1,2-Dibromoethane	ND		4.1	0.52	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Isopropylbenzene	ND		4.1	0.61	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Methylcyclohexane	ND		4.1	0.62	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Styrene	ND		4.1	0.20	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Tetrachloroethene	ND		4.1	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Toluene	ND		4.1	0.31	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
trans-1,2-Dichloroethene	ND		4.1	0.42	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
trans-1,3-Dichloropropene	ND		4.1	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Trichloroethene	ND		4.1	0.89	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Trichlorofluoromethane	ND		4.1	0.38	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Vinyl chloride	ND		4.1	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1
Xylenes, Total	ND		8.1	0.68	ug/Kg	☼	01/09/19 07:20	01/15/19 00:50	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-4 (9'-15')

Date Collected: 01/08/19 12:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-10

Matrix: Solid

Percent Solids: 93.4

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/09/19 07:20	01/15/19 00:50	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		64 - 126	01/09/19 07:20	01/15/19 00:50	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/09/19 07:20	01/15/19 00:50	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/09/19 07:20	01/15/19 00:50	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (0'-5')

Lab Sample ID: 480-147622-11

Date Collected: 01/08/19 12:20

Matrix: Solid

Date Received: 01/09/19 01:00

Percent Solids: 92.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7350		10.9	4.8	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Antimony	ND		16.3	0.43	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Arsenic	6.0		2.2	0.43	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Barium	24.7		0.54	0.12	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Beryllium	0.31		0.22	0.030	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Cadmium	0.13	J	0.22	0.033	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Calcium	81600	B	54.3	3.6	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Chromium	10.3		0.54	0.22	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Cobalt	7.4		0.54	0.054	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Copper	41.8		1.1	0.23	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Iron	11000		10.9	3.8	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Lead	6.6		1.1	0.26	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Magnesium	43200		21.7	1.0	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Manganese	404	B	0.22	0.035	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Nickel	12.7		5.4	0.25	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Potassium	2990		32.6	21.7	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Selenium	ND		4.3	0.43	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Silver	ND		0.65	0.22	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Sodium	133	J B	152	14.1	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Thallium	ND		6.5	0.33	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Vanadium	13.2		0.54	0.12	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1
Zinc	19.5		2.2	0.70	mg/Kg	☼	01/10/19 08:56	01/10/19 21:00	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.021	0.0083	mg/Kg	☼	01/09/19 13:10	01/09/19 15:40	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (0'-5')

Date Collected: 01/08/19 12:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-12

Matrix: Solid

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		180	27	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2,4-Dichlorophenol	ND		180	20	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2,4-Dimethylphenol	ND		180	45	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2-Chlorophenol	ND		180	34	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2-Methylphenol	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2-Methylnaphthalene	ND		180	37	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4-Chloro-3-methylphenol	ND		180	46	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4-Chloroaniline	ND		180	46	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4-Methylphenol	ND		360	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Acenaphthene	ND		180	27	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Acenaphthylene	ND		180	24	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Acetophenone	ND		180	25	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Anthracene	ND		180	46	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Atrazine	ND		180	64	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Benzaldehyde	ND		180	150	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Benzo[a]pyrene	ND		180	27	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Benzo[b]fluoranthene	ND		180	29	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Benzo[g,h,i]perylene	ND		180	20	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Benzo[k]fluoranthene	ND		180	24	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Caprolactam	ND		180	55	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Carbazole	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Chrysene	ND		180	41	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Dibenz(a,h)anthracene	ND		180	33	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Dibenzofuran	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (0'-5')

Date Collected: 01/08/19 12:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-12

Matrix: Solid

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		180	20	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Fluorene	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Hexachloroethane	ND		180	24	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Indeno[1,2,3-cd]pyrene	ND		180	23	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Isophorone	ND		180	39	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Naphthalene	ND		180	24	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Nitrobenzene	ND		180	21	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Phenanthrene	ND		180	27	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Phenol	ND		180	28	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1
Pyrene	ND		180	22	ug/Kg	☼	01/09/19 14:14	01/11/19 10:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	80		53 - 120	01/09/19 14:14	01/11/19 10:41	1
Phenol-d5 (Surr)	85		54 - 120	01/09/19 14:14	01/11/19 10:41	1
p-Terphenyl-d14 (Surr)	97		65 - 121	01/09/19 14:14	01/11/19 10:41	1
2,4,6-Tribromophenol (Surr)	90		54 - 120	01/09/19 14:14	01/11/19 10:41	1
2-Fluorobiphenyl	86		60 - 120	01/09/19 14:14	01/11/19 10:41	1
2-Fluorophenol (Surr)	79		52 - 120	01/09/19 14:14	01/11/19 10:41	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.050	mg/Kg	☼	01/09/19 14:25	01/10/19 15:13	1
PCB-1221	ND		0.25	0.050	mg/Kg	☼	01/09/19 14:25	01/10/19 15:13	1
PCB-1232	ND		0.25	0.050	mg/Kg	☼	01/09/19 14:25	01/10/19 15:13	1
PCB-1242	ND		0.25	0.050	mg/Kg	☼	01/09/19 14:25	01/10/19 15:13	1
PCB-1248	ND		0.25	0.050	mg/Kg	☼	01/09/19 14:25	01/10/19 15:13	1
PCB-1254	ND		0.25	0.12	mg/Kg	☼	01/09/19 14:25	01/10/19 15:13	1
PCB-1260	ND		0.25	0.12	mg/Kg	☼	01/09/19 14:25	01/10/19 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		60 - 154	01/09/19 14:25	01/10/19 15:13	1
Tetrachloro-m-xylene	103		60 - 154	01/09/19 14:25	01/10/19 15:13	1
DCB Decachlorobiphenyl	115		65 - 174	01/09/19 14:25	01/10/19 15:13	1
DCB Decachlorobiphenyl	138		65 - 174	01/09/19 14:25	01/10/19 15:13	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (5'-10')

Date Collected: 01/08/19 13:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-13

Matrix: Solid

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,1,2,2-Tetrachloroethane	ND		4.2	0.68	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,1,2-Trichloroethane	ND		4.2	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.95	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,2,4-Trichlorobenzene	ND		4.2	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,2-Dibromo-3-Chloropropane	ND		4.2	2.1	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
2-Butanone (MEK)	ND		21	1.5	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Acetone	20	J	21	3.5	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Benzene	ND		4.2	0.21	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Bromodichloromethane	ND		4.2	0.56	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Chloroethane	ND	*	4.2	0.95	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Chloromethane	ND		4.2	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
cis-1,3-Dichloropropene	ND		4.2	0.60	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Isopropylbenzene	ND		4.2	0.63	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Methyl acetate	ND		21	2.5	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Methylcyclohexane	ND		4.2	0.64	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Methylene Chloride	1.9	J	4.2	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Styrene	ND		4.2	0.21	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Toluene	ND		4.2	0.32	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
trans-1,2-Dichloroethene	ND		4.2	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
trans-1,3-Dichloropropene	ND		4.2	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1
Xylenes, Total	ND		8.4	0.70	ug/Kg	☼	01/09/19 07:20	01/15/19 01:16	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (5'-10')

Date Collected: 01/08/19 13:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-13

Matrix: Solid

Percent Solids: 89.6

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/09/19 07:20	01/15/19 01:16	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	01/09/19 07:20	01/15/19 01:16	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/09/19 07:20	01/15/19 01:16	1
<i>Dibromofluoromethane (Surr)</i>	99		60 - 140	01/09/19 07:20	01/15/19 01:16	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (10'-15')

Date Collected: 01/08/19 13:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-14

Matrix: Solid

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.8	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,1,2,2-Tetrachloroethane	ND		3.8	0.61	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,1,2-Trichloroethane	ND		3.8	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	0.86	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,1-Dichloroethane	ND		3.8	0.46	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,1-Dichloroethene	ND		3.8	0.46	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,2,4-Trichlorobenzene	ND		3.8	0.23	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,2-Dibromo-3-Chloropropane	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,2-Dichlorobenzene	ND		3.8	0.29	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,2-Dichloroethane	ND		3.8	0.19	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,2-Dichloropropane	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,3-Dichlorobenzene	ND		3.8	0.19	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
2-Butanone (MEK)	ND		19	1.4	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
2-Hexanone	ND		19	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
4-Methyl-2-pentanone (MIBK)	ND		19	1.2	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Acetone	15	J	19	3.2	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Benzene	ND		3.8	0.18	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Bromodichloromethane	ND		3.8	0.50	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Bromoform	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Bromomethane	ND		3.8	0.34	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Carbon disulfide	ND		3.8	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Carbon tetrachloride	ND		3.8	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Chlorobenzene	ND		3.8	0.50	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Dibromochloromethane	ND		3.8	0.48	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Chloroethane	ND	*	3.8	0.85	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Chloroform	ND		3.8	0.23	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Chloromethane	ND		3.8	0.23	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
cis-1,2-Dichloroethene	ND		3.8	0.48	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
cis-1,3-Dichloropropene	ND		3.8	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Cyclohexane	ND		3.8	0.53	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Dichlorodifluoromethane	ND		3.8	0.31	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Ethylbenzene	ND		3.8	0.26	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
1,2-Dibromoethane	ND		3.8	0.48	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Isopropylbenzene	ND		3.8	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Methyl acetate	ND		19	2.3	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Methyl tert-butyl ether	ND		3.8	0.37	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Methylcyclohexane	ND		3.8	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Methylene Chloride	1.7	J	3.8	1.7	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Styrene	ND		3.8	0.19	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Toluene	ND		3.8	0.28	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
trans-1,2-Dichloroethene	ND		3.8	0.39	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
trans-1,3-Dichloropropene	ND		3.8	1.7	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Trichloroethene	ND		3.8	0.83	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Trichlorofluoromethane	ND		3.8	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Vinyl chloride	ND		3.8	0.46	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1
Xylenes, Total	ND		7.5	0.63	ug/Kg	☼	01/09/19 07:20	01/15/19 01:42	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (10'-15')

Date Collected: 01/08/19 13:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-14

Matrix: Solid

Percent Solids: 90.2

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/09/19 07:20	01/15/19 01:42	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	01/09/19 07:20	01/15/19 01:42	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/09/19 07:20	01/15/19 01:42	1
<i>Dibromofluoromethane (Surr)</i>	99		60 - 140	01/09/19 07:20	01/15/19 01:42	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-10 (10'-15')

Date Collected: 01/08/19 13:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-15

Matrix: Solid

Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.72	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Acetone	ND		22	3.7	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Benzene	ND		4.4	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Bromomethane	ND		4.4	0.40	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Dibromochloromethane	ND		4.4	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Chloroethane	ND	*	4.4	1.0	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Chloromethane	ND		4.4	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
cis-1,2-Dichloroethene	ND		4.4	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
cis-1,3-Dichloropropene	ND		4.4	0.64	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Cyclohexane	ND		4.4	0.62	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
1,2-Dibromoethane	ND		4.4	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Isopropylbenzene	ND		4.4	0.67	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Methylcyclohexane	ND		4.4	0.67	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Methylene Chloride	2.1	J	4.4	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Styrene	ND		4.4	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Toluene	ND		4.4	0.33	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
trans-1,2-Dichloroethene	ND		4.4	0.46	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Trichlorofluoromethane	ND		4.4	0.42	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1
Xylenes, Total	ND		8.8	0.74	ug/Kg	☼	01/09/19 07:20	01/15/19 02:08	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-10 (10'-15')

Date Collected: 01/08/19 13:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-15

Matrix: Solid

Percent Solids: 90.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/09/19 07:20	01/15/19 02:08	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		64 - 126	01/09/19 07:20	01/15/19 02:08	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/09/19 07:20	01/15/19 02:08	1
<i>Dibromofluoromethane (Surr)</i>	99		60 - 140	01/09/19 07:20	01/15/19 02:08	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-10 (15'-20')

Lab Sample ID: 480-147622-16

Date Collected: 01/08/19 14:00

Matrix: Solid

Date Received: 01/09/19 01:00

Percent Solids: 90.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Acetone	ND		22	3.7	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Benzene	ND		4.4	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Bromomethane	ND		4.4	0.40	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Chloroethane	ND	*	4.4	0.99	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Chloromethane	ND		4.4	0.27	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Cyclohexane	ND		4.4	0.62	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Methylcyclohexane	ND		4.4	0.67	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Methylene Chloride	2.0	J	4.4	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Styrene	ND		4.4	0.22	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Toluene	0.65	J	4.4	0.33	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Trichlorofluoromethane	ND		4.4	0.42	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1
Xylenes, Total	ND		8.8	0.74	ug/Kg	☼	01/09/19 07:20	01/15/19 02:33	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-10 (15'-20')

Date Collected: 01/08/19 14:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-16

Matrix: Solid

Percent Solids: 90.0

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/09/19 07:20	01/15/19 02:33	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	102		64 - 126	01/09/19 07:20	01/15/19 02:33	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/09/19 07:20	01/15/19 02:33	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/09/19 07:20	01/15/19 02:33	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-9 (10'-15')

Date Collected: 01/08/19 14:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-17

Matrix: Solid

Percent Solids: 87.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,1,2,2-Tetrachloroethane	ND		4.8	0.78	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,1,2-Trichloroethane	ND		4.8	0.62	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,1-Dichloroethane	ND		4.8	0.58	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,2-Dibromo-3-Chloropropane	ND		4.8	2.4	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,2-Dichlorobenzene	ND		4.8	0.37	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Acetone	22	J	24	4.0	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Benzene	ND		4.8	0.23	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Bromodichloromethane	ND		4.8	0.64	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Bromomethane	ND		4.8	0.43	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Carbon tetrachloride	ND		4.8	0.46	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Chlorobenzene	ND		4.8	0.63	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Dibromochloromethane	ND		4.8	0.61	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Chloroethane	ND	*	4.8	1.1	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Chloroform	ND		4.8	0.30	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
cis-1,2-Dichloroethene	ND		4.8	0.61	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Cyclohexane	ND		4.8	0.67	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Dichlorodifluoromethane	ND		4.8	0.40	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
1,2-Dibromoethane	ND		4.8	0.61	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Isopropylbenzene	ND		4.8	0.72	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Methyl acetate	ND		24	2.9	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Methylcyclohexane	ND		4.8	0.73	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Methylene Chloride	2.9	J	4.8	2.2	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Styrene	ND		4.8	0.24	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Toluene	ND		4.8	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
trans-1,2-Dichloroethene	ND		4.8	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Trichloroethene	ND		4.8	1.1	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Vinyl chloride	ND		4.8	0.58	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1
Xylenes, Total	ND		9.6	0.80	ug/Kg	☼	01/09/19 07:20	01/15/19 03:00	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-9 (10'-15')

Date Collected: 01/08/19 14:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-17

Matrix: Solid

Percent Solids: 87.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/09/19 07:20	01/15/19 03:00	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/09/19 07:20	01/15/19 03:00	1
<i>4-Bromofluorobenzene (Surr)</i>	100		72 - 126	01/09/19 07:20	01/15/19 03:00	1
<i>Dibromofluoromethane (Surr)</i>	99		60 - 140	01/09/19 07:20	01/15/19 03:00	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-9 (15'-20')

Lab Sample ID: 480-147622-18

Date Collected: 01/08/19 14:40

Matrix: Solid

Date Received: 01/09/19 01:00

Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.29	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,1,2,2-Tetrachloroethane	ND		4.1	0.66	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,1,2-Trichloroethane	ND		4.1	0.53	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.92	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,1-Dichloroethane	ND		4.1	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,2,4-Trichlorobenzene	ND		4.1	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,2-Dibromo-3-Chloropropane	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,2-Dichloropropane	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
2-Butanone (MEK)	ND		20	1.5	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Acetone	7.0	J	20	3.4	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Benzene	ND		4.1	0.20	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Bromodichloromethane	ND		4.1	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Bromoform	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Bromomethane	ND		4.1	0.36	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Carbon disulfide	ND		4.1	2.0	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Carbon tetrachloride	ND		4.1	0.39	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Chlorobenzene	ND		4.1	0.53	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Dibromochloromethane	ND		4.1	0.52	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Chloroethane	ND		4.1	0.92	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Chloromethane	ND		4.1	0.24	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
cis-1,2-Dichloroethene	ND		4.1	0.52	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
cis-1,3-Dichloropropene	ND		4.1	0.58	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Cyclohexane	ND		4.1	0.57	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Dichlorodifluoromethane	ND		4.1	0.33	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
1,2-Dibromoethane	ND		4.1	0.52	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Isopropylbenzene	ND		4.1	0.61	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Methylcyclohexane	ND		4.1	0.62	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Styrene	ND		4.1	0.20	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Tetrachloroethene	ND		4.1	0.54	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Toluene	ND		4.1	0.31	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
trans-1,2-Dichloroethene	ND		4.1	0.42	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
trans-1,3-Dichloropropene	ND		4.1	1.8	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Trichloroethene	ND		4.1	0.89	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Trichlorofluoromethane	ND		4.1	0.38	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Vinyl chloride	ND		4.1	0.49	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1
Xylenes, Total	ND		8.1	0.68	ug/Kg	☼	01/09/19 07:20	01/15/19 11:29	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-9 (15'-20')

Date Collected: 01/08/19 14:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-18

Matrix: Solid

Percent Solids: 91.7

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/09/19 07:20	01/15/19 11:29	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/09/19 07:20	01/15/19 11:29	1
<i>4-Bromofluorobenzene (Surr)</i>	94		72 - 126	01/09/19 07:20	01/15/19 11:29	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/09/19 07:20	01/15/19 11:29	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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 (50-149)	DCA (53-146)	BFB (49-148)	DBFM (60-140)
480-147622-1	SB-1 (12'-15')	100	105	103	103
480-147622-2	SB-1 (17'-20')	99	107	103	103
480-147622-5 - DL	SB-2 (10'-15')	103	106	106	104
LCS 480-455051/1-A	Lab Control Sample	99	106	102	104
LCSD 480-455051/2-A	Lab Control Sample Dup	98	103	106	100
MB 480-455051/3-A	Method Blank	100	108	103	101

Surrogate Legend

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

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)	DCA (64-126)	BFB (72-126)	DBFM (60-140)
480-147622-5	SB-2 (10'-15')	100	104	99	102
480-147622-6	SB-2 (15'-20')	103	103	86	101
480-147622-7	SB-3 (10'-13')	99	101	99	100
480-147622-7 MS	SB-3 (10'-13')	98	91	101	99
480-147622-7 MSD	SB-3 (10'-13')	98	93	101	99
480-147622-8	SB-3 (15'-20')	102	103	94	100
480-147622-9	SB-4 (4'-9')	98	105	99	100
480-147622-10	SB-4 (9'-15')	98	104	98	100
480-147622-13	SB-5 (5'-10')	98	103	99	99
480-147622-14	SB-5 (10'-15')	98	103	98	99
480-147622-15	SB-10 (10'-15')	98	104	98	99
480-147622-16	SB-10 (15'-20')	98	102	98	100
480-147622-17	SB-9 (10'-15')	98	106	100	99
480-147622-18	SB-9 (15'-20')	100	105	94	102
LCS 480-454910/1-A	Lab Control Sample	100	99	102	101
LCS 480-455001/1-A	Lab Control Sample	99	100	102	100
LCS 480-455052/1-A	Lab Control Sample	99	103	102	102
MB 480-454910/2-A	Method Blank	100	101	100	101
MB 480-455001/2-A	Method Blank	98	103	100	101
MB 480-455052/2-A	Method Blank	99	101	98	100

Surrogate Legend

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

TestAmerica Buffalo

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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 (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-147622-4	SB-2 (2'-5')	84	93	92	87	91	93
480-147622-12	SB-5 (0'-5')	80	85	97	90	86	79
LCS 480-454394/2-A	Lab Control Sample	88	88	104	107	91	83
MB 480-454394/1-A	Method Blank	82	83	98	82	89	86

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)
480-147622-4	SB-2 (2'-5')	90	101	110	129
480-147622-4 MS	SB-2 (2'-5')	108	122	133	156
480-147622-4 MSD	SB-2 (2'-5')	114	121	141	164
480-147622-12	SB-5 (0'-5')	91	103	115	138
LCS 480-454399/2-A	Lab Control Sample	146	144	187 X	203 X
MB 480-454399/1-A	Method Blank	101	113	133	154

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: MB 480-454910/2-A

Matrix: Solid

Analysis Batch: 454900

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.3	0.45	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,1,2,2-Tetrachloroethane	ND		6.3	1.0	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,1,2-Trichloroethane	ND		6.3	0.81	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.3	1.4	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,1-Dichloroethane	ND		6.3	0.76	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,1-Dichloroethene	ND		6.3	0.77	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,2,4-Trichlorobenzene	ND		6.3	0.38	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,2-Dibromo-3-Chloropropane	ND		6.3	3.1	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,2-Dichlorobenzene	ND		6.3	0.49	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,2-Dichloroethane	ND		6.3	0.31	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,2-Dichloropropane	ND		6.3	3.1	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,3-Dichlorobenzene	ND		6.3	0.32	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,4-Dichlorobenzene	ND		6.3	0.88	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
2-Butanone (MEK)	ND		31	2.3	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
2-Hexanone	ND		31	3.1	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
4-Methyl-2-pentanone (MIBK)	ND		31	2.1	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Acetone	ND		31	5.3	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Benzene	ND		6.3	0.31	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Bromodichloromethane	ND		6.3	0.84	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Bromoform	ND		6.3	3.1	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Bromomethane	ND		6.3	0.56	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Carbon disulfide	ND		6.3	3.1	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Carbon tetrachloride	ND		6.3	0.61	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Chlorobenzene	ND		6.3	0.83	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Dibromochloromethane	ND		6.3	0.80	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Chloroethane	ND		6.3	1.4	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Chloroform	ND		6.3	0.39	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Chloromethane	ND		6.3	0.38	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
cis-1,2-Dichloroethene	ND		6.3	0.80	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
cis-1,3-Dichloropropene	ND		6.3	0.90	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Cyclohexane	ND		6.3	0.88	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Dichlorodifluoromethane	ND		6.3	0.52	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Ethylbenzene	ND		6.3	0.43	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
1,2-Dibromoethane	ND		6.3	0.80	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Isopropylbenzene	ND		6.3	0.94	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Methyl acetate	ND		31	3.8	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Methyl tert-butyl ether	ND		6.3	0.61	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Methylcyclohexane	ND		6.3	0.95	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Methylene Chloride	ND		6.3	2.9	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Styrene	ND		6.3	0.31	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Tetrachloroethene	ND		6.3	0.84	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Toluene	ND		6.3	0.47	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
trans-1,2-Dichloroethene	ND		6.3	0.65	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
trans-1,3-Dichloropropene	ND		6.3	2.8	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Trichloroethene	ND		6.3	1.4	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Trichlorofluoromethane	ND		6.3	0.59	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Vinyl chloride	ND		6.3	0.76	ug/Kg		01/14/19 12:00	01/14/19 13:14	1
Xylenes, Total	ND		13	1.1	ug/Kg		01/14/19 12:00	01/14/19 13:14	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 125	01/14/19 12:00	01/14/19 13:14	1
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	01/14/19 12:00	01/14/19 13:14	1
4-Bromofluorobenzene (Surr)	100		72 - 126	01/14/19 12:00	01/14/19 13:14	1
Dibromofluoromethane (Surr)	101		60 - 140	01/14/19 12:00	01/14/19 13:14	1

Lab Sample ID: LCS 480-454910/1-A
Matrix: Solid
Analysis Batch: 454900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 454910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.8		ug/Kg		102	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	80 - 120
1,1,2-Trichloroethane	50.0	51.4		ug/Kg		103	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.4		ug/Kg		103	60 - 140
1,1-Dichloroethane	50.0	50.5		ug/Kg		101	73 - 126
1,1-Dichloroethene	50.0	49.8		ug/Kg		100	59 - 125
1,2,4-Trichlorobenzene	50.0	51.1		ug/Kg		102	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	53.6		ug/Kg		107	63 - 124
1,2-Dichlorobenzene	50.0	50.5		ug/Kg		101	75 - 120
1,2-Dichloroethane	50.0	50.7		ug/Kg		101	77 - 122
1,2-Dichloropropane	50.0	50.9		ug/Kg		102	75 - 124
1,3-Dichlorobenzene	50.0	50.8		ug/Kg		102	74 - 120
1,4-Dichlorobenzene	50.0	50.6		ug/Kg		101	73 - 120
2-Butanone (MEK)	250	288		ug/Kg		115	70 - 134
2-Hexanone	250	286		ug/Kg		115	59 - 130
4-Methyl-2-pentanone (MIBK)	250	277		ug/Kg		111	65 - 133
Acetone	250	289		ug/Kg		116	61 - 137
Benzene	50.0	50.6		ug/Kg		101	79 - 127
Bromodichloromethane	50.0	51.8		ug/Kg		104	80 - 122
Bromoform	50.0	57.0		ug/Kg		114	68 - 126
Bromomethane	50.0	50.9		ug/Kg		102	37 - 149
Carbon disulfide	50.0	49.0		ug/Kg		98	64 - 131
Carbon tetrachloride	50.0	52.5		ug/Kg		105	75 - 135
Chlorobenzene	50.0	50.9		ug/Kg		102	76 - 124
Dibromochloromethane	50.0	54.9		ug/Kg		110	76 - 125
Chloroethane	50.0	44.3		ug/Kg		89	69 - 135
Chloroform	50.0	50.7		ug/Kg		101	80 - 120
Chloromethane	50.0	48.2		ug/Kg		96	63 - 127
cis-1,2-Dichloroethene	50.0	50.5		ug/Kg		101	81 - 120
cis-1,3-Dichloropropene	50.0	52.4		ug/Kg		105	80 - 120
Cyclohexane	50.0	49.7		ug/Kg		99	65 - 120
Dichlorodifluoromethane	50.0	46.8		ug/Kg		94	57 - 142
Ethylbenzene	50.0	50.8		ug/Kg		102	80 - 120
1,2-Dibromoethane	50.0	52.9		ug/Kg		106	78 - 120
Isopropylbenzene	50.0	49.6		ug/Kg		99	72 - 120
Methyl acetate	100	110		ug/Kg		110	55 - 136
Methyl tert-butyl ether	50.0	52.8		ug/Kg		106	63 - 125
Methylcyclohexane	50.0	51.1		ug/Kg		102	60 - 140
Methylene Chloride	50.0	45.8		ug/Kg		92	61 - 127
Styrene	50.0	51.0		ug/Kg		102	80 - 120
Tetrachloroethene	50.0	51.4		ug/Kg		103	74 - 122
Toluene	50.0	50.4		ug/Kg		101	74 - 128
trans-1,2-Dichloroethene	50.0	51.4		ug/Kg		103	78 - 126

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCS 480-454910/1-A

Matrix: Solid

Analysis Batch: 454900

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	52.2		ug/Kg		104	73 - 123
Trichloroethene	50.0	50.9		ug/Kg		102	77 - 129
Trichlorofluoromethane	50.0	48.1		ug/Kg		96	65 - 146
Vinyl chloride	50.0	48.7		ug/Kg		97	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 125
1,2-Dichloroethane-d4 (Surr)	99		64 - 126
4-Bromofluorobenzene (Surr)	102		72 - 126
Dibromofluoromethane (Surr)	101		60 - 140

Lab Sample ID: 480-147622-7 MS

Matrix: Solid

Analysis Batch: 454900

Client Sample ID: SB-3 (10'-13')

Prep Type: Total/NA

Prep Batch: 454910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		41.6	38.4		ug/Kg	☼	92	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1	41.6	27.6	F1	ug/Kg	☼	66	80 - 120
1,1,2-Trichloroethane	ND	F1	41.6	32.2	F1	ug/Kg	☼	77	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		41.6	38.0		ug/Kg	☼	91	60 - 140
1,1-Dichloroethane	ND		41.6	39.1		ug/Kg	☼	94	73 - 126
1,1-Dichloroethene	ND		41.6	37.2		ug/Kg	☼	89	59 - 125
1,2,4-Trichlorobenzene	ND		41.6	29.9		ug/Kg	☼	72	64 - 120
1,2-Dibromo-3-Chloropropane	ND	F1	41.6	23.4	F1	ug/Kg	☼	56	63 - 124
1,2-Dichlorobenzene	ND		41.6	34.0		ug/Kg	☼	82	75 - 120
1,2-Dichloroethane	ND		41.6	35.1		ug/Kg	☼	84	77 - 122
1,2-Dichloropropane	ND		41.6	38.6		ug/Kg	☼	93	75 - 124
1,3-Dichlorobenzene	ND		41.6	34.9		ug/Kg	☼	84	74 - 120
1,4-Dichlorobenzene	ND		41.6	34.5		ug/Kg	☼	83	73 - 120
2-Butanone (MEK)	3.2	J F1	208	124	F1	ug/Kg	☼	58	70 - 134
2-Hexanone	ND		208	126		ug/Kg	☼	61	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	F1	208	129	F1	ug/Kg	☼	62	65 - 133
Acetone	88	F1	208	127	F1	ug/Kg	☼	19	61 - 137
Benzene	ND		41.6	38.7		ug/Kg	☼	93	79 - 127
Bromodichloromethane	ND		41.6	37.8		ug/Kg	☼	91	80 - 122
Bromoform	ND		41.6	31.3		ug/Kg	☼	75	68 - 126
Bromomethane	ND		41.6	39.5		ug/Kg	☼	95	37 - 149
Carbon disulfide	ND		41.6	37.0		ug/Kg	☼	89	64 - 131
Carbon tetrachloride	ND		41.6	39.4		ug/Kg	☼	95	75 - 135
Chlorobenzene	ND		41.6	36.8		ug/Kg	☼	88	76 - 124
Dibromochloromethane	ND		41.6	35.1		ug/Kg	☼	84	76 - 125
Chloroethane	ND	*	41.6	37.5		ug/Kg	☼	90	69 - 135
Chloroform	ND		41.6	39.1		ug/Kg	☼	94	80 - 120
Chloromethane	ND		41.6	35.8		ug/Kg	☼	86	63 - 127
cis-1,2-Dichloroethene	12	F1	41.6	43.9	F1	ug/Kg	☼	77	80 - 120
cis-1,3-Dichloropropene	ND		41.6	36.6		ug/Kg	☼	88	80 - 120
Cyclohexane	ND		41.6	37.5		ug/Kg	☼	90	65 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: 480-147622-7 MS

Matrix: Solid

Analysis Batch: 454900

Client Sample ID: SB-3 (10'-13')

Prep Type: Total/NA

Prep Batch: 454910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Dichlorodifluoromethane	ND		41.6	36.9		ug/Kg	✱	89	57 - 142
Ethylbenzene	ND		41.6	37.4		ug/Kg	✱	90	80 - 120
1,2-Dibromoethane	ND	F1	41.6	30.7	F1	ug/Kg	✱	74	78 - 120
Isopropylbenzene	ND		41.6	36.3		ug/Kg	✱	87	72 - 120
Methyl acetate	ND		83.2	51.7		ug/Kg	✱	62	55 - 136
Methyl tert-butyl ether	ND		41.6	33.7		ug/Kg	✱	81	63 - 125
Methylcyclohexane	ND		41.6	36.8		ug/Kg	✱	88	60 - 140
Methylene Chloride	ND		41.6	33.9		ug/Kg	✱	81	61 - 127
Styrene	ND		41.6	36.1		ug/Kg	✱	87	80 - 120
Tetrachloroethene	ND		41.6	37.3		ug/Kg	✱	90	74 - 122
Toluene	ND		41.6	37.4		ug/Kg	✱	90	74 - 128
trans-1,2-Dichloroethene	0.80	J	41.6	38.7		ug/Kg	✱	91	78 - 126
trans-1,3-Dichloropropene	ND		41.6	33.8		ug/Kg	✱	81	73 - 123
Trichloroethene	6.4		41.6	51.9		ug/Kg	✱	109	77 - 129
Trichlorofluoromethane	ND		41.6	39.2		ug/Kg	✱	94	65 - 146
Vinyl chloride	ND		41.6	36.5		ug/Kg	✱	88	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	98		71 - 125
1,2-Dichloroethane-d4 (Surr)	91		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	99		60 - 140

Lab Sample ID: 480-147622-7 MSD

Matrix: Solid

Analysis Batch: 454900

Client Sample ID: SB-3 (10'-13')

Prep Type: Total/NA

Prep Batch: 454910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1-Trichloroethane	ND		41.5	37.3		ug/Kg	✱	90	77 - 121	3	30
1,1,2,2-Tetrachloroethane	ND		41.5	28.7	F1	ug/Kg	✱	69	80 - 120	4	30
1,1,2-Trichloroethane	ND		41.5	32.5		ug/Kg	✱	78	78 - 122	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		41.5	36.5		ug/Kg	✱	88	60 - 140	4	30
1,1-Dichloroethane	ND		41.5	37.8		ug/Kg	✱	91	73 - 126	3	30
1,1-Dichloroethene	ND		41.5	35.6		ug/Kg	✱	86	59 - 125	4	30
1,2,4-Trichlorobenzene	ND		41.5	30.2		ug/Kg	✱	73	64 - 120	1	30
1,2-Dibromo-3-Chloropropane	ND		41.5	24.1	F1	ug/Kg	✱	58	63 - 124	3	30
1,2-Dichlorobenzene	ND		41.5	33.7		ug/Kg	✱	81	75 - 120	1	30
1,2-Dichloroethane	ND		41.5	35.1		ug/Kg	✱	85	77 - 122	0	30
1,2-Dichloropropane	ND		41.5	37.8		ug/Kg	✱	91	75 - 124	2	30
1,3-Dichlorobenzene	ND		41.5	34.0		ug/Kg	✱	82	74 - 120	3	30
1,4-Dichlorobenzene	ND		41.5	33.7		ug/Kg	✱	81	73 - 120	2	30
2-Butanone (MEK)	ND		207	132	F1	ug/Kg	✱	64	70 - 134	6	30
2-Hexanone	ND		207	134		ug/Kg	✱	65	59 - 130	6	30
4-Methyl-2-pentanone (MIBK)	ND		207	137		ug/Kg	✱	66	65 - 133	6	30
Acetone	35		207	135	F1	ug/Kg	✱	48	61 - 137	6	30
Benzene	ND		41.5	37.6		ug/Kg	✱	91	79 - 127	3	30
Bromodichloromethane	ND		41.5	37.3		ug/Kg	✱	90	80 - 122	1	30

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: 480-147622-7 MSD

Matrix: Solid

Analysis Batch: 454900

Client Sample ID: SB-3 (10'-13')

Prep Type: Total/NA

Prep Batch: 454910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		41.5	31.8		ug/Kg	☼	77	68 - 126	2	30
Bromomethane	ND		41.5	39.1		ug/Kg	☼	94	37 - 149	1	30
Carbon disulfide	ND		41.5	35.1		ug/Kg	☼	85	64 - 131	5	30
Carbon tetrachloride	ND		41.5	37.8		ug/Kg	☼	91	75 - 135	4	30
Chlorobenzene	ND		41.5	35.7		ug/Kg	☼	86	76 - 124	3	30
Dibromochloromethane	ND		41.5	34.7		ug/Kg	☼	84	76 - 125	1	30
Chloroethane	ND		41.5	36.4		ug/Kg	☼	88	69 - 135	3	30
Chloroform	ND		41.5	38.0		ug/Kg	☼	92	80 - 120	3	30
Chloromethane	ND		41.5	35.2		ug/Kg	☼	85	63 - 127	2	30
cis-1,2-Dichloroethene	3.1	J	41.5	39.4		ug/Kg	☼	88	80 - 120	11	30
cis-1,3-Dichloropropene	ND		41.5	36.3		ug/Kg	☼	88	80 - 120	1	30
Cyclohexane	ND		41.5	35.6		ug/Kg	☼	86	65 - 120	5	30
Dichlorodifluoromethane	ND		41.5	36.7		ug/Kg	☼	88	57 - 142	1	30
Ethylbenzene	ND		41.5	35.7		ug/Kg	☼	86	80 - 120	5	30
1,2-Dibromoethane	ND		41.5	31.2	F1	ug/Kg	☼	75	78 - 120	1	30
Isopropylbenzene	ND		41.5	35.2		ug/Kg	☼	85	72 - 120	3	30
Methyl acetate	ND		83.0	55.5		ug/Kg	☼	67	55 - 136	7	30
Methyl tert-butyl ether	ND		41.5	34.4		ug/Kg	☼	83	63 - 125	2	30
Methylcyclohexane	ND		41.5	35.3		ug/Kg	☼	85	60 - 140	4	30
Methylene Chloride	ND		41.5	33.9		ug/Kg	☼	82	61 - 127	0	30
Styrene	ND		41.5	34.8		ug/Kg	☼	84	80 - 120	3	30
Tetrachloroethene	ND		41.5	35.8		ug/Kg	☼	86	74 - 122	4	30
Toluene	ND		41.5	36.1		ug/Kg	☼	87	74 - 128	4	30
trans-1,2-Dichloroethene	ND		41.5	37.1		ug/Kg	☼	89	78 - 126	4	30
trans-1,3-Dichloropropene	ND		41.5	33.4		ug/Kg	☼	81	73 - 123	1	30
Trichloroethene	17		41.5	47.6	F1	ug/Kg	☼	73	77 - 129	9	30
Trichlorofluoromethane	ND		41.5	37.1		ug/Kg	☼	89	65 - 146	5	30
Vinyl chloride	ND		41.5	36.1		ug/Kg	☼	87	61 - 133	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	98		71 - 125
1,2-Dichloroethane-d4 (Surr)	93		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	99		60 - 140

Lab Sample ID: MB 480-455001/2-A

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: MB 480-455001/2-A

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
2-Hexanone	ND		25	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Acetone	ND		25	4.2	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Benzene	ND		5.0	0.25	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Bromoform	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chloroform	ND		5.0	0.31	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methyl acetate	ND		25	3.0	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Styrene	ND		5.0	0.25	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Toluene	ND		5.0	0.38	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/14/19 20:04	01/14/19 22:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 125	01/14/19 20:04	01/14/19 22:52	1
1,2-Dichloroethane-d4 (Surr)	103		64 - 126	01/14/19 20:04	01/14/19 22:52	1
4-Bromofluorobenzene (Surr)	100		72 - 126	01/14/19 20:04	01/14/19 22:52	1
Dibromofluoromethane (Surr)	101		60 - 140	01/14/19 20:04	01/14/19 22:52	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCS 480-455001/1-A

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	50.0	45.4		ug/Kg		91	77 - 121
1,1,2,2-Tetrachloroethane	50.0	44.2		ug/Kg		88	80 - 120
1,1,2-Trichloroethane	50.0	44.2		ug/Kg		88	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.9		ug/Kg		90	60 - 140
1,1-Dichloroethane	50.0	45.6		ug/Kg		91	73 - 126
1,1-Dichloroethene	50.0	44.4		ug/Kg		89	59 - 125
1,2,4-Trichlorobenzene	50.0	45.3		ug/Kg		91	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	44.2		ug/Kg		88	63 - 124
1,2-Dichlorobenzene	50.0	44.2		ug/Kg		88	75 - 120
1,2-Dichloroethane	50.0	45.1		ug/Kg		90	77 - 122
1,2-Dichloropropane	50.0	45.6		ug/Kg		91	75 - 124
1,3-Dichlorobenzene	50.0	44.9		ug/Kg		90	74 - 120
1,4-Dichlorobenzene	50.0	44.6		ug/Kg		89	73 - 120
2-Butanone (MEK)	250	252		ug/Kg		101	70 - 134
2-Hexanone	250	250		ug/Kg		100	59 - 130
4-Methyl-2-pentanone (MIBK)	250	240		ug/Kg		96	65 - 133
Acetone	250	239		ug/Kg		96	61 - 137
Benzene	50.0	45.7		ug/Kg		91	79 - 127
Bromodichloromethane	50.0	45.1		ug/Kg		90	80 - 122
Bromoform	50.0	46.5		ug/Kg		93	68 - 126
Bromomethane	50.0	39.6		ug/Kg		79	37 - 149
Carbon disulfide	50.0	44.9		ug/Kg		90	64 - 131
Carbon tetrachloride	50.0	46.2		ug/Kg		92	75 - 135
Chlorobenzene	50.0	44.8		ug/Kg		90	76 - 124
Dibromochloromethane	50.0	45.5		ug/Kg		91	76 - 125
Chloroethane	50.0	33.9	*	ug/Kg		68	69 - 135
Chloroform	50.0	45.5		ug/Kg		91	80 - 120
Chloromethane	50.0	45.8		ug/Kg		92	63 - 127
cis-1,2-Dichloroethene	50.0	44.9		ug/Kg		90	81 - 120
cis-1,3-Dichloropropene	50.0	45.8		ug/Kg		92	80 - 120
Cyclohexane	50.0	44.0		ug/Kg		88	65 - 120
Dichlorodifluoromethane	50.0	47.3		ug/Kg		95	57 - 142
Ethylbenzene	50.0	44.8		ug/Kg		90	80 - 120
1,2-Dibromoethane	50.0	44.8		ug/Kg		90	78 - 120
Isopropylbenzene	50.0	43.6		ug/Kg		87	72 - 120
Methyl acetate	100	95.2		ug/Kg		95	55 - 136
Methyl tert-butyl ether	50.0	46.2		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	44.5		ug/Kg		89	60 - 140
Methylene Chloride	50.0	42.6		ug/Kg		85	61 - 127
Styrene	50.0	44.6		ug/Kg		89	80 - 120
Tetrachloroethene	50.0	45.3		ug/Kg		91	74 - 122
Toluene	50.0	44.4		ug/Kg		89	74 - 128
trans-1,2-Dichloroethene	50.0	45.9		ug/Kg		92	78 - 126
trans-1,3-Dichloropropene	50.0	45.0		ug/Kg		90	73 - 123
Trichloroethene	50.0	46.3		ug/Kg		93	77 - 129
Trichlorofluoromethane	50.0	41.3		ug/Kg		83	65 - 146
Vinyl chloride	50.0	46.7		ug/Kg		93	61 - 133

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCS 480-455001/1-A

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455001

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

Lab Sample ID: MB 480-455051/3-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1-Dichloroethane	ND		100	31	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1-Dichloroethene	ND		100	35	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloroethane	ND		100	41	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloropropane	ND		100	16	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
2-Butanone (MEK)	ND		500	300	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
2-Hexanone	ND		500	210	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Acetone	ND		500	410	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Benzene	ND		100	19	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromodichloromethane	ND		100	20	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromoform	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromomethane	ND		100	22	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Carbon disulfide	ND		100	46	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Carbon tetrachloride	ND		100	26	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chlorobenzene	ND		100	13	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Dibromochloromethane	ND		100	48	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloroethane	ND		100	21	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloroform	ND		100	69	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloromethane	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Cyclohexane	ND		100	22	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Ethylbenzene	ND		100	29	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dibromoethane	ND		100	18	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Isopropylbenzene	ND		100	15	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methyl acetate	ND		500	48	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methylcyclohexane	ND		100	47	ug/Kg		01/15/19 08:37	01/15/19 23:02	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: MB 480-455051/3-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		100	20	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Styrene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Tetrachloroethene	ND		100	13	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Toluene	ND		100	27	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Trichloroethene	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Trichlorofluoromethane	ND		100	47	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Vinyl chloride	ND		100	34	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Xylenes, Total	ND		200	55	ug/Kg		01/15/19 08:37	01/15/19 23:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		50 - 149	01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloroethane-d4 (Surr)	108		53 - 146	01/15/19 08:37	01/15/19 23:02	1
4-Bromofluorobenzene (Surr)	103		49 - 148	01/15/19 08:37	01/15/19 23:02	1
Dibromofluoromethane (Surr)	101		60 - 140	01/15/19 08:37	01/15/19 23:02	1

Lab Sample ID: LCS 480-455051/1-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	2500	2730		ug/Kg		109	68 - 130
1,1,2,2-Tetrachloroethane	2500	2350		ug/Kg		94	73 - 120
1,1,2-Trichloroethane	2500	2380		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2350		ug/Kg		94	10 - 179
1,1-Dichloroethane	2500	2460		ug/Kg		99	78 - 121
1,1-Dichloroethene	2500	2350		ug/Kg		94	48 - 133
1,2,4-Trichlorobenzene	2500	2430		ug/Kg		97	70 - 140
1,2-Dibromo-3-Chloropropane	2500	2410		ug/Kg		97	56 - 122
1,2-Dichlorobenzene	2500	2510		ug/Kg		100	78 - 125
1,2-Dichloroethane	2500	2500		ug/Kg		100	74 - 127
1,2-Dichloropropane	2500	2640		ug/Kg		106	80 - 120
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120
1,4-Dichlorobenzene	2500	2520		ug/Kg		101	80 - 120
2-Butanone (MEK)	12500	12700		ug/Kg		102	54 - 149
2-Hexanone	12500	12400		ug/Kg		99	59 - 127
4-Methyl-2-pentanone (MIBK)	12500	11700		ug/Kg		93	74 - 120
Acetone	12500	14600		ug/Kg		117	47 - 141
Benzene	2500	2450		ug/Kg		98	77 - 125
Bromodichloromethane	2500	2810		ug/Kg		113	71 - 121
Bromoform	2500	3150	*	ug/Kg		126	48 - 125
Bromomethane	2500	2960		ug/Kg		118	39 - 149
Carbon disulfide	2500	2170		ug/Kg		87	40 - 136
Carbon tetrachloride	2500	2960		ug/Kg		119	54 - 135
Chlorobenzene	2500	2500		ug/Kg		100	76 - 126
Dibromochloromethane	2500	2780		ug/Kg		111	64 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCS 480-455051/1-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	2500	3000		ug/Kg		120	23 - 150
Chloroform	2500	2380		ug/Kg		95	78 - 120
Chloromethane	2500	2710		ug/Kg		108	61 - 124
cis-1,2-Dichloroethene	2500	2430		ug/Kg		97	79 - 124
cis-1,3-Dichloropropene	2500	2560		ug/Kg		103	75 - 121
Cyclohexane	2500	2660		ug/Kg		107	49 - 129
Dichlorodifluoromethane	2500	2620		ug/Kg		105	10 - 150
Ethylbenzene	2500	2490		ug/Kg		100	78 - 124
1,2-Dibromoethane	2500	2390		ug/Kg		96	80 - 120
Isopropylbenzene	2500	2530		ug/Kg		101	76 - 120
Methyl acetate	5000	4860		ug/Kg		97	71 - 123
Methyl tert-butyl ether	2500	2330		ug/Kg		93	67 - 137
Methylcyclohexane	2500	2620		ug/Kg		105	50 - 130
Methylene Chloride	2500	2540		ug/Kg		102	75 - 118
Styrene	2500	2560		ug/Kg		102	80 - 120
Tetrachloroethene	2500	2510		ug/Kg		100	73 - 133
Toluene	2500	2350		ug/Kg		94	75 - 124
trans-1,2-Dichloroethene	2500	2330		ug/Kg		93	74 - 129
trans-1,3-Dichloropropene	2500	2590		ug/Kg		104	73 - 120
Trichloroethene	2500	2470		ug/Kg		99	75 - 131
Trichlorofluoromethane	2500	2920		ug/Kg		117	29 - 158
Vinyl chloride	2500	2590		ug/Kg		104	59 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		50 - 149
1,2-Dichloroethane-d4 (Surr)	106		53 - 146
4-Bromofluorobenzene (Surr)	102		49 - 148
Dibromofluoromethane (Surr)	104		60 - 140

Lab Sample ID: LCSD 480-455051/2-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,1,1-Trichloroethane	2500	2760		ug/Kg		110	68 - 130	1	20
1,1,2,2-Tetrachloroethane	2500	2270		ug/Kg		91	73 - 120	3	20
1,1,2-Trichloroethane	2500	2410		ug/Kg		96	80 - 120	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2490		ug/Kg		100	10 - 179	6	20
1,1-Dichloroethane	2500	2470		ug/Kg		99	78 - 121	0	20
1,1-Dichloroethene	2500	2360		ug/Kg		94	48 - 133	0	20
1,2,4-Trichlorobenzene	2500	2360		ug/Kg		94	70 - 140	3	20
1,2-Dibromo-3-Chloropropane	2500	2410		ug/Kg		96	56 - 122	0	20
1,2-Dichlorobenzene	2500	2440		ug/Kg		97	78 - 125	3	20
1,2-Dichloroethane	2500	2510		ug/Kg		100	74 - 127	0	20
1,2-Dichloropropane	2500	2580		ug/Kg		103	80 - 120	3	20
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120	0	20
1,4-Dichlorobenzene	2500	2490		ug/Kg		100	80 - 120	1	20

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCSD 480-455051/2-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Butanone (MEK)	12500	12800		ug/Kg		102	54 - 149	1	20
2-Hexanone	12500	12700		ug/Kg		102	59 - 127	3	20
4-Methyl-2-pentanone (MIBK)	12500	11800		ug/Kg		95	74 - 120	2	20
Acetone	12500	14000		ug/Kg		112	47 - 141	4	20
Benzene	2500	2470		ug/Kg		99	77 - 125	1	20
Bromodichloromethane	2500	2710		ug/Kg		108	71 - 121	4	20
Bromoform	2500	3020		ug/Kg		121	48 - 125	4	20
Bromomethane	2500	3030		ug/Kg		121	39 - 149	2	20
Carbon disulfide	2500	2210		ug/Kg		88	40 - 136	2	20
Carbon tetrachloride	2500	3020		ug/Kg		121	54 - 135	2	20
Chlorobenzene	2500	2580		ug/Kg		103	76 - 126	3	20
Dibromochloromethane	2500	2820		ug/Kg		113	64 - 120	1	20
Chloroethane	2500	3090		ug/Kg		124	23 - 150	3	20
Chloroform	2500	2430		ug/Kg		97	78 - 120	2	20
Chloromethane	2500	2810		ug/Kg		112	61 - 124	4	20
cis-1,2-Dichloroethene	2500	2420		ug/Kg		97	79 - 124	1	20
cis-1,3-Dichloropropene	2500	2550		ug/Kg		102	75 - 121	0	20
Cyclohexane	2500	2650		ug/Kg		106	49 - 129	1	20
Dichlorodifluoromethane	2500	2750		ug/Kg		110	10 - 150	5	20
Ethylbenzene	2500	2550		ug/Kg		102	78 - 124	2	20
1,2-Dibromoethane	2500	2500		ug/Kg		100	80 - 120	4	20
Isopropylbenzene	2500	2570		ug/Kg		103	76 - 120	1	20
Methyl acetate	5000	4910		ug/Kg		98	71 - 123	1	20
Methyl tert-butyl ether	2500	2310		ug/Kg		92	67 - 137	1	20
Methylcyclohexane	2500	2660		ug/Kg		106	50 - 130	1	20
Methylene Chloride	2500	2550		ug/Kg		102	75 - 118	1	20
Styrene	2500	2610		ug/Kg		105	80 - 120	2	20
Tetrachloroethene	2500	2460		ug/Kg		98	73 - 133	2	20
Toluene	2500	2440		ug/Kg		98	75 - 124	4	20
trans-1,2-Dichloroethene	2500	2440		ug/Kg		97	74 - 129	5	20
trans-1,3-Dichloropropene	2500	2590		ug/Kg		103	73 - 120	0	20
Trichloroethene	2500	2560		ug/Kg		102	75 - 131	3	20
Trichlorofluoromethane	2500	2990		ug/Kg		119	29 - 158	2	20
Vinyl chloride	2500	2790		ug/Kg		112	59 - 124	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		50 - 149
1,2-Dichloroethane-d4 (Surr)	103		53 - 146
4-Bromofluorobenzene (Surr)	106		49 - 148
Dibromofluoromethane (Surr)	100		60 - 140

Lab Sample ID: MB 480-455052/2-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/15/19 08:54	01/15/19 10:53	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: MB 480-455052/2-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
2-Hexanone	ND		25	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Acetone	ND		25	4.2	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Benzene	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromoform	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloroform	ND		5.0	0.31	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methyl acetate	ND		25	3.0	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Styrene	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Toluene	ND		5.0	0.38	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/15/19 08:54	01/15/19 10:53	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: MB 480-455052/2-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455052

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125	01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	01/15/19 08:54	01/15/19 10:53	1
4-Bromofluorobenzene (Surr)	98		72 - 126	01/15/19 08:54	01/15/19 10:53	1
Dibromofluoromethane (Surr)	100		60 - 140	01/15/19 08:54	01/15/19 10:53	1

Lab Sample ID: LCS 480-455052/1-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.3		ug/Kg		101	77 - 121
1,1,2,2-Tetrachloroethane	50.0	50.2		ug/Kg		100	80 - 120
1,1,2-Trichloroethane	50.0	50.5		ug/Kg		101	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.4		ug/Kg		101	60 - 140
1,1-Dichloroethane	50.0	51.2		ug/Kg		102	73 - 126
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	59 - 125
1,2,4-Trichlorobenzene	50.0	50.6		ug/Kg		101	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	50.4		ug/Kg		101	63 - 124
1,2-Dichlorobenzene	50.0	49.5		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	53.0		ug/Kg		106	77 - 122
1,2-Dichloropropane	50.0	51.9		ug/Kg		104	75 - 124
1,3-Dichlorobenzene	50.0	49.5		ug/Kg		99	74 - 120
1,4-Dichlorobenzene	50.0	49.4		ug/Kg		99	73 - 120
2-Butanone (MEK)	250	285		ug/Kg		114	70 - 134
2-Hexanone	250	277		ug/Kg		111	59 - 130
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	65 - 133
Acetone	250	291		ug/Kg		116	61 - 137
Benzene	50.0	50.9		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	52.1		ug/Kg		104	80 - 122
Bromoform	50.0	54.1		ug/Kg		108	68 - 126
Bromomethane	50.0	53.8		ug/Kg		108	37 - 149
Carbon disulfide	50.0	49.0		ug/Kg		98	64 - 131
Carbon tetrachloride	50.0	50.8		ug/Kg		102	75 - 135
Chlorobenzene	50.0	50.3		ug/Kg		101	76 - 124
Dibromochloromethane	50.0	52.6		ug/Kg		105	76 - 125
Chloroethane	50.0	49.5		ug/Kg		99	69 - 135
Chloroform	50.0	51.4		ug/Kg		103	80 - 120
Chloromethane	50.0	49.8		ug/Kg		100	63 - 127
cis-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	81 - 120
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	80 - 120
Cyclohexane	50.0	48.0		ug/Kg		96	65 - 120
Dichlorodifluoromethane	50.0	47.0		ug/Kg		94	57 - 142
Ethylbenzene	50.0	49.3		ug/Kg		99	80 - 120
1,2-Dibromoethane	50.0	51.6		ug/Kg		103	78 - 120
Isopropylbenzene	50.0	47.6		ug/Kg		95	72 - 120
Methyl acetate	100	110		ug/Kg		110	55 - 136
Methyl tert-butyl ether	50.0	53.5		ug/Kg		107	63 - 125

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCS 480-455052/1-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylcyclohexane	50.0	49.7		ug/Kg		99	60 - 140
Methylene Chloride	50.0	46.9		ug/Kg		94	61 - 127
Styrene	50.0	49.7		ug/Kg		99	80 - 120
Tetrachloroethene	50.0	49.3		ug/Kg		99	74 - 122
Toluene	50.0	48.8		ug/Kg		98	74 - 128
trans-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	78 - 126
trans-1,3-Dichloropropene	50.0	51.3		ug/Kg		103	73 - 123
Trichloroethene	50.0	50.4		ug/Kg		101	77 - 129
Trichlorofluoromethane	50.0	49.2		ug/Kg		98	65 - 146
Vinyl chloride	50.0	49.8		ug/Kg		100	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		71 - 125
1,2-Dichloroethane-d4 (Surr)	103		64 - 126
4-Bromofluorobenzene (Surr)	102		72 - 126
Dibromofluoromethane (Surr)	102		60 - 140

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

Lab Sample ID: MB 480-454394/1-A

Matrix: Solid

Analysis Batch: 454568

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454394

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2,4-Dinitrophenol	ND		1700	780	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2-Chloronaphthalene	ND		170	28	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2-Chlorophenol	ND		170	31	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2-Methylphenol	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2-Methylnaphthalene	ND		170	34	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2-Nitroaniline	ND		330	25	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
2-Nitrophenol	ND		170	48	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
3-Nitroaniline	ND		330	47	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
4-Chloroaniline	ND		170	42	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
4-Methylphenol	ND		330	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
4-Nitroaniline	ND		330	89	ug/Kg		01/09/19 14:14	01/11/19 04:57	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: MB 480-454394/1-A

Matrix: Solid

Analysis Batch: 454568

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454394

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND		330	120	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Acenaphthene	ND		170	25	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Acenaphthylene	ND		170	22	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Acetophenone	ND		170	23	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Anthracene	ND		170	42	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Atrazine	ND		170	59	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Benzaldehyde	ND		170	130	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Benzo[a]pyrene	ND		170	25	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Caprolactam	ND		170	51	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Carbazole	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Chrysene	ND		170	38	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Dibenzofuran	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Diethyl phthalate	ND		170	22	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Dimethyl phthalate	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Fluoranthene	ND		170	18	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Fluorene	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Hexachlorobenzene	ND		170	23	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Hexachlorobutadiene	ND		170	25	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Hexachloroethane	ND		170	22	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Isophorone	ND		170	36	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Naphthalene	ND		170	22	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Nitrobenzene	ND		170	19	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Pentachlorophenol	ND		330	170	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Phenanthrene	ND		170	25	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Phenol	ND		170	26	ug/Kg		01/09/19 14:14	01/11/19 04:57	1
Pyrene	ND		170	20	ug/Kg		01/09/19 14:14	01/11/19 04:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	82		53 - 120	01/09/19 14:14	01/11/19 04:57	1
Phenol-d5 (Surr)	83		54 - 120	01/09/19 14:14	01/11/19 04:57	1
p-Terphenyl-d14 (Surr)	98		65 - 121	01/09/19 14:14	01/11/19 04:57	1
2,4,6-Tribromophenol (Surr)	82		54 - 120	01/09/19 14:14	01/11/19 04:57	1
2-Fluorobiphenyl	89		60 - 120	01/09/19 14:14	01/11/19 04:57	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: MB 480-454394/1-A

Matrix: Solid

Analysis Batch: 454568

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454394

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	86		52 - 120	01/09/19 14:14	01/11/19 04:57	1

Lab Sample ID: LCS 480-454394/2-A

Matrix: Solid

Analysis Batch: 454568

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454394

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Biphenyl	1660	1540		ug/Kg		92	59 - 120
bis (2-chloroisopropyl) ether	1660	1240		ug/Kg		75	44 - 120
2,4,5-Trichlorophenol	1660	1610		ug/Kg		96	59 - 126
2,4,6-Trichlorophenol	1660	1650		ug/Kg		99	59 - 123
2,4-Dichlorophenol	1660	1490		ug/Kg		89	61 - 120
2,4-Dimethylphenol	1660	1480		ug/Kg		89	59 - 120
2,4-Dinitrophenol	3330	2280		ug/Kg		68	41 - 146
2,4-Dinitrotoluene	1660	1650		ug/Kg		99	63 - 120
2,6-Dinitrotoluene	1660	1680		ug/Kg		101	66 - 120
2-Chloronaphthalene	1660	1490		ug/Kg		89	57 - 120
2-Chlorophenol	1660	1400		ug/Kg		84	53 - 120
2-Methylphenol	1660	1440		ug/Kg		87	54 - 120
2-Methylnaphthalene	1660	1450		ug/Kg		87	59 - 120
2-Nitroaniline	1660	1540		ug/Kg		92	61 - 120
2-Nitrophenol	1660	1310		ug/Kg		79	56 - 120
3,3'-Dichlorobenzidine	3330	2620		ug/Kg		79	54 - 120
3-Nitroaniline	1660	1350		ug/Kg		81	48 - 120
4,6-Dinitro-2-methylphenol	3330	3240		ug/Kg		97	49 - 122
4-Bromophenyl phenyl ether	1660	1610		ug/Kg		97	58 - 120
4-Chloro-3-methylphenol	1660	1490		ug/Kg		90	61 - 120
4-Chloroaniline	1660	1260		ug/Kg		76	38 - 120
4-Chlorophenyl phenyl ether	1660	1600		ug/Kg		96	63 - 124
4-Methylphenol	1660	1430		ug/Kg		86	55 - 120
4-Nitroaniline	1660	1590		ug/Kg		96	56 - 120
4-Nitrophenol	3330	3660		ug/Kg		110	43 - 147
Acenaphthene	1660	1490		ug/Kg		90	62 - 120
Acenaphthylene	1660	1560		ug/Kg		94	58 - 121
Acetophenone	1660	1390		ug/Kg		84	54 - 120
Anthracene	1660	1650		ug/Kg		99	62 - 120
Atrazine	3330	3270		ug/Kg		98	60 - 127
Benzaldehyde	3330	2200		ug/Kg		66	10 - 150
Benzo[a]anthracene	1660	1510		ug/Kg		91	65 - 120
Benzo[a]pyrene	1660	1690		ug/Kg		101	64 - 120
Benzo[b]fluoranthene	1660	1790		ug/Kg		107	64 - 120
Benzo[g,h,i]perylene	1660	1700		ug/Kg		102	45 - 145
Benzo[k]fluoranthene	1660	1600		ug/Kg		96	65 - 120
Bis(2-chloroethoxy)methane	1660	1400		ug/Kg		84	55 - 120
Bis(2-chloroethyl)ether	1660	1320		ug/Kg		79	45 - 120
Bis(2-ethylhexyl) phthalate	1660	1680		ug/Kg		101	61 - 133
Butyl benzyl phthalate	1660	1650		ug/Kg		99	61 - 129
Caprolactam	3330	2920		ug/Kg		88	47 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCS 480-454394/2-A

Matrix: Solid

Analysis Batch: 454568

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454394

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbazole	1660	1660		ug/Kg		99	65 - 120
Chrysene	1660	1620		ug/Kg		98	64 - 120
Dibenz(a,h)anthracene	1660	1650		ug/Kg		99	54 - 132
Di-n-butyl phthalate	1660	1710		ug/Kg		103	58 - 130
Di-n-octyl phthalate	1660	1660		ug/Kg		100	57 - 133
Dibenzofuran	1660	1550		ug/Kg		93	63 - 120
Diethyl phthalate	1660	1690		ug/Kg		102	66 - 120
Dimethyl phthalate	1660	1590		ug/Kg		96	65 - 124
Fluoranthene	1660	1650		ug/Kg		99	62 - 120
Fluorene	1660	1580		ug/Kg		95	63 - 120
Hexachlorobenzene	1660	1640		ug/Kg		99	60 - 120
Hexachlorobutadiene	1660	1390		ug/Kg		83	45 - 120
Hexachlorocyclopentadiene	1660	1510		ug/Kg		91	47 - 120
Hexachloroethane	1660	1270		ug/Kg		76	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1670		ug/Kg		100	56 - 134
Isophorone	1660	1400		ug/Kg		84	56 - 120
N-Nitrosodi-n-propylamine	1660	1310		ug/Kg		78	52 - 120
N-Nitrosodiphenylamine	1660	1650		ug/Kg		99	51 - 128
Naphthalene	1660	1390		ug/Kg		83	55 - 120
Nitrobenzene	1660	1400		ug/Kg		84	54 - 120
Pentachlorophenol	3330	3580		ug/Kg		107	51 - 120
Phenanthrene	1660	1640		ug/Kg		99	60 - 120
Phenol	1660	1320		ug/Kg		79	53 - 120
Pyrene	1660	1660		ug/Kg		100	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	88		53 - 120
Phenol-d5 (Surr)	88		54 - 120
p-Terphenyl-d14 (Surr)	104		65 - 121
2,4,6-Tribromophenol (Surr)	107		54 - 120
2-Fluorobiphenyl	91		60 - 120
2-Fluorophenol (Surr)	83		52 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-454399/1-A

Matrix: Solid

Analysis Batch: 454528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.19	0.038	mg/Kg		01/09/19 14:25	01/10/19 13:36	1
PCB-1221	ND		0.19	0.038	mg/Kg		01/09/19 14:25	01/10/19 13:36	1
PCB-1232	ND		0.19	0.038	mg/Kg		01/09/19 14:25	01/10/19 13:36	1
PCB-1242	ND		0.19	0.038	mg/Kg		01/09/19 14:25	01/10/19 13:36	1
PCB-1248	ND		0.19	0.038	mg/Kg		01/09/19 14:25	01/10/19 13:36	1
PCB-1254	ND		0.19	0.090	mg/Kg		01/09/19 14:25	01/10/19 13:36	1
PCB-1260	ND		0.19	0.090	mg/Kg		01/09/19 14:25	01/10/19 13:36	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 480-454399/1-A

Matrix: Solid

Analysis Batch: 454528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454399

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	101		60 - 154	01/09/19 14:25	01/10/19 13:36	1
Tetrachloro-m-xylene	113		60 - 154	01/09/19 14:25	01/10/19 13:36	1
DCB Decachlorobiphenyl	133		65 - 174	01/09/19 14:25	01/10/19 13:36	1
DCB Decachlorobiphenyl	154		65 - 174	01/09/19 14:25	01/10/19 13:36	1

Lab Sample ID: LCS 480-454399/2-A

Matrix: Solid

Analysis Batch: 454528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.21	3.13		mg/Kg		141	51 - 185
PCB-1260	2.21	3.20		mg/Kg		145	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	146		60 - 154
Tetrachloro-m-xylene	144		60 - 154
DCB Decachlorobiphenyl	187	X	65 - 174
DCB Decachlorobiphenyl	203	X	65 - 174

Lab Sample ID: 480-147622-4 MS

Matrix: Solid

Analysis Batch: 454528

Client Sample ID: SB-2 (2'-5')

Prep Type: Total/NA

Prep Batch: 454399

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		2.27	2.08		mg/Kg	☼	92	50 - 177
PCB-1260	ND		2.27	2.01		mg/Kg	☼	89	33 - 200

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	108		60 - 154
Tetrachloro-m-xylene	122		60 - 154
DCB Decachlorobiphenyl	133		65 - 174
DCB Decachlorobiphenyl	156		65 - 174

Lab Sample ID: 480-147622-4 MSD

Matrix: Solid

Analysis Batch: 454528

Client Sample ID: SB-2 (2'-5')

Prep Type: Total/NA

Prep Batch: 454399

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
PCB-1016	ND		2.76	2.98		mg/Kg	☼	108	50 - 177	36	50
PCB-1260	ND		2.76	2.93		mg/Kg	☼	106	33 - 200	37	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	114		60 - 154
Tetrachloro-m-xylene	121		60 - 154
DCB Decachlorobiphenyl	141		65 - 174
DCB Decachlorobiphenyl	164		65 - 174

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-454322/1-A

Matrix: Solid

Analysis Batch: 454668

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	4.4	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Antimony	ND		15.0	0.40	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Arsenic	ND		2.0	0.40	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Barium	ND		0.50	0.11	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Beryllium	ND		0.20	0.028	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Cadmium	ND		0.20	0.030	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Calcium	4.60	J	50.0	3.3	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Chromium	ND		0.50	0.20	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Cobalt	ND		0.50	0.050	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Copper	ND		1.0	0.21	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Iron	ND		10	3.5	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Lead	ND		1.0	0.24	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Magnesium	ND		20.0	0.93	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Manganese	0.104	J	0.20	0.032	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Nickel	ND		5.0	0.23	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Potassium	ND		30.0	20.0	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Selenium	ND		4.0	0.40	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Silver	ND		0.60	0.20	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Sodium	17.52	J	140	13.0	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Thallium	ND		6.0	0.30	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Vanadium	ND		0.50	0.11	mg/Kg		01/10/19 08:56	01/10/19 19:52	1
Zinc	ND		2.0	0.64	mg/Kg		01/10/19 08:56	01/10/19 19:52	1

Lab Sample ID: LCSSRM 480-454322/2-A

Matrix: Solid

Analysis Batch: 454668

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454322

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10100	8392		mg/Kg		83.1	41.6 - 123.8
Antimony	145	45.91		mg/Kg		31.7	10.0 - 137.2
Arsenic	171	144.1		mg/Kg		84.3	66.1 - 122.2
Barium	272	219.6		mg/Kg		80.7	71.7 - 119.5
Beryllium	102	86.78		mg/Kg		85.1	71.8 - 119.6
Cadmium	225	174.7		mg/Kg		77.6	70.2 - 117.3
Calcium	5190	4094		mg/Kg		78.9	66.7 - 117.0
Chromium	144	118.1		mg/Kg		82.0	66.1 - 122.9
Cobalt	48.8	48.43		mg/Kg		99.2	74.0 - 123.4
Copper	174	150.6		mg/Kg		86.5	71.3 - 119.0
Iron	15000	13210		mg/Kg		88.1	32.9 - 154.7

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

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

Lab Sample ID: LCSSRM 480-454322/2-A
Matrix: Solid
Analysis Batch: 454668

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 454322

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	111	109.7		mg/Kg		98.8	71.0 - 128.8
Magnesium	2570	2073		mg/Kg		80.7	56.4 - 125.3
Manganese	232	198.4		mg/Kg		85.5	71.1 - 125.4
Nickel	98.3	96.73		mg/Kg		98.4	65.4 - 121.1
Potassium	2420	2041		mg/Kg		84.3	49.2 - 117.8
Selenium	206	173.7		mg/Kg		84.3	63.6 - 122.3
Silver	45.5	36.30		mg/Kg		79.8	66.2 - 124.2
Sodium	252	218.6		mg/Kg		86.7	41.7 - 131.7
Thallium	167	164.0		mg/Kg		98.2	65.9 - 121.0
Vanadium	61.8	56.15		mg/Kg		90.9	52.1 - 131.6
Zinc	207	168.3		mg/Kg		81.3	67.1 - 125.1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-454221/1-A
Matrix: Solid
Analysis Batch: 454412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 454221

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0082	mg/Kg		01/09/19 13:10	01/09/19 15:15	1

Lab Sample ID: LCSSRM 480-454221/2-A ^10
Matrix: Solid
Analysis Batch: 454412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 454221

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	11.20		mg/Kg		93.3	57.3 - 133.3

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

GC/MS VOA

Analysis Batch: 454900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-5	SB-2 (10'-15')	Total/NA	Solid	8260C	454910
480-147622-9	SB-4 (4'-9')	Total/NA	Solid	8260C	454910
MB 480-454910/2-A	Method Blank	Total/NA	Solid	8260C	454910
LCS 480-454910/1-A	Lab Control Sample	Total/NA	Solid	8260C	454910
480-147622-7 MS	SB-3 (10'-13')	Total/NA	Solid	8260C	454910
480-147622-7 MSD	SB-3 (10'-13')	Total/NA	Solid	8260C	454910

Prep Batch: 454910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-5	SB-2 (10'-15')	Total/NA	Solid	5035A_L	
480-147622-9	SB-4 (4'-9')	Total/NA	Solid	5035A_L	
MB 480-454910/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-454910/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-147622-7 MS	SB-3 (10'-13')	Total/NA	Solid	5035A_L	
480-147622-7 MSD	SB-3 (10'-13')	Total/NA	Solid	5035A_L	

Analysis Batch: 454994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-6	SB-2 (15'-20')	Total/NA	Solid	8260C	455001
480-147622-7	SB-3 (10'-13')	Total/NA	Solid	8260C	455001
480-147622-8	SB-3 (15'-20')	Total/NA	Solid	8260C	455001
480-147622-10	SB-4 (9'-15')	Total/NA	Solid	8260C	455001
480-147622-13	SB-5 (5'-10')	Total/NA	Solid	8260C	455001
480-147622-14	SB-5 (10'-15')	Total/NA	Solid	8260C	455001
480-147622-15	SB-10 (10'-15')	Total/NA	Solid	8260C	455001
480-147622-16	SB-10 (15'-20')	Total/NA	Solid	8260C	455001
480-147622-17	SB-9 (10'-15')	Total/NA	Solid	8260C	455001
MB 480-455001/2-A	Method Blank	Total/NA	Solid	8260C	455001
LCS 480-455001/1-A	Lab Control Sample	Total/NA	Solid	8260C	455001

Prep Batch: 455001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-6	SB-2 (15'-20')	Total/NA	Solid	5035A_L	
480-147622-7	SB-3 (10'-13')	Total/NA	Solid	5035A_L	
480-147622-8	SB-3 (15'-20')	Total/NA	Solid	5035A_L	
480-147622-10	SB-4 (9'-15')	Total/NA	Solid	5035A_L	
480-147622-13	SB-5 (5'-10')	Total/NA	Solid	5035A_L	
480-147622-14	SB-5 (10'-15')	Total/NA	Solid	5035A_L	
480-147622-15	SB-10 (10'-15')	Total/NA	Solid	5035A_L	
480-147622-16	SB-10 (15'-20')	Total/NA	Solid	5035A_L	
480-147622-17	SB-9 (10'-15')	Total/NA	Solid	5035A_L	
MB 480-455001/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455001/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 455045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-18	SB-9 (15'-20')	Total/NA	Solid	8260C	455052
MB 480-455052/2-A	Method Blank	Total/NA	Solid	8260C	455052
LCS 480-455052/1-A	Lab Control Sample	Total/NA	Solid	8260C	455052

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

GC/MS VOA (Continued)

Prep Batch: 455051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-1	SB-1 (12'-15')	Total/NA	Solid	5035A_H	
480-147622-2	SB-1 (17'-20')	Total/NA	Solid	5035A_H	
480-147622-5 - DL	SB-2 (10'-15')	Total/NA	Solid	5035A_H	
MB 480-455051/3-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-455051/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	
LCSD 480-455051/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_H	

Prep Batch: 455052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-18	SB-9 (15'-20')	Total/NA	Solid	5035A_L	
MB 480-455052/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455052/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 455192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-1	SB-1 (12'-15')	Total/NA	Solid	8260C	455051
480-147622-2	SB-1 (17'-20')	Total/NA	Solid	8260C	455051
480-147622-5 - DL	SB-2 (10'-15')	Total/NA	Solid	8260C	455051
MB 480-455051/3-A	Method Blank	Total/NA	Solid	8260C	455051
LCS 480-455051/1-A	Lab Control Sample	Total/NA	Solid	8260C	455051
LCSD 480-455051/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	455051

GC/MS Semi VOA

Prep Batch: 454394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-4	SB-2 (2'-5')	Total/NA	Solid	3550C	
480-147622-12	SB-5 (0'-5')	Total/NA	Solid	3550C	
MB 480-454394/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-454394/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 454568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-4	SB-2 (2'-5')	Total/NA	Solid	8270D	454394
480-147622-12	SB-5 (0'-5')	Total/NA	Solid	8270D	454394
MB 480-454394/1-A	Method Blank	Total/NA	Solid	8270D	454394
LCS 480-454394/2-A	Lab Control Sample	Total/NA	Solid	8270D	454394

GC Semi VOA

Prep Batch: 454399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-4	SB-2 (2'-5')	Total/NA	Solid	3550C	
480-147622-12	SB-5 (0'-5')	Total/NA	Solid	3550C	
MB 480-454399/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-454399/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-147622-4 MS	SB-2 (2'-5')	Total/NA	Solid	3550C	
480-147622-4 MSD	SB-2 (2'-5')	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

GC Semi VOA (Continued)

Analysis Batch: 454528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-4	SB-2 (2'-5')	Total/NA	Solid	8082A	454399
480-147622-12	SB-5 (0'-5')	Total/NA	Solid	8082A	454399
MB 480-454399/1-A	Method Blank	Total/NA	Solid	8082A	454399
LCS 480-454399/2-A	Lab Control Sample	Total/NA	Solid	8082A	454399
480-147622-4 MS	SB-2 (2'-5')	Total/NA	Solid	8082A	454399
480-147622-4 MSD	SB-2 (2'-5')	Total/NA	Solid	8082A	454399

Metals

Prep Batch: 454221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-3	SB-2 (2'-5')	Total/NA	Solid	7471B	
480-147622-11	SB-5 (0'-5')	Total/NA	Solid	7471B	
MB 480-454221/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-454221/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 454322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-3	SB-2 (2'-5')	Total/NA	Solid	3050B	
480-147622-11	SB-5 (0'-5')	Total/NA	Solid	3050B	
MB 480-454322/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-454322/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 454412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-3	SB-2 (2'-5')	Total/NA	Solid	7471B	454221
480-147622-11	SB-5 (0'-5')	Total/NA	Solid	7471B	454221
MB 480-454221/1-A	Method Blank	Total/NA	Solid	7471B	454221
LCSSRM 480-454221/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	454221

Analysis Batch: 454668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-3	SB-2 (2'-5')	Total/NA	Solid	6010C	454322
480-147622-11	SB-5 (0'-5')	Total/NA	Solid	6010C	454322
MB 480-454322/1-A	Method Blank	Total/NA	Solid	6010C	454322
LCSSRM 480-454322/2-A	Lab Control Sample	Total/NA	Solid	6010C	454322

General Chemistry

Analysis Batch: 454812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-3	SB-2 (2'-5')	Total/NA	Solid	Moisture	
480-147622-4	SB-2 (2'-5')	Total/NA	Solid	Moisture	
480-147622-11	SB-5 (0'-5')	Total/NA	Solid	Moisture	
480-147622-12	SB-5 (0'-5')	Total/NA	Solid	Moisture	

Analysis Batch: 455083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-1	SB-1 (12'-15')	Total/NA	Solid	Moisture	
480-147622-2	SB-1 (17'-20')	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

General Chemistry (Continued)

Analysis Batch: 455083 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147622-5	SB-2 (10'-15')	Total/NA	Solid	Moisture	
480-147622-6	SB-2 (15'-20')	Total/NA	Solid	Moisture	
480-147622-7	SB-3 (10'-13')	Total/NA	Solid	Moisture	
480-147622-8	SB-3 (15'-20')	Total/NA	Solid	Moisture	
480-147622-9	SB-4 (4'-9')	Total/NA	Solid	Moisture	
480-147622-10	SB-4 (9'-15')	Total/NA	Solid	Moisture	
480-147622-13	SB-5 (5'-10')	Total/NA	Solid	Moisture	
480-147622-14	SB-5 (10'-15')	Total/NA	Solid	Moisture	
480-147622-15	SB-10 (10'-15')	Total/NA	Solid	Moisture	
480-147622-16	SB-10 (15'-20')	Total/NA	Solid	Moisture	
480-147622-17	SB-9 (10'-15')	Total/NA	Solid	Moisture	
480-147622-18	SB-9 (15'-20')	Total/NA	Solid	Moisture	
480-147622-7 MS	SB-3 (10'-13')	Total/NA	Solid	Moisture	
480-147622-7 MSD	SB-3 (10'-13')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-1 (12'-15')

Date Collected: 01/08/19 09:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-1 (12'-15')

Date Collected: 01/08/19 09:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-1

Matrix: Solid

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			455051	01/15/19 08:37	AMM	TAL BUF
Total/NA	Analysis	8260C		50	455192	01/15/19 23:39	AMM	TAL BUF

Client Sample ID: SB-1 (17'-20')

Date Collected: 01/08/19 09:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-1 (17'-20')

Date Collected: 01/08/19 09:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-2

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_H			455051	01/15/19 08:38	AMM	TAL BUF
Total/NA	Analysis	8260C		200	455192	01/16/19 00:06	AMM	TAL BUF

Client Sample ID: SB-2 (2'-5')

Date Collected: 01/08/19 09:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-2 (2'-5')

Date Collected: 01/08/19 09:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-3

Matrix: Solid

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			454322	01/10/19 08:56	JMP	TAL BUF
Total/NA	Analysis	6010C		1	454668	01/10/19 20:57	LMH	TAL BUF
Total/NA	Prep	7471B			454221	01/09/19 13:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	454412	01/09/19 15:39	BMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (2'-5')

Date Collected: 01/08/19 10:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-2 (2'-5')

Date Collected: 01/08/19 10:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-4

Matrix: Solid

Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			454394	01/09/19 14:14	SGD	TAL BUF
Total/NA	Analysis	8270D		5	454568	01/11/19 10:16	DMR	TAL BUF
Total/NA	Prep	3550C			454399	01/09/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8082A		1	454528	01/10/19 14:41	W1T	TAL BUF

Client Sample ID: SB-2 (10'-15')

Date Collected: 01/08/19 10:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-2 (10'-15')

Date Collected: 01/08/19 10:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-5

Matrix: Solid

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			454910	01/09/19 07:20	CDC	TAL BUF
Total/NA	Analysis	8260C		1	454900	01/14/19 17:18	AEM	TAL BUF
Total/NA	Prep	5035A_H	DL		455051	01/15/19 08:38	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	20	455192	01/16/19 00:33	AMM	TAL BUF

Client Sample ID: SB-2 (15'-20')

Date Collected: 01/08/19 10:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-2 (15'-20')

Date Collected: 01/08/19 10:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-6

Matrix: Solid

Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-2 (15'-20')

Date Collected: 01/08/19 10:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-6

Matrix: Solid

Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	454994	01/14/19 23:32	CDC	TAL BUF

Client Sample ID: SB-3 (10'-13')

Date Collected: 01/08/19 11:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-3 (10'-13')

Date Collected: 01/08/19 11:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-7

Matrix: Solid

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/14/19 23:58	CDC	TAL BUF

Client Sample ID: SB-3 (15'-20')

Date Collected: 01/08/19 11:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-3 (15'-20')

Date Collected: 01/08/19 11:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-8

Matrix: Solid

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 00:25	CDC	TAL BUF

Client Sample ID: SB-4 (4'-9')

Date Collected: 01/08/19 11:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-4 (4'-9')

Date Collected: 01/08/19 11:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-9

Matrix: Solid

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			454910	01/09/19 07:20	CDC	TAL BUF
Total/NA	Analysis	8260C		1	454900	01/14/19 19:02	AEM	TAL BUF

Client Sample ID: SB-4 (9'-15')

Date Collected: 01/08/19 12:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-4 (9'-15')

Date Collected: 01/08/19 12:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-10

Matrix: Solid

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 00:50	CDC	TAL BUF

Client Sample ID: SB-5 (0'-5')

Date Collected: 01/08/19 12:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-5 (0'-5')

Date Collected: 01/08/19 12:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-11

Matrix: Solid

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			454322	01/10/19 08:56	JMP	TAL BUF
Total/NA	Analysis	6010C		1	454668	01/10/19 21:00	LMH	TAL BUF
Total/NA	Prep	7471B			454221	01/09/19 13:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	454412	01/09/19 15:40	BMB	TAL BUF

Client Sample ID: SB-5 (0'-5')

Date Collected: 01/08/19 12:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-5 (0'-5')

Date Collected: 01/08/19 12:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-12

Matrix: Solid

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			454394	01/09/19 14:14	SGD	TAL BUF
Total/NA	Analysis	8270D		1	454568	01/11/19 10:41	DMR	TAL BUF
Total/NA	Prep	3550C			454399	01/09/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8082A		1	454528	01/10/19 15:13	W1T	TAL BUF

Client Sample ID: SB-5 (5'-10')

Date Collected: 01/08/19 13:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-5 (5'-10')

Date Collected: 01/08/19 13:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-13

Matrix: Solid

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 01:16	CDC	TAL BUF

Client Sample ID: SB-5 (10'-15')

Date Collected: 01/08/19 13:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-5 (10'-15')

Date Collected: 01/08/19 13:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-14

Matrix: Solid

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 01:42	CDC	TAL BUF

Client Sample ID: SB-10 (10'-15')

Date Collected: 01/08/19 13:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-10 (10'-15')

Date Collected: 01/08/19 13:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-15

Matrix: Solid

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 02:08	CDC	TAL BUF

Client Sample ID: SB-10 (15'-20')

Date Collected: 01/08/19 14:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-10 (15'-20')

Date Collected: 01/08/19 14:00

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-16

Matrix: Solid

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 02:33	CDC	TAL BUF

Client Sample ID: SB-9 (10'-15')

Date Collected: 01/08/19 14:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-9 (10'-15')

Date Collected: 01/08/19 14:20

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-17

Matrix: Solid

Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/09/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 03:00	CDC	TAL BUF

Client Sample ID: SB-9 (15'-20')

Date Collected: 01/08/19 14:40

Date Received: 01/09/19 01:00

Lab Sample ID: 480-147622-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Client Sample ID: SB-9 (15'-20')

Lab Sample ID: 480-147622-18

Date Collected: 01/08/19 14:40

Matrix: Solid

Date Received: 01/09/19 01:00

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/09/19 07:20	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455045	01/15/19 11:29	AEM	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147622-1	SB-1 (12'-15')	Solid	01/08/19 09:00	01/09/19 01:00
480-147622-2	SB-1 (17'-20')	Solid	01/08/19 09:20	01/09/19 01:00
480-147622-3	SB-2 (2'-5')	Solid	01/08/19 09:40	01/09/19 01:00
480-147622-4	SB-2 (2'-5')	Solid	01/08/19 10:00	01/09/19 01:00
480-147622-5	SB-2 (10'-15')	Solid	01/08/19 10:20	01/09/19 01:00
480-147622-6	SB-2 (15'-20')	Solid	01/08/19 10:40	01/09/19 01:00
480-147622-7	SB-3 (10'-13')	Solid	01/08/19 11:00	01/09/19 01:00
480-147622-8	SB-3 (15'-20')	Solid	01/08/19 11:20	01/09/19 01:00
480-147622-9	SB-4 (4'-9')	Solid	01/08/19 11:40	01/09/19 01:00
480-147622-10	SB-4 (9'-15')	Solid	01/08/19 12:00	01/09/19 01:00
480-147622-11	SB-5 (0'-5')	Solid	01/08/19 12:20	01/09/19 01:00
480-147622-12	SB-5 (0'-5')	Solid	01/08/19 12:40	01/09/19 01:00
480-147622-13	SB-5 (5'-10')	Solid	01/08/19 13:00	01/09/19 01:00
480-147622-14	SB-5 (10'-15')	Solid	01/08/19 13:20	01/09/19 01:00
480-147622-15	SB-10 (10'-15')	Solid	01/08/19 13:40	01/09/19 01:00
480-147622-16	SB-10 (15'-20')	Solid	01/08/19 14:00	01/09/19 01:00
480-147622-17	SB-9 (10'-15')	Solid	01/08/19 14:20	01/09/19 01:00
480-147622-18	SB-9 (15'-20')	Solid	01/08/19 14:40	01/09/19 01:00

Chain of Custody Record

#225



Client Information Client Contact: Matt Walker Company: C&S Engineers, Inc. Address: 499 Col. Eileen Collins Blvd City: Syracuse State, Zip: NY, 13212 Phone: 315-703-4323(Tel) Email: mawalker@cscos.com Project Name: Former Sims Matchplate Site Site:		Lab PM: Stone, Judy L E-Mail: judy.stone@testamericainc.com Car: 480-147622 COC COC No: 480-122577-28125.9 Page: 1 of 2 Job #:
Analysis Requested Due Date Requested: TAT Requested (days): PO #: Purchase Order Requested WO #: Project #: 48019352 SOW#:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=volatile, BT=tissue, A=air) Preservation Code: Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 6010C, 7471B 8081B, 8082A, 8151A, 8270D 8260C - TCL list OLM04.2 8081B, 8151A, 8270D 8082A, 8270D Total Number of containers		Special Instructions/Note: Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QC Requirements:
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Date:
Relinquished by: Relinquished by: Angel Anjo Relinquished by: R. Rylich Relinquished by:		Date/Time: 1/8/19 15:41 Date/Time: 1-8-19, 19:00 Date/Time:
Custody Seal No.: Custody Seals Intact: ☐ Yes ☐ No		Cooler Temperature(s) °C and Other Remarks: 0.9 #3

[illegible]

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-147622-1

Login Number: 147622

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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 (Excluding tests with immediate HTs)..	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	Freezer - 1/9/19 @ 0720
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.	True	
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 Engineers, Inc
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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: 480-147693-1

Client Project/Site: Former Sims Matchplate Site

For:

C&S Engineers, Inc.

499 Col. Eileen Collins Blvd

Syracuse, New York 13212

Attn: Matt Walker



Authorized for release by:

1/17/2019 7:14:48 PM

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

LINKS

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www.testamericainc.com

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	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.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.

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.

Metals

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Job ID: 480-147693-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-147693-1

Receipt

The samples were received on 1/10/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-455001 and analytical batch 480-454994 recovered outside control limits for the following analyte: Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. The following samples are affected: SB-14 (10'-15') (480-147693-1), SB-14 (15'-20') (480-147693-2), SB-15 (10'-15') (480-147693-5), SB-15 (15'-20') (480-147693-6), SB-20 (10'-15') (480-147693-7), SB-20 (15'-20') (480-147693-8), SB-25 (10'-15') (480-147693-9) and SB-25 (15'-20') (480-147693-10).

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-455051 and analytical batch 480-455192 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: SB-7 (5'-10') (480-147693-17).

Method(s) 8260C: The following sample was analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-7 (5'-10') (480-147693-17). 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/MS Semi VOA

Method(s) 8270D: The following sample was diluted due to color and viscosity: SB-6 (0-5') (480-147693-14). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-454961 recovered outside acceptance criteria, low biased, for 2,2'-oxybis[1-chloropropane]. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: SB-15 (0-5') (480-147693-4) and SB-6 (0-5') (480-147693-14).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-454961 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: SB-15 (0-5') (480-147693-4) and SB-6 (0-5') (480-147693-14).

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

GC Semi VOA

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

Metals

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

Organic Prep

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

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-14 (10'-15')

Lab Sample ID: 480-147693-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	47		22	3.7	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-14 (15'-20')

Lab Sample ID: 480-147693-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3	J	19	3.2	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	13400		12.4	5.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.1		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	48.6		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.49		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.17	J	0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	78600	B	62.1	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.4		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.7		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	19.8		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	14400	B	12.4	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	7.0		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	48900		24.8	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	338	B	0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	16.0		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	5040	B	37.3	24.8	mg/Kg	1	☼	6010C	Total/NA
Sodium	171	J B	174	16.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	20.6		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	22.8		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.042		0.025	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-4

No Detections.

Client Sample ID: SB-15 (10'-15')

Lab Sample ID: 480-147693-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	28		26	4.4	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	2.4	J	5.2	2.4	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-15 (15'-20')

Lab Sample ID: 480-147693-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.59	J	4.6	0.28	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-20 (10'-15')

Lab Sample ID: 480-147693-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.6	J	18	3.1	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.29	J	3.7	0.28	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-20 (15'-20')

Lab Sample ID: 480-147693-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	20	3.4	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	2.0	J	4.1	1.9	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-25 (10'-15')

Lab Sample ID: 480-147693-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	22		22	3.7	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	2.1	J	4.4	2.0	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.48	J	4.4	0.33	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-25 (15'-20')

Lab Sample ID: 480-147693-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	24		20	3.4	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-30 (10'-15')

Lab Sample ID: 480-147693-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21		20	3.3	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1.4	J	3.9	0.53	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-30 (15'-20')

Lab Sample ID: 480-147693-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.6	J	4.8	0.61	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1.2	J	4.8	0.64	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	15300		12.7	5.6	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.59	J	19.1	0.51	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.6		2.5	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	60.7		0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.58		0.25	0.036	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.1		0.25	0.038	mg/Kg	1	☼	6010C	Total/NA
Calcium	54300	B	63.6	4.2	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.4		0.64	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.3		0.64	0.064	mg/Kg	1	☼	6010C	Total/NA
Copper	28.2		1.3	0.27	mg/Kg	1	☼	6010C	Total/NA
Iron	18000	B	12.7	4.5	mg/Kg	1	☼	6010C	Total/NA
Lead	45.1		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	25100		25.4	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	556	B	0.25	0.041	mg/Kg	1	☼	6010C	Total/NA
Nickel	28.7		6.4	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	4310	B	38.2	25.4	mg/Kg	1	☼	6010C	Total/NA
Sodium	174	J B	178	16.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	24.2		0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	70.7		2.5	0.81	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.13		0.026	0.010	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	370	J	2100	310	ug/Kg	10	✱	8270D	Total/NA
Acenaphthylene	520	J	2100	280	ug/Kg	10	✱	8270D	Total/NA
Anthracene	1400	J	2100	530	ug/Kg	10	✱	8270D	Total/NA
Benzo[a]anthracene	4200		2100	210	ug/Kg	10	✱	8270D	Total/NA
Benzo[a]pyrene	3500		2100	310	ug/Kg	10	✱	8270D	Total/NA
Benzo[b]fluoranthene	4100		2100	340	ug/Kg	10	✱	8270D	Total/NA
Benzo[g,h,i]perylene	1600	J	2100	230	ug/Kg	10	✱	8270D	Total/NA
Benzo[k]fluoranthene	2100		2100	280	ug/Kg	10	✱	8270D	Total/NA
Carbazole	470	J	2100	250	ug/Kg	10	✱	8270D	Total/NA
Chrysene	3500		2100	480	ug/Kg	10	✱	8270D	Total/NA
Dibenzofuran	320	J	2100	250	ug/Kg	10	✱	8270D	Total/NA
Fluoranthene	8700		2100	230	ug/Kg	10	✱	8270D	Total/NA
Fluorene	470	J	2100	250	ug/Kg	10	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1900	J	2100	260	ug/Kg	10	✱	8270D	Total/NA
Naphthalene	410	J	2100	280	ug/Kg	10	✱	8270D	Total/NA
Phenanthrene	5500		2100	310	ug/Kg	10	✱	8270D	Total/NA
Pyrene	5900		2100	250	ug/Kg	10	✱	8270D	Total/NA

Client Sample ID: SB-6 (10'-15')

Lab Sample ID: 480-147693-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.0	J	17	2.9	ug/Kg	1	✱	8260C	Total/NA

Client Sample ID: SB-6 (15'-20')

Lab Sample ID: 480-147693-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.7	J	21	3.5	ug/Kg	1	✱	8260C	Total/NA

Client Sample ID: SB-7 (5'-10')

Lab Sample ID: 480-147693-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	20		4.1	0.30	ug/Kg	1	✱	8260C	Total/NA
1,1,2-Trichloroethane	0.62	J	4.1	0.53	ug/Kg	1	✱	8260C	Total/NA
1,1-Dichloroethene	2.3	J	4.1	0.50	ug/Kg	1	✱	8260C	Total/NA
1,2-Dichloroethane	0.24	J	4.1	0.20	ug/Kg	1	✱	8260C	Total/NA
2-Butanone (MEK)	3.0	J	20	1.5	ug/Kg	1	✱	8260C	Total/NA
Acetone	12	J	20	3.4	ug/Kg	1	✱	8260C	Total/NA
Benzene	0.32	J	4.1	0.20	ug/Kg	1	✱	8260C	Total/NA
Carbon tetrachloride	6.3		4.1	0.39	ug/Kg	1	✱	8260C	Total/NA
Chloroform	2.1	J	4.1	0.25	ug/Kg	1	✱	8260C	Total/NA
cis-1,2-Dichloroethene	9.5		4.1	0.52	ug/Kg	1	✱	8260C	Total/NA
Tetrachloroethene	2.3	J	4.1	0.55	ug/Kg	1	✱	8260C	Total/NA
Toluene	1.9	J	4.1	0.31	ug/Kg	1	✱	8260C	Total/NA
Trichloroethene	2400	E	4.1	0.90	ug/Kg	1	✱	8260C	Total/NA
Trichloroethene - DL	200000		3400	950	ug/Kg	80	✱	8260C	Total/NA

Client Sample ID: SB-7 (15'-17')

Lab Sample ID: 480-147693-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	56		18	3.0	ug/Kg	1	✱	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-7 (15'-17') (Continued)

Lab Sample ID: 480-147693-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	53		3.5	0.78	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-14 (10'-15')

Lab Sample ID: 480-147693-1

Date Collected: 01/09/19 08:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 92.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	0.99	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,1-Dichloroethene	ND		4.4	0.53	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Acetone	47		22	3.7	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Benzene	ND		4.4	0.21	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Bromodichloromethane	ND		4.4	0.58	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Bromomethane	ND		4.4	0.39	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Chloroethane	ND	*	4.4	0.99	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Chloromethane	ND		4.4	0.26	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Cyclohexane	ND		4.4	0.61	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Methyl acetate	ND		22	2.6	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Methylcyclohexane	ND		4.4	0.66	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Styrene	ND		4.4	0.22	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Toluene	ND		4.4	0.33	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Trichlorofluoromethane	ND		4.4	0.41	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1
Xylenes, Total	ND		8.7	0.73	ug/Kg	☼	01/10/19 07:20	01/15/19 03:51	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-14 (10'-15')

Lab Sample ID: 480-147693-1

Date Collected: 01/09/19 08:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 92.2

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/10/19 07:20	01/15/19 03:51	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/10/19 07:20	01/15/19 03:51	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/10/19 07:20	01/15/19 03:51	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/10/19 07:20	01/15/19 03:51	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-14 (15'-20')

Lab Sample ID: 480-147693-2

Date Collected: 01/09/19 08:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.8	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,1,1,2-Tetrachloroethane	ND		3.8	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,1,2-Trichloroethane	ND		3.8	0.49	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	0.86	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,1-Dichloroethane	ND		3.8	0.46	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,1-Dichloroethene	ND		3.8	0.46	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,2,4-Trichlorobenzene	ND		3.8	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,2-Dibromo-3-Chloropropane	ND		3.8	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,2-Dichlorobenzene	ND		3.8	0.29	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,2-Dichloroethane	ND		3.8	0.19	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,2-Dichloropropane	ND		3.8	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,3-Dichlorobenzene	ND		3.8	0.19	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
2-Butanone (MEK)	ND		19	1.4	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
2-Hexanone	ND		19	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
4-Methyl-2-pentanone (MIBK)	ND		19	1.2	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Acetone	5.3	J	19	3.2	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Benzene	ND		3.8	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Bromodichloromethane	ND		3.8	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Bromoform	ND		3.8	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Bromomethane	ND		3.8	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Carbon disulfide	ND		3.8	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Carbon tetrachloride	ND		3.8	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Chlorobenzene	ND		3.8	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Dibromochloromethane	ND		3.8	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Chloroethane	ND	*	3.8	0.85	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Chloroform	ND		3.8	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Chloromethane	ND		3.8	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
cis-1,2-Dichloroethene	ND		3.8	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
cis-1,3-Dichloropropene	ND		3.8	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Cyclohexane	ND		3.8	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Dichlorodifluoromethane	ND		3.8	0.31	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Ethylbenzene	ND		3.8	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
1,2-Dibromoethane	ND		3.8	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Isopropylbenzene	ND		3.8	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Methyl acetate	ND		19	2.3	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Methyl tert-butyl ether	ND		3.8	0.37	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Methylcyclohexane	ND		3.8	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Methylene Chloride	ND		3.8	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Styrene	ND		3.8	0.19	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Tetrachloroethene	ND		3.8	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Toluene	ND		3.8	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
trans-1,2-Dichloroethene	ND		3.8	0.39	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
trans-1,3-Dichloropropene	ND		3.8	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Trichloroethene	ND		3.8	0.83	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Trichlorofluoromethane	ND		3.8	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Vinyl chloride	ND		3.8	0.46	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1
Xylenes, Total	ND		7.5	0.63	ug/Kg	☼	01/10/19 06:40	01/15/19 04:18	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-14 (15'-20')

Lab Sample ID: 480-147693-2

Date Collected: 01/09/19 08:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 90.4

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/10/19 06:40	01/15/19 04:18	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/10/19 06:40	01/15/19 04:18	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/10/19 06:40	01/15/19 04:18	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/10/19 06:40	01/15/19 04:18	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-3

Date Collected: 01/09/19 08:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 80.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13400		12.4	5.5	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Antimony	ND		18.6	0.50	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Arsenic	4.1		2.5	0.50	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Barium	48.6		0.62	0.14	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Beryllium	0.49		0.25	0.035	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Cadmium	0.17	J	0.25	0.037	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Calcium	78600	B	62.1	4.1	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Chromium	15.4		0.62	0.25	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Cobalt	7.7		0.62	0.062	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Copper	19.8		1.2	0.26	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Iron	14400	B	12.4	4.3	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Lead	7.0		1.2	0.30	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Magnesium	48900		24.8	1.2	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Manganese	338	B	0.25	0.040	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Nickel	16.0		6.2	0.29	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Potassium	5040	B	37.3	24.8	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Selenium	ND		5.0	0.50	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Silver	ND		0.75	0.25	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Sodium	171	J B	174	16.1	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Thallium	ND		7.5	0.37	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Vanadium	20.6		0.62	0.14	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1
Zinc	22.8		2.5	0.79	mg/Kg	☼	01/15/19 07:32	01/15/19 17:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.025	0.010	mg/Kg	☼	01/14/19 12:45	01/14/19 14:07	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-4

Date Collected: 01/09/19 09:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	30	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2,4-Dinitrophenol	ND		2000	930	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2-Chlorophenol	ND		200	37	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2-Methylphenol	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2-Nitroaniline	ND		390	30	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
3-Nitroaniline	ND		390	56	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4-Methylphenol	ND		390	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4-Nitroaniline	ND		390	110	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Acenaphthene	ND		200	30	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Acenaphthylene	ND		200	26	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Acetophenone	ND		200	27	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Anthracene	ND		200	50	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Atrazine	ND		200	70	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Benzaldehyde	ND		200	160	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Benzo[a]pyrene	ND		200	30	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Benzo[b]fluoranthene	ND		200	32	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Benzo[g,h,i]perylene	ND		200	21	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Benzo[k]fluoranthene	ND		200	26	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Bis(2-ethylhexyl) phthalate	ND		200	69	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Caprolactam	ND		200	61	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Carbazole	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Chrysene	ND		200	45	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Dibenz(a,h)anthracene	ND		200	36	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Dibenzofuran	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-4

Date Collected: 01/09/19 09:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		200	21	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Fluorene	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Hexachloroethane	ND		200	26	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Indeno[1,2,3-cd]pyrene	ND		200	25	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Isophorone	ND		200	43	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Naphthalene	ND		200	26	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Nitrobenzene	ND		200	23	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Phenanthrene	ND		200	30	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Phenol	ND		200	31	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1
Pyrene	ND		200	24	ug/Kg	☼	01/10/19 14:39	01/14/19 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	86		53 - 120	01/10/19 14:39	01/14/19 23:22	1
Phenol-d5 (Surr)	82		54 - 120	01/10/19 14:39	01/14/19 23:22	1
p-Terphenyl-d14 (Surr)	96		65 - 121	01/10/19 14:39	01/14/19 23:22	1
2,4,6-Tribromophenol (Surr)	107		54 - 120	01/10/19 14:39	01/14/19 23:22	1
2-Fluorobiphenyl	89		60 - 120	01/10/19 14:39	01/14/19 23:22	1
2-Fluorophenol (Surr)	78		52 - 120	01/10/19 14:39	01/14/19 23:22	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.056	mg/Kg	☼	01/14/19 07:37	01/17/19 15:32	1
PCB-1221	ND		0.29	0.056	mg/Kg	☼	01/14/19 07:37	01/17/19 15:32	1
PCB-1232	ND		0.29	0.056	mg/Kg	☼	01/14/19 07:37	01/17/19 15:32	1
PCB-1242	ND		0.29	0.056	mg/Kg	☼	01/14/19 07:37	01/17/19 15:32	1
PCB-1248	ND		0.29	0.056	mg/Kg	☼	01/14/19 07:37	01/17/19 15:32	1
PCB-1254	ND		0.29	0.13	mg/Kg	☼	01/14/19 07:37	01/17/19 15:32	1
PCB-1260	ND		0.29	0.13	mg/Kg	☼	01/14/19 07:37	01/17/19 15:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	101		60 - 154	01/14/19 07:37	01/17/19 15:32	1
Tetrachloro-m-xylene	77		60 - 154	01/14/19 07:37	01/17/19 15:32	1
DCB Decachlorobiphenyl	79		65 - 174	01/14/19 07:37	01/17/19 15:32	1
DCB Decachlorobiphenyl	77		65 - 174	01/14/19 07:37	01/17/19 15:32	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (10'-15')

Lab Sample ID: 480-147693-5

Date Collected: 01/09/19 09:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,1,1,2-Tetrachloroethane	ND		5.2	0.85	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,1,2-Trichloroethane	ND		5.2	0.68	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,1-Dichloroethane	ND		5.2	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,1-Dichloroethene	ND		5.2	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,2,4-Trichlorobenzene	ND		5.2	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,2-Dibromo-3-Chloropropane	ND		5.2	2.6	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,2-Dichlorobenzene	ND		5.2	0.41	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,2-Dichloropropane	ND		5.2	2.6	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,4-Dichlorobenzene	ND		5.2	0.73	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Acetone	28		26	4.4	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Benzene	ND		5.2	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Bromodichloromethane	ND		5.2	0.70	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Bromoform	ND		5.2	2.6	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Bromomethane	ND		5.2	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Carbon disulfide	ND		5.2	2.6	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Carbon tetrachloride	ND		5.2	0.51	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Chlorobenzene	ND		5.2	0.69	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Dibromochloromethane	ND		5.2	0.67	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Chloroethane	ND *		5.2	1.2	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Chloroform	ND		5.2	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Chloromethane	ND		5.2	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
cis-1,2-Dichloroethene	ND		5.2	0.67	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
cis-1,3-Dichloropropene	ND		5.2	0.75	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Cyclohexane	ND		5.2	0.73	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Dichlorodifluoromethane	ND		5.2	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
1,2-Dibromoethane	ND		5.2	0.67	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Isopropylbenzene	ND		5.2	0.79	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Methylcyclohexane	ND		5.2	0.80	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Methylene Chloride	2.4 J		5.2	2.4	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Styrene	ND		5.2	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Tetrachloroethene	ND		5.2	0.70	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Toluene	ND		5.2	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
trans-1,2-Dichloroethene	ND		5.2	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
trans-1,3-Dichloropropene	ND		5.2	2.3	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Trichloroethene	ND		5.2	1.2	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Trichlorofluoromethane	ND		5.2	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Vinyl chloride	ND		5.2	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1
Xylenes, Total	ND		10	0.88	ug/Kg	☼	01/10/19 06:40	01/15/19 04:44	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (10'-15')

Lab Sample ID: 480-147693-5

Date Collected: 01/09/19 09:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 88.8

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		71 - 125	01/10/19 06:40	01/15/19 04:44	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/10/19 06:40	01/15/19 04:44	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/10/19 06:40	01/15/19 04:44	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/10/19 06:40	01/15/19 04:44	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (15'-20')

Lab Sample ID: 480-147693-6

Date Collected: 01/09/19 09:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.1

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	☼	01/10/19 06:40	01/15/19 05:10	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.75	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,1,2-Trichloroethane	ND		4.6	0.60	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.0	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,1-Dichloroethene	ND		4.6	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,2,4-Trichlorobenzene	ND		4.6	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,2-Dibromo-3-Chloropropane	ND		4.6	2.3	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,2-Dichloropropane	ND		4.6	2.3	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,4-Dichlorobenzene	ND		4.6	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Acetone	ND		23	3.9	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Benzene	ND		4.6	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Bromodichloromethane	ND		4.6	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Bromoform	ND		4.6	2.3	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Bromomethane	ND		4.6	0.41	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Carbon disulfide	ND		4.6	2.3	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Carbon tetrachloride	ND		4.6	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Dibromochloromethane	ND		4.6	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Chloroethane	ND	*	4.6	1.0	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Chloroform	0.59	J	4.6	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Chloromethane	ND		4.6	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
cis-1,2-Dichloroethene	ND		4.6	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
cis-1,3-Dichloropropene	ND		4.6	0.66	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Cyclohexane	ND		4.6	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Dichlorodifluoromethane	ND		4.6	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
1,2-Dibromoethane	ND		4.6	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Isopropylbenzene	ND		4.6	0.69	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Methyl acetate	ND		23	2.8	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Methylcyclohexane	ND		4.6	0.70	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Styrene	ND		4.6	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Toluene	ND		4.6	0.35	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
trans-1,2-Dichloroethene	ND		4.6	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
trans-1,3-Dichloropropene	ND		4.6	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Trichlorofluoromethane	ND		4.6	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1
Xylenes, Total	ND		9.2	0.77	ug/Kg	☼	01/10/19 06:40	01/15/19 05:10	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (15'-20')

Lab Sample ID: 480-147693-6

Date Collected: 01/09/19 09:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		71 - 125	01/10/19 06:40	01/15/19 05:10	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		64 - 126	01/10/19 06:40	01/15/19 05:10	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/10/19 06:40	01/15/19 05:10	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/10/19 06:40	01/15/19 05:10	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-20 (10'-15')

Lab Sample ID: 480-147693-7

Date Collected: 01/09/19 10:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 90.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.7	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,1,1,2,2-Tetrachloroethane	ND	F1	3.7	0.60	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,1,2-Trichloroethane	ND	F1	3.7	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	0.84	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,1-Dichloroethane	ND		3.7	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,1-Dichloroethene	ND		3.7	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,2,4-Trichlorobenzene	ND		3.7	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,2-Dibromo-3-Chloropropane	ND	F1	3.7	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,2-Dichlorobenzene	ND		3.7	0.29	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,2-Dichloroethane	ND		3.7	0.19	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,2-Dichloropropane	ND		3.7	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,3-Dichlorobenzene	ND		3.7	0.19	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,4-Dichlorobenzene	ND		3.7	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
2-Butanone (MEK)	ND	F1	18	1.3	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
2-Hexanone	ND		18	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
4-Methyl-2-pentanone (MIBK)	ND	F1	18	1.2	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Acetone	8.6	J	18	3.1	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Benzene	ND		3.7	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Bromodichloromethane	ND		3.7	0.49	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Bromoform	ND		3.7	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Bromomethane	ND		3.7	0.33	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Carbon disulfide	ND		3.7	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Carbon tetrachloride	ND		3.7	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Chlorobenzene	ND		3.7	0.49	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Dibromochloromethane	ND		3.7	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Chloroethane	ND	*	3.7	0.83	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Chloroform	ND		3.7	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Chloromethane	ND		3.7	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
cis-1,2-Dichloroethene	ND	F1	3.7	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
cis-1,3-Dichloropropene	ND	F1	3.7	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Cyclohexane	ND		3.7	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Dichlorodifluoromethane	ND		3.7	0.30	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Ethylbenzene	ND	F1	3.7	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
1,2-Dibromoethane	ND	F1	3.7	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Isopropylbenzene	ND		3.7	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Methyl acetate	ND		18	2.2	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Methyl tert-butyl ether	ND		3.7	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Methylcyclohexane	ND		3.7	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Methylene Chloride	ND		3.7	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Styrene	ND	F1	3.7	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Tetrachloroethene	ND		3.7	0.49	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Toluene	0.29	J	3.7	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
trans-1,2-Dichloroethene	ND		3.7	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
trans-1,3-Dichloropropene	ND		3.7	1.6	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Trichloroethene	ND		3.7	0.81	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Trichlorofluoromethane	ND		3.7	0.35	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Vinyl chloride	ND		3.7	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1
Xylenes, Total	ND	F1	7.4	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 05:35	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-20 (10'-15')

Lab Sample ID: 480-147693-7

Date Collected: 01/09/19 10:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 90.7

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/10/19 06:40	01/15/19 05:35	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/10/19 06:40	01/15/19 05:35	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/10/19 06:40	01/15/19 05:35	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/10/19 06:40	01/15/19 05:35	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-20 (15'-20')

Lab Sample ID: 480-147693-8

Date Collected: 01/09/19 10:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,1,2,2-Tetrachloroethane	ND		4.1	0.66	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,1,2-Trichloroethane	ND		4.1	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.93	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,2,4-Trichlorobenzene	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,2-Dibromo-3-Chloropropane	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,2-Dichloropropane	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
2-Butanone (MEK)	ND		20	1.5	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Acetone	11	J	20	3.4	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Benzene	ND		4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Bromodichloromethane	ND		4.1	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Bromoform	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Bromomethane	ND		4.1	0.37	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Carbon disulfide	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Dibromochloromethane	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Chloroethane	ND	*	4.1	0.92	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Chloromethane	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
cis-1,2-Dichloroethene	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
cis-1,3-Dichloropropene	ND		4.1	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Cyclohexane	ND		4.1	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Dichlorodifluoromethane	ND		4.1	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
1,2-Dibromoethane	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Isopropylbenzene	ND		4.1	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Methyl acetate	ND		20	2.5	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Methylcyclohexane	ND		4.1	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Methylene Chloride	2.0	J	4.1	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Styrene	ND		4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Toluene	ND		4.1	0.31	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
trans-1,2-Dichloroethene	ND		4.1	0.42	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
trans-1,3-Dichloropropene	ND		4.1	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Trichloroethene	ND		4.1	0.90	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Trichlorofluoromethane	ND		4.1	0.39	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1
Xylenes, Total	ND		8.2	0.69	ug/Kg	☼	01/10/19 06:40	01/15/19 06:01	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-20 (15'-20')

Lab Sample ID: 480-147693-8

Date Collected: 01/09/19 10:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.3

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/10/19 06:40	01/15/19 06:01	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	01/10/19 06:40	01/15/19 06:01	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/10/19 06:40	01/15/19 06:01	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/10/19 06:40	01/15/19 06:01	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-25 (10'-15')

Lab Sample ID: 480-147693-9

Date Collected: 01/09/19 10:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Acetone	22		22	3.7	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Benzene	ND		4.4	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Bromomethane	ND		4.4	0.39	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Chloroethane	ND	*	4.4	0.99	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Chloromethane	ND		4.4	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Cyclohexane	ND		4.4	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Methyl acetate	ND		22	2.6	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Methylcyclohexane	ND		4.4	0.66	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Methylene Chloride	2.1	J	4.4	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Styrene	ND		4.4	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Toluene	0.48	J	4.4	0.33	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Trichlorofluoromethane	ND		4.4	0.41	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1
Xylenes, Total	ND		8.7	0.73	ug/Kg	☼	01/10/19 06:40	01/15/19 06:26	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-25 (10'-15')

Lab Sample ID: 480-147693-9

Date Collected: 01/09/19 10:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 82.8

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/10/19 06:40	01/15/19 06:26	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		64 - 126	01/10/19 06:40	01/15/19 06:26	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/10/19 06:40	01/15/19 06:26	1
<i>Dibromofluoromethane (Surr)</i>	99		60 - 140	01/10/19 06:40	01/15/19 06:26	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-25 (15'-20')

Lab Sample ID: 480-147693-10

Date Collected: 01/09/19 11:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,1,2,2-Tetrachloroethane	ND		4.1	0.66	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,1,2-Trichloroethane	ND		4.1	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.93	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,2,4-Trichlorobenzene	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,2-Dibromo-3-Chloropropane	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,2-Dichloroethane	ND		4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,2-Dichloropropane	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
2-Butanone (MEK)	ND		20	1.5	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Acetone	24		20	3.4	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Benzene	ND		4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Bromodichloromethane	ND		4.1	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Bromoform	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Bromomethane	ND		4.1	0.37	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Carbon disulfide	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Carbon tetrachloride	ND		4.1	0.39	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Dibromochloromethane	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Chloroethane	ND	*	4.1	0.92	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Chloromethane	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
cis-1,2-Dichloroethene	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
cis-1,3-Dichloropropene	ND		4.1	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Cyclohexane	ND		4.1	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Dichlorodifluoromethane	ND		4.1	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
1,2-Dibromoethane	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Isopropylbenzene	ND		4.1	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Methyl acetate	ND		20	2.5	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Methylcyclohexane	ND		4.1	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Styrene	ND		4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Toluene	ND		4.1	0.31	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
trans-1,2-Dichloroethene	ND		4.1	0.42	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
trans-1,3-Dichloropropene	ND		4.1	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Trichloroethene	ND		4.1	0.89	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Trichlorofluoromethane	ND		4.1	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1
Xylenes, Total	ND		8.1	0.68	ug/Kg	☼	01/10/19 06:40	01/15/19 06:52	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-25 (15'-20')

Lab Sample ID: 480-147693-10

Date Collected: 01/09/19 11:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.6

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		71 - 125	01/10/19 06:40	01/15/19 06:52	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/10/19 06:40	01/15/19 06:52	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/10/19 06:40	01/15/19 06:52	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/10/19 06:40	01/15/19 06:52	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-30 (10'-15')

Lab Sample ID: 480-147693-11

Date Collected: 01/09/19 11:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.9	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,1,1,2-Tetrachloroethane	ND		3.9	0.63	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,1,2-Trichloroethane	ND		3.9	0.51	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	0.89	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,2,4-Trichlorobenzene	ND		3.9	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,2-Dibromo-3-Chloropropane	ND		3.9	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,2-Dichloropropane	ND		3.9	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
2-Butanone (MEK)	ND		20	1.4	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Acetone	21		20	3.3	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Benzene	ND		3.9	0.19	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Bromodichloromethane	ND		3.9	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Bromoform	ND		3.9	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Bromomethane	ND		3.9	0.35	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Carbon disulfide	ND		3.9	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Dibromochloromethane	ND		3.9	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Chloroethane	ND		3.9	0.88	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Chloromethane	ND		3.9	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
cis-1,2-Dichloroethene	ND		3.9	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
cis-1,3-Dichloropropene	ND		3.9	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Cyclohexane	ND		3.9	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Dichlorodifluoromethane	ND		3.9	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
1,2-Dibromoethane	ND		3.9	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Isopropylbenzene	ND		3.9	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Methyl tert-butyl ether	ND		3.9	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Methylcyclohexane	ND		3.9	0.60	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Styrene	ND		3.9	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Tetrachloroethene	1.4	J	3.9	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Toluene	ND		3.9	0.30	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
trans-1,2-Dichloroethene	ND		3.9	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
trans-1,3-Dichloropropene	ND		3.9	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Trichloroethene	ND		3.9	0.86	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Trichlorofluoromethane	ND		3.9	0.37	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1
Xylenes, Total	ND		7.8	0.66	ug/Kg	☼	01/10/19 06:40	01/15/19 11:55	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-30 (10'-15')

Lab Sample ID: 480-147693-11

Date Collected: 01/09/19 11:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.2

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/10/19 06:40	01/15/19 11:55	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/10/19 06:40	01/15/19 11:55	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/10/19 06:40	01/15/19 11:55	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/10/19 06:40	01/15/19 11:55	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-30 (15'-20')

Lab Sample ID: 480-147693-12

Date Collected: 01/09/19 11:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,1,1,2-Tetrachloroethane	ND		4.8	0.78	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,1,2-Trichloroethane	ND		4.8	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,1-Dichloroethane	ND		4.8	0.58	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,2-Dibromo-3-Chloropropane	ND		4.8	2.4	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,2-Dichlorobenzene	ND		4.8	0.37	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Acetone	ND		24	4.0	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Benzene	ND		4.8	0.23	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Bromodichloromethane	ND		4.8	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Bromomethane	ND		4.8	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Carbon tetrachloride	ND		4.8	0.46	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Chlorobenzene	ND		4.8	0.63	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Dibromochloromethane	ND		4.8	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Chloroethane	ND		4.8	1.1	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Chloroform	ND		4.8	0.30	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
cis-1,2-Dichloroethene	1.6	J	4.8	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Cyclohexane	ND		4.8	0.67	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Dichlorodifluoromethane	ND		4.8	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
1,2-Dibromoethane	ND		4.8	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Isopropylbenzene	ND		4.8	0.72	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Methyl acetate	ND		24	2.9	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Methylcyclohexane	ND		4.8	0.73	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Methylene Chloride	ND		4.8	2.2	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Styrene	ND		4.8	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Tetrachloroethene	1.2	J	4.8	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Toluene	ND		4.8	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
trans-1,2-Dichloroethene	ND		4.8	0.49	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Trichloroethene	ND		4.8	1.1	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Vinyl chloride	ND		4.8	0.58	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1
Xylenes, Total	ND		9.6	0.81	ug/Kg	☼	01/10/19 06:40	01/15/19 12:22	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-30 (15'-20')

Lab Sample ID: 480-147693-12

Date Collected: 01/09/19 11:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.0

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		71 - 125	01/10/19 06:40	01/15/19 12:22	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/10/19 06:40	01/15/19 12:22	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/10/19 06:40	01/15/19 12:22	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/10/19 06:40	01/15/19 12:22	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-13

Date Collected: 01/09/19 12:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 79.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15300		12.7	5.6	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Antimony	0.59	J	19.1	0.51	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Arsenic	6.6		2.5	0.51	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Barium	60.7		0.64	0.14	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Beryllium	0.58		0.25	0.036	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Cadmium	1.1		0.25	0.038	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Calcium	54300	B	63.6	4.2	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Chromium	18.4		0.64	0.25	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Cobalt	8.3		0.64	0.064	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Copper	28.2		1.3	0.27	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Iron	18000	B	12.7	4.5	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Lead	45.1		1.3	0.31	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Magnesium	25100		25.4	1.2	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Manganese	556	B	0.25	0.041	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Nickel	28.7		6.4	0.29	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Potassium	4310	B	38.2	25.4	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Selenium	ND		5.1	0.51	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Silver	ND		0.76	0.25	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Sodium	174	J B	178	16.5	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Thallium	ND		7.6	0.38	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Vanadium	24.2		0.64	0.14	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1
Zinc	70.7		2.5	0.81	mg/Kg	☼	01/15/19 07:32	01/15/19 17:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.026	0.010	mg/Kg	☼	01/14/19 12:45	01/14/19 14:08	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (0-5')

Lab Sample ID: 480-147693-14

Date Collected: 01/09/19 12:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		2100	310	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
bis (2-chloroisopropyl) ether	ND		2100	430	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2,4,5-Trichlorophenol	ND		2100	580	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2,4,6-Trichlorophenol	ND		2100	430	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2,4-Dichlorophenol	ND		2100	230	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2,4-Dimethylphenol	ND		2100	510	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2,4-Dinitrophenol	ND		21000	9800	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2,4-Dinitrotoluene	ND		2100	440	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2,6-Dinitrotoluene	ND		2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2-Chloronaphthalene	ND		2100	350	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2-Chlorophenol	ND		2100	390	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2-Methylphenol	ND		2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2-Methylnaphthalene	ND		2100	430	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2-Nitroaniline	ND		4100	310	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
2-Nitrophenol	ND		2100	600	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
3,3'-Dichlorobenzidine	ND		4100	2500	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
3-Nitroaniline	ND		4100	590	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4,6-Dinitro-2-methylphenol	ND		4100	2100	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4-Bromophenyl phenyl ether	ND		2100	300	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4-Chloro-3-methylphenol	ND		2100	530	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4-Chloroaniline	ND		2100	530	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4-Chlorophenyl phenyl ether	ND		2100	260	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4-Methylphenol	ND		4100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4-Nitroaniline	ND		4100	1100	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
4-Nitrophenol	ND		4100	1500	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Acenaphthene	370	J	2100	310	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Acenaphthylene	520	J	2100	280	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Acetophenone	ND		2100	290	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Anthracene	1400	J	2100	530	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Atrazine	ND		2100	740	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Benzaldehyde	ND		2100	1700	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Benzo[a]anthracene	4200		2100	210	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Benzo[a]pyrene	3500		2100	310	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Benzo[b]fluoranthene	4100		2100	340	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Benzo[g,h,i]perylene	1600	J	2100	230	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Benzo[k]fluoranthene	2100		2100	280	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Bis(2-chloroethoxy)methane	ND		2100	450	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Bis(2-chloroethyl)ether	ND		2100	280	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Bis(2-ethylhexyl) phthalate	ND		2100	730	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Butyl benzyl phthalate	ND		2100	350	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Caprolactam	ND		2100	640	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Carbazole	470	J	2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Chrysene	3500		2100	480	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Dibenz(a,h)anthracene	ND		2100	380	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Di-n-butyl phthalate	ND		2100	360	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Di-n-octyl phthalate	ND		2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Dibenzofuran	320	J	2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Diethyl phthalate	ND		2100	280	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Dimethyl phthalate	ND		2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (0-5')

Lab Sample ID: 480-147693-14

Date Collected: 01/09/19 12:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	8700		2100	230	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Fluorene	470	J	2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Hexachlorobenzene	ND		2100	290	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Hexachlorobutadiene	ND		2100	310	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Hexachlorocyclopentadiene	ND		2100	290	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Hexachloroethane	ND		2100	280	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Indeno[1,2,3-cd]pyrene	1900	J	2100	260	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Isophorone	ND		2100	450	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
N-Nitrosodi-n-propylamine	ND		2100	360	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
N-Nitrosodiphenylamine	ND		2100	1700	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Naphthalene	410	J	2100	280	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Nitrobenzene	ND		2100	240	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Pentachlorophenol	ND		4100	2100	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Phenanthrene	5500		2100	310	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Phenol	ND		2100	330	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Pyrene	5900		2100	250	ug/Kg	☼	01/10/19 14:39	01/14/19 23:48	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	76		53 - 120				01/10/19 14:39	01/14/19 23:48	10
Phenol-d5 (Surr)	73		54 - 120				01/10/19 14:39	01/14/19 23:48	10
p-Terphenyl-d14 (Surr)	93		65 - 121				01/10/19 14:39	01/14/19 23:48	10
2,4,6-Tribromophenol (Surr)	107		54 - 120				01/10/19 14:39	01/14/19 23:48	10
2-Fluorobiphenyl	86		60 - 120				01/10/19 14:39	01/14/19 23:48	10
2-Fluorophenol (Surr)	72		52 - 120				01/10/19 14:39	01/14/19 23:48	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.048	mg/Kg	☼	01/14/19 07:37	01/17/19 15:48	1
PCB-1221	ND		0.25	0.048	mg/Kg	☼	01/14/19 07:37	01/17/19 15:48	1
PCB-1232	ND		0.25	0.048	mg/Kg	☼	01/14/19 07:37	01/17/19 15:48	1
PCB-1242	ND		0.25	0.048	mg/Kg	☼	01/14/19 07:37	01/17/19 15:48	1
PCB-1248	ND		0.25	0.048	mg/Kg	☼	01/14/19 07:37	01/17/19 15:48	1
PCB-1254	ND		0.25	0.12	mg/Kg	☼	01/14/19 07:37	01/17/19 15:48	1
PCB-1260	ND		0.25	0.12	mg/Kg	☼	01/14/19 07:37	01/17/19 15:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		60 - 154				01/14/19 07:37	01/17/19 15:48	1
Tetrachloro-m-xylene	82		60 - 154				01/14/19 07:37	01/17/19 15:48	1
DCB Decachlorobiphenyl	79		65 - 174				01/14/19 07:37	01/17/19 15:48	1
DCB Decachlorobiphenyl	78		65 - 174				01/14/19 07:37	01/17/19 15:48	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (10'-15')

Lab Sample ID: 480-147693-15

Date Collected: 01/09/19 12:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.5	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,1,1,2-Tetrachloroethane	ND		3.5	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,1,2-Trichloroethane	ND		3.5	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	0.80	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,1-Dichloroethane	ND		3.5	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,1-Dichloroethene	ND		3.5	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,2,4-Trichlorobenzene	ND		3.5	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,2-Dibromo-3-Chloropropane	ND		3.5	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,2-Dichlorobenzene	ND		3.5	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,2-Dichloroethane	ND		3.5	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,2-Dichloropropane	ND		3.5	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,3-Dichlorobenzene	ND		3.5	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,4-Dichlorobenzene	ND		3.5	0.49	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
2-Butanone (MEK)	ND		17	1.3	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
2-Hexanone	ND		17	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
4-Methyl-2-pentanone (MIBK)	ND		17	1.1	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Acetone	5.0	J	17	2.9	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Benzene	ND		3.5	0.17	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Bromodichloromethane	ND		3.5	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Bromoform	ND		3.5	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Bromomethane	ND		3.5	0.31	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Carbon disulfide	ND		3.5	1.7	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Carbon tetrachloride	ND		3.5	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Chlorobenzene	ND		3.5	0.46	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Dibromochloromethane	ND		3.5	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Chloroethane	ND		3.5	0.79	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Chloroform	ND		3.5	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Chloromethane	ND		3.5	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
cis-1,2-Dichloroethene	ND		3.5	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
cis-1,3-Dichloropropene	ND		3.5	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Cyclohexane	ND		3.5	0.49	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Dichlorodifluoromethane	ND		3.5	0.29	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Ethylbenzene	ND		3.5	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
1,2-Dibromoethane	ND		3.5	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Isopropylbenzene	ND		3.5	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Methyl acetate	ND		17	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Methyl tert-butyl ether	ND		3.5	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Methylcyclohexane	ND		3.5	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Methylene Chloride	ND		3.5	1.6	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Styrene	ND		3.5	0.17	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Tetrachloroethene	ND		3.5	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Toluene	ND		3.5	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
trans-1,2-Dichloroethene	ND		3.5	0.36	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
trans-1,3-Dichloropropene	ND		3.5	1.5	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Trichloroethene	ND		3.5	0.77	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Trichlorofluoromethane	ND		3.5	0.33	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Vinyl chloride	ND		3.5	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1
Xylenes, Total	ND		7.0	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 12:48	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (10'-15')

Date Collected: 01/09/19 12:40

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-15

Matrix: Solid

Percent Solids: 91.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		71 - 125	01/10/19 06:40	01/15/19 12:48	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		64 - 126	01/10/19 06:40	01/15/19 12:48	1
<i>4-Bromofluorobenzene (Surr)</i>	88		72 - 126	01/10/19 06:40	01/15/19 12:48	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/10/19 06:40	01/15/19 12:48	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (15'-20')

Lab Sample ID: 480-147693-16

Date Collected: 01/09/19 13:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,1,2,2-Tetrachloroethane	ND		4.2	0.68	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.96	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,2,4-Trichlorobenzene	ND		4.2	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,2-Dibromo-3-Chloropropane	ND		4.2	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
2-Butanone (MEK)	ND		21	1.5	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Acetone	6.7	J	21	3.5	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Benzene	ND		4.2	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Bromodichloromethane	ND		4.2	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Chloroethane	ND		4.2	0.95	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Chloromethane	ND		4.2	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Isopropylbenzene	ND		4.2	0.63	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Methyl acetate	ND		21	2.5	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Methylcyclohexane	ND		4.2	0.64	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Styrene	ND		4.2	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Toluene	ND		4.2	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
trans-1,2-Dichloroethene	ND		4.2	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
trans-1,3-Dichloropropene	ND		4.2	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1
Xylenes, Total	ND		8.4	0.71	ug/Kg	☼	01/10/19 06:40	01/15/19 13:14	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (15'-20')

Date Collected: 01/09/19 13:00

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-16

Matrix: Solid

Percent Solids: 90.1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	102		71 - 125	01/10/19 06:40	01/15/19 13:14	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/10/19 06:40	01/15/19 13:14	1
<i>4-Bromofluorobenzene (Surr)</i>	83		72 - 126	01/10/19 06:40	01/15/19 13:14	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/10/19 06:40	01/15/19 13:14	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-7 (5'-10')

Lab Sample ID: 480-147693-17

Date Collected: 01/09/19 13:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	20		4.1	0.30	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,1,2,2-Tetrachloroethane	ND		4.1	0.66	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,1,2-Trichloroethane	0.62	J	4.1	0.53	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.93	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,1-Dichloroethene	2.3	J	4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,2,4-Trichlorobenzene	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,2-Dibromo-3-Chloropropane	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,2-Dichloroethane	0.24	J	4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,2-Dichloropropane	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
2-Butanone (MEK)	3.0	J	20	1.5	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Acetone	12	J	20	3.4	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Benzene	0.32	J	4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Bromodichloromethane	ND		4.1	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Bromoform	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Bromomethane	ND		4.1	0.37	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Carbon disulfide	ND		4.1	2.0	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Carbon tetrachloride	6.3		4.1	0.39	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Dibromochloromethane	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Chloroethane	ND		4.1	0.92	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Chloroform	2.1	J	4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Chloromethane	ND		4.1	0.25	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
cis-1,2-Dichloroethene	9.5		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
cis-1,3-Dichloropropene	ND		4.1	0.59	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Cyclohexane	ND		4.1	0.57	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Dichlorodifluoromethane	ND		4.1	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
1,2-Dibromoethane	ND		4.1	0.52	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Isopropylbenzene	ND		4.1	0.61	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Methyl acetate	ND		20	2.5	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Methylcyclohexane	ND		4.1	0.62	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Styrene	ND		4.1	0.20	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Tetrachloroethene	2.3	J	4.1	0.55	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Toluene	1.9	J	4.1	0.31	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
trans-1,2-Dichloroethene	ND		4.1	0.42	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
trans-1,3-Dichloropropene	ND		4.1	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Trichloroethene	2400	E	4.1	0.90	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Trichlorofluoromethane	ND		4.1	0.38	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1
Xylenes, Total	ND		8.1	0.68	ug/Kg	☼	01/10/19 06:40	01/15/19 13:39	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-7 (5'-10')

Lab Sample ID: 480-147693-17

Date Collected: 01/09/19 13:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125	01/10/19 06:40	01/15/19 13:39	1
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	01/10/19 06:40	01/15/19 13:39	1
4-Bromofluorobenzene (Surr)	99		72 - 126	01/10/19 06:40	01/15/19 13:39	1
Dibromofluoromethane (Surr)	103		60 - 140	01/10/19 06:40	01/15/19 13:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3400	940	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,1,2,2-Tetrachloroethane	ND		3400	550	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,1,2-Trichloroethane	ND		3400	710	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3400	1700	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,1-Dichloroethane	ND		3400	1100	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,1-Dichloroethene	ND		3400	1200	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,2,4-Trichlorobenzene	ND		3400	1300	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,2-Dibromo-3-Chloropropane	ND		3400	1700	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,2-Dichlorobenzene	ND		3400	870	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,2-Dichloroethane	ND		3400	1400	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,2-Dichloropropane	ND		3400	550	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,3-Dichlorobenzene	ND		3400	910	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,4-Dichlorobenzene	ND		3400	480	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
2-Butanone (MEK)	ND		17000	10000	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
2-Hexanone	ND		17000	7000	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
4-Methyl-2-pentanone (MIBK)	ND		17000	1100	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Acetone	ND		17000	14000	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Benzene	ND		3400	650	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Bromodichloromethane	ND		3400	680	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Bromoform	ND	*	3400	1700	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Bromomethane	ND		3400	750	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Carbon disulfide	ND		3400	1500	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Carbon tetrachloride	ND		3400	870	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Chlorobenzene	ND		3400	450	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Dibromochloromethane	ND		3400	1600	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Chloroethane	ND		3400	710	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Chloroform	ND		3400	2300	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Chloromethane	ND		3400	810	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
cis-1,2-Dichloroethene	ND		3400	940	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
cis-1,3-Dichloropropene	ND		3400	810	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Cyclohexane	ND		3400	750	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Dichlorodifluoromethane	ND		3400	1500	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Ethylbenzene	ND		3400	990	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
1,2-Dibromoethane	ND		3400	600	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Isopropylbenzene	ND		3400	510	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Methyl acetate	ND		17000	1600	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Methyl tert-butyl ether	ND		3400	1300	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Methylcyclohexane	ND		3400	1600	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Methylene Chloride	ND		3400	670	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Styrene	ND		3400	820	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Tetrachloroethene	ND		3400	460	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Toluene	ND		3400	910	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
trans-1,2-Dichloroethene	ND		3400	800	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-7 (5'-10')

Lab Sample ID: 480-147693-17

Date Collected: 01/09/19 13:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		3400	330	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Trichloroethene	200000		3400	950	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Trichlorofluoromethane	ND		3400	1600	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Vinyl chloride	ND		3400	1100	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Xylenes, Total	ND		6800	1900	ug/Kg	☼	01/15/19 14:08	01/16/19 02:21	80
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		50 - 149				01/15/19 14:08	01/16/19 02:21	80
1,2-Dichloroethane-d4 (Surr)	112		53 - 146				01/15/19 14:08	01/16/19 02:21	80
4-Bromofluorobenzene (Surr)	105		49 - 148				01/15/19 14:08	01/16/19 02:21	80
Dibromofluoromethane (Surr)	109		60 - 140				01/15/19 14:08	01/16/19 02:21	80

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-7 (15'-17')

Lab Sample ID: 480-147693-18

Date Collected: 01/09/19 13:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.5	0.26	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,1,2,2-Tetrachloroethane	ND		3.5	0.58	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,1,2-Trichloroethane	ND		3.5	0.46	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.5	0.81	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,1-Dichloroethane	ND		3.5	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,1-Dichloroethene	ND		3.5	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,2,4-Trichlorobenzene	ND		3.5	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,2-Dibromo-3-Chloropropane	ND		3.5	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,2-Dichlorobenzene	ND		3.5	0.28	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,2-Dichloroethane	ND		3.5	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,2-Dichloropropane	ND		3.5	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,3-Dichlorobenzene	ND		3.5	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,4-Dichlorobenzene	ND		3.5	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
2-Butanone (MEK)	ND		18	1.3	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
2-Hexanone	ND		18	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
4-Methyl-2-pentanone (MIBK)	ND		18	1.2	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Acetone	56		18	3.0	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Benzene	ND		3.5	0.17	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Bromodichloromethane	ND		3.5	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Bromoform	ND		3.5	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Bromomethane	ND		3.5	0.32	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Carbon disulfide	ND		3.5	1.8	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Carbon tetrachloride	ND		3.5	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Chlorobenzene	ND		3.5	0.47	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Dibromochloromethane	ND		3.5	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Chloroethane	ND		3.5	0.80	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Chloroform	ND		3.5	0.22	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Chloromethane	ND		3.5	0.21	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
cis-1,2-Dichloroethene	ND		3.5	0.45	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
cis-1,3-Dichloropropene	ND		3.5	0.51	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Cyclohexane	ND		3.5	0.50	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Dichlorodifluoromethane	ND		3.5	0.29	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Ethylbenzene	ND		3.5	0.24	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
1,2-Dibromoethane	ND		3.5	0.46	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Isopropylbenzene	ND		3.5	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Methyl acetate	ND		18	2.1	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Methyl tert-butyl ether	ND		3.5	0.35	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Methylcyclohexane	ND		3.5	0.54	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Methylene Chloride	ND		3.5	1.6	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Styrene	ND		3.5	0.18	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Tetrachloroethene	ND		3.5	0.48	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Toluene	ND		3.5	0.27	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
trans-1,2-Dichloroethene	ND		3.5	0.37	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
trans-1,3-Dichloropropene	ND		3.5	1.6	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Trichloroethene	53		3.5	0.78	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Trichlorofluoromethane	ND		3.5	0.34	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Vinyl chloride	ND		3.5	0.43	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1
Xylenes, Total	ND		7.1	0.60	ug/Kg	☼	01/10/19 06:40	01/15/19 14:06	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-7 (15'-17')

Date Collected: 01/09/19 13:40

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-18

Matrix: Solid

Percent Solids: 92.0

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	102		71 - 125	01/10/19 06:40	01/15/19 14:06	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/10/19 06:40	01/15/19 14:06	1
<i>4-Bromofluorobenzene (Surr)</i>	84		72 - 126	01/10/19 06:40	01/15/19 14:06	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/10/19 06:40	01/15/19 14:06	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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)	DCA (64-126)	BFB (72-126)	DBFM (60-140)
480-147693-1	SB-14 (10'-15')	98	105	99	100
480-147693-2	SB-14 (15'-20')	98	106	98	100
480-147693-5	SB-15 (10'-15')	97	106	98	101
480-147693-6	SB-15 (15'-20')	97	108	98	102
480-147693-7	SB-20 (10'-15')	98	105	99	100
480-147693-7 MS	SB-20 (10'-15')	97	93	99	99
480-147693-7 MSD	SB-20 (10'-15')	98	95	101	99
480-147693-8	SB-20 (15'-20')	98	103	99	100
480-147693-9	SB-25 (10'-15')	98	104	98	99
480-147693-10	SB-25 (15'-20')	99	105	99	101
480-147693-11	SB-30 (10'-15')	98	106	99	101
480-147693-12	SB-30 (15'-20')	97	106	98	102
480-147693-15	SB-6 (10'-15')	101	104	88	101
480-147693-16	SB-6 (15'-20')	102	106	83	102
480-147693-17	SB-7 (5'-10')	99	105	99	103
480-147693-18	SB-7 (15'-17')	102	105	84	101
LCS 480-455001/1-A	Lab Control Sample	99	100	102	100
LCS 480-455052/1-A	Lab Control Sample	99	103	102	102
MB 480-455001/2-A	Method Blank	98	103	100	101
MB 480-455052/2-A	Method Blank	99	101	98	100

Surrogate Legend

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

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 (50-149)	DCA (53-146)	BFB (49-148)	DBFM (60-140)
480-147693-17 - DL	SB-7 (5'-10')	103	112	105	109
LCS 480-455051/1-A	Lab Control Sample	99	106	102	104
LCSD 480-455051/2-A	Lab Control Sample Dup	98	103	106	100
MB 480-455051/3-A	Method Blank	100	108	103	101

Surrogate Legend

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

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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 (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-147693-4	SB-15 (0-5')	86	82	96	107	89	78
480-147693-14	SB-6 (0-5')	76	73	93	107	86	72
LCS 480-454574/2-A	Lab Control Sample	83	79	105	113	94	72
MB 480-454574/1-A	Method Blank	89	85	112	101	97	80

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)
480-147693-4	SB-15 (0-5')	101	77	79	77
480-147693-14	SB-6 (0-5')	99	82	79	78
LCS 480-454848/2-A	Lab Control Sample	132	103	106	106
MB 480-454848/1-A	Method Blank	107	84	85	85

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: MB 480-455001/2-A

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
2-Hexanone	ND		25	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Acetone	ND		25	4.2	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Benzene	ND		5.0	0.25	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Bromoform	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chloroform	ND		5.0	0.31	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methyl acetate	ND		25	3.0	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Styrene	ND		5.0	0.25	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Toluene	ND		5.0	0.38	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/14/19 20:04	01/14/19 22:52	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/14/19 20:04	01/14/19 22:52	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		71 - 125	01/14/19 20:04	01/14/19 22:52	1
1,2-Dichloroethane-d4 (Surr)	103		64 - 126	01/14/19 20:04	01/14/19 22:52	1
4-Bromofluorobenzene (Surr)	100		72 - 126	01/14/19 20:04	01/14/19 22:52	1
Dibromofluoromethane (Surr)	101		60 - 140	01/14/19 20:04	01/14/19 22:52	1

Lab Sample ID: LCS 480-455001/1-A

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	45.4		ug/Kg		91	77 - 121
1,1,2,2-Tetrachloroethane	50.0	44.2		ug/Kg		88	80 - 120
1,1,2-Trichloroethane	50.0	44.2		ug/Kg		88	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.9		ug/Kg		90	60 - 140
1,1-Dichloroethane	50.0	45.6		ug/Kg		91	73 - 126
1,1-Dichloroethene	50.0	44.4		ug/Kg		89	59 - 125
1,2,4-Trichlorobenzene	50.0	45.3		ug/Kg		91	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	44.2		ug/Kg		88	63 - 124
1,2-Dichlorobenzene	50.0	44.2		ug/Kg		88	75 - 120
1,2-Dichloroethane	50.0	45.1		ug/Kg		90	77 - 122
1,2-Dichloropropane	50.0	45.6		ug/Kg		91	75 - 124
1,3-Dichlorobenzene	50.0	44.9		ug/Kg		90	74 - 120
1,4-Dichlorobenzene	50.0	44.6		ug/Kg		89	73 - 120
2-Butanone (MEK)	250	252		ug/Kg		101	70 - 134
2-Hexanone	250	250		ug/Kg		100	59 - 130
4-Methyl-2-pentanone (MIBK)	250	240		ug/Kg		96	65 - 133
Acetone	250	239		ug/Kg		96	61 - 137
Benzene	50.0	45.7		ug/Kg		91	79 - 127
Bromodichloromethane	50.0	45.1		ug/Kg		90	80 - 122
Bromoform	50.0	46.5		ug/Kg		93	68 - 126
Bromomethane	50.0	39.6		ug/Kg		79	37 - 149
Carbon disulfide	50.0	44.9		ug/Kg		90	64 - 131
Carbon tetrachloride	50.0	46.2		ug/Kg		92	75 - 135
Chlorobenzene	50.0	44.8		ug/Kg		90	76 - 124
Dibromochloromethane	50.0	45.5		ug/Kg		91	76 - 125
Chloroethane	50.0	33.9	*	ug/Kg		68	69 - 135
Chloroform	50.0	45.5		ug/Kg		91	80 - 120
Chloromethane	50.0	45.8		ug/Kg		92	63 - 127
cis-1,2-Dichloroethene	50.0	44.9		ug/Kg		90	81 - 120
cis-1,3-Dichloropropene	50.0	45.8		ug/Kg		92	80 - 120
Cyclohexane	50.0	44.0		ug/Kg		88	65 - 120
Dichlorodifluoromethane	50.0	47.3		ug/Kg		95	57 - 142
Ethylbenzene	50.0	44.8		ug/Kg		90	80 - 120
1,2-Dibromoethane	50.0	44.8		ug/Kg		90	78 - 120
Isopropylbenzene	50.0	43.6		ug/Kg		87	72 - 120
Methyl acetate	100	95.2		ug/Kg		95	55 - 136
Methyl tert-butyl ether	50.0	46.2		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	44.5		ug/Kg		89	60 - 140
Methylene Chloride	50.0	42.6		ug/Kg		85	61 - 127
Styrene	50.0	44.6		ug/Kg		89	80 - 120
Tetrachloroethene	50.0	45.3		ug/Kg		91	74 - 122
Toluene	50.0	44.4		ug/Kg		89	74 - 128
trans-1,2-Dichloroethene	50.0	45.9		ug/Kg		92	78 - 126

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCS 480-455001/1-A

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	45.0		ug/Kg		90	73 - 123
Trichloroethene	50.0	46.3		ug/Kg		93	77 - 129
Trichlorofluoromethane	50.0	41.3		ug/Kg		83	65 - 146
Vinyl chloride	50.0	46.7		ug/Kg		93	61 - 133

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

Lab Sample ID: 480-147693-7 MS

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: SB-20 (10'-15')

Prep Type: Total/NA

Prep Batch: 455001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		37.6	35.3		ug/Kg	☼	94	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1	37.6	25.8	F1	ug/Kg	☼	69	80 - 120
1,1,2-Trichloroethane	ND	F1	37.6	29.3		ug/Kg	☼	78	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		37.6	34.2		ug/Kg	☼	91	60 - 140
1,1-Dichloroethane	ND		37.6	36.0		ug/Kg	☼	96	73 - 126
1,1-Dichloroethene	ND		37.6	33.8		ug/Kg	☼	90	59 - 125
1,2,4-Trichlorobenzene	ND		37.6	30.3		ug/Kg	☼	81	64 - 120
1,2-Dibromo-3-Chloropropane	ND	F1	37.6	21.3	F1	ug/Kg	☼	57	63 - 124
1,2-Dichlorobenzene	ND		37.6	31.8		ug/Kg	☼	85	75 - 120
1,2-Dichloroethane	ND		37.6	32.8		ug/Kg	☼	87	77 - 122
1,2-Dichloropropane	ND		37.6	34.8		ug/Kg	☼	93	75 - 124
1,3-Dichlorobenzene	ND		37.6	32.8		ug/Kg	☼	87	74 - 120
1,4-Dichlorobenzene	ND		37.6	32.5		ug/Kg	☼	87	73 - 120
2-Butanone (MEK)	ND	F1	188	120	F1	ug/Kg	☼	64	70 - 134
2-Hexanone	ND		188	120		ug/Kg	☼	64	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	F1	188	123		ug/Kg	☼	65	65 - 133
Acetone	8.6	J	188	132		ug/Kg	☼	66	61 - 137
Benzene	ND		37.6	35.5		ug/Kg	☼	94	79 - 127
Bromodichloromethane	ND		37.6	34.2		ug/Kg	☼	91	80 - 122
Bromoform	ND		37.6	28.4		ug/Kg	☼	76	68 - 126
Bromomethane	ND		37.6	38.2		ug/Kg	☼	102	37 - 149
Carbon disulfide	ND		37.6	34.2		ug/Kg	☼	91	64 - 131
Carbon tetrachloride	ND		37.6	35.3		ug/Kg	☼	94	75 - 135
Chlorobenzene	ND		37.6	33.3		ug/Kg	☼	89	76 - 124
Dibromochloromethane	ND		37.6	30.9		ug/Kg	☼	82	76 - 125
Chloroethane	ND	*	37.6	36.1		ug/Kg	☼	96	69 - 135
Chloroform	ND		37.6	35.4		ug/Kg	☼	94	80 - 120
Chloromethane	ND		37.6	37.7		ug/Kg	☼	100	63 - 127
cis-1,2-Dichloroethene	ND	F1	37.6	34.6		ug/Kg	☼	92	80 - 120
cis-1,3-Dichloropropene	ND	F1	37.6	33.1		ug/Kg	☼	88	80 - 120
Cyclohexane	ND		37.6	33.4		ug/Kg	☼	89	65 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: 480-147693-7 MS

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: SB-20 (10'-15')

Prep Type: Total/NA

Prep Batch: 455001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		37.6	35.5		ug/Kg	✱	95	57 - 142
Ethylbenzene	ND	F1	37.6	33.9		ug/Kg	✱	90	80 - 120
1,2-Dibromoethane	ND	F1	37.6	28.0	F1	ug/Kg	✱	75	78 - 120
Isopropylbenzene	ND		37.6	33.5		ug/Kg	✱	89	72 - 120
Methyl acetate	ND		75.1	49.7		ug/Kg	✱	66	55 - 136
Methyl tert-butyl ether	ND		37.6	31.2		ug/Kg	✱	83	63 - 125
Methylcyclohexane	ND		37.6	32.8		ug/Kg	✱	87	60 - 140
Methylene Chloride	ND		37.6	31.7		ug/Kg	✱	84	61 - 127
Styrene	ND	F1	37.6	32.5		ug/Kg	✱	87	80 - 120
Tetrachloroethene	ND		37.6	33.3		ug/Kg	✱	89	74 - 122
Toluene	0.29	J	37.6	33.6		ug/Kg	✱	89	74 - 128
trans-1,2-Dichloroethene	ND		37.6	34.9		ug/Kg	✱	93	78 - 126
trans-1,3-Dichloropropene	ND		37.6	30.1		ug/Kg	✱	80	73 - 123
Trichloroethene	ND		37.6	35.1		ug/Kg	✱	93	77 - 129
Trichlorofluoromethane	ND		37.6	35.9		ug/Kg	✱	96	65 - 146
Vinyl chloride	ND		37.6	36.1		ug/Kg	✱	96	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	97		71 - 125
1,2-Dichloroethane-d4 (Surr)	93		64 - 126
4-Bromofluorobenzene (Surr)	99		72 - 126
Dibromofluoromethane (Surr)	99		60 - 140

Lab Sample ID: 480-147693-7 MSD

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: SB-20 (10'-15')

Prep Type: Total/NA

Prep Batch: 455001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		40.6	32.9		ug/Kg	✱	81	77 - 121	7	30
1,1,1,2,2-Tetrachloroethane	ND	F1	40.6	25.6	F1	ug/Kg	✱	63	80 - 120	1	30
1,1,1,2-Trichloroethane	ND	F1	40.6	29.3	F1	ug/Kg	✱	72	78 - 122	0	30
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40.6	31.6		ug/Kg	✱	78	60 - 140	8	30
1,1-Dichloroethane	ND		40.6	33.7		ug/Kg	✱	83	73 - 126	6	30
1,1-Dichloroethene	ND		40.6	31.3		ug/Kg	✱	77	59 - 125	8	30
1,2,4-Trichlorobenzene	ND		40.6	28.8		ug/Kg	✱	71	64 - 120	5	30
1,2-Dibromo-3-Chloropropane	ND	F1	40.6	22.4	F1	ug/Kg	✱	55	63 - 124	5	30
1,2-Dichlorobenzene	ND		40.6	30.5		ug/Kg	✱	75	75 - 120	4	30
1,2-Dichloroethane	ND		40.6	32.2		ug/Kg	✱	79	77 - 122	2	30
1,2-Dichloropropane	ND		40.6	33.7		ug/Kg	✱	83	75 - 124	3	30
1,3-Dichlorobenzene	ND		40.6	31.1		ug/Kg	✱	77	74 - 120	5	30
1,4-Dichlorobenzene	ND		40.6	30.9		ug/Kg	✱	76	73 - 120	5	30
2-Butanone (MEK)	ND	F1	203	125	F1	ug/Kg	✱	62	70 - 134	4	30
2-Hexanone	ND		203	125		ug/Kg	✱	62	59 - 130	4	30
4-Methyl-2-pentanone (MIBK)	ND	F1	203	128	F1	ug/Kg	✱	63	65 - 133	4	30
Acetone	8.6	J	203	136		ug/Kg	✱	63	61 - 137	3	30
Benzene	ND		40.6	33.5		ug/Kg	✱	82	79 - 127	6	30
Bromodichloromethane	ND		40.6	32.8		ug/Kg	✱	81	80 - 122	4	30

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: 480-147693-7 MSD

Matrix: Solid

Analysis Batch: 454994

Client Sample ID: SB-20 (10'-15')

Prep Type: Total/NA

Prep Batch: 455001

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		40.6	28.3		ug/Kg	✱	70	68 - 126	0	30
Bromomethane	ND		40.6	37.2		ug/Kg	✱	92	37 - 149	3	30
Carbon disulfide	ND		40.6	31.0		ug/Kg	✱	76	64 - 131	10	30
Carbon tetrachloride	ND		40.6	32.9		ug/Kg	✱	81	75 - 135	7	30
Chlorobenzene	ND		40.6	31.8		ug/Kg	✱	78	76 - 124	4	30
Dibromochloromethane	ND		40.6	31.0		ug/Kg	✱	76	76 - 125	0	30
Chloroethane	ND	*	40.6	33.4		ug/Kg	✱	82	69 - 135	8	30
Chloroform	ND		40.6	33.2		ug/Kg	✱	82	80 - 120	6	30
Chloromethane	ND		40.6	35.4		ug/Kg	✱	87	63 - 127	6	30
cis-1,2-Dichloroethene	ND	F1	40.6	32.2	F1	ug/Kg	✱	79	80 - 120	7	30
cis-1,3-Dichloropropene	ND	F1	40.6	32.1	F1	ug/Kg	✱	79	80 - 120	3	30
Cyclohexane	ND		40.6	31.0		ug/Kg	✱	76	65 - 120	8	30
Dichlorodifluoromethane	ND		40.6	30.9		ug/Kg	✱	76	57 - 142	14	30
Ethylbenzene	ND	F1	40.6	32.0	F1	ug/Kg	✱	79	80 - 120	6	30
1,2-Dibromoethane	ND	F1	40.6	28.3	F1	ug/Kg	✱	70	78 - 120	1	30
Isopropylbenzene	ND		40.6	31.1		ug/Kg	✱	77	72 - 120	7	30
Methyl acetate	ND		81.2	50.1		ug/Kg	✱	62	55 - 136	1	30
Methyl tert-butyl ether	ND		40.6	31.1		ug/Kg	✱	76	63 - 125	0	30
Methylcyclohexane	ND		40.6	30.8		ug/Kg	✱	76	60 - 140	6	30
Methylene Chloride	ND		40.6	30.5		ug/Kg	✱	75	61 - 127	4	30
Styrene	ND	F1	40.6	31.3	F1	ug/Kg	✱	77	80 - 120	4	30
Tetrachloroethene	ND		40.6	31.5		ug/Kg	✱	78	74 - 122	5	30
Toluene	0.29	J	40.6	32.7		ug/Kg	✱	80	74 - 128	3	30
trans-1,2-Dichloroethene	ND		40.6	32.5		ug/Kg	✱	80	78 - 126	7	30
trans-1,3-Dichloropropene	ND		40.6	29.8		ug/Kg	✱	73	73 - 123	1	30
Trichloroethene	ND		40.6	32.8		ug/Kg	✱	81	77 - 129	7	30
Trichlorofluoromethane	ND		40.6	32.8		ug/Kg	✱	81	65 - 146	9	30
Vinyl chloride	ND		40.6	34.0		ug/Kg	✱	84	61 - 133	6	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	98		71 - 125
1,2-Dichloroethane-d4 (Surr)	95		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	99		60 - 140

Lab Sample ID: MB 480-455051/3-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,1,2-Trichloroethane	ND		100	21	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1-Dichloroethane	ND		100	31	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1-Dichloroethene	ND		100	35	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: MB 480-455051/3-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		100	26	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloroethane	ND		100	41	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloropropane	ND		100	16	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
2-Butanone (MEK)	ND		500	300	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
2-Hexanone	ND		500	210	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Acetone	ND		500	410	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Benzene	ND		100	19	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromodichloromethane	ND		100	20	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromoform	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromomethane	ND		100	22	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Carbon disulfide	ND		100	46	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Carbon tetrachloride	ND		100	26	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chlorobenzene	ND		100	13	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Dibromochloromethane	ND		100	48	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloroethane	ND		100	21	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloroform	ND		100	69	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloromethane	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Cyclohexane	ND		100	22	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Ethylbenzene	ND		100	29	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dibromoethane	ND		100	18	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Isopropylbenzene	ND		100	15	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methyl acetate	ND		500	48	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methylcyclohexane	ND		100	47	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methylene Chloride	ND		100	20	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Styrene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Tetrachloroethene	ND		100	13	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Toluene	ND		100	27	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Trichloroethene	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Trichlorofluoromethane	ND		100	47	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Vinyl chloride	ND		100	34	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Xylenes, Total	ND		200	55	ug/Kg		01/15/19 08:37	01/15/19 23:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		50 - 149	01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloroethane-d4 (Surr)	108		53 - 146	01/15/19 08:37	01/15/19 23:02	1
4-Bromofluorobenzene (Surr)	103		49 - 148	01/15/19 08:37	01/15/19 23:02	1
Dibromofluoromethane (Surr)	101		60 - 140	01/15/19 08:37	01/15/19 23:02	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCS 480-455051/1-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2500	2730		ug/Kg		109	68 - 130
1,1,2,2-Tetrachloroethane	2500	2350		ug/Kg		94	73 - 120
1,1,2-Trichloroethane	2500	2380		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2350		ug/Kg		94	10 - 179
1,1-Dichloroethane	2500	2460		ug/Kg		99	78 - 121
1,1-Dichloroethene	2500	2350		ug/Kg		94	48 - 133
1,2,4-Trichlorobenzene	2500	2430		ug/Kg		97	70 - 140
1,2-Dibromo-3-Chloropropane	2500	2410		ug/Kg		97	56 - 122
1,2-Dichlorobenzene	2500	2510		ug/Kg		100	78 - 125
1,2-Dichloroethane	2500	2500		ug/Kg		100	74 - 127
1,2-Dichloropropane	2500	2640		ug/Kg		106	80 - 120
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120
1,4-Dichlorobenzene	2500	2520		ug/Kg		101	80 - 120
2-Butanone (MEK)	12500	12700		ug/Kg		102	54 - 149
2-Hexanone	12500	12400		ug/Kg		99	59 - 127
4-Methyl-2-pentanone (MIBK)	12500	11700		ug/Kg		93	74 - 120
Acetone	12500	14600		ug/Kg		117	47 - 141
Benzene	2500	2450		ug/Kg		98	77 - 125
Bromodichloromethane	2500	2810		ug/Kg		113	71 - 121
Bromoform	2500	3150	*	ug/Kg		126	48 - 125
Bromomethane	2500	2960		ug/Kg		118	39 - 149
Carbon disulfide	2500	2170		ug/Kg		87	40 - 136
Carbon tetrachloride	2500	2960		ug/Kg		119	54 - 135
Chlorobenzene	2500	2500		ug/Kg		100	76 - 126
Dibromochloromethane	2500	2780		ug/Kg		111	64 - 120
Chloroethane	2500	3000		ug/Kg		120	23 - 150
Chloroform	2500	2380		ug/Kg		95	78 - 120
Chloromethane	2500	2710		ug/Kg		108	61 - 124
cis-1,2-Dichloroethene	2500	2430		ug/Kg		97	79 - 124
cis-1,3-Dichloropropene	2500	2560		ug/Kg		103	75 - 121
Cyclohexane	2500	2660		ug/Kg		107	49 - 129
Dichlorodifluoromethane	2500	2620		ug/Kg		105	10 - 150
Ethylbenzene	2500	2490		ug/Kg		100	78 - 124
1,2-Dibromoethane	2500	2390		ug/Kg		96	80 - 120
Isopropylbenzene	2500	2530		ug/Kg		101	76 - 120
Methyl acetate	5000	4860		ug/Kg		97	71 - 123
Methyl tert-butyl ether	2500	2330		ug/Kg		93	67 - 137
Methylcyclohexane	2500	2620		ug/Kg		105	50 - 130
Methylene Chloride	2500	2540		ug/Kg		102	75 - 118
Styrene	2500	2560		ug/Kg		102	80 - 120
Tetrachloroethene	2500	2510		ug/Kg		100	73 - 133
Toluene	2500	2350		ug/Kg		94	75 - 124
trans-1,2-Dichloroethene	2500	2330		ug/Kg		93	74 - 129
trans-1,3-Dichloropropene	2500	2590		ug/Kg		104	73 - 120
Trichloroethene	2500	2470		ug/Kg		99	75 - 131
Trichlorofluoromethane	2500	2920		ug/Kg		117	29 - 158
Vinyl chloride	2500	2590		ug/Kg		104	59 - 124

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCS 480-455051/1-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455051

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		50 - 149
1,2-Dichloroethane-d4 (Surr)	106		53 - 146
4-Bromofluorobenzene (Surr)	102		49 - 148
Dibromofluoromethane (Surr)	104		60 - 140

Lab Sample ID: LCSD 480-455051/2-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	2500	2760		ug/Kg		110	68 - 130	1	20
1,1,1,2-Tetrachloroethane	2500	2270		ug/Kg		91	73 - 120	3	20
1,1,1,2-Trichloroethane	2500	2410		ug/Kg		96	80 - 120	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2490		ug/Kg		100	10 - 179	6	20
1,1-Dichloroethane	2500	2470		ug/Kg		99	78 - 121	0	20
1,1-Dichloroethene	2500	2360		ug/Kg		94	48 - 133	0	20
1,2,4-Trichlorobenzene	2500	2360		ug/Kg		94	70 - 140	3	20
1,2-Dibromo-3-Chloropropane	2500	2410		ug/Kg		96	56 - 122	0	20
1,2-Dichlorobenzene	2500	2440		ug/Kg		97	78 - 125	3	20
1,2-Dichloroethane	2500	2510		ug/Kg		100	74 - 127	0	20
1,2-Dichloropropane	2500	2580		ug/Kg		103	80 - 120	3	20
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120	0	20
1,4-Dichlorobenzene	2500	2490		ug/Kg		100	80 - 120	1	20
2-Butanone (MEK)	12500	12800		ug/Kg		102	54 - 149	1	20
2-Hexanone	12500	12700		ug/Kg		102	59 - 127	3	20
4-Methyl-2-pentanone (MIBK)	12500	11800		ug/Kg		95	74 - 120	2	20
Acetone	12500	14000		ug/Kg		112	47 - 141	4	20
Benzene	2500	2470		ug/Kg		99	77 - 125	1	20
Bromodichloromethane	2500	2710		ug/Kg		108	71 - 121	4	20
Bromoform	2500	3020		ug/Kg		121	48 - 125	4	20
Bromomethane	2500	3030		ug/Kg		121	39 - 149	2	20
Carbon disulfide	2500	2210		ug/Kg		88	40 - 136	2	20
Carbon tetrachloride	2500	3020		ug/Kg		121	54 - 135	2	20
Chlorobenzene	2500	2580		ug/Kg		103	76 - 126	3	20
Dibromochloromethane	2500	2820		ug/Kg		113	64 - 120	1	20
Chloroethane	2500	3090		ug/Kg		124	23 - 150	3	20
Chloroform	2500	2430		ug/Kg		97	78 - 120	2	20
Chloromethane	2500	2810		ug/Kg		112	61 - 124	4	20
cis-1,2-Dichloroethene	2500	2420		ug/Kg		97	79 - 124	1	20
cis-1,3-Dichloropropene	2500	2550		ug/Kg		102	75 - 121	0	20
Cyclohexane	2500	2650		ug/Kg		106	49 - 129	1	20
Dichlorodifluoromethane	2500	2750		ug/Kg		110	10 - 150	5	20
Ethylbenzene	2500	2550		ug/Kg		102	78 - 124	2	20
1,2-Dibromoethane	2500	2500		ug/Kg		100	80 - 120	4	20
Isopropylbenzene	2500	2570		ug/Kg		103	76 - 120	1	20
Methyl acetate	5000	4910		ug/Kg		98	71 - 123	1	20
Methyl tert-butyl ether	2500	2310		ug/Kg		92	67 - 137	1	20

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCSD 480-455051/2-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylcyclohexane	2500	2660		ug/Kg		106	50 - 130	1	20
Methylene Chloride	2500	2550		ug/Kg		102	75 - 118	1	20
Styrene	2500	2610		ug/Kg		105	80 - 120	2	20
Tetrachloroethene	2500	2460		ug/Kg		98	73 - 133	2	20
Toluene	2500	2440		ug/Kg		98	75 - 124	4	20
trans-1,2-Dichloroethene	2500	2440		ug/Kg		97	74 - 129	5	20
trans-1,3-Dichloropropene	2500	2590		ug/Kg		103	73 - 120	0	20
Trichloroethene	2500	2560		ug/Kg		102	75 - 131	3	20
Trichlorofluoromethane	2500	2990		ug/Kg		119	29 - 158	2	20
Vinyl chloride	2500	2790		ug/Kg		112	59 - 124	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		50 - 149
1,2-Dichloroethane-d4 (Surr)	103		53 - 146
4-Bromofluorobenzene (Surr)	106		49 - 148
Dibromofluoromethane (Surr)	100		60 - 140

Lab Sample ID: MB 480-455052/2-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
2-Hexanone	ND		25	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Acetone	ND		25	4.2	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Benzene	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromoform	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: MB 480-455052/2-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		5.0	0.31	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methyl acetate	ND		25	3.0	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Styrene	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Toluene	ND		5.0	0.38	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/15/19 08:54	01/15/19 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125	01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	01/15/19 08:54	01/15/19 10:53	1
4-Bromofluorobenzene (Surr)	98		72 - 126	01/15/19 08:54	01/15/19 10:53	1
Dibromofluoromethane (Surr)	100		60 - 140	01/15/19 08:54	01/15/19 10:53	1

Lab Sample ID: LCS 480-455052/1-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.3		ug/Kg		101	77 - 121
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/Kg		100	80 - 120
1,1,2-Trichloroethane	50.0	50.5		ug/Kg		101	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.4		ug/Kg		101	60 - 140
1,1-Dichloroethane	50.0	51.2		ug/Kg		102	73 - 126
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	59 - 125
1,2,4-Trichlorobenzene	50.0	50.6		ug/Kg		101	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	50.4		ug/Kg		101	63 - 124
1,2-Dichlorobenzene	50.0	49.5		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	53.0		ug/Kg		106	77 - 122
1,2-Dichloropropane	50.0	51.9		ug/Kg		104	75 - 124
1,3-Dichlorobenzene	50.0	49.5		ug/Kg		99	74 - 120
1,4-Dichlorobenzene	50.0	49.4		ug/Kg		99	73 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCS 480-455052/1-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	250	285		ug/Kg		114	70 - 134
2-Hexanone	250	277		ug/Kg		111	59 - 130
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	65 - 133
Acetone	250	291		ug/Kg		116	61 - 137
Benzene	50.0	50.9		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	52.1		ug/Kg		104	80 - 122
Bromoform	50.0	54.1		ug/Kg		108	68 - 126
Bromomethane	50.0	53.8		ug/Kg		108	37 - 149
Carbon disulfide	50.0	49.0		ug/Kg		98	64 - 131
Carbon tetrachloride	50.0	50.8		ug/Kg		102	75 - 135
Chlorobenzene	50.0	50.3		ug/Kg		101	76 - 124
Dibromochloromethane	50.0	52.6		ug/Kg		105	76 - 125
Chloroethane	50.0	49.5		ug/Kg		99	69 - 135
Chloroform	50.0	51.4		ug/Kg		103	80 - 120
Chloromethane	50.0	49.8		ug/Kg		100	63 - 127
cis-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	81 - 120
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	80 - 120
Cyclohexane	50.0	48.0		ug/Kg		96	65 - 120
Dichlorodifluoromethane	50.0	47.0		ug/Kg		94	57 - 142
Ethylbenzene	50.0	49.3		ug/Kg		99	80 - 120
1,2-Dibromoethane	50.0	51.6		ug/Kg		103	78 - 120
Isopropylbenzene	50.0	47.6		ug/Kg		95	72 - 120
Methyl acetate	100	110		ug/Kg		110	55 - 136
Methyl tert-butyl ether	50.0	53.5		ug/Kg		107	63 - 125
Methylcyclohexane	50.0	49.7		ug/Kg		99	60 - 140
Methylene Chloride	50.0	46.9		ug/Kg		94	61 - 127
Styrene	50.0	49.7		ug/Kg		99	80 - 120
Tetrachloroethene	50.0	49.3		ug/Kg		99	74 - 122
Toluene	50.0	48.8		ug/Kg		98	74 - 128
trans-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	78 - 126
trans-1,3-Dichloropropene	50.0	51.3		ug/Kg		103	73 - 123
Trichloroethene	50.0	50.4		ug/Kg		101	77 - 129
Trichlorofluoromethane	50.0	49.2		ug/Kg		98	65 - 146
Vinyl chloride	50.0	49.8		ug/Kg		100	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		71 - 125
1,2-Dichloroethane-d4 (Surr)	103		64 - 126
4-Bromofluorobenzene (Surr)	102		72 - 126
Dibromofluoromethane (Surr)	102		60 - 140

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: MB 480-454574/1-A

Matrix: Solid

Analysis Batch: 454961

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2,4-Dinitrophenol	ND		1600	780	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2-Chloronaphthalene	ND		170	28	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2-Chlorophenol	ND		170	31	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2-Methylphenol	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2-Methylnaphthalene	ND		170	34	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2-Nitroaniline	ND		330	25	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
2-Nitrophenol	ND		170	48	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
3-Nitroaniline	ND		330	47	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4-Chloroaniline	ND		170	42	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4-Methylphenol	ND		330	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4-Nitroaniline	ND		330	88	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
4-Nitrophenol	ND		330	120	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Acenaphthene	ND		170	25	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Acenaphthylene	ND		170	22	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Acetophenone	ND		170	23	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Anthracene	ND		170	42	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Atrazine	ND		170	59	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Benzaldehyde	ND		170	130	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Benzo[a]pyrene	ND		170	25	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Caprolactam	ND		170	51	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Carbazole	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Chrysene	ND		170	38	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Dibenzofuran	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Diethyl phthalate	ND		170	22	ug/Kg		01/10/19 14:39	01/14/19 16:11	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: MB 480-454574/1-A

Matrix: Solid

Analysis Batch: 454961

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Fluoranthene	ND		170	18	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Fluorene	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Hexachlorobenzene	ND		170	23	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Hexachlorobutadiene	ND		170	25	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Hexachloroethane	ND		170	22	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Isophorone	ND		170	36	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Naphthalene	ND		170	22	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Nitrobenzene	ND		170	19	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Pentachlorophenol	ND		330	170	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Phenanthrene	ND		170	25	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Phenol	ND		170	26	ug/Kg		01/10/19 14:39	01/14/19 16:11	1
Pyrene	ND		170	20	ug/Kg		01/10/19 14:39	01/14/19 16:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	89		53 - 120	01/10/19 14:39	01/14/19 16:11	1
Phenol-d5 (Surr)	85		54 - 120	01/10/19 14:39	01/14/19 16:11	1
p-Terphenyl-d14 (Surr)	112		65 - 121	01/10/19 14:39	01/14/19 16:11	1
2,4,6-Tribromophenol (Surr)	101		54 - 120	01/10/19 14:39	01/14/19 16:11	1
2-Fluorobiphenyl	97		60 - 120	01/10/19 14:39	01/14/19 16:11	1
2-Fluorophenol (Surr)	80		52 - 120	01/10/19 14:39	01/14/19 16:11	1

Lab Sample ID: LCS 480-454574/2-A

Matrix: Solid

Analysis Batch: 454961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1630	1470		ug/Kg		90	59 - 120
bis (2-chloroisopropyl) ether	1630	746		ug/Kg		46	44 - 120
2,4,5-Trichlorophenol	1630	1560		ug/Kg		96	59 - 126
2,4,6-Trichlorophenol	1630	1520		ug/Kg		93	59 - 123
2,4-Dichlorophenol	1630	1440		ug/Kg		88	61 - 120
2,4-Dimethylphenol	1630	1400		ug/Kg		86	59 - 120
2,4-Dinitrophenol	3260	2290		ug/Kg		70	41 - 146
2,4-Dinitrotoluene	1630	1590		ug/Kg		98	63 - 120
2,6-Dinitrotoluene	1630	1550		ug/Kg		95	66 - 120
2-Chloronaphthalene	1630	1440		ug/Kg		88	57 - 120
2-Chlorophenol	1630	1250		ug/Kg		77	53 - 120
2-Methylphenol	1630	1260		ug/Kg		77	54 - 120
2-Methylnaphthalene	1630	1420		ug/Kg		87	59 - 120
2-Nitroaniline	1630	1400		ug/Kg		86	61 - 120
2-Nitrophenol	1630	1390		ug/Kg		85	56 - 120
3,3'-Dichlorobenzidine	3260	2350		ug/Kg		72	54 - 120
3-Nitroaniline	1630	1130		ug/Kg		69	48 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCS 480-454574/2-A

Matrix: Solid

Analysis Batch: 454961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	3260	3210		ug/Kg		98	49 - 122
4-Bromophenyl phenyl ether	1630	1600		ug/Kg		98	58 - 120
4-Chloro-3-methylphenol	1630	1480		ug/Kg		91	61 - 120
4-Chloroaniline	1630	1060		ug/Kg		65	38 - 120
4-Chlorophenyl phenyl ether	1630	1550		ug/Kg		95	63 - 124
4-Methylphenol	1630	1310		ug/Kg		80	55 - 120
4-Nitroaniline	1630	1440		ug/Kg		88	56 - 120
4-Nitrophenol	3260	3390		ug/Kg		104	43 - 147
Acenaphthene	1630	1460		ug/Kg		89	62 - 120
Acenaphthylene	1630	1550		ug/Kg		95	58 - 121
Acetophenone	1630	1330		ug/Kg		82	54 - 120
Anthracene	1630	1580		ug/Kg		97	62 - 120
Atrazine	3260	3100		ug/Kg		95	60 - 127
Benzaldehyde	3260	2030		ug/Kg		62	10 - 150
Benzo[a]anthracene	1630	1470		ug/Kg		90	65 - 120
Benzo[a]pyrene	1630	1550		ug/Kg		95	64 - 120
Benzo[b]fluoranthene	1630	1630		ug/Kg		100	64 - 120
Benzo[g,h,i]perylene	1630	1540		ug/Kg		94	45 - 145
Benzo[k]fluoranthene	1630	1510		ug/Kg		93	65 - 120
Bis(2-chloroethoxy)methane	1630	1250		ug/Kg		77	55 - 120
Bis(2-chloroethyl)ether	1630	1160		ug/Kg		71	45 - 120
Bis(2-ethylhexyl) phthalate	1630	1640		ug/Kg		100	61 - 133
Butyl benzyl phthalate	1630	1580		ug/Kg		97	61 - 129
Caprolactam	3260	2740		ug/Kg		84	47 - 120
Carbazole	1630	1570		ug/Kg		96	65 - 120
Chrysene	1630	1490		ug/Kg		92	64 - 120
Dibenz(a,h)anthracene	1630	1610		ug/Kg		99	54 - 132
Di-n-butyl phthalate	1630	1600		ug/Kg		98	58 - 130
Di-n-octyl phthalate	1630	1530		ug/Kg		94	57 - 133
Dibenzofuran	1630	1520		ug/Kg		93	63 - 120
Diethyl phthalate	1630	1660		ug/Kg		102	66 - 120
Dimethyl phthalate	1630	1540		ug/Kg		95	65 - 124
Fluoranthene	1630	1560		ug/Kg		96	62 - 120
Fluorene	1630	1560		ug/Kg		96	63 - 120
Hexachlorobenzene	1630	1710		ug/Kg		105	60 - 120
Hexachlorobutadiene	1630	1540		ug/Kg		95	45 - 120
Hexachlorocyclopentadiene	1630	1640		ug/Kg		101	47 - 120
Hexachloroethane	1630	1210		ug/Kg		74	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1580		ug/Kg		97	56 - 134
Isophorone	1630	1280		ug/Kg		78	56 - 120
N-Nitrosodi-n-propylamine	1630	1160		ug/Kg		71	52 - 120
N-Nitrosodiphenylamine	1630	1570		ug/Kg		97	51 - 128
Naphthalene	1630	1340		ug/Kg		82	55 - 120
Nitrobenzene	1630	1220		ug/Kg		75	54 - 120
Pentachlorophenol	3260	2790		ug/Kg		86	51 - 120
Phenanthrene	1630	1530		ug/Kg		94	60 - 120
Phenol	1630	1160		ug/Kg		71	53 - 120
Pyrene	1630	1620		ug/Kg		99	61 - 133

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCS 480-454574/2-A

Matrix: Solid

Analysis Batch: 454961

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454574

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	83		53 - 120
Phenol-d5 (Surr)	79		54 - 120
p-Terphenyl-d14 (Surr)	105		65 - 121
2,4,6-Tribromophenol (Surr)	113		54 - 120
2-Fluorobiphenyl	94		60 - 120
2-Fluorophenol (Surr)	72		52 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-454848/1-A

Matrix: Solid

Analysis Batch: 455460

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1221	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1232	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1242	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1248	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1254	ND		0.23	0.11	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1260	ND		0.23	0.11	mg/Kg		01/14/19 07:37	01/17/19 14:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		60 - 154	01/14/19 07:37	01/17/19 14:13	1
Tetrachloro-m-xylene	84		60 - 154	01/14/19 07:37	01/17/19 14:13	1
DCB Decachlorobiphenyl	85		65 - 174	01/14/19 07:37	01/17/19 14:13	1
DCB Decachlorobiphenyl	85		65 - 174	01/14/19 07:37	01/17/19 14:13	1

Lab Sample ID: LCS 480-454848/2-A

Matrix: Solid

Analysis Batch: 455460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.31	2.54		mg/Kg		110	51 - 185
PCB-1260	2.31	2.76		mg/Kg		119	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	132		60 - 154
Tetrachloro-m-xylene	103		60 - 154
DCB Decachlorobiphenyl	106		65 - 174
DCB Decachlorobiphenyl	106		65 - 174

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-454975/1-A

Matrix: Solid

Analysis Batch: 455246

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	4.4	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Antimony	ND		14.9	0.40	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Arsenic	ND		2.0	0.40	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Barium	ND		0.50	0.11	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Beryllium	ND		0.20	0.028	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Cadmium	ND		0.20	0.030	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Calcium	4.79	J	49.8	3.3	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Chromium	ND		0.50	0.20	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Cobalt	ND		0.50	0.050	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Copper	ND		1.0	0.21	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Iron	5.13	J	10	3.5	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Lead	ND		1.0	0.24	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Magnesium	ND		19.9	0.92	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Manganese	0.0548	J	0.20	0.032	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Nickel	ND		5.0	0.23	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Potassium	23.47	J	29.9	19.9	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Selenium	ND		4.0	0.40	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Silver	ND		0.60	0.20	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Sodium	44.27	J	139	12.9	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Thallium	ND		6.0	0.30	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Vanadium	ND		0.50	0.11	mg/Kg		01/15/19 07:32	01/15/19 16:24	1
Zinc	ND		2.0	0.64	mg/Kg		01/15/19 07:32	01/15/19 16:24	1

Lab Sample ID: LCSSRM 480-454975/2-A

Matrix: Solid

Analysis Batch: 455246

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454975

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10100	9205		mg/Kg		91.1	41.6 - 123.8
Antimony	145	50.39		mg/Kg		34.8	10.0 - 137.2
Arsenic	171	145.7		mg/Kg		85.2	66.1 - 122.2
Barium	272	230.7		mg/Kg		84.8	71.7 - 119.5
Beryllium	102	84.10		mg/Kg		82.5	71.8 - 119.6
Cadmium	225	192.5		mg/Kg		85.6	70.2 - 117.3
Calcium	5190	4151		mg/Kg		80.0	66.7 - 117.0
Chromium	144	121.1		mg/Kg		84.1	66.1 - 122.9
Cobalt	48.8	49.03		mg/Kg		100.5	74.0 - 123.4
Copper	174	147.3		mg/Kg		84.7	71.3 - 119.0
Iron	15000	13720		mg/Kg		91.4	32.9 - 154.7

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

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

Lab Sample ID: LCSSRM 480-454975/2-A

Matrix: Solid

Analysis Batch: 455246

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454975

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	111	113.8		mg/Kg		102.6	71.0 - 128.8
Magnesium	2570	2239		mg/Kg		87.1	56.4 - 125.3
Manganese	232	198.3		mg/Kg		85.5	71.1 - 125.4
Nickel	98.3	91.46		mg/Kg		93.0	65.4 - 121.1
Potassium	2420	2134		mg/Kg		88.2	49.2 - 117.8
Selenium	206	175.5		mg/Kg		85.2	63.6 - 122.3
Silver	45.5	39.00		mg/Kg		85.7	66.2 - 124.2
Sodium	252	239.6		mg/Kg		95.1	41.7 - 131.7
Thallium	167	154.0		mg/Kg		92.2	65.9 - 121.0
Vanadium	61.8	56.42		mg/Kg		91.3	52.1 - 131.6
Zinc	207	177.6		mg/Kg		85.8	67.1 - 125.1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-454580/1-A

Matrix: Solid

Analysis Batch: 454968

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0076	mg/Kg		01/14/19 12:45	01/14/19 13:49	1

Lab Sample ID: LCSSRM 480-454580/2-A ^10

Matrix: Solid

Analysis Batch: 454968

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454580

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	11.01		mg/Kg		91.7	57.3 - 133.3

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

GC/MS VOA

Analysis Batch: 454994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-1	SB-14 (10'-15')	Total/NA	Solid	8260C	455001
480-147693-2	SB-14 (15'-20')	Total/NA	Solid	8260C	455001
480-147693-5	SB-15 (10'-15')	Total/NA	Solid	8260C	455001
480-147693-6	SB-15 (15'-20')	Total/NA	Solid	8260C	455001
480-147693-7	SB-20 (10'-15')	Total/NA	Solid	8260C	455001
480-147693-8	SB-20 (15'-20')	Total/NA	Solid	8260C	455001
480-147693-9	SB-25 (10'-15')	Total/NA	Solid	8260C	455001
480-147693-10	SB-25 (15'-20')	Total/NA	Solid	8260C	455001
MB 480-455001/2-A	Method Blank	Total/NA	Solid	8260C	455001
LCS 480-455001/1-A	Lab Control Sample	Total/NA	Solid	8260C	455001
480-147693-7 MS	SB-20 (10'-15')	Total/NA	Solid	8260C	455001
480-147693-7 MSD	SB-20 (10'-15')	Total/NA	Solid	8260C	455001

Prep Batch: 455001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-1	SB-14 (10'-15')	Total/NA	Solid	5035A_L	
480-147693-2	SB-14 (15'-20')	Total/NA	Solid	5035A_L	
480-147693-5	SB-15 (10'-15')	Total/NA	Solid	5035A_L	
480-147693-6	SB-15 (15'-20')	Total/NA	Solid	5035A_L	
480-147693-7	SB-20 (10'-15')	Total/NA	Solid	5035A_L	
480-147693-8	SB-20 (15'-20')	Total/NA	Solid	5035A_L	
480-147693-9	SB-25 (10'-15')	Total/NA	Solid	5035A_L	
480-147693-10	SB-25 (15'-20')	Total/NA	Solid	5035A_L	
MB 480-455001/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455001/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-147693-7 MS	SB-20 (10'-15')	Total/NA	Solid	5035A_L	
480-147693-7 MSD	SB-20 (10'-15')	Total/NA	Solid	5035A_L	

Analysis Batch: 455045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-11	SB-30 (10'-15')	Total/NA	Solid	8260C	455052
480-147693-12	SB-30 (15'-20')	Total/NA	Solid	8260C	455052
480-147693-15	SB-6 (10'-15')	Total/NA	Solid	8260C	455052
480-147693-16	SB-6 (15'-20')	Total/NA	Solid	8260C	455052
480-147693-17	SB-7 (5'-10')	Total/NA	Solid	8260C	455052
480-147693-18	SB-7 (15'-17')	Total/NA	Solid	8260C	455052
MB 480-455052/2-A	Method Blank	Total/NA	Solid	8260C	455052
LCS 480-455052/1-A	Lab Control Sample	Total/NA	Solid	8260C	455052

Prep Batch: 455051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-17 - DL	SB-7 (5'-10')	Total/NA	Solid	5035A_H	
MB 480-455051/3-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-455051/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	
LCSD 480-455051/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_H	

Prep Batch: 455052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-11	SB-30 (10'-15')	Total/NA	Solid	5035A_L	
480-147693-12	SB-30 (15'-20')	Total/NA	Solid	5035A_L	
480-147693-15	SB-6 (10'-15')	Total/NA	Solid	5035A_L	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

GC/MS VOA (Continued)

Prep Batch: 455052 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-16	SB-6 (15'-20')	Total/NA	Solid	5035A_L	
480-147693-17	SB-7 (5'-10')	Total/NA	Solid	5035A_L	
480-147693-18	SB-7 (15'-17')	Total/NA	Solid	5035A_L	
MB 480-455052/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455052/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 455192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-17 - DL	SB-7 (5'-10')	Total/NA	Solid	8260C	455051
MB 480-455051/3-A	Method Blank	Total/NA	Solid	8260C	455051
LCS 480-455051/1-A	Lab Control Sample	Total/NA	Solid	8260C	455051
LCSD 480-455051/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	455051

GC/MS Semi VOA

Prep Batch: 454574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-4	SB-15 (0-5')	Total/NA	Solid	3550C	
480-147693-14	SB-6 (0-5')	Total/NA	Solid	3550C	
MB 480-454574/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-454574/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 454961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-4	SB-15 (0-5')	Total/NA	Solid	8270D	454574
480-147693-14	SB-6 (0-5')	Total/NA	Solid	8270D	454574
MB 480-454574/1-A	Method Blank	Total/NA	Solid	8270D	454574
LCS 480-454574/2-A	Lab Control Sample	Total/NA	Solid	8270D	454574

GC Semi VOA

Prep Batch: 454848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-4	SB-15 (0-5')	Total/NA	Solid	3550C	
480-147693-14	SB-6 (0-5')	Total/NA	Solid	3550C	
MB 480-454848/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-454848/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 455460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-4	SB-15 (0-5')	Total/NA	Solid	8082A	454848
480-147693-14	SB-6 (0-5')	Total/NA	Solid	8082A	454848
MB 480-454848/1-A	Method Blank	Total/NA	Solid	8082A	454848
LCS 480-454848/2-A	Lab Control Sample	Total/NA	Solid	8082A	454848

Metals

Prep Batch: 454580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-3	SB-15 (0-5')	Total/NA	Solid	7471B	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Metals (Continued)

Prep Batch: 454580 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-13	SB-6 (0'-5')	Total/NA	Solid	7471B	
MB 480-454580/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-454580/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 454968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-3	SB-15 (0'-5')	Total/NA	Solid	7471B	454580
480-147693-13	SB-6 (0'-5')	Total/NA	Solid	7471B	454580
MB 480-454580/1-A	Method Blank	Total/NA	Solid	7471B	454580
LCSSRM 480-454580/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	454580

Prep Batch: 454975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-3	SB-15 (0'-5')	Total/NA	Solid	3050B	
480-147693-13	SB-6 (0'-5')	Total/NA	Solid	3050B	
MB 480-454975/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-454975/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 455246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-3	SB-15 (0'-5')	Total/NA	Solid	6010C	454975
480-147693-13	SB-6 (0'-5')	Total/NA	Solid	6010C	454975
MB 480-454975/1-A	Method Blank	Total/NA	Solid	6010C	454975
LCSSRM 480-454975/2-A	Lab Control Sample	Total/NA	Solid	6010C	454975

General Chemistry

Analysis Batch: 455083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-1	SB-14 (10'-15')	Total/NA	Solid	Moisture	
480-147693-2	SB-14 (15'-20')	Total/NA	Solid	Moisture	
480-147693-5	SB-15 (10'-15')	Total/NA	Solid	Moisture	
480-147693-6	SB-15 (15'-20')	Total/NA	Solid	Moisture	
480-147693-7	SB-20 (10'-15')	Total/NA	Solid	Moisture	
480-147693-8	SB-20 (15'-20')	Total/NA	Solid	Moisture	
480-147693-9	SB-25 (10'-15')	Total/NA	Solid	Moisture	
480-147693-10	SB-25 (15'-20')	Total/NA	Solid	Moisture	
480-147693-11	SB-30 (10'-15')	Total/NA	Solid	Moisture	
480-147693-12	SB-30 (15'-20')	Total/NA	Solid	Moisture	
480-147693-15	SB-6 (10'-15')	Total/NA	Solid	Moisture	
480-147693-16	SB-6 (15'-20')	Total/NA	Solid	Moisture	
480-147693-17	SB-7 (5'-10')	Total/NA	Solid	Moisture	
480-147693-18	SB-7 (15'-17')	Total/NA	Solid	Moisture	
480-147693-7 MS	SB-20 (10'-15')	Total/NA	Solid	Moisture	
480-147693-7 MSD	SB-20 (10'-15')	Total/NA	Solid	Moisture	

Analysis Batch: 455189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-3	SB-15 (0'-5')	Total/NA	Solid	Moisture	
480-147693-4	SB-15 (0'-5')	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

General Chemistry (Continued)

Analysis Batch: 455189 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147693-13	SB-6 (0'-5')	Total/NA	Solid	Moisture	
480-147693-14	SB-6 (0'-5')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-14 (10'-15')

Date Collected: 01/09/19 08:00

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-14 (10'-15')

Date Collected: 01/09/19 08:00

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-1

Matrix: Solid

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 07:20	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 03:51	CDC	TAL BUF

Client Sample ID: SB-14 (15'-20')

Date Collected: 01/09/19 08:20

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-14 (15'-20')

Date Collected: 01/09/19 08:20

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-2

Matrix: Solid

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 06:40	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 04:18	CDC	TAL BUF

Client Sample ID: SB-15 (0-5')

Date Collected: 01/09/19 08:40

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455189	01/15/19 18:30	KPK	TAL BUF

Client Sample ID: SB-15 (0-5')

Date Collected: 01/09/19 08:40

Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-3

Matrix: Solid

Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			454975	01/15/19 07:32	EMB	TAL BUF
Total/NA	Analysis	6010C		1	455246	01/15/19 17:32	LMH	TAL BUF
Total/NA	Prep	7471B			454580	01/14/19 12:45	BMB	TAL BUF
Total/NA	Analysis	7471B		1	454968	01/14/19 14:07	BMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-4

Date Collected: 01/09/19 09:00

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455189	01/15/19 18:30	KPK	TAL BUF

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-4

Date Collected: 01/09/19 09:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			454574	01/10/19 14:39	SGD	TAL BUF
Total/NA	Analysis	8270D		1	454961	01/14/19 23:22	DMR	TAL BUF
Total/NA	Prep	3550C			454848	01/14/19 07:37	SGD	TAL BUF
Total/NA	Analysis	8082A		1	455460	01/17/19 15:32	DSC	TAL BUF

Client Sample ID: SB-15 (10'-15')

Lab Sample ID: 480-147693-5

Date Collected: 01/09/19 09:20

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-15 (10'-15')

Lab Sample ID: 480-147693-5

Date Collected: 01/09/19 09:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 06:40	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 04:44	CDC	TAL BUF

Client Sample ID: SB-15 (15'-20')

Lab Sample ID: 480-147693-6

Date Collected: 01/09/19 09:40

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-15 (15'-20')

Lab Sample ID: 480-147693-6

Date Collected: 01/09/19 09:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 06:40	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 05:10	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-20 (10'-15')

Lab Sample ID: 480-147693-7

Date Collected: 01/09/19 10:00

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-20 (10'-15')

Lab Sample ID: 480-147693-7

Date Collected: 01/09/19 10:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 06:40	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 05:35	CDC	TAL BUF

Client Sample ID: SB-20 (15'-20')

Lab Sample ID: 480-147693-8

Date Collected: 01/09/19 10:20

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-20 (15'-20')

Lab Sample ID: 480-147693-8

Date Collected: 01/09/19 10:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 06:40	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 06:01	CDC	TAL BUF

Client Sample ID: SB-25 (10'-15')

Lab Sample ID: 480-147693-9

Date Collected: 01/09/19 10:40

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-25 (10'-15')

Lab Sample ID: 480-147693-9

Date Collected: 01/09/19 10:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 06:40	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 06:26	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-25 (15'-20')

Lab Sample ID: 480-147693-10

Date Collected: 01/09/19 11:00

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-25 (15'-20')

Lab Sample ID: 480-147693-10

Date Collected: 01/09/19 11:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455001	01/10/19 06:40	AEM	TAL BUF
Total/NA	Analysis	8260C		1	454994	01/15/19 06:52	CDC	TAL BUF

Client Sample ID: SB-30 (10'-15')

Lab Sample ID: 480-147693-11

Date Collected: 01/09/19 11:20

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-30 (10'-15')

Lab Sample ID: 480-147693-11

Date Collected: 01/09/19 11:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/10/19 06:40	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455045	01/15/19 11:55	AEM	TAL BUF

Client Sample ID: SB-30 (15'-20')

Lab Sample ID: 480-147693-12

Date Collected: 01/09/19 11:40

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-30 (15'-20')

Lab Sample ID: 480-147693-12

Date Collected: 01/09/19 11:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/10/19 06:40	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455045	01/15/19 12:22	AEM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-13

Date Collected: 01/09/19 12:00

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455189	01/15/19 18:30	KPK	TAL BUF

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-13

Date Collected: 01/09/19 12:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			454975	01/15/19 07:32	EMB	TAL BUF
Total/NA	Analysis	6010C		1	455246	01/15/19 17:36	LMH	TAL BUF
Total/NA	Prep	7471B			454580	01/14/19 12:45	BMB	TAL BUF
Total/NA	Analysis	7471B		1	454968	01/14/19 14:08	BMB	TAL BUF

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-14

Date Collected: 01/09/19 12:20

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455189	01/15/19 18:30	KPK	TAL BUF

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-14

Date Collected: 01/09/19 12:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			454574	01/10/19 14:39	SGD	TAL BUF
Total/NA	Analysis	8270D		10	454961	01/14/19 23:48	DMR	TAL BUF
Total/NA	Prep	3550C			454848	01/14/19 07:37	SGD	TAL BUF
Total/NA	Analysis	8082A		1	455460	01/17/19 15:48	DSC	TAL BUF

Client Sample ID: SB-6 (10'-15')

Lab Sample ID: 480-147693-15

Date Collected: 01/09/19 12:40

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-6 (10'-15')

Lab Sample ID: 480-147693-15

Date Collected: 01/09/19 12:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/10/19 06:40	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-6 (10'-15')

Lab Sample ID: 480-147693-15

Date Collected: 01/09/19 12:40

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	455045	01/15/19 12:48	AEM	TAL BUF

Client Sample ID: SB-6 (15'-20')

Lab Sample ID: 480-147693-16

Date Collected: 01/09/19 13:00

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-6 (15'-20')

Lab Sample ID: 480-147693-16

Date Collected: 01/09/19 13:00

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/10/19 06:40	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455045	01/15/19 13:14	AEM	TAL BUF

Client Sample ID: SB-7 (5'-10')

Lab Sample ID: 480-147693-17

Date Collected: 01/09/19 13:20

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

Client Sample ID: SB-7 (5'-10')

Lab Sample ID: 480-147693-17

Date Collected: 01/09/19 13:20

Matrix: Solid

Date Received: 01/10/19 01:00

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/10/19 06:40	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455045	01/15/19 13:39	AEM	TAL BUF
Total/NA	Prep	5035A_H	DL		455051	01/15/19 14:08	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	80	455192	01/16/19 02:21	AMM	TAL BUF

Client Sample ID: SB-7 (15'-17')

Lab Sample ID: 480-147693-18

Date Collected: 01/09/19 13:40

Matrix: Solid

Date Received: 01/10/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455083	01/15/19 10:17	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Client Sample ID: SB-7 (15'-17')
Date Collected: 01/09/19 13:40
Date Received: 01/10/19 01:00

Lab Sample ID: 480-147693-18
Matrix: Solid
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/10/19 06:40	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455045	01/15/19 14:06	AEM	TAL BUF

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

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	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.

TestAmerica Job ID: 480-147693-1

Project/Site: Former Sims Matchplate Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147693-1	SB-14 (10'-15')	Solid	01/09/19 08:00	01/10/19 01:00
480-147693-2	SB-14 (15'-20')	Solid	01/09/19 08:20	01/10/19 01:00
480-147693-3	SB-15 (0-5')	Solid	01/09/19 08:40	01/10/19 01:00
480-147693-4	SB-15 (0-5')	Solid	01/09/19 09:00	01/10/19 01:00
480-147693-5	SB-15 (10'-15')	Solid	01/09/19 09:20	01/10/19 01:00
480-147693-6	SB-15 (15'-20')	Solid	01/09/19 09:40	01/10/19 01:00
480-147693-7	SB-20 (10'-15')	Solid	01/09/19 10:00	01/10/19 01:00
480-147693-8	SB-20 (15'-20')	Solid	01/09/19 10:20	01/10/19 01:00
480-147693-9	SB-25 (10'-15')	Solid	01/09/19 10:40	01/10/19 01:00
480-147693-10	SB-25 (15'-20')	Solid	01/09/19 11:00	01/10/19 01:00
480-147693-11	SB-30 (10'-15')	Solid	01/09/19 11:20	01/10/19 01:00
480-147693-12	SB-30 (15'-20')	Solid	01/09/19 11:40	01/10/19 01:00
480-147693-13	SB-6 (0'-5')	Solid	01/09/19 12:00	01/10/19 01:00
480-147693-14	SB-6 (0-5')	Solid	01/09/19 12:20	01/10/19 01:00
480-147693-15	SB-6 (10'-15')	Solid	01/09/19 12:40	01/10/19 01:00
480-147693-16	SB-6 (15'-20')	Solid	01/09/19 13:00	01/10/19 01:00
480-147693-17	SB-7 (5'-10')	Solid	01/09/19 13:20	01/10/19 01:00
480-147693-18	SB-7 (15'-17')	Solid	01/09/19 13:40	01/10/19 01:00

[illegible]

#225 Chain of Custody Record

Client Information		Sample ID: 1-9-19 16:00		Lab Pkt: Stone, Judy L		Cust No: 480-122577-28125.1	
Name Contact: Matt Walker		Phone: 315 794-8362		E-Mail: judy.stone@testamericainc.com		Page: 2 of 6	
Company: C&S Engineers, Inc.		Address: 499 Col. Eileen Collins Blvd		City: Syracuse		State: NY	
Zip: 13212		Phone: 315-703-4323 (Tel)		Fax: 315-703-4323 (Fax)		Email: mwalker@cscs.com	
Project Name: Former Slime Matchplate Site		Project #: 48018352		Site: SS04W		Date Requested: 1-9-19	
Due Date Requested: 1-9-19		TAT Requested (days): Standards		PO #: 315-703-4323 (Tel)		Purchase Order Requested: Standards	
Matrix: Solid		Sample Type: (C=Comp, G=Grab)		Sample Time: 1-9-19 11:20		Sample Date: 1-9-19 11:20	
Sample Identification		Preservation Code:		Field Filtered Sample (Yes or No)		MS/MSD (Yes or No)	
SB-30 (10'-15')		Solid		X		X	
SB-30 (15'-20')		Solid		X		X	
SB-6 (0'-5')		Solid		X		X	
SB-6 (0'-5')		Solid		X		X	
SB-6 (10'-15')		Solid		X		X	
SB-6 (15'-20')		Solid		X		X	
SB-7 (5'-10')		Solid		X		X	
SB-7 (15'-17')		Solid		X		X	
1-9-19 Ref		Solid		X		X	
Possible Hazard Identification		Poison B		Unknown		Radiological	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant		☐ Deliberate Requested: I, II, III, IV		☐ Other (specify) IV		☐ Archive For Months	
Empty Kit Relinquished by: Ref		Date: 1-9-19 16:00		Time: 1-9-19 16:00		Method of Shipment: SVL	
Relinquished by: Ref		Date: 1-9-19 16:00		Time: 1-9-19 16:00		Company: SVL	
Relinquished by: Ref		Date: 1-9-19 16:00		Time: 1-9-19 16:00		Company: SVL	
Relinquished by: Ref		Date: 1-9-19 16:00		Time: 1-9-19 16:00		Company: SVL	
Custody Seal No.: 0.8		Cooler Temperature(s) °C and Other Remarks: 0.8		Date: 1-9-19 16:00		Company: SVL	

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-147693-1

Login Number: 147693

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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 (Excluding tests with immediate HTs)..	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	Freezer 1/10/19 @ 6:40
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.	True	
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 Engineers Inc
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-147755-1

Client Project/Site: Former Sims Matchplate Site

For:

C&S Engineers, Inc.

499 Col. Eileen Collins Blvd

Syracuse, New York 13212

Attn: Matt Walker



Authorized for release by:

1/18/2019 2:08:19 PM

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

LINKS

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www.testamericainc.com

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Qualifiers

GC/MS 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.
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

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.

Metals

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Job ID: 480-147755-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-147755-1

Receipt

The samples were received on 1/11/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-455051 and analytical batch 480-455192 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following sample was analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-12 (5'-10') (480-147755-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Internal standard (ISTD) and surrogate responses for the following sample were outside control limits: SB-8 (15'-20') (480-147755-4). The sample was re-analyzed with concurring results, and the re-analyzed set of data has been reported.

Method(s) 8260C: Internal standard (ISTD) and surrogate responses for the following sample were outside of acceptance limits: SB-11 (15'-20') (480-147755-6). The sample was not re-analyzed due to insufficient volume. The data from the original analysis was lost due to instrument/computer issues.

Method(s) 8260C: Internal standard (ISTD) response for the following sample was outside of acceptance limits: SB-12 (15'-20') (480-147755-8). The sample was not re-analyzed due to insufficient volume. The data from the original analysis was lost due to instrument/computer issues.

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-455199 and analytical batch 480-455197 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) 8260C: Internal standard (ISTD) and Surrogate (SURR) response for the following sample was outside control limits: SB-18 (15'-20') (480-147755-16). The sample was re-analyzed with concurring results, and the second set of data has been reported.

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 continuing calibration verification (CCV) associated with batch 480-455117 recovered outside acceptance criteria, low biased, for 2,2'-oxybis[1-chloropropane]. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-455117 recovered above the upper control limit for Diethyl phthalate, Atrazine and, Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: SB-8 (0'-5') (480-147755-2) and SB-16 (0'-5') (480-147755-12).

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

GC Semi VOA

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

Metals

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Job ID: 480-147755-1 (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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (0'-5')

Lab Sample ID: 480-147755-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	10800		10.9	4.8	mg/Kg	1		☼	6010C	Total/NA
Antimony	0.48	J	16.4	0.44	mg/Kg	1		☼	6010C	Total/NA
Arsenic	3.3		2.2	0.44	mg/Kg	1		☼	6010C	Total/NA
Barium	28.5		0.55	0.12	mg/Kg	1		☼	6010C	Total/NA
Beryllium	0.43		0.22	0.031	mg/Kg	1		☼	6010C	Total/NA
Cadmium	0.17	J	0.22	0.033	mg/Kg	1		☼	6010C	Total/NA
Calcium	33500	B	54.7	3.6	mg/Kg	1		☼	6010C	Total/NA
Chromium	13.0		0.55	0.22	mg/Kg	1		☼	6010C	Total/NA
Cobalt	6.4		0.55	0.055	mg/Kg	1		☼	6010C	Total/NA
Copper	21.6		1.1	0.23	mg/Kg	1		☼	6010C	Total/NA
Iron	13500		10.9	3.8	mg/Kg	1		☼	6010C	Total/NA
Lead	6.9		1.1	0.26	mg/Kg	1		☼	6010C	Total/NA
Magnesium	24700		21.9	1.0	mg/Kg	1		☼	6010C	Total/NA
Manganese	401	B	0.22	0.035	mg/Kg	1		☼	6010C	Total/NA
Nickel	16.8		5.5	0.25	mg/Kg	1		☼	6010C	Total/NA
Potassium	3680		32.8	21.9	mg/Kg	1		☼	6010C	Total/NA
Sodium	190		153	14.2	mg/Kg	1		☼	6010C	Total/NA
Vanadium	17.7		0.55	0.12	mg/Kg	1		☼	6010C	Total/NA
Zinc	21.1		2.2	0.70	mg/Kg	1		☼	6010C	Total/NA
Mercury	0.045		0.022	0.0087	mg/Kg	1		☼	7471B	Total/NA

Client Sample ID: SB-8 (0'-5')

Lab Sample ID: 480-147755-2

No Detections.

Client Sample ID: SB-8 (10'-15')

Lab Sample ID: 480-147755-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	3.4	J	18	3.0	ug/Kg	1		☼	8260C	Total/NA
Trichloroethene	0.97	J	3.6	0.78	ug/Kg	1		☼	8260C	Total/NA

Client Sample ID: SB-8 (15'-20')

Lab Sample ID: 480-147755-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	9.7	J	21	3.5	ug/Kg	1		☼	8260C	Total/NA
Chloroform	0.34	J	4.2	0.26	ug/Kg	1		☼	8260C	Total/NA

Client Sample ID: SB-11 (10'-15')

Lab Sample ID: 480-147755-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	9.7	J	21	3.5	ug/Kg	1		☼	8260C	Total/NA

Client Sample ID: SB-11 (15'-20')

Lab Sample ID: 480-147755-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	4.9	J	21	3.6	ug/Kg	1		☼	8260C	Total/NA
Benzene	0.30	J	4.2	0.21	ug/Kg	1		☼	8260C	Total/NA
Chloroform	0.27	J	4.2	0.26	ug/Kg	1		☼	8260C	Total/NA
Toluene	0.95	J	4.2	0.32	ug/Kg	1		☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-12 (5'-10')

Lab Sample ID: 480-147755-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1200	J	3800	1100	ug/Kg	80	☼	8260C	Total/NA
Trichloroethene	190000		3800	1100	ug/Kg	80	☼	8260C	Total/NA

Client Sample ID: SB-12 (15'-20')

Lab Sample ID: 480-147755-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.43	J F1	4.1	0.29	ug/Kg	1	☼	8260C	Total/NA
Acetone	13	J	20	3.4	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.25	J F1	4.1	0.25	ug/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	2.6	J F1	4.1	0.52	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	110	F1	4.1	0.89	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-13 (10'-15')

Lab Sample ID: 480-147755-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	37		20	3.4	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-13 (15'-20')

Lab Sample ID: 480-147755-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.3	J	26	4.4	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12000		11.9	5.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.6		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	63.1		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.47		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.19	J	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	85800	B	59.3	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.3		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.3		0.59	0.059	mg/Kg	1	☼	6010C	Total/NA
Copper	22.7		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	13200		11.9	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	8.4		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	49600		23.7	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	307	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	14.7		5.9	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	4560		35.6	23.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	192		166	15.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.7		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	24.4		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.026		0.025	0.0099	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	48	J	180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	45	J	180	27	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (0'-5') (Continued)

Lab Sample ID: 480-147755-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	59	J	180	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	47	J	180	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	27	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	89	J	180	62	ug/Kg	1	☼	8270D	Total/NA
Chrysene	56	J	180	41	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	61	J	180	19	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	38	J	180	23	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	29	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	75	J	180	21	ug/Kg	1	☼	8270D	Total/NA

Client Sample ID: SB-16 (10'-15')

Lab Sample ID: 480-147755-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	90		25	4.2	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-16 (15'-20')

Lab Sample ID: 480-147755-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	23	J	30	5.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-18 (10'-15')

Lab Sample ID: 480-147755-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.2	J	21	3.5	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.80	J	4.2	0.26	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-18 (15'-20')

Lab Sample ID: 480-147755-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45		23	3.8	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (0'-5')

Lab Sample ID: 480-147755-1

Date Collected: 01/10/19 08:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10800		10.9	4.8	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Antimony	0.48	J	16.4	0.44	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Arsenic	3.3		2.2	0.44	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Barium	28.5		0.55	0.12	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Beryllium	0.43		0.22	0.031	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Cadmium	0.17	J	0.22	0.033	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Calcium	33500	B	54.7	3.6	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Chromium	13.0		0.55	0.22	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Cobalt	6.4		0.55	0.055	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Copper	21.6		1.1	0.23	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Iron	13500		10.9	3.8	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Lead	6.9		1.1	0.26	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Magnesium	24700		21.9	1.0	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Manganese	401	B	0.22	0.035	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Nickel	16.8		5.5	0.25	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Potassium	3680		32.8	21.9	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Selenium	ND		4.4	0.44	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Silver	ND		0.66	0.22	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Sodium	190		153	14.2	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Thallium	ND		6.6	0.33	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Vanadium	17.7		0.55	0.12	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1
Zinc	21.1		2.2	0.70	mg/Kg	☼	01/12/19 10:29	01/14/19 11:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.022	0.0087	mg/Kg	☼	01/15/19 15:00	01/15/19 15:58	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (0'-5')

Lab Sample ID: 480-147755-2

Date Collected: 01/10/19 08:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
bis (2-chloroisopropyl) ether	ND		180	36	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2,4,5-Trichlorophenol	ND		180	49	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2,4,6-Trichlorophenol	ND		180	36	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2,4-Dinitrophenol	ND		1800	830	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2,4-Dinitrotoluene	ND		180	37	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2,6-Dinitrotoluene	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2-Chlorophenol	ND		180	33	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2-Methylphenol	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2-Methylnaphthalene	ND		180	36	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2-Nitroaniline	ND		350	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
2-Nitrophenol	ND		180	51	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
3,3'-Dichlorobenzidine	ND		350	210	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
3-Nitroaniline	ND		350	50	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4,6-Dinitro-2-methylphenol	ND		350	180	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4-Chlorophenyl phenyl ether	ND		180	22	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4-Methylphenol	ND		350	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4-Nitroaniline	ND		350	95	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
4-Nitrophenol	ND		350	130	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Acenaphthene	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Acenaphthylene	ND		180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Acetophenone	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Anthracene	ND		180	45	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Atrazine	ND		180	63	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Benzaldehyde	ND		180	140	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Benzo[a]pyrene	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Benzo[b]fluoranthene	ND		180	29	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Benzo[g,h,i]perylene	ND		180	19	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Benzo[k]fluoranthene	ND		180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Bis(2-chloroethoxy)methane	ND		180	38	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Bis(2-chloroethyl)ether	ND		180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Bis(2-ethylhexyl) phthalate	ND		180	62	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Caprolactam	ND		180	54	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Carbazole	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Chrysene	ND		180	40	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Di-n-octyl phthalate	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Dibenzofuran	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Diethyl phthalate	ND		180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Dimethyl phthalate	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (0'-5')

Lab Sample ID: 480-147755-2

Date Collected: 01/10/19 08:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		180	19	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Fluorene	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Hexachlorobenzene	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Hexachlorocyclopentadiene	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Hexachloroethane	ND		180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Indeno[1,2,3-cd]pyrene	ND		180	22	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Isophorone	ND		180	38	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Naphthalene	ND		180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Nitrobenzene	ND		180	20	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Pentachlorophenol	ND		350	180	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Phenanthrene	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Phenol	ND		180	28	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1
Pyrene	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	82		53 - 120	01/11/19 14:15	01/15/19 20:49	1
Phenol-d5 (Surr)	82		54 - 120	01/11/19 14:15	01/15/19 20:49	1
p-Terphenyl-d14 (Surr)	105		65 - 121	01/11/19 14:15	01/15/19 20:49	1
2,4,6-Tribromophenol (Surr)	104		54 - 120	01/11/19 14:15	01/15/19 20:49	1
2-Fluorobiphenyl	89		60 - 120	01/11/19 14:15	01/15/19 20:49	1
2-Fluorophenol (Surr)	74		52 - 120	01/11/19 14:15	01/15/19 20:49	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.26	0.051	mg/Kg	☼	01/14/19 07:37	01/17/19 16:52	1
PCB-1221	ND		0.26	0.051	mg/Kg	☼	01/14/19 07:37	01/17/19 16:52	1
PCB-1232	ND		0.26	0.051	mg/Kg	☼	01/14/19 07:37	01/17/19 16:52	1
PCB-1242	ND		0.26	0.051	mg/Kg	☼	01/14/19 07:37	01/17/19 16:52	1
PCB-1248	ND		0.26	0.051	mg/Kg	☼	01/14/19 07:37	01/17/19 16:52	1
PCB-1254	ND		0.26	0.12	mg/Kg	☼	01/14/19 07:37	01/17/19 16:52	1
PCB-1260	ND		0.26	0.12	mg/Kg	☼	01/14/19 07:37	01/17/19 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		60 - 154	01/14/19 07:37	01/17/19 16:52	1
Tetrachloro-m-xylene	74		60 - 154	01/14/19 07:37	01/17/19 16:52	1
DCB Decachlorobiphenyl	76		65 - 174	01/14/19 07:37	01/17/19 16:52	1
DCB Decachlorobiphenyl	75		65 - 174	01/14/19 07:37	01/17/19 16:52	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (10'-15')

Lab Sample ID: 480-147755-3

Date Collected: 01/10/19 08:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.6	0.26	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,1,2,2-Tetrachloroethane	ND		3.6	0.58	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,1,2-Trichloroethane	ND		3.6	0.46	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.6	0.81	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,1-Dichloroethane	ND		3.6	0.43	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,1-Dichloroethene	ND		3.6	0.44	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,2,4-Trichlorobenzene	ND		3.6	0.22	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,2-Dibromo-3-Chloropropane	ND		3.6	1.8	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,2-Dichlorobenzene	ND		3.6	0.28	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,2-Dichloroethane	ND		3.6	0.18	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,2-Dichloropropane	ND		3.6	1.8	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,3-Dichlorobenzene	ND		3.6	0.18	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,4-Dichlorobenzene	ND		3.6	0.50	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
2-Butanone (MEK)	ND		18	1.3	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
2-Hexanone	ND		18	1.8	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
4-Methyl-2-pentanone (MIBK)	ND		18	1.2	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Acetone	3.4	J	18	3.0	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Benzene	ND		3.6	0.17	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Bromodichloromethane	ND		3.6	0.48	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Bromoform	ND		3.6	1.8	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Bromomethane	ND		3.6	0.32	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Carbon disulfide	ND		3.6	1.8	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Carbon tetrachloride	ND		3.6	0.34	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Chlorobenzene	ND		3.6	0.47	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Dibromochloromethane	ND		3.6	0.46	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Chloroethane	ND		3.6	0.80	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Chloroform	ND		3.6	0.22	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Chloromethane	ND		3.6	0.21	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
cis-1,2-Dichloroethene	ND		3.6	0.46	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
cis-1,3-Dichloropropene	ND		3.6	0.51	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Cyclohexane	ND		3.6	0.50	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Dichlorodifluoromethane	ND		3.6	0.29	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Ethylbenzene	ND		3.6	0.25	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
1,2-Dibromoethane	ND		3.6	0.46	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Isopropylbenzene	ND		3.6	0.54	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Methyl acetate	ND		18	2.1	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Methyl tert-butyl ether	ND		3.6	0.35	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Methylcyclohexane	ND		3.6	0.54	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Methylene Chloride	ND		3.6	1.6	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Styrene	ND		3.6	0.18	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Tetrachloroethene	ND		3.6	0.48	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Toluene	ND		3.6	0.27	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
trans-1,2-Dichloroethene	ND		3.6	0.37	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
trans-1,3-Dichloropropene	ND		3.6	1.6	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Trichloroethene	0.97	J	3.6	0.78	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Trichlorofluoromethane	ND		3.6	0.34	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Vinyl chloride	ND		3.6	0.43	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1
Xylenes, Total	ND		7.1	0.60	ug/Kg	☼	01/11/19 05:10	01/15/19 15:24	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (10'-15')

Lab Sample ID: 480-147755-3

Date Collected: 01/10/19 08:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.2

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	105		71 - 125	01/11/19 05:10	01/15/19 15:24	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	01/11/19 05:10	01/15/19 15:24	1
<i>4-Bromofluorobenzene (Surr)</i>	84		72 - 126	01/11/19 05:10	01/15/19 15:24	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/11/19 05:10	01/15/19 15:24	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (15'-20')

Lab Sample ID: 480-147755-4

Date Collected: 01/10/19 09:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,1,1,2,2-Tetrachloroethane	ND	*	4.2	0.68	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,1,2-Trichloroethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.95	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,2,4-Trichlorobenzene	ND	*	4.2	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,2-Dibromo-3-Chloropropane	ND	*	4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,2-Dichlorobenzene	ND	*	4.2	0.33	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,3-Dichlorobenzene	ND	*	4.2	0.22	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,4-Dichlorobenzene	ND	*	4.2	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
2-Butanone (MEK)	ND		21	1.5	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Acetone	9.7	J	21	3.5	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Benzene	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Bromodichloromethane	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Chloroethane	ND		4.2	0.95	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Chloroform	0.34	J	4.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Chloromethane	ND		4.2	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
cis-1,3-Dichloropropene	ND		4.2	0.60	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Isopropylbenzene	ND	*	4.2	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Methyl acetate	ND		21	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Methylcyclohexane	ND		4.2	0.64	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Styrene	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Toluene	ND		4.2	0.32	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
trans-1,2-Dichloroethene	ND		4.2	0.43	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
trans-1,3-Dichloropropene	ND		4.2	1.8	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1
Xylenes, Total	ND		8.4	0.70	ug/Kg	☼	01/11/19 05:10	01/16/19 03:14	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (15'-20')

Lab Sample ID: 480-147755-4

Date Collected: 01/10/19 09:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.8

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	126	X	71 - 125	01/11/19 05:10	01/16/19 03:14	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	103		64 - 126	01/11/19 05:10	01/16/19 03:14	1
<i>4-Bromofluorobenzene (Surr)</i>	63	X	72 - 126	01/11/19 05:10	01/16/19 03:14	1
<i>Dibromofluoromethane (Surr)</i>	105		60 - 140	01/11/19 05:10	01/16/19 03:14	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-11 (10'-15')

Lab Sample ID: 480-147755-5

Date Collected: 01/10/19 09:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,1,2,2-Tetrachloroethane	ND		4.2	0.67	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,1,2-Trichloroethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.95	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,2,4-Trichlorobenzene	ND		4.2	0.25	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,2-Dibromo-3-Chloropropane	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,3-Dichlorobenzene	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,4-Dichlorobenzene	ND		4.2	0.58	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
2-Butanone (MEK)	ND		21	1.5	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Acetone	9.7	J	21	3.5	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Benzene	ND		4.2	0.20	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Bromodichloromethane	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Bromomethane	ND		4.2	0.37	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Dibromochloromethane	ND		4.2	0.53	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Chloroethane	ND		4.2	0.94	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Chloroform	ND		4.2	0.26	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Chloromethane	ND		4.2	0.25	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
cis-1,2-Dichloroethene	ND		4.2	0.53	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
cis-1,3-Dichloropropene	ND		4.2	0.60	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Cyclohexane	ND		4.2	0.58	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Dichlorodifluoromethane	ND		4.2	0.34	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
1,2-Dibromoethane	ND		4.2	0.53	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Isopropylbenzene	ND		4.2	0.63	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Methyl acetate	ND		21	2.5	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Methylcyclohexane	ND		4.2	0.63	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Styrene	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Toluene	ND		4.2	0.31	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
trans-1,2-Dichloroethene	ND		4.2	0.43	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
trans-1,3-Dichloropropene	ND		4.2	1.8	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Trichloroethene	ND		4.2	0.91	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Trichlorofluoromethane	ND		4.2	0.39	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1
Xylenes, Total	ND		8.3	0.70	ug/Kg	☼	01/11/19 05:10	01/15/19 16:16	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-11 (10'-15')

Lab Sample ID: 480-147755-5

Date Collected: 01/10/19 09:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 92.1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/11/19 05:10	01/15/19 16:16	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/11/19 05:10	01/15/19 16:16	1
<i>4-Bromofluorobenzene (Surr)</i>	94		72 - 126	01/11/19 05:10	01/15/19 16:16	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/11/19 05:10	01/15/19 16:16	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-11 (15'-20')

Lab Sample ID: 480-147755-6

Date Collected: 01/10/19 09:40

Matrix: Solid

Date Received: 01/11/19 01:00

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		4.2	0.31	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,1,2,2-Tetrachloroethane	ND	*	4.2	0.69	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.97	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,1-Dichloroethane	ND		4.2	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,2,4-Trichlorobenzene	ND	*	4.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,2-Dibromo-3-Chloropropane	ND	*	4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,2-Dichlorobenzene	ND	*	4.2	0.33	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,3-Dichlorobenzene	ND	*	4.2	0.22	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,4-Dichlorobenzene	ND	*	4.2	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
2-Butanone (MEK)	ND		21	1.6	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Acetone	4.9	J	21	3.6	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Benzene	0.30	J	4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Bromodichloromethane	ND		4.2	0.57	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Chloroethane	ND		4.2	0.96	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Chloroform	0.27	J	4.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Chloromethane	ND		4.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Isopropylbenzene	ND	*	4.2	0.64	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Methyl acetate	ND		21	2.6	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Methyl tert-butyl ether	ND		4.2	0.42	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Methylcyclohexane	ND		4.2	0.64	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Styrene	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Tetrachloroethene	ND		4.2	0.57	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Toluene	0.95	J	4.2	0.32	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
trans-1,2-Dichloroethene	ND		4.2	0.44	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
trans-1,3-Dichloropropene	ND		4.2	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Vinyl chloride	ND		4.2	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1
Xylenes, Total	ND		8.5	0.71	ug/Kg	☼	01/11/19 05:10	01/16/19 03:40	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-11 (15'-20')

Lab Sample ID: 480-147755-6

Date Collected: 01/10/19 09:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 89.7

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	127	X	71 - 125	01/11/19 05:10	01/16/19 03:40	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		64 - 126	01/11/19 05:10	01/16/19 03:40	1
<i>4-Bromofluorobenzene (Surr)</i>	62	X	72 - 126	01/11/19 05:10	01/16/19 03:40	1
<i>Dibromofluoromethane (Surr)</i>	106		60 - 140	01/11/19 05:10	01/16/19 03:40	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-12 (5'-10')

Lab Sample ID: 480-147755-7

Date Collected: 01/10/19 10:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1200	J	3800	1100	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,1,1,2,2-Tetrachloroethane	ND		3800	620	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,1,2-Trichloroethane	ND		3800	800	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3800	1900	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,1-Dichloroethane	ND		3800	1200	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,1-Dichloroethene	ND		3800	1300	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,2,4-Trichlorobenzene	ND		3800	1400	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,2-Dibromo-3-Chloropropane	ND		3800	1900	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,2-Dichlorobenzene	ND		3800	970	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,2-Dichloroethane	ND		3800	1600	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,2-Dichloropropane	ND		3800	610	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,3-Dichlorobenzene	ND		3800	1000	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,4-Dichlorobenzene	ND		3800	530	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
2-Butanone (MEK)	ND		19000	11000	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
2-Hexanone	ND		19000	7800	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
4-Methyl-2-pentanone (MIBK)	ND		19000	1200	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Acetone	ND		19000	16000	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Benzene	ND		3800	720	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Bromodichloromethane	ND		3800	760	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Bromoform	ND	*	3800	1900	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Bromomethane	ND		3800	830	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Carbon disulfide	ND		3800	1700	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Carbon tetrachloride	ND		3800	970	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Chlorobenzene	ND		3800	500	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Dibromochloromethane	ND		3800	1800	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Chloroethane	ND		3800	790	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Chloroform	ND		3800	2600	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Chloromethane	ND		3800	900	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
cis-1,2-Dichloroethene	ND		3800	1000	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
cis-1,3-Dichloropropene	ND		3800	910	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Cyclohexane	ND		3800	840	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Dichlorodifluoromethane	ND		3800	1700	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Ethylbenzene	ND		3800	1100	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
1,2-Dibromoethane	ND		3800	660	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Isopropylbenzene	ND		3800	570	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Methyl acetate	ND		19000	1800	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Methyl tert-butyl ether	ND		3800	1400	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Methylcyclohexane	ND		3800	1800	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Methylene Chloride	ND		3800	750	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Styrene	ND		3800	910	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Tetrachloroethene	ND		3800	510	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Toluene	ND		3800	1000	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
trans-1,2-Dichloroethene	ND		3800	890	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
trans-1,3-Dichloropropene	ND		3800	370	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Trichloroethene	190000		3800	1100	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Trichlorofluoromethane	ND		3800	1800	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Vinyl chloride	ND		3800	1300	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80
Xylenes, Total	ND		7600	2100	ug/Kg	☼	01/15/19 10:15	01/16/19 01:00	80

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-12 (5'-10')

Lab Sample ID: 480-147755-7

Date Collected: 01/10/19 10:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.4

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	102		50 - 149	01/15/19 10:15	01/16/19 01:00	80
<i>1,2-Dichloroethane-d4 (Surr)</i>	109		53 - 146	01/15/19 10:15	01/16/19 01:00	80
<i>4-Bromofluorobenzene (Surr)</i>	108		49 - 148	01/15/19 10:15	01/16/19 01:00	80
<i>Dibromofluoromethane (Surr)</i>	108		60 - 140	01/15/19 10:15	01/16/19 01:00	80

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-12 (15'-20')

Lab Sample ID: 480-147755-8

Date Collected: 01/10/19 10:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.43	J F1	4.1	0.29	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,1,1,2,2-Tetrachloroethane	ND	* F1	4.1	0.66	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,1,2-Trichloroethane	ND	F1	4.1	0.53	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.92	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,1-Dichloroethane	ND		4.1	0.49	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,2,4-Trichlorobenzene	ND	* F1	4.1	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,2-Dibromo-3-Chloropropane	ND	* F1	4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,2-Dichlorobenzene	ND	* F1	4.1	0.32	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,2-Dichloroethane	ND	F1	4.1	0.20	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,2-Dichloropropane	ND	F1	4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,3-Dichlorobenzene	ND	* F1	4.1	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,4-Dichlorobenzene	ND	* F1	4.1	0.57	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
2-Butanone (MEK)	ND	F1	20	1.5	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
2-Hexanone	ND	F1	20	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
4-Methyl-2-pentanone (MIBK)	ND	F1	20	1.3	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Acetone	13	J	20	3.4	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Benzene	ND	F1	4.1	0.20	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Bromodichloromethane	ND	F1	4.1	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Bromoform	ND	F1	4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Bromomethane	ND		4.1	0.36	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Carbon disulfide	ND		4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Carbon tetrachloride	ND	F1	4.1	0.39	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Chlorobenzene	ND	F1	4.1	0.53	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Dibromochloromethane	ND	F1	4.1	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Chloroethane	ND		4.1	0.92	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Chloroform	0.25	J F1	4.1	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Chloromethane	ND		4.1	0.24	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
cis-1,2-Dichloroethene	2.6	J F1	4.1	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
cis-1,3-Dichloropropene	ND	F1	4.1	0.58	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Cyclohexane	ND	F1	4.1	0.57	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Dichlorodifluoromethane	ND		4.1	0.33	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Ethylbenzene	ND	F1	4.1	0.28	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
1,2-Dibromoethane	ND	F1	4.1	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Isopropylbenzene	ND	* F1	4.1	0.61	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Methylcyclohexane	ND	F1	4.1	0.62	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Styrene	ND	F1	4.1	0.20	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Tetrachloroethene	ND	F1	4.1	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Toluene	ND	F1	4.1	0.31	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
trans-1,2-Dichloroethene	ND	F1	4.1	0.42	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
trans-1,3-Dichloropropene	ND	F1	4.1	1.8	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Trichloroethene	110	F1	4.1	0.89	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Trichlorofluoromethane	ND		4.1	0.38	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Vinyl chloride	ND		4.1	0.49	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1
Xylenes, Total	ND	F1	8.1	0.68	ug/Kg	☼	01/11/19 05:10	01/16/19 04:06	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-12 (15'-20')

Lab Sample ID: 480-147755-8

Date Collected: 01/10/19 10:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.6

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	110		71 - 125	01/11/19 05:10	01/16/19 04:06	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/11/19 05:10	01/16/19 04:06	1
<i>4-Bromofluorobenzene (Surr)</i>	73		72 - 126	01/11/19 05:10	01/16/19 04:06	1
<i>Dibromofluoromethane (Surr)</i>	103		60 - 140	01/11/19 05:10	01/16/19 04:06	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-13 (10'-15')

Lab Sample ID: 480-147755-9

Date Collected: 01/10/19 10:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	0.30	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,1,1,2-Tetrachloroethane	ND		4.1	0.66	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,1,2-Trichloroethane	ND		4.1	0.53	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.93	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,1-Dichloroethane	ND		4.1	0.50	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,1-Dichloroethene	ND		4.1	0.50	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,2,4-Trichlorobenzene	ND		4.1	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,2-Dibromo-3-Chloropropane	ND		4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,2-Dichlorobenzene	ND		4.1	0.32	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,2-Dichloroethane	ND		4.1	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,2-Dichloropropane	ND		4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,3-Dichlorobenzene	ND		4.1	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,4-Dichlorobenzene	ND		4.1	0.57	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
2-Butanone (MEK)	ND		20	1.5	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Acetone	37		20	3.4	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Benzene	ND		4.1	0.20	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Bromodichloromethane	ND		4.1	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Bromoform	ND		4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Bromomethane	ND		4.1	0.37	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Carbon disulfide	ND		4.1	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Carbon tetrachloride	ND		4.1	0.40	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Chlorobenzene	ND		4.1	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Dibromochloromethane	ND		4.1	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Chloroethane	ND		4.1	0.92	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Chloroform	ND		4.1	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Chloromethane	ND		4.1	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
cis-1,2-Dichloroethene	ND		4.1	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
cis-1,3-Dichloropropene	ND		4.1	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Cyclohexane	ND		4.1	0.57	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Dichlorodifluoromethane	ND		4.1	0.34	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Ethylbenzene	ND		4.1	0.28	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
1,2-Dibromoethane	ND		4.1	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Isopropylbenzene	ND		4.1	0.62	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Methyl acetate	ND		20	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Methyl tert-butyl ether	ND		4.1	0.40	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Methylcyclohexane	ND		4.1	0.62	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Methylene Chloride	ND		4.1	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Styrene	ND		4.1	0.20	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Tetrachloroethene	ND		4.1	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Toluene	ND		4.1	0.31	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
trans-1,2-Dichloroethene	ND		4.1	0.42	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
trans-1,3-Dichloropropene	ND		4.1	1.8	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Trichloroethene	ND		4.1	0.90	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Trichlorofluoromethane	ND		4.1	0.39	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Vinyl chloride	ND		4.1	0.50	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1
Xylenes, Total	ND		8.2	0.69	ug/Kg	☼	01/11/19 05:10	01/16/19 01:31	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-13 (10'-15')

Lab Sample ID: 480-147755-9

Date Collected: 01/10/19 10:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		71 - 125	01/11/19 05:10	01/16/19 01:31	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/11/19 05:10	01/16/19 01:31	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/11/19 05:10	01/16/19 01:31	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/11/19 05:10	01/16/19 01:31	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-13 (15'-20')

Lab Sample ID: 480-147755-10

Date Collected: 01/10/19 11:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,1,1,2,2-Tetrachloroethane	ND		5.2	0.84	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,1,2-Trichloroethane	ND		5.2	0.68	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,1-Dichloroethane	ND		5.2	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,1-Dichloroethene	ND		5.2	0.64	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,2,4-Trichlorobenzene	ND		5.2	0.32	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,2-Dibromo-3-Chloropropane	ND		5.2	2.6	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,2-Dichlorobenzene	ND		5.2	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,2-Dichloropropane	ND		5.2	2.6	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,4-Dichlorobenzene	ND		5.2	0.73	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Acetone	6.3	J	26	4.4	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Benzene	ND		5.2	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Bromodichloromethane	ND		5.2	0.70	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Bromoform	ND		5.2	2.6	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Bromomethane	ND		5.2	0.47	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Carbon disulfide	ND		5.2	2.6	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Carbon tetrachloride	ND		5.2	0.50	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Chlorobenzene	ND		5.2	0.69	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Dibromochloromethane	ND		5.2	0.67	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Chloroethane	ND		5.2	1.2	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Chloroform	ND		5.2	0.32	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Chloromethane	ND		5.2	0.31	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
cis-1,2-Dichloroethene	ND		5.2	0.67	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
cis-1,3-Dichloropropene	ND		5.2	0.75	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Cyclohexane	ND		5.2	0.73	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Dichlorodifluoromethane	ND		5.2	0.43	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
1,2-Dibromoethane	ND		5.2	0.67	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Isopropylbenzene	ND		5.2	0.78	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Methyl acetate	ND		26	3.1	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Methylcyclohexane	ND		5.2	0.79	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Styrene	ND		5.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Tetrachloroethene	ND		5.2	0.70	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Toluene	ND		5.2	0.39	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
trans-1,2-Dichloroethene	ND		5.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
trans-1,3-Dichloropropene	ND		5.2	2.3	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Trichloroethene	ND		5.2	1.1	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Trichlorofluoromethane	ND		5.2	0.49	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Vinyl chloride	ND		5.2	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1
Xylenes, Total	ND		10	0.87	ug/Kg	☼	01/11/19 05:10	01/16/19 01:57	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-13 (15'-20')

Lab Sample ID: 480-147755-10

Date Collected: 01/10/19 11:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 80.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		71 - 125	01/11/19 05:10	01/16/19 01:57	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/11/19 05:10	01/16/19 01:57	1
<i>4-Bromofluorobenzene (Surr)</i>	95		72 - 126	01/11/19 05:10	01/16/19 01:57	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/11/19 05:10	01/16/19 01:57	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-11

Date Collected: 01/10/19 11:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 83.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000		11.9	5.2	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Antimony	ND		17.8	0.47	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Arsenic	3.6		2.4	0.47	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Barium	63.1		0.59	0.13	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Beryllium	0.47		0.24	0.033	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Cadmium	0.19	J	0.24	0.036	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Calcium	85800	B	59.3	3.9	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Chromium	14.3		0.59	0.24	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Cobalt	6.3		0.59	0.059	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Copper	22.7		1.2	0.25	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Iron	13200		11.9	4.2	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Lead	8.4		1.2	0.28	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Magnesium	49600		23.7	1.1	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Manganese	307	B	0.24	0.038	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Nickel	14.7		5.9	0.27	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Potassium	4560		35.6	23.7	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Selenium	ND		4.7	0.47	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Silver	ND		0.71	0.24	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Sodium	192		166	15.4	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Thallium	ND		7.1	0.36	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Vanadium	18.7		0.59	0.13	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1
Zinc	24.4		2.4	0.76	mg/Kg	☼	01/12/19 10:29	01/14/19 11:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.025	0.0099	mg/Kg	☼	01/15/19 15:00	01/15/19 16:02	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-12

Date Collected: 01/10/19 11:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
bis (2-chloroisopropyl) ether	ND		180	36	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2,4,5-Trichlorophenol	ND		180	49	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2,4,6-Trichlorophenol	ND		180	36	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2,4-Dinitrophenol	ND		1800	840	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2,6-Dinitrotoluene	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2-Chlorophenol	ND		180	33	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2-Methylphenol	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2-Methylnaphthalene	ND		180	36	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2-Nitroaniline	ND		350	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
3,3'-Dichlorobenzidine	ND		350	210	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
3-Nitroaniline	ND		350	50	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4,6-Dinitro-2-methylphenol	ND		350	180	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4-Methylphenol	ND		350	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4-Nitroaniline	ND		350	96	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
4-Nitrophenol	ND		350	130	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Acenaphthene	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Acenaphthylene	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Acetophenone	ND		180	25	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Anthracene	ND		180	45	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Atrazine	ND		180	63	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Benzaldehyde	ND		180	140	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Benzo[a]anthracene	48	J	180	18	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Benzo[a]pyrene	45	J	180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Benzo[b]fluoranthene	59	J	180	29	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Benzo[g,h,i]perylene	47	J	180	19	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Benzo[k]fluoranthene	27	J	180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Bis(2-ethylhexyl) phthalate	89	J	180	62	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Caprolactam	ND		180	55	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Carbazole	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Chrysene	56	J	180	41	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Di-n-octyl phthalate	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Dibenzofuran	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Dimethyl phthalate	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-12

Date Collected: 01/10/19 11:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	61	J	180	19	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Fluorene	ND		180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Hexachloroethane	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Indeno[1,2,3-cd]pyrene	38	J	180	23	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Isophorone	ND		180	39	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Naphthalene	ND		180	24	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Nitrobenzene	ND		180	20	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Pentachlorophenol	ND		350	180	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Phenanthrene	29	J	180	27	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Phenol	ND		180	28	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Pyrene	75	J	180	21	ug/Kg	☼	01/11/19 14:15	01/15/19 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	80		53 - 120				01/11/19 14:15	01/15/19 20:24	1
Phenol-d5 (Surr)	77		54 - 120				01/11/19 14:15	01/15/19 20:24	1
p-Terphenyl-d14 (Surr)	109		65 - 121				01/11/19 14:15	01/15/19 20:24	1
2,4,6-Tribromophenol (Surr)	111		54 - 120				01/11/19 14:15	01/15/19 20:24	1
2-Fluorobiphenyl	90		60 - 120				01/11/19 14:15	01/15/19 20:24	1
2-Fluorophenol (Surr)	70		52 - 120				01/11/19 14:15	01/15/19 20:24	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	☼	01/14/19 07:37	01/17/19 17:08	1
PCB-1221	ND		0.22	0.043	mg/Kg	☼	01/14/19 07:37	01/17/19 17:08	1
PCB-1232	ND		0.22	0.043	mg/Kg	☼	01/14/19 07:37	01/17/19 17:08	1
PCB-1242	ND		0.22	0.043	mg/Kg	☼	01/14/19 07:37	01/17/19 17:08	1
PCB-1248	ND		0.22	0.043	mg/Kg	☼	01/14/19 07:37	01/17/19 17:08	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	01/14/19 07:37	01/17/19 17:08	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	01/14/19 07:37	01/17/19 17:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		60 - 154				01/14/19 07:37	01/17/19 17:08	1
Tetrachloro-m-xylene	82		60 - 154				01/14/19 07:37	01/17/19 17:08	1
DCB Decachlorobiphenyl	78		65 - 174				01/14/19 07:37	01/17/19 17:08	1
DCB Decachlorobiphenyl	78		65 - 174				01/14/19 07:37	01/17/19 17:08	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (10'-15')

Lab Sample ID: 480-147755-13

Date Collected: 01/10/19 12:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.4

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	0.36	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.80	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,1,2-Trichloroethane	ND		4.9	0.64	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,2-Dibromo-3-Chloropropane	ND		4.9	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,2-Dichlorobenzene	ND		4.9	0.39	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,2-Dichloropropane	ND		4.9	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,4-Dichlorobenzene	ND		4.9	0.69	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Acetone	90		25	4.2	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Benzene	ND		4.9	0.24	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Bromodichloromethane	ND		4.9	0.66	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Bromoform	ND		4.9	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Bromomethane	ND		4.9	0.44	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Carbon disulfide	ND		4.9	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Carbon tetrachloride	ND		4.9	0.48	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Chlorobenzene	ND		4.9	0.65	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Dibromochloromethane	ND		4.9	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Chloroethane	ND		4.9	1.1	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Chloromethane	ND		4.9	0.30	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
cis-1,2-Dichloroethene	ND		4.9	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
cis-1,3-Dichloropropene	ND		4.9	0.71	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Cyclohexane	ND		4.9	0.69	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Dichlorodifluoromethane	ND		4.9	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
1,2-Dibromoethane	ND		4.9	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Isopropylbenzene	ND		4.9	0.74	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Methylcyclohexane	ND		4.9	0.75	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Methylene Chloride	ND		4.9	2.3	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Styrene	ND		4.9	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Toluene	ND		4.9	0.37	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
trans-1,2-Dichloroethene	ND		4.9	0.51	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
trans-1,3-Dichloropropene	ND		4.9	2.2	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Trichlorofluoromethane	ND		4.9	0.47	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1
Xylenes, Total	ND		9.9	0.83	ug/Kg	☼	01/11/19 05:10	01/16/19 02:23	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (10'-15')

Date Collected: 01/10/19 12:00

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-13

Matrix: Solid

Percent Solids: 91.4

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		71 - 125	01/11/19 05:10	01/16/19 02:23	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		64 - 126	01/11/19 05:10	01/16/19 02:23	1
<i>4-Bromofluorobenzene (Surr)</i>	90		72 - 126	01/11/19 05:10	01/16/19 02:23	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/11/19 05:10	01/16/19 02:23	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (15'-20')

Lab Sample ID: 480-147755-14

Date Collected: 01/10/19 12:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 92.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.9	0.43	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,1,2,2-Tetrachloroethane	ND		5.9	0.96	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,1,2-Trichloroethane	ND		5.9	0.77	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.4	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,1-Dichloroethane	ND		5.9	0.72	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,1-Dichloroethene	ND		5.9	0.73	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,2,4-Trichlorobenzene	ND		5.9	0.36	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,2-Dibromo-3-Chloropropane	ND		5.9	3.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,2-Dichlorobenzene	ND		5.9	0.46	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,2-Dichloroethane	ND		5.9	0.30	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,2-Dichloropropane	ND		5.9	3.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,3-Dichlorobenzene	ND		5.9	0.31	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,4-Dichlorobenzene	ND		5.9	0.83	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
2-Hexanone	ND		30	3.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
4-Methyl-2-pentanone (MIBK)	ND		30	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Acetone	23	J	30	5.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Benzene	ND		5.9	0.29	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Bromodichloromethane	ND		5.9	0.80	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Bromoform	ND		5.9	3.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Bromomethane	ND		5.9	0.53	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Carbon disulfide	ND		5.9	3.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Carbon tetrachloride	ND		5.9	0.57	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Chlorobenzene	ND		5.9	0.78	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Dibromochloromethane	ND		5.9	0.76	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Chloroethane	ND		5.9	1.3	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Chloroform	ND		5.9	0.37	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Chloromethane	ND		5.9	0.36	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
cis-1,2-Dichloroethene	ND		5.9	0.76	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
cis-1,3-Dichloropropene	ND		5.9	0.86	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Cyclohexane	ND		5.9	0.83	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Dichlorodifluoromethane	ND		5.9	0.49	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Ethylbenzene	ND		5.9	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
1,2-Dibromoethane	ND		5.9	0.76	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Isopropylbenzene	ND		5.9	0.90	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Methyl acetate	ND		30	3.6	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Methylcyclohexane	ND		5.9	0.90	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Methylene Chloride	ND		5.9	2.7	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Styrene	ND		5.9	0.30	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Tetrachloroethene	ND		5.9	0.80	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Toluene	ND		5.9	0.45	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
trans-1,2-Dichloroethene	ND		5.9	0.61	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
trans-1,3-Dichloropropene	ND		5.9	2.6	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Trichloroethene	ND		5.9	1.3	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Trichlorofluoromethane	ND		5.9	0.56	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Vinyl chloride	ND		5.9	0.72	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	01/11/19 05:10	01/16/19 02:49	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (15'-20')

Date Collected: 01/10/19 12:20

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-14

Matrix: Solid

Percent Solids: 92.7

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/11/19 05:10	01/16/19 02:49	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/11/19 05:10	01/16/19 02:49	1
<i>4-Bromofluorobenzene (Surr)</i>	87		72 - 126	01/11/19 05:10	01/16/19 02:49	1
<i>Dibromofluoromethane (Surr)</i>	103		60 - 140	01/11/19 05:10	01/16/19 02:49	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-18 (10'-15')

Date Collected: 01/10/19 12:40

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-15

Matrix: Solid

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.2	0.31	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,1,1,2-Tetrachloroethane	ND		4.2	0.68	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,1,2-Trichloroethane	ND		4.2	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.96	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,1-Dichloroethene	ND		4.2	0.52	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,2,4-Trichlorobenzene	ND		4.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,2-Dibromo-3-Chloropropane	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,3-Dichlorobenzene	ND		4.2	0.22	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,4-Dichlorobenzene	ND		4.2	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
2-Butanone (MEK)	ND		21	1.5	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Acetone	4.2	J	21	3.5	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Benzene	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Bromodichloromethane	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Carbon tetrachloride	ND		4.2	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Chlorobenzene	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Dibromochloromethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Chloroethane	ND		4.2	0.95	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Chloroform	0.80	J	4.2	0.26	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Chloromethane	ND		4.2	0.25	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
cis-1,2-Dichloroethene	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
cis-1,3-Dichloropropene	ND		4.2	0.61	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Cyclohexane	ND		4.2	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Dichlorodifluoromethane	ND		4.2	0.35	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Isopropylbenzene	ND		4.2	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Methyl acetate	ND		21	2.5	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Methylcyclohexane	ND		4.2	0.64	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Styrene	ND		4.2	0.21	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Toluene	ND		4.2	0.32	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
trans-1,2-Dichloroethene	ND		4.2	0.43	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
trans-1,3-Dichloropropene	ND		4.2	1.9	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Trichloroethene	ND		4.2	0.93	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Trichlorofluoromethane	ND		4.2	0.40	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1
Xylenes, Total	ND		8.4	0.71	ug/Kg	☼	01/11/19 05:10	01/16/19 04:32	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-18 (10'-15')

Date Collected: 01/10/19 12:40

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-15

Matrix: Solid

Percent Solids: 90.1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	97		71 - 125	01/11/19 05:10	01/16/19 04:32	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	104		64 - 126	01/11/19 05:10	01/16/19 04:32	1
<i>4-Bromofluorobenzene (Surr)</i>	97		72 - 126	01/11/19 05:10	01/16/19 04:32	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/11/19 05:10	01/16/19 04:32	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-18 (15'-20')

Date Collected: 01/10/19 13:00

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-16

Matrix: Solid

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,1,1,2,2-Tetrachloroethane	ND	*	4.5	0.74	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,1,2-Trichloroethane	ND	*	4.5	0.59	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,2,4-Trichlorobenzene	ND	*	4.5	0.28	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,2-Dibromo-3-Chloropropane	ND	*	4.5	2.3	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,2-Dichlorobenzene	ND	*	4.5	0.35	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,2-Dichloropropane	ND		4.5	2.3	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,3-Dichlorobenzene	ND	*	4.5	0.23	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,4-Dichlorobenzene	ND	*	4.5	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
2-Hexanone	ND	*	23	2.3	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
4-Methyl-2-pentanone (MIBK)	ND	*	23	1.5	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Acetone	45		23	3.8	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Benzene	ND		4.5	0.22	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Bromodichloromethane	ND		4.5	0.61	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Bromoform	ND	*	4.5	2.3	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Bromomethane	ND		4.5	0.41	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Carbon disulfide	ND		4.5	2.3	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Carbon tetrachloride	ND		4.5	0.44	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Chlorobenzene	ND	*	4.5	0.60	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Dibromochloromethane	ND	*	4.5	0.58	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
cis-1,2-Dichloroethene	ND		4.5	0.58	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
cis-1,3-Dichloropropene	ND		4.5	0.65	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Cyclohexane	ND		4.5	0.63	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Ethylbenzene	ND	*	4.5	0.31	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
1,2-Dibromoethane	ND	*	4.5	0.58	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Isopropylbenzene	ND	*	4.5	0.68	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Methyl acetate	ND		23	2.7	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Methyl tert-butyl ether	ND		4.5	0.45	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Methylcyclohexane	ND		4.5	0.69	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Styrene	ND	*	4.5	0.23	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Tetrachloroethene	ND	*	4.5	0.61	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Toluene	ND	*	4.5	0.34	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
trans-1,2-Dichloroethene	ND		4.5	0.47	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
trans-1,3-Dichloropropene	ND	*	4.5	2.0	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Trichloroethene	ND		4.5	1.0	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Trichlorofluoromethane	ND		4.5	0.43	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1
Xylenes, Total	ND		9.1	0.76	ug/Kg	☼	01/11/19 05:10	01/16/19 11:53	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-18 (15'-20')

Date Collected: 01/10/19 13:00

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-16

Matrix: Solid

Percent Solids: 83.2

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	143	* X	71 - 125	01/11/19 05:10	01/16/19 11:53	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	98		64 - 126	01/11/19 05:10	01/16/19 11:53	1
<i>4-Bromofluorobenzene (Surr)</i>	64	* X	72 - 126	01/11/19 05:10	01/16/19 11:53	1
<i>Dibromofluoromethane (Surr)</i>	109		60 - 140	01/11/19 05:10	01/16/19 11:53	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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)	DCA (64-126)	BFB (72-126)	DBFM (60-140)
480-147755-3	SB-8 (10'-15')	105	103	84	101
480-147755-4	SB-8 (15'-20')	126 X	103	63 X	105
480-147755-5	SB-11 (10'-15')	100	105	94	101
480-147755-6	SB-11 (15'-20')	127 X	104	62 X	106
480-147755-8	SB-12 (15'-20')	110	106	73	103
480-147755-8 MS	SB-12 (15'-20')	98	97	98	102
480-147755-8 MSD	SB-12 (15'-20')	98	95	97	103
480-147755-9	SB-13 (10'-15')	97	105	98	100
480-147755-10	SB-13 (15'-20')	98	105	95	101
480-147755-13	SB-16 (10'-15')	99	107	90	102
480-147755-14	SB-16 (15'-20')	100	106	87	103
480-147755-15	SB-18 (10'-15')	97	104	97	100
480-147755-16	SB-18 (15'-20')	143 * X	98	64 * X	109
LCS 480-455052/1-A	Lab Control Sample	99	103	102	102
LCS 480-455199/1-A	Lab Control Sample	97	104	103	101
LCS 480-455234/1-A	Lab Control Sample	100	105	101	102
MB 480-455052/2-A	Method Blank	99	101	98	100
MB 480-455199/2-A	Method Blank	97	105	98	102
MB 480-455234/2-A	Method Blank	101	103	98	99

Surrogate Legend

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

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 (50-149)	DCA (53-146)	BFB (49-148)	DBFM (60-140)
480-147755-7	SB-12 (5'-10')	102	109	108	108
LCS 480-455051/1-A	Lab Control Sample	99	106	102	104
LCSD 480-455051/2-A	Lab Control Sample Dup	98	103	106	100
MB 480-455051/3-A	Method Blank	100	108	103	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 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 (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-147755-2	SB-8 (0'-5')	82	82	105	104	89	74

TestAmerica Buffalo

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-147755-12	SB-16 (0'-5')	80	77	109	111	90	70
LCS 480-454744/2-A	Lab Control Sample	88	81	114	119	101	78
MB 480-454744/1-A	Method Blank	87	85	117	100	94	80

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (60-154)	TCX2 (60-154)	DCBP1 (65-174)	DCBP2 (65-174)
480-147755-2	SB-8 (0'-5')	92	74	76	75
480-147755-12	SB-16 (0'-5')	98	82	78	78
LCS 480-454848/2-A	Lab Control Sample	132	103	106	106
MB 480-454848/1-A	Method Blank	107	84	85	85

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: MB 480-455051/3-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1-Dichloroethane	ND		100	31	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,1-Dichloroethene	ND		100	35	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloroethane	ND		100	41	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloropropane	ND		100	16	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
2-Butanone (MEK)	ND		500	300	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
2-Hexanone	ND		500	210	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Acetone	ND		500	410	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Benzene	ND		100	19	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromodichloromethane	ND		100	20	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromoform	ND		100	50	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Bromomethane	ND		100	22	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Carbon disulfide	ND		100	46	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Carbon tetrachloride	ND		100	26	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chlorobenzene	ND		100	13	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Dibromochloromethane	ND		100	48	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloroethane	ND		100	21	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloroform	ND		100	69	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Chloromethane	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Cyclohexane	ND		100	22	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Ethylbenzene	ND		100	29	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
1,2-Dibromoethane	ND		100	18	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Isopropylbenzene	ND		100	15	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methyl acetate	ND		500	48	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methylcyclohexane	ND		100	47	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Methylene Chloride	ND		100	20	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Styrene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Tetrachloroethene	ND		100	13	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Toluene	ND		100	27	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Trichloroethene	ND		100	28	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Trichlorofluoromethane	ND		100	47	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Vinyl chloride	ND		100	34	ug/Kg		01/15/19 08:37	01/15/19 23:02	1
Xylenes, Total	ND		200	55	ug/Kg		01/15/19 08:37	01/15/19 23:02	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.

TestAmerica Job ID: 480-147755-1

Project/Site: Former Sims Matchplate Site

<i>Surrogate</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Toluene-d8 (Surr)	100		50 - 149	01/15/19 08:37	01/15/19 23:02	1
1,2-Dichloroethane-d4 (Surr)	108		53 - 146	01/15/19 08:37	01/15/19 23:02	1
4-Bromofluorobenzene (Surr)	103		49 - 148	01/15/19 08:37	01/15/19 23:02	1
Dibromofluoromethane (Surr)	101		60 - 140	01/15/19 08:37	01/15/19 23:02	1

Lab Sample ID: LCS 480-455051/1-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455051

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCS</i> <i>Result</i>	<i>LCS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>
1,1,1-Trichloroethane	2500	2730		ug/Kg		109	68 - 130
1,1,2,2-Tetrachloroethane	2500	2350		ug/Kg		94	73 - 120
1,1,2-Trichloroethane	2500	2380		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2350		ug/Kg		94	10 - 179
1,1-Dichloroethane	2500	2460		ug/Kg		99	78 - 121
1,1-Dichloroethene	2500	2350		ug/Kg		94	48 - 133
1,2,4-Trichlorobenzene	2500	2430		ug/Kg		97	70 - 140
1,2-Dibromo-3-Chloropropane	2500	2410		ug/Kg		97	56 - 122
1,2-Dichlorobenzene	2500	2510		ug/Kg		100	78 - 125
1,2-Dichloroethane	2500	2500		ug/Kg		100	74 - 127
1,2-Dichloropropane	2500	2640		ug/Kg		106	80 - 120
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120
1,4-Dichlorobenzene	2500	2520		ug/Kg		101	80 - 120
2-Butanone (MEK)	12500	12700		ug/Kg		102	54 - 149
2-Hexanone	12500	12400		ug/Kg		99	59 - 127
4-Methyl-2-pentanone (MIBK)	12500	11700		ug/Kg		93	74 - 120
Acetone	12500	14600		ug/Kg		117	47 - 141
Benzene	2500	2450		ug/Kg		98	77 - 125
Bromodichloromethane	2500	2810		ug/Kg		113	71 - 121
Bromoform	2500	3150 *		ug/Kg		126	48 - 125
Bromomethane	2500	2960		ug/Kg		118	39 - 149
Carbon disulfide	2500	2170		ug/Kg		87	40 - 136
Carbon tetrachloride	2500	2960		ug/Kg		119	54 - 135
Chlorobenzene	2500	2500		ug/Kg		100	76 - 126
Dibromochloromethane	2500	2780		ug/Kg		111	64 - 120
Chloroethane	2500	3000		ug/Kg		120	23 - 150
Chloroform	2500	2380		ug/Kg		95	78 - 120
Chloromethane	2500	2710		ug/Kg		108	61 - 124
cis-1,2-Dichloroethene	2500	2430		ug/Kg		97	79 - 124
cis-1,3-Dichloropropene	2500	2560		ug/Kg		103	75 - 121
Cyclohexane	2500	2660		ug/Kg		107	49 - 129
Dichlorodifluoromethane	2500	2620		ug/Kg		105	10 - 150
Ethylbenzene	2500	2490		ug/Kg		100	78 - 124
1,2-Dibromoethane	2500	2390		ug/Kg		96	80 - 120
Isopropylbenzene	2500	2530		ug/Kg		101	76 - 120
Methyl acetate	5000	4860		ug/Kg		97	71 - 123
Methyl tert-butyl ether	2500	2330		ug/Kg		93	67 - 137
Methylcyclohexane	2500	2620		ug/Kg		105	50 - 130
Methylene Chloride	2500	2540		ug/Kg		102	75 - 118
Styrene	2500	2560		ug/Kg		102	80 - 120
Tetrachloroethene	2500	2510		ug/Kg		100	73 - 133
Toluene	2500	2350		ug/Kg		94	75 - 124
trans-1,2-Dichloroethene	2500	2330		ug/Kg		93	74 - 129

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCS 480-455051/1-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	2500	2590		ug/Kg		104	73 - 120
Trichloroethene	2500	2470		ug/Kg		99	75 - 131
Trichlorofluoromethane	2500	2920		ug/Kg		117	29 - 158
Vinyl chloride	2500	2590		ug/Kg		104	59 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		50 - 149
1,2-Dichloroethane-d4 (Surr)	106		53 - 146
4-Bromofluorobenzene (Surr)	102		49 - 148
Dibromofluoromethane (Surr)	104		60 - 140

Lab Sample ID: LCSD 480-455051/2-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	2500	2760		ug/Kg		110	68 - 130	1	20
1,1,2,2-Tetrachloroethane	2500	2270		ug/Kg		91	73 - 120	3	20
1,1,2-Trichloroethane	2500	2410		ug/Kg		96	80 - 120	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2490		ug/Kg		100	10 - 179	6	20
1,1-Dichloroethane	2500	2470		ug/Kg		99	78 - 121	0	20
1,1-Dichloroethene	2500	2360		ug/Kg		94	48 - 133	0	20
1,2,4-Trichlorobenzene	2500	2360		ug/Kg		94	70 - 140	3	20
1,2-Dibromo-3-Chloropropane	2500	2410		ug/Kg		96	56 - 122	0	20
1,2-Dichlorobenzene	2500	2440		ug/Kg		97	78 - 125	3	20
1,2-Dichloroethane	2500	2510		ug/Kg		100	74 - 127	0	20
1,2-Dichloropropane	2500	2580		ug/Kg		103	80 - 120	3	20
1,3-Dichlorobenzene	2500	2530		ug/Kg		101	80 - 120	0	20
1,4-Dichlorobenzene	2500	2490		ug/Kg		100	80 - 120	1	20
2-Butanone (MEK)	12500	12800		ug/Kg		102	54 - 149	1	20
2-Hexanone	12500	12700		ug/Kg		102	59 - 127	3	20
4-Methyl-2-pentanone (MIBK)	12500	11800		ug/Kg		95	74 - 120	2	20
Acetone	12500	14000		ug/Kg		112	47 - 141	4	20
Benzene	2500	2470		ug/Kg		99	77 - 125	1	20
Bromodichloromethane	2500	2710		ug/Kg		108	71 - 121	4	20
Bromoform	2500	3020		ug/Kg		121	48 - 125	4	20
Bromomethane	2500	3030		ug/Kg		121	39 - 149	2	20
Carbon disulfide	2500	2210		ug/Kg		88	40 - 136	2	20
Carbon tetrachloride	2500	3020		ug/Kg		121	54 - 135	2	20
Chlorobenzene	2500	2580		ug/Kg		103	76 - 126	3	20
Dibromochloromethane	2500	2820		ug/Kg		113	64 - 120	1	20
Chloroethane	2500	3090		ug/Kg		124	23 - 150	3	20
Chloroform	2500	2430		ug/Kg		97	78 - 120	2	20
Chloromethane	2500	2810		ug/Kg		112	61 - 124	4	20
cis-1,2-Dichloroethene	2500	2420		ug/Kg		97	79 - 124	1	20
cis-1,3-Dichloropropene	2500	2550		ug/Kg		102	75 - 121	0	20
Cyclohexane	2500	2650		ug/Kg		106	49 - 129	1	20

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCSD 480-455051/2-A

Matrix: Solid

Analysis Batch: 455192

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 455051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	2500	2750		ug/Kg		110	10 - 150	5	20
Ethylbenzene	2500	2550		ug/Kg		102	78 - 124	2	20
1,2-Dibromoethane	2500	2500		ug/Kg		100	80 - 120	4	20
Isopropylbenzene	2500	2570		ug/Kg		103	76 - 120	1	20
Methyl acetate	5000	4910		ug/Kg		98	71 - 123	1	20
Methyl tert-butyl ether	2500	2310		ug/Kg		92	67 - 137	1	20
Methylcyclohexane	2500	2660		ug/Kg		106	50 - 130	1	20
Methylene Chloride	2500	2550		ug/Kg		102	75 - 118	1	20
Styrene	2500	2610		ug/Kg		105	80 - 120	2	20
Tetrachloroethene	2500	2460		ug/Kg		98	73 - 133	2	20
Toluene	2500	2440		ug/Kg		98	75 - 124	4	20
trans-1,2-Dichloroethene	2500	2440		ug/Kg		97	74 - 129	5	20
trans-1,3-Dichloropropene	2500	2590		ug/Kg		103	73 - 120	0	20
Trichloroethene	2500	2560		ug/Kg		102	75 - 131	3	20
Trichlorofluoromethane	2500	2990		ug/Kg		119	29 - 158	2	20
Vinyl chloride	2500	2790		ug/Kg		112	59 - 124	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		50 - 149
1,2-Dichloroethane-d4 (Surr)	103		53 - 146
4-Bromofluorobenzene (Surr)	106		49 - 148
Dibromofluoromethane (Surr)	100		60 - 140

Lab Sample ID: MB 480-455052/2-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
2-Hexanone	ND		25	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Acetone	ND		25	4.2	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Benzene	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Bromoform	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: MB 480-455052/2-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.0	0.45	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloroform	ND		5.0	0.31	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methyl acetate	ND		25	3.0	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Styrene	ND		5.0	0.25	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Toluene	ND		5.0	0.38	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/15/19 08:54	01/15/19 10:53	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/15/19 08:54	01/15/19 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125	01/15/19 08:54	01/15/19 10:53	1
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	01/15/19 08:54	01/15/19 10:53	1
4-Bromofluorobenzene (Surr)	98		72 - 126	01/15/19 08:54	01/15/19 10:53	1
Dibromofluoromethane (Surr)	100		60 - 140	01/15/19 08:54	01/15/19 10:53	1

Lab Sample ID: LCS 480-455052/1-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.3		ug/Kg		101	77 - 121
1,1,2,2-Tetrachloroethane	50.0	50.2		ug/Kg		100	80 - 120
1,1,2-Trichloroethane	50.0	50.5		ug/Kg		101	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.4		ug/Kg		101	60 - 140
1,1-Dichloroethane	50.0	51.2		ug/Kg		102	73 - 126
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	59 - 125
1,2,4-Trichlorobenzene	50.0	50.6		ug/Kg		101	64 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCS 480-455052/1-A

Matrix: Solid

Analysis Batch: 455045

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	50.0	50.4		ug/Kg		101	63 - 124
1,2-Dichlorobenzene	50.0	49.5		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	53.0		ug/Kg		106	77 - 122
1,2-Dichloropropane	50.0	51.9		ug/Kg		104	75 - 124
1,3-Dichlorobenzene	50.0	49.5		ug/Kg		99	74 - 120
1,4-Dichlorobenzene	50.0	49.4		ug/Kg		99	73 - 120
2-Butanone (MEK)	250	285		ug/Kg		114	70 - 134
2-Hexanone	250	277		ug/Kg		111	59 - 130
4-Methyl-2-pentanone (MIBK)	250	272		ug/Kg		109	65 - 133
Acetone	250	291		ug/Kg		116	61 - 137
Benzene	50.0	50.9		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	52.1		ug/Kg		104	80 - 122
Bromoform	50.0	54.1		ug/Kg		108	68 - 126
Bromomethane	50.0	53.8		ug/Kg		108	37 - 149
Carbon disulfide	50.0	49.0		ug/Kg		98	64 - 131
Carbon tetrachloride	50.0	50.8		ug/Kg		102	75 - 135
Chlorobenzene	50.0	50.3		ug/Kg		101	76 - 124
Dibromochloromethane	50.0	52.6		ug/Kg		105	76 - 125
Chloroethane	50.0	49.5		ug/Kg		99	69 - 135
Chloroform	50.0	51.4		ug/Kg		103	80 - 120
Chloromethane	50.0	49.8		ug/Kg		100	63 - 127
cis-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	81 - 120
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	80 - 120
Cyclohexane	50.0	48.0		ug/Kg		96	65 - 120
Dichlorodifluoromethane	50.0	47.0		ug/Kg		94	57 - 142
Ethylbenzene	50.0	49.3		ug/Kg		99	80 - 120
1,2-Dibromoethane	50.0	51.6		ug/Kg		103	78 - 120
Isopropylbenzene	50.0	47.6		ug/Kg		95	72 - 120
Methyl acetate	100	110		ug/Kg		110	55 - 136
Methyl tert-butyl ether	50.0	53.5		ug/Kg		107	63 - 125
Methylcyclohexane	50.0	49.7		ug/Kg		99	60 - 140
Methylene Chloride	50.0	46.9		ug/Kg		94	61 - 127
Styrene	50.0	49.7		ug/Kg		99	80 - 120
Tetrachloroethene	50.0	49.3		ug/Kg		99	74 - 122
Toluene	50.0	48.8		ug/Kg		98	74 - 128
trans-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	78 - 126
trans-1,3-Dichloropropene	50.0	51.3		ug/Kg		103	73 - 123
Trichloroethene	50.0	50.4		ug/Kg		101	77 - 129
Trichlorofluoromethane	50.0	49.2		ug/Kg		98	65 - 146
Vinyl chloride	50.0	49.8		ug/Kg		100	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		71 - 125
1,2-Dichloroethane-d4 (Surr)	103		64 - 126
4-Bromofluorobenzene (Surr)	102		72 - 126
Dibromofluoromethane (Surr)	102		60 - 140

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: MB 480-455199/2-A

Matrix: Solid

Analysis Batch: 455197

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
2-Hexanone	ND		25	2.5	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Acetone	ND		25	4.2	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Benzene	ND		5.0	0.25	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Bromoform	ND		5.0	2.5	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Chloroform	ND		5.0	0.31	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Methyl acetate	ND		25	3.0	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Styrene	ND		5.0	0.25	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Toluene	ND		5.0	0.38	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/15/19 23:09	01/16/19 00:28	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/15/19 23:09	01/16/19 00:28	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.

TestAmerica Job ID: 480-147755-1

Project/Site: Former Sims Matchplate Site

<i>Surrogate</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Toluene-d8 (Surr)	97		71 - 125	01/15/19 23:09	01/16/19 00:28	1
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	01/15/19 23:09	01/16/19 00:28	1
4-Bromofluorobenzene (Surr)	98		72 - 126	01/15/19 23:09	01/16/19 00:28	1
Dibromofluoromethane (Surr)	102		60 - 140	01/15/19 23:09	01/16/19 00:28	1

Lab Sample ID: LCS 480-455199/1-A

Matrix: Solid

Analysis Batch: 455197

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455199

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCS</i> <i>Result</i>	<i>LCS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>
1,1,1-Trichloroethane	50.0	45.5		ug/Kg		91	77 - 121
1,1,2,2-Tetrachloroethane	50.0	41.1		ug/Kg		82	80 - 120
1,1,2-Trichloroethane	50.0	41.6		ug/Kg		83	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.2		ug/Kg		86	60 - 140
1,1-Dichloroethane	50.0	45.2		ug/Kg		90	73 - 126
1,1-Dichloroethene	50.0	43.9		ug/Kg		88	59 - 125
1,2,4-Trichlorobenzene	50.0	41.7		ug/Kg		83	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	41.1		ug/Kg		82	63 - 124
1,2-Dichlorobenzene	50.0	41.0		ug/Kg		82	75 - 120
1,2-Dichloroethane	50.0	44.8		ug/Kg		90	77 - 122
1,2-Dichloropropane	50.0	44.2		ug/Kg		88	75 - 124
1,3-Dichlorobenzene	50.0	41.7		ug/Kg		83	74 - 120
1,4-Dichlorobenzene	50.0	41.3		ug/Kg		83	73 - 120
2-Butanone (MEK)	250	249		ug/Kg		100	70 - 134
2-Hexanone	250	235		ug/Kg		94	59 - 130
4-Methyl-2-pentanone (MIBK)	250	228		ug/Kg		91	65 - 133
Acetone	250	252		ug/Kg		101	61 - 137
Benzene	50.0	44.9		ug/Kg		90	79 - 127
Bromodichloromethane	50.0	44.5		ug/Kg		89	80 - 122
Bromoform	50.0	43.9		ug/Kg		88	68 - 126
Bromomethane	50.0	41.1		ug/Kg		82	37 - 149
Carbon disulfide	50.0	44.1		ug/Kg		88	64 - 131
Carbon tetrachloride	50.0	45.4		ug/Kg		91	75 - 135
Chlorobenzene	50.0	42.1		ug/Kg		84	76 - 124
Dibromochloromethane	50.0	43.0		ug/Kg		86	76 - 125
Chloroethane	50.0	36.3		ug/Kg		73	69 - 135
Chloroform	50.0	44.5		ug/Kg		89	80 - 120
Chloromethane	50.0	46.2		ug/Kg		92	63 - 127
cis-1,2-Dichloroethene	50.0	44.0		ug/Kg		88	81 - 120
cis-1,3-Dichloropropene	50.0	44.4		ug/Kg		89	80 - 120
Cyclohexane	50.0	43.1		ug/Kg		86	65 - 120
Dichlorodifluoromethane	50.0	43.5		ug/Kg		87	57 - 142
Ethylbenzene	50.0	43.3		ug/Kg		87	80 - 120
1,2-Dibromoethane	50.0	41.9		ug/Kg		84	78 - 120
Isopropylbenzene	50.0	41.1		ug/Kg		82	72 - 120
Methyl acetate	100	94.6		ug/Kg		95	55 - 136
Methyl tert-butyl ether	50.0	45.0		ug/Kg		90	63 - 125
Methylcyclohexane	50.0	43.3		ug/Kg		87	60 - 140
Methylene Chloride	50.0	39.0		ug/Kg		78	61 - 127
Styrene	50.0	41.7		ug/Kg		83	80 - 120
Tetrachloroethene	50.0	42.9		ug/Kg		86	74 - 122
Toluene	50.0	42.5		ug/Kg		85	74 - 128
trans-1,2-Dichloroethene	50.0	45.0		ug/Kg		90	78 - 126

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCS 480-455199/1-A

Matrix: Solid

Analysis Batch: 455197

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	42.4		ug/Kg		85	73 - 123
Trichloroethene	50.0	45.0		ug/Kg		90	77 - 129
Trichlorofluoromethane	50.0	42.9		ug/Kg		86	65 - 146
Vinyl chloride	50.0	46.8		ug/Kg		94	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		71 - 125
1,2-Dichloroethane-d4 (Surr)	104		64 - 126
4-Bromofluorobenzene (Surr)	103		72 - 126
Dibromofluoromethane (Surr)	101		60 - 140

Lab Sample ID: 480-147755-8 MS

Matrix: Solid

Analysis Batch: 455197

Client Sample ID: SB-12 (15'-20')

Prep Type: Total/NA

Prep Batch: 455199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.43	J F1	41.1	30.2	F1	ug/Kg	☼	72	77 - 121
1,1,2,2-Tetrachloroethane	ND	* F1	41.1	20.6	F1	ug/Kg	☼	50	80 - 120
1,1,2-Trichloroethane	ND	F1	41.1	23.6	F1	ug/Kg	☼	57	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		41.1	29.5		ug/Kg	☼	72	60 - 140
1,1-Dichloroethane	ND		41.1	31.8		ug/Kg	☼	77	73 - 126
1,1-Dichloroethene	ND		41.1	28.8		ug/Kg	☼	70	59 - 125
1,2,4-Trichlorobenzene	ND	* F1	41.1	4.46	F1	ug/Kg	☼	11	64 - 120
1,2-Dibromo-3-Chloropropane	ND	* F1	41.1	14.5	F1	ug/Kg	☼	35	63 - 124
1,2-Dichlorobenzene	ND	* F1	41.1	14.2	F1	ug/Kg	☼	34	75 - 120
1,2-Dichloroethane	ND	F1	41.1	29.4	F1	ug/Kg	☼	71	77 - 122
1,2-Dichloropropane	ND	F1	41.1	28.7	F1	ug/Kg	☼	70	75 - 124
1,3-Dichlorobenzene	ND	* F1	41.1	12.9	F1	ug/Kg	☼	31	74 - 120
1,4-Dichlorobenzene	ND	* F1	41.1	12.7	F1	ug/Kg	☼	31	73 - 120
2-Butanone (MEK)	ND	F1	206	132	F1	ug/Kg	☼	64	70 - 134
2-Hexanone	ND	F1	206	99.2	F1	ug/Kg	☼	48	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	F1	206	115	F1	ug/Kg	☼	56	65 - 133
Acetone	13	J	206	156		ug/Kg	☼	69	61 - 137
Benzene	ND	F1	41.1	29.2	F1	ug/Kg	☼	71	79 - 127
Bromodichloromethane	ND	F1	41.1	28.1	F1	ug/Kg	☼	68	80 - 122
Bromoform	ND	F1	41.1	19.5	F1	ug/Kg	☼	47	68 - 126
Bromomethane	ND		41.1	38.9		ug/Kg	☼	95	37 - 149
Carbon disulfide	ND		41.1	27.4		ug/Kg	☼	67	64 - 131
Carbon tetrachloride	ND	F1	41.1	28.9	F1	ug/Kg	☼	70	75 - 135
Chlorobenzene	ND	F1	41.1	20.8	F1	ug/Kg	☼	51	76 - 124
Dibromochloromethane	ND	F1	41.1	23.4	F1	ug/Kg	☼	57	76 - 125
Chloroethane	ND		41.1	34.8		ug/Kg	☼	85	69 - 135
Chloroform	0.25	J F1	41.1	31.0	F1	ug/Kg	☼	75	80 - 120
Chloromethane	ND		41.1	38.4		ug/Kg	☼	94	63 - 127
cis-1,2-Dichloroethene	2.6	J F1	41.1	29.8	F1	ug/Kg	☼	66	80 - 120
cis-1,3-Dichloropropene	ND	F1	41.1	24.1	F1	ug/Kg	☼	59	80 - 120
Cyclohexane	ND	F1	41.1	26.0	F1	ug/Kg	☼	63	65 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: 480-147755-8 MS

Matrix: Solid

Analysis Batch: 455197

Client Sample ID: SB-12 (15'-20')

Prep Type: Total/NA

Prep Batch: 455199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		41.1	32.7		ug/Kg	✱	80	57 - 142
Ethylbenzene	ND	F1	41.1	20.7	F1	ug/Kg	✱	50	80 - 120
1,2-Dibromoethane	ND	F1	41.1	19.9	F1	ug/Kg	✱	48	78 - 120
Isopropylbenzene	ND	* F1	41.1	20.4	F1	ug/Kg	✱	50	72 - 120
Methyl acetate	ND		82.2	56.0		ug/Kg	✱	68	55 - 136
Methyl tert-butyl ether	ND		41.1	32.9		ug/Kg	✱	80	63 - 125
Methylcyclohexane	ND	F1	41.1	22.0	F1	ug/Kg	✱	54	60 - 140
Methylene Chloride	ND		41.1	30.1		ug/Kg	✱	73	61 - 127
Styrene	ND	F1	41.1	17.6	F1	ug/Kg	✱	43	80 - 120
Tetrachloroethene	ND	F1	41.1	20.9	F1	ug/Kg	✱	51	74 - 122
Toluene	ND	F1	41.1	23.8	F1	ug/Kg	✱	58	74 - 128
trans-1,2-Dichloroethene	ND	F1	41.1	28.5	F1	ug/Kg	✱	69	78 - 126
trans-1,3-Dichloropropene	ND	F1	41.1	20.6	F1	ug/Kg	✱	50	73 - 123
Trichloroethene	110	F1	41.1	40.8	F1	ug/Kg	✱	-180	77 - 129
Trichlorofluoromethane	ND		41.1	32.9		ug/Kg	✱	80	65 - 146
Vinyl chloride	ND		41.1	35.7		ug/Kg	✱	87	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	98		71 - 125
1,2-Dichloroethane-d4 (Surr)	97		64 - 126
4-Bromofluorobenzene (Surr)	98		72 - 126
Dibromofluoromethane (Surr)	102		60 - 140

Lab Sample ID: 480-147755-8 MSD

Matrix: Solid

Analysis Batch: 455197

Client Sample ID: SB-12 (15'-20')

Prep Type: Total/NA

Prep Batch: 455199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,1,1-Trichloroethane	0.43	J F1	42.6	31.8	F1	ug/Kg	✱	74	77 - 121	5	30
1,1,1,2,2-Tetrachloroethane	ND	* F1	42.6	22.4	F1	ug/Kg	✱	53	80 - 120	8	30
1,1,1,2-Trichloroethane	ND	F1	42.6	25.4	F1	ug/Kg	✱	60	78 - 122	7	30
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		42.6	31.0		ug/Kg	✱	73	60 - 140	5	30
1,1-Dichloroethane	ND		42.6	32.9		ug/Kg	✱	77	73 - 126	3	30
1,1-Dichloroethene	ND		42.6	29.6		ug/Kg	✱	69	59 - 125	3	30
1,2,4-Trichlorobenzene	ND	* F1	42.6	4.60	F1	ug/Kg	✱	11	64 - 120	3	30
1,2-Dibromo-3-Chloropropane	ND	* F1	42.6	16.4	F1	ug/Kg	✱	39	63 - 124	12	30
1,2-Dichlorobenzene	ND	* F1	42.6	15.3	F1	ug/Kg	✱	36	75 - 120	7	30
1,2-Dichloroethane	ND	F1	42.6	30.3	F1	ug/Kg	✱	71	77 - 122	3	30
1,2-Dichloropropane	ND	F1	42.6	30.3	F1	ug/Kg	✱	71	75 - 124	5	30
1,3-Dichlorobenzene	ND	* F1	42.6	13.3	F1	ug/Kg	✱	31	74 - 120	3	30
1,4-Dichlorobenzene	ND	* F1	42.6	13.3	F1	ug/Kg	✱	31	73 - 120	4	30
2-Butanone (MEK)	ND	F1	213	127	F1	ug/Kg	✱	59	70 - 134	4	30
2-Hexanone	ND	F1	213	103	F1	ug/Kg	✱	48	59 - 130	4	30
4-Methyl-2-pentanone (MIBK)	ND	F1	213	118	F1	ug/Kg	✱	55	65 - 133	2	30
Acetone	13	J	213	148		ug/Kg	✱	64	61 - 137	5	30
Benzene	ND	F1	42.6	30.5	F1	ug/Kg	✱	72	79 - 127	4	30
Bromodichloromethane	ND	F1	42.6	29.8	F1	ug/Kg	✱	70	80 - 122	6	30

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: 480-147755-8 MSD

Matrix: Solid

Analysis Batch: 455197

Client Sample ID: SB-12 (15'-20')

Prep Type: Total/NA

Prep Batch: 455199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND	F1	42.6	20.8	F1	ug/Kg	✱	49	68 - 126	6	30
Bromomethane	ND		42.6	38.7		ug/Kg	✱	91	37 - 149	1	30
Carbon disulfide	ND		42.6	28.3		ug/Kg	✱	66	64 - 131	3	30
Carbon tetrachloride	ND	F1	42.6	30.7	F1	ug/Kg	✱	72	75 - 135	6	30
Chlorobenzene	ND	F1	42.6	22.0	F1	ug/Kg	✱	52	76 - 124	5	30
Dibromochloromethane	ND	F1	42.6	25.1	F1	ug/Kg	✱	59	76 - 125	7	30
Chloroethane	ND		42.6	37.2		ug/Kg	✱	87	69 - 135	7	30
Chloroform	0.25	J F1	42.6	32.1	F1	ug/Kg	✱	75	80 - 120	4	30
Chloromethane	ND		42.6	39.3		ug/Kg	✱	92	63 - 127	2	30
cis-1,2-Dichloroethene	2.6	J F1	42.6	30.4	F1	ug/Kg	✱	65	80 - 120	2	30
cis-1,3-Dichloropropene	ND	F1	42.6	25.5	F1	ug/Kg	✱	60	80 - 120	6	30
Cyclohexane	ND	F1	42.6	27.8		ug/Kg	✱	65	65 - 120	7	30
Dichlorodifluoromethane	ND		42.6	32.7		ug/Kg	✱	77	57 - 142	0	30
Ethylbenzene	ND	F1	42.6	21.8	F1	ug/Kg	✱	51	80 - 120	5	30
1,2-Dibromoethane	ND	F1	42.6	21.1	F1	ug/Kg	✱	50	78 - 120	6	30
Isopropylbenzene	ND	* F1	42.6	22.2	F1	ug/Kg	✱	52	72 - 120	8	30
Methyl acetate	ND		85.2	53.5		ug/Kg	✱	63	55 - 136	5	30
Methyl tert-butyl ether	ND		42.6	33.3		ug/Kg	✱	78	63 - 125	1	30
Methylcyclohexane	ND	F1	42.6	23.5	F1	ug/Kg	✱	55	60 - 140	6	30
Methylene Chloride	ND		42.6	31.1		ug/Kg	✱	73	61 - 127	4	30
Styrene	ND	F1	42.6	18.4	F1	ug/Kg	✱	43	80 - 120	4	30
Tetrachloroethene	ND	F1	42.6	21.7	F1	ug/Kg	✱	51	74 - 122	4	30
Toluene	ND	F1	42.6	24.8	F1	ug/Kg	✱	58	74 - 128	4	30
trans-1,2-Dichloroethene	ND	F1	42.6	28.7	F1	ug/Kg	✱	67	78 - 126	1	30
trans-1,3-Dichloropropene	ND	F1	42.6	21.6	F1	ug/Kg	✱	51	73 - 123	5	30
Trichloroethene	110	F1	42.6	36.1	F1	ug/Kg	✱	-185	77 - 129	12	30
Trichlorofluoromethane	ND		42.6	34.3		ug/Kg	✱	81	65 - 146	4	30
Vinyl chloride	ND		42.6	36.9		ug/Kg	✱	87	61 - 133	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	98		71 - 125
1,2-Dichloroethane-d4 (Surr)	95		64 - 126
4-Bromofluorobenzene (Surr)	97		72 - 126
Dibromofluoromethane (Surr)	103		60 - 140

Lab Sample ID: MB 480-455234/2-A

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455234

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: MB 480-455234/2-A

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455234

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
2-Hexanone	ND		25	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Acetone	ND		25	4.2	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Benzene	ND		5.0	0.25	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Bromoform	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chloroform	ND		5.0	0.31	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methyl acetate	ND		25	3.0	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Styrene	ND		5.0	0.25	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Toluene	ND		5.0	0.38	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/16/19 08:33	01/16/19 11:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		71 - 125	01/16/19 08:33	01/16/19 11:10	1
1,2-Dichloroethane-d4 (Surr)	103		64 - 126	01/16/19 08:33	01/16/19 11:10	1
4-Bromofluorobenzene (Surr)	98		72 - 126	01/16/19 08:33	01/16/19 11:10	1
Dibromofluoromethane (Surr)	99		60 - 140	01/16/19 08:33	01/16/19 11:10	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCS 480-455234/1-A

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	48.2		ug/Kg		96	77 - 121
1,1,2,2-Tetrachloroethane	50.0	47.8		ug/Kg		96	80 - 120
1,1,2-Trichloroethane	50.0	47.8		ug/Kg		96	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.8		ug/Kg		96	60 - 140
1,1-Dichloroethane	50.0	48.4		ug/Kg		97	73 - 126
1,1-Dichloroethene	50.0	46.9		ug/Kg		94	59 - 125
1,2,4-Trichlorobenzene	50.0	46.3		ug/Kg		93	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.3		ug/Kg		95	63 - 124
1,2-Dichlorobenzene	50.0	46.9		ug/Kg		94	75 - 120
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	77 - 122
1,2-Dichloropropane	50.0	48.0		ug/Kg		96	75 - 124
1,3-Dichlorobenzene	50.0	47.1		ug/Kg		94	74 - 120
1,4-Dichlorobenzene	50.0	46.8		ug/Kg		94	73 - 120
2-Butanone (MEK)	250	267		ug/Kg		107	70 - 134
2-Hexanone	250	259		ug/Kg		104	59 - 130
4-Methyl-2-pentanone (MIBK)	250	254		ug/Kg		102	65 - 133
Acetone	250	276		ug/Kg		111	61 - 137
Benzene	50.0	48.1		ug/Kg		96	79 - 127
Bromodichloromethane	50.0	48.8		ug/Kg		98	80 - 122
Bromoform	50.0	50.1		ug/Kg		100	68 - 126
Bromomethane	50.0	54.9		ug/Kg		110	37 - 149
Carbon disulfide	50.0	47.9		ug/Kg		96	64 - 131
Carbon tetrachloride	50.0	49.1		ug/Kg		98	75 - 135
Chlorobenzene	50.0	46.8		ug/Kg		94	76 - 124
Dibromochloromethane	50.0	49.3		ug/Kg		99	76 - 125
Chloroethane	50.0	53.4		ug/Kg		107	69 - 135
Chloroform	50.0	48.6		ug/Kg		97	80 - 120
Chloromethane	50.0	50.7		ug/Kg		101	63 - 127
cis-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	81 - 120
cis-1,3-Dichloropropene	50.0	48.3		ug/Kg		97	80 - 120
Cyclohexane	50.0	46.7		ug/Kg		93	65 - 120
Dichlorodifluoromethane	50.0	45.4		ug/Kg		91	57 - 142
Ethylbenzene	50.0	46.9		ug/Kg		94	80 - 120
1,2-Dibromoethane	50.0	48.4		ug/Kg		97	78 - 120
Isopropylbenzene	50.0	46.0		ug/Kg		92	72 - 120
Methyl acetate	100	102		ug/Kg		102	55 - 136
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	63 - 125
Methylcyclohexane	50.0	46.7		ug/Kg		93	60 - 140
Methylene Chloride	50.0	43.9		ug/Kg		88	61 - 127
Styrene	50.0	46.2		ug/Kg		92	80 - 120
Tetrachloroethene	50.0	46.5		ug/Kg		93	74 - 122
Toluene	50.0	46.6		ug/Kg		93	74 - 128
trans-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	78 - 126
trans-1,3-Dichloropropene	50.0	48.3		ug/Kg		97	73 - 123
Trichloroethene	50.0	47.2		ug/Kg		94	77 - 129
Trichlorofluoromethane	50.0	51.3		ug/Kg		103	65 - 146
Vinyl chloride	50.0	51.7		ug/Kg		103	61 - 133

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCS 480-455234/1-A

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455234

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 125
1,2-Dichloroethane-d4 (Surr)	105		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	102		60 - 140

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

Lab Sample ID: MB 480-454744/1-A

Matrix: Solid

Analysis Batch: 455117

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454744

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2,4-Dinitrophenol	ND		1600	780	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2-Chloronaphthalene	ND		170	28	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2-Chlorophenol	ND		170	31	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2-Methylphenol	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2-Methylnaphthalene	ND		170	34	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2-Nitroaniline	ND		330	25	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
2-Nitrophenol	ND		170	48	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
3-Nitroaniline	ND		330	47	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4-Chloroaniline	ND		170	42	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4-Methylphenol	ND		330	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4-Nitroaniline	ND		330	88	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
4-Nitrophenol	ND		330	120	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Acenaphthene	ND		170	25	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Acenaphthylene	ND		170	22	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Acetophenone	ND		170	23	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Anthracene	ND		170	42	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Atrazine	ND		170	59	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Benzaldehyde	ND		170	130	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Benzo[a]pyrene	ND		170	25	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		01/11/19 14:15	01/15/19 15:50	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: MB 480-454744/1-A

Matrix: Solid

Analysis Batch: 455117

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454744

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Caprolactam	ND		170	51	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Carbazole	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Chrysene	ND		170	38	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Dibenzofuran	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Diethyl phthalate	ND		170	22	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Dimethyl phthalate	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Fluoranthene	ND		170	18	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Fluorene	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Hexachlorobenzene	ND		170	23	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Hexachlorobutadiene	ND		170	25	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Hexachloroethane	ND		170	22	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Isophorone	ND		170	36	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Naphthalene	ND		170	22	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Nitrobenzene	ND		170	19	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Pentachlorophenol	ND		330	170	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Phenanthrene	ND		170	25	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Phenol	ND		170	26	ug/Kg		01/11/19 14:15	01/15/19 15:50	1
Pyrene	ND		170	20	ug/Kg		01/11/19 14:15	01/15/19 15:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	87		53 - 120	01/11/19 14:15	01/15/19 15:50	1
Phenol-d5 (Surr)	85		54 - 120	01/11/19 14:15	01/15/19 15:50	1
p-Terphenyl-d14 (Surr)	117		65 - 121	01/11/19 14:15	01/15/19 15:50	1
2,4,6-Tribromophenol (Surr)	100		54 - 120	01/11/19 14:15	01/15/19 15:50	1
2-Fluorobiphenyl	94		60 - 120	01/11/19 14:15	01/15/19 15:50	1
2-Fluorophenol (Surr)	80		52 - 120	01/11/19 14:15	01/15/19 15:50	1

Lab Sample ID: LCS 480-454744/2-A

Matrix: Solid

Analysis Batch: 455117

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454744

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1630	1590		ug/Kg		98	59 - 120
bis (2-chloroisopropyl) ether	1630	819		ug/Kg		50	44 - 120
2,4,5-Trichlorophenol	1630	1610		ug/Kg		99	59 - 126
2,4,6-Trichlorophenol	1630	1640		ug/Kg		101	59 - 123
2,4-Dichlorophenol	1630	1460		ug/Kg		90	61 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCS 480-454744/2-A

Matrix: Solid

Analysis Batch: 455117

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454744

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	1630	1470		ug/Kg		90	59 - 120
2,4-Dinitrophenol	3250	2240		ug/Kg		69	41 - 146
2,4-Dinitrotoluene	1630	1530		ug/Kg		94	63 - 120
2,6-Dinitrotoluene	1630	1560		ug/Kg		96	66 - 120
2-Chloronaphthalene	1630	1550		ug/Kg		96	57 - 120
2-Chlorophenol	1630	1300		ug/Kg		80	53 - 120
2-Methylphenol	1630	1300		ug/Kg		80	54 - 120
2-Methylnaphthalene	1630	1500		ug/Kg		92	59 - 120
2-Nitroaniline	1630	1420		ug/Kg		87	61 - 120
2-Nitrophenol	1630	1480		ug/Kg		91	56 - 120
3,3'-Dichlorobenzidine	3250	2490		ug/Kg		76	54 - 120
3-Nitroaniline	1630	1060		ug/Kg		65	48 - 120
4,6-Dinitro-2-methylphenol	3250	3240		ug/Kg		100	49 - 122
4-Bromophenyl phenyl ether	1630	1710		ug/Kg		105	58 - 120
4-Chloro-3-methylphenol	1630	1460		ug/Kg		90	61 - 120
4-Chloroaniline	1630	980		ug/Kg		60	38 - 120
4-Chlorophenyl phenyl ether	1630	1580		ug/Kg		97	63 - 124
4-Methylphenol	1630	1320		ug/Kg		81	55 - 120
4-Nitroaniline	1630	1420		ug/Kg		87	56 - 120
4-Nitrophenol	3250	3300		ug/Kg		101	43 - 147
Acenaphthene	1630	1530		ug/Kg		94	62 - 120
Acenaphthylene	1630	1630		ug/Kg		100	58 - 121
Acetophenone	1630	1350		ug/Kg		83	54 - 120
Anthracene	1630	1650		ug/Kg		101	62 - 120
Atrazine	3250	2950		ug/Kg		91	60 - 127
Benzaldehyde	3250	2050		ug/Kg		63	10 - 150
Benzo[a]anthracene	1630	1560		ug/Kg		96	65 - 120
Benzo[a]pyrene	1630	1690		ug/Kg		104	64 - 120
Benzo[b]fluoranthene	1630	1760		ug/Kg		108	64 - 120
Benzo[g,h,i]perylene	1630	1750		ug/Kg		107	45 - 145
Benzo[k]fluoranthene	1630	1590		ug/Kg		98	65 - 120
Bis(2-chloroethoxy)methane	1630	1360		ug/Kg		83	55 - 120
Bis(2-chloroethyl)ether	1630	1190		ug/Kg		73	45 - 120
Bis(2-ethylhexyl) phthalate	1630	1730		ug/Kg		106	61 - 133
Butyl benzyl phthalate	1630	1700		ug/Kg		104	61 - 129
Caprolactam	3250	2600		ug/Kg		80	47 - 120
Carbazole	1630	1570		ug/Kg		97	65 - 120
Chrysene	1630	1570		ug/Kg		97	64 - 120
Dibenz(a,h)anthracene	1630	1800		ug/Kg		110	54 - 132
Di-n-butyl phthalate	1630	1660		ug/Kg		102	58 - 130
Di-n-octyl phthalate	1630	1600		ug/Kg		98	57 - 133
Dibenzofuran	1630	1560		ug/Kg		96	63 - 120
Diethyl phthalate	1630	1650		ug/Kg		102	66 - 120
Dimethyl phthalate	1630	1580		ug/Kg		97	65 - 124
Fluoranthene	1630	1550		ug/Kg		95	62 - 120
Fluorene	1630	1550		ug/Kg		95	63 - 120
Hexachlorobenzene	1630	1810		ug/Kg		111	60 - 120
Hexachlorobutadiene	1630	1600		ug/Kg		99	45 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCS 480-454744/2-A

Matrix: Solid

Analysis Batch: 455117

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454744

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	1630	1800		ug/Kg		111	47 - 120
Hexachloroethane	1630	1240		ug/Kg		76	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1760		ug/Kg		108	56 - 134
Isophorone	1630	1360		ug/Kg		83	56 - 120
N-Nitrosodi-n-propylamine	1630	1210		ug/Kg		74	52 - 120
N-Nitrosodiphenylamine	1630	1700		ug/Kg		104	51 - 128
Naphthalene	1630	1400		ug/Kg		86	55 - 120
Nitrobenzene	1630	1300		ug/Kg		80	54 - 120
Pentachlorophenol	3250	3110		ug/Kg		96	51 - 120
Phenanthrene	1630	1580		ug/Kg		97	60 - 120
Phenol	1630	1220		ug/Kg		75	53 - 120
Pyrene	1630	1830		ug/Kg		112	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	88		53 - 120
Phenol-d5 (Surr)	81		54 - 120
p-Terphenyl-d14 (Surr)	114		65 - 121
2,4,6-Tribromophenol (Surr)	119		54 - 120
2-Fluorobiphenyl	101		60 - 120
2-Fluorophenol (Surr)	78		52 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-454848/1-A

Matrix: Solid

Analysis Batch: 455460

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1221	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1232	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1242	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1248	ND		0.23	0.045	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1254	ND		0.23	0.11	mg/Kg		01/14/19 07:37	01/17/19 14:13	1
PCB-1260	ND		0.23	0.11	mg/Kg		01/14/19 07:37	01/17/19 14:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		60 - 154	01/14/19 07:37	01/17/19 14:13	1
Tetrachloro-m-xylene	84		60 - 154	01/14/19 07:37	01/17/19 14:13	1
DCB Decachlorobiphenyl	85		65 - 174	01/14/19 07:37	01/17/19 14:13	1
DCB Decachlorobiphenyl	85		65 - 174	01/14/19 07:37	01/17/19 14:13	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 480-454848/2-A

Matrix: Solid

Analysis Batch: 455460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.31	2.54		mg/Kg		110	51 - 185
PCB-1260	2.31	2.76		mg/Kg		119	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	132		60 - 154
Tetrachloro-m-xylene	103		60 - 154
DCB Decachlorobiphenyl	106		65 - 174
DCB Decachlorobiphenyl	106		65 - 174

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-454780/1-A

Matrix: Solid

Analysis Batch: 455035

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 454780

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.7	4.3	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Antimony	ND		14.6	0.39	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Arsenic	ND		1.9	0.39	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Barium	ND		0.49	0.11	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Beryllium	ND		0.19	0.027	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Cadmium	ND		0.19	0.029	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Calcium	5.96	J	48.7	3.2	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Chromium	ND		0.49	0.19	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Cobalt	ND		0.49	0.049	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Copper	ND		0.97	0.20	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Iron	ND		9.7	3.4	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Lead	ND		0.97	0.23	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Magnesium	ND		19.5	0.90	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Manganese	0.0429	J	0.19	0.031	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Nickel	ND		4.9	0.22	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Potassium	ND		29.2	19.5	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Selenium	ND		3.9	0.39	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Silver	ND		0.58	0.19	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Sodium	ND		136	12.7	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Thallium	ND		5.8	0.29	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Vanadium	ND		0.49	0.11	mg/Kg		01/12/19 10:29	01/14/19 11:41	1
Zinc	ND		1.9	0.62	mg/Kg		01/12/19 10:29	01/14/19 11:41	1

Lab Sample ID: LCSSRM 480-454780/2-A

Matrix: Solid

Analysis Batch: 455035

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454780

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10100	8738		mg/Kg		86.5	41.6 - 123.8
Antimony	145	52.84		mg/Kg		36.4	10.0 - 137.2

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

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

Lab Sample ID: LCSSRM 480-454780/2-A

Matrix: Solid

Analysis Batch: 455035

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 454780

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	171	146.2		mg/Kg		85.5	66.1 - 122.2
Barium	272	224.6		mg/Kg		82.6	71.7 - 119.5
Beryllium	102	86.56		mg/Kg		84.9	71.8 - 119.6
Cadmium	225	184.2		mg/Kg		81.9	70.2 - 117.3
Calcium	5190	4185		mg/Kg		80.6	66.7 - 117.0
Chromium	144	121.6		mg/Kg		84.4	66.1 - 122.9
Cobalt	48.8	48.58		mg/Kg		99.5	74.0 - 123.4
Copper	174	149.3		mg/Kg		85.8	71.3 - 119.0
Iron	15000	14120		mg/Kg		94.1	32.9 - 154.7
Lead	111	112.4		mg/Kg		101.2	71.0 - 128.8
Magnesium	2570	2236		mg/Kg		87.0	56.4 - 125.3
Manganese	232	207.1		mg/Kg		89.3	71.1 - 125.4
Nickel	98.3	93.67		mg/Kg		95.3	65.4 - 121.1
Potassium	2420	2040		mg/Kg		84.3	49.2 - 117.8
Selenium	206	176.4		mg/Kg		85.6	63.6 - 122.3
Silver	45.5	38.35		mg/Kg		84.3	66.2 - 124.2
Sodium	252	206.1		mg/Kg		81.8	41.7 - 131.7
Thallium	167	162.4		mg/Kg		97.2	65.9 - 121.0
Vanadium	61.8	56.64		mg/Kg		91.7	52.1 - 131.6
Zinc	207	177.8		mg/Kg		85.9	67.1 - 125.1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-455139/1-A

Matrix: Solid

Analysis Batch: 455166

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455139

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0081	mg/Kg		01/15/19 15:00	01/15/19 15:47	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-455139/2-A ^10
Matrix: Solid
Analysis Batch: 455166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 455139

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	10.73		mg/Kg		89.4	57.3 - 133. 3

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

GC/MS VOA

Analysis Batch: 455045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-3	SB-8 (10'-15')	Total/NA	Solid	8260C	455052
480-147755-5	SB-11 (10'-15')	Total/NA	Solid	8260C	455052
MB 480-455052/2-A	Method Blank	Total/NA	Solid	8260C	455052
LCS 480-455052/1-A	Lab Control Sample	Total/NA	Solid	8260C	455052

Prep Batch: 455051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-7	SB-12 (5'-10')	Total/NA	Solid	5035A_H	
MB 480-455051/3-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-455051/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	
LCSD 480-455051/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_H	

Prep Batch: 455052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-3	SB-8 (10'-15')	Total/NA	Solid	5035A_L	
480-147755-5	SB-11 (10'-15')	Total/NA	Solid	5035A_L	
480-147755-9	SB-13 (10'-15')	Total/NA	Solid	5035A_L	
480-147755-10	SB-13 (15'-20')	Total/NA	Solid	5035A_L	
480-147755-13	SB-16 (10'-15')	Total/NA	Solid	5035A_L	
480-147755-14	SB-16 (15'-20')	Total/NA	Solid	5035A_L	
MB 480-455052/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455052/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 455192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-7	SB-12 (5'-10')	Total/NA	Solid	8260C	455051
MB 480-455051/3-A	Method Blank	Total/NA	Solid	8260C	455051
LCS 480-455051/1-A	Lab Control Sample	Total/NA	Solid	8260C	455051
LCSD 480-455051/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	455051

Analysis Batch: 455197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-4	SB-8 (15'-20')	Total/NA	Solid	8260C	455199
480-147755-6	SB-11 (15'-20')	Total/NA	Solid	8260C	455199
480-147755-8	SB-12 (15'-20')	Total/NA	Solid	8260C	455199
480-147755-9	SB-13 (10'-15')	Total/NA	Solid	8260C	455052
480-147755-10	SB-13 (15'-20')	Total/NA	Solid	8260C	455052
480-147755-13	SB-16 (10'-15')	Total/NA	Solid	8260C	455052
480-147755-14	SB-16 (15'-20')	Total/NA	Solid	8260C	455052
480-147755-15	SB-18 (10'-15')	Total/NA	Solid	8260C	455199
MB 480-455199/2-A	Method Blank	Total/NA	Solid	8260C	455199
LCS 480-455199/1-A	Lab Control Sample	Total/NA	Solid	8260C	455199
480-147755-8 MS	SB-12 (15'-20')	Total/NA	Solid	8260C	455199
480-147755-8 MSD	SB-12 (15'-20')	Total/NA	Solid	8260C	455199

Prep Batch: 455199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-4	SB-8 (15'-20')	Total/NA	Solid	5035A_L	
480-147755-6	SB-11 (15'-20')	Total/NA	Solid	5035A_L	
480-147755-8	SB-12 (15'-20')	Total/NA	Solid	5035A_L	
480-147755-15	SB-18 (10'-15')	Total/NA	Solid	5035A_L	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

GC/MS VOA (Continued)

Prep Batch: 455199 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-455199/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455199/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-147755-8 MS	SB-12 (15'-20')	Total/NA	Solid	5035A_L	
480-147755-8 MSD	SB-12 (15'-20')	Total/NA	Solid	5035A_L	

Prep Batch: 455234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-16	SB-18 (15'-20')	Total/NA	Solid	5035A_L	
MB 480-455234/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455234/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 455237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-16	SB-18 (15'-20')	Total/NA	Solid	8260C	455234
MB 480-455234/2-A	Method Blank	Total/NA	Solid	8260C	455234
LCS 480-455234/1-A	Lab Control Sample	Total/NA	Solid	8260C	455234

GC/MS Semi VOA

Prep Batch: 454744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-2	SB-8 (0'-5')	Total/NA	Solid	3550C	
480-147755-12	SB-16 (0'-5')	Total/NA	Solid	3550C	
MB 480-454744/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-454744/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 455117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-2	SB-8 (0'-5')	Total/NA	Solid	8270D	454744
480-147755-12	SB-16 (0'-5')	Total/NA	Solid	8270D	454744
MB 480-454744/1-A	Method Blank	Total/NA	Solid	8270D	454744
LCS 480-454744/2-A	Lab Control Sample	Total/NA	Solid	8270D	454744

GC Semi VOA

Prep Batch: 454848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-2	SB-8 (0'-5')	Total/NA	Solid	3550C	
480-147755-12	SB-16 (0'-5')	Total/NA	Solid	3550C	
MB 480-454848/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-454848/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 455460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-2	SB-8 (0'-5')	Total/NA	Solid	8082A	454848
480-147755-12	SB-16 (0'-5')	Total/NA	Solid	8082A	454848
MB 480-454848/1-A	Method Blank	Total/NA	Solid	8082A	454848
LCS 480-454848/2-A	Lab Control Sample	Total/NA	Solid	8082A	454848

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Metals

Prep Batch: 454780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-1	SB-8 (0'-5')	Total/NA	Solid	3050B	
480-147755-11	SB-16 (0'-5')	Total/NA	Solid	3050B	
MB 480-454780/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-454780/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 455035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-1	SB-8 (0'-5')	Total/NA	Solid	6010C	454780
480-147755-11	SB-16 (0'-5')	Total/NA	Solid	6010C	454780
MB 480-454780/1-A	Method Blank	Total/NA	Solid	6010C	454780
LCSSRM 480-454780/2-A	Lab Control Sample	Total/NA	Solid	6010C	454780

Prep Batch: 455139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-1	SB-8 (0'-5')	Total/NA	Solid	7471B	
480-147755-11	SB-16 (0'-5')	Total/NA	Solid	7471B	
MB 480-455139/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-455139/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 455166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-1	SB-8 (0'-5')	Total/NA	Solid	7471B	455139
480-147755-11	SB-16 (0'-5')	Total/NA	Solid	7471B	455139
MB 480-455139/1-A	Method Blank	Total/NA	Solid	7471B	455139
LCSSRM 480-455139/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	455139

General Chemistry

Analysis Batch: 454812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147755-1	SB-8 (0'-5')	Total/NA	Solid	Moisture	
480-147755-2	SB-8 (0'-5')	Total/NA	Solid	Moisture	
480-147755-3	SB-8 (10'-15')	Total/NA	Solid	Moisture	
480-147755-4	SB-8 (15'-20')	Total/NA	Solid	Moisture	
480-147755-5	SB-11 (10'-15')	Total/NA	Solid	Moisture	
480-147755-6	SB-11 (15'-20')	Total/NA	Solid	Moisture	
480-147755-7	SB-12 (5'-10')	Total/NA	Solid	Moisture	
480-147755-8	SB-12 (15'-20')	Total/NA	Solid	Moisture	
480-147755-9	SB-13 (10'-15')	Total/NA	Solid	Moisture	
480-147755-10	SB-13 (15'-20')	Total/NA	Solid	Moisture	
480-147755-11	SB-16 (0'-5')	Total/NA	Solid	Moisture	
480-147755-12	SB-16 (0'-5')	Total/NA	Solid	Moisture	
480-147755-13	SB-16 (10'-15')	Total/NA	Solid	Moisture	
480-147755-14	SB-16 (15'-20')	Total/NA	Solid	Moisture	
480-147755-15	SB-18 (10'-15')	Total/NA	Solid	Moisture	
480-147755-16	SB-18 (15'-20')	Total/NA	Solid	Moisture	
480-147755-8 MS	SB-12 (15'-20')	Total/NA	Solid	Moisture	
480-147755-8 MSD	SB-12 (15'-20')	Total/NA	Solid	Moisture	

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (0'-5')

Date Collected: 01/10/19 08:00

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-8 (0'-5')

Date Collected: 01/10/19 08:00

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-1

Matrix: Solid

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			454780	01/12/19 10:29	JMP	TAL BUF
Total/NA	Analysis	6010C		1	455035	01/14/19 11:48	LMH	TAL BUF
Total/NA	Prep	7471B			455139	01/15/19 15:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	455166	01/15/19 15:58	BMB	TAL BUF

Client Sample ID: SB-8 (0'-5')

Date Collected: 01/10/19 08:20

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-8 (0'-5')

Date Collected: 01/10/19 08:20

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-2

Matrix: Solid

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			454744	01/11/19 14:15	SGD	TAL BUF
Total/NA	Analysis	8270D		1	455117	01/15/19 20:49	DMR	TAL BUF
Total/NA	Prep	3550C			454848	01/14/19 07:37	SGD	TAL BUF
Total/NA	Analysis	8082A		1	455460	01/17/19 16:52	DSC	TAL BUF

Client Sample ID: SB-8 (10'-15')

Date Collected: 01/10/19 08:40

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-8 (10'-15')

Date Collected: 01/10/19 08:40

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-3

Matrix: Solid

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/11/19 05:10	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-8 (10'-15')

Lab Sample ID: 480-147755-3

Date Collected: 01/10/19 08:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	455045	01/15/19 15:24	AEM	TAL BUF

Client Sample ID: SB-8 (15'-20')

Lab Sample ID: 480-147755-4

Date Collected: 01/10/19 09:00

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-8 (15'-20')

Lab Sample ID: 480-147755-4

Date Collected: 01/10/19 09:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455199	01/11/19 05:10	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 03:14	CDC	TAL BUF

Client Sample ID: SB-11 (10'-15')

Lab Sample ID: 480-147755-5

Date Collected: 01/10/19 09:20

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-11 (10'-15')

Lab Sample ID: 480-147755-5

Date Collected: 01/10/19 09:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/11/19 05:10	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455045	01/15/19 16:16	AEM	TAL BUF

Client Sample ID: SB-11 (15'-20')

Lab Sample ID: 480-147755-6

Date Collected: 01/10/19 09:40

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-11 (15'-20')

Lab Sample ID: 480-147755-6

Date Collected: 01/10/19 09:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455199	01/11/19 05:10	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 03:40	CDC	TAL BUF

Client Sample ID: SB-12 (5'-10')

Lab Sample ID: 480-147755-7

Date Collected: 01/10/19 10:00

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-12 (5'-10')

Lab Sample ID: 480-147755-7

Date Collected: 01/10/19 10:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			455051	01/15/19 10:15	AMM	TAL BUF
Total/NA	Analysis	8260C		80	455192	01/16/19 01:00	AMM	TAL BUF

Client Sample ID: SB-12 (15'-20')

Lab Sample ID: 480-147755-8

Date Collected: 01/10/19 10:20

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-12 (15'-20')

Lab Sample ID: 480-147755-8

Date Collected: 01/10/19 10:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455199	01/11/19 05:10	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 04:06	CDC	TAL BUF

Client Sample ID: SB-13 (10'-15')

Lab Sample ID: 480-147755-9

Date Collected: 01/10/19 10:40

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-13 (10'-15')

Lab Sample ID: 480-147755-9

Date Collected: 01/10/19 10:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/11/19 05:10	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 01:31	CDC	TAL BUF

Client Sample ID: SB-13 (15'-20')

Lab Sample ID: 480-147755-10

Date Collected: 01/10/19 11:00

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-13 (15'-20')

Lab Sample ID: 480-147755-10

Date Collected: 01/10/19 11:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/11/19 05:10	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 01:57	CDC	TAL BUF

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-11

Date Collected: 01/10/19 11:20

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-11

Date Collected: 01/10/19 11:20

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			454780	01/12/19 10:29	JMP	TAL BUF
Total/NA	Analysis	6010C		1	455035	01/14/19 11:52	LMH	TAL BUF
Total/NA	Prep	7471B			455139	01/15/19 15:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	455166	01/15/19 16:02	BMB	TAL BUF

Client Sample ID: SB-16 (0'-5')

Lab Sample ID: 480-147755-12

Date Collected: 01/10/19 11:40

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-16 (0'-5')

Date Collected: 01/10/19 11:40

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-12

Matrix: Solid

Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			454744	01/11/19 14:15	SGD	TAL BUF
Total/NA	Analysis	8270D		1	455117	01/15/19 20:24	DMR	TAL BUF
Total/NA	Prep	3550C			454848	01/14/19 07:37	SGD	TAL BUF
Total/NA	Analysis	8082A		1	455460	01/17/19 17:08	DSC	TAL BUF

Client Sample ID: SB-16 (10'-15')

Date Collected: 01/10/19 12:00

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-16 (10'-15')

Date Collected: 01/10/19 12:00

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-13

Matrix: Solid

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/11/19 05:10	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 02:23	CDC	TAL BUF

Client Sample ID: SB-16 (15'-20')

Date Collected: 01/10/19 12:20

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-16 (15'-20')

Date Collected: 01/10/19 12:20

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-14

Matrix: Solid

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455052	01/11/19 05:10	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 02:49	CDC	TAL BUF

Client Sample ID: SB-18 (10'-15')

Date Collected: 01/10/19 12:40

Date Received: 01/11/19 01:00

Lab Sample ID: 480-147755-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Client Sample ID: SB-18 (10'-15')

Lab Sample ID: 480-147755-15

Date Collected: 01/10/19 12:40

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455199	01/11/19 05:10	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455197	01/16/19 04:32	CDC	TAL BUF

Client Sample ID: SB-18 (15'-20')

Lab Sample ID: 480-147755-16

Date Collected: 01/10/19 13:00

Matrix: Solid

Date Received: 01/11/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	454812	01/12/19 13:50	MDH	TAL BUF

Client Sample ID: SB-18 (15'-20')

Lab Sample ID: 480-147755-16

Date Collected: 01/10/19 13:00

Matrix: Solid

Date Received: 01/11/19 01:00

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/11/19 05:10	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 11:53	AEM	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	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.

TestAmerica Job ID: 480-147755-1

Project/Site: Former Sims Matchplate Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147755-1	SB-8 (0'-5')	Solid	01/10/19 08:00	01/11/19 01:00
480-147755-2	SB-8 (0'-5')	Solid	01/10/19 08:20	01/11/19 01:00
480-147755-3	SB-8 (10'-15')	Solid	01/10/19 08:40	01/11/19 01:00
480-147755-4	SB-8 (15'-20')	Solid	01/10/19 09:00	01/11/19 01:00
480-147755-5	SB-11 (10'-15')	Solid	01/10/19 09:20	01/11/19 01:00
480-147755-6	SB-11 (15'-20')	Solid	01/10/19 09:40	01/11/19 01:00
480-147755-7	SB-12 (5'-10')	Solid	01/10/19 10:00	01/11/19 01:00
480-147755-8	SB-12 (15'-20')	Solid	01/10/19 10:20	01/11/19 01:00
480-147755-9	SB-13 (10'-15')	Solid	01/10/19 10:40	01/11/19 01:00
480-147755-10	SB-13 (15'-20')	Solid	01/10/19 11:00	01/11/19 01:00
480-147755-11	SB-16 (0'-5')	Solid	01/10/19 11:20	01/11/19 01:00
480-147755-12	SB-16 (0'-5')	Solid	01/10/19 11:40	01/11/19 01:00
480-147755-13	SB-16 (10'-15')	Solid	01/10/19 12:00	01/11/19 01:00
480-147755-14	SB-16 (15'-20')	Solid	01/10/19 12:20	01/11/19 01:00
480-147755-15	SB-18 (10'-15')	Solid	01/10/19 12:40	01/11/19 01:00
480-147755-16	SB-18 (15'-20')	Solid	01/10/19 13:00	01/11/19 01:00

Client Information Client Contact: Matt Walker Company: C&S Engineers, Inc. Address: 499 Col. Eileen Collins Blvd City: Syracuse State, Zip: NY, 13212 Phone: 315-703-4323(Tel) Email: mwalker@cscos.com Project Name: Former Sims Matchplate Site Site:		Due Date Requested: TAT Requested (days): Standard PO #: Standard Purchase Order Requested WO #: Project #: 48019352 SOW#:		Lab PM: Stone, Judy L E-Mail: judy.stone@testamericainc.com Camer Tracking No(s): COC No: 480-122577-28125.1 Page: Page 1 of 2 Job #:		Analysis Requested Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		480-147755 COC					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7471B	6061B, 6062A, 6161A, 6270D	6260C - TCL list OLM04.2	6061B, 6161A, 6270D	6062A, 6270D	Total Number of Containers	Special Instructions/Note:
SB-8 (0'-5')	1/10/19	8:00		Solid			X						
SB-8 (0'-5')	1-10-19	8:20		Solid				X					
SB-8 (10'-15')	1-10-19	8:40		Solid				X					
SB-8 (15'-20')	1-10-19	9:00		Solid				X					
SB-11 (10'-15')	1-10-19	9:20		Solid				X					
SB-11 (15'-20')	1-10-19	9:40		Solid				X					
SB-12 (5'-10')	1-10-19	10:00		Solid				X					
SB-12 (15'-20')	1-10-19	10:20		Solid			X						
SB-13 (10'-15')	1-10-19	10:40		Solid			X						
SB-13 (15'-20')	1-10-19	11:00		Solid			X						
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)													
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Relinquished by: Angel Arago also													

Syracuse

#225

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

Client Information		Lab PM:		Carter Tracking No(s)		COC No:				
Company: C&S Engineers, Inc.		Stone, Judy L				480-122577-28125.2				
Address: 499 Col. Eileen Collins Blvd		E-Mail: judy.stone@testamericainc.com				Page 2 of 2				
City: Syracuse		Phone: (315) 875-6589				Job #				
State, Zip: NY, 13212										
Phone: 315-703-4323(Tel)										
Email: mawalker@cscos.com										
Project Name: Former Sims Matchplate Site										
Site										
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=oil, T=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Preservation Codes:	Special Instructions/Note:
SB-16 (0'-5')	1-10-19	11:20		Solid						
SB-16 (0'-5')	1-10-19	11:48		Solid						
SB-16 (10'-15')	1-10-19	12:00		Solid						
SB-16 (15'-20')	1-10-19	12:20		Solid						
SB-18 (10'-15')	1-10-19	12:40		Solid						
SB-18 (15'-20')	1-10-19	13:20		Solid						
1-10-19 RE										
Possible Hazard Identification		Date:		Time:		Method of Shipment:				
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological										
Deliverable Requested: I, II, III, IV, Other (specify)										
Empty Kit Relinquished by:										
Relinquished by: Angel Ariza Ployp		Date/Time: 1-10-19 15:00		Company: CTS		Received by: [Signature]		Date/Time: 1-10-19 15:00		Company: SVA
Relinquished by: R. C. G. 114		Date/Time: 1-10-19 19:00		Company: SVA		Received by: [Signature]		Date/Time: 01-11-19 01:00		Company: [Blank]
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks:		0.8		#3

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-147755-1

Login Number: 147755

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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 (Excluding tests with immediate HTs)..	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	Freezer 01/11/19 @ 5:10 AM
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.	True	
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 Engineers, Inc.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-147860-1

Client Project/Site: Former Sims Matchplate Site

For:

C&S Engineers, Inc.

499 Col. Eileen Collins Blvd

Syracuse, New York 13212

Attn: Matt Walker



Authorized for release by:

1/22/2019 5:48:17 PM

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

LINKS

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results through

TotalAccess

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www.testamericainc.com

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Qualifiers

GC/MS 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.
F1	MS and/or MSD Recovery is outside acceptance limits.

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.

GC Semi VOA

Qualifier	Qualifier Description
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.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Job ID: 480-147860-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-147860-1

Receipt

The samples were received on 1/15/2019 12:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-455521 recovered outside acceptance criteria, low biased, for 2,2'-oxybis[1-chloropropane]. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: SB-29 (0'-5') (480-147860-4) and SB-27 (0'-5') (480-147860-8).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-455521 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: SB-29 (0'-5') (480-147860-4) and SB-27 (0'-5') (480-147860-8).

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

GC Semi VOA

Method(s) 8082A: Surrogate recovery for the following sample was outside control limits: SB-27 (0'-5') (480-147860-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-455591/31) that had recoveries for the surrogate Tetrachloro-m-xylene that were below acceptance limits: SB-29 (0'-5') (480-147860-4) and SB-27 (0'-5') (480-147860-8). The secondary surrogate Decachlorobiphenyl is within limits. Therefore, the data have been reported.

Method(s) 8082A: All primary data for analytical batch 455591 are reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals

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

Organic Prep

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

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	13500	B	11.5	5.1	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.2		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	42.4		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.51		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.16	J	0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	81600	B	57.6	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.0		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.2		0.58	0.058	mg/Kg	1	☼	6010C	Total/NA
Copper	15.6		1.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	13500		11.5	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	6.6		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	49500	B	23.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	390		0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	16.4	B	5.8	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	4970	B	34.6	23.0	mg/Kg	1	☼	6010C	Total/NA
Sodium	214	B	161	15.0	mg/Kg	1	☼	6010C	Total/NA
Vanadium	21.0		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	23.6		2.3	0.74	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.046		0.021	0.0086	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-29 (10'-15')

Lab Sample ID: 480-147860-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.5	J	28	4.8	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.34	J	5.7	0.28	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.68	J	5.7	0.35	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1.0	J	5.7	0.76	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.99	J	5.7	0.43	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-29 (15'-20')

Lab Sample ID: 480-147860-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.4	J	21	3.6	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.69	J	4.3	0.26	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-4

No Detections.

Client Sample ID: SB-28 (10'-15')

Lab Sample ID: 480-147860-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.62	J	3.7	0.23	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-28 (15'-20')

Lab Sample ID: 480-147860-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.91	J	4.4	0.27	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	1.2	J	4.4	0.98	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12900	B	11.2	4.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.61	J	16.8	0.45	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.5		2.2	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	27.4		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.51		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.22	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	16800	B	55.9	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.8		0.56	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.1		0.56	0.056	mg/Kg	1	☼	6010C	Total/NA
Copper	16.3		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	15800		11.2	3.9	mg/Kg	1	☼	6010C	Total/NA
Lead	7.0		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	13900	B	22.4	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	251		0.22	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	21.3	B	5.6	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	3830	B	33.5	22.4	mg/Kg	1	☼	6010C	Total/NA
Sodium	180	B	157	14.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	21.0		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	27.4		2.2	0.72	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.035		0.023	0.0094	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	45	J	220	23	ug/Kg	1	☼	8270D	Total/NA
Pyrene	40	J	220	25	ug/Kg	1	☼	8270D	Total/NA

Client Sample ID: SB-27 (10'-15')

Lab Sample ID: 480-147860-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.9	J	24	4.1	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.86	J	4.8	0.30	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-27 (15'-20')

Lab Sample ID: 480-147860-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.3	J	23	3.9	ug/Kg	1	☼	8260C	Total/NA
Chloroform	1.1	J	4.6	0.29	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	1.7	J	4.6	1.0	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-26 (5'-10')

Lab Sample ID: 480-147860-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.4	J	20	3.4	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.64	J	4.0	0.25	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-26 (10'-15')

Lab Sample ID: 480-147860-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	27	4.5	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-26 (10'-15') (Continued)

Lab Sample ID: 480-147860-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.74	J	5.4	0.33	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-1

Date Collected: 01/14/19 09:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 87.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13500	B	11.5	5.1	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Antimony	ND		17.3	0.46	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Arsenic	3.2		2.3	0.46	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Barium	42.4		0.58	0.13	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Beryllium	0.51		0.23	0.032	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Cadmium	0.16	J	0.23	0.035	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Calcium	81600	B	57.6	3.8	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Chromium	15.0		0.58	0.23	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Cobalt	7.2		0.58	0.058	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Copper	15.6		1.2	0.24	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Iron	13500		11.5	4.0	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Lead	6.6		1.2	0.28	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Magnesium	49500	B	23.0	1.1	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Manganese	390		0.23	0.037	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Nickel	16.4	B	5.8	0.26	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Potassium	4970	B	34.6	23.0	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Selenium	ND		4.6	0.46	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Silver	ND		0.69	0.23	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Sodium	214	B	161	15.0	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Thallium	ND		6.9	0.35	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Vanadium	21.0		0.58	0.13	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1
Zinc	23.6		2.3	0.74	mg/Kg	☼	01/18/19 10:20	01/21/19 10:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.021	0.0086	mg/Kg	☼	01/17/19 11:45	01/17/19 13:03	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (10'-15')

Lab Sample ID: 480-147860-2

Date Collected: 01/14/19 09:15

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.7	0.41	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,1,2,2-Tetrachloroethane	ND		5.7	0.92	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,1,2-Trichloroethane	ND		5.7	0.74	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.7	1.3	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,1-Dichloroethane	ND		5.7	0.70	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,1-Dichloroethene	ND		5.7	0.70	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,2,4-Trichlorobenzene	ND		5.7	0.35	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,2-Dibromo-3-Chloropropane	ND		5.7	2.8	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,2-Dichlorobenzene	ND		5.7	0.45	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,2-Dichloroethane	ND		5.7	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,2-Dichloropropane	ND		5.7	2.8	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,3-Dichlorobenzene	ND		5.7	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,4-Dichlorobenzene	ND		5.7	0.80	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
2-Butanone (MEK)	ND		28	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Acetone	9.5	J	28	4.8	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Benzene	0.34	J	5.7	0.28	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Bromodichloromethane	ND		5.7	0.76	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Bromoform	ND		5.7	2.8	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Bromomethane	ND		5.7	0.51	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Carbon disulfide	ND		5.7	2.8	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Carbon tetrachloride	ND		5.7	0.55	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Chlorobenzene	ND		5.7	0.75	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Dibromochloromethane	ND		5.7	0.73	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Chloroethane	ND		5.7	1.3	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Chloroform	0.68	J	5.7	0.35	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Chloromethane	ND		5.7	0.34	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
cis-1,2-Dichloroethene	ND		5.7	0.73	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
cis-1,3-Dichloropropene	ND		5.7	0.82	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Cyclohexane	ND		5.7	0.80	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Dichlorodifluoromethane	ND		5.7	0.47	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Ethylbenzene	ND		5.7	0.39	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
1,2-Dibromoethane	ND		5.7	0.73	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Isopropylbenzene	ND		5.7	0.86	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Methyl acetate	ND		28	3.4	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Methyl tert-butyl ether	ND		5.7	0.56	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Methylcyclohexane	ND		5.7	0.87	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Methylene Chloride	ND		5.7	2.6	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Styrene	ND		5.7	0.28	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Tetrachloroethene	1.0	J	5.7	0.76	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Toluene	0.99	J	5.7	0.43	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
trans-1,2-Dichloroethene	ND		5.7	0.59	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
trans-1,3-Dichloropropene	ND		5.7	2.5	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Trichloroethene	ND		5.7	1.3	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Trichlorofluoromethane	ND		5.7	0.54	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Vinyl chloride	ND		5.7	0.70	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1
Xylenes, Total	ND		11	0.96	ug/Kg	☼	01/15/19 12:15	01/16/19 15:19	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (10'-15')

Lab Sample ID: 480-147860-2

Date Collected: 01/14/19 09:15

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 83.9

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/15/19 12:15	01/16/19 15:19	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		64 - 126	01/15/19 12:15	01/16/19 15:19	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/15/19 12:15	01/16/19 15:19	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/15/19 12:15	01/16/19 15:19	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (15'-20')

Lab Sample ID: 480-147860-3

Date Collected: 01/14/19 09:15

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 87.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,1,2,2-Tetrachloroethane	ND		4.3	0.69	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,1,2-Trichloroethane	ND		4.3	0.56	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	0.97	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,2,4-Trichlorobenzene	ND		4.3	0.26	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,2-Dibromo-3-Chloropropane	ND		4.3	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,2-Dichloropropane	ND		4.3	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
2-Butanone (MEK)	ND		21	1.6	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Acetone	8.4	J	21	3.6	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Benzene	ND		4.3	0.21	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Bromodichloromethane	ND		4.3	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Bromoform	ND		4.3	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Bromomethane	ND		4.3	0.38	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Carbon disulfide	ND		4.3	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Dibromochloromethane	ND		4.3	0.55	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Chloroethane	ND		4.3	0.97	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Chloroform	0.69	J	4.3	0.26	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Chloromethane	ND		4.3	0.26	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
cis-1,2-Dichloroethene	ND		4.3	0.55	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
cis-1,3-Dichloropropene	ND		4.3	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Cyclohexane	ND		4.3	0.60	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Dichlorodifluoromethane	ND		4.3	0.35	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
1,2-Dibromoethane	ND		4.3	0.55	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Isopropylbenzene	ND		4.3	0.64	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Methyl acetate	ND		21	2.6	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Methylcyclohexane	ND		4.3	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Styrene	ND		4.3	0.21	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Toluene	ND		4.3	0.32	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
trans-1,2-Dichloroethene	ND		4.3	0.44	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
trans-1,3-Dichloropropene	ND		4.3	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Trichlorofluoromethane	ND		4.3	0.40	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1
Xylenes, Total	ND		8.5	0.72	ug/Kg	☼	01/15/19 12:15	01/16/19 15:45	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (15'-20')

Lab Sample ID: 480-147860-3

Date Collected: 01/14/19 09:15

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 87.3

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/15/19 12:15	01/16/19 15:45	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	109		64 - 126	01/15/19 12:15	01/16/19 15:45	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/15/19 12:15	01/16/19 15:45	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/15/19 12:15	01/16/19 15:45	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-4

Date Collected: 01/14/19 09:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		200	30	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2,4-Dinitrophenol	ND		2000	930	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2-Chlorophenol	ND		200	37	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2-Methylphenol	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2-Nitroaniline	ND		390	30	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
3-Nitroaniline	ND		390	56	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4-Methylphenol	ND		390	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4-Nitroaniline	ND		390	110	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Acenaphthene	ND		200	30	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Acenaphthylene	ND		200	26	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Acetophenone	ND		200	27	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Anthracene	ND		200	50	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Atrazine	ND		200	70	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Benzaldehyde	ND		200	160	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Benzo[a]pyrene	ND		200	30	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Benzo[b]fluoranthene	ND		200	32	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Benzo[g,h,i]perylene	ND		200	21	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Benzo[k]fluoranthene	ND		200	26	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Bis(2-ethylhexyl) phthalate	ND		200	69	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Caprolactam	ND		200	60	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Carbazole	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Chrysene	ND		200	45	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Dibenz(a,h)anthracene	ND		200	36	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Dibenzofuran	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-4

Date Collected: 01/14/19 09:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		200	21	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Fluorene	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Hexachloroethane	ND		200	26	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Indeno[1,2,3-cd]pyrene	ND		200	25	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Isophorone	ND		200	43	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Naphthalene	ND		200	26	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Nitrobenzene	ND		200	23	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Phenanthrene	ND		200	30	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Phenol	ND		200	31	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1
Pyrene	ND		200	24	ug/Kg	☼	01/16/19 07:26	01/17/19 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	86		53 - 120	01/16/19 07:26	01/17/19 19:59	1
Phenol-d5 (Surr)	83		54 - 120	01/16/19 07:26	01/17/19 19:59	1
p-Terphenyl-d14 (Surr)	117		65 - 121	01/16/19 07:26	01/17/19 19:59	1
2,4,6-Tribromophenol (Surr)	99		54 - 120	01/16/19 07:26	01/17/19 19:59	1
2-Fluorobiphenyl	87		60 - 120	01/16/19 07:26	01/17/19 19:59	1
2-Fluorophenol (Surr)	78		52 - 120	01/16/19 07:26	01/17/19 19:59	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.055	mg/Kg	☼	01/16/19 07:32	01/18/19 17:53	1
PCB-1221	ND		0.28	0.055	mg/Kg	☼	01/16/19 07:32	01/18/19 17:53	1
PCB-1232	ND		0.28	0.055	mg/Kg	☼	01/16/19 07:32	01/18/19 17:53	1
PCB-1242	ND		0.28	0.055	mg/Kg	☼	01/16/19 07:32	01/18/19 17:53	1
PCB-1248	ND		0.28	0.055	mg/Kg	☼	01/16/19 07:32	01/18/19 17:53	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	01/16/19 07:32	01/18/19 17:53	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	01/16/19 07:32	01/18/19 17:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		60 - 154	01/16/19 07:32	01/18/19 17:53	1
DCB Decachlorobiphenyl	72		65 - 174	01/16/19 07:32	01/18/19 17:53	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-28 (10'-15')

Lab Sample ID: 480-147860-5

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.7	0.27	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,1,2,2-Tetrachloroethane	ND		3.7	0.61	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,1,2-Trichloroethane	ND		3.7	0.49	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	0.85	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,1-Dichloroethane	ND		3.7	0.46	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,1-Dichloroethene	ND		3.7	0.46	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,2,4-Trichlorobenzene	ND		3.7	0.23	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,2-Dibromo-3-Chloropropane	ND		3.7	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,2-Dichlorobenzene	ND		3.7	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,2-Dichloroethane	ND		3.7	0.19	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,2-Dichloropropane	ND		3.7	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,3-Dichlorobenzene	ND		3.7	0.19	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,4-Dichlorobenzene	ND		3.7	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
2-Butanone (MEK)	ND		19	1.4	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
2-Hexanone	ND		19	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
4-Methyl-2-pentanone (MIBK)	ND		19	1.2	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Acetone	ND		19	3.2	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Benzene	ND		3.7	0.18	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Bromodichloromethane	ND		3.7	0.50	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Bromoform	ND		3.7	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Bromomethane	ND		3.7	0.34	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Carbon disulfide	ND		3.7	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Carbon tetrachloride	ND		3.7	0.36	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Chlorobenzene	ND		3.7	0.49	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Dibromochloromethane	ND		3.7	0.48	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Chloroethane	ND		3.7	0.85	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Chloroform	0.62	J	3.7	0.23	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Chloromethane	ND		3.7	0.23	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
cis-1,2-Dichloroethene	ND		3.7	0.48	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
cis-1,3-Dichloropropene	ND		3.7	0.54	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Cyclohexane	ND		3.7	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Dichlorodifluoromethane	ND		3.7	0.31	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Ethylbenzene	ND		3.7	0.26	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
1,2-Dibromoethane	ND		3.7	0.48	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Isopropylbenzene	ND		3.7	0.56	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Methyl acetate	ND		19	2.3	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Methyl tert-butyl ether	ND		3.7	0.37	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Methylcyclohexane	ND		3.7	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Methylene Chloride	ND		3.7	1.7	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Styrene	ND		3.7	0.19	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Tetrachloroethene	ND		3.7	0.50	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Toluene	ND		3.7	0.28	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
trans-1,2-Dichloroethene	ND		3.7	0.39	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
trans-1,3-Dichloropropene	ND		3.7	1.6	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Trichloroethene	ND		3.7	0.82	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Trichlorofluoromethane	ND		3.7	0.35	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Vinyl chloride	ND		3.7	0.46	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1
Xylenes, Total	ND		7.5	0.63	ug/Kg	☼	01/15/19 12:15	01/16/19 16:11	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-28 (10'-15')

Lab Sample ID: 480-147860-5

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 89.9

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/15/19 12:15	01/16/19 16:11	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		64 - 126	01/15/19 12:15	01/16/19 16:11	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/15/19 12:15	01/16/19 16:11	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/15/19 12:15	01/16/19 16:11	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-28 (15'-20')

Lab Sample ID: 480-147860-6

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.72	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,1,2-Trichloroethane	ND		4.4	0.58	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,2-Dichlorobenzene	ND		4.4	0.35	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Acetone	ND		22	3.7	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Benzene	ND		4.4	0.22	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Bromodichloromethane	ND		4.4	0.60	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Bromomethane	ND		4.4	0.40	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Chlorobenzene	ND		4.4	0.59	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Dibromochloromethane	ND		4.4	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Chloroethane	ND		4.4	1.0	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Chloroform	0.91	J	4.4	0.27	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Chloromethane	ND		4.4	0.27	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
cis-1,2-Dichloroethene	ND		4.4	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
cis-1,3-Dichloropropene	ND		4.4	0.64	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Cyclohexane	ND		4.4	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Dichlorodifluoromethane	ND		4.4	0.37	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Ethylbenzene	ND		4.4	0.31	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
1,2-Dibromoethane	ND		4.4	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Isopropylbenzene	ND		4.4	0.67	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Methyl tert-butyl ether	ND		4.4	0.44	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Methylcyclohexane	ND		4.4	0.68	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Styrene	ND		4.4	0.22	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Tetrachloroethene	ND		4.4	0.60	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Toluene	ND		4.4	0.34	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
trans-1,2-Dichloroethene	ND		4.4	0.46	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
trans-1,3-Dichloropropene	ND		4.4	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Trichloroethene	1.2	J	4.4	0.98	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Trichlorofluoromethane	ND		4.4	0.42	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1
Xylenes, Total	ND		8.9	0.75	ug/Kg	☼	01/15/19 12:15	01/16/19 16:37	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-28 (15'-20')

Lab Sample ID: 480-147860-6

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 85.7

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/15/19 12:15	01/16/19 16:37	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		64 - 126	01/15/19 12:15	01/16/19 16:37	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/15/19 12:15	01/16/19 16:37	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/15/19 12:15	01/16/19 16:37	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-7

Date Collected: 01/14/19 12:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 86.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12900	B	11.2	4.9	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Antimony	0.61	J	16.8	0.45	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Arsenic	3.5		2.2	0.45	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Barium	27.4		0.56	0.12	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Beryllium	0.51		0.22	0.031	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Cadmium	0.13	J	0.22	0.034	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Calcium	16800	B	55.9	3.7	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Chromium	15.8		0.56	0.22	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Cobalt	7.1		0.56	0.056	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Copper	16.3		1.1	0.23	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Iron	15800		11.2	3.9	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Lead	7.0		1.1	0.27	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Magnesium	13900	B	22.4	1.0	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Manganese	251		0.22	0.036	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Nickel	21.3	B	5.6	0.26	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Potassium	3830	B	33.5	22.4	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Selenium	ND		4.5	0.45	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Silver	ND		0.67	0.22	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Sodium	180	B	157	14.5	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Thallium	ND		6.7	0.34	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Vanadium	21.0		0.56	0.12	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1
Zinc	27.4		2.2	0.72	mg/Kg	☼	01/18/19 10:20	01/21/19 11:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.023	0.0094	mg/Kg	☼	01/17/19 11:45	01/17/19 13:08	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-8

Date Collected: 01/14/19 12:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 77.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		220	32	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
bis (2-chloroisopropyl) ether	ND		220	43	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2,4,5-Trichlorophenol	ND		220	59	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2,4,6-Trichlorophenol	ND		220	43	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2,4-Dichlorophenol	ND		220	23	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2,4-Dimethylphenol	ND		220	52	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2,4-Dinitrophenol	ND		2100	1000	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2,4-Dinitrotoluene	ND		220	45	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2,6-Dinitrotoluene	ND		220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2-Chloronaphthalene	ND		220	36	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2-Chlorophenol	ND		220	40	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2-Methylphenol	ND		220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2-Methylnaphthalene	ND		220	43	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2-Nitroaniline	ND		420	32	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
2-Nitrophenol	ND		220	61	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
3,3'-Dichlorobenzidine	ND		420	250	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
3-Nitroaniline	ND		420	60	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4,6-Dinitro-2-methylphenol	ND		420	220	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4-Bromophenyl phenyl ether	ND		220	31	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4-Chloro-3-methylphenol	ND		220	54	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4-Chloroaniline	ND		220	54	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4-Chlorophenyl phenyl ether	ND		220	27	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4-Methylphenol	ND		420	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4-Nitroaniline	ND		420	110	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
4-Nitrophenol	ND		420	150	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Acenaphthene	ND		220	32	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Acenaphthylene	ND		220	28	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Acetophenone	ND		220	29	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Anthracene	ND		220	54	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Atrazine	ND		220	75	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Benzaldehyde	ND		220	170	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Benzo[a]anthracene	ND		220	22	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Benzo[a]pyrene	ND		220	32	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Benzo[b]fluoranthene	ND		220	34	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Benzo[g,h,i]perylene	ND		220	23	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Benzo[k]fluoranthene	ND		220	28	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Bis(2-chloroethoxy)methane	ND		220	46	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Bis(2-chloroethyl)ether	ND		220	28	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Bis(2-ethylhexyl) phthalate	ND		220	74	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Butyl benzyl phthalate	ND		220	36	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Caprolactam	ND		220	65	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Carbazole	ND		220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Chrysene	ND		220	48	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Dibenz(a,h)anthracene	ND		220	38	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Di-n-butyl phthalate	ND		220	37	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Di-n-octyl phthalate	ND		220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Dibenzofuran	ND		220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Diethyl phthalate	ND		220	28	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Dimethyl phthalate	ND		220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-8

Date Collected: 01/14/19 12:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 77.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	45	J	220	23	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Fluorene	ND		220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Hexachlorobutadiene	ND		220	32	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Hexachlorocyclopentadiene	ND		220	29	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Hexachloroethane	ND		220	28	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Indeno[1,2,3-cd]pyrene	ND		220	27	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Isophorone	ND		220	46	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
N-Nitrosodi-n-propylamine	ND		220	37	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Naphthalene	ND		220	28	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Nitrobenzene	ND		220	24	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Phenanthrene	ND		220	32	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Phenol	ND		220	33	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Pyrene	40	J	220	25	ug/Kg	☼	01/16/19 07:26	01/17/19 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	85		53 - 120				01/16/19 07:26	01/17/19 20:24	1
Phenol-d5 (Surr)	82		54 - 120				01/16/19 07:26	01/17/19 20:24	1
p-Terphenyl-d14 (Surr)	116		65 - 121				01/16/19 07:26	01/17/19 20:24	1
2,4,6-Tribromophenol (Surr)	106		54 - 120				01/16/19 07:26	01/17/19 20:24	1
2-Fluorobiphenyl	86		60 - 120				01/16/19 07:26	01/17/19 20:24	1
2-Fluorophenol (Surr)	77		52 - 120				01/16/19 07:26	01/17/19 20:24	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.26	0.050	mg/Kg	☼	01/16/19 07:32	01/18/19 18:09	1
PCB-1221	ND		0.26	0.050	mg/Kg	☼	01/16/19 07:32	01/18/19 18:09	1
PCB-1232	ND		0.26	0.050	mg/Kg	☼	01/16/19 07:32	01/18/19 18:09	1
PCB-1242	ND		0.26	0.050	mg/Kg	☼	01/16/19 07:32	01/18/19 18:09	1
PCB-1248	ND		0.26	0.050	mg/Kg	☼	01/16/19 07:32	01/18/19 18:09	1
PCB-1254	ND		0.26	0.12	mg/Kg	☼	01/16/19 07:32	01/18/19 18:09	1
PCB-1260	ND		0.26	0.12	mg/Kg	☼	01/16/19 07:32	01/18/19 18:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	60		60 - 154				01/16/19 07:32	01/18/19 18:09	1
DCB Decachlorobiphenyl	55	X	65 - 174				01/16/19 07:32	01/18/19 18:09	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (10'-15')

Lab Sample ID: 480-147860-9

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,1,1,2,2-Tetrachloroethane	ND	F1	4.8	0.79	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,1,2-Trichloroethane	ND		4.8	0.63	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,1-Dichloroethane	ND		4.8	0.59	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,2-Dibromo-3-Chloropropane	ND	F1	4.8	2.4	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,2-Dichlorobenzene	ND		4.8	0.38	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,4-Dichlorobenzene	ND		4.8	0.68	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
2-Butanone (MEK)	ND	F1	24	1.8	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Acetone	6.9	J	24	4.1	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Benzene	ND		4.8	0.24	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Bromodichloromethane	ND		4.8	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Bromomethane	ND		4.8	0.44	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Carbon tetrachloride	ND		4.8	0.47	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Chlorobenzene	ND		4.8	0.64	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Dibromochloromethane	ND		4.8	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Chloroethane	ND		4.8	1.1	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Chloroform	0.86	J	4.8	0.30	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
cis-1,2-Dichloroethene	ND		4.8	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
cis-1,3-Dichloropropene	ND		4.8	0.70	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Cyclohexane	ND		4.8	0.68	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Dichlorodifluoromethane	ND		4.8	0.40	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
1,2-Dibromoethane	ND	F1	4.8	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Isopropylbenzene	ND		4.8	0.73	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Methyl acetate	ND		24	2.9	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Methyl tert-butyl ether	ND		4.8	0.48	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Methylcyclohexane	ND		4.8	0.74	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Methylene Chloride	ND		4.8	2.2	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Styrene	ND		4.8	0.24	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Tetrachloroethene	ND		4.8	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Toluene	ND		4.8	0.37	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
trans-1,2-Dichloroethene	ND		4.8	0.50	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Trichloroethene	ND		4.8	1.1	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Trichlorofluoromethane	ND		4.8	0.46	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Vinyl chloride	ND		4.8	0.59	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1
Xylenes, Total	ND		9.7	0.81	ug/Kg	☼	01/15/19 12:15	01/16/19 17:03	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (10'-15')

Lab Sample ID: 480-147860-9

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 90.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		71 - 125	01/15/19 12:15	01/16/19 17:03	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		64 - 126	01/15/19 12:15	01/16/19 17:03	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/15/19 12:15	01/16/19 17:03	1
<i>Dibromofluoromethane (Surr)</i>	100		60 - 140	01/15/19 12:15	01/16/19 17:03	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (15'-20')

Lab Sample ID: 480-147860-10

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 88.1

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	0.34	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.75	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,1,2-Trichloroethane	ND		4.6	0.60	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.1	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,1-Dichloroethane	ND		4.6	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,1-Dichloroethene	ND		4.6	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,2,4-Trichlorobenzene	ND		4.6	0.28	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,2-Dibromo-3-Chloropropane	ND		4.6	2.3	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,2-Dichloropropane	ND		4.6	2.3	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Acetone	5.3	J	23	3.9	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Benzene	ND		4.6	0.23	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Bromodichloromethane	ND		4.6	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Bromoform	ND		4.6	2.3	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Bromomethane	ND		4.6	0.42	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Carbon disulfide	ND		4.6	2.3	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Carbon tetrachloride	ND		4.6	0.45	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Dibromochloromethane	ND		4.6	0.59	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Chloroethane	ND		4.6	1.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Chloroform	1.1	J	4.6	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Chloromethane	ND		4.6	0.28	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
cis-1,2-Dichloroethene	ND		4.6	0.59	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
cis-1,3-Dichloropropene	ND		4.6	0.67	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Cyclohexane	ND		4.6	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Dichlorodifluoromethane	ND		4.6	0.38	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
1,2-Dibromoethane	ND		4.6	0.60	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Isopropylbenzene	ND		4.6	0.70	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Methyl acetate	ND		23	2.8	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Methyl tert-butyl ether	ND		4.6	0.46	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Methylcyclohexane	ND		4.6	0.70	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Styrene	ND		4.6	0.23	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Toluene	ND		4.6	0.35	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
trans-1,2-Dichloroethene	ND		4.6	0.48	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
trans-1,3-Dichloropropene	ND		4.6	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Trichloroethene	1.7	J	4.6	1.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Trichlorofluoromethane	ND		4.6	0.44	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Vinyl chloride	ND		4.6	0.57	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1
Xylenes, Total	ND		9.3	0.78	ug/Kg	☼	01/15/19 12:15	01/16/19 17:29	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (15'-20')

Lab Sample ID: 480-147860-10

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 88.1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/15/19 12:15	01/16/19 17:29	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		64 - 126	01/15/19 12:15	01/16/19 17:29	1
<i>4-Bromofluorobenzene (Surr)</i>	97		72 - 126	01/15/19 12:15	01/16/19 17:29	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/15/19 12:15	01/16/19 17:29	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-26 (5'-10')

Lab Sample ID: 480-147860-11

Date Collected: 01/14/19 14:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	0.29	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,1,1,2-Tetrachloroethane	ND		4.0	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,1,2-Trichloroethane	ND		4.0	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	0.92	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,1-Dichloroethane	ND		4.0	0.49	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,1-Dichloroethene	ND		4.0	0.49	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,2,4-Trichlorobenzene	ND		4.0	0.24	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,2-Dibromo-3-Chloropropane	ND		4.0	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,2-Dichlorobenzene	ND		4.0	0.31	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,2-Dichloroethane	ND		4.0	0.20	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,2-Dichloropropane	ND		4.0	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,3-Dichlorobenzene	ND		4.0	0.21	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,4-Dichlorobenzene	ND		4.0	0.56	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
2-Butanone (MEK)	ND		20	1.5	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Acetone	6.4	J	20	3.4	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Benzene	ND		4.0	0.20	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Bromodichloromethane	ND		4.0	0.54	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Bromoform	ND		4.0	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Bromomethane	ND		4.0	0.36	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Carbon disulfide	ND		4.0	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Carbon tetrachloride	ND		4.0	0.39	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Chlorobenzene	ND		4.0	0.53	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Dibromochloromethane	ND		4.0	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Chloroethane	ND		4.0	0.91	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Chloroform	0.64	J	4.0	0.25	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Chloromethane	ND		4.0	0.24	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
cis-1,2-Dichloroethene	ND		4.0	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
cis-1,3-Dichloropropene	ND		4.0	0.58	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Cyclohexane	ND		4.0	0.56	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Dichlorodifluoromethane	ND		4.0	0.33	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Ethylbenzene	ND		4.0	0.28	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
1,2-Dibromoethane	ND		4.0	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Isopropylbenzene	ND		4.0	0.61	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Methyl tert-butyl ether	ND		4.0	0.40	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Methylcyclohexane	ND		4.0	0.61	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Methylene Chloride	ND		4.0	1.9	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Styrene	ND		4.0	0.20	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Tetrachloroethene	ND		4.0	0.54	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Toluene	ND		4.0	0.30	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
trans-1,2-Dichloroethene	ND		4.0	0.42	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
trans-1,3-Dichloropropene	ND		4.0	1.8	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Trichloroethene	ND		4.0	0.89	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Trichlorofluoromethane	ND		4.0	0.38	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Vinyl chloride	ND		4.0	0.49	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1
Xylenes, Total	ND		8.1	0.68	ug/Kg	☼	01/15/19 12:15	01/16/19 17:54	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-26 (5'-10')

Date Collected: 01/14/19 14:00

Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-11

Matrix: Solid

Percent Solids: 89.1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/15/19 12:15	01/16/19 17:54	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		64 - 126	01/15/19 12:15	01/16/19 17:54	1
<i>4-Bromofluorobenzene (Surr)</i>	99		72 - 126	01/15/19 12:15	01/16/19 17:54	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/15/19 12:15	01/16/19 17:54	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-26 (10'-15')

Lab Sample ID: 480-147860-12

Date Collected: 01/14/19 14:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.4	0.39	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,1,2,2-Tetrachloroethane	ND		5.4	0.87	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,1,2-Trichloroethane	ND		5.4	0.70	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,1-Dichloroethane	ND		5.4	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,1-Dichloroethene	ND		5.4	0.66	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,2,4-Trichlorobenzene	ND		5.4	0.33	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,2-Dibromo-3-Chloropropane	ND		5.4	2.7	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,2-Dichlorobenzene	ND		5.4	0.42	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,2-Dichloroethane	ND		5.4	0.27	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,2-Dichloropropane	ND		5.4	2.7	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,3-Dichlorobenzene	ND		5.4	0.28	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,4-Dichlorobenzene	ND		5.4	0.75	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
2-Butanone (MEK)	ND		27	2.0	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.8	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Acetone	11	J	27	4.5	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Benzene	ND		5.4	0.26	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Bromodichloromethane	ND		5.4	0.72	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Bromoform	ND		5.4	2.7	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Bromomethane	ND		5.4	0.48	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Carbon disulfide	ND		5.4	2.7	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Carbon tetrachloride	ND		5.4	0.52	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Chlorobenzene	ND		5.4	0.71	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Dibromochloromethane	ND		5.4	0.69	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Chloroethane	ND		5.4	1.2	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Chloroform	0.74	J	5.4	0.33	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Chloromethane	ND		5.4	0.32	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
cis-1,2-Dichloroethene	ND		5.4	0.69	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
cis-1,3-Dichloropropene	ND		5.4	0.77	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Cyclohexane	ND		5.4	0.75	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Dichlorodifluoromethane	ND		5.4	0.44	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Ethylbenzene	ND		5.4	0.37	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
1,2-Dibromoethane	ND		5.4	0.69	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Isopropylbenzene	ND		5.4	0.81	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Methyl acetate	ND		27	3.2	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Methyl tert-butyl ether	ND		5.4	0.53	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Methylcyclohexane	ND		5.4	0.81	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Methylene Chloride	ND		5.4	2.5	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Styrene	ND		5.4	0.27	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Tetrachloroethene	ND		5.4	0.72	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Toluene	ND		5.4	0.41	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
trans-1,2-Dichloroethene	ND		5.4	0.55	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
trans-1,3-Dichloropropene	ND		5.4	2.4	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Trichloroethene	ND		5.4	1.2	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Trichlorofluoromethane	ND		5.4	0.51	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Vinyl chloride	ND		5.4	0.65	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1
Xylenes, Total	ND		11	0.90	ug/Kg	☼	01/15/19 12:15	01/16/19 18:20	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-26 (10'-15')

Lab Sample ID: 480-147860-12

Date Collected: 01/14/19 14:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 88.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/15/19 12:15	01/16/19 18:20	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		64 - 126	01/15/19 12:15	01/16/19 18:20	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/15/19 12:15	01/16/19 18:20	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/15/19 12:15	01/16/19 18:20	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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)	DCA (64-126)	BFB (72-126)	DBFM (60-140)
480-147860-2	SB-29 (10'-15')	100	107	98	102
480-147860-3	SB-29 (15'-20')	100	109	98	102
480-147860-5	SB-28 (10'-15')	100	108	99	102
480-147860-6	SB-28 (15'-20')	100	107	98	102
480-147860-9	SB-27 (10'-15')	99	107	98	100
480-147860-9 MS	SB-27 (10'-15')	100	99	100	101
480-147860-9 MSD	SB-27 (10'-15')	100	100	101	101
480-147860-10	SB-27 (15'-20')	100	107	97	102
480-147860-11	SB-26 (5'-10')	100	108	99	102
480-147860-12	SB-26 (10'-15')	100	108	98	101
LCS 480-455234/1-A	Lab Control Sample	100	105	101	102
MB 480-455234/2-A	Method Blank	101	103	98	99

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 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 (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-147860-4	SB-29 (0'-5')	86	83	117	99	87	78
480-147860-4 MS	SB-29 (0'-5')	85	81	112	106	86	76
480-147860-4 MSD	SB-29 (0'-5')	83	83	109	112	85	77
480-147860-8	SB-27 (0'-5')	85	82	116	106	86	77
LCS 480-455207/2-A	Lab Control Sample	83	81	116	111	86	75
MB 480-455207/1-A	Method Blank	83	84	116	93	89	77

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX2 (60-154)	DCBP2 (65-174)
480-147860-4	SB-29 (0'-5')	75	72
480-147860-8	SB-27 (0'-5')	60	55 X
LCS 480-455210/2-A	Lab Control Sample	87	89
MB 480-455210/1-A	Method Blank	82	84

TestAmerica Buffalo

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

1

2

3

4

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15

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: MB 480-455234/2-A

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455234

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
2-Hexanone	ND		25	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Acetone	ND		25	4.2	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Benzene	ND		5.0	0.25	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Bromoform	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chloroform	ND		5.0	0.31	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methyl acetate	ND		25	3.0	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Styrene	ND		5.0	0.25	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Toluene	ND		5.0	0.38	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/16/19 08:33	01/16/19 11:10	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/16/19 08:33	01/16/19 11:10	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		71 - 125	01/16/19 08:33	01/16/19 11:10	1
1,2-Dichloroethane-d4 (Surr)	103		64 - 126	01/16/19 08:33	01/16/19 11:10	1
4-Bromofluorobenzene (Surr)	98		72 - 126	01/16/19 08:33	01/16/19 11:10	1
Dibromofluoromethane (Surr)	99		60 - 140	01/16/19 08:33	01/16/19 11:10	1

Lab Sample ID: LCS 480-455234/1-A

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	48.2		ug/Kg		96	77 - 121
1,1,2,2-Tetrachloroethane	50.0	47.8		ug/Kg		96	80 - 120
1,1,2-Trichloroethane	50.0	47.8		ug/Kg		96	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.8		ug/Kg		96	60 - 140
1,1-Dichloroethane	50.0	48.4		ug/Kg		97	73 - 126
1,1-Dichloroethene	50.0	46.9		ug/Kg		94	59 - 125
1,2,4-Trichlorobenzene	50.0	46.3		ug/Kg		93	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.3		ug/Kg		95	63 - 124
1,2-Dichlorobenzene	50.0	46.9		ug/Kg		94	75 - 120
1,2-Dichloroethane	50.0	50.1		ug/Kg		100	77 - 122
1,2-Dichloropropane	50.0	48.0		ug/Kg		96	75 - 124
1,3-Dichlorobenzene	50.0	47.1		ug/Kg		94	74 - 120
1,4-Dichlorobenzene	50.0	46.8		ug/Kg		94	73 - 120
2-Butanone (MEK)	250	267		ug/Kg		107	70 - 134
2-Hexanone	250	259		ug/Kg		104	59 - 130
4-Methyl-2-pentanone (MIBK)	250	254		ug/Kg		102	65 - 133
Acetone	250	276		ug/Kg		111	61 - 137
Benzene	50.0	48.1		ug/Kg		96	79 - 127
Bromodichloromethane	50.0	48.8		ug/Kg		98	80 - 122
Bromoform	50.0	50.1		ug/Kg		100	68 - 126
Bromomethane	50.0	54.9		ug/Kg		110	37 - 149
Carbon disulfide	50.0	47.9		ug/Kg		96	64 - 131
Carbon tetrachloride	50.0	49.1		ug/Kg		98	75 - 135
Chlorobenzene	50.0	46.8		ug/Kg		94	76 - 124
Dibromochloromethane	50.0	49.3		ug/Kg		99	76 - 125
Chloroethane	50.0	53.4		ug/Kg		107	69 - 135
Chloroform	50.0	48.6		ug/Kg		97	80 - 120
Chloromethane	50.0	50.7		ug/Kg		101	63 - 127
cis-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	81 - 120
cis-1,3-Dichloropropene	50.0	48.3		ug/Kg		97	80 - 120
Cyclohexane	50.0	46.7		ug/Kg		93	65 - 120
Dichlorodifluoromethane	50.0	45.4		ug/Kg		91	57 - 142
Ethylbenzene	50.0	46.9		ug/Kg		94	80 - 120
1,2-Dibromoethane	50.0	48.4		ug/Kg		97	78 - 120
Isopropylbenzene	50.0	46.0		ug/Kg		92	72 - 120
Methyl acetate	100	102		ug/Kg		102	55 - 136
Methyl tert-butyl ether	50.0	50.0		ug/Kg		100	63 - 125
Methylcyclohexane	50.0	46.7		ug/Kg		93	60 - 140
Methylene Chloride	50.0	43.9		ug/Kg		88	61 - 127
Styrene	50.0	46.2		ug/Kg		92	80 - 120
Tetrachloroethene	50.0	46.5		ug/Kg		93	74 - 122
Toluene	50.0	46.6		ug/Kg		93	74 - 128
trans-1,2-Dichloroethene	50.0	47.6		ug/Kg		95	78 - 126

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: LCS 480-455234/1-A

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455234

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	48.3		ug/Kg		97	73 - 123
Trichloroethene	50.0	47.2		ug/Kg		94	77 - 129
Trichlorofluoromethane	50.0	51.3		ug/Kg		103	65 - 146
Vinyl chloride	50.0	51.7		ug/Kg		103	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 125
1,2-Dichloroethane-d4 (Surr)	105		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	102		60 - 140

Lab Sample ID: 480-147860-9 MS

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: SB-27 (10'-15')

Prep Type: Total/NA

Prep Batch: 455234

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		42.1	38.7		ug/Kg	☼	92	77 - 121
1,1,1,2-Tetrachloroethane	ND	F1	42.1	30.5	F1	ug/Kg	☼	72	80 - 120
1,1,2-Trichloroethane	ND		42.1	33.4		ug/Kg	☼	79	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		42.1	37.6		ug/Kg	☼	89	60 - 140
1,1-Dichloroethane	ND		42.1	38.5		ug/Kg	☼	91	73 - 126
1,1-Dichloroethene	ND		42.1	36.2		ug/Kg	☼	86	59 - 125
1,2,4-Trichlorobenzene	ND		42.1	31.0		ug/Kg	☼	74	64 - 120
1,2-Dibromo-3-Chloropropane	ND	F1	42.1	25.2	F1	ug/Kg	☼	60	63 - 124
1,2-Dichlorobenzene	ND		42.1	34.7		ug/Kg	☼	82	75 - 120
1,2-Dichloroethane	ND		42.1	37.1		ug/Kg	☼	88	77 - 122
1,2-Dichloropropane	ND		42.1	37.7		ug/Kg	☼	89	75 - 124
1,3-Dichlorobenzene	ND		42.1	35.5		ug/Kg	☼	84	74 - 120
1,4-Dichlorobenzene	ND		42.1	35.3		ug/Kg	☼	84	73 - 120
2-Butanone (MEK)	ND	F1	211	141	F1	ug/Kg	☼	67	70 - 134
2-Hexanone	ND		211	142		ug/Kg	☼	67	59 - 130
4-Methyl-2-pentanone (MIBK)	ND		211	145		ug/Kg	☼	69	65 - 133
Acetone	6.9	J	211	145		ug/Kg	☼	66	61 - 137
Benzene	ND		42.1	38.4		ug/Kg	☼	91	79 - 127
Bromodichloromethane	ND		42.1	38.1		ug/Kg	☼	90	80 - 122
Bromoform	ND		42.1	32.5		ug/Kg	☼	77	68 - 126
Bromomethane	ND		42.1	46.3		ug/Kg	☼	110	37 - 149
Carbon disulfide	ND		42.1	36.7		ug/Kg	☼	87	64 - 131
Carbon tetrachloride	ND		42.1	39.2		ug/Kg	☼	93	75 - 135
Chlorobenzene	ND		42.1	36.7		ug/Kg	☼	87	76 - 124
Dibromochloromethane	ND		42.1	35.2		ug/Kg	☼	83	76 - 125
Chloroethane	ND		42.1	43.8		ug/Kg	☼	104	69 - 135
Chloroform	0.86	J	42.1	39.6		ug/Kg	☼	92	80 - 120
Chloromethane	ND		42.1	40.0		ug/Kg	☼	95	63 - 127
cis-1,2-Dichloroethene	ND		42.1	36.7		ug/Kg	☼	87	80 - 120
cis-1,3-Dichloropropene	ND		42.1	36.4		ug/Kg	☼	86	80 - 120
Cyclohexane	ND		42.1	36.7		ug/Kg	☼	87	65 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: 480-147860-9 MS

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: SB-27 (10'-15')

Prep Type: Total/NA

Prep Batch: 455234

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		42.1	35.3		ug/Kg	✱	84	57 - 142
Ethylbenzene	ND		42.1	37.7		ug/Kg	✱	90	80 - 120
1,2-Dibromoethane	ND	F1	42.1	31.6	F1	ug/Kg	✱	75	78 - 120
Isopropylbenzene	ND		42.1	37.2		ug/Kg	✱	88	72 - 120
Methyl acetate	ND		84.3	55.9		ug/Kg	✱	66	55 - 136
Methyl tert-butyl ether	ND		42.1	34.3		ug/Kg	✱	81	63 - 125
Methylcyclohexane	ND		42.1	36.8		ug/Kg	✱	87	60 - 140
Methylene Chloride	ND		42.1	33.3		ug/Kg	✱	79	61 - 127
Styrene	ND		42.1	35.8		ug/Kg	✱	85	80 - 120
Tetrachloroethene	ND		42.1	37.4		ug/Kg	✱	89	74 - 122
Toluene	ND		42.1	37.4		ug/Kg	✱	89	74 - 128
trans-1,2-Dichloroethene	ND		42.1	37.1		ug/Kg	✱	88	78 - 126
trans-1,3-Dichloropropene	ND		42.1	34.6		ug/Kg	✱	82	73 - 123
Trichloroethene	ND		42.1	37.4		ug/Kg	✱	89	77 - 129
Trichlorofluoromethane	ND		42.1	43.5		ug/Kg	✱	103	65 - 146
Vinyl chloride	ND		42.1	40.8		ug/Kg	✱	97	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 125
1,2-Dichloroethane-d4 (Surr)	99		64 - 126
4-Bromofluorobenzene (Surr)	100		72 - 126
Dibromofluoromethane (Surr)	101		60 - 140

Lab Sample ID: 480-147860-9 MSD

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: SB-27 (10'-15')

Prep Type: Total/NA

Prep Batch: 455234

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		43.4	38.0		ug/Kg	✱	88	77 - 121	2	30
1,1,1,2,2-Tetrachloroethane	ND	F1	43.4	31.7	F1	ug/Kg	✱	73	80 - 120	4	30
1,1,1,2-Trichloroethane	ND		43.4	34.5		ug/Kg	✱	79	78 - 122	3	30
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		43.4	38.1		ug/Kg	✱	88	60 - 140	1	30
1,1-Dichloroethane	ND		43.4	38.2		ug/Kg	✱	88	73 - 126	1	30
1,1-Dichloroethene	ND		43.4	36.6		ug/Kg	✱	84	59 - 125	1	30
1,2,4-Trichlorobenzene	ND		43.4	33.7		ug/Kg	✱	78	64 - 120	9	30
1,2-Dibromo-3-Chloropropane	ND	F1	43.4	27.5		ug/Kg	✱	63	63 - 124	9	30
1,2-Dichlorobenzene	ND		43.4	35.3		ug/Kg	✱	81	75 - 120	2	30
1,2-Dichloroethane	ND		43.4	37.1		ug/Kg	✱	86	77 - 122	0	30
1,2-Dichloropropane	ND		43.4	37.5		ug/Kg	✱	86	75 - 124	1	30
1,3-Dichlorobenzene	ND		43.4	36.0		ug/Kg	✱	83	74 - 120	1	30
1,4-Dichlorobenzene	ND		43.4	35.6		ug/Kg	✱	82	73 - 120	1	30
2-Butanone (MEK)	ND	F1	217	152		ug/Kg	✱	70	70 - 134	7	30
2-Hexanone	ND		217	154		ug/Kg	✱	71	59 - 130	8	30
4-Methyl-2-pentanone (MIBK)	ND		217	156		ug/Kg	✱	72	65 - 133	7	30
Acetone	6.9	J	217	159		ug/Kg	✱	70	61 - 137	9	30
Benzene	ND		43.4	37.8		ug/Kg	✱	87	79 - 127	2	30
Bromodichloromethane	ND		43.4	37.8		ug/Kg	✱	87	80 - 122	1	30

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: 480-147860-9 MSD

Matrix: Solid

Analysis Batch: 455237

Client Sample ID: SB-27 (10'-15')

Prep Type: Total/NA

Prep Batch: 455234

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		43.4	33.8		ug/Kg	✱	78	68 - 126	4	30
Bromomethane	ND		43.4	43.6		ug/Kg	✱	100	37 - 149	6	30
Carbon disulfide	ND		43.4	35.7		ug/Kg	✱	82	64 - 131	3	30
Carbon tetrachloride	ND		43.4	39.1		ug/Kg	✱	90	75 - 135	0	30
Chlorobenzene	ND		43.4	36.6		ug/Kg	✱	84	76 - 124	0	30
Dibromochloromethane	ND		43.4	36.0		ug/Kg	✱	83	76 - 125	2	30
Chloroethane	ND		43.4	43.6		ug/Kg	✱	101	69 - 135	0	30
Chloroform	0.86	J	43.4	38.9		ug/Kg	✱	88	80 - 120	2	30
Chloromethane	ND		43.4	39.6		ug/Kg	✱	91	63 - 127	1	30
cis-1,2-Dichloroethene	ND		43.4	36.6		ug/Kg	✱	84	80 - 120	0	30
cis-1,3-Dichloropropene	ND		43.4	36.6		ug/Kg	✱	84	80 - 120	0	30
Cyclohexane	ND		43.4	36.9		ug/Kg	✱	85	65 - 120	1	30
Dichlorodifluoromethane	ND		43.4	36.2		ug/Kg	✱	83	57 - 142	2	30
Ethylbenzene	ND		43.4	37.1		ug/Kg	✱	86	80 - 120	2	30
1,2-Dibromoethane	ND	F1	43.4	32.9	F1	ug/Kg	✱	76	78 - 120	4	30
Isopropylbenzene	ND		43.4	36.4		ug/Kg	✱	84	72 - 120	2	30
Methyl acetate	ND		86.8	59.5		ug/Kg	✱	69	55 - 136	6	30
Methyl tert-butyl ether	ND		43.4	35.9		ug/Kg	✱	83	63 - 125	5	30
Methylcyclohexane	ND		43.4	36.5		ug/Kg	✱	84	60 - 140	1	30
Methylene Chloride	ND		43.4	33.6		ug/Kg	✱	77	61 - 127	1	30
Styrene	ND		43.4	35.8		ug/Kg	✱	82	80 - 120	0	30
Tetrachloroethene	ND		43.4	36.3		ug/Kg	✱	84	74 - 122	3	30
Toluene	ND		43.4	36.9		ug/Kg	✱	85	74 - 128	1	30
trans-1,2-Dichloroethene	ND		43.4	37.0		ug/Kg	✱	85	78 - 126	0	30
trans-1,3-Dichloropropene	ND		43.4	35.2		ug/Kg	✱	81	73 - 123	2	30
Trichloroethene	ND		43.4	37.1		ug/Kg	✱	86	77 - 129	1	30
Trichlorofluoromethane	ND		43.4	42.2		ug/Kg	✱	97	65 - 146	3	30
Vinyl chloride	ND		43.4	39.8		ug/Kg	✱	92	61 - 133	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	100		71 - 125
1,2-Dichloroethane-d4 (Surr)	100		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	101		60 - 140

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

Lab Sample ID: MB 480-455207/1-A

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455207

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		01/16/19 07:26	01/17/19 18:20	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: MB 480-455207/1-A

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455207

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		1600	770	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2-Chloronaphthalene	ND		170	28	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2-Chlorophenol	ND		170	30	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2-Methylphenol	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2-Methylnaphthalene	ND		170	33	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2-Nitroaniline	ND		320	25	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
2-Nitrophenol	ND		170	47	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
3-Nitroaniline	ND		320	46	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4-Chloroaniline	ND		170	41	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4-Methylphenol	ND		320	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4-Nitroaniline	ND		320	88	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
4-Nitrophenol	ND		320	120	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Acenaphthene	ND		170	25	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Acenaphthylene	ND		170	22	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Acetophenone	ND		170	23	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Anthracene	ND		170	41	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Atrazine	ND		170	58	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Benzaldehyde	ND		170	130	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Benzo[a]pyrene	ND		170	25	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Caprolactam	ND		170	50	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Carbazole	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Chrysene	ND		170	37	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Dibenzofuran	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Diethyl phthalate	ND		170	22	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Dimethyl phthalate	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Fluoranthene	ND		170	18	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Fluorene	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Hexachlorobenzene	ND		170	23	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Hexachlorobutadiene	ND		170	25	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		01/16/19 07:26	01/17/19 18:20	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: MB 480-455207/1-A

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455207

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		170	22	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Isophorone	ND		170	35	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Naphthalene	ND		170	22	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Nitrobenzene	ND		170	19	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Pentachlorophenol	ND		320	170	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Phenanthrene	ND		170	25	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Phenol	ND		170	26	ug/Kg		01/16/19 07:26	01/17/19 18:20	1
Pyrene	ND		170	20	ug/Kg		01/16/19 07:26	01/17/19 18:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	83		53 - 120	01/16/19 07:26	01/17/19 18:20	1
Phenol-d5 (Surr)	84		54 - 120	01/16/19 07:26	01/17/19 18:20	1
p-Terphenyl-d14 (Surr)	116		65 - 121	01/16/19 07:26	01/17/19 18:20	1
2,4,6-Tribromophenol (Surr)	93		54 - 120	01/16/19 07:26	01/17/19 18:20	1
2-Fluorobiphenyl	89		60 - 120	01/16/19 07:26	01/17/19 18:20	1
2-Fluorophenol (Surr)	77		52 - 120	01/16/19 07:26	01/17/19 18:20	1

Lab Sample ID: LCS 480-455207/2-A

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455207

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1630	1400		ug/Kg		86	59 - 120
bis (2-chloroisopropyl) ether	1630	802		ug/Kg		49	44 - 120
2,4,5-Trichlorophenol	1630	1540		ug/Kg		95	59 - 126
2,4,6-Trichlorophenol	1630	1490		ug/Kg		91	59 - 123
2,4-Dichlorophenol	1630	1560		ug/Kg		96	61 - 120
2,4-Dimethylphenol	1630	1530		ug/Kg		94	59 - 120
2,4-Dinitrophenol	3250	1650		ug/Kg		51	41 - 146
2,4-Dinitrotoluene	1630	1550		ug/Kg		95	63 - 120
2,6-Dinitrotoluene	1630	1540		ug/Kg		94	66 - 120
2-Chloronaphthalene	1630	1400		ug/Kg		86	57 - 120
2-Chlorophenol	1630	1350		ug/Kg		83	53 - 120
2-Methylphenol	1630	1400		ug/Kg		86	54 - 120
2-Methylnaphthalene	1630	1550		ug/Kg		95	59 - 120
2-Nitroaniline	1630	1410		ug/Kg		86	61 - 120
2-Nitrophenol	1630	1450		ug/Kg		89	56 - 120
3,3'-Dichlorobenzidine	3250	2560		ug/Kg		79	54 - 120
3-Nitroaniline	1630	1210		ug/Kg		74	48 - 120
4,6-Dinitro-2-methylphenol	3250	2900		ug/Kg		89	49 - 122
4-Bromophenyl phenyl ether	1630	1640		ug/Kg		101	58 - 120
4-Chloro-3-methylphenol	1630	1640		ug/Kg		101	61 - 120
4-Chloroaniline	1630	1160		ug/Kg		71	38 - 120
4-Chlorophenyl phenyl ether	1630	1550		ug/Kg		95	63 - 124
4-Methylphenol	1630	1460		ug/Kg		90	55 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: LCS 480-455207/2-A

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455207

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitroaniline	1630	1410		ug/Kg		87	56 - 120
4-Nitrophenol	3250	3520		ug/Kg		108	43 - 147
Acenaphthene	1630	1420		ug/Kg		87	62 - 120
Acenaphthylene	1630	1510		ug/Kg		93	58 - 121
Acetophenone	1630	1430		ug/Kg		88	54 - 120
Anthracene	1630	1640		ug/Kg		101	62 - 120
Atrazine	3250	3170		ug/Kg		97	60 - 127
Benzaldehyde	3250	2020		ug/Kg		62	10 - 150
Benzo[a]anthracene	1630	1590		ug/Kg		98	65 - 120
Benzo[a]pyrene	1630	1670		ug/Kg		103	64 - 120
Benzo[b]fluoranthene	1630	1820		ug/Kg		112	64 - 120
Benzo[g,h,i]perylene	1630	1690		ug/Kg		104	45 - 145
Benzo[k]fluoranthene	1630	1540		ug/Kg		95	65 - 120
Bis(2-chloroethoxy)methane	1630	1350		ug/Kg		83	55 - 120
Bis(2-chloroethyl)ether	1630	1190		ug/Kg		73	45 - 120
Bis(2-ethylhexyl) phthalate	1630	1830		ug/Kg		112	61 - 133
Butyl benzyl phthalate	1630	1740		ug/Kg		107	61 - 129
Caprolactam	3250	3110		ug/Kg		96	47 - 120
Carbazole	1630	1600		ug/Kg		98	65 - 120
Chrysene	1630	1570		ug/Kg		96	64 - 120
Dibenz(a,h)anthracene	1630	1730		ug/Kg		107	54 - 132
Di-n-butyl phthalate	1630	1730		ug/Kg		106	58 - 130
Di-n-octyl phthalate	1630	1760		ug/Kg		108	57 - 133
Dibenzofuran	1630	1510		ug/Kg		93	63 - 120
Diethyl phthalate	1630	1690		ug/Kg		104	66 - 120
Dimethyl phthalate	1630	1560		ug/Kg		96	65 - 124
Fluoranthene	1630	1630		ug/Kg		100	62 - 120
Fluorene	1630	1540		ug/Kg		94	63 - 120
Hexachlorobenzene	1630	1780		ug/Kg		110	60 - 120
Hexachlorobutadiene	1630	1570		ug/Kg		96	45 - 120
Hexachlorocyclopentadiene	1630	1550		ug/Kg		95	47 - 120
Hexachloroethane	1630	1250		ug/Kg		77	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1700		ug/Kg		105	56 - 134
Isophorone	1630	1380		ug/Kg		85	56 - 120
N-Nitrosodi-n-propylamine	1630	1290		ug/Kg		79	52 - 120
N-Nitrosodiphenylamine	1630	1650		ug/Kg		101	51 - 128
Naphthalene	1630	1410		ug/Kg		87	55 - 120
Nitrobenzene	1630	1310		ug/Kg		80	54 - 120
Pentachlorophenol	3250	3310		ug/Kg		102	51 - 120
Phenanthrene	1630	1560		ug/Kg		96	60 - 120
Phenol	1630	1280		ug/Kg		79	53 - 120
Pyrene	1630	1740		ug/Kg		107	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	83		53 - 120
Phenol-d5 (Surr)	81		54 - 120
p-Terphenyl-d14 (Surr)	116		65 - 121
2,4,6-Tribromophenol (Surr)	111		54 - 120

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: LCS 480-455207/2-A

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455207

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	86		60 - 120
2-Fluorophenol (Surr)	75		52 - 120

Lab Sample ID: 480-147860-4 MS

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455207

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	ND		2010	1690		ug/Kg	☼	84	58 - 120
bis (2-chloroisopropyl) ether	ND		2010	1020		ug/Kg	☼	51	31 - 120
2,4,5-Trichlorophenol	ND		2010	1820		ug/Kg	☼	91	46 - 120
2,4,6-Trichlorophenol	ND		2010	1810		ug/Kg	☼	90	41 - 123
2,4-Dichlorophenol	ND		2010	1860		ug/Kg	☼	93	45 - 120
2,4-Dimethylphenol	ND		2010	1800		ug/Kg	☼	90	52 - 120
2,4-Dinitrophenol	ND		4020	2410		ug/Kg	☼	60	41 - 146
2,4-Dinitrotoluene	ND		2010	1830		ug/Kg	☼	91	63 - 125
2,6-Dinitrotoluene	ND		2010	1830		ug/Kg	☼	91	66 - 120
2-Chloronaphthalene	ND		2010	1700		ug/Kg	☼	85	57 - 120
2-Chlorophenol	ND		2010	1670		ug/Kg	☼	83	43 - 120
2-Methylphenol	ND		2010	1740		ug/Kg	☼	87	48 - 120
2-Methylnaphthalene	ND		2010	1850		ug/Kg	☼	92	55 - 120
2-Nitroaniline	ND		2010	1690		ug/Kg	☼	84	61 - 120
2-Nitrophenol	ND		2010	1760		ug/Kg	☼	88	37 - 120
3,3'-Dichlorobenzidine	ND		4020	3250		ug/Kg	☼	81	37 - 126
3-Nitroaniline	ND		2010	1440		ug/Kg	☼	72	48 - 120
4,6-Dinitro-2-methylphenol	ND		4020	3850		ug/Kg	☼	96	23 - 149
4-Bromophenyl phenyl ether	ND		2010	2020		ug/Kg	☼	100	58 - 120
4-Chloro-3-methylphenol	ND		2010	1930		ug/Kg	☼	96	49 - 125
4-Chloroaniline	ND		2010	1390		ug/Kg	☼	69	38 - 120
4-Chlorophenyl phenyl ether	ND		2010	1870		ug/Kg	☼	93	63 - 124
4-Methylphenol	ND		2010	1750		ug/Kg	☼	87	50 - 120
4-Nitroaniline	ND		2010	1620		ug/Kg	☼	81	47 - 120
4-Nitrophenol	ND		4020	3990		ug/Kg	☼	99	31 - 147
Acenaphthene	ND		2010	1720		ug/Kg	☼	86	60 - 120
Acenaphthylene	ND		2010	1810		ug/Kg	☼	90	58 - 121
Acetophenone	ND		2010	1740		ug/Kg	☼	86	47 - 120
Anthracene	ND		2010	1980		ug/Kg	☼	99	62 - 120
Atrazine	ND		4020	3810		ug/Kg	☼	95	60 - 150
Benzaldehyde	ND		4020	2540		ug/Kg	☼	63	10 - 150
Benzo[a]anthracene	ND		2010	1940		ug/Kg	☼	97	65 - 120
Benzo[a]pyrene	ND		2010	1960		ug/Kg	☼	97	64 - 120
Benzo[b]fluoranthene	ND		2010	2170		ug/Kg	☼	108	64 - 120
Benzo[g,h,i]perylene	ND		2010	2000		ug/Kg	☼	100	45 - 145
Benzo[k]fluoranthene	ND		2010	1840		ug/Kg	☼	92	65 - 120
Bis(2-chloroethoxy)methane	ND		2010	1630		ug/Kg	☼	81	52 - 120
Bis(2-chloroethyl)ether	ND		2010	1490		ug/Kg	☼	74	45 - 120
Bis(2-ethylhexyl) phthalate	ND		2010	2300		ug/Kg	☼	114	61 - 133
Butyl benzyl phthalate	ND		2010	2130		ug/Kg	☼	106	61 - 120

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: 480-147860-4 MS

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455207

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Caprolactam	ND		4020	3520		ug/Kg	☼	88	37 - 133
Carbazole	ND		2010	1950		ug/Kg	☼	97	59 - 120
Chrysene	ND		2010	1940		ug/Kg	☼	97	64 - 120
Dibenz(a,h)anthracene	ND		2010	2080		ug/Kg	☼	103	54 - 132
Di-n-butyl phthalate	ND		2010	2120		ug/Kg	☼	106	58 - 130
Di-n-octyl phthalate	ND		2010	2190		ug/Kg	☼	109	57 - 133
Dibenzofuran	ND		2010	1810		ug/Kg	☼	90	62 - 120
Diethyl phthalate	ND		2010	2020		ug/Kg	☼	100	66 - 120
Dimethyl phthalate	ND		2010	1890		ug/Kg	☼	94	65 - 124
Fluoranthene	ND		2010	2000		ug/Kg	☼	100	62 - 120
Fluorene	ND		2010	1840		ug/Kg	☼	92	63 - 120
Hexachlorobenzene	ND		2010	2190		ug/Kg	☼	109	60 - 120
Hexachlorobutadiene	ND		2010	1930		ug/Kg	☼	96	45 - 120
Hexachlorocyclopentadiene	ND		2010	1890		ug/Kg	☼	94	31 - 120
Hexachloroethane	ND		2010	1530		ug/Kg	☼	76	21 - 120
Indeno[1,2,3-cd]pyrene	ND		2010	2050		ug/Kg	☼	102	56 - 134
Isophorone	ND		2010	1670		ug/Kg	☼	83	56 - 120
N-Nitrosodi-n-propylamine	ND		2010	1590		ug/Kg	☼	79	46 - 120
N-Nitrosodiphenylamine	ND		2010	1980		ug/Kg	☼	99	20 - 128
Naphthalene	ND		2010	1700		ug/Kg	☼	85	46 - 120
Nitrobenzene	ND		2010	1560		ug/Kg	☼	78	49 - 120
Pentachlorophenol	ND		4020	3870		ug/Kg	☼	96	25 - 136
Phenanthrene	ND		2010	1930		ug/Kg	☼	96	60 - 122
Phenol	ND		2010	1550		ug/Kg	☼	77	50 - 120
Pyrene	ND		2010	2050		ug/Kg	☼	102	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5 (Surr)	85		53 - 120
Phenol-d5 (Surr)	81		54 - 120
p-Terphenyl-d14 (Surr)	112		65 - 121
2,4,6-Tribromophenol (Surr)	106		54 - 120
2-Fluorobiphenyl	86		60 - 120
2-Fluorophenol (Surr)	76		52 - 120

Lab Sample ID: 480-147860-4 MSD

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455207

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biphenyl	ND		1970	1660		ug/Kg	☼	84	58 - 120	2	20
bis (2-chloroisopropyl) ether	ND		1970	1010		ug/Kg	☼	51	31 - 120	1	24
2,4,5-Trichlorophenol	ND		1970	1790		ug/Kg	☼	91	46 - 120	2	18
2,4,6-Trichlorophenol	ND		1970	1770		ug/Kg	☼	90	41 - 123	3	19
2,4-Dichlorophenol	ND		1970	1830		ug/Kg	☼	93	45 - 120	1	19
2,4-Dimethylphenol	ND		1970	1750		ug/Kg	☼	89	52 - 120	3	42
2,4-Dinitrophenol	ND		3940	2340		ug/Kg	☼	59	41 - 146	3	22
2,4-Dinitrotoluene	ND		1970	1880		ug/Kg	☼	95	63 - 125	3	20
2,6-Dinitrotoluene	ND		1970	1810		ug/Kg	☼	92	66 - 120	1	15

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: 480-147860-4 MSD

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455207

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloronaphthalene	ND		1970	1650		ug/Kg	☼	84	57 - 120	3	21
2-Chlorophenol	ND		1970	1600		ug/Kg	☼	81	43 - 120	4	25
2-Methylphenol	ND		1970	1680		ug/Kg	☼	85	48 - 120	3	27
2-Methylnaphthalene	ND		1970	1790		ug/Kg	☼	91	55 - 120	3	21
2-Nitroaniline	ND		1970	1630		ug/Kg	☼	83	61 - 120	4	15
2-Nitrophenol	ND		1970	1700		ug/Kg	☼	86	37 - 120	4	18
3,3'-Dichlorobenzidine	ND		3940	3260		ug/Kg	☼	83	37 - 126	0	25
3-Nitroaniline	ND		1970	1500		ug/Kg	☼	76	48 - 120	4	19
4,6-Dinitro-2-methylphenol	ND		3940	3590		ug/Kg	☼	91	23 - 149	7	15
4-Bromophenyl phenyl ether	ND		1970	1940		ug/Kg	☼	99	58 - 120	4	15
4-Chloro-3-methylphenol	ND		1970	1950		ug/Kg	☼	99	49 - 125	1	27
4-Chloroaniline	ND		1970	1500		ug/Kg	☼	76	38 - 120	7	22
4-Chlorophenyl phenyl ether	ND		1970	1820		ug/Kg	☼	92	63 - 124	3	16
4-Methylphenol	ND		1970	1700		ug/Kg	☼	87	50 - 120	3	24
4-Nitroaniline	ND		1970	1750		ug/Kg	☼	89	47 - 120	8	24
4-Nitrophenol	ND		3940	4120		ug/Kg	☼	105	31 - 147	3	25
Acenaphthene	ND		1970	1700		ug/Kg	☼	86	60 - 120	1	35
Acenaphthylene	ND		1970	1820		ug/Kg	☼	92	58 - 121	0	18
Acetophenone	ND		1970	1720		ug/Kg	☼	87	47 - 120	1	20
Anthracene	ND		1970	1900		ug/Kg	☼	97	62 - 120	4	15
Atrazine	ND		3940	3870		ug/Kg	☼	98	60 - 150	2	20
Benzaldehyde	ND		3940	2680		ug/Kg	☼	68	10 - 150	5	20
Benzo[a]anthracene	ND		1970	1850		ug/Kg	☼	94	65 - 120	5	15
Benzo[a]pyrene	ND		1970	1930		ug/Kg	☼	98	64 - 120	2	15
Benzo[b]fluoranthene	ND		1970	2060		ug/Kg	☼	105	64 - 120	5	15
Benzo[g,h,i]perylene	ND		1970	1950		ug/Kg	☼	99	45 - 145	3	15
Benzo[k]fluoranthene	ND		1970	1820		ug/Kg	☼	93	65 - 120	1	22
Bis(2-chloroethoxy)methane	ND		1970	1590		ug/Kg	☼	80	52 - 120	3	17
Bis(2-chloroethyl)ether	ND		1970	1520		ug/Kg	☼	77	45 - 120	2	21
Bis(2-ethylhexyl) phthalate	ND		1970	2170		ug/Kg	☼	110	61 - 133	6	15
Butyl benzyl phthalate	ND		1970	1970		ug/Kg	☼	100	61 - 120	8	16
Caprolactam	ND		3940	3710		ug/Kg	☼	94	37 - 133	5	20
Carbazole	ND		1970	1960		ug/Kg	☼	99	59 - 120	1	20
Chrysene	ND		1970	1840		ug/Kg	☼	93	64 - 120	5	15
Dibenz(a,h)anthracene	ND		1970	2020		ug/Kg	☼	103	54 - 132	3	15
Di-n-butyl phthalate	ND		1970	2110		ug/Kg	☼	107	58 - 130	1	15
Di-n-octyl phthalate	ND		1970	2090		ug/Kg	☼	106	57 - 133	5	16
Dibenzofuran	ND		1970	1780		ug/Kg	☼	91	62 - 120	2	15
Diethyl phthalate	ND		1970	2000		ug/Kg	☼	102	66 - 120	1	15
Dimethyl phthalate	ND		1970	1850		ug/Kg	☼	94	65 - 124	2	15
Fluoranthene	ND		1970	2020		ug/Kg	☼	102	62 - 120	1	15
Fluorene	ND		1970	1820		ug/Kg	☼	92	63 - 120	1	15
Hexachlorobenzene	ND		1970	2080		ug/Kg	☼	106	60 - 120	5	15
Hexachlorobutadiene	ND		1970	1870		ug/Kg	☼	95	45 - 120	3	44
Hexachlorocyclopentadiene	ND		1970	1760		ug/Kg	☼	89	31 - 120	7	49
Hexachloroethane	ND		1970	1600		ug/Kg	☼	81	21 - 120	5	46
Indeno[1,2,3-cd]pyrene	ND		1970	1970		ug/Kg	☼	100	56 - 134	4	15
Isophorone	ND		1970	1650		ug/Kg	☼	84	56 - 120	1	17

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: 480-147860-4 MSD

Matrix: Solid

Analysis Batch: 455521

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455207

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosodi-n-propylamine	ND		1970	1570		ug/Kg	✱	79	46 - 120	2	31
N-Nitrosodiphenylamine	ND		1970	1890		ug/Kg	✱	96	20 - 128	5	15
Naphthalene	ND		1970	1670		ug/Kg	✱	85	46 - 120	2	29
Nitrobenzene	ND		1970	1490		ug/Kg	✱	76	49 - 120	5	24
Pentachlorophenol	ND		3940	3710		ug/Kg	✱	94	25 - 136	4	35
Phenanthrene	ND		1970	1880		ug/Kg	✱	96	60 - 122	3	15
Phenol	ND		1970	1560		ug/Kg	✱	79	50 - 120	0	35
Pyrene	ND		1970	1950		ug/Kg	✱	99	61 - 133	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	83		53 - 120
Phenol-d5 (Surr)	83		54 - 120
p-Terphenyl-d14 (Surr)	109		65 - 121
2,4,6-Tribromophenol (Surr)	112		54 - 120
2-Fluorobiphenyl	85		60 - 120
2-Fluorophenol (Surr)	77		52 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-455210/1-A

Matrix: Solid

Analysis Batch: 455591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455210

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1221	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1232	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1242	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1248	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1254	ND		0.18	0.086	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1260	ND		0.18	0.086	mg/Kg		01/16/19 07:32	01/18/19 15:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		60 - 154	01/16/19 07:32	01/18/19 15:45	1
DCB Decachlorobiphenyl	84		65 - 174	01/16/19 07:32	01/18/19 15:45	1

Lab Sample ID: LCS 480-455210/2-A

Matrix: Solid

Analysis Batch: 455591

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455210

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.36	2.03		mg/Kg		86	51 - 185
PCB-1260	2.36	2.09		mg/Kg		89	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	87		60 - 154
DCB Decachlorobiphenyl	89		65 - 174

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-455541/1-A

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455541

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	4.4	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Antimony	0.409	J	15.0	0.40	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Arsenic	ND		2.0	0.40	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Barium	ND		0.50	0.11	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Beryllium	ND		0.20	0.028	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Cadmium	ND		0.20	0.030	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Calcium	10.19	J	49.9	3.3	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Chromium	ND		0.50	0.20	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Cobalt	ND		0.50	0.050	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Copper	ND		1.0	0.21	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Iron	ND		10	3.5	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Lead	ND		1.0	0.24	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Magnesium	2.97	J	20.0	0.93	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Manganese	ND		0.20	0.032	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Nickel	0.323	J	5.0	0.23	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Potassium	30.08		29.9	20.0	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Selenium	ND		4.0	0.40	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Silver	ND		0.60	0.20	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Thallium	ND		6.0	0.30	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Vanadium	ND		0.50	0.11	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Zinc	ND		2.0	0.64	mg/Kg		01/18/19 10:20	01/21/19 10:35	1

Lab Sample ID: MB 480-455541/1-A

Matrix: Solid

Analysis Batch: 455934

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455541

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	50.10	J	140	13.0	mg/Kg		01/18/19 10:20	01/21/19 12:35	1

Lab Sample ID: LCSSRM 480-455541/2-A

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455541

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10100	7627		mg/Kg		75.5	41.6 - 123.8
Antimony	145	41.25		mg/Kg		28.4	10.0 - 137.2
Arsenic	171	129.7		mg/Kg		75.9	66.1 - 122.2
Barium	272	200.4		mg/Kg		73.7	71.7 - 119.5
Beryllium	102	77.53		mg/Kg		76.0	71.8 - 119.6
Cadmium	225	162.0		mg/Kg		72.0	70.2 - 117.3
Calcium	5190	3674		mg/Kg		70.8	66.7 - 117.0
Chromium	144	104.2		mg/Kg		72.4	66.1 - 122.9

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: LCSSRM 480-455541/2-A

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455541

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	48.8	43.03		mg/Kg		88.2	74.0 - 123.4
Copper	174	133.9		mg/Kg		77.0	71.3 - 119.0
Iron	15000	11380		mg/Kg		75.9	32.9 - 154.7
Lead	111	105.6		mg/Kg		95.2	71.0 - 128.8
Magnesium	2570	1896		mg/Kg		73.8	56.4 - 125.3
Manganese	232	211.6		mg/Kg		91.2	71.1 - 125.4
Nickel	98.3	84.17		mg/Kg		85.6	65.4 - 121.1
Potassium	2420	1808		mg/Kg		74.7	49.2 - 117.8
Selenium	206	155.8		mg/Kg		75.6	63.6 - 122.3
Silver	45.5	33.72		mg/Kg		74.1	66.2 - 124.2
Sodium	252	232.4		mg/Kg		92.2	41.7 - 131.7
Thallium	167	142.2		mg/Kg		85.1	65.9 - 121.0
Vanadium	61.8	47.39		mg/Kg		76.7	52.1 - 131.6
Zinc	207	165.9		mg/Kg		80.1	67.1 - 125.1

Lab Sample ID: 480-147860-1 MS

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455541

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	13500	B	2320	21770	4	mg/Kg	☼	355	75 - 125
Antimony	ND		46.4	25.97	F1	mg/Kg	☼	56	75 - 125
Arsenic	3.2		46.4	46.99		mg/Kg	☼	95	75 - 125
Barium	42.4		46.4	104.3	F1	mg/Kg	☼	134	75 - 125
Beryllium	0.51		46.4	40.65		mg/Kg	☼	87	75 - 125
Cadmium	0.16	J	46.4	42.00		mg/Kg	☼	90	75 - 125
Calcium	81600	B	2320	84020	4	mg/Kg	☼	103	75 - 125
Chromium	15.0		46.4	57.43		mg/Kg	☼	91	75 - 125
Cobalt	7.2		46.4	50.00		mg/Kg	☼	92	75 - 125
Copper	15.6		46.4	57.01		mg/Kg	☼	89	75 - 125
Iron	13500		2320	15760	4	mg/Kg	☼	98	75 - 125
Lead	6.6		46.4	54.07		mg/Kg	☼	102	75 - 125
Magnesium	49500	B	2320	55820	E 4	mg/Kg	☼	272	75 - 125
Manganese	390		46.4	312.2	4	mg/Kg	☼	-167	75 - 125
Nickel	16.4	B	46.4	62.39		mg/Kg	☼	99	75 - 125
Potassium	4970	B	2320	10460	F1	mg/Kg	☼	237	75 - 125
Selenium	ND		46.4	43.06		mg/Kg	☼	93	75 - 125
Silver	ND		11.6	10.72		mg/Kg	☼	92	75 - 125

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

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

Lab Sample ID: 480-147860-1 MS

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455541

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	214	B	2320	2487		mg/Kg	✱	98	75 - 125
Thallium	ND		46.4	44.73		mg/Kg	✱	96	75 - 125
Vanadium	21.0		46.4	67.86		mg/Kg	✱	101	75 - 125
Zinc	23.6		46.4	63.67		mg/Kg	✱	86	75 - 125

Lab Sample ID: 480-147860-1 MSD

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: SB-29 (0'-5')

Prep Type: Total/NA

Prep Batch: 455541

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	13500	B	2280	24640	4	mg/Kg	✱	488	75 - 125	12	20
Antimony	ND		45.5	22.53	F1	mg/Kg	✱	49	75 - 125	14	20
Arsenic	3.2		45.5	45.08		mg/Kg	✱	92	75 - 125	4	20
Barium	42.4		45.5	104.7	F1	mg/Kg	✱	137	75 - 125	0	20
Beryllium	0.51		45.5	39.44		mg/Kg	✱	85	75 - 125	3	20
Cadmium	0.16	J	45.5	39.20		mg/Kg	✱	86	75 - 125	7	20
Calcium	81600	B	2280	18290	4 F2	mg/Kg	✱	-2782	75 - 125	128	20
Chromium	15.0		45.5	64.71		mg/Kg	✱	109	75 - 125	12	20
Cobalt	7.2		45.5	51.80		mg/Kg	✱	98	75 - 125	4	20
Copper	15.6		45.5	57.73		mg/Kg	✱	93	75 - 125	1	20
Iron	13500		2280	20220	4 F2	mg/Kg	✱	295	75 - 125	25	20
Lead	6.6		45.5	68.38	F1 F2	mg/Kg	✱	136	75 - 125	23	20
Magnesium	49500	B	2280	16870	4 F2	mg/Kg	✱	-1434	75 - 125	107	20
Manganese	390		45.5	244.6	4 F2	mg/Kg	✱	-318	75 - 125	24	20
Nickel	16.4	B	45.5	76.40	F1	mg/Kg	✱	132	75 - 125	20	20
Potassium	4970	B	2280	9251	F1	mg/Kg	✱	188	75 - 125	12	20
Selenium	ND		45.5	40.17		mg/Kg	✱	88	75 - 125	7	20
Silver	ND		11.4	10.25		mg/Kg	✱	90	75 - 125	4	20
Sodium	214	B	2280	2326		mg/Kg	✱	93	75 - 125	7	20
Thallium	ND		45.5	44.23		mg/Kg	✱	97	75 - 125	1	20
Vanadium	21.0		45.5	72.22		mg/Kg	✱	113	75 - 125	6	20
Zinc	23.6		45.5	86.01	F1 F2	mg/Kg	✱	137	75 - 125	30	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-455353/1-A

Matrix: Solid

Analysis Batch: 455512

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0078	mg/Kg		01/17/19 11:45	01/17/19 13:01	1

Lab Sample ID: LCSSRM 480-455353/2-A ^10

Matrix: Solid

Analysis Batch: 455512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455353

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	13.68		mg/Kg		114.0	57.3 - 133.3

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Lab Sample ID: 480-147860-1 MS
Matrix: Solid
Analysis Batch: 455512

Client Sample ID: SB-29 (0'-5')
Prep Type: Total/NA
Prep Batch: 455353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.046		0.376	0.458		mg/Kg	☼	110	80 - 120		

Lab Sample ID: 480-147860-1 MSD
Matrix: Solid
Analysis Batch: 455512

Client Sample ID: SB-29 (0'-5')
Prep Type: Total/NA
Prep Batch: 455353

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.046		0.366	0.456		mg/Kg	☼	112	80 - 120	0	20

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

GC/MS VOA

Prep Batch: 455234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-2	SB-29 (10'-15')	Total/NA	Solid	5035A_L	
480-147860-3	SB-29 (15'-20')	Total/NA	Solid	5035A_L	
480-147860-5	SB-28 (10'-15')	Total/NA	Solid	5035A_L	
480-147860-6	SB-28 (15'-20')	Total/NA	Solid	5035A_L	
480-147860-9	SB-27 (10'-15')	Total/NA	Solid	5035A_L	
480-147860-10	SB-27 (15'-20')	Total/NA	Solid	5035A_L	
480-147860-11	SB-26 (5'-10')	Total/NA	Solid	5035A_L	
480-147860-12	SB-26 (10'-15')	Total/NA	Solid	5035A_L	
MB 480-455234/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455234/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-147860-9 MS	SB-27 (10'-15')	Total/NA	Solid	5035A_L	
480-147860-9 MSD	SB-27 (10'-15')	Total/NA	Solid	5035A_L	

Analysis Batch: 455237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-2	SB-29 (10'-15')	Total/NA	Solid	8260C	455234
480-147860-3	SB-29 (15'-20')	Total/NA	Solid	8260C	455234
480-147860-5	SB-28 (10'-15')	Total/NA	Solid	8260C	455234
480-147860-6	SB-28 (15'-20')	Total/NA	Solid	8260C	455234
480-147860-9	SB-27 (10'-15')	Total/NA	Solid	8260C	455234
480-147860-10	SB-27 (15'-20')	Total/NA	Solid	8260C	455234
480-147860-11	SB-26 (5'-10')	Total/NA	Solid	8260C	455234
480-147860-12	SB-26 (10'-15')	Total/NA	Solid	8260C	455234
MB 480-455234/2-A	Method Blank	Total/NA	Solid	8260C	455234
LCS 480-455234/1-A	Lab Control Sample	Total/NA	Solid	8260C	455234
480-147860-9 MS	SB-27 (10'-15')	Total/NA	Solid	8260C	455234
480-147860-9 MSD	SB-27 (10'-15')	Total/NA	Solid	8260C	455234

GC/MS Semi VOA

Prep Batch: 455207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-4	SB-29 (0'-5')	Total/NA	Solid	3550C	
480-147860-8	SB-27 (0'-5')	Total/NA	Solid	3550C	
MB 480-455207/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-455207/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-147860-4 MS	SB-29 (0'-5')	Total/NA	Solid	3550C	
480-147860-4 MSD	SB-29 (0'-5')	Total/NA	Solid	3550C	

Analysis Batch: 455521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-4	SB-29 (0'-5')	Total/NA	Solid	8270D	455207
480-147860-8	SB-27 (0'-5')	Total/NA	Solid	8270D	455207
MB 480-455207/1-A	Method Blank	Total/NA	Solid	8270D	455207
LCS 480-455207/2-A	Lab Control Sample	Total/NA	Solid	8270D	455207
480-147860-4 MS	SB-29 (0'-5')	Total/NA	Solid	8270D	455207
480-147860-4 MSD	SB-29 (0'-5')	Total/NA	Solid	8270D	455207

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

GC Semi VOA

Prep Batch: 455210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-4	SB-29 (0'-5')	Total/NA	Solid	3550C	
480-147860-8	SB-27 (0'-5')	Total/NA	Solid	3550C	
MB 480-455210/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-455210/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 455591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-4	SB-29 (0'-5')	Total/NA	Solid	8082A	455210
480-147860-8	SB-27 (0'-5')	Total/NA	Solid	8082A	455210
MB 480-455210/1-A	Method Blank	Total/NA	Solid	8082A	455210
LCS 480-455210/2-A	Lab Control Sample	Total/NA	Solid	8082A	455210

Metals

Prep Batch: 455353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-1	SB-29 (0'-5')	Total/NA	Solid	7471B	
480-147860-7	SB-27 (0'-5')	Total/NA	Solid	7471B	
MB 480-455353/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-455353/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-147860-1 MS	SB-29 (0'-5')	Total/NA	Solid	7471B	
480-147860-1 MSD	SB-29 (0'-5')	Total/NA	Solid	7471B	

Analysis Batch: 455512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-1	SB-29 (0'-5')	Total/NA	Solid	7471B	455353
480-147860-7	SB-27 (0'-5')	Total/NA	Solid	7471B	455353
MB 480-455353/1-A	Method Blank	Total/NA	Solid	7471B	455353
LCSSRM 480-455353/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	455353
480-147860-1 MS	SB-29 (0'-5')	Total/NA	Solid	7471B	455353
480-147860-1 MSD	SB-29 (0'-5')	Total/NA	Solid	7471B	455353

Prep Batch: 455541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-1	SB-29 (0'-5')	Total/NA	Solid	3050B	
480-147860-7	SB-27 (0'-5')	Total/NA	Solid	3050B	
MB 480-455541/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-455541/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-147860-1 MS	SB-29 (0'-5')	Total/NA	Solid	3050B	
480-147860-1 MSD	SB-29 (0'-5')	Total/NA	Solid	3050B	

Analysis Batch: 455926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-1	SB-29 (0'-5')	Total/NA	Solid	6010C	455541
480-147860-7	SB-27 (0'-5')	Total/NA	Solid	6010C	455541
MB 480-455541/1-A	Method Blank	Total/NA	Solid	6010C	455541
LCSSRM 480-455541/2-A	Lab Control Sample	Total/NA	Solid	6010C	455541
480-147860-1 MS	SB-29 (0'-5')	Total/NA	Solid	6010C	455541
480-147860-1 MSD	SB-29 (0'-5')	Total/NA	Solid	6010C	455541

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Metals (Continued)

Analysis Batch: 455934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-455541/1-A	Method Blank	Total/NA	Solid	6010C	455541

General Chemistry

Analysis Batch: 455278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147860-1	SB-29 (0'-5')	Total/NA	Solid	Moisture	
480-147860-2	SB-29 (10'-15')	Total/NA	Solid	Moisture	
480-147860-3	SB-29 (15'-20')	Total/NA	Solid	Moisture	
480-147860-4	SB-29 (0'-5')	Total/NA	Solid	Moisture	
480-147860-5	SB-28 (10'-15')	Total/NA	Solid	Moisture	
480-147860-6	SB-28 (15'-20')	Total/NA	Solid	Moisture	
480-147860-7	SB-27 (0'-5')	Total/NA	Solid	Moisture	
480-147860-8	SB-27 (0'-5')	Total/NA	Solid	Moisture	
480-147860-9	SB-27 (10'-15')	Total/NA	Solid	Moisture	
480-147860-10	SB-27 (15'-20')	Total/NA	Solid	Moisture	
480-147860-11	SB-26 (5'-10')	Total/NA	Solid	Moisture	
480-147860-12	SB-26 (10'-15')	Total/NA	Solid	Moisture	
480-147860-9 MS	SB-27 (10'-15')	Total/NA	Solid	Moisture	
480-147860-9 MSD	SB-27 (10'-15')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (0'-5')

Date Collected: 01/14/19 09:00

Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-29 (0'-5')

Date Collected: 01/14/19 09:00

Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-1

Matrix: Solid

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			455541	01/18/19 10:20	JMP	TAL BUF
Total/NA	Analysis	6010C		1	455926	01/21/19 10:54	LMH	TAL BUF
Total/NA	Prep	7471B			455353	01/17/19 11:45	BMB	TAL BUF
Total/NA	Analysis	7471B		1	455512	01/17/19 13:03	BMB	TAL BUF

Client Sample ID: SB-29 (10'-15')

Date Collected: 01/14/19 09:15

Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-29 (10'-15')

Date Collected: 01/14/19 09:15

Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-2

Matrix: Solid

Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 15:19	AEM	TAL BUF

Client Sample ID: SB-29 (15'-20')

Date Collected: 01/14/19 09:15

Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-29 (15'-20')

Date Collected: 01/14/19 09:15

Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-3

Matrix: Solid

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 15:45	AEM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-4

Date Collected: 01/14/19 09:00

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-4

Date Collected: 01/14/19 09:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			455207	01/16/19 07:26	SGD	TAL BUF
Total/NA	Analysis	8270D		1	455521	01/17/19 19:59	DMR	TAL BUF
Total/NA	Prep	3550C			455210	01/16/19 07:32	SMP	TAL BUF
Total/NA	Analysis	8082A		1	455591	01/18/19 17:53	W1T	TAL BUF

Client Sample ID: SB-28 (10'-15')

Lab Sample ID: 480-147860-5

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-28 (10'-15')

Lab Sample ID: 480-147860-5

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 16:11	AEM	TAL BUF

Client Sample ID: SB-28 (15'-20')

Lab Sample ID: 480-147860-6

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-28 (15'-20')

Lab Sample ID: 480-147860-6

Date Collected: 01/14/19 09:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 16:37	AEM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-7

Date Collected: 01/14/19 12:30

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-7

Date Collected: 01/14/19 12:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			455541	01/18/19 10:20	JMP	TAL BUF
Total/NA	Analysis	6010C		1	455926	01/21/19 11:13	LMH	TAL BUF
Total/NA	Prep	7471B			455353	01/17/19 11:45	BMB	TAL BUF
Total/NA	Analysis	7471B		1	455512	01/17/19 13:08	BMB	TAL BUF

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-8

Date Collected: 01/14/19 12:30

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-8

Date Collected: 01/14/19 12:30

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 77.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			455207	01/16/19 07:26	SGD	TAL BUF
Total/NA	Analysis	8270D		1	455521	01/17/19 20:24	DMR	TAL BUF
Total/NA	Prep	3550C			455210	01/16/19 07:32	SMP	TAL BUF
Total/NA	Analysis	8082A		1	455591	01/18/19 18:09	W1T	TAL BUF

Client Sample ID: SB-27 (10'-15')

Lab Sample ID: 480-147860-9

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-27 (10'-15')

Lab Sample ID: 480-147860-9

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-27 (10'-15')

Lab Sample ID: 480-147860-9

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	455237	01/16/19 17:03	AEM	TAL BUF

Client Sample ID: SB-27 (15'-20')

Lab Sample ID: 480-147860-10

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-27 (15'-20')

Lab Sample ID: 480-147860-10

Date Collected: 01/14/19 12:45

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 17:29	AEM	TAL BUF

Client Sample ID: SB-26 (5'-10')

Lab Sample ID: 480-147860-11

Date Collected: 01/14/19 14:00

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

Client Sample ID: SB-26 (5'-10')

Lab Sample ID: 480-147860-11

Date Collected: 01/14/19 14:00

Matrix: Solid

Date Received: 01/15/19 12:00

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 17:54	AEM	TAL BUF

Client Sample ID: SB-26 (10'-15')

Lab Sample ID: 480-147860-12

Date Collected: 01/14/19 14:00

Matrix: Solid

Date Received: 01/15/19 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455278	01/16/19 10:37	MDH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Client Sample ID: SB-26 (10'-15')
Date Collected: 01/14/19 14:00
Date Received: 01/15/19 12:00

Lab Sample ID: 480-147860-12
Matrix: Solid
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455234	01/15/19 12:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	455237	01/16/19 18:20	AEM	TAL BUF

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

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	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.

TestAmerica Job ID: 480-147860-1

Project/Site: Former Sims Matchplate Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147860-1	SB-29 (0'-5')	Solid	01/14/19 09:00	01/15/19 12:00
480-147860-2	SB-29 (10'-15')	Solid	01/14/19 09:15	01/15/19 12:00
480-147860-3	SB-29 (15'-20')	Solid	01/14/19 09:15	01/15/19 12:00
480-147860-4	SB-29 (0'-5')	Solid	01/14/19 09:00	01/15/19 12:00
480-147860-5	SB-28 (10'-15')	Solid	01/14/19 09:30	01/15/19 12:00
480-147860-6	SB-28 (15'-20')	Solid	01/14/19 09:30	01/15/19 12:00
480-147860-7	SB-27 (0'-5')	Solid	01/14/19 12:30	01/15/19 12:00
480-147860-8	SB-27 (0'-5')	Solid	01/14/19 12:30	01/15/19 12:00
480-147860-9	SB-27 (10'-15')	Solid	01/14/19 12:45	01/15/19 12:00
480-147860-10	SB-27 (15'-20')	Solid	01/14/19 12:45	01/15/19 12:00
480-147860-11	SB-26 (5'-10')	Solid	01/14/19 14:00	01/15/19 12:00
480-147860-12	SB-26 (10'-15')	Solid	01/14/19 14:00	01/15/19 12:00

Client Information		Sampler: _____		Lab PM: _____		Carrier Tracking No(s): _____		COC No: 480-122577-2E	
Client Contact: Matt Walker		Phone: _____		E-Mail: _____		Page: 2 of 4		Job #: _____	
Company: C&S Engineers, Inc.		Address: 499 Col. Eileen Collins Blvd		City: Syracuse		State: NY		Zip: 13212	
Phone: 315-703-4323(Tel)		Email: mwalker@cscos.com		Project Name: Former Sims Matchplate Site		Site: _____		SSOW#: _____	
Due Date Requested: _____		TAT Requested (days): 5 days		PO #: _____		Purchase Order Requested: _____		WO #: _____	
Project #: 48019352		Project Name: _____		Site: _____		SSOW#: _____		SSOW#: _____	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=oil, L=liquid, A=air)	Field Filtered Sample (Yes or No)	Analysis Requested										Total Number of Containers	Special Instructions/Note:		
						8010C, 7471B	8081B, 8082A, 8151A, 8270D	8260C - TCL list OLMO4.2	8081B, 8151A, 8270D	8082A, 8270D	Preservation Cc	Preservation Cc	Preservation Cc	Preservation Cc	Preservation Cc			Preservation Cc	Preservation Cc
SB-29 (0-5')	1/14/19	900	C	Solid															
SB-29 (10-15')	1/14/19	915	C	Solid															
SB-29 (15-20')	1/14/19	915	C	Solid															
SB-29 (0-5')	1/14/19	900	C	Solid															
SB-28 (10-15')	1/14/19	930	C	Solid															
SB-28 (15-20')	1/14/19	930	C	Solid															
SB-27 (0-5')	1/14/19	1230	C	Solid															
SB-27 (0-5')	1/14/19	1230	C	Solid															
SB-27 (10-15')	1/14/19	1245	C	Solid															
SB-27 (15-20')	1/14/19	1245	C	Solid															
SB-27 (10-15')MS	1/14/19	1245	C	Solid															

Possible Hazard Identification		☐ Non-Hazard		☐ Flammable	☐ Skin Irritant	☐ Poison B	☐ Unknown	☐ Radiological
Deliverable Requested: I, II, III, IV, Other (specify)								
Empty Kit Relinquished by:		Date: _____						
Relinquished by: Wayne Randall C&S		Date/Time: 1/14/19 15:30		Company: C&S		Received by: [Signature]		
Relinquished by: R. C. Higley		Date/Time: 1-14-19, 19:00		Company: C&S		Received by: [Signature]		
Relinquished by:		Date/Time:		Company:		Received by:		
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		#1 2.4		

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-147860-1

Login Number: 147860

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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 (Excluding tests with immediate HTs)..	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	Freezer 1/15/19 @ 1215
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.	True	
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 Engineers Inc.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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: 480-147921-1

Client Project/Site: Former Sims Matchplate Site

For:

C&S Engineers, Inc.

499 Col. Eileen Collins Blvd

Syracuse, New York 13212

Attn: Matt Walker



Authorized for release by:

1/23/2019 8:18:02 PM

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Qualifiers

GC/MS 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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Job ID: 480-147921-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-147921-1

Receipt

The samples were received on 1/16/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7° C.

GC/MS VOA

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

GC/MS Semi VOA

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

GC Semi VOA

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-455591/31) that had recoveries for the surrogate Tetrachloro-m-xylene below acceptance limits: SB - 32 (0' - 5') (480-147921-2) and SB - 21 (0' - 5') (480-147921-8). The secondary surrogate Decachlorobiphenyl is within limits. Therefore, the data have been reported.

Method(s) 8082A: All primary data for analytical batch 455591 are reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals

Method(s) 6010C: The method blank for preparation batch 480-455541 and analytical batch 480-455926 contained Total Potassium above the reporting limit (RL). Associated samples SB - 32 (0' - 5') (480-147921-1) and SB - 21 (0' - 5') (480-147921-7) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010C: The following sample was diluted due to the presence of Calcium which interferes with Total Copper: SB - 32 (0' - 5') (480-147921-1). 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.

Organic Prep

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

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (0' - 5')

Lab Sample ID: 480-147921-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	2980	B	12.5	5.5	mg/Kg	1		✱	6010C	Total/NA
Arsenic	1.1	J	2.5	0.50	mg/Kg	1		✱	6010C	Total/NA
Barium	11.4		0.62	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.14	J	0.25	0.035	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.059	J	0.25	0.037	mg/Kg	1		✱	6010C	Total/NA
Calcium	233000	B	312	20.6	mg/Kg	5		✱	6010C	Total/NA
Chromium	3.1		0.62	0.25	mg/Kg	1		✱	6010C	Total/NA
Cobalt	1.1		0.62	0.062	mg/Kg	1		✱	6010C	Total/NA
Copper	1.5	J	6.2	1.3	mg/Kg	5		✱	6010C	Total/NA
Iron	4700		12.5	4.4	mg/Kg	1		✱	6010C	Total/NA
Lead	3.6		1.2	0.30	mg/Kg	1		✱	6010C	Total/NA
Magnesium	149000	B	125	5.8	mg/Kg	5		✱	6010C	Total/NA
Manganese	103		0.25	0.040	mg/Kg	1		✱	6010C	Total/NA
Nickel	3.8	J B	6.2	0.29	mg/Kg	1		✱	6010C	Total/NA
Potassium	1470	B	37.5	25.0	mg/Kg	1		✱	6010C	Total/NA
Sodium	330	B	175	16.2	mg/Kg	1		✱	6010C	Total/NA
Vanadium	8.3		0.62	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	6.4		2.5	0.80	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.018	J	0.026	0.010	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: SB - 32 (0' - 5')

Lab Sample ID: 480-147921-2

No Detections.

Client Sample ID: SB - 32 (10' - 15')

Lab Sample ID: 480-147921-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	87		24	4.1	ug/Kg	1		✱	8260C	Total/NA
Chloroform	0.42	J B	4.9	0.30	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB - 32 (15' - 20')

Lab Sample ID: 480-147921-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.75	J	5.2	0.37	ug/Kg	1		✱	8260C	Total/NA
Acetone	4.3	J	26	4.3	ug/Kg	1		✱	8260C	Total/NA
Chloroform	1.5	J B	5.2	0.32	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB - 31 (10' - 15')

Lab Sample ID: 480-147921-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	39		22	3.7	ug/Kg	1		✱	8260C	Total/NA
Chloroform	0.44	J B	4.3	0.27	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB - 31 (15' - 20')

Lab Sample ID: 480-147921-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	75		24	4.1	ug/Kg	1		✱	8260C	Total/NA
Chloroform	0.35	J B	4.9	0.30	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-7

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (0' - 5') (Continued)

Lab Sample ID: 480-147921-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	11300	B	11.2	4.9	mg/Kg	1		✱	6010C	Total/NA
Arsenic	3.4		2.2	0.45	mg/Kg	1		✱	6010C	Total/NA
Barium	50.5		0.56	0.12	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.43		0.22	0.031	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.12	J	0.22	0.034	mg/Kg	1		✱	6010C	Total/NA
Calcium	82700	B	56.0	3.7	mg/Kg	1		✱	6010C	Total/NA
Chromium	12.8		0.56	0.22	mg/Kg	1		✱	6010C	Total/NA
Cobalt	5.6		0.56	0.056	mg/Kg	1		✱	6010C	Total/NA
Copper	19.7		1.1	0.24	mg/Kg	1		✱	6010C	Total/NA
Iron	12300		11.2	3.9	mg/Kg	1		✱	6010C	Total/NA
Lead	5.0		1.1	0.27	mg/Kg	1		✱	6010C	Total/NA
Magnesium	42900	B	22.4	1.0	mg/Kg	1		✱	6010C	Total/NA
Manganese	273		0.22	0.036	mg/Kg	1		✱	6010C	Total/NA
Nickel	13.9	B	5.6	0.26	mg/Kg	1		✱	6010C	Total/NA
Potassium	4520	B	33.6	22.4	mg/Kg	1		✱	6010C	Total/NA
Sodium	212	B	157	14.6	mg/Kg	1		✱	6010C	Total/NA
Vanadium	17.5		0.56	0.12	mg/Kg	1		✱	6010C	Total/NA
Zinc	19.8		2.2	0.72	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.018	J	0.022	0.0089	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-8

No Detections.

Client Sample ID: SB - 21 (10' - 15')

Lab Sample ID: 480-147921-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.4	J	5.9	0.43	ug/Kg	1		✱	8260C	Total/NA
Acetone	72		29	4.9	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene	35		5.9	1.3	ug/Kg	1		✱	8260C	Total/NA

Client Sample ID: SB - 21 (15' - 20')

Lab Sample ID: 480-147921-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.70	J	4.4	0.32	ug/Kg	1		✱	8260C	Total/NA
Acetone	11	J	22	3.7	ug/Kg	1		✱	8260C	Total/NA
Chloroform	0.76	J B	4.4	0.27	ug/Kg	1		✱	8260C	Total/NA
Toluene	0.35	J	4.4	0.33	ug/Kg	1		✱	8260C	Total/NA
Trichloroethene	22		4.4	0.96	ug/Kg	1		✱	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (0' - 5')

Lab Sample ID: 480-147921-1

Date Collected: 01/15/19 08:45

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 78.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2980	B	12.5	5.5	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Antimony	ND		18.7	0.50	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Arsenic	1.1	J	2.5	0.50	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Barium	11.4		0.62	0.14	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Beryllium	0.14	J	0.25	0.035	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Cadmium	0.059	J	0.25	0.037	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Calcium	233000	B	312	20.6	mg/Kg	☼	01/18/19 10:20	01/22/19 23:37	5
Chromium	3.1		0.62	0.25	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Cobalt	1.1		0.62	0.062	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Copper	1.5	J	6.2	1.3	mg/Kg	☼	01/18/19 10:20	01/22/19 23:37	5
Iron	4700		12.5	4.4	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Lead	3.6		1.2	0.30	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Magnesium	149000	B	125	5.8	mg/Kg	☼	01/18/19 10:20	01/22/19 23:37	5
Manganese	103		0.25	0.040	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Nickel	3.8	J B	6.2	0.29	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Potassium	1470	B	37.5	25.0	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Selenium	ND		5.0	0.50	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Silver	ND		0.75	0.25	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Sodium	330	B	175	16.2	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Thallium	ND		7.5	0.37	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Vanadium	8.3		0.62	0.14	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1
Zinc	6.4		2.5	0.80	mg/Kg	☼	01/18/19 10:20	01/21/19 11:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.026	0.010	mg/Kg	☼	01/22/19 11:10	01/22/19 13:55	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (0' - 5')

Lab Sample ID: 480-147921-2

Date Collected: 01/15/19 08:45

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2,4,5-Trichlorophenol	ND		190	50	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2,4-Dinitrotoluene	ND		190	38	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2-Chloronaphthalene	ND		190	30	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2-Chlorophenol	ND		190	34	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2-Methylphenol	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
2-Nitrophenol	ND		190	52	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4-Methylphenol	ND		360	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Acenaphthene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Acenaphthylene	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Acetophenone	ND		190	25	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Anthracene	ND		190	46	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Atrazine	ND		190	64	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Benzaldehyde	ND		190	150	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Benzo[a]pyrene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Benzo[b]fluoranthene	ND		190	29	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Bis(2-chloroethoxy)methane	ND		190	39	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Bis(2-ethylhexyl) phthalate	ND		190	63	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Butyl benzyl phthalate	ND		190	30	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Caprolactam	ND		190	56	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Carbazole	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Chrysene	ND		190	41	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Dibenzofuran	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (0' - 5')

Lab Sample ID: 480-147921-2

Date Collected: 01/15/19 08:45

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		190	20	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Fluorene	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Hexachlorobutadiene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Hexachloroethane	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Indeno[1,2,3-cd]pyrene	ND		190	23	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Isophorone	ND		190	39	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Naphthalene	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Nitrobenzene	ND		190	21	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Phenanthrene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Phenol	ND		190	28	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1
Pyrene	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	83		53 - 120	01/16/19 17:14	01/18/19 00:13	1
Phenol-d5 (Surr)	87		54 - 120	01/16/19 17:14	01/18/19 00:13	1
p-Terphenyl-d14 (Surr)	104		65 - 121	01/16/19 17:14	01/18/19 00:13	1
2,4,6-Tribromophenol (Surr)	80		54 - 120	01/16/19 17:14	01/18/19 00:13	1
2-Fluorobiphenyl	91		60 - 120	01/16/19 17:14	01/18/19 00:13	1
2-Fluorophenol (Surr)	80		52 - 120	01/16/19 17:14	01/18/19 00:13	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.048	mg/Kg	☼	01/16/19 08:51	01/18/19 18:25	1
PCB-1221	ND		0.25	0.048	mg/Kg	☼	01/16/19 08:51	01/18/19 18:25	1
PCB-1232	ND		0.25	0.048	mg/Kg	☼	01/16/19 08:51	01/18/19 18:25	1
PCB-1242	ND		0.25	0.048	mg/Kg	☼	01/16/19 08:51	01/18/19 18:25	1
PCB-1248	ND		0.25	0.048	mg/Kg	☼	01/16/19 08:51	01/18/19 18:25	1
PCB-1254	ND		0.25	0.12	mg/Kg	☼	01/16/19 08:51	01/18/19 18:25	1
PCB-1260	ND		0.25	0.12	mg/Kg	☼	01/16/19 08:51	01/18/19 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		60 - 154	01/16/19 08:51	01/18/19 18:25	1
DCB Decachlorobiphenyl	73		65 - 174	01/16/19 08:51	01/18/19 18:25	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (10' -15')

Lab Sample ID: 480-147921-3

Date Collected: 01/15/19 09:15

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.36	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.79	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,1,2-Trichloroethane	ND		4.9	0.64	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,2-Dibromo-3-Chloropropane	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,2-Dichloropropane	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,4-Dichlorobenzene	ND		4.9	0.69	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Acetone	87		24	4.1	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Benzene	ND		4.9	0.24	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Bromodichloromethane	ND		4.9	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Bromoform	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Bromomethane	ND		4.9	0.44	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Carbon disulfide	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Chlorobenzene	ND		4.9	0.65	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Dibromochloromethane	ND		4.9	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Chloroethane	ND		4.9	1.1	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Chloroform	0.42	J B	4.9	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Chloromethane	ND		4.9	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
cis-1,2-Dichloroethene	ND		4.9	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
cis-1,3-Dichloropropene	ND		4.9	0.70	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Cyclohexane	ND		4.9	0.69	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Dichlorodifluoromethane	ND		4.9	0.40	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
1,2-Dibromoethane	ND		4.9	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Isopropylbenzene	ND		4.9	0.74	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Methyl acetate	ND		24	3.0	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Methylcyclohexane	ND		4.9	0.74	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Methylene Chloride	ND		4.9	2.3	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Styrene	ND		4.9	0.24	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Toluene	ND		4.9	0.37	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
trans-1,2-Dichloroethene	ND		4.9	0.51	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
trans-1,3-Dichloropropene	ND		4.9	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Trichlorofluoromethane	ND		4.9	0.46	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1
Xylenes, Total	ND		9.8	0.82	ug/Kg	☼	01/16/19 21:50	01/17/19 00:48	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (10' -15')

Lab Sample ID: 480-147921-3

Date Collected: 01/15/19 09:15

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 86.9

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		71 - 125	01/16/19 21:50	01/17/19 00:48	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/16/19 21:50	01/17/19 00:48	1
<i>4-Bromofluorobenzene (Surr)</i>	96		72 - 126	01/16/19 21:50	01/17/19 00:48	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/16/19 21:50	01/17/19 00:48	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (15' - 20')

Lab Sample ID: 480-147921-4

Date Collected: 01/15/19 09:15

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.75	J	5.2	0.37	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,1,1,2,2-Tetrachloroethane	ND		5.2	0.84	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,1,2-Trichloroethane	ND		5.2	0.67	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,1-Dichloroethane	ND		5.2	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,1-Dichloroethene	ND		5.2	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,2,4-Trichlorobenzene	ND		5.2	0.31	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,2-Dibromo-3-Chloropropane	ND		5.2	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,2-Dichlorobenzene	ND		5.2	0.40	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,2-Dichloropropane	ND		5.2	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,4-Dichlorobenzene	ND		5.2	0.72	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Acetone	4.3	J	26	4.3	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Benzene	ND		5.2	0.25	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Bromodichloromethane	ND		5.2	0.69	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Bromoform	ND		5.2	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Bromomethane	ND		5.2	0.46	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Carbon disulfide	ND		5.2	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Carbon tetrachloride	ND		5.2	0.50	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Chlorobenzene	ND		5.2	0.68	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Dibromochloromethane	ND		5.2	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Chloroethane	ND		5.2	1.2	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Chloroform	1.5	J B	5.2	0.32	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Chloromethane	ND		5.2	0.31	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
cis-1,2-Dichloroethene	ND		5.2	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
cis-1,3-Dichloropropene	ND		5.2	0.74	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Cyclohexane	ND		5.2	0.72	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Dichlorodifluoromethane	ND		5.2	0.43	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
1,2-Dibromoethane	ND		5.2	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Isopropylbenzene	ND		5.2	0.78	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Methyl acetate	ND		26	3.1	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Methylcyclohexane	ND		5.2	0.79	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Styrene	ND		5.2	0.26	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Tetrachloroethene	ND		5.2	0.69	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Toluene	ND		5.2	0.39	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
trans-1,2-Dichloroethene	ND		5.2	0.53	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
trans-1,3-Dichloropropene	ND		5.2	2.3	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Trichloroethene	ND		5.2	1.1	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Trichlorofluoromethane	ND		5.2	0.49	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Vinyl chloride	ND		5.2	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1
Xylenes, Total	ND		10	0.87	ug/Kg	☼	01/16/19 21:50	01/17/19 01:14	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (15' - 20')

Lab Sample ID: 480-147921-4

Date Collected: 01/15/19 09:15

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 88.2

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/16/19 21:50	01/17/19 01:14	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		64 - 126	01/16/19 21:50	01/17/19 01:14	1
<i>4-Bromofluorobenzene (Surr)</i>	97		72 - 126	01/16/19 21:50	01/17/19 01:14	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/16/19 21:50	01/17/19 01:14	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 31 (10' - 15')

Lab Sample ID: 480-147921-5

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 89.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.3	0.32	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,1,1,2-Tetrachloroethane	ND		4.3	0.70	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,1,2-Trichloroethane	ND		4.3	0.56	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	0.99	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,1-Dichloroethane	ND		4.3	0.53	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,1-Dichloroethene	ND		4.3	0.53	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,2,4-Trichlorobenzene	ND		4.3	0.26	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,2-Dibromo-3-Chloropropane	ND		4.3	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,2-Dichlorobenzene	ND		4.3	0.34	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,2-Dichloroethane	ND		4.3	0.22	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,2-Dichloropropane	ND		4.3	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,4-Dichlorobenzene	ND		4.3	0.61	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Acetone	39		22	3.7	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Benzene	ND		4.3	0.21	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Bromodichloromethane	ND		4.3	0.58	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Bromoform	ND		4.3	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Bromomethane	ND		4.3	0.39	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Carbon disulfide	ND		4.3	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Carbon tetrachloride	ND		4.3	0.42	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Chlorobenzene	ND		4.3	0.57	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Dibromochloromethane	ND		4.3	0.56	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Chloroethane	ND		4.3	0.98	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Chloroform	0.44	J B	4.3	0.27	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Chloromethane	ND		4.3	0.26	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
cis-1,2-Dichloroethene	ND		4.3	0.56	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
cis-1,3-Dichloropropene	ND		4.3	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Cyclohexane	ND		4.3	0.61	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Dichlorodifluoromethane	ND		4.3	0.36	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Ethylbenzene	ND		4.3	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
1,2-Dibromoethane	ND		4.3	0.56	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Isopropylbenzene	ND		4.3	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Methyl acetate	ND		22	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Methyl tert-butyl ether	ND		4.3	0.43	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Methylcyclohexane	ND		4.3	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Styrene	ND		4.3	0.22	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Tetrachloroethene	ND		4.3	0.58	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Toluene	ND		4.3	0.33	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
trans-1,2-Dichloroethene	ND		4.3	0.45	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
trans-1,3-Dichloropropene	ND		4.3	1.9	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Trichloroethene	ND		4.3	0.96	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Trichlorofluoromethane	ND		4.3	0.41	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Vinyl chloride	ND		4.3	0.53	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1
Xylenes, Total	ND		8.7	0.73	ug/Kg	☼	01/16/19 21:50	01/17/19 01:40	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 31 (10' - 15')

Lab Sample ID: 480-147921-5

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 89.1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		71 - 125	01/16/19 21:50	01/17/19 01:40	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/16/19 21:50	01/17/19 01:40	1
<i>4-Bromofluorobenzene (Surr)</i>	97		72 - 126	01/16/19 21:50	01/17/19 01:40	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/16/19 21:50	01/17/19 01:40	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 31 (15' - 20')

Lab Sample ID: 480-147921-6

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 80.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.79	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,1,2-Trichloroethane	ND		4.9	0.64	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,2-Dibromo-3-Chloropropane	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,2-Dichloropropane	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,4-Dichlorobenzene	ND		4.9	0.68	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Acetone	75		24	4.1	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Benzene	ND		4.9	0.24	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Bromodichloromethane	ND		4.9	0.65	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Bromoform	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Bromomethane	ND		4.9	0.44	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Carbon disulfide	ND		4.9	2.4	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Chlorobenzene	ND		4.9	0.65	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Dibromochloromethane	ND		4.9	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Chloroethane	ND		4.9	1.1	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Chloroform	0.35	J B	4.9	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Chloromethane	ND		4.9	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
cis-1,2-Dichloroethene	ND		4.9	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
cis-1,3-Dichloropropene	ND		4.9	0.70	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Cyclohexane	ND		4.9	0.68	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Dichlorodifluoromethane	ND		4.9	0.40	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
1,2-Dibromoethane	ND		4.9	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Isopropylbenzene	ND		4.9	0.74	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Methyl acetate	ND		24	3.0	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Methylcyclohexane	ND		4.9	0.74	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Methylene Chloride	ND		4.9	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Styrene	ND		4.9	0.24	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Toluene	ND		4.9	0.37	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
trans-1,3-Dichloropropene	ND		4.9	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Trichlorofluoromethane	ND		4.9	0.46	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1
Xylenes, Total	ND		9.8	0.82	ug/Kg	☼	01/16/19 21:50	01/17/19 02:05	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 31 (15' - 20')

Lab Sample ID: 480-147921-6

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 80.7

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		71 - 125	01/16/19 21:50	01/17/19 02:05	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		64 - 126	01/16/19 21:50	01/17/19 02:05	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/16/19 21:50	01/17/19 02:05	1
<i>Dibromofluoromethane (Surr)</i>	101		60 - 140	01/16/19 21:50	01/17/19 02:05	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-7

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 87.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11300	B	11.2	4.9	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Antimony	ND		16.8	0.45	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Arsenic	3.4		2.2	0.45	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Barium	50.5		0.56	0.12	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Beryllium	0.43		0.22	0.031	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Cadmium	0.12	J	0.22	0.034	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Calcium	82700	B	56.0	3.7	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Chromium	12.8		0.56	0.22	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Cobalt	5.6		0.56	0.056	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Copper	19.7		1.1	0.24	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Iron	12300		11.2	3.9	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Lead	5.0		1.1	0.27	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Magnesium	42900	B	22.4	1.0	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Manganese	273		0.22	0.036	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Nickel	13.9	B	5.6	0.26	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Potassium	4520	B	33.6	22.4	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Selenium	ND		4.5	0.45	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Silver	ND		0.67	0.22	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Sodium	212	B	157	14.6	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Thallium	ND		6.7	0.34	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Vanadium	17.5		0.56	0.12	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1
Zinc	19.8		2.2	0.72	mg/Kg	☼	01/18/19 10:20	01/21/19 11:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.022	0.0089	mg/Kg	☼	01/22/19 11:10	01/22/19 14:03	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-8

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2,4,5-Trichlorophenol	ND		190	50	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2,4-Dinitrotoluene	ND		190	38	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2-Chlorophenol	ND		190	34	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2-Methylphenol	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
2-Nitrophenol	ND		190	52	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4-Methylphenol	ND		360	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Acenaphthene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Acenaphthylene	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Acetophenone	ND		190	25	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Anthracene	ND		190	46	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Atrazine	ND		190	65	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Benzaldehyde	ND		190	150	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Benzo[a]pyrene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Bis(2-chloroethoxy)methane	ND		190	39	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Bis(2-ethylhexyl) phthalate	ND		190	63	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Caprolactam	ND		190	56	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Carbazole	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Chrysene	ND		190	42	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Dibenzofuran	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-8

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		190	20	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Fluorene	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Hexachlorobutadiene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Hexachloroethane	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Indeno[1,2,3-cd]pyrene	ND		190	23	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Isophorone	ND		190	39	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Naphthalene	ND		190	24	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Nitrobenzene	ND		190	21	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Phenanthrene	ND		190	27	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Phenol	ND		190	28	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1
Pyrene	ND		190	22	ug/Kg	☼	01/16/19 17:14	01/18/19 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	87		53 - 120	01/16/19 17:14	01/18/19 14:35	1
Phenol-d5 (Surr)	86		54 - 120	01/16/19 17:14	01/18/19 14:35	1
p-Terphenyl-d14 (Surr)	115		65 - 121	01/16/19 17:14	01/18/19 14:35	1
2,4,6-Tribromophenol (Surr)	87		54 - 120	01/16/19 17:14	01/18/19 14:35	1
2-Fluorobiphenyl	94		60 - 120	01/16/19 17:14	01/18/19 14:35	1
2-Fluorophenol (Surr)	83		52 - 120	01/16/19 17:14	01/18/19 14:35	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.046	mg/Kg	☼	01/16/19 08:51	01/18/19 18:41	1
PCB-1221	ND		0.23	0.046	mg/Kg	☼	01/16/19 08:51	01/18/19 18:41	1
PCB-1232	ND		0.23	0.046	mg/Kg	☼	01/16/19 08:51	01/18/19 18:41	1
PCB-1242	ND		0.23	0.046	mg/Kg	☼	01/16/19 08:51	01/18/19 18:41	1
PCB-1248	ND		0.23	0.046	mg/Kg	☼	01/16/19 08:51	01/18/19 18:41	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	01/16/19 08:51	01/18/19 18:41	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	01/16/19 08:51	01/18/19 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	66		60 - 154	01/16/19 08:51	01/18/19 18:41	1
DCB Decachlorobiphenyl	67		65 - 174	01/16/19 08:51	01/18/19 18:41	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (10' - 15')

Lab Sample ID: 480-147921-9

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.4	J	5.9	0.43	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,1,1,2,2-Tetrachloroethane	ND		5.9	0.95	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,1,2-Trichloroethane	ND		5.9	0.76	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.3	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,1-Dichloroethane	ND		5.9	0.71	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,1-Dichloroethene	ND		5.9	0.72	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,2,4-Trichlorobenzene	ND		5.9	0.36	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,2-Dibromo-3-Chloropropane	ND		5.9	2.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,2-Dichlorobenzene	ND		5.9	0.46	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,2-Dichloroethane	ND		5.9	0.29	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,2-Dichloropropane	ND		5.9	2.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,3-Dichlorobenzene	ND		5.9	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,4-Dichlorobenzene	ND		5.9	0.82	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
2-Butanone (MEK)	ND		29	2.1	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
2-Hexanone	ND		29	2.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Acetone	72		29	4.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Benzene	ND		5.9	0.29	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Bromodichloromethane	ND		5.9	0.79	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Bromoform	ND		5.9	2.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Bromomethane	ND		5.9	0.53	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Carbon disulfide	ND		5.9	2.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Carbon tetrachloride	ND		5.9	0.57	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Chlorobenzene	ND		5.9	0.77	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Dibromochloromethane	ND		5.9	0.75	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Chloroethane	ND		5.9	1.3	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Chloroform	ND		5.9	0.36	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Chloromethane	ND		5.9	0.35	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
cis-1,2-Dichloroethene	ND		5.9	0.75	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
cis-1,3-Dichloropropene	ND		5.9	0.84	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Cyclohexane	ND		5.9	0.82	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Dichlorodifluoromethane	ND		5.9	0.48	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Ethylbenzene	ND		5.9	0.40	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
1,2-Dibromoethane	ND		5.9	0.75	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Isopropylbenzene	ND		5.9	0.88	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Methyl acetate	ND		29	3.5	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Methylcyclohexane	ND		5.9	0.89	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Methylene Chloride	ND		5.9	2.7	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Styrene	ND		5.9	0.29	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Tetrachloroethene	ND		5.9	0.79	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Toluene	ND		5.9	0.44	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
trans-1,2-Dichloroethene	ND		5.9	0.60	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
trans-1,3-Dichloropropene	ND		5.9	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Trichloroethene	35		5.9	1.3	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Trichlorofluoromethane	ND		5.9	0.55	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Vinyl chloride	ND		5.9	0.71	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1
Xylenes, Total	ND		12	0.98	ug/Kg	☼	01/16/19 21:50	01/17/19 02:31	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (10' - 15')

Lab Sample ID: 480-147921-9

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.6

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		71 - 125	01/16/19 21:50	01/17/19 02:31	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		64 - 126	01/16/19 21:50	01/17/19 02:31	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/16/19 21:50	01/17/19 02:31	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/16/19 21:50	01/17/19 02:31	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (15' - 20')

Lab Sample ID: 480-147921-10

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.70	J	4.4	0.32	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Acetone	11	J	22	3.7	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Benzene	ND		4.4	0.21	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Bromomethane	ND		4.4	0.39	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Chloroethane	ND		4.4	0.99	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Chloroform	0.76	J B	4.4	0.27	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Chloromethane	ND		4.4	0.26	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Cyclohexane	ND		4.4	0.61	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Methyl acetate	ND		22	2.6	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Methylcyclohexane	ND		4.4	0.66	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Styrene	ND		4.4	0.22	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Toluene	0.35	J	4.4	0.33	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Trichloroethene	22		4.4	0.96	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Trichlorofluoromethane	ND		4.4	0.41	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1
Xylenes, Total	ND		8.7	0.73	ug/Kg	☼	01/16/19 21:50	01/17/19 02:57	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (15' - 20')

Lab Sample ID: 480-147921-10

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.5

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		71 - 125	01/16/19 21:50	01/17/19 02:57	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	107		64 - 126	01/16/19 21:50	01/17/19 02:57	1
<i>4-Bromofluorobenzene (Surr)</i>	98		72 - 126	01/16/19 21:50	01/17/19 02:57	1
<i>Dibromofluoromethane (Surr)</i>	102		60 - 140	01/16/19 21:50	01/17/19 02:57	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

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)	DCA (64-126)	BFB (72-126)	DBFM (60-140)
480-147921-3	SB - 32 (10' - 15')	101	106	96	102
480-147921-4	SB - 32 (15' - 20')	100	105	97	102
480-147921-5	SB - 31 (10' - 15')	101	106	97	101
480-147921-6	SB - 31 (15' - 20')	101	107	98	101
480-147921-9	SB - 21 (10' - 15')	100	106	98	102
480-147921-10	SB - 21 (15' - 20')	101	107	98	102
LCS 480-455390/1-A	Lab Control Sample	101	104	101	103
MB 480-455390/2-A	Method Blank	100	106	98	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 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 (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-147921-2	SB - 32 (0' - 5')	83	87	104	80	91	80
480-147921-8	SB - 21 (0' - 5')	87	86	115	87	94	83
LCS 480-455365/2-A	Lab Control Sample	87	92	109	100	96	87
MB 480-455365/1-A	Method Blank	83	84	108	78	91	80

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX2 (60-154)	DCBP2 (65-174)
480-147921-2	SB - 32 (0' - 5')	71	73
480-147921-8	SB - 21 (0' - 5')	66	67
LCS 480-455210/2-A	Lab Control Sample	87	89
MB 480-455210/1-A	Method Blank	82	84

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

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

Lab Sample ID: MB 480-455390/2-A

Matrix: Solid

Analysis Batch: 455386

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
2-Hexanone	ND		25	2.5	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Acetone	ND		25	4.2	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Benzene	ND		5.0	0.25	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Bromoform	ND		5.0	2.5	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Chloroform	0.778	J	5.0	0.31	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Methyl acetate	ND		25	3.0	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Styrene	ND		5.0	0.25	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Toluene	ND		5.0	0.38	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/16/19 21:50	01/16/19 23:15	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/16/19 21:50	01/16/19 23:15	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.

TestAmerica Job ID: 480-147921-1

Project/Site: Former Sims Matchplate Site

<i>Surrogate</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Toluene-d8 (Surr)	100		71 - 125	01/16/19 21:50	01/16/19 23:15	1
1,2-Dichloroethane-d4 (Surr)	106		64 - 126	01/16/19 21:50	01/16/19 23:15	1
4-Bromofluorobenzene (Surr)	98		72 - 126	01/16/19 21:50	01/16/19 23:15	1
Dibromofluoromethane (Surr)	101		60 - 140	01/16/19 21:50	01/16/19 23:15	1

Lab Sample ID: LCS 480-455390/1-A

Matrix: Solid

Analysis Batch: 455386

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455390

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCS</i> <i>Result</i>	<i>LCS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>
1,1,1-Trichloroethane	50.0	47.3		ug/Kg		95	77 - 121
1,1,2,2-Tetrachloroethane	50.0	44.8		ug/Kg		90	80 - 120
1,1,2-Trichloroethane	50.0	44.5		ug/Kg		89	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.4		ug/Kg		91	60 - 140
1,1-Dichloroethane	50.0	47.1		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	46.6		ug/Kg		93	59 - 125
1,2,4-Trichlorobenzene	50.0	46.4		ug/Kg		93	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	45.7		ug/Kg		91	63 - 124
1,2-Dichlorobenzene	50.0	45.1		ug/Kg		90	75 - 120
1,2-Dichloroethane	50.0	46.9		ug/Kg		94	77 - 122
1,2-Dichloropropane	50.0	45.2		ug/Kg		90	75 - 124
1,3-Dichlorobenzene	50.0	45.6		ug/Kg		91	74 - 120
1,4-Dichlorobenzene	50.0	45.4		ug/Kg		91	73 - 120
2-Butanone (MEK)	250	255		ug/Kg		102	70 - 134
2-Hexanone	250	252		ug/Kg		101	59 - 130
4-Methyl-2-pentanone (MIBK)	250	245		ug/Kg		98	65 - 133
Acetone	250	262		ug/Kg		105	61 - 137
Benzene	50.0	46.6		ug/Kg		93	79 - 127
Bromodichloromethane	50.0	45.6		ug/Kg		91	80 - 122
Bromoform	50.0	46.7		ug/Kg		93	68 - 126
Bromomethane	50.0	45.8		ug/Kg		92	37 - 149
Carbon disulfide	50.0	45.9		ug/Kg		92	64 - 131
Carbon tetrachloride	50.0	47.5		ug/Kg		95	75 - 135
Chlorobenzene	50.0	45.4		ug/Kg		91	76 - 124
Dibromochloromethane	50.0	46.0		ug/Kg		92	76 - 125
Chloroethane	50.0	40.8		ug/Kg		82	69 - 135
Chloroform	50.0	47.0		ug/Kg		94	80 - 120
Chloromethane	50.0	50.7		ug/Kg		101	63 - 127
cis-1,2-Dichloroethene	50.0	45.9		ug/Kg		92	81 - 120
cis-1,3-Dichloropropene	50.0	45.4		ug/Kg		91	80 - 120
Cyclohexane	50.0	44.3		ug/Kg		89	65 - 120
Dichlorodifluoromethane	50.0	43.0		ug/Kg		86	57 - 142
Ethylbenzene	50.0	45.9		ug/Kg		92	80 - 120
1,2-Dibromoethane	50.0	45.4		ug/Kg		91	78 - 120
Isopropylbenzene	50.0	45.7		ug/Kg		91	72 - 120
Methyl acetate	100	96.3		ug/Kg		96	55 - 136
Methyl tert-butyl ether	50.0	47.1		ug/Kg		94	63 - 125
Methylcyclohexane	50.0	43.8		ug/Kg		88	60 - 140
Methylene Chloride	50.0	42.4		ug/Kg		85	61 - 127
Styrene	50.0	44.3		ug/Kg		89	80 - 120
Tetrachloroethene	50.0	46.5		ug/Kg		93	74 - 122
Toluene	50.0	45.4		ug/Kg		91	74 - 128
trans-1,2-Dichloroethene	50.0	47.5		ug/Kg		95	78 - 126

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

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

Lab Sample ID: LCS 480-455390/1-A

Matrix: Solid

Analysis Batch: 455386

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	45.8		ug/Kg		92	73 - 123
Trichloroethene	50.0	46.2		ug/Kg		92	77 - 129
Trichlorofluoromethane	50.0	45.2		ug/Kg		90	65 - 146
Vinyl chloride	50.0	50.8		ug/Kg		102	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		71 - 125
1,2-Dichloroethane-d4 (Surr)	104		64 - 126
4-Bromofluorobenzene (Surr)	101		72 - 126
Dibromofluoromethane (Surr)	103		60 - 140

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

Lab Sample ID: MB 480-455365/1-A

Matrix: Solid

Analysis Batch: 455504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2,4-Dinitrophenol	ND		1600	780	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2-Chloronaphthalene	ND		170	28	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2-Chlorophenol	ND		170	31	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2-Methylphenol	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2-Methylnaphthalene	ND		170	34	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2-Nitroaniline	ND		330	25	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
2-Nitrophenol	ND		170	48	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
3-Nitroaniline	ND		330	47	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4-Chloroaniline	ND		170	42	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4-Methylphenol	ND		330	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4-Nitroaniline	ND		330	88	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
4-Nitrophenol	ND		330	120	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Acenaphthene	ND		170	25	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Acenaphthylene	ND		170	22	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Acetophenone	ND		170	23	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Anthracene	ND		170	42	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Atrazine	ND		170	59	ug/Kg		01/16/19 17:14	01/17/19 20:04	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

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

Lab Sample ID: MB 480-455365/1-A

Matrix: Solid

Analysis Batch: 455504

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	ND		170	130	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Benzo[a]pyrene	ND		170	25	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Caprolactam	ND		170	51	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Carbazole	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Chrysene	ND		170	38	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Dibenzofuran	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Diethyl phthalate	ND		170	22	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Dimethyl phthalate	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Fluoranthene	ND		170	18	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Fluorene	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Hexachlorobenzene	ND		170	23	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Hexachlorobutadiene	ND		170	25	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Hexachloroethane	ND		170	22	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Isophorone	ND		170	36	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Naphthalene	ND		170	22	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Nitrobenzene	ND		170	19	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Pentachlorophenol	ND		330	170	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Phenanthrene	ND		170	25	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Phenol	ND		170	26	ug/Kg		01/16/19 17:14	01/17/19 20:04	1
Pyrene	ND		170	20	ug/Kg		01/16/19 17:14	01/17/19 20:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	83		53 - 120	01/16/19 17:14	01/17/19 20:04	1
Phenol-d5 (Surr)	84		54 - 120	01/16/19 17:14	01/17/19 20:04	1
p-Terphenyl-d14 (Surr)	108		65 - 121	01/16/19 17:14	01/17/19 20:04	1
2,4,6-Tribromophenol (Surr)	78		54 - 120	01/16/19 17:14	01/17/19 20:04	1
2-Fluorobiphenyl	91		60 - 120	01/16/19 17:14	01/17/19 20:04	1
2-Fluorophenol (Surr)	80		52 - 120	01/16/19 17:14	01/17/19 20:04	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

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

Lab Sample ID: LCS 480-455365/2-A

Matrix: Solid

Analysis Batch: 455504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1660	1590		ug/Kg		96	59 - 120
bis (2-chloroisopropyl) ether	1660	1370		ug/Kg		82	44 - 120
2,4,5-Trichlorophenol	1660	1600		ug/Kg		96	59 - 126
2,4,6-Trichlorophenol	1660	1610		ug/Kg		97	59 - 123
2,4-Dichlorophenol	1660	1630		ug/Kg		98	61 - 120
2,4-Dimethylphenol	1660	1580		ug/Kg		95	59 - 120
2,4-Dinitrophenol	3320	2660		ug/Kg		80	41 - 146
2,4-Dinitrotoluene	1660	1680		ug/Kg		101	63 - 120
2,6-Dinitrotoluene	1660	1650		ug/Kg		99	66 - 120
2-Chloronaphthalene	1660	1570		ug/Kg		94	57 - 120
2-Chlorophenol	1660	1490		ug/Kg		89	53 - 120
2-Methylphenol	1660	1520		ug/Kg		91	54 - 120
2-Methylnaphthalene	1660	1560		ug/Kg		94	59 - 120
2-Nitroaniline	1660	1590		ug/Kg		96	61 - 120
2-Nitrophenol	1660	1490		ug/Kg		90	56 - 120
3,3'-Dichlorobenzidine	3320	2460		ug/Kg		74	54 - 120
3-Nitroaniline	1660	1300		ug/Kg		78	48 - 120
4,6-Dinitro-2-methylphenol	3320	3500		ug/Kg		105	49 - 122
4-Bromophenyl phenyl ether	1660	1580		ug/Kg		95	58 - 120
4-Chloro-3-methylphenol	1660	1620		ug/Kg		97	61 - 120
4-Chloroaniline	1660	1290		ug/Kg		77	38 - 120
4-Chlorophenyl phenyl ether	1660	1640		ug/Kg		98	63 - 124
4-Methylphenol	1660	1560		ug/Kg		94	55 - 120
4-Nitroaniline	1660	1610		ug/Kg		97	56 - 120
4-Nitrophenol	3320	3350		ug/Kg		101	43 - 147
Acenaphthene	1660	1610		ug/Kg		97	62 - 120
Acenaphthylene	1660	1740		ug/Kg		105	58 - 121
Acetophenone	1660	1470		ug/Kg		89	54 - 120
Anthracene	1660	1710		ug/Kg		103	62 - 120
Atrazine	3320	3350		ug/Kg		101	60 - 127
Benzaldehyde	3320	2470		ug/Kg		74	10 - 150
Benzo[a]anthracene	1660	1590		ug/Kg		96	65 - 120
Benzo[a]pyrene	1660	1700		ug/Kg		102	64 - 120
Benzo[b]fluoranthene	1660	1720		ug/Kg		103	64 - 120
Benzo[g,h,i]perylene	1660	1660		ug/Kg		100	45 - 145
Benzo[k]fluoranthene	1660	1660		ug/Kg		100	65 - 120
Bis(2-chloroethoxy)methane	1660	1520		ug/Kg		92	55 - 120
Bis(2-chloroethyl)ether	1660	1430		ug/Kg		86	45 - 120
Bis(2-ethylhexyl) phthalate	1660	1770		ug/Kg		106	61 - 133
Butyl benzyl phthalate	1660	1660		ug/Kg		100	61 - 129
Caprolactam	3320	3220		ug/Kg		97	47 - 120
Carbazole	1660	1710		ug/Kg		103	65 - 120
Chrysene	1660	1640		ug/Kg		99	64 - 120
Dibenz(a,h)anthracene	1660	1690		ug/Kg		102	54 - 132
Di-n-butyl phthalate	1660	1740		ug/Kg		105	58 - 130
Di-n-octyl phthalate	1660	1780		ug/Kg		107	57 - 133
Dibenzofuran	1660	1680		ug/Kg		101	63 - 120
Diethyl phthalate	1660	1720		ug/Kg		104	66 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

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

Lab Sample ID: LCS 480-455365/2-A

Matrix: Solid

Analysis Batch: 455504

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dimethyl phthalate	1660	1710		ug/Kg		103	65 - 124
Fluoranthene	1660	1730		ug/Kg		104	62 - 120
Fluorene	1660	1710		ug/Kg		103	63 - 120
Hexachlorobenzene	1660	1640		ug/Kg		99	60 - 120
Hexachlorobutadiene	1660	1470		ug/Kg		88	45 - 120
Hexachlorocyclopentadiene	1660	1610		ug/Kg		97	47 - 120
Hexachloroethane	1660	1280		ug/Kg		77	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1680		ug/Kg		101	56 - 134
Isophorone	1660	1600		ug/Kg		97	56 - 120
N-Nitrosodi-n-propylamine	1660	1530		ug/Kg		92	52 - 120
N-Nitrosodiphenylamine	1660	1660		ug/Kg		100	51 - 128
Naphthalene	1660	1520		ug/Kg		91	55 - 120
Nitrobenzene	1660	1460		ug/Kg		88	54 - 120
Pentachlorophenol	3320	3440		ug/Kg		104	51 - 120
Phenanthrene	1660	1620		ug/Kg		97	60 - 120
Phenol	1660	1520		ug/Kg		92	53 - 120
Pyrene	1660	1620		ug/Kg		97	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5 (Surr)	87		53 - 120
Phenol-d5 (Surr)	92		54 - 120
p-Terphenyl-d14 (Surr)	109		65 - 121
2,4,6-Tribromophenol (Surr)	100		54 - 120
2-Fluorobiphenyl	96		60 - 120
2-Fluorophenol (Surr)	87		52 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-455210/1-A

Matrix: Solid

Analysis Batch: 455591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455210

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1221	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1232	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1242	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1248	ND		0.18	0.036	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1254	ND		0.18	0.086	mg/Kg		01/16/19 07:32	01/18/19 15:45	1
PCB-1260	ND		0.18	0.086	mg/Kg		01/16/19 07:32	01/18/19 15:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		60 - 154	01/16/19 07:32	01/18/19 15:45	1
DCB Decachlorobiphenyl	84		65 - 174	01/16/19 07:32	01/18/19 15:45	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 480-455210/2-A

Matrix: Solid

Analysis Batch: 455591

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455210

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	2.36	2.03		mg/Kg		86	51 - 185
PCB-1260	2.36	2.09		mg/Kg		89	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	87		60 - 154
DCB Decachlorobiphenyl	89		65 - 174

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-455541/1-A

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455541

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	4.4	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Antimony	0.409	J	15.0	0.40	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Arsenic	ND		2.0	0.40	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Barium	ND		0.50	0.11	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Beryllium	ND		0.20	0.028	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Cadmium	ND		0.20	0.030	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Calcium	10.19	J	49.9	3.3	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Chromium	ND		0.50	0.20	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Cobalt	ND		0.50	0.050	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Copper	ND		1.0	0.21	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Iron	ND		10	3.5	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Lead	ND		1.0	0.24	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Magnesium	2.97	J	20.0	0.93	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Manganese	ND		0.20	0.032	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Nickel	0.323	J	5.0	0.23	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Potassium	30.08		29.9	20.0	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Selenium	ND		4.0	0.40	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Silver	ND		0.60	0.20	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Thallium	ND		6.0	0.30	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Vanadium	ND		0.50	0.11	mg/Kg		01/18/19 10:20	01/21/19 10:35	1
Zinc	ND		2.0	0.64	mg/Kg		01/18/19 10:20	01/21/19 10:35	1

Lab Sample ID: MB 480-455541/1-A

Matrix: Solid

Analysis Batch: 455934

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 455541

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	50.10	J	140	13.0	mg/Kg		01/18/19 10:20	01/21/19 12:35	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

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

Lab Sample ID: LCSSRM 480-455541/2-A

Matrix: Solid

Analysis Batch: 455926

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 455541

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10100	7627		mg/Kg		75.5	41.6 - 123.8
Antimony	145	41.25		mg/Kg		28.4	10.0 - 137.2
Arsenic	171	129.7		mg/Kg		75.9	66.1 - 122.2
Barium	272	200.4		mg/Kg		73.7	71.7 - 119.5
Beryllium	102	77.53		mg/Kg		76.0	71.8 - 119.6
Cadmium	225	162.0		mg/Kg		72.0	70.2 - 117.3
Calcium	5190	3674		mg/Kg		70.8	66.7 - 117.0
Chromium	144	104.2		mg/Kg		72.4	66.1 - 122.9
Cobalt	48.8	43.03		mg/Kg		88.2	74.0 - 123.4
Copper	174	133.9		mg/Kg		77.0	71.3 - 119.0
Iron	15000	11380		mg/Kg		75.9	32.9 - 154.7
Lead	111	105.6		mg/Kg		95.2	71.0 - 128.8
Magnesium	2570	1896		mg/Kg		73.8	56.4 - 125.3
Manganese	232	211.6		mg/Kg		91.2	71.1 - 125.4
Nickel	98.3	84.17		mg/Kg		85.6	65.4 - 121.1
Potassium	2420	1808		mg/Kg		74.7	49.2 - 117.8
Selenium	206	155.8		mg/Kg		75.6	63.6 - 122.3
Silver	45.5	33.72		mg/Kg		74.1	66.2 - 124.2
Sodium	252	232.4		mg/Kg		92.2	41.7 - 131.7
Thallium	167	142.2		mg/Kg		85.1	65.9 - 121.0
Vanadium	61.8	47.39		mg/Kg		76.7	52.1 - 131.6
Zinc	207	165.9		mg/Kg		80.1	67.1 - 125.1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-456040/1-A

Matrix: Solid

Analysis Batch: 456102

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 456040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.018	0.0075	mg/Kg		01/22/19 11:10	01/22/19 13:53	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-456040/2-A ^10
Matrix: Solid
Analysis Batch: 456102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 456040

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	11.15		mg/Kg		92.9	57.3 - 133.3

Lab Sample ID: 480-147921-1 MS
Matrix: Solid
Analysis Batch: 456102

Client Sample ID: SB - 32 (0' - 5')
Prep Type: Total/NA
Prep Batch: 456040

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.018	J	0.402	0.400		mg/Kg	☼	95	80 - 120

Lab Sample ID: 480-147921-1 MSD
Matrix: Solid
Analysis Batch: 456102

Client Sample ID: SB - 32 (0' - 5')
Prep Type: Total/NA
Prep Batch: 456040

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.018	J	0.394	0.415		mg/Kg	☼	101	80 - 120	4	20

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

GC/MS VOA

Analysis Batch: 455386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-3	SB - 32 (10' - 15')	Total/NA	Solid	8260C	455390
480-147921-4	SB - 32 (15' - 20')	Total/NA	Solid	8260C	455390
480-147921-5	SB - 31 (10' - 15')	Total/NA	Solid	8260C	455390
480-147921-6	SB - 31 (15' - 20')	Total/NA	Solid	8260C	455390
480-147921-9	SB - 21 (10' - 15')	Total/NA	Solid	8260C	455390
480-147921-10	SB - 21 (15' - 20')	Total/NA	Solid	8260C	455390
MB 480-455390/2-A	Method Blank	Total/NA	Solid	8260C	455390
LCS 480-455390/1-A	Lab Control Sample	Total/NA	Solid	8260C	455390

Prep Batch: 455390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-3	SB - 32 (10' - 15')	Total/NA	Solid	5035A_L	
480-147921-4	SB - 32 (15' - 20')	Total/NA	Solid	5035A_L	
480-147921-5	SB - 31 (10' - 15')	Total/NA	Solid	5035A_L	
480-147921-6	SB - 31 (15' - 20')	Total/NA	Solid	5035A_L	
480-147921-9	SB - 21 (10' - 15')	Total/NA	Solid	5035A_L	
480-147921-10	SB - 21 (15' - 20')	Total/NA	Solid	5035A_L	
MB 480-455390/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-455390/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

GC/MS Semi VOA

Prep Batch: 455365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-2	SB - 32 (0' - 5')	Total/NA	Solid	3550C	
480-147921-8	SB - 21 (0' - 5')	Total/NA	Solid	3550C	
MB 480-455365/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-455365/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 455504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-2	SB - 32 (0' - 5')	Total/NA	Solid	8270D	455365
MB 480-455365/1-A	Method Blank	Total/NA	Solid	8270D	455365
LCS 480-455365/2-A	Lab Control Sample	Total/NA	Solid	8270D	455365

Analysis Batch: 455698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-8	SB - 21 (0' - 5')	Total/NA	Solid	8270D	455365

GC Semi VOA

Prep Batch: 455210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-2	SB - 32 (0' - 5')	Total/NA	Solid	3550C	
480-147921-8	SB - 21 (0' - 5')	Total/NA	Solid	3550C	
MB 480-455210/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-455210/2-A	Lab Control Sample	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

GC Semi VOA (Continued)

Analysis Batch: 455591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-2	SB - 32 (0' - 5')	Total/NA	Solid	8082A	455210
480-147921-8	SB - 21 (0' - 5')	Total/NA	Solid	8082A	455210
MB 480-455210/1-A	Method Blank	Total/NA	Solid	8082A	455210
LCS 480-455210/2-A	Lab Control Sample	Total/NA	Solid	8082A	455210

Metals

Prep Batch: 455541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-1	SB - 32 (0' - 5')	Total/NA	Solid	3050B	
480-147921-7	SB - 21 (0' - 5')	Total/NA	Solid	3050B	
MB 480-455541/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-455541/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 455926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-1	SB - 32 (0' - 5')	Total/NA	Solid	6010C	455541
480-147921-7	SB - 21 (0' - 5')	Total/NA	Solid	6010C	455541
MB 480-455541/1-A	Method Blank	Total/NA	Solid	6010C	455541
LCSSRM 480-455541/2-A	Lab Control Sample	Total/NA	Solid	6010C	455541

Analysis Batch: 455934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-455541/1-A	Method Blank	Total/NA	Solid	6010C	455541

Prep Batch: 456040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-1	SB - 32 (0' - 5')	Total/NA	Solid	7471B	
480-147921-7	SB - 21 (0' - 5')	Total/NA	Solid	7471B	
MB 480-456040/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-456040/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-147921-1 MS	SB - 32 (0' - 5')	Total/NA	Solid	7471B	
480-147921-1 MSD	SB - 32 (0' - 5')	Total/NA	Solid	7471B	

Analysis Batch: 456102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-1	SB - 32 (0' - 5')	Total/NA	Solid	7471B	456040
480-147921-7	SB - 21 (0' - 5')	Total/NA	Solid	7471B	456040
MB 480-456040/1-A	Method Blank	Total/NA	Solid	7471B	456040
LCSSRM 480-456040/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	456040
480-147921-1 MS	SB - 32 (0' - 5')	Total/NA	Solid	7471B	456040
480-147921-1 MSD	SB - 32 (0' - 5')	Total/NA	Solid	7471B	456040

Analysis Batch: 456166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-1	SB - 32 (0' - 5')	Total/NA	Solid	6010C	455541

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

General Chemistry

Analysis Batch: 455396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-3	SB - 32 (10' - 15')	Total/NA	Solid	Moisture	
480-147921-4	SB - 32 (15' - 20')	Total/NA	Solid	Moisture	
480-147921-5	SB - 31 (10' - 15')	Total/NA	Solid	Moisture	
480-147921-6	SB - 31 (15' - 20')	Total/NA	Solid	Moisture	
480-147921-9	SB - 21 (10' - 15')	Total/NA	Solid	Moisture	
480-147921-10	SB - 21 (15' - 20')	Total/NA	Solid	Moisture	

Analysis Batch: 455654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-147921-1	SB - 32 (0' - 5')	Total/NA	Solid	Moisture	
480-147921-2	SB - 32 (0' - 5')	Total/NA	Solid	Moisture	
480-147921-7	SB - 21 (0' - 5')	Total/NA	Solid	Moisture	
480-147921-8	SB - 21 (0' - 5')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (0' - 5')

Date Collected: 01/15/19 08:45

Date Received: 01/16/19 01:00

Lab Sample ID: 480-147921-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455654	01/18/19 09:46	KPK	TAL BUF

Client Sample ID: SB - 32 (0' - 5')

Date Collected: 01/15/19 08:45

Date Received: 01/16/19 01:00

Lab Sample ID: 480-147921-1

Matrix: Solid

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			455541	01/18/19 10:20	JMP	TAL BUF
Total/NA	Analysis	6010C		1	455926	01/21/19 11:16	LMH	TAL BUF
Total/NA	Prep	3050B			455541	01/18/19 10:20	JMP	TAL BUF
Total/NA	Analysis	6010C		5	456166	01/22/19 23:37	AMH	TAL BUF
Total/NA	Prep	7471B			456040	01/22/19 11:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	456102	01/22/19 13:55	BMB	TAL BUF

Client Sample ID: SB - 32 (0' - 5')

Date Collected: 01/15/19 08:45

Date Received: 01/16/19 01:00

Lab Sample ID: 480-147921-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455654	01/18/19 09:46	KPK	TAL BUF

Client Sample ID: SB - 32 (0' - 5')

Date Collected: 01/15/19 08:45

Date Received: 01/16/19 01:00

Lab Sample ID: 480-147921-2

Matrix: Solid

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			455365	01/16/19 17:14	ATG	TAL BUF
Total/NA	Analysis	8270D		1	455504	01/18/19 00:13	PJQ	TAL BUF
Total/NA	Prep	3550C			455210	01/16/19 08:51	SMP	TAL BUF
Total/NA	Analysis	8082A		1	455591	01/18/19 18:25	W1T	TAL BUF

Client Sample ID: SB - 32 (10' -15')

Date Collected: 01/15/19 09:15

Date Received: 01/16/19 01:00

Lab Sample ID: 480-147921-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455396	01/17/19 01:17	AEM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 32 (10' -15')

Lab Sample ID: 480-147921-3

Date Collected: 01/15/19 09:15

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455390	01/16/19 21:50	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455386	01/17/19 00:48	AMM	TAL BUF

Client Sample ID: SB - 32 (15' - 20')

Lab Sample ID: 480-147921-4

Date Collected: 01/15/19 09:15

Matrix: Solid

Date Received: 01/16/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455396	01/17/19 01:17	AEM	TAL BUF

Client Sample ID: SB - 32 (15' - 20')

Lab Sample ID: 480-147921-4

Date Collected: 01/15/19 09:15

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455390	01/16/19 21:50	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455386	01/17/19 01:14	AMM	TAL BUF

Client Sample ID: SB - 31 (10' - 15')

Lab Sample ID: 480-147921-5

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455396	01/17/19 01:17	AEM	TAL BUF

Client Sample ID: SB - 31 (10' - 15')

Lab Sample ID: 480-147921-5

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455390	01/16/19 21:50	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455386	01/17/19 01:40	AMM	TAL BUF

Client Sample ID: SB - 31 (15' - 20')

Lab Sample ID: 480-147921-6

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455396	01/17/19 01:17	AEM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 31 (15' - 20')

Lab Sample ID: 480-147921-6

Date Collected: 01/15/19 10:30

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455390	01/16/19 21:50	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455386	01/17/19 02:05	AMM	TAL BUF

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-7

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455654	01/18/19 09:46	KPK	TAL BUF

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-7

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			455541	01/18/19 10:20	JMP	TAL BUF
Total/NA	Analysis	6010C		1	455926	01/21/19 11:20	LMH	TAL BUF
Total/NA	Prep	7471B			456040	01/22/19 11:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	456102	01/22/19 14:03	BMB	TAL BUF

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-8

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455654	01/18/19 09:46	KPK	TAL BUF

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-8

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			455365	01/16/19 17:14	ATG	TAL BUF
Total/NA	Analysis	8270D		1	455698	01/18/19 14:35	RJS	TAL BUF
Total/NA	Prep	3550C			455210	01/16/19 08:51	SMP	TAL BUF
Total/NA	Analysis	8082A		1	455591	01/18/19 18:41	W1T	TAL BUF

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Client Sample ID: SB - 21 (10' - 15')

Lab Sample ID: 480-147921-9

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455396	01/17/19 01:17	AEM	TAL BUF

Client Sample ID: SB - 21 (10' - 15')

Lab Sample ID: 480-147921-9

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455390	01/16/19 21:50	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455386	01/17/19 02:31	AMM	TAL BUF

Client Sample ID: SB - 21 (15' - 20')

Lab Sample ID: 480-147921-10

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	455396	01/17/19 01:17	AEM	TAL BUF

Client Sample ID: SB - 21 (15' - 20')

Lab Sample ID: 480-147921-10

Date Collected: 01/15/19 12:00

Matrix: Solid

Date Received: 01/16/19 01:00

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			455390	01/16/19 21:50	AEM	TAL BUF
Total/NA	Analysis	8260C		1	455386	01/17/19 02:57	AMM	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147921-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	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.

TestAmerica Job ID: 480-147921-1

Project/Site: Former Sims Matchplate Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147921-1	SB - 32 (0' - 5')	Solid	01/15/19 08:45	01/16/19 01:00
480-147921-2	SB - 32 (0' - 5')	Solid	01/15/19 08:45	01/16/19 01:00
480-147921-3	SB - 32 (10' - 15')	Solid	01/15/19 09:15	01/16/19 01:00
480-147921-4	SB - 32 (15' - 20')	Solid	01/15/19 09:15	01/16/19 01:00
480-147921-5	SB - 31 (10' - 15')	Solid	01/15/19 10:30	01/16/19 01:00
480-147921-6	SB - 31 (15' - 20')	Solid	01/15/19 10:30	01/16/19 01:00
480-147921-7	SB - 21 (0' - 5')	Solid	01/15/19 12:00	01/16/19 01:00
480-147921-8	SB - 21 (0' - 5')	Solid	01/15/19 12:00	01/16/19 01:00
480-147921-9	SB - 21 (10' - 15')	Solid	01/15/19 12:00	01/16/19 01:00
480-147921-10	SB - 21 (15' - 20')	Solid	01/15/19 12:00	01/16/19 01:00

Client Information		Sample:		Lab PM:		Carrier Tracking No(s):		DOC No:	
Direct Contact: Matt Walker		Phone:		Stone, Judy L				480-122577-28125.3	
Company: C&S Engineers, Inc.		Due Date Requested:		E-Mail: judy.stone@testamericainc.com				Page Page 3 of 8	
Address: 499 Col. Eileen Collins Blvd		TAT Requested (days): 5		Field Filtered Sample (Yes or No) Perform at SQMSD (Yes or No)		8011B, 8032A, 8151A, 8270D 8011B, 8032A, 8151A, 8270D		Total Number of containers Other:	
City: Syracuse		PO #:				8011B, 8032A, 8151A, 8270D 8011B, 8032A, 8151A, 8270D			
State, Zip: NY, 13212		Purchase Order Requested							
Phone: 315-703-4323(Tel)		W/O #:							
Email: mwalker@cscos.com		Project #: 48019362		8011B, 8032A, 8151A, 8270D 8011B, 8032A, 8151A, 8270D		Total Number of containers Other:			
Project Name: Former Sims Matchplate Site		SSOW#							
Title:									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (S=solid, L=liquid, G=grab)	Field Filtered Sample (Yes or No)		Perform at SQMSD (Yes or No)	
				Preservation Code:		N N N N N		Special Instructions/Notes:	
SB-32 (0-5)		1/15/19	8:45	C	Solid	X			
SB-32 (0-5)		1/15/19	8:45	C	Solid			X	
SB-32 (10-15)		1/15/19	9:15	C	Solid			X	
SB-32 (15-20)		1/15/19	9:15	C	Solid			X	
SB-31 (10-15)		1/15/19	10:30	C	Solid			X	
SB-31 (15-20)		1/15/19	10:30	C	Solid			X	
SB-21 (0-5)		1/15/19	12:00	C	Solid	X			
SB-21 (0-5)		1/15/19	12:00	C	Solid			X	
SB-21 (10-15)		1/15/19	12:00	C	Solid			X	
SB-21 (15-20)		1/15/19	12:00	C	Solid			X	
- R6 -				Solid					
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 ☐ Radiological						☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: Wayne Rudy		Date/Time: 1/15/19 1545		Company: C&S		Received by: R. English		Date/Time: 1-18-19, 15:45	
Relinquished by: R. English		Date/Time: 1-15-19, 19:00		Company: Sgn		Received by: [Signature]		Date/Time: 01-16-19 0100	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: A Yes A No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.7 #3					

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-147921-1

Login Number: 147921

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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 (Excluding tests with immediate HTs)..	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	Freezer 1/16/19@2:15 AM
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.	True	
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 Engineers, Inc.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-148067-1

Client Project/Site: Former Sims Matchplate Site

For:

C&S Engineers, Inc.

499 Col. Eileen Collins Blvd

Syracuse, New York 13212

Attn: Matt Walker



Authorized for release by:

1/25/2019 11:53:16 AM

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery 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.
E	Result exceeded calibration range.
*	LCS or LCSD is outside acceptance limits.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Job ID: 480-148067-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-148067-1

Receipt

The samples were received on 1/18/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-455740 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: MW-1 (480-148067-1), TW-1 (480-148067-2), MW-2 (480-148067-3), TW-3 (480-148067-4), MW-3 (480-148067-5), MW-6 (480-148067-6), Dupe (480-148067-7) and Trip Blank (480-148067-8).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: TW-1 (480-148067-2), MW-3 (480-148067-5), (480-148067-B-5 MS), (480-148067-B-5 MSD) and Dupe (480-148067-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-2 (480-148067-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: TW-3 (480-148067-4). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-455755 recovered above the upper control limit for Dichlorobromomethane, Chlorodibromomethane, 1,1,2-Trichloro-1,2,2-trifluoroethane and Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: MW-3 (480-148067-5).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-455755 recovered outside control limits for the following analytes: cis-1,3-Dichloropropene and Ethylene Dibromide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-3 (480-148067-5).

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone (MEK) in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) associated with batch 480-455755. The following sample was affected: MW-3 (480-148067-5).

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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-1

Lab Sample ID: 480-148067-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.62	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: TW-1

Lab Sample ID: 480-148067-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	130		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 480-148067-3

No Detections.

Client Sample ID: TW-3

Lab Sample ID: 480-148067-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2		1.0	0.34	ug/L	1		8260C	Total/NA
Trichloroethene	0.60	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 480-148067-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	33		10	8.1	ug/L	10		8260C	Total/NA
Trichloroethene	1100	E	10	4.6	ug/L	10		8260C	Total/NA
Carbon disulfide - DL	3.9	J	20	3.8	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene - DL	35		20	16	ug/L	20		8260C	Total/NA
Trichloroethene - DL	1200	F1	20	9.2	ug/L	20		8260C	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 480-148067-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.65	J	1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: Dupe

Lab Sample ID: 480-148067-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	35		20	16	ug/L	20		8260C	Total/NA
Trichloroethene	1200		20	9.2	ug/L	20		8260C	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 480-148067-8

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-1

Lab Sample ID: 480-148067-1

Date Collected: 01/17/19 09:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	F1	1.0	0.82	ug/L			01/19/19 00:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/19/19 00:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/19/19 00:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/19/19 00:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/19/19 00:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/19/19 00:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/19/19 00:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/19/19 00:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/19/19 00:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/19/19 00:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/19/19 00:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/19/19 00:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/19/19 00:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/19/19 00:23	1
2-Hexanone	ND		5.0	1.2	ug/L			01/19/19 00:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/19/19 00:23	1
Acetone	ND		10	3.0	ug/L			01/19/19 00:23	1
Benzene	ND		1.0	0.41	ug/L			01/19/19 00:23	1
Bromodichloromethane	ND	F1	1.0	0.39	ug/L			01/19/19 00:23	1
Bromoform	ND		1.0	0.26	ug/L			01/19/19 00:23	1
Bromomethane	ND		1.0	0.69	ug/L			01/19/19 00:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/19/19 00:23	1
Carbon tetrachloride	ND	F1	1.0	0.27	ug/L			01/19/19 00:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/19/19 00:23	1
Dibromochloromethane	ND	F1	1.0	0.32	ug/L			01/19/19 00:23	1
Chloroethane	ND		1.0	0.32	ug/L			01/19/19 00:23	1
Chloroform	ND		1.0	0.34	ug/L			01/19/19 00:23	1
Chloromethane	ND		1.0	0.35	ug/L			01/19/19 00:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/19/19 00:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/19/19 00:23	1
Cyclohexane	ND		1.0	0.18	ug/L			01/19/19 00:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/19/19 00:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/19/19 00:23	1
1,2-Dibromoethane	ND	F1	1.0	0.73	ug/L			01/19/19 00:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/19/19 00:23	1
Methyl acetate	ND		2.5	1.3	ug/L			01/19/19 00:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/19/19 00:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/19/19 00:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/19/19 00:23	1
Styrene	ND		1.0	0.73	ug/L			01/19/19 00:23	1
Tetrachloroethene	ND	F1	1.0	0.36	ug/L			01/19/19 00:23	1
Toluene	ND		1.0	0.51	ug/L			01/19/19 00:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/19/19 00:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/19/19 00:23	1
Trichloroethene	0.62	J	1.0	0.46	ug/L			01/19/19 00:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/19/19 00:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/19/19 00:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/19/19 00:23	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-1

Lab Sample ID: 480-148067-1

Date Collected: 01/17/19 09:00

Matrix: Water

Date Received: 01/18/19 01:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	103		80 - 120		01/19/19 00:23	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	110		77 - 120		01/19/19 00:23	1
<i>4-Bromofluorobenzene (Surr)</i>	106		73 - 120		01/19/19 00:23	1
<i>Dibromofluoromethane (Surr)</i>	106		75 - 123		01/19/19 00:23	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: TW-1

Lab Sample ID: 480-148067-2

Date Collected: 01/17/19 10:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			01/19/19 00:49	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			01/19/19 00:49	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			01/19/19 00:49	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			01/19/19 00:49	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			01/19/19 00:49	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			01/19/19 00:49	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			01/19/19 00:49	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			01/19/19 00:49	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			01/19/19 00:49	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			01/19/19 00:49	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			01/19/19 00:49	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			01/19/19 00:49	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			01/19/19 00:49	2
2-Butanone (MEK)	ND		20	2.6	ug/L			01/19/19 00:49	2
2-Hexanone	ND		10	2.5	ug/L			01/19/19 00:49	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			01/19/19 00:49	2
Acetone	ND		20	6.0	ug/L			01/19/19 00:49	2
Benzene	ND		2.0	0.82	ug/L			01/19/19 00:49	2
Bromodichloromethane	ND		2.0	0.78	ug/L			01/19/19 00:49	2
Bromoform	ND		2.0	0.52	ug/L			01/19/19 00:49	2
Bromomethane	ND		2.0	1.4	ug/L			01/19/19 00:49	2
Carbon disulfide	ND		2.0	0.38	ug/L			01/19/19 00:49	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			01/19/19 00:49	2
Chlorobenzene	ND		2.0	1.5	ug/L			01/19/19 00:49	2
Dibromochloromethane	ND		2.0	0.64	ug/L			01/19/19 00:49	2
Chloroethane	ND		2.0	0.64	ug/L			01/19/19 00:49	2
Chloroform	ND		2.0	0.68	ug/L			01/19/19 00:49	2
Chloromethane	ND		2.0	0.70	ug/L			01/19/19 00:49	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			01/19/19 00:49	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			01/19/19 00:49	2
Cyclohexane	ND		2.0	0.36	ug/L			01/19/19 00:49	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			01/19/19 00:49	2
Ethylbenzene	ND		2.0	1.5	ug/L			01/19/19 00:49	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			01/19/19 00:49	2
Isopropylbenzene	ND		2.0	1.6	ug/L			01/19/19 00:49	2
Methyl acetate	ND		5.0	2.6	ug/L			01/19/19 00:49	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			01/19/19 00:49	2
Methylcyclohexane	ND		2.0	0.32	ug/L			01/19/19 00:49	2
Methylene Chloride	ND		2.0	0.88	ug/L			01/19/19 00:49	2
Styrene	ND		2.0	1.5	ug/L			01/19/19 00:49	2
Tetrachloroethene	ND		2.0	0.72	ug/L			01/19/19 00:49	2
Toluene	ND		2.0	1.0	ug/L			01/19/19 00:49	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			01/19/19 00:49	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			01/19/19 00:49	2
Trichloroethene	130		2.0	0.92	ug/L			01/19/19 00:49	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			01/19/19 00:49	2
Vinyl chloride	ND		2.0	1.8	ug/L			01/19/19 00:49	2
Xylenes, Total	ND		4.0	1.3	ug/L			01/19/19 00:49	2

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: TW-1

Date Collected: 01/17/19 10:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-2

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		80 - 120		01/19/19 00:49	2
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		77 - 120		01/19/19 00:49	2
<i>4-Bromofluorobenzene (Surr)</i>	105		73 - 120		01/19/19 00:49	2
<i>Dibromofluoromethane (Surr)</i>	104		75 - 123		01/19/19 00:49	2

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-2

Lab Sample ID: 480-148067-3

Date Collected: 01/17/19 11:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			01/19/19 01:16	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			01/19/19 01:16	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			01/19/19 01:16	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			01/19/19 01:16	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			01/19/19 01:16	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			01/19/19 01:16	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			01/19/19 01:16	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			01/19/19 01:16	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			01/19/19 01:16	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			01/19/19 01:16	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			01/19/19 01:16	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			01/19/19 01:16	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			01/19/19 01:16	2
2-Butanone (MEK)	ND		20	2.6	ug/L			01/19/19 01:16	2
2-Hexanone	ND		10	2.5	ug/L			01/19/19 01:16	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			01/19/19 01:16	2
Acetone	ND		20	6.0	ug/L			01/19/19 01:16	2
Benzene	ND		2.0	0.82	ug/L			01/19/19 01:16	2
Bromodichloromethane	ND		2.0	0.78	ug/L			01/19/19 01:16	2
Bromoform	ND		2.0	0.52	ug/L			01/19/19 01:16	2
Bromomethane	ND		2.0	1.4	ug/L			01/19/19 01:16	2
Carbon disulfide	ND		2.0	0.38	ug/L			01/19/19 01:16	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			01/19/19 01:16	2
Chlorobenzene	ND		2.0	1.5	ug/L			01/19/19 01:16	2
Dibromochloromethane	ND		2.0	0.64	ug/L			01/19/19 01:16	2
Chloroethane	ND		2.0	0.64	ug/L			01/19/19 01:16	2
Chloroform	ND		2.0	0.68	ug/L			01/19/19 01:16	2
Chloromethane	ND		2.0	0.70	ug/L			01/19/19 01:16	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			01/19/19 01:16	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			01/19/19 01:16	2
Cyclohexane	ND		2.0	0.36	ug/L			01/19/19 01:16	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			01/19/19 01:16	2
Ethylbenzene	ND		2.0	1.5	ug/L			01/19/19 01:16	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			01/19/19 01:16	2
Isopropylbenzene	ND		2.0	1.6	ug/L			01/19/19 01:16	2
Methyl acetate	ND		5.0	2.6	ug/L			01/19/19 01:16	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			01/19/19 01:16	2
Methylcyclohexane	ND		2.0	0.32	ug/L			01/19/19 01:16	2
Methylene Chloride	ND		2.0	0.88	ug/L			01/19/19 01:16	2
Styrene	ND		2.0	1.5	ug/L			01/19/19 01:16	2
Tetrachloroethene	ND		2.0	0.72	ug/L			01/19/19 01:16	2
Toluene	ND		2.0	1.0	ug/L			01/19/19 01:16	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			01/19/19 01:16	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			01/19/19 01:16	2
Trichloroethene	ND		2.0	0.92	ug/L			01/19/19 01:16	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			01/19/19 01:16	2
Vinyl chloride	ND		2.0	1.8	ug/L			01/19/19 01:16	2
Xylenes, Total	ND		4.0	1.3	ug/L			01/19/19 01:16	2

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-2

Date Collected: 01/17/19 11:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-3

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	101		80 - 120		01/19/19 01:16	2
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		77 - 120		01/19/19 01:16	2
<i>4-Bromofluorobenzene (Surr)</i>	104		73 - 120		01/19/19 01:16	2
<i>Dibromofluoromethane (Surr)</i>	101		75 - 123		01/19/19 01:16	2

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: TW-3

Lab Sample ID: 480-148067-4

Date Collected: 01/17/19 12:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/19/19 01:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/19/19 01:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/19/19 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/19/19 01:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/19/19 01:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/19/19 01:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/19/19 01:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/19/19 01:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/19/19 01:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/19/19 01:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/19/19 01:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/19/19 01:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/19/19 01:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/19/19 01:43	1
2-Hexanone	ND		5.0	1.2	ug/L			01/19/19 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/19/19 01:43	1
Acetone	ND		10	3.0	ug/L			01/19/19 01:43	1
Benzene	ND		1.0	0.41	ug/L			01/19/19 01:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/19/19 01:43	1
Bromoform	ND		1.0	0.26	ug/L			01/19/19 01:43	1
Bromomethane	ND		1.0	0.69	ug/L			01/19/19 01:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/19/19 01:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/19/19 01:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/19/19 01:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/19/19 01:43	1
Chloroethane	ND		1.0	0.32	ug/L			01/19/19 01:43	1
Chloroform	1.2		1.0	0.34	ug/L			01/19/19 01:43	1
Chloromethane	ND		1.0	0.35	ug/L			01/19/19 01:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/19/19 01:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/19/19 01:43	1
Cyclohexane	ND		1.0	0.18	ug/L			01/19/19 01:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/19/19 01:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/19/19 01:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/19/19 01:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/19/19 01:43	1
Methyl acetate	ND		2.5	1.3	ug/L			01/19/19 01:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/19/19 01:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/19/19 01:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/19/19 01:43	1
Styrene	ND		1.0	0.73	ug/L			01/19/19 01:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/19/19 01:43	1
Toluene	ND		1.0	0.51	ug/L			01/19/19 01:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/19/19 01:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/19/19 01:43	1
Trichloroethene	0.60	J	1.0	0.46	ug/L			01/19/19 01:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/19/19 01:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/19/19 01:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/19/19 01:43	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: TW-3

Lab Sample ID: 480-148067-4

Date Collected: 01/17/19 12:00

Matrix: Water

Date Received: 01/18/19 01:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		80 - 120		01/19/19 01:43	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		77 - 120		01/19/19 01:43	1
<i>4-Bromofluorobenzene (Surr)</i>	105		73 - 120		01/19/19 01:43	1
<i>Dibromofluoromethane (Surr)</i>	101		75 - 123		01/19/19 01:43	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-3

Lab Sample ID: 480-148067-5

Date Collected: 01/17/19 13:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			01/19/19 02:10	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			01/19/19 02:10	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			01/19/19 02:10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			01/19/19 02:10	10
1,1-Dichloroethane	ND		10	3.8	ug/L			01/19/19 02:10	10
1,1-Dichloroethene	ND		10	2.9	ug/L			01/19/19 02:10	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			01/19/19 02:10	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			01/19/19 02:10	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			01/19/19 02:10	10
1,2-Dichloroethane	ND		10	2.1	ug/L			01/19/19 02:10	10
1,2-Dichloropropane	ND		10	7.2	ug/L			01/19/19 02:10	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			01/19/19 02:10	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			01/19/19 02:10	10
2-Butanone (MEK)	ND		100	13	ug/L			01/19/19 02:10	10
2-Hexanone	ND		50	12	ug/L			01/19/19 02:10	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			01/19/19 02:10	10
Acetone	ND		100	30	ug/L			01/19/19 02:10	10
Benzene	ND		10	4.1	ug/L			01/19/19 02:10	10
Bromodichloromethane	ND		10	3.9	ug/L			01/19/19 02:10	10
Bromoform	ND		10	2.6	ug/L			01/19/19 02:10	10
Bromomethane	ND		10	6.9	ug/L			01/19/19 02:10	10
Carbon disulfide	ND		10	1.9	ug/L			01/19/19 02:10	10
Carbon tetrachloride	ND		10	2.7	ug/L			01/19/19 02:10	10
Chlorobenzene	ND		10	7.5	ug/L			01/19/19 02:10	10
Dibromochloromethane	ND		10	3.2	ug/L			01/19/19 02:10	10
Chloroethane	ND		10	3.2	ug/L			01/19/19 02:10	10
Chloroform	ND		10	3.4	ug/L			01/19/19 02:10	10
Chloromethane	ND		10	3.5	ug/L			01/19/19 02:10	10
cis-1,2-Dichloroethene	33		10	8.1	ug/L			01/19/19 02:10	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			01/19/19 02:10	10
Cyclohexane	ND		10	1.8	ug/L			01/19/19 02:10	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			01/19/19 02:10	10
Ethylbenzene	ND		10	7.4	ug/L			01/19/19 02:10	10
1,2-Dibromoethane	ND		10	7.3	ug/L			01/19/19 02:10	10
Isopropylbenzene	ND		10	7.9	ug/L			01/19/19 02:10	10
Methyl acetate	ND		25	13	ug/L			01/19/19 02:10	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			01/19/19 02:10	10
Methylcyclohexane	ND		10	1.6	ug/L			01/19/19 02:10	10
Methylene Chloride	ND		10	4.4	ug/L			01/19/19 02:10	10
Styrene	ND		10	7.3	ug/L			01/19/19 02:10	10
Tetrachloroethene	ND		10	3.6	ug/L			01/19/19 02:10	10
Toluene	ND		10	5.1	ug/L			01/19/19 02:10	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			01/19/19 02:10	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			01/19/19 02:10	10
Trichloroethene	1100	E	10	4.6	ug/L			01/19/19 02:10	10
Trichlorofluoromethane	ND		10	8.8	ug/L			01/19/19 02:10	10
Vinyl chloride	ND		10	9.0	ug/L			01/19/19 02:10	10
Xylenes, Total	ND		20	6.6	ug/L			01/19/19 02:10	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-3

Date Collected: 01/17/19 13:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		01/19/19 02:10	10
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		01/19/19 02:10	10
4-Bromofluorobenzene (Surr)	108		73 - 120		01/19/19 02:10	10
Dibromofluoromethane (Surr)	102		75 - 123		01/19/19 02:10	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			01/19/19 13:19	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			01/19/19 13:19	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			01/19/19 13:19	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			01/19/19 13:19	20
1,1-Dichloroethane	ND		20	7.6	ug/L			01/19/19 13:19	20
1,1-Dichloroethene	ND		20	5.8	ug/L			01/19/19 13:19	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			01/19/19 13:19	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			01/19/19 13:19	20
1,2-Dichlorobenzene	ND		20	16	ug/L			01/19/19 13:19	20
1,2-Dichloroethane	ND		20	4.2	ug/L			01/19/19 13:19	20
1,2-Dichloropropane	ND		20	14	ug/L			01/19/19 13:19	20
1,3-Dichlorobenzene	ND		20	16	ug/L			01/19/19 13:19	20
1,4-Dichlorobenzene	ND		20	17	ug/L			01/19/19 13:19	20
2-Butanone (MEK)	ND *		200	26	ug/L			01/19/19 13:19	20
2-Hexanone	ND		100	25	ug/L			01/19/19 13:19	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			01/19/19 13:19	20
Acetone	ND		200	60	ug/L			01/19/19 13:19	20
Benzene	ND		20	8.2	ug/L			01/19/19 13:19	20
Bromodichloromethane	ND F1		20	7.8	ug/L			01/19/19 13:19	20
Bromoform	ND		20	5.2	ug/L			01/19/19 13:19	20
Bromomethane	ND		20	14	ug/L			01/19/19 13:19	20
Carbon disulfide	3.9 J		20	3.8	ug/L			01/19/19 13:19	20
Carbon tetrachloride	ND		20	5.4	ug/L			01/19/19 13:19	20
Chlorobenzene	ND		20	15	ug/L			01/19/19 13:19	20
Dibromochloromethane	ND		20	6.4	ug/L			01/19/19 13:19	20
Chloroethane	ND		20	6.4	ug/L			01/19/19 13:19	20
Chloroform	ND		20	6.8	ug/L			01/19/19 13:19	20
Chloromethane	ND		20	7.0	ug/L			01/19/19 13:19	20
cis-1,2-Dichloroethene	35		20	16	ug/L			01/19/19 13:19	20
cis-1,3-Dichloropropene	ND *		20	7.2	ug/L			01/19/19 13:19	20
Cyclohexane	ND		20	3.6	ug/L			01/19/19 13:19	20
Dichlorodifluoromethane	ND		20	14	ug/L			01/19/19 13:19	20
Ethylbenzene	ND		20	15	ug/L			01/19/19 13:19	20
1,2-Dibromoethane	ND F1 *		20	15	ug/L			01/19/19 13:19	20
Isopropylbenzene	ND		20	16	ug/L			01/19/19 13:19	20
Methyl acetate	ND		50	26	ug/L			01/19/19 13:19	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			01/19/19 13:19	20
Methylcyclohexane	ND		20	3.2	ug/L			01/19/19 13:19	20
Methylene Chloride	ND		20	8.8	ug/L			01/19/19 13:19	20
Styrene	ND		20	15	ug/L			01/19/19 13:19	20
Tetrachloroethene	ND		20	7.2	ug/L			01/19/19 13:19	20
Toluene	ND		20	10	ug/L			01/19/19 13:19	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			01/19/19 13:19	20

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-3

Lab Sample ID: 480-148067-5

Date Collected: 01/17/19 13:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			01/19/19 13:19	20
Trichloroethene	1200	F1	20	9.2	ug/L			01/19/19 13:19	20
Trichlorofluoromethane	ND		20	18	ug/L			01/19/19 13:19	20
Vinyl chloride	ND		20	18	ug/L			01/19/19 13:19	20
Xylenes, Total	ND		40	13	ug/L			01/19/19 13:19	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120					01/19/19 13:19	20
1,2-Dichloroethane-d4 (Surr)	104		77 - 120					01/19/19 13:19	20
4-Bromofluorobenzene (Surr)	104		73 - 120					01/19/19 13:19	20
Dibromofluoromethane (Surr)	106		75 - 123					01/19/19 13:19	20

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-6

Lab Sample ID: 480-148067-6

Date Collected: 01/17/19 14:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/19/19 02:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/19/19 02:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/19/19 02:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/19/19 02:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/19/19 02:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/19/19 02:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/19/19 02:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/19/19 02:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/19/19 02:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/19/19 02:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/19/19 02:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/19/19 02:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/19/19 02:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/19/19 02:37	1
2-Hexanone	ND		5.0	1.2	ug/L			01/19/19 02:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/19/19 02:37	1
Acetone	ND		10	3.0	ug/L			01/19/19 02:37	1
Benzene	ND		1.0	0.41	ug/L			01/19/19 02:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/19/19 02:37	1
Bromoform	ND		1.0	0.26	ug/L			01/19/19 02:37	1
Bromomethane	ND		1.0	0.69	ug/L			01/19/19 02:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/19/19 02:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/19/19 02:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/19/19 02:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/19/19 02:37	1
Chloroethane	ND		1.0	0.32	ug/L			01/19/19 02:37	1
Chloroform	ND		1.0	0.34	ug/L			01/19/19 02:37	1
Chloromethane	ND		1.0	0.35	ug/L			01/19/19 02:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/19/19 02:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/19/19 02:37	1
Cyclohexane	ND		1.0	0.18	ug/L			01/19/19 02:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/19/19 02:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/19/19 02:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/19/19 02:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/19/19 02:37	1
Methyl acetate	ND		2.5	1.3	ug/L			01/19/19 02:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/19/19 02:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/19/19 02:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/19/19 02:37	1
Styrene	ND		1.0	0.73	ug/L			01/19/19 02:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/19/19 02:37	1
Toluene	ND		1.0	0.51	ug/L			01/19/19 02:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/19/19 02:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/19/19 02:37	1
Trichloroethene	0.65	J	1.0	0.46	ug/L			01/19/19 02:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/19/19 02:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/19/19 02:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/19/19 02:37	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-6

Date Collected: 01/17/19 14:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-6

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		80 - 120		01/19/19 02:37	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	106		77 - 120		01/19/19 02:37	1
<i>4-Bromofluorobenzene (Surr)</i>	106		73 - 120		01/19/19 02:37	1
<i>Dibromofluoromethane (Surr)</i>	99		75 - 123		01/19/19 02:37	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: Dupe

Date Collected: 01/17/19 15:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			01/19/19 03:04	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			01/19/19 03:04	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			01/19/19 03:04	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			01/19/19 03:04	20
1,1-Dichloroethane	ND		20	7.6	ug/L			01/19/19 03:04	20
1,1-Dichloroethene	ND		20	5.8	ug/L			01/19/19 03:04	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			01/19/19 03:04	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			01/19/19 03:04	20
1,2-Dichlorobenzene	ND		20	16	ug/L			01/19/19 03:04	20
1,2-Dichloroethane	ND		20	4.2	ug/L			01/19/19 03:04	20
1,2-Dichloropropane	ND		20	14	ug/L			01/19/19 03:04	20
1,3-Dichlorobenzene	ND		20	16	ug/L			01/19/19 03:04	20
1,4-Dichlorobenzene	ND		20	17	ug/L			01/19/19 03:04	20
2-Butanone (MEK)	ND		200	26	ug/L			01/19/19 03:04	20
2-Hexanone	ND		100	25	ug/L			01/19/19 03:04	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			01/19/19 03:04	20
Acetone	ND		200	60	ug/L			01/19/19 03:04	20
Benzene	ND		20	8.2	ug/L			01/19/19 03:04	20
Bromodichloromethane	ND		20	7.8	ug/L			01/19/19 03:04	20
Bromoform	ND		20	5.2	ug/L			01/19/19 03:04	20
Bromomethane	ND		20	14	ug/L			01/19/19 03:04	20
Carbon disulfide	ND		20	3.8	ug/L			01/19/19 03:04	20
Carbon tetrachloride	ND		20	5.4	ug/L			01/19/19 03:04	20
Chlorobenzene	ND		20	15	ug/L			01/19/19 03:04	20
Dibromochloromethane	ND		20	6.4	ug/L			01/19/19 03:04	20
Chloroethane	ND		20	6.4	ug/L			01/19/19 03:04	20
Chloroform	ND		20	6.8	ug/L			01/19/19 03:04	20
Chloromethane	ND		20	7.0	ug/L			01/19/19 03:04	20
cis-1,2-Dichloroethene	35		20	16	ug/L			01/19/19 03:04	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			01/19/19 03:04	20
Cyclohexane	ND		20	3.6	ug/L			01/19/19 03:04	20
Dichlorodifluoromethane	ND		20	14	ug/L			01/19/19 03:04	20
Ethylbenzene	ND		20	15	ug/L			01/19/19 03:04	20
1,2-Dibromoethane	ND		20	15	ug/L			01/19/19 03:04	20
Isopropylbenzene	ND		20	16	ug/L			01/19/19 03:04	20
Methyl acetate	ND		50	26	ug/L			01/19/19 03:04	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			01/19/19 03:04	20
Methylcyclohexane	ND		20	3.2	ug/L			01/19/19 03:04	20
Methylene Chloride	ND		20	8.8	ug/L			01/19/19 03:04	20
Styrene	ND		20	15	ug/L			01/19/19 03:04	20
Tetrachloroethene	ND		20	7.2	ug/L			01/19/19 03:04	20
Toluene	ND		20	10	ug/L			01/19/19 03:04	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			01/19/19 03:04	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			01/19/19 03:04	20
Trichloroethene	1200		20	9.2	ug/L			01/19/19 03:04	20
Trichlorofluoromethane	ND		20	18	ug/L			01/19/19 03:04	20
Vinyl chloride	ND		20	18	ug/L			01/19/19 03:04	20
Xylenes, Total	ND		40	13	ug/L			01/19/19 03:04	20

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: Dupe

Date Collected: 01/17/19 15:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-7

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		80 - 120		01/19/19 03:04	20
<i>1,2-Dichloroethane-d4 (Surr)</i>	105		77 - 120		01/19/19 03:04	20
<i>4-Bromofluorobenzene (Surr)</i>	102		73 - 120		01/19/19 03:04	20
<i>Dibromofluoromethane (Surr)</i>	101		75 - 123		01/19/19 03:04	20

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: Trip Blank

Lab Sample ID: 480-148067-8

Date Collected: 01/17/19 00:00

Matrix: Water

Date Received: 01/18/19 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/19/19 03:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/19/19 03:31	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/19/19 03:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/19/19 03:31	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/19/19 03:31	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/19/19 03:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/19/19 03:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/19/19 03:31	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/19/19 03:31	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/19/19 03:31	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/19/19 03:31	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/19/19 03:31	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/19/19 03:31	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/19/19 03:31	1
2-Hexanone	ND		5.0	1.2	ug/L			01/19/19 03:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/19/19 03:31	1
Acetone	ND		10	3.0	ug/L			01/19/19 03:31	1
Benzene	ND		1.0	0.41	ug/L			01/19/19 03:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/19/19 03:31	1
Bromoform	ND		1.0	0.26	ug/L			01/19/19 03:31	1
Bromomethane	ND		1.0	0.69	ug/L			01/19/19 03:31	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/19/19 03:31	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/19/19 03:31	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/19/19 03:31	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/19/19 03:31	1
Chloroethane	ND		1.0	0.32	ug/L			01/19/19 03:31	1
Chloroform	ND		1.0	0.34	ug/L			01/19/19 03:31	1
Chloromethane	ND		1.0	0.35	ug/L			01/19/19 03:31	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/19/19 03:31	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/19/19 03:31	1
Cyclohexane	ND		1.0	0.18	ug/L			01/19/19 03:31	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/19/19 03:31	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/19/19 03:31	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/19/19 03:31	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/19/19 03:31	1
Methyl acetate	ND		2.5	1.3	ug/L			01/19/19 03:31	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/19/19 03:31	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/19/19 03:31	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/19/19 03:31	1
Styrene	ND		1.0	0.73	ug/L			01/19/19 03:31	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/19/19 03:31	1
Toluene	ND		1.0	0.51	ug/L			01/19/19 03:31	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/19/19 03:31	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/19/19 03:31	1
Trichloroethene	ND		1.0	0.46	ug/L			01/19/19 03:31	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/19/19 03:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/19/19 03:31	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/19/19 03:31	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: Trip Blank

Lab Sample ID: 480-148067-8

Date Collected: 01/17/19 00:00

Matrix: Water

Date Received: 01/18/19 01:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	99		80 - 120		01/19/19 03:31	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		77 - 120		01/19/19 03:31	1
<i>4-Bromofluorobenzene (Surr)</i>	103		73 - 120		01/19/19 03:31	1
<i>Dibromofluoromethane (Surr)</i>	103		75 - 123		01/19/19 03:31	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	DCA (77-120)	BFB (73-120)	DBFM (75-123)
480-148067-1	MW-1	103	110	106	106
480-148067-1 MS	MW-1	102	105	106	105
480-148067-1 MSD	MW-1	100	107	107	108
480-148067-2	TW-1	101	106	105	104
480-148067-3	MW-2	101	101	104	101
480-148067-4	TW-3	100	106	105	101
480-148067-5	MW-3	103	106	108	102
480-148067-5 - DL	MW-3	102	104	104	106
480-148067-5 MS	MW-3	101	106	106	104
480-148067-5 MSD	MW-3	101	107	106	107
480-148067-6	MW-6	100	106	106	99
480-148067-7	Dupe	99	105	102	101
480-148067-8	Trip Blank	99	108	103	103
LCS 480-455740/5	Lab Control Sample	100	102	104	107
LCS 480-455755/5	Lab Control Sample	99	109	104	102
MB 480-455740/7	Method Blank	100	111	107	112
MB 480-455755/7	Method Blank	102	107	101	108

Surrogate Legend

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: MB 480-455740/7

Matrix: Water

Analysis Batch: 455740

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/18/19 23:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/18/19 23:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/18/19 23:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/18/19 23:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/18/19 23:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/18/19 23:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/18/19 23:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/18/19 23:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/18/19 23:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/18/19 23:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/18/19 23:22	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/18/19 23:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/18/19 23:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/18/19 23:22	1
2-Hexanone	ND		5.0	1.2	ug/L			01/18/19 23:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/18/19 23:22	1
Acetone	ND		10	3.0	ug/L			01/18/19 23:22	1
Benzene	ND		1.0	0.41	ug/L			01/18/19 23:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/18/19 23:22	1
Bromoform	ND		1.0	0.26	ug/L			01/18/19 23:22	1
Bromomethane	ND		1.0	0.69	ug/L			01/18/19 23:22	1
Carbon disulfide	0.221	J	1.0	0.19	ug/L			01/18/19 23:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/18/19 23:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/18/19 23:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/18/19 23:22	1
Chloroethane	ND		1.0	0.32	ug/L			01/18/19 23:22	1
Chloroform	ND		1.0	0.34	ug/L			01/18/19 23:22	1
Chloromethane	ND		1.0	0.35	ug/L			01/18/19 23:22	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/18/19 23:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/18/19 23:22	1
Cyclohexane	ND		1.0	0.18	ug/L			01/18/19 23:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/18/19 23:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/18/19 23:22	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/18/19 23:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/18/19 23:22	1
Methyl acetate	ND		2.5	1.3	ug/L			01/18/19 23:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/18/19 23:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/18/19 23:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/18/19 23:22	1
Styrene	ND		1.0	0.73	ug/L			01/18/19 23:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/18/19 23:22	1
Toluene	ND		1.0	0.51	ug/L			01/18/19 23:22	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/18/19 23:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/18/19 23:22	1
Trichloroethene	ND		1.0	0.46	ug/L			01/18/19 23:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/18/19 23:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/18/19 23:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/18/19 23:22	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		01/18/19 23:22	1
1,2-Dichloroethane-d4 (Surr)	111		77 - 120		01/18/19 23:22	1
4-Bromofluorobenzene (Surr)	107		73 - 120		01/18/19 23:22	1
Dibromofluoromethane (Surr)	112		75 - 123		01/18/19 23:22	1

Lab Sample ID: LCS 480-455740/5

Matrix: Water

Analysis Batch: 455740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.9		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	76 - 120
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.9		ug/L		103	61 - 148
1,1-Dichloroethane	25.0	23.3		ug/L		93	77 - 120
1,1-Dichloroethene	25.0	23.8		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.0		ug/L		104	56 - 134
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	25.0		ug/L		100	76 - 120
1,3-Dichlorobenzene	25.0	24.6		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 120
2-Butanone (MEK)	125	139		ug/L		111	57 - 140
2-Hexanone	125	127		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	124		ug/L		99	71 - 125
Acetone	125	148		ug/L		119	56 - 142
Benzene	25.0	24.8		ug/L		99	71 - 124
Bromodichloromethane	25.0	28.2		ug/L		113	80 - 122
Bromoform	25.0	28.9		ug/L		116	61 - 132
Bromomethane	25.0	23.2		ug/L		93	55 - 144
Carbon disulfide	25.0	21.0		ug/L		84	59 - 134
Carbon tetrachloride	25.0	27.6		ug/L		111	72 - 134
Chlorobenzene	25.0	24.6		ug/L		98	80 - 120
Dibromochloromethane	25.0	29.6		ug/L		118	75 - 125
Chloroethane	25.0	23.5		ug/L		94	69 - 136
Chloroform	25.0	24.4		ug/L		98	73 - 127
Chloromethane	25.0	19.5		ug/L		78	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	28.2		ug/L		113	74 - 124
Cyclohexane	25.0	25.3		ug/L		101	59 - 135
Dichlorodifluoromethane	25.0	17.1		ug/L		68	59 - 135
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	27.7		ug/L		111	77 - 120
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	50.0	47.3		ug/L		95	74 - 133
Methyl tert-butyl ether	25.0	24.9		ug/L		100	77 - 120
Methylcyclohexane	25.0	25.3		ug/L		101	68 - 134
Methylene Chloride	25.0	22.9		ug/L		92	75 - 124
Styrene	25.0	25.1		ug/L		100	80 - 120
Tetrachloroethene	25.0	25.7		ug/L		103	74 - 122
Toluene	25.0	24.2		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	24.5		ug/L		98	73 - 127

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: LCS 480-455740/5

Matrix: Water

Analysis Batch: 455740

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	25.0	27.6		ug/L		110	80 - 120
Trichloroethene	25.0	25.3		ug/L		101	74 - 123
Trichlorofluoromethane	25.0	24.6		ug/L		98	62 - 150
Vinyl chloride	25.0	20.3		ug/L		81	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	104		73 - 120
Dibromofluoromethane (Surr)	107		75 - 123

Lab Sample ID: 480-148067-1 MS

Matrix: Water

Analysis Batch: 455740

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	F1	25.0	31.8	F1	ug/L		127	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	28.1		ug/L		112	76 - 120
1,1,2-Trichloroethane	ND		25.0	28.3		ug/L		113	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	29.1		ug/L		116	61 - 148
1,1-Dichloroethane	ND		25.0	27.5		ug/L		110	77 - 120
1,1-Dichloroethene	ND		25.0	30.3		ug/L		121	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	25.3		ug/L		101	79 - 122
1,2-Dibromo-3-Chloropropane	ND		25.0	26.4		ug/L		106	56 - 134
1,2-Dichlorobenzene	ND		25.0	27.4		ug/L		110	80 - 124
1,2-Dichloroethane	ND		25.0	28.1		ug/L		112	75 - 120
1,2-Dichloropropane	ND		25.0	28.4		ug/L		113	76 - 120
1,3-Dichlorobenzene	ND		25.0	27.5		ug/L		110	77 - 120
1,4-Dichlorobenzene	ND		25.0	27.1		ug/L		109	78 - 124
2-Butanone (MEK)	ND		125	151		ug/L		121	57 - 140
2-Hexanone	ND		125	144		ug/L		115	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	138		ug/L		110	71 - 125
Acetone	ND		125	134		ug/L		107	56 - 142
Benzene	ND		25.0	29.2		ug/L		117	71 - 124
Bromodichloromethane	ND	F1	25.0	31.1	F1	ug/L		125	80 - 122
Bromoform	ND		25.0	29.4		ug/L		118	61 - 132
Bromomethane	ND		25.0	29.0		ug/L		116	55 - 144
Carbon disulfide	ND		25.0	25.1		ug/L		100	59 - 134
Carbon tetrachloride	ND	F1	25.0	34.6	F1	ug/L		138	72 - 134
Chlorobenzene	ND		25.0	29.2		ug/L		117	80 - 120
Dibromochloromethane	ND	F1	25.0	32.2	F1	ug/L		129	75 - 125
Chloroethane	ND		25.0	28.9		ug/L		116	69 - 136
Chloroform	ND		25.0	27.8		ug/L		111	73 - 127
Chloromethane	ND		25.0	24.6		ug/L		98	68 - 124
cis-1,2-Dichloroethene	ND		25.0	27.6		ug/L		111	74 - 124
cis-1,3-Dichloropropene	ND		25.0	30.3		ug/L		121	74 - 124
Cyclohexane	ND		25.0	29.6		ug/L		119	59 - 135

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: 480-148067-1 MS

Matrix: Water

Analysis Batch: 455740

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	ND		25.0	20.6		ug/L		82	59 - 135
Ethylbenzene	ND		25.0	29.4		ug/L		118	77 - 123
1,2-Dibromoethane	ND	F1	25.0	31.8	F1	ug/L		127	77 - 120
Isopropylbenzene	ND		25.0	29.8		ug/L		119	77 - 122
Methyl acetate	ND		50.0	50.7		ug/L		101	74 - 133
Methyl tert-butyl ether	ND		25.0	27.0		ug/L		108	77 - 120
Methylcyclohexane	ND		25.0	28.8		ug/L		115	68 - 134
Methylene Chloride	ND		25.0	25.4		ug/L		102	75 - 124
Styrene	ND		25.0	29.7		ug/L		119	80 - 120
Tetrachloroethene	ND	F1	25.0	32.8	F1	ug/L		131	74 - 122
Toluene	ND		25.0	28.9		ug/L		116	80 - 122
trans-1,2-Dichloroethene	ND		25.0	28.8		ug/L		115	73 - 127
trans-1,3-Dichloropropene	ND		25.0	29.9		ug/L		119	80 - 120
Trichloroethene	0.62	J	25.0	30.3		ug/L		119	74 - 123
Trichlorofluoromethane	ND		25.0	30.7		ug/L		123	62 - 150
Vinyl chloride	ND		25.0	27.3		ug/L		109	65 - 133
Surrogate	MS %Recovery	MS Qualifier	Limits						
Toluene-d8 (Surr)	102		80 - 120						
1,2-Dichloroethane-d4 (Surr)	105		77 - 120						
4-Bromofluorobenzene (Surr)	106		73 - 120						
Dibromofluoromethane (Surr)	105		75 - 123						

Lab Sample ID: 480-148067-1 MSD

Matrix: Water

Analysis Batch: 455740

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND	F1	25.0	31.8	F1	ug/L		127	73 - 126	0	15
1,1,1,2-Tetrachloroethane	ND		25.0	27.8		ug/L		111	76 - 120	1	15
1,1,1,2-Trichloroethane	ND		25.0	26.9		ug/L		107	76 - 122	5	15
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	29.6		ug/L		118	61 - 148	2	20
1,1-Dichloroethane	ND		25.0	27.7		ug/L		111	77 - 120	1	20
1,1-Dichloroethene	ND		25.0	30.8		ug/L		123	66 - 127	2	16
1,2,4-Trichlorobenzene	ND		25.0	25.5		ug/L		102	79 - 122	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	27.2		ug/L		109	56 - 134	3	15
1,2-Dichlorobenzene	ND		25.0	26.7		ug/L		107	80 - 124	3	20
1,2-Dichloroethane	ND		25.0	27.7		ug/L		111	75 - 120	1	20
1,2-Dichloropropane	ND		25.0	27.2		ug/L		109	76 - 120	4	20
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	77 - 120	4	20
1,4-Dichlorobenzene	ND		25.0	26.4		ug/L		106	78 - 124	3	20
2-Butanone (MEK)	ND		125	143		ug/L		115	57 - 140	5	20
2-Hexanone	ND		125	133		ug/L		107	65 - 127	8	15
4-Methyl-2-pentanone (MIBK)	ND		125	132		ug/L		106	71 - 125	4	35
Acetone	ND		125	133		ug/L		106	56 - 142	1	15
Benzene	ND		25.0	28.7		ug/L		115	71 - 124	2	13
Bromodichloromethane	ND	F1	25.0	30.8	F1	ug/L		123	80 - 122	1	15

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: 480-148067-1 MSD

Matrix: Water

Analysis Batch: 455740

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		25.0	29.5		ug/L		118	61 - 132	0	15
Bromomethane	ND		25.0	27.7		ug/L		111	55 - 144	5	15
Carbon disulfide	ND		25.0	26.2		ug/L		105	59 - 134	4	15
Carbon tetrachloride	ND	F1	25.0	34.5	F1	ug/L		138	72 - 134	0	15
Chlorobenzene	ND		25.0	27.0		ug/L		108	80 - 120	8	25
Dibromochloromethane	ND	F1	25.0	30.8		ug/L		123	75 - 125	5	15
Chloroethane	ND		25.0	28.6		ug/L		114	69 - 136	1	15
Chloroform	ND		25.0	27.9		ug/L		112	73 - 127	1	20
Chloromethane	ND		25.0	24.8		ug/L		99	68 - 124	1	15
cis-1,2-Dichloroethene	ND		25.0	27.8		ug/L		111	74 - 124	1	15
cis-1,3-Dichloropropene	ND		25.0	29.6		ug/L		118	74 - 124	3	15
Cyclohexane	ND		25.0	29.5		ug/L		118	59 - 135	0	20
Dichlorodifluoromethane	ND		25.0	20.5		ug/L		82	59 - 135	0	20
Ethylbenzene	ND		25.0	27.9		ug/L		112	77 - 123	5	15
1,2-Dibromoethane	ND	F1	25.0	30.0		ug/L		120	77 - 120	6	15
Isopropylbenzene	ND		25.0	29.2		ug/L		117	77 - 122	2	20
Methyl acetate	ND		50.0	50.4		ug/L		101	74 - 133	0	20
Methyl tert-butyl ether	ND		25.0	27.0		ug/L		108	77 - 120	0	37
Methylcyclohexane	ND		25.0	28.9		ug/L		116	68 - 134	0	20
Methylene Chloride	ND		25.0	25.7		ug/L		103	75 - 124	1	15
Styrene	ND		25.0	28.0		ug/L		112	80 - 120	6	20
Tetrachloroethene	ND	F1	25.0	31.0	F1	ug/L		124	74 - 122	6	20
Toluene	ND		25.0	27.5		ug/L		110	80 - 122	5	15
trans-1,2-Dichloroethene	ND		25.0	29.1		ug/L		116	73 - 127	1	20
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	80 - 120	6	15
Trichloroethene	0.62	J	25.0	30.8		ug/L		121	74 - 123	2	16
Trichlorofluoromethane	ND		25.0	30.9		ug/L		124	62 - 150	1	20
Vinyl chloride	ND		25.0	28.0		ug/L		112	65 - 133	3	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	107		77 - 120
4-Bromofluorobenzene (Surr)	107		73 - 120
Dibromofluoromethane (Surr)	108		75 - 123

Lab Sample ID: MB 480-455755/7

Matrix: Water

Analysis Batch: 455755

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/19/19 12:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/19/19 12:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/19/19 12:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/19/19 12:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/19/19 12:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/19/19 12:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/19/19 12:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/19/19 12:43	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: MB 480-455755/7

Matrix: Water

Analysis Batch: 455755

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/19/19 12:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/19/19 12:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/19/19 12:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/19/19 12:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/19/19 12:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/19/19 12:43	1
2-Hexanone	ND		5.0	1.2	ug/L			01/19/19 12:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/19/19 12:43	1
Acetone	ND		10	3.0	ug/L			01/19/19 12:43	1
Benzene	ND		1.0	0.41	ug/L			01/19/19 12:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/19/19 12:43	1
Bromoform	ND		1.0	0.26	ug/L			01/19/19 12:43	1
Bromomethane	ND		1.0	0.69	ug/L			01/19/19 12:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/19/19 12:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/19/19 12:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/19/19 12:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/19/19 12:43	1
Chloroethane	ND		1.0	0.32	ug/L			01/19/19 12:43	1
Chloroform	ND		1.0	0.34	ug/L			01/19/19 12:43	1
Chloromethane	ND		1.0	0.35	ug/L			01/19/19 12:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/19/19 12:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/19/19 12:43	1
Cyclohexane	ND		1.0	0.18	ug/L			01/19/19 12:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/19/19 12:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/19/19 12:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/19/19 12:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/19/19 12:43	1
Methyl acetate	ND		2.5	1.3	ug/L			01/19/19 12:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/19/19 12:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/19/19 12:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/19/19 12:43	1
Styrene	ND		1.0	0.73	ug/L			01/19/19 12:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/19/19 12:43	1
Toluene	ND		1.0	0.51	ug/L			01/19/19 12:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/19/19 12:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/19/19 12:43	1
Trichloroethene	ND		1.0	0.46	ug/L			01/19/19 12:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/19/19 12:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/19/19 12:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/19/19 12:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		01/19/19 12:43	1
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		01/19/19 12:43	1
4-Bromofluorobenzene (Surr)	101		73 - 120		01/19/19 12:43	1
Dibromofluoromethane (Surr)	108		75 - 123		01/19/19 12:43	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: LCS 480-455755/5

Matrix: Water

Analysis Batch: 455755

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	73 - 126
1,1,2,2-Tetrachloroethane	25.0	27.6		ug/L		110	76 - 120
1,1,2-Trichloroethane	25.0	26.3		ug/L		105	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.4		ug/L		98	61 - 148
1,1-Dichloroethane	25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	24.1		ug/L		96	66 - 127
1,2,4-Trichlorobenzene	25.0	25.1		ug/L		100	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	27.2		ug/L		109	56 - 134
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	26.8		ug/L		107	75 - 120
1,2-Dichloropropane	25.0	25.5		ug/L		102	76 - 120
1,3-Dichlorobenzene	25.0	24.9		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		101	80 - 120
2-Butanone (MEK)	125	201	*	ug/L		161	57 - 140
2-Hexanone	125	139		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		104	71 - 125
Acetone	125	163		ug/L		131	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromodichloromethane	25.0	29.8		ug/L		119	80 - 122
Bromoform	25.0	29.6		ug/L		118	61 - 132
Bromomethane	25.0	23.5		ug/L		94	55 - 144
Carbon disulfide	25.0	21.5		ug/L		86	59 - 134
Carbon tetrachloride	25.0	27.0		ug/L		108	72 - 134
Chlorobenzene	25.0	25.7		ug/L		103	80 - 120
Dibromochloromethane	25.0	30.9		ug/L		124	75 - 125
Chloroethane	25.0	22.9		ug/L		92	69 - 136
Chloroform	25.0	24.9		ug/L		100	73 - 127
Chloromethane	25.0	20.7		ug/L		83	68 - 124
cis-1,2-Dichloroethene	25.0	24.6		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	31.4	*	ug/L		125	74 - 124
Cyclohexane	25.0	24.2		ug/L		97	59 - 135
Dichlorodifluoromethane	25.0	19.7		ug/L		79	59 - 135
Ethylbenzene	25.0	24.4		ug/L		97	77 - 123
1,2-Dibromoethane	25.0	30.2	*	ug/L		121	77 - 120
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	50.0	51.7		ug/L		103	74 - 133
Methyl tert-butyl ether	25.0	26.3		ug/L		105	77 - 120
Methylcyclohexane	25.0	25.4		ug/L		102	68 - 134
Methylene Chloride	25.0	24.1		ug/L		96	75 - 124
Styrene	25.0	26.2		ug/L		105	80 - 120
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	24.9		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	29.9		ug/L		120	80 - 120
Trichloroethene	25.0	26.0		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	22.1		ug/L		89	62 - 150
Vinyl chloride	25.0	21.2		ug/L		85	65 - 133

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: LCS 480-455755/5

Matrix: Water

Analysis Batch: 455755

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	109		77 - 120
4-Bromofluorobenzene (Surr)	104		73 - 120
Dibromofluoromethane (Surr)	102		75 - 123

Lab Sample ID: 480-148067-5 MS

Matrix: Water

Analysis Batch: 455755

Client Sample ID: MW-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		500	601		ug/L		120	73 - 126
1,1,2,2-Tetrachloroethane	ND		500	527		ug/L		105	76 - 120
1,1,2-Trichloroethane	ND		500	539		ug/L		108	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	657		ug/L		131	61 - 148
1,1-Dichloroethane	ND		500	535		ug/L		107	77 - 120
1,1-Dichloroethene	ND		500	599		ug/L		120	66 - 127
1,2,4-Trichlorobenzene	ND		500	477		ug/L		95	79 - 122
1,2-Dibromo-3-Chloropropane	ND		500	482		ug/L		96	56 - 134
1,2-Dichlorobenzene	ND		500	514		ug/L		103	80 - 124
1,2-Dichloroethane	ND		500	536		ug/L		107	75 - 120
1,2-Dichloropropane	ND		500	537		ug/L		107	76 - 120
1,3-Dichlorobenzene	ND		500	510		ug/L		102	77 - 120
1,4-Dichlorobenzene	ND		500	509		ug/L		102	78 - 124
2-Butanone (MEK)	ND	*	2500	2850		ug/L		114	57 - 140
2-Hexanone	ND		2500	2720		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		2500	2580		ug/L		103	71 - 125
Acetone	ND		2500	2520		ug/L		101	56 - 142
Benzene	ND		500	569		ug/L		114	71 - 124
Bromodichloromethane	ND	F1	500	615	F1	ug/L		123	80 - 122
Bromoform	ND		500	549		ug/L		110	61 - 132
Bromomethane	ND		500	526		ug/L		105	55 - 144
Carbon disulfide	3.9	J	500	508		ug/L		101	59 - 134
Carbon tetrachloride	ND		500	657		ug/L		131	72 - 134
Chlorobenzene	ND		500	543		ug/L		109	80 - 120
Dibromochloromethane	ND		500	588		ug/L		118	75 - 125
Chloroethane	ND		500	517		ug/L		103	69 - 136
Chloroform	ND		500	545		ug/L		109	73 - 127
Chloromethane	ND		500	480		ug/L		96	68 - 124
cis-1,2-Dichloroethene	35		500	571		ug/L		107	74 - 124
cis-1,3-Dichloropropene	ND	*	500	588		ug/L		118	74 - 124
Cyclohexane	ND		500	619		ug/L		124	59 - 135
Dichlorodifluoromethane	ND		500	531		ug/L		106	59 - 135
Ethylbenzene	ND		500	549		ug/L		110	77 - 123
1,2-Dibromoethane	ND	F1 *	500	586		ug/L		117	77 - 120
Isopropylbenzene	ND		500	544		ug/L		109	77 - 122
Methyl acetate	ND		1000	1010		ug/L		101	74 - 133
Methyl tert-butyl ether	ND		500	536		ug/L		107	77 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: 480-148067-5 MS

Matrix: Water

Analysis Batch: 455755

Client Sample ID: MW-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylcyclohexane	ND		500	616		ug/L		123	68 - 134
Methylene Chloride	ND		500	504		ug/L		101	75 - 124
Styrene	ND		500	549		ug/L		110	80 - 120
Tetrachloroethene	ND		500	609		ug/L		122	74 - 122
Toluene	ND		500	540		ug/L		108	80 - 122
trans-1,2-Dichloroethene	ND		500	559		ug/L		112	73 - 127
trans-1,3-Dichloropropene	ND		500	558		ug/L		112	80 - 120
Trichloroethene	1200	F1	500	1540		ug/L		77	74 - 123
Trichlorofluoromethane	ND		500	600		ug/L		120	62 - 150
Vinyl chloride	ND		500	524		ug/L		105	65 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	106		73 - 120
Dibromofluoromethane (Surr)	104		75 - 123

Lab Sample ID: 480-148067-5 MSD

Matrix: Water

Analysis Batch: 455755

Client Sample ID: MW-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		500	581		ug/L		116	73 - 126	3	15
1,1,1,2,2-Tetrachloroethane	ND		500	534		ug/L		107	76 - 120	1	15
1,1,1,2-Trichloroethane	ND		500	537		ug/L		107	76 - 122	0	15
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	611		ug/L		122	61 - 148	7	20
1,1-Dichloroethane	ND		500	519		ug/L		104	77 - 120	3	20
1,1-Dichloroethene	ND		500	566		ug/L		113	66 - 127	6	16
1,2,4-Trichlorobenzene	ND		500	466		ug/L		93	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		500	518		ug/L		104	56 - 134	7	15
1,2-Dichlorobenzene	ND		500	514		ug/L		103	80 - 124	0	20
1,2-Dichloroethane	ND		500	532		ug/L		106	75 - 120	1	20
1,2-Dichloropropane	ND		500	546		ug/L		109	76 - 120	2	20
1,3-Dichlorobenzene	ND		500	513		ug/L		103	77 - 120	1	20
1,4-Dichlorobenzene	ND		500	519		ug/L		104	78 - 124	2	20
2-Butanone (MEK)	ND	*	2500	2950		ug/L		118	57 - 140	3	20
2-Hexanone	ND		2500	2810		ug/L		113	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)	ND		2500	2590		ug/L		104	71 - 125	0	35
Acetone	ND		2500	2540		ug/L		102	56 - 142	1	15
Benzene	ND		500	550		ug/L		110	71 - 124	3	13
Bromodichloromethane	ND	F1	500	608		ug/L		122	80 - 122	1	15
Bromoform	ND		500	565		ug/L		113	61 - 132	3	15
Bromomethane	ND		500	502		ug/L		100	55 - 144	5	15
Carbon disulfide	3.9	J	500	479		ug/L		95	59 - 134	6	15
Carbon tetrachloride	ND		500	643		ug/L		129	72 - 134	2	15
Chlorobenzene	ND		500	535		ug/L		107	80 - 120	1	25
Dibromochloromethane	ND		500	598		ug/L		120	75 - 125	2	15

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

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

Lab Sample ID: 480-148067-5 MSD

Matrix: Water

Analysis Batch: 455755

Client Sample ID: MW-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroethane	ND		500	498		ug/L		100	69 - 136	4	15
Chloroform	ND		500	529		ug/L		106	73 - 127	3	20
Chloromethane	ND		500	452		ug/L		90	68 - 124	6	15
cis-1,2-Dichloroethene	35		500	542		ug/L		101	74 - 124	5	15
cis-1,3-Dichloropropene	ND	*	500	618		ug/L		124	74 - 124	5	15
Cyclohexane	ND		500	600		ug/L		120	59 - 135	3	20
Dichlorodifluoromethane	ND		500	497		ug/L		99	59 - 135	7	20
Ethylbenzene	ND		500	525		ug/L		105	77 - 123	4	15
1,2-Dibromoethane	ND	F1 *	500	607	F1	ug/L		121	77 - 120	3	15
Isopropylbenzene	ND		500	533		ug/L		107	77 - 122	2	20
Methyl acetate	ND		1000	1010		ug/L		101	74 - 133	0	20
Methyl tert-butyl ether	ND		500	521		ug/L		104	77 - 120	3	37
Methylcyclohexane	ND		500	585		ug/L		117	68 - 134	5	20
Methylene Chloride	ND		500	494		ug/L		99	75 - 124	2	15
Styrene	ND		500	544		ug/L		109	80 - 120	1	20
Tetrachloroethene	ND		500	588		ug/L		118	74 - 122	3	20
Toluene	ND		500	527		ug/L		105	80 - 122	2	15
trans-1,2-Dichloroethene	ND		500	544		ug/L		109	73 - 127	3	20
trans-1,3-Dichloropropene	ND		500	575		ug/L		115	80 - 120	3	15
Trichloroethene	1200	F1	500	1510	F1	ug/L		71	74 - 123	2	16
Trichlorofluoromethane	ND		500	563		ug/L		113	62 - 150	6	20
Vinyl chloride	ND		500	494		ug/L		99	65 - 133	6	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	107		77 - 120
4-Bromofluorobenzene (Surr)	106		73 - 120
Dibromofluoromethane (Surr)	107		75 - 123

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

GC/MS VOA

Analysis Batch: 455740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148067-1	MW-1	Total/NA	Water	8260C	
480-148067-2	TW-1	Total/NA	Water	8260C	
480-148067-3	MW-2	Total/NA	Water	8260C	
480-148067-4	TW-3	Total/NA	Water	8260C	
480-148067-5	MW-3	Total/NA	Water	8260C	
480-148067-6	MW-6	Total/NA	Water	8260C	
480-148067-7	Dupe	Total/NA	Water	8260C	
480-148067-8	Trip Blank	Total/NA	Water	8260C	
MB 480-455740/7	Method Blank	Total/NA	Water	8260C	
LCS 480-455740/5	Lab Control Sample	Total/NA	Water	8260C	
480-148067-1 MS	MW-1	Total/NA	Water	8260C	
480-148067-1 MSD	MW-1	Total/NA	Water	8260C	

Analysis Batch: 455755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148067-5 - DL	MW-3	Total/NA	Water	8260C	
MB 480-455755/7	Method Blank	Total/NA	Water	8260C	
LCS 480-455755/5	Lab Control Sample	Total/NA	Water	8260C	
480-148067-5 MS	MW-3	Total/NA	Water	8260C	
480-148067-5 MSD	MW-3	Total/NA	Water	8260C	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: MW-1

Date Collected: 01/17/19 09:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	455740	01/19/19 00:23	OMI	TAL BUF

Client Sample ID: TW-1

Date Collected: 01/17/19 10:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	455740	01/19/19 00:49	OMI	TAL BUF

Client Sample ID: MW-2

Date Collected: 01/17/19 11:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	455740	01/19/19 01:16	OMI	TAL BUF

Client Sample ID: TW-3

Date Collected: 01/17/19 12:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	455740	01/19/19 01:43	OMI	TAL BUF

Client Sample ID: MW-3

Date Collected: 01/17/19 13:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	455740	01/19/19 02:10	OMI	TAL BUF
Total/NA	Analysis	8260C	DL	20	455755	01/19/19 13:19	KMN	TAL BUF

Client Sample ID: MW-6

Date Collected: 01/17/19 14:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	455740	01/19/19 02:37	OMI	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Client Sample ID: Dupe

Date Collected: 01/17/19 15:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	455740	01/19/19 03:04	OMI	TAL BUF

Client Sample ID: Trip Blank

Date Collected: 01/17/19 00:00

Date Received: 01/18/19 01:00

Lab Sample ID: 480-148067-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	455740	01/19/19 03:31	OMI	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

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Method Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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.

TestAmerica Job ID: 480-148067-1

Project/Site: Former Sims Matchplate Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-148067-1	MW-1	Water	01/17/19 09:00	01/18/19 01:00
480-148067-2	TW-1	Water	01/17/19 10:00	01/18/19 01:00
480-148067-3	MW-2	Water	01/17/19 11:00	01/18/19 01:00
480-148067-4	TW-3	Water	01/17/19 12:00	01/18/19 01:00
480-148067-5	MW-3	Water	01/17/19 13:00	01/18/19 01:00
480-148067-6	MW-6	Water	01/17/19 14:00	01/18/19 01:00
480-148067-7	Dupe	Water	01/17/19 15:00	01/18/19 01:00
480-148067-8	Trip Blank	Water	01/17/19 00:00	01/18/19 01:00

Client Information		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122578-28126.1	
Client Contact: Matt Walker		E-Mail: judy.stone@testamericainc.com		Page 1 of 1	
Company: C&S Engineers, Inc.		Due Date Requested:		Job #:	
Address: 499 Col. Eileen Collins Blvd		TAT Requested (days):		Preservation Codes:	
City: Syracuse		Standard		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
State, Zip: NY, 13212		PO #:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Phone: 315-703-4323(Tel)		Purchase Order Requested		Total Number of Containers	
Email: mawalker@cscos.com		WO #:		480-148067 COC	
Project Name: Former Sims Matchplate Site		Project #:		Special Instructions/Note:	
Site: 48019352		SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, B=solid, O=wasteoil, BT=Tissue, A=AU)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL list OLM04.2	Analysis Requested	Preservation Codes
MW-1	1-17-19	9:00		Water	X	X			
TW-1	1-17-19	10:00		Water	X	X			
MW-2	1-17-19	11:00		Water	X	X			
TW-3	1-17-19	12:00		Water	X	X			
MW-3	1-17-19	13:00		Water	X	X			
MW-6	1-17-19	14:00		Water	X	X			
Dupe	1-17-19	15:00		Water	X	X			
1-17-19 AP				Water					
				Water					
				Water					
				Water					
				Water					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological
 Deliverable Requested: I, II, III, IV, V Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: 1/17/19 15:30 Company: C.S. Relinquished by: 1-17-19, 19:10 Company: C.S. Relinquished by: 1-17-19, 19:10 Company: C.S.

Custody Seal No.: ☐ Yes ☐ No ☐ Delta

Cooler Temperature(s) °C and Other Remarks: 4.8

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-148067-1

Login Number: 148067

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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 (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	One container was broken (MW-1 MS)
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.	True	
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 Engineers, Inc.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-148804-1

Client Project/Site: Former Sims Matchplate Site

Revision: 1

For:

C&S Engineers, Inc.

499 Col. Eileen Collins Blvd

Syracuse, New York 13212

Attn: Matt Walker



Authorized for release by:

2/19/2019 2:30:45 PM

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

LINKS

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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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Qualifiers

GC/MS 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.
*	LCS or LCSD is outside acceptance limits.

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.
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

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.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F4	MS/MSD RPD exceeds control limits due to sample size difference.
B	Compound was found in the blank and sample.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)

TestAmerica Buffalo

Definitions/Glossary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Glossary (Continued)

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

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Case Narrative

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Job ID: 480-148804-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-148804-1

Revision (1)

The report has been revised to remove an unnecessary comment from the narrative. The comment in Organic Prep section about pesticides by 3510 has been removed.

Receipt

The samples were received on 2/8/2019 3:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-7 (480-148804-16). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-458448 recovered outside control limits for the following analyte: Dichlorodifluoromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-7 (480-148804-16) and Trip Blank (480-148804-17).

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: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base surrogate to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (6 -12) (480-148804-6), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12) and (480-148804-B-3-B MS). These results have been reported and qualified.

Method(s) 8270D: The following samples were diluted due to color and viscosity: SS - 1 (0 -2) (480-148804-1), SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (0 -2) (480-148804-5), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14), SS - 8 (6 -12) (480-148804-15), (480-148804-B-3-B MS) and (480-148804-B-3-C MSD). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 480-458568 and analytical batch 480-458762 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-458568 and analytical batch 480-458762 were diluted below the method detection limit (MDL) for 2,4-Dinitrophenol and therefore percent recovery and RPD were not calculated. The associated laboratory control sample (LCS) recovery was within acceptance limits.

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 following samples were diluted due to the nature of the sample matrix: SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8) and SS - 7 (6 -12) (480-148804-13). As such, surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: For method 8081, the recovery of the one surrogate in samples SS - 3 (0 -2) (480-148804-5), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 8 (0 -2) (480-148804-14), SS - 8 (6 -12) (480-148804-15), (480-148804-A-14-B MS) and (480-148804-B-14-E MSD) exceeds quality control limits due to the sample matrix. The recovery of the secondary surrogate is within quality control criteria; no corrective action is required.

Case Narrative

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Job ID: 480-148804-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: SS - 5 (0 -2) (480-148804-9) and SS - 5 (6 -12) (480-148804-10). Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 480-458779 and analytical batch 480-458894 were outside control limits: (480-148804-A-14-B MS) and (480-148804-B-14-E MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8081B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-458779 and analytical batch 480-458894 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8081B: All primary data for analytical batch 458894 are reported from the RTX-CLPII column.

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-458420/6 and CCV 480-458420/32) that had recoveries for the surrogate Decachlorobiphenyl slightly below acceptance limits: SS - 1 (0 -2) (480-148804-1), SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (0 -2) (480-148804-5), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14) and SS - 8 (6 -12) (480-148804-15). The secondary surrogate Tetrachloro-m-xylene is within limits. Therefore, the data have been reported.

Method(s) 8082A: Surrogate recoveries for the following samples were outside control limits: SS - 2 (0 -2) (480-148804-3), SS - 4 (0 -2) (480-148804-7) and SS - 6 (0 -2) (480-148804-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082A: All primary data for analytical batch 458420 are reported from the ZB-35 column.

Method(s) 8151A: The continuing calibration verifications (CCV 480-459243/31) and (CCV 480-459243/42) recovered above the upper control limit for the surrogate 2,4-Dichlorophenylacetic acid. The samples associated with these CCVs were non-detects all target analytes and the surrogate recoveries were not adversely affected; therefore, the data have been reported. The following samples are impacted: SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14) and SS - 8 (6 -12) (480-148804-15).

Method(s) 8151A: All primary data for analytical batch 459027 are reported from the RTX-CLPI column, while all primary data for analytical batch 459243 are reported from the RTX-CLPII column.

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

Metals

Method(s) 6010C: The Serial Dilution (480-148804-B-1-A SD ^5) in batch 480-458368, exhibited results outside the quality control limits for Total Calcium, Iron, Magnesium, Manganese, and Zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6010C: The following samples were diluted due to the presence of Total Calcium which interferes with Copper: SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (6 -12) (480-148804-6), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 7 (0 -2) (480-148804-12) and SS - 7 (6 -12) (480-148804-13). 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.

Organic Prep

Method(s) 3550C: The following samples required a Florisil clean-up, via 3620C, to reduce matrix interferences: SS - 1 (0 -2) (480-148804-1), SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (0 -2) (480-148804-5), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14), SS - 8 (6 -12) (480-148804-15), (480-148804-A-14 MS) and (480-148804-B-14 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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (0 -2)

Lab Sample ID: 480-148804-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	260	J	950	240	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]anthracene	610	J	950	95	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]pyrene	540	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	340	J	950	100	ug/Kg	5	✱	8270D	Total/NA
Benzo[k]fluoranthene	330	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Chrysene	640	J	950	210	ug/Kg	5	✱	8270D	Total/NA
Fluoranthene	1400		950	100	ug/Kg	5	✱	8270D	Total/NA
Fluorene	130	J	950	110	ug/Kg	5	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	300	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Phenanthrene	1100		950	140	ug/Kg	5	✱	8270D	Total/NA
Pyrene	1300		950	110	ug/Kg	5	✱	8270D	Total/NA
4,4'-DDT	1.9		1.9	0.44	ug/Kg	1	✱	8081B	Total/NA
Aluminum	6500	F1	11.7	5.2	mg/Kg	1	✱	6010C	Total/NA
Arsenic	4.2		2.3	0.47	mg/Kg	1	✱	6010C	Total/NA
Barium	31.0		0.59	0.13	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.28		0.23	0.033	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.54		0.23	0.035	mg/Kg	1	✱	6010C	Total/NA
Calcium	103000	F2 B	58.6	3.9	mg/Kg	1	✱	6010C	Total/NA
Chromium	11.2		0.59	0.23	mg/Kg	1	✱	6010C	Total/NA
Cobalt	4.2		0.59	0.059	mg/Kg	1	✱	6010C	Total/NA
Copper	21.4		1.2	0.25	mg/Kg	1	✱	6010C	Total/NA
Iron	12700	F2	11.7	4.1	mg/Kg	1	✱	6010C	Total/NA
Lead	55.7	F1	1.2	0.28	mg/Kg	1	✱	6010C	Total/NA
Magnesium	39100	F2 B	23.4	1.1	mg/Kg	1	✱	6010C	Total/NA
Manganese	201	B	0.23	0.037	mg/Kg	1	✱	6010C	Total/NA
Nickel	13.7		5.9	0.27	mg/Kg	1	✱	6010C	Total/NA
Potassium	2340	F1	35.2	23.4	mg/Kg	1	✱	6010C	Total/NA
Sodium	131	J F1	164	15.2	mg/Kg	1	✱	6010C	Total/NA
Vanadium	13.7		0.59	0.13	mg/Kg	1	✱	6010C	Total/NA
Zinc	38.0	F1	2.3	0.75	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.036		0.023	0.0091	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	35		25	4.2	ug/Kg	1	✱	8260C	Total/NA
Methylene Chloride	2.5	J	5.0	2.3	ug/Kg	1	✱	8260C	Total/NA
Anthracene	590	J	1000	260	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]anthracene	1400		1000	100	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]pyrene	1200		1000	150	ug/Kg	5	✱	8270D	Total/NA
Benzo[b]fluoranthene	1400		1000	170	ug/Kg	5	✱	8270D	Total/NA
Benzo[g,h,i]perylene	700	J	1000	110	ug/Kg	5	✱	8270D	Total/NA
Benzo[k]fluoranthene	830	J	1000	130	ug/Kg	5	✱	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	2600		1000	350	ug/Kg	5	✱	8270D	Total/NA
Butyl benzyl phthalate	1100		1000	170	ug/Kg	5	✱	8270D	Total/NA
Carbazole	160	J	1000	120	ug/Kg	5	✱	8270D	Total/NA
Chrysene	1500		1000	230	ug/Kg	5	✱	8270D	Total/NA
Di-n-butyl phthalate	690	J	1000	180	ug/Kg	5	✱	8270D	Total/NA
Fluoranthene	3000		1000	110	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (6 -12) (Continued)

Lab Sample ID: 480-148804-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluorene	130	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	660	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1800		1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	2700		1000	120	ug/Kg	5	☼	8270D	Total/NA
PCB-1016	0.087	J	0.21	0.040	mg/Kg	1	☼	8082A	Total/NA
PCB-1254	0.17	J	0.21	0.097	mg/Kg	1	☼	8082A	Total/NA
Aluminum	6300		11.9	5.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.8		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	67.7		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.28		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.2		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	148000	B	119	7.9	mg/Kg	2	☼	6010C	Total/NA
Chromium	11.3		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.2		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	18.2		2.4	0.50	mg/Kg	2	☼	6010C	Total/NA
Iron	10700		11.9	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	52.2		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	69200	B	47.6	2.2	mg/Kg	2	☼	6010C	Total/NA
Manganese	395	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	12.1		6.0	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	2150		35.7	23.8	mg/Kg	1	☼	6010C	Total/NA
Sodium	203		167	15.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13.3		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	39.8		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.050		0.025	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	520	J F2 F1	1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	820	J F2 F1	1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1100	F1	1100	180	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	750	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	400	J F1	1100	140	ug/Kg	5	☼	8270D	Total/NA
Chrysene	630	J F2 F1	1100	250	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	950	J F2 F1	1100	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	530	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	290	J F2 F1	1100	160	ug/Kg	5	☼	8270D	Total/NA
Pyrene	860	J F2 F1	1100	130	ug/Kg	5	☼	8270D	Total/NA
4,4'-DDE	4.1	J	11	2.2	ug/Kg	5	☼	8081B	Total/NA
Aluminum	8580		13.1	5.8	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.7		2.6	0.52	mg/Kg	1	☼	6010C	Total/NA
Barium	63.8		0.65	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.42		0.26	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.59		0.26	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	144000	B	131	8.6	mg/Kg	2	☼	6010C	Total/NA
Chromium	13.4		0.65	0.26	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.6		0.65	0.065	mg/Kg	1	☼	6010C	Total/NA
Copper	33.6		2.6	0.55	mg/Kg	2	☼	6010C	Total/NA
Iron	16300		13.1	4.6	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (0 -2) (Continued)

Lab Sample ID: 480-148804-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	54.8		1.3	0.31	mg/Kg	1	✱	6010C	Total/NA
Magnesium	47000	B	26.1	1.2	mg/Kg	1	✱	6010C	Total/NA
Manganese	522	B	0.26	0.042	mg/Kg	1	✱	6010C	Total/NA
Nickel	19.0		6.5	0.30	mg/Kg	1	✱	6010C	Total/NA
Potassium	3170		39.2	26.1	mg/Kg	1	✱	6010C	Total/NA
Sodium	170	J	183	17.0	mg/Kg	1	✱	6010C	Total/NA
Vanadium	17.0		0.65	0.14	mg/Kg	1	✱	6010C	Total/NA
Zinc	72.3		2.6	0.84	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.039		0.026	0.011	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.8	J	22	3.7	ug/Kg	1	✱	8260C	Total/NA
Benzene	0.26	J	4.4	0.22	ug/Kg	1	✱	8260C	Total/NA
cis-1,2-Dichloroethene	1.3	J	4.4	0.56	ug/Kg	1	✱	8260C	Total/NA
Toluene	0.90	J	4.4	0.33	ug/Kg	1	✱	8260C	Total/NA
Trichloroethene	8.4		4.4	0.97	ug/Kg	1	✱	8260C	Total/NA
Acenaphthylene	180	J	1000	130	ug/Kg	5	✱	8270D	Total/NA
Anthracene	550	J	1000	250	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]anthracene	1800		1000	100	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]pyrene	1800		1000	150	ug/Kg	5	✱	8270D	Total/NA
Benzo[b]fluoranthene	2000		1000	160	ug/Kg	5	✱	8270D	Total/NA
Benzo[g,h,i]perylene	1400		1000	110	ug/Kg	5	✱	8270D	Total/NA
Benzo[k]fluoranthene	1300		1000	130	ug/Kg	5	✱	8270D	Total/NA
Carbazole	150	J	1000	120	ug/Kg	5	✱	8270D	Total/NA
Chrysene	2100		1000	230	ug/Kg	5	✱	8270D	Total/NA
Fluoranthene	3600		1000	110	ug/Kg	5	✱	8270D	Total/NA
Fluorene	130	J	1000	120	ug/Kg	5	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1100		1000	130	ug/Kg	5	✱	8270D	Total/NA
Phenanthrene	1500		1000	150	ug/Kg	5	✱	8270D	Total/NA
Pyrene	3200		1000	120	ug/Kg	5	✱	8270D	Total/NA
4,4'-DDT	14	J	20	4.7	ug/Kg	10	✱	8081B	Total/NA
Aluminum	6950		11.9	5.2	mg/Kg	1	✱	6010C	Total/NA
Arsenic	7.4		2.4	0.47	mg/Kg	1	✱	6010C	Total/NA
Barium	92.6		0.59	0.13	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.27		0.24	0.033	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.67		0.24	0.036	mg/Kg	1	✱	6010C	Total/NA
Calcium	212000	B	119	7.8	mg/Kg	2	✱	6010C	Total/NA
Chromium	11.1		0.59	0.24	mg/Kg	1	✱	6010C	Total/NA
Cobalt	5.4		0.59	0.059	mg/Kg	1	✱	6010C	Total/NA
Copper	17.5		2.4	0.50	mg/Kg	2	✱	6010C	Total/NA
Iron	9470		11.9	4.2	mg/Kg	1	✱	6010C	Total/NA
Lead	137		1.2	0.28	mg/Kg	1	✱	6010C	Total/NA
Magnesium	47500	B	23.7	1.1	mg/Kg	1	✱	6010C	Total/NA
Manganese	705	B	0.24	0.038	mg/Kg	1	✱	6010C	Total/NA
Nickel	13.2		5.9	0.27	mg/Kg	1	✱	6010C	Total/NA
Potassium	2170		35.6	23.7	mg/Kg	1	✱	6010C	Total/NA
Sodium	233		166	15.4	mg/Kg	1	✱	6010C	Total/NA
Vanadium	13.6		0.59	0.13	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (6 -12) (Continued)

Lab Sample ID: 480-148804-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	47.1		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.054		0.024	0.0098	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 3 (0 -2)

Lab Sample ID: 480-148804-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	200	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Anthracene	330	J	1100	270	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	990	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	1000	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1300		1100	170	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	740	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	570	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	440	J	1100	370	ug/Kg	5	☼	8270D	Total/NA
Carbazole	140	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	1100		1100	240	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	2300		1100	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	620	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1500		1100	160	ug/Kg	5	☼	8270D	Total/NA
Pyrene	2100		1100	130	ug/Kg	5	☼	8270D	Total/NA
4,4'-DDD	0.88	J B	2.2	0.42	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	2.1	J	2.2	0.50	ug/Kg	1	☼	8081B	Total/NA
alpha-BHC	0.41	J	2.2	0.39	ug/Kg	1	☼	8081B	Total/NA
Endosulfan II	0.50	J	2.2	0.39	ug/Kg	1	☼	8081B	Total/NA
Aluminum	12700		13.3	5.9	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.3		2.7	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	64.9		0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54		0.27	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.85		0.27	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	47800	B	66.5	4.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	19.1		0.67	0.27	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.5		0.67	0.067	mg/Kg	1	☼	6010C	Total/NA
Copper	81.0		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Iron	17300		13.3	4.7	mg/Kg	1	☼	6010C	Total/NA
Lead	76.2		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Magnesium	24700	B	26.6	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	384	B	0.27	0.043	mg/Kg	1	☼	6010C	Total/NA
Nickel	25.7		6.7	0.31	mg/Kg	1	☼	6010C	Total/NA
Potassium	3770		39.9	26.6	mg/Kg	1	☼	6010C	Total/NA
Sodium	120	J	186	17.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.3		0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	105		2.7	0.85	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.077		0.026	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	53		19	3.2	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	250	J	910	91	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	260	J	910	130	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (6 -12) (Continued)

Lab Sample ID: 480-148804-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	360	J	910	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	210	J	910	96	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	130	J	910	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	200	J	910	200	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	500	J	910	96	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	190	J	910	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	170	J	910	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	460	J	910	110	ug/Kg	5	☼	8270D	Total/NA
4,4'-DDT	10	J	18	4.2	ug/Kg	10	☼	8081B	Total/NA
Methoxychlor	22		18	3.7	ug/Kg	10	☼	8081B	Total/NA
Aluminum	6860		11.0	4.8	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.6		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	67.7		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.27		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.25		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	144000	B	110	7.3	mg/Kg	2	☼	6010C	Total/NA
Chromium	9.9		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.8		0.55	0.055	mg/Kg	1	☼	6010C	Total/NA
Copper	14.3		2.2	0.46	mg/Kg	2	☼	6010C	Total/NA
Iron	9830		11.0	3.9	mg/Kg	1	☼	6010C	Total/NA
Lead	15.5		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	53400	B	44.1	2.0	mg/Kg	2	☼	6010C	Total/NA
Manganese	257	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	10.7		5.5	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	2570		33.1	22.0	mg/Kg	1	☼	6010C	Total/NA
Sodium	170		154	14.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	12.7		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	25.7		2.2	0.71	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.018	J	0.021	0.0087	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	500	J	2300	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	1700	J	2300	230	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	2000	J	2300	340	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	2500		2300	370	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1600	J	2300	240	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	1300	J	2300	300	ug/Kg	10	☼	8270D	Total/NA
Chrysene	2100	J	2300	510	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	3800		2300	240	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1300	J	2300	280	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	1300	J	2300	340	ug/Kg	10	☼	8270D	Total/NA
Pyrene	3300		2300	270	ug/Kg	10	☼	8270D	Total/NA
4,4'-DDT	15	J	23	5.3	ug/Kg	10	☼	8081B	Total/NA
Aluminum	9920		13.6	6.0	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.4		2.7	0.54	mg/Kg	1	☼	6010C	Total/NA
Barium	68.0		0.68	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.47		0.27	0.038	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.53		0.27	0.041	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (0 -2) (Continued)

Lab Sample ID: 480-148804-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	57200	B	67.9	4.5	mg/Kg	1	✱	6010C	Total/NA
Chromium	17.0		0.68	0.27	mg/Kg	1	✱	6010C	Total/NA
Cobalt	6.6		0.68	0.068	mg/Kg	1	✱	6010C	Total/NA
Copper	28.9		1.4	0.29	mg/Kg	1	✱	6010C	Total/NA
Iron	14000		13.6	4.8	mg/Kg	1	✱	6010C	Total/NA
Lead	92.0		1.4	0.33	mg/Kg	1	✱	6010C	Total/NA
Magnesium	27800	B	27.2	1.3	mg/Kg	1	✱	6010C	Total/NA
Manganese	355	B	0.27	0.043	mg/Kg	1	✱	6010C	Total/NA
Nickel	19.6		6.8	0.31	mg/Kg	1	✱	6010C	Total/NA
Potassium	3180		40.7	27.2	mg/Kg	1	✱	6010C	Total/NA
Sodium	169	J	190	17.7	mg/Kg	1	✱	6010C	Total/NA
Vanadium	20.4		0.68	0.15	mg/Kg	1	✱	6010C	Total/NA
Zinc	76.1		2.7	0.87	mg/Kg	1	✱	6010C	Total/NA
Mercury	0.081		0.027	0.011	mg/Kg	1	✱	7471B	Total/NA

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	25	4.2	ug/Kg	1	✱	8260C	Total/NA
Acenaphthylene	340	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Anthracene	340	J	950	230	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]anthracene	1100		950	95	ug/Kg	5	✱	8270D	Total/NA
Benzo[a]pyrene	1200		950	140	ug/Kg	5	✱	8270D	Total/NA
Benzo[b]fluoranthene	1600		950	150	ug/Kg	5	✱	8270D	Total/NA
Benzo[g,h,i]perylene	880	J	950	100	ug/Kg	5	✱	8270D	Total/NA
Benzo[k]fluoranthene	530	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Chrysene	1300		950	210	ug/Kg	5	✱	8270D	Total/NA
Dibenz(a,h)anthracene	240	J	950	170	ug/Kg	5	✱	8270D	Total/NA
Fluoranthene	2400		950	100	ug/Kg	5	✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	740	J	950	120	ug/Kg	5	✱	8270D	Total/NA
Phenanthrene	1000		950	140	ug/Kg	5	✱	8270D	Total/NA
Pyrene	2200		950	110	ug/Kg	5	✱	8270D	Total/NA
4,4'-DDT	11	J	19	4.3	ug/Kg	10	✱	8081B	Total/NA
Methoxychlor	30		19	3.8	ug/Kg	10	✱	8081B	Total/NA
Aluminum	9080		11.4	5.0	mg/Kg	1	✱	6010C	Total/NA
Arsenic	5.2		2.3	0.45	mg/Kg	1	✱	6010C	Total/NA
Barium	56.8		0.57	0.12	mg/Kg	1	✱	6010C	Total/NA
Beryllium	0.51		0.23	0.032	mg/Kg	1	✱	6010C	Total/NA
Cadmium	0.32		0.23	0.034	mg/Kg	1	✱	6010C	Total/NA
Calcium	53800	B	56.8	3.7	mg/Kg	1	✱	6010C	Total/NA
Chromium	13.8		0.57	0.23	mg/Kg	1	✱	6010C	Total/NA
Cobalt	6.0		0.57	0.057	mg/Kg	1	✱	6010C	Total/NA
Copper	21.9		1.1	0.24	mg/Kg	1	✱	6010C	Total/NA
Iron	13200		11.4	4.0	mg/Kg	1	✱	6010C	Total/NA
Lead	52.3		1.1	0.27	mg/Kg	1	✱	6010C	Total/NA
Magnesium	21700	B	22.7	1.1	mg/Kg	1	✱	6010C	Total/NA
Manganese	308	B	0.23	0.036	mg/Kg	1	✱	6010C	Total/NA
Nickel	16.6		5.7	0.26	mg/Kg	1	✱	6010C	Total/NA
Potassium	2890		34.1	22.7	mg/Kg	1	✱	6010C	Total/NA
Sodium	123	J	159	14.8	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (6 -12) (Continued)

Lab Sample ID: 480-148804-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	20.1		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	47.8		2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.072		0.022	0.0091	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 5 (0 -2)

Lab Sample ID: 480-148804-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	490	J	940	120	ug/Kg	5	☼	8270D	Total/NA
Anthracene	1300		940	230	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	5300		940	94	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	5000		940	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	5400		940	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	3500		940	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	2800		940	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	5800		940	210	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	1100		940	170	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	6500		940	100	ug/Kg	5	☼	8270D	Total/NA
Fluorene	160	J	940	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3000		940	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1200		940	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	8700		940	110	ug/Kg	5	☼	8270D	Total/NA
4,4'-DDT	3.7		3.7	0.86	ug/Kg	2	☼	8081B	Total/NA
Endrin ketone	1.7	J	3.7	0.90	ug/Kg	2	☼	8081B	Total/NA
Aluminum	5810		11.6	5.1	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.2		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	73.3		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.24		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.75		0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	130000	B	116	7.6	mg/Kg	2	☼	6010C	Total/NA
Chromium	14.3		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.8		0.58	0.058	mg/Kg	1	☼	6010C	Total/NA
Copper	33.2		2.3	0.49	mg/Kg	2	☼	6010C	Total/NA
Iron	9200		11.6	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	81.3		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	34600	B	23.2	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	224	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	14.0		5.8	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	1840		34.8	23.2	mg/Kg	1	☼	6010C	Total/NA
Sodium	137	J	162	15.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	12.8		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	122		2.3	0.74	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.034		0.022	0.0088	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 5 (6 -12)

Lab Sample ID: 480-148804-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.59	J	7.9	0.57	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	340	J	990	99	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	330	J	990	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	360	J	990	160	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (6 -12) (Continued)

Lab Sample ID: 480-148804-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	230	J	990	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	160	J	990	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	260	J	990	220	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	440	J	990	100	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	190	J	990	120	ug/Kg	5	☼	8270D	Total/NA
Pyrene	510	J	990	120	ug/Kg	5	☼	8270D	Total/NA
4,4'-DDT	2.7	J	3.9	0.91	ug/Kg	2	☼	8081B	Total/NA
Aluminum	9010		12.0	5.3	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.9		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	63.9		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.35		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.84		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	140000	B	120	7.9	mg/Kg	2	☼	6010C	Total/NA
Chromium	12.1		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.1		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	20.9		2.4	0.50	mg/Kg	2	☼	6010C	Total/NA
Iron	10600		12.0	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	44.0		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	36800	B	24.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	294	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	13.1		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	3610		36.0	24.0	mg/Kg	1	☼	6010C	Total/NA
Sodium	195		168	15.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	15.4		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	71.6		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.022	J	0.024	0.0097	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 6 (0 -2)

Lab Sample ID: 480-148804-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	2.4	J	4.3	1.0	ug/Kg	1	☼	8081B	Total/NA
Aluminum	7970		26.3	11.6	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.0	J	5.3	1.1	mg/Kg	1	☼	6010C	Total/NA
Barium	45.9		1.3	0.29	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.56		0.53	0.074	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.26	J	0.53	0.079	mg/Kg	1	☼	6010C	Total/NA
Calcium	203000	B	132	8.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	42.7		1.3	0.53	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.4		1.3	0.13	mg/Kg	1	☼	6010C	Total/NA
Copper	9.5		2.6	0.55	mg/Kg	1	☼	6010C	Total/NA
Iron	7900		26.3	9.2	mg/Kg	1	☼	6010C	Total/NA
Lead	9.6		2.6	0.63	mg/Kg	1	☼	6010C	Total/NA
Magnesium	33700	B	52.7	2.4	mg/Kg	1	☼	6010C	Total/NA
Manganese	167	B	0.53	0.084	mg/Kg	1	☼	6010C	Total/NA
Nickel	15.2		13.2	0.61	mg/Kg	1	☼	6010C	Total/NA
Potassium	3390		79.0	52.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	792		369	34.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	73.3		1.3	0.29	mg/Kg	1	☼	6010C	Total/NA
Zinc	36.9		5.3	1.7	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: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (0 -2)

Lab Sample ID: 480-148804-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	260	J	2200	230	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	530	J	2200	230	ug/Kg	5	☼	8270D	Total/NA
Pyrene	490	J	2200	260	ug/Kg	5	☼	8270D	Total/NA
4,4'-DDT	2.6	J	4.3	1.0	ug/Kg	1	☼	8081B	Total/NA
delta-BHC	1.3	J	4.3	0.81	ug/Kg	1	☼	8081B	Total/NA
Aluminum	10600		25.7	11.3	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.5	J	5.1	1.0	mg/Kg	1	☼	6010C	Total/NA
Barium	128		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.44	J	0.51	0.072	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.26	J	0.51	0.077	mg/Kg	1	☼	6010C	Total/NA
Calcium	454000	B	642	42.3	mg/Kg	5	☼	6010C	Total/NA
Chromium	17.8		1.3	0.51	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.4		1.3	0.13	mg/Kg	1	☼	6010C	Total/NA
Copper	14.2		12.8	2.7	mg/Kg	5	☼	6010C	Total/NA
Iron	14700		25.7	9.0	mg/Kg	1	☼	6010C	Total/NA
Lead	6.7		2.6	0.62	mg/Kg	1	☼	6010C	Total/NA
Magnesium	184000	B	257	11.9	mg/Kg	5	☼	6010C	Total/NA
Manganese	610	B	0.51	0.082	mg/Kg	1	☼	6010C	Total/NA
Nickel	15.4		12.8	0.59	mg/Kg	1	☼	6010C	Total/NA
Potassium	4590		77.0	51.3	mg/Kg	1	☼	6010C	Total/NA
Sodium	468		359	33.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	21.0		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Zinc	28.5		5.1	1.6	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.036	J	0.050	0.020	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS - 7 (6 -12)

Lab Sample ID: 480-148804-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.6	J	24	4.0	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	200	J	960	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	540	J	960	96	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	570	J	960	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	630	J	960	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	440	J	960	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	400	J	960	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	650	J	960	220	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1100		960	100	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	370	J	960	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	470	J	960	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1100		960	110	ug/Kg	5	☼	8270D	Total/NA
4,4'-DDT	10	J	19	4.5	ug/Kg	10	☼	8081B	Total/NA
Aluminum	11900		11.2	4.9	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.4		2.2	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	94.3		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.47		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.41		0.22	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	133000	B	112	7.4	mg/Kg	2	☼	6010C	Total/NA
Chromium	15.2		0.56	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.3		0.56	0.056	mg/Kg	1	☼	6010C	Total/NA
Copper	21.6		2.2	0.47	mg/Kg	2	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (6 -12) (Continued)

Lab Sample ID: 480-148804-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Iron	13500		11.2	3.9	mg/Kg	1		✱	6010C	Total/NA
Lead	40.5		1.1	0.27	mg/Kg	1		✱	6010C	Total/NA
Magnesium	68000	B	45.0	2.1	mg/Kg	2		✱	6010C	Total/NA
Manganese	540	B	0.22	0.036	mg/Kg	1		✱	6010C	Total/NA
Nickel	18.1		5.6	0.26	mg/Kg	1		✱	6010C	Total/NA
Potassium	4390		33.7	22.5	mg/Kg	1		✱	6010C	Total/NA
Sodium	174		157	14.6	mg/Kg	1		✱	6010C	Total/NA
Vanadium	19.7		0.56	0.12	mg/Kg	1		✱	6010C	Total/NA
Zinc	52.2		2.2	0.72	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.096		0.023	0.0092	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: SS - 8 (0 -2)

Lab Sample ID: 480-148804-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthylene	200	J	1100	140	ug/Kg	5		✱	8270D	Total/NA
Benzo[a]anthracene	950	J	1100	110	ug/Kg	5		✱	8270D	Total/NA
Benzo[a]pyrene	1000	J	1100	160	ug/Kg	5		✱	8270D	Total/NA
Benzo[b]fluoranthene	1300		1100	170	ug/Kg	5		✱	8270D	Total/NA
Benzo[g,h,i]perylene	820	J	1100	120	ug/Kg	5		✱	8270D	Total/NA
Benzo[k]fluoranthene	720	J	1100	140	ug/Kg	5		✱	8270D	Total/NA
Chrysene	1100		1100	240	ug/Kg	5		✱	8270D	Total/NA
Dibenz(a,h)anthracene	250	J	1100	190	ug/Kg	5		✱	8270D	Total/NA
Fluoranthene	2000		1100	120	ug/Kg	5		✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	740	J	1100	130	ug/Kg	5		✱	8270D	Total/NA
Phenanthrene	890	J	1100	160	ug/Kg	5		✱	8270D	Total/NA
Pyrene	1900		1100	130	ug/Kg	5		✱	8270D	Total/NA
4,4'-DDE	1.9	J F2	2.1	0.44	ug/Kg	1		✱	8081B	Total/NA
4,4'-DDT	8.6	F2	2.1	0.50	ug/Kg	1		✱	8081B	Total/NA
alpha-BHC	0.53	J F2	2.1	0.38	ug/Kg	1		✱	8081B	Total/NA
Aluminum	11700		13.0	5.7	mg/Kg	1		✱	6010C	Total/NA
Arsenic	12.0		2.6	0.52	mg/Kg	1		✱	6010C	Total/NA
Barium	190		0.65	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.52		0.26	0.037	mg/Kg	1		✱	6010C	Total/NA
Cadmium	1.4		0.26	0.039	mg/Kg	1		✱	6010C	Total/NA
Calcium	20500	B	65.2	4.3	mg/Kg	1		✱	6010C	Total/NA
Chromium	20.2		0.65	0.26	mg/Kg	1		✱	6010C	Total/NA
Cobalt	7.9		0.65	0.065	mg/Kg	1		✱	6010C	Total/NA
Copper	60.6		1.3	0.27	mg/Kg	1		✱	6010C	Total/NA
Iron	15900		13.0	4.6	mg/Kg	1		✱	6010C	Total/NA
Lead	463		1.3	0.31	mg/Kg	1		✱	6010C	Total/NA
Magnesium	7280	B	26.1	1.2	mg/Kg	1		✱	6010C	Total/NA
Manganese	393	B	0.26	0.042	mg/Kg	1		✱	6010C	Total/NA
Nickel	19.7		6.5	0.30	mg/Kg	1		✱	6010C	Total/NA
Potassium	2400		39.1	26.1	mg/Kg	1		✱	6010C	Total/NA
Selenium	1.1	J	5.2	0.52	mg/Kg	1		✱	6010C	Total/NA
Sodium	129	J	183	17.0	mg/Kg	1		✱	6010C	Total/NA
Vanadium	27.6		0.65	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	339		2.6	0.83	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.50		0.026	0.010	mg/Kg	1		✱	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acenaphthene	220	J	1100	160	ug/Kg	5		✱	8270D	Total/NA
Acenaphthylene	220	J	1100	140	ug/Kg	5		✱	8270D	Total/NA
Anthracene	1100		1100	270	ug/Kg	5		✱	8270D	Total/NA
Benzo[a]anthracene	2400		1100	110	ug/Kg	5		✱	8270D	Total/NA
Benzo[a]pyrene	2100		1100	160	ug/Kg	5		✱	8270D	Total/NA
Benzo[b]fluoranthene	2400		1100	170	ug/Kg	5		✱	8270D	Total/NA
Benzo[g,h,i]perylene	1300		1100	110	ug/Kg	5		✱	8270D	Total/NA
Benzo[k]fluoranthene	1400		1100	140	ug/Kg	5		✱	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	760	J	1100	370	ug/Kg	5		✱	8270D	Total/NA
Carbazole	600	J	1100	130	ug/Kg	5		✱	8270D	Total/NA
Chrysene	2200		1100	240	ug/Kg	5		✱	8270D	Total/NA
Dibenzofuran	320	J	1100	130	ug/Kg	5		✱	8270D	Total/NA
Fluoranthene	5300		1100	110	ug/Kg	5		✱	8270D	Total/NA
Fluorene	470	J	1100	130	ug/Kg	5		✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1300		1100	130	ug/Kg	5		✱	8270D	Total/NA
Phenanthrene	4300		1100	160	ug/Kg	5		✱	8270D	Total/NA
Pyrene	3900		1100	130	ug/Kg	5		✱	8270D	Total/NA
4,4'-DDD	0.53	J B	2.1	0.41	ug/Kg	1		✱	8081B	Total/NA
4,4'-DDE	0.77	J	2.1	0.44	ug/Kg	1		✱	8081B	Total/NA
4,4'-DDT	3.8		2.1	0.49	ug/Kg	1		✱	8081B	Total/NA
Aluminum	12100		12.7	5.6	mg/Kg	1		✱	6010C	Total/NA
Arsenic	9.1		2.5	0.51	mg/Kg	1		✱	6010C	Total/NA
Barium	170		0.64	0.14	mg/Kg	1		✱	6010C	Total/NA
Beryllium	0.52		0.25	0.036	mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.96		0.25	0.038	mg/Kg	1		✱	6010C	Total/NA
Calcium	14100	B	63.5	4.2	mg/Kg	1		✱	6010C	Total/NA
Chromium	18.9		0.64	0.25	mg/Kg	1		✱	6010C	Total/NA
Cobalt	8.5		0.64	0.064	mg/Kg	1		✱	6010C	Total/NA
Copper	49.5		1.3	0.27	mg/Kg	1		✱	6010C	Total/NA
Iron	19400		12.7	4.4	mg/Kg	1		✱	6010C	Total/NA
Lead	333		1.3	0.30	mg/Kg	1		✱	6010C	Total/NA
Magnesium	8290	B	25.4	1.2	mg/Kg	1		✱	6010C	Total/NA
Manganese	494	B	0.25	0.041	mg/Kg	1		✱	6010C	Total/NA
Nickel	21.0		6.4	0.29	mg/Kg	1		✱	6010C	Total/NA
Potassium	2620		38.1	25.4	mg/Kg	1		✱	6010C	Total/NA
Sodium	127	J	178	16.5	mg/Kg	1		✱	6010C	Total/NA
Vanadium	27.2		0.64	0.14	mg/Kg	1		✱	6010C	Total/NA
Zinc	243		2.5	0.81	mg/Kg	1		✱	6010C	Total/NA
Mercury	0.71		0.026	0.011	mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 480-148804-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1600		800	650	ug/L	800			8260C	Total/NA
Trichloroethene	37000		800	370	ug/L	800			8260C	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 480-148804-17

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (0 -2)

Lab Sample ID: 480-148804-1

Date Collected: 02/07/19 09:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
bis (2-chloroisopropyl) ether	ND		950	190	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2,4,5-Trichlorophenol	ND		950	260	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2,4,6-Trichlorophenol	ND		950	190	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2,4-Dichlorophenol	ND		950	100	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2,4-Dimethylphenol	ND		950	230	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2,4-Dinitrophenol	ND		9300	4400	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2,4-Dinitrotoluene	ND		950	200	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2,6-Dinitrotoluene	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2-Chloronaphthalene	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2-Chlorophenol	ND		950	170	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2-Methylphenol	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2-Methylnaphthalene	ND		950	190	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2-Nitroaniline	ND		1900	140	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
2-Nitrophenol	ND		950	270	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
3,3'-Dichlorobenzidine	ND		1900	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
3-Nitroaniline	ND		1900	260	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4,6-Dinitro-2-methylphenol	ND		1900	950	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4-Bromophenyl phenyl ether	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4-Chloro-3-methylphenol	ND		950	240	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4-Chloroaniline	ND		950	240	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4-Chlorophenyl phenyl ether	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4-Methylphenol	ND		1900	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4-Nitroaniline	ND		1900	500	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
4-Nitrophenol	ND		1900	670	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Acenaphthene	ND		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Acenaphthylene	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Acetophenone	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Anthracene	260	J	950	240	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Atrazine	ND		950	330	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Benzaldehyde	ND		950	760	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Benzo[a]anthracene	610	J	950	95	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Benzo[a]pyrene	540	J	950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Benzo[b]fluoranthene	560	J	950	150	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Benzo[g,h,i]perylene	340	J	950	100	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Benzo[k]fluoranthene	330	J	950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Bis(2-chloroethoxy)methane	ND		950	200	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Bis(2-chloroethyl)ether	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Bis(2-ethylhexyl) phthalate	ND		950	330	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Butyl benzyl phthalate	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Caprolactam	ND		950	290	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Carbazole	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Chrysene	640	J	950	210	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Dibenz(a,h)anthracene	ND		950	170	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Di-n-butyl phthalate	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Di-n-octyl phthalate	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Dibenzofuran	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Diethyl phthalate	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Dimethyl phthalate	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (0 -2)

Lab Sample ID: 480-148804-1

Date Collected: 02/07/19 09:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 86.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1400		950	100	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Fluorene	130	J	950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Hexachlorobenzene	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Hexachlorobutadiene	ND		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Hexachlorocyclopentadiene	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Hexachloroethane	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Indeno[1,2,3-cd]pyrene	300	J	950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Isophorone	ND		950	200	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
N-Nitrosodi-n-propylamine	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
N-Nitrosodiphenylamine	ND		950	770	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Naphthalene	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Nitrobenzene	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Pentachlorophenol	ND		1900	950	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Phenanthrene	1100		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Phenol	ND		950	150	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Pyrene	1300		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 19:44	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	96		53 - 120				02/11/19 14:25	02/12/19 19:44	5
Phenol-d5 (Surr)	87		54 - 120				02/11/19 14:25	02/12/19 19:44	5
p-Terphenyl-d14 (Surr)	117		65 - 121				02/11/19 14:25	02/12/19 19:44	5
2,4,6-Tribromophenol (Surr)	94		54 - 120				02/11/19 14:25	02/12/19 19:44	5
2-Fluorobiphenyl	99		60 - 120				02/11/19 14:25	02/12/19 19:44	5
2-Fluorophenol (Surr)	89		52 - 120				02/11/19 14:25	02/12/19 19:44	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		1.9	0.37	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
4,4'-DDE	ND		1.9	0.40	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
4,4'-DDT	1.9		1.9	0.44	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Aldrin	ND		1.9	0.46	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
alpha-BHC	ND		1.9	0.34	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
cis-Chlordane	ND		1.9	0.94	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
beta-BHC	ND		1.9	0.34	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
delta-BHC	ND		1.9	0.35	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Dieldrin	ND		1.9	0.45	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Endosulfan I	ND		1.9	0.36	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Endosulfan II	ND		1.9	0.34	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Endosulfan sulfate	ND		1.9	0.35	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Endrin	ND		1.9	0.37	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Endrin aldehyde	ND		1.9	0.48	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Endrin ketone	ND		1.9	0.46	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
gamma-BHC (Lindane)	ND		1.9	0.35	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
trans-Chlordane	ND		1.9	0.60	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Heptachlor	ND		1.9	0.41	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Heptachlor epoxide	ND		1.9	0.49	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Methoxychlor	ND		1.9	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1
Toxaphene	ND		19	11	ug/Kg	☼	02/12/19 14:56	02/13/19 14:30	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (0 -2)

Date Collected: 02/07/19 09:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-1

Matrix: Solid

Percent Solids: 86.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	112		45 - 120	02/12/19 14:56	02/13/19 14:30	1
Tetrachloro-m-xylene	53		30 - 124	02/12/19 14:56	02/13/19 14:30	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.042	mg/Kg	✱	02/08/19 14:30	02/10/19 16:18	1
PCB-1221	ND		0.22	0.042	mg/Kg	✱	02/08/19 14:30	02/10/19 16:18	1
PCB-1232	ND		0.22	0.042	mg/Kg	✱	02/08/19 14:30	02/10/19 16:18	1
PCB-1242	ND		0.22	0.042	mg/Kg	✱	02/08/19 14:30	02/10/19 16:18	1
PCB-1248	ND		0.22	0.042	mg/Kg	✱	02/08/19 14:30	02/10/19 16:18	1
PCB-1254	ND		0.22	0.10	mg/Kg	✱	02/08/19 14:30	02/10/19 16:18	1
PCB-1260	ND		0.22	0.10	mg/Kg	✱	02/08/19 14:30	02/10/19 16:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		60 - 154	02/08/19 14:30	02/10/19 16:18	1
DCB Decachlorobiphenyl	67		65 - 174	02/08/19 14:30	02/10/19 16:18	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.1	ug/Kg	✱	02/11/19 14:31	02/14/19 12:01	1
2,4-D	ND		19	12	ug/Kg	✱	02/11/19 14:31	02/14/19 12:01	1
Silvex (2,4,5-TP)	ND		19	6.8	ug/Kg	✱	02/11/19 14:31	02/14/19 12:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	61		28 - 129	02/11/19 14:31	02/14/19 12:01	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6500	F1	11.7	5.2	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Antimony	ND		17.6	0.47	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Arsenic	4.2		2.3	0.47	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Barium	31.0		0.59	0.13	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Beryllium	0.28		0.23	0.033	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Cadmium	0.54		0.23	0.035	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Calcium	103000	F2 B	58.6	3.9	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Chromium	11.2		0.59	0.23	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Cobalt	4.2		0.59	0.059	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Copper	21.4		1.2	0.25	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Iron	12700	F2	11.7	4.1	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Lead	55.7	F1	1.2	0.28	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Magnesium	39100	F2 B	23.4	1.1	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Manganese	201	B	0.23	0.037	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Nickel	13.7		5.9	0.27	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Potassium	2340	F1	35.2	23.4	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Selenium	ND		4.7	0.47	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Silver	ND		0.70	0.23	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Sodium	131	J F1	164	15.2	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Thallium	ND		7.0	0.35	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Vanadium	13.7		0.59	0.13	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1
Zinc	38.0	F1	2.3	0.75	mg/Kg	✱	02/09/19 09:24	02/11/19 12:16	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (0 -2)

Lab Sample ID: 480-148804-1

Date Collected: 02/07/19 09:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 86.7

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.023	0.0091	mg/Kg	☼	02/14/19 12:00	02/14/19 13:33	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Date Collected: 02/07/19 09:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Acetone	35		25	4.2	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Benzene	ND		5.0	0.25	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Bromoform	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Chlorobenzene	ND		5.0	0.66	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Chloroform	ND		5.0	0.31	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Cyclohexane	ND		5.0	0.70	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Ethylbenzene	ND		5.0	0.35	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Methylene Chloride	2.5	J	5.0	2.3	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Styrene	ND		5.0	0.25	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Toluene	ND		5.0	0.38	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1
Xylenes, Total	ND		10	0.84	ug/Kg	☼	02/08/19 07:15	02/11/19 15:11	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Date Collected: 02/07/19 09:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		71 - 125	02/08/19 07:15	02/11/19 15:11	1
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	02/08/19 07:15	02/11/19 15:11	1
4-Bromofluorobenzene (Surr)	98		72 - 126	02/08/19 07:15	02/11/19 15:11	1
Dibromofluoromethane (Surr)	104		60 - 140	02/08/19 07:15	02/11/19 15:11	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	☼	02/11/19 14:25	02/12/19 20:10	5
bis (2-chloroisopropyl) ether	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2,4,6-Trichlorophenol	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2,4-Dinitrophenol	ND		10000	4800	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2-Chlorophenol	ND		1000	190	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2-Methylnaphthalene	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
3-Nitroaniline	ND		2000	290	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4-Bromophenyl phenyl ether	ND		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4-Chloro-3-methylphenol	ND		1000	260	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4-Chloroaniline	ND		1000	260	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4-Nitroaniline	ND		2000	540	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
4-Nitrophenol	ND		2000	730	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Acenaphthene	ND		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Acetophenone	ND		1000	140	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Anthracene	590	J	1000	260	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Atrazine	ND		1000	360	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Benzaldehyde	ND		1000	830	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Benzo[a]anthracene	1400		1000	100	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Benzo[a]pyrene	1200		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Benzo[b]fluoranthene	1400		1000	170	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Benzo[g,h,i]perylene	700	J	1000	110	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Benzo[k]fluoranthene	830	J	1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Bis(2-ethylhexyl) phthalate	2600		1000	350	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Butyl benzyl phthalate	1100		1000	170	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Caprolactam	ND		1000	310	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Carbazole	160	J	1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Chrysene	1500		1000	230	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Date Collected: 02/07/19 09:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Di-n-butyl phthalate	690	J	1000	180	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Fluoranthene	3000		1000	110	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Fluorene	130	J	1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Indeno[1,2,3-cd]pyrene	660	J	1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Isophorone	ND		1000	220	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
N-Nitrosodi-n-propylamine	ND		1000	180	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
N-Nitrosodiphenylamine	ND		1000	840	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Naphthalene	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Nitrobenzene	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Pentachlorophenol	ND		2000	1000	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Phenanthrene	1800		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Phenol	ND		1000	160	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5
Pyrene	2700		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:10	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	102		53 - 120	02/11/19 14:25	02/12/19 20:10	5
Phenol-d5 (Surr)	97		54 - 120	02/11/19 14:25	02/12/19 20:10	5
p-Terphenyl-d14 (Surr)	136	X	65 - 121	02/11/19 14:25	02/12/19 20:10	5
2,4,6-Tribromophenol (Surr)	122	X	54 - 120	02/11/19 14:25	02/12/19 20:10	5
2-Fluorobiphenyl	107		60 - 120	02/11/19 14:25	02/12/19 20:10	5
2-Fluorophenol (Surr)	93		52 - 120	02/11/19 14:25	02/12/19 20:10	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		2.0	0.40	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
4,4'-DDE	ND		2.0	0.43	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
4,4'-DDT	ND		2.0	0.48	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Aldrin	ND		2.0	0.50	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
alpha-BHC	ND		2.0	0.37	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
cis-Chlordane	ND		2.0	1.0	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
beta-BHC	ND		2.0	0.37	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
delta-BHC	ND		2.0	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Dieldrin	ND		2.0	0.49	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Endosulfan I	ND		2.0	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Endosulfan II	ND		2.0	0.37	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Endrin	ND		2.0	0.40	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Endrin aldehyde	ND		2.0	0.52	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
Endrin ketone	ND		2.0	0.50	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
gamma-BHC (Lindane)	ND		2.0	0.37	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1
trans-Chlordane	ND		2.0	0.65	ug/Kg	☼	02/12/19 14:56	02/13/19 14:50	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Date Collected: 02/07/19 09:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		2.0	0.44	ug/Kg	☆	02/12/19 14:56	02/13/19 14:50	1
Heptachlor epoxide	ND		2.0	0.53	ug/Kg	☆	02/12/19 14:56	02/13/19 14:50	1
Methoxychlor	ND		2.0	0.42	ug/Kg	☆	02/12/19 14:56	02/13/19 14:50	1
Toxaphene	ND		20	12	ug/Kg	☆	02/12/19 14:56	02/13/19 14:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	97		45 - 120				02/12/19 14:56	02/13/19 14:50	1
Tetrachloro-m-xylene	48		30 - 124				02/12/19 14:56	02/13/19 14:50	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.087	J	0.21	0.040	mg/Kg	☆	02/08/19 14:30	02/10/19 16:34	1
PCB-1221	ND		0.21	0.040	mg/Kg	☆	02/08/19 14:30	02/10/19 16:34	1
PCB-1232	ND		0.21	0.040	mg/Kg	☆	02/08/19 14:30	02/10/19 16:34	1
PCB-1242	ND		0.21	0.040	mg/Kg	☆	02/08/19 14:30	02/10/19 16:34	1
PCB-1248	ND		0.21	0.040	mg/Kg	☆	02/08/19 14:30	02/10/19 16:34	1
PCB-1254	0.17	J	0.21	0.097	mg/Kg	☆	02/08/19 14:30	02/10/19 16:34	1
PCB-1260	ND		0.21	0.097	mg/Kg	☆	02/08/19 14:30	02/10/19 16:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		60 - 154				02/08/19 14:30	02/10/19 16:34	1
DCB Decachlorobiphenyl	72		65 - 174				02/08/19 14:30	02/10/19 16:34	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.4	ug/Kg	☆	02/11/19 14:31	02/14/19 12:30	1
2,4-D	ND		20	13	ug/Kg	☆	02/11/19 14:31	02/14/19 12:30	1
Silvex (2,4,5-TP)	ND		20	7.2	ug/Kg	☆	02/11/19 14:31	02/14/19 12:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	52		28 - 129				02/11/19 14:31	02/14/19 12:30	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6300		11.9	5.2	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Antimony	ND		17.9	0.48	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Arsenic	3.8		2.4	0.48	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Barium	67.7		0.60	0.13	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Beryllium	0.28		0.24	0.033	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Cadmium	1.2		0.24	0.036	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Calcium	148000	B	119	7.9	mg/Kg	☆	02/09/19 09:24	02/12/19 10:55	2
Chromium	11.3		0.60	0.24	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Cobalt	4.2		0.60	0.060	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Copper	18.2		2.4	0.50	mg/Kg	☆	02/09/19 09:24	02/12/19 10:55	2
Iron	10700		11.9	4.2	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Lead	52.2		1.2	0.29	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Magnesium	69200	B	47.6	2.2	mg/Kg	☆	02/09/19 09:24	02/12/19 10:55	2
Manganese	395	B	0.24	0.038	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Nickel	12.1		6.0	0.27	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Potassium	2150		35.7	23.8	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1
Selenium	ND		4.8	0.48	mg/Kg	☆	02/09/19 09:24	02/11/19 12:47	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Date Collected: 02/07/19 09:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.71	0.24	mg/Kg	☼	02/09/19 09:24	02/11/19 12:47	1
Sodium	203		167	15.5	mg/Kg	☼	02/09/19 09:24	02/11/19 12:47	1
Thallium	ND		7.1	0.36	mg/Kg	☼	02/09/19 09:24	02/11/19 12:47	1
Vanadium	13.3		0.60	0.13	mg/Kg	☼	02/09/19 09:24	02/11/19 12:47	1
Zinc	39.8		2.4	0.76	mg/Kg	☼	02/09/19 09:24	02/11/19 12:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.025	0.010	mg/Kg	☼	02/14/19 12:00	02/14/19 13:38	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Date Collected: 02/07/19 09:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
bis (2-chloroisopropyl) ether	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2,4,5-Trichlorophenol	ND		1100	300	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2,4,6-Trichlorophenol	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2,4-Dichlorophenol	ND		1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2,4-Dimethylphenol	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2,4-Dinitrophenol	ND		11000	5100	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2,4-Dinitrotoluene	ND	F1	1100	230	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2,6-Dinitrotoluene	ND	F1	1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2-Chlorophenol	ND		1100	200	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2-Methylnaphthalene	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
2-Nitrophenol	ND		1100	310	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
3-Nitroaniline	ND		2100	310	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4,6-Dinitro-2-methylphenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4-Bromophenyl phenyl ether	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4-Chloro-3-methylphenol	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4-Chloroaniline	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4-Chlorophenyl phenyl ether	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4-Methylphenol	ND		2100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4-Nitroaniline	ND		2100	580	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
4-Nitrophenol	ND		2100	770	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Acenaphthene	ND	F1	1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Acenaphthylene	ND	F1	1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Acetophenone	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Anthracene	ND	F2 F1	1100	270	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Atrazine	ND		1100	380	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Benzaldehyde	ND		1100	880	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Benzo[a]anthracene	520	J F2 F1	1100	110	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Benzo[a]pyrene	820	J F2 F1	1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Benzo[b]fluoranthene	1100	F1	1100	180	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Benzo[g,h,i]perylene	750	J	1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Benzo[k]fluoranthene	400	J F1	1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Bis(2-ethylhexyl) phthalate	ND	F1	1100	380	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Butyl benzyl phthalate	ND	F1	1100	180	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Caprolactam	ND		1100	330	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Carbazole	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Chrysene	630	J F2 F1	1100	250	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Di-n-butyl phthalate	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Di-n-octyl phthalate	ND	F1	1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Dibenzofuran	ND	F2 F1	1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Diethyl phthalate	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Date Collected: 02/07/19 09:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	950	J F2 F1	1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Fluorene	ND	F2 F1	1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Hexachlorobenzene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Hexachlorocyclopentadiene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Indeno[1,2,3-cd]pyrene	530	J	1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Isophorone	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
N-Nitrosodi-n-propylamine	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
N-Nitrosodiphenylamine	ND		1100	900	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Naphthalene	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Pentachlorophenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Phenanthrene	290	J F2 F1	1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Phenol	ND		1100	170	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Pyrene	860	J F2 F1	1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 18:54	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	96		53 - 120				02/11/19 14:25	02/12/19 18:54	5
Phenol-d5 (Surr)	94		54 - 120				02/11/19 14:25	02/12/19 18:54	5
p-Terphenyl-d14 (Surr)	122	X	65 - 121				02/11/19 14:25	02/12/19 18:54	5
2,4,6-Tribromophenol (Surr)	103		54 - 120				02/11/19 14:25	02/12/19 18:54	5
2-Fluorobiphenyl	101		60 - 120				02/11/19 14:25	02/12/19 18:54	5
2-Fluorophenol (Surr)	94		52 - 120				02/11/19 14:25	02/12/19 18:54	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		11	2.1	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
4,4'-DDE	4.1	J	11	2.2	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
4,4'-DDT	ND		11	2.5	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Aldrin	ND		11	2.6	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
alpha-BHC	ND		11	1.9	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
cis-Chlordane	ND		11	5.3	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
beta-BHC	ND		11	1.9	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
delta-BHC	ND		11	2.0	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Dieldrin	ND		11	2.6	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Endosulfan I	ND		11	2.1	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Endosulfan II	ND		11	1.9	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Endosulfan sulfate	ND		11	2.0	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Endrin	ND		11	2.1	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Endrin aldehyde	ND		11	2.7	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Endrin ketone	ND		11	2.6	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
gamma-BHC (Lindane)	ND		11	2.0	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
trans-Chlordane	ND		11	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Heptachlor	ND		11	2.3	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Heptachlor epoxide	ND		11	2.8	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Methoxychlor	ND		11	2.2	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5
Toxaphene	ND		110	62	ug/Kg	☼	02/12/19 14:56	02/13/19 15:09	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (0 -2)

Date Collected: 02/07/19 09:30

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-3

Matrix: Solid

Percent Solids: 76.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	202	X	45 - 120	02/12/19 14:56	02/13/19 15:09	5
Tetrachloro-m-xylene	116		30 - 124	02/12/19 14:56	02/13/19 15:09	5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.044	mg/Kg	✱	02/08/19 14:30	02/10/19 16:50	1
PCB-1221	ND		0.22	0.044	mg/Kg	✱	02/08/19 14:30	02/10/19 16:50	1
PCB-1232	ND		0.22	0.044	mg/Kg	✱	02/08/19 14:30	02/10/19 16:50	1
PCB-1242	ND		0.22	0.044	mg/Kg	✱	02/08/19 14:30	02/10/19 16:50	1
PCB-1248	ND		0.22	0.044	mg/Kg	✱	02/08/19 14:30	02/10/19 16:50	1
PCB-1254	ND		0.22	0.10	mg/Kg	✱	02/08/19 14:30	02/10/19 16:50	1
PCB-1260	ND		0.22	0.10	mg/Kg	✱	02/08/19 14:30	02/10/19 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	60		60 - 154	02/08/19 14:30	02/10/19 16:50	1
DCB Decachlorobiphenyl	63	X	65 - 174	02/08/19 14:30	02/10/19 16:50	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.8	ug/Kg	✱	02/11/19 14:31	02/14/19 11:31	1
2,4-D	ND		21	13	ug/Kg	✱	02/11/19 14:31	02/14/19 11:31	1
Silvex (2,4,5-TP)	ND		21	7.7	ug/Kg	✱	02/11/19 14:31	02/14/19 11:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	62		28 - 129	02/11/19 14:31	02/14/19 11:31	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8580		13.1	5.8	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Antimony	ND		19.6	0.52	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Arsenic	5.7		2.6	0.52	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Barium	63.8		0.65	0.14	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Beryllium	0.42		0.26	0.037	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Cadmium	0.59		0.26	0.039	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Calcium	144000	B	131	8.6	mg/Kg	✱	02/09/19 09:24	02/12/19 10:59	2
Chromium	13.4		0.65	0.26	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Cobalt	5.6		0.65	0.065	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Copper	33.6		2.6	0.55	mg/Kg	✱	02/09/19 09:24	02/12/19 10:59	2
Iron	16300		13.1	4.6	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Lead	54.8		1.3	0.31	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Magnesium	47000	B	26.1	1.2	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Manganese	522	B	0.26	0.042	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Nickel	19.0		6.5	0.30	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Potassium	3170		39.2	26.1	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Selenium	ND		5.2	0.52	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Silver	ND		0.78	0.26	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Sodium	170	J	183	17.0	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Thallium	ND		7.8	0.39	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Vanadium	17.0		0.65	0.14	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1
Zinc	72.3		2.6	0.84	mg/Kg	✱	02/09/19 09:24	02/11/19 12:51	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Date Collected: 02/07/19 09:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.026	0.011	mg/Kg	☼	02/14/19 12:00	02/14/19 13:39	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Date Collected: 02/07/19 09:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Acetone	9.8	J	22	3.7	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Benzene	0.26	J	4.4	0.22	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Bromomethane	ND		4.4	0.40	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Chloroethane	ND		4.4	0.99	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Chloromethane	ND		4.4	0.27	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
cis-1,2-Dichloroethene	1.3	J	4.4	0.56	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Cyclohexane	ND		4.4	0.62	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Methylcyclohexane	ND		4.4	0.67	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Styrene	ND		4.4	0.22	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Toluene	0.90	J	4.4	0.33	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Trichloroethene	8.4		4.4	0.97	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Trichlorofluoromethane	ND		4.4	0.42	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1
Xylenes, Total	ND		8.8	0.74	ug/Kg	☼	02/08/19 07:15	02/11/19 15:36	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Date Collected: 02/07/19 09:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		71 - 125	02/08/19 07:15	02/11/19 15:36	1
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	02/08/19 07:15	02/11/19 15:36	1
4-Bromofluorobenzene (Surr)	97		72 - 126	02/08/19 07:15	02/11/19 15:36	1
Dibromofluoromethane (Surr)	104		60 - 140	02/08/19 07:15	02/11/19 15:36	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	☼	02/11/19 14:25	02/12/19 20:35	5
bis (2-chloroisopropyl) ether	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2,4,6-Trichlorophenol	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2,4-Dinitrophenol	ND		10000	4700	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2-Chlorophenol	ND		1000	190	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2-Methylnaphthalene	ND		1000	210	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
3-Nitroaniline	ND		2000	280	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4-Bromophenyl phenyl ether	ND		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4-Nitroaniline	ND		2000	540	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
4-Nitrophenol	ND		2000	720	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Acenaphthene	ND		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Acenaphthylene	180	J	1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Acetophenone	ND		1000	140	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Anthracene	550	J	1000	250	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Atrazine	ND		1000	360	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Benzaldehyde	ND		1000	820	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Benzo[a]anthracene	1800		1000	100	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Benzo[a]pyrene	1800		1000	150	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Benzo[b]fluoranthene	2000		1000	160	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Benzo[g,h,i]perylene	1400		1000	110	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Benzo[k]fluoranthene	1300		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Bis(2-ethylhexyl) phthalate	ND		1000	350	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Caprolactam	ND		1000	310	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Carbazole	150	J	1000	120	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5
Chrysene	2100		1000	230	ug/Kg	☼	02/11/19 14:25	02/12/19 20:35	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Date Collected: 02/07/19 09:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Di-n-butyl phthalate	ND		1000	180	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Dibenzofuran	ND		1000	120	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Diethyl phthalate	ND		1000	130	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Dimethyl phthalate	ND		1000	120	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Fluoranthene	3600		1000	110	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Fluorene	130	J	1000	120	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Hexachlorobenzene	ND		1000	140	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Hexachloroethane	ND		1000	130	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Indeno[1,2,3-cd]pyrene	1100		1000	130	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Isophorone	ND		1000	220	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
N-Nitrosodi-n-propylamine	ND		1000	180	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
N-Nitrosodiphenylamine	ND		1000	830	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Naphthalene	ND		1000	130	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Nitrobenzene	ND		1000	110	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Pentachlorophenol	ND		2000	1000	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Phenanthrene	1500		1000	150	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Phenol	ND		1000	160	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5
Pyrene	3200		1000	120	ug/Kg	✱	02/11/19 14:25	02/12/19 20:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	101		53 - 120	02/11/19 14:25	02/12/19 20:35	5
Phenol-d5 (Surr)	97		54 - 120	02/11/19 14:25	02/12/19 20:35	5
p-Terphenyl-d14 (Surr)	132	X	65 - 121	02/11/19 14:25	02/12/19 20:35	5
2,4,6-Tribromophenol (Surr)	117		54 - 120	02/11/19 14:25	02/12/19 20:35	5
2-Fluorobiphenyl	108		60 - 120	02/11/19 14:25	02/12/19 20:35	5
2-Fluorophenol (Surr)	95		52 - 120	02/11/19 14:25	02/12/19 20:35	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		20	3.9	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
4,4'-DDE	ND		20	4.2	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
4,4'-DDT	14	J	20	4.7	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Aldrin	ND		20	4.9	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
alpha-BHC	ND		20	3.6	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
cis-Chlordane	ND		20	10	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
beta-BHC	ND		20	3.6	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
delta-BHC	ND		20	3.7	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Dieldrin	ND		20	4.8	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Endosulfan I	ND		20	3.8	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Endosulfan II	ND		20	3.6	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Endosulfan sulfate	ND		20	3.7	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Endrin	ND		20	4.0	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Endrin aldehyde	ND		20	5.1	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
Endrin ketone	ND		20	4.9	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
gamma-BHC (Lindane)	ND		20	3.7	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10
trans-Chlordane	ND		20	6.4	ug/Kg	✱	02/12/19 14:56	02/13/19 15:29	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Date Collected: 02/07/19 09:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		20	4.3	ug/Kg	☆	02/12/19 14:56	02/13/19 15:29	10
Heptachlor epoxide	ND		20	5.2	ug/Kg	☆	02/12/19 14:56	02/13/19 15:29	10
Methoxychlor	ND		20	4.1	ug/Kg	☆	02/12/19 14:56	02/13/19 15:29	10
Toxaphene	ND		200	120	ug/Kg	☆	02/12/19 14:56	02/13/19 15:29	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	184	X	45 - 120				02/12/19 14:56	02/13/19 15:29	10
Tetrachloro-m-xylene	0	X	30 - 124				02/12/19 14:56	02/13/19 15:29	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27	0.053	mg/Kg	☆	02/08/19 14:30	02/10/19 17:06	1
PCB-1221	ND		0.27	0.053	mg/Kg	☆	02/08/19 14:30	02/10/19 17:06	1
PCB-1232	ND		0.27	0.053	mg/Kg	☆	02/08/19 14:30	02/10/19 17:06	1
PCB-1242	ND		0.27	0.053	mg/Kg	☆	02/08/19 14:30	02/10/19 17:06	1
PCB-1248	ND		0.27	0.053	mg/Kg	☆	02/08/19 14:30	02/10/19 17:06	1
PCB-1254	ND		0.27	0.13	mg/Kg	☆	02/08/19 14:30	02/10/19 17:06	1
PCB-1260	ND		0.27	0.13	mg/Kg	☆	02/08/19 14:30	02/10/19 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		60 - 154				02/08/19 14:30	02/10/19 17:06	1
DCB Decachlorobiphenyl	68		65 - 174				02/08/19 14:30	02/10/19 17:06	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		20	6.4	ug/Kg	☆	02/11/19 14:31	02/14/19 10:31	1
2,4-D	ND		20	13	ug/Kg	☆	02/11/19 14:31	02/14/19 10:31	1
Silvex (2,4,5-TP)	ND		20	7.2	ug/Kg	☆	02/11/19 14:31	02/14/19 10:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	54		28 - 129				02/11/19 14:31	02/14/19 10:31	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6950		11.9	5.2	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Antimony	ND		17.8	0.47	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Arsenic	7.4		2.4	0.47	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Barium	92.6		0.59	0.13	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Beryllium	0.27		0.24	0.033	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Cadmium	0.67		0.24	0.036	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Calcium	212000	B	119	7.8	mg/Kg	☆	02/09/19 09:24	02/12/19 11:14	2
Chromium	11.1		0.59	0.24	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Cobalt	5.4		0.59	0.059	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Copper	17.5		2.4	0.50	mg/Kg	☆	02/09/19 09:24	02/12/19 11:14	2
Iron	9470		11.9	4.2	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Lead	137		1.2	0.28	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Magnesium	47500	B	23.7	1.1	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Manganese	705	B	0.24	0.038	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Nickel	13.2		5.9	0.27	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Potassium	2170		35.6	23.7	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1
Selenium	ND		4.7	0.47	mg/Kg	☆	02/09/19 09:24	02/11/19 12:55	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Date Collected: 02/07/19 09:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.71	0.24	mg/Kg	☼	02/09/19 09:24	02/11/19 12:55	1
Sodium	233		166	15.4	mg/Kg	☼	02/09/19 09:24	02/11/19 12:55	1
Thallium	ND		7.1	0.36	mg/Kg	☼	02/09/19 09:24	02/11/19 12:55	1
Vanadium	13.6		0.59	0.13	mg/Kg	☼	02/09/19 09:24	02/11/19 12:55	1
Zinc	47.1		2.4	0.76	mg/Kg	☼	02/09/19 09:24	02/11/19 12:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054		0.024	0.0098	mg/Kg	☼	02/14/19 12:00	02/14/19 13:40	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (0 -2)

Lab Sample ID: 480-148804-5

Date Collected: 02/07/19 10:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
bis (2-chloroisopropyl) ether	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2,4,5-Trichlorophenol	ND		1100	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2,4,6-Trichlorophenol	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2,4-Dichlorophenol	ND		1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2,4-Dimethylphenol	ND		1100	260	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2,4-Dinitrophenol	ND		11000	5000	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2,4-Dinitrotoluene	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2-Chlorophenol	ND		1100	200	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2-Methylnaphthalene	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
2-Nitrophenol	ND		1100	310	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
3-Nitroaniline	ND		2100	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4,6-Dinitro-2-methylphenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4-Bromophenyl phenyl ether	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4-Chloro-3-methylphenol	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4-Chloroaniline	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4-Chlorophenyl phenyl ether	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4-Methylphenol	ND		2100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4-Nitroaniline	ND		2100	570	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
4-Nitrophenol	ND		2100	770	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Acenaphthene	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Acenaphthylene	200	J	1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Acetophenone	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Anthracene	330	J	1100	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Atrazine	ND		1100	380	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Benzaldehyde	ND		1100	870	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Benzo[a]anthracene	990	J	1100	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Benzo[a]pyrene	1000	J	1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Benzo[b]fluoranthene	1300		1100	170	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Benzo[g,h,i]perylene	740	J	1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Benzo[k]fluoranthene	570	J	1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Bis(2-ethylhexyl) phthalate	440	J	1100	370	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Caprolactam	ND		1100	330	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Carbazole	140	J	1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Chrysene	1100		1100	240	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Di-n-butyl phthalate	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Dibenzofuran	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Diethyl phthalate	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (0 -2)

Lab Sample ID: 480-148804-5

Date Collected: 02/07/19 10:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	2300		1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Fluorene	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Hexachlorobenzene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Hexachlorocyclopentadiene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Indeno[1,2,3-cd]pyrene	620 J		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Isophorone	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
N-Nitrosodi-n-propylamine	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
N-Nitrosodiphenylamine	ND		1100	890	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Naphthalene	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Pentachlorophenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Phenanthrene	1500		1100	160	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Phenol	ND		1100	170	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Pyrene	2100		1100	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:00	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	100		53 - 120				02/11/19 14:25	02/12/19 21:00	5
Phenol-d5 (Surr)	91		54 - 120				02/11/19 14:25	02/12/19 21:00	5
p-Terphenyl-d14 (Surr)	120		65 - 121				02/11/19 14:25	02/12/19 21:00	5
2,4,6-Tribromophenol (Surr)	107		54 - 120				02/11/19 14:25	02/12/19 21:00	5
2-Fluorobiphenyl	103		60 - 120				02/11/19 14:25	02/12/19 21:00	5
2-Fluorophenol (Surr)	91		52 - 120				02/11/19 14:25	02/12/19 21:00	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.88 J B		2.2	0.42	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
4,4'-DDE	ND		2.2	0.45	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
4,4'-DDT	2.1 J		2.2	0.50	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Aldrin	ND		2.2	0.53	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
alpha-BHC	0.41 J		2.2	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
cis-Chlordane	ND		2.2	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
beta-BHC	ND		2.2	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
delta-BHC	ND		2.2	0.40	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Dieldrin	ND		2.2	0.52	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Endosulfan I	ND		2.2	0.41	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Endosulfan II	0.50 J		2.2	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Endosulfan sulfate	ND		2.2	0.40	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Endrin	ND		2.2	0.43	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Endrin aldehyde	ND		2.2	0.55	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Endrin ketone	ND		2.2	0.53	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
gamma-BHC (Lindane)	ND		2.2	0.40	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
trans-Chlordane	ND		2.2	0.69	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Heptachlor	ND		2.2	0.47	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Heptachlor epoxide	ND		2.2	0.56	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Methoxychlor	ND		2.2	0.44	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1
Toxaphene	ND		22	13	ug/Kg	☼	02/12/19 14:56	02/13/19 15:49	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (0 -2)

Date Collected: 02/07/19 10:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-5

Matrix: Solid

Percent Solids: 76.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	129	X	45 - 120	02/12/19 14:56	02/13/19 15:49	1
Tetrachloro-m-xylene	53		30 - 124	02/12/19 14:56	02/13/19 15:49	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.27	0.053	mg/Kg	✱	02/08/19 14:30	02/10/19 17:22	1
PCB-1221	ND		0.27	0.053	mg/Kg	✱	02/08/19 14:30	02/10/19 17:22	1
PCB-1232	ND		0.27	0.053	mg/Kg	✱	02/08/19 14:30	02/10/19 17:22	1
PCB-1242	ND		0.27	0.053	mg/Kg	✱	02/08/19 14:30	02/10/19 17:22	1
PCB-1248	ND		0.27	0.053	mg/Kg	✱	02/08/19 14:30	02/10/19 17:22	1
PCB-1254	ND		0.27	0.13	mg/Kg	✱	02/08/19 14:30	02/10/19 17:22	1
PCB-1260	ND		0.27	0.13	mg/Kg	✱	02/08/19 14:30	02/10/19 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		60 - 154	02/08/19 14:30	02/10/19 17:22	1
DCB Decachlorobiphenyl	83		65 - 174	02/08/19 14:30	02/10/19 17:22	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.8	ug/Kg	✱	02/11/19 14:31	02/14/19 13:00	1
2,4-D	ND		21	13	ug/Kg	✱	02/11/19 14:31	02/14/19 13:00	1
Silvex (2,4,5-TP)	ND		21	7.6	ug/Kg	✱	02/11/19 14:31	02/14/19 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	58		28 - 129	02/11/19 14:31	02/14/19 13:00	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12700		13.3	5.9	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Antimony	ND		20.0	0.53	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Arsenic	6.3		2.7	0.53	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Barium	64.9		0.67	0.15	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Beryllium	0.54		0.27	0.037	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Cadmium	0.85		0.27	0.040	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Calcium	47800	B	66.5	4.4	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Chromium	19.1		0.67	0.27	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Cobalt	7.5		0.67	0.067	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Copper	81.0		1.3	0.28	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Iron	17300		13.3	4.7	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Lead	76.2		1.3	0.32	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Magnesium	24700	B	26.6	1.2	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Manganese	384	B	0.27	0.043	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Nickel	25.7		6.7	0.31	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Potassium	3770		39.9	26.6	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Selenium	ND		5.3	0.53	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Silver	ND		0.80	0.27	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Sodium	120	J	186	17.3	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Thallium	ND		8.0	0.40	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Vanadium	22.3		0.67	0.15	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1
Zinc	105		2.7	0.85	mg/Kg	✱	02/09/19 09:24	02/11/19 12:59	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (0 -2)

Lab Sample ID: 480-148804-5

Date Collected: 02/07/19 10:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.077		0.026	0.010	mg/Kg	☼	02/14/19 12:00	02/14/19 13:44	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Date Collected: 02/07/19 10:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.8	0.28	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,1,2,2-Tetrachloroethane	ND		3.8	0.62	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,1,2-Trichloroethane	ND		3.8	0.50	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.8	0.87	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,1-Dichloroethane	ND		3.8	0.46	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,1-Dichloroethene	ND		3.8	0.47	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,2,4-Trichlorobenzene	ND		3.8	0.23	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,2-Dibromo-3-Chloropropane	ND		3.8	1.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,2-Dichlorobenzene	ND		3.8	0.30	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,2-Dichloroethane	ND		3.8	0.19	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,2-Dichloropropane	ND		3.8	1.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,3-Dichlorobenzene	ND		3.8	0.20	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,4-Dichlorobenzene	ND		3.8	0.53	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
2-Butanone (MEK)	ND		19	1.4	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
2-Hexanone	ND		19	1.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
4-Methyl-2-pentanone (MIBK)	ND		19	1.2	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Acetone	53		19	3.2	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Benzene	ND		3.8	0.19	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Bromodichloromethane	ND		3.8	0.51	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Bromoform	ND		3.8	1.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Bromomethane	ND		3.8	0.34	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Carbon disulfide	ND		3.8	1.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Carbon tetrachloride	ND		3.8	0.37	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Chlorobenzene	ND		3.8	0.50	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Dibromochloromethane	ND		3.8	0.49	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Chloroethane	ND		3.8	0.86	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Chloroform	ND		3.8	0.24	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Chloromethane	ND		3.8	0.23	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
cis-1,2-Dichloroethene	ND		3.8	0.49	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
cis-1,3-Dichloropropene	ND		3.8	0.55	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Cyclohexane	ND		3.8	0.53	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Dichlorodifluoromethane	ND		3.8	0.31	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Ethylbenzene	ND		3.8	0.26	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
1,2-Dibromoethane	ND		3.8	0.49	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Isopropylbenzene	ND		3.8	0.57	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Methyl acetate	ND		19	2.3	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Methyl tert-butyl ether	ND		3.8	0.37	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Methylcyclohexane	ND		3.8	0.58	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Methylene Chloride	ND		3.8	1.8	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Styrene	ND		3.8	0.19	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Tetrachloroethene	ND		3.8	0.51	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Toluene	ND		3.8	0.29	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
trans-1,2-Dichloroethene	ND		3.8	0.39	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
trans-1,3-Dichloropropene	ND		3.8	1.7	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Trichloroethene	ND		3.8	0.84	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Trichlorofluoromethane	ND		3.8	0.36	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Vinyl chloride	ND		3.8	0.46	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1
Xylenes, Total	ND		7.6	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 16:02	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Date Collected: 02/07/19 10:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 91.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 125	02/08/19 07:15	02/11/19 16:02	1
1,2-Dichloroethane-d4 (Surr)	106		64 - 126	02/08/19 07:15	02/11/19 16:02	1
4-Bromofluorobenzene (Surr)	99		72 - 126	02/08/19 07:15	02/11/19 16:02	1
Dibromofluoromethane (Surr)	104		60 - 140	02/08/19 07:15	02/11/19 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		910	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
bis (2-chloroisopropyl) ether	ND		910	180	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2,4,5-Trichlorophenol	ND		910	250	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2,4,6-Trichlorophenol	ND		910	180	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2,4-Dichlorophenol	ND		910	96	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2,4-Dimethylphenol	ND		910	220	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2,4-Dinitrophenol	ND		8900	4200	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2,4-Dinitrotoluene	ND		910	190	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2,6-Dinitrotoluene	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2-Chloronaphthalene	ND		910	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2-Chlorophenol	ND		910	170	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2-Methylphenol	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2-Methylnaphthalene	ND		910	180	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2-Nitroaniline	ND		1800	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
2-Nitrophenol	ND		910	260	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
3-Nitroaniline	ND		1800	250	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4,6-Dinitro-2-methylphenol	ND		1800	910	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4-Bromophenyl phenyl ether	ND		910	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4-Chloro-3-methylphenol	ND		910	220	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4-Chloroaniline	ND		910	220	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4-Chlorophenyl phenyl ether	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
4-Nitrophenol	ND		1800	640	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Acenaphthene	ND		910	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Acenaphthylene	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Acetophenone	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Anthracene	ND		910	220	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Atrazine	ND		910	310	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Benzaldehyde	ND		910	720	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Benzo[a]anthracene	250	J	910	91	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Benzo[a]pyrene	260	J	910	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Benzo[b]fluoranthene	360	J	910	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Benzo[g,h,i]perylene	210	J	910	96	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Benzo[k]fluoranthene	130	J	910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Bis(2-chloroethoxy)methane	ND		910	190	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Bis(2-chloroethyl)ether	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Bis(2-ethylhexyl) phthalate	ND		910	310	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Butyl benzyl phthalate	ND		910	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Caprolactam	ND		910	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Carbazole	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Chrysene	200	J	910	200	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Date Collected: 02/07/19 10:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		910	160	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Di-n-butyl phthalate	ND		910	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Di-n-octyl phthalate	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Dibenzofuran	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Diethyl phthalate	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Dimethyl phthalate	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Fluoranthene	500	J	910	96	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Fluorene	ND		910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Hexachlorobenzene	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Hexachlorobutadiene	ND		910	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Hexachlorocyclopentadiene	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Hexachloroethane	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Indeno[1,2,3-cd]pyrene	190	J	910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Isophorone	ND		910	190	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
N-Nitrosodi-n-propylamine	ND		910	150	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
N-Nitrosodiphenylamine	ND		910	740	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Naphthalene	ND		910	120	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Nitrobenzene	ND		910	100	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Pentachlorophenol	ND		1800	910	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Phenanthrene	170	J	910	130	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Phenol	ND		910	140	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5
Pyrene	460	J	910	110	ug/Kg	☼	02/11/19 14:25	02/12/19 21:25	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	99		53 - 120	02/11/19 14:25	02/12/19 21:25	5
Phenol-d5 (Surr)	91		54 - 120	02/11/19 14:25	02/12/19 21:25	5
p-Terphenyl-d14 (Surr)	123	X	65 - 121	02/11/19 14:25	02/12/19 21:25	5
2,4,6-Tribromophenol (Surr)	95		54 - 120	02/11/19 14:25	02/12/19 21:25	5
2-Fluorobiphenyl	102		60 - 120	02/11/19 14:25	02/12/19 21:25	5
2-Fluorophenol (Surr)	90		52 - 120	02/11/19 14:25	02/12/19 21:25	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		18	3.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
4,4'-DDE	ND		18	3.8	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
4,4'-DDT	10	J	18	4.2	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Aldrin	ND		18	4.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
alpha-BHC	ND		18	3.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
cis-Chlordane	ND		18	9.0	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
beta-BHC	ND		18	3.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
delta-BHC	ND		18	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Dieldrin	ND		18	4.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Endosulfan I	ND		18	3.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Endosulfan II	ND		18	3.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Endosulfan sulfate	ND		18	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Endrin	ND		18	3.6	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Endrin aldehyde	ND		18	4.6	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
Endrin ketone	ND		18	4.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
gamma-BHC (Lindane)	ND		18	3.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10
trans-Chlordane	ND		18	5.8	ug/Kg	☼	02/12/19 14:56	02/13/19 16:08	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Date Collected: 02/07/19 10:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		18	3.9	ug/Kg	✱	02/12/19 14:56	02/13/19 16:08	10
Heptachlor epoxide	ND		18	4.7	ug/Kg	✱	02/12/19 14:56	02/13/19 16:08	10
Methoxychlor	22		18	3.7	ug/Kg	✱	02/12/19 14:56	02/13/19 16:08	10
Toxaphene	ND		180	110	ug/Kg	✱	02/12/19 14:56	02/13/19 16:08	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	101		45 - 120				02/12/19 14:56	02/13/19 16:08	10
Tetrachloro-m-xylene	81		30 - 124				02/12/19 14:56	02/13/19 16:08	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.039	mg/Kg	✱	02/08/19 14:30	02/10/19 17:38	1
PCB-1221	ND		0.20	0.039	mg/Kg	✱	02/08/19 14:30	02/10/19 17:38	1
PCB-1232	ND		0.20	0.039	mg/Kg	✱	02/08/19 14:30	02/10/19 17:38	1
PCB-1242	ND		0.20	0.039	mg/Kg	✱	02/08/19 14:30	02/10/19 17:38	1
PCB-1248	ND		0.20	0.039	mg/Kg	✱	02/08/19 14:30	02/10/19 17:38	1
PCB-1254	ND		0.20	0.094	mg/Kg	✱	02/08/19 14:30	02/10/19 17:38	1
PCB-1260	ND		0.20	0.094	mg/Kg	✱	02/08/19 14:30	02/10/19 17:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		60 - 154				02/08/19 14:30	02/10/19 17:38	1
DCB Decachlorobiphenyl	69		65 - 174				02/08/19 14:30	02/10/19 17:38	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		18	5.8	ug/Kg	✱	02/11/19 14:31	02/15/19 11:04	1
2,4-D	ND		18	11	ug/Kg	✱	02/11/19 14:31	02/15/19 11:04	1
Silvex (2,4,5-TP)	ND		18	6.5	ug/Kg	✱	02/11/19 14:31	02/15/19 11:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	77		28 - 129				02/11/19 14:31	02/15/19 11:04	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6860		11.0	4.8	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Antimony	ND		16.5	0.44	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Arsenic	2.6		2.2	0.44	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Barium	67.7		0.55	0.12	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Beryllium	0.27		0.22	0.031	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Cadmium	0.25		0.22	0.033	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Calcium	144000	B	110	7.3	mg/Kg	✱	02/09/19 09:24	02/12/19 11:17	2
Chromium	9.9		0.55	0.22	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Cobalt	3.8		0.55	0.055	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Copper	14.3		2.2	0.46	mg/Kg	✱	02/09/19 09:24	02/12/19 11:17	2
Iron	9830		11.0	3.9	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Lead	15.5		1.1	0.26	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Magnesium	53400	B	44.1	2.0	mg/Kg	✱	02/09/19 09:24	02/12/19 11:17	2
Manganese	257	B	0.22	0.035	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Nickel	10.7		5.5	0.25	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Potassium	2570		33.1	22.0	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1
Selenium	ND		4.4	0.44	mg/Kg	✱	02/09/19 09:24	02/11/19 13:03	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Date Collected: 02/07/19 10:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.66	0.22	mg/Kg	☼	02/09/19 09:24	02/11/19 13:03	1
Sodium	170		154	14.3	mg/Kg	☼	02/09/19 09:24	02/11/19 13:03	1
Thallium	ND		6.6	0.33	mg/Kg	☼	02/09/19 09:24	02/11/19 13:03	1
Vanadium	12.7		0.55	0.12	mg/Kg	☼	02/09/19 09:24	02/11/19 13:03	1
Zinc	25.7		2.2	0.71	mg/Kg	☼	02/09/19 09:24	02/11/19 13:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018	J	0.021	0.0087	mg/Kg	☼	02/14/19 12:00	02/14/19 13:46	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Date Collected: 02/07/19 10:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 72.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		2300	340	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
bis (2-chloroisopropyl) ether	ND		2300	460	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2,4,5-Trichlorophenol	ND		2300	620	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2,4,6-Trichlorophenol	ND		2300	460	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2,4-Dichlorophenol	ND		2300	240	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2,4-Dimethylphenol	ND		2300	560	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2,4-Dinitrophenol	ND		22000	11000	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2,4-Dinitrotoluene	ND		2300	470	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2,6-Dinitrotoluene	ND		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2-Chloronaphthalene	ND		2300	380	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2-Chlorophenol	ND		2300	420	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2-Methylphenol	ND		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2-Methylnaphthalene	ND		2300	460	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2-Nitroaniline	ND		4500	340	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
2-Nitrophenol	ND		2300	650	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
3,3'-Dichlorobenzidine	ND		4500	2700	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
3-Nitroaniline	ND		4500	640	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4,6-Dinitro-2-methylphenol	ND		4500	2300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4-Bromophenyl phenyl ether	ND		2300	330	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4-Chloro-3-methylphenol	ND		2300	570	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4-Chloroaniline	ND		2300	570	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4-Chlorophenyl phenyl ether	ND		2300	280	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4-Methylphenol	ND		4500	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4-Nitroaniline	ND		4500	1200	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
4-Nitrophenol	ND		4500	1600	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Acenaphthene	ND		2300	340	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Acenaphthylene	500	J	2300	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Acetophenone	ND		2300	310	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Anthracene	ND		2300	570	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Atrazine	ND		2300	800	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Benzaldehyde	ND		2300	1800	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Benzo[a]anthracene	1700	J	2300	230	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Benzo[a]pyrene	2000	J	2300	340	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Benzo[b]fluoranthene	2500		2300	370	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Benzo[g,h,i]perylene	1600	J	2300	240	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Benzo[k]fluoranthene	1300	J	2300	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Bis(2-chloroethoxy)methane	ND		2300	490	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Bis(2-chloroethyl)ether	ND		2300	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Bis(2-ethylhexyl) phthalate	ND		2300	790	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Butyl benzyl phthalate	ND		2300	380	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Caprolactam	ND		2300	690	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Carbazole	ND		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Chrysene	2100	J	2300	510	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Dibenz(a,h)anthracene	ND		2300	410	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Di-n-butyl phthalate	ND		2300	390	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Di-n-octyl phthalate	ND		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Dibenzofuran	ND		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Diethyl phthalate	ND		2300	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Dimethyl phthalate	ND		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Date Collected: 02/07/19 10:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 72.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	3800		2300	240	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Fluorene	ND		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Hexachlorobenzene	ND		2300	310	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Hexachlorobutadiene	ND		2300	340	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Hexachlorocyclopentadiene	ND		2300	310	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Hexachloroethane	ND		2300	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Indeno[1,2,3-cd]pyrene	1300 J		2300	280	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Isophorone	ND		2300	490	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
N-Nitrosodi-n-propylamine	ND		2300	390	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
N-Nitrosodiphenylamine	ND		2300	1900	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Naphthalene	ND		2300	300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Nitrobenzene	ND		2300	260	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Pentachlorophenol	ND		4500	2300	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Phenanthrene	1300 J		2300	340	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Phenol	ND		2300	350	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Pyrene	3300		2300	270	ug/Kg	☼	02/11/19 14:25	02/12/19 21:50	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	105		53 - 120				02/11/19 14:25	02/12/19 21:50	10
Phenol-d5 (Surr)	93		54 - 120				02/11/19 14:25	02/12/19 21:50	10
p-Terphenyl-d14 (Surr)	118		65 - 121				02/11/19 14:25	02/12/19 21:50	10
2,4,6-Tribromophenol (Surr)	118		54 - 120				02/11/19 14:25	02/12/19 21:50	10
2-Fluorobiphenyl	101		60 - 120				02/11/19 14:25	02/12/19 21:50	10
2-Fluorophenol (Surr)	101		52 - 120				02/11/19 14:25	02/12/19 21:50	10

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		23	4.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
4,4'-DDE	ND		23	4.7	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
4,4'-DDT	15 J		23	5.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Aldrin	ND		23	5.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
alpha-BHC	ND		23	4.1	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
cis-Chlordane	ND		23	11	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
beta-BHC	ND		23	4.1	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
delta-BHC	ND		23	4.2	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Dieldrin	ND		23	5.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Endosulfan I	ND		23	4.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Endosulfan II	ND		23	4.1	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Endosulfan sulfate	ND		23	4.2	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Endrin	ND		23	4.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Endrin aldehyde	ND		23	5.8	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Endrin ketone	ND		23	5.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
gamma-BHC (Lindane)	ND		23	4.1	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
trans-Chlordane	ND		23	7.2	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Heptachlor	ND		23	4.9	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Heptachlor epoxide	ND		23	5.8	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Methoxychlor	ND		23	4.6	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10
Toxaphene	ND		230	130	ug/Kg	☼	02/12/19 14:56	02/13/19 16:28	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (0 -2)

Date Collected: 02/07/19 10:30

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-7

Matrix: Solid

Percent Solids: 72.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	216	X	45 - 120	02/12/19 14:56	02/13/19 16:28	10
Tetrachloro-m-xylene	0	X	30 - 124	02/12/19 14:56	02/13/19 16:28	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.33	0.064	mg/Kg	☼	02/08/19 14:30	02/10/19 17:54	1
PCB-1221	ND		0.33	0.064	mg/Kg	☼	02/08/19 14:30	02/10/19 17:54	1
PCB-1232	ND		0.33	0.064	mg/Kg	☼	02/08/19 14:30	02/10/19 17:54	1
PCB-1242	ND		0.33	0.064	mg/Kg	☼	02/08/19 14:30	02/10/19 17:54	1
PCB-1248	ND		0.33	0.064	mg/Kg	☼	02/08/19 14:30	02/10/19 17:54	1
PCB-1254	ND		0.33	0.15	mg/Kg	☼	02/08/19 14:30	02/10/19 17:54	1
PCB-1260	ND		0.33	0.15	mg/Kg	☼	02/08/19 14:30	02/10/19 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	61		60 - 154	02/08/19 14:30	02/10/19 17:54	1
DCB Decachlorobiphenyl	57	X	65 - 174	02/08/19 14:30	02/10/19 17:54	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		23	7.3	ug/Kg	☼	02/11/19 14:31	02/15/19 11:34	1
2,4-D	ND		23	14	ug/Kg	☼	02/11/19 14:31	02/15/19 11:34	1
Silvex (2,4,5-TP)	ND		23	8.2	ug/Kg	☼	02/11/19 14:31	02/15/19 11:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	58		28 - 129	02/11/19 14:31	02/15/19 11:34	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9920		13.6	6.0	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Antimony	ND		20.4	0.54	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Arsenic	5.4		2.7	0.54	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Barium	68.0		0.68	0.15	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Beryllium	0.47		0.27	0.038	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Cadmium	0.53		0.27	0.041	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Calcium	57200	B	67.9	4.5	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Chromium	17.0		0.68	0.27	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Cobalt	6.6		0.68	0.068	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Copper	28.9		1.4	0.29	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Iron	14000		13.6	4.8	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Lead	92.0		1.4	0.33	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Magnesium	27800	B	27.2	1.3	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Manganese	355	B	0.27	0.043	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Nickel	19.6		6.8	0.31	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Potassium	3180		40.7	27.2	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Selenium	ND		5.4	0.54	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Silver	ND		0.81	0.27	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Sodium	169	J	190	17.7	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Thallium	ND		8.1	0.41	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Vanadium	20.4		0.68	0.15	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1
Zinc	76.1		2.7	0.87	mg/Kg	☼	02/09/19 09:24	02/11/19 13:07	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Date Collected: 02/07/19 10:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 72.6

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081		0.027	0.011	mg/Kg	☼	02/14/19 12:00	02/14/19 13:47	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Date Collected: 02/07/19 10:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Acetone	12	J	25	4.2	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Benzene	ND		5.0	0.24	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Bromoform	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Chlorobenzene	ND		5.0	0.66	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Chloroform	ND		5.0	0.31	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Cyclohexane	ND		5.0	0.70	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Ethylbenzene	ND		5.0	0.34	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Styrene	ND		5.0	0.25	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Toluene	ND		5.0	0.38	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1
Xylenes, Total	ND		10	0.84	ug/Kg	☼	02/08/19 07:15	02/11/19 16:28	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Date Collected: 02/07/19 10:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 125	02/08/19 07:15	02/11/19 16:28	1
1,2-Dichloroethane-d4 (Surr)	107		64 - 126	02/08/19 07:15	02/11/19 16:28	1
4-Bromofluorobenzene (Surr)	98		72 - 126	02/08/19 07:15	02/11/19 16:28	1
Dibromofluoromethane (Surr)	104		60 - 140	02/08/19 07:15	02/11/19 16:28	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	☼	02/11/19 14:25	02/12/19 22:15	5
bis (2-chloroisopropyl) ether	ND		950	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2,4,5-Trichlorophenol	ND		950	260	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2,4,6-Trichlorophenol	ND		950	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2,4-Dichlorophenol	ND		950	100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2,4-Dimethylphenol	ND		950	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2,4-Dinitrophenol	ND		9200	4400	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2,4-Dinitrotoluene	ND		950	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2,6-Dinitrotoluene	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2-Chloronaphthalene	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2-Chlorophenol	ND		950	170	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2-Methylphenol	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2-Methylnaphthalene	ND		950	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
2-Nitrophenol	ND		950	270	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4,6-Dinitro-2-methylphenol	ND		1800	950	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4-Bromophenyl phenyl ether	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4-Chloro-3-methylphenol	ND		950	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4-Chloroaniline	ND		950	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4-Chlorophenyl phenyl ether	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
4-Nitrophenol	ND		1800	660	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Acenaphthene	ND		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Acenaphthylene	340	J	950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Acetophenone	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Anthracene	340	J	950	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Atrazine	ND		950	330	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Benzaldehyde	ND		950	750	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Benzo[a]anthracene	1100		950	95	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Benzo[a]pyrene	1200		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Benzo[b]fluoranthene	1600		950	150	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Benzo[g,h,i]perylene	880	J	950	100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Benzo[k]fluoranthene	530	J	950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Bis(2-chloroethoxy)methane	ND		950	200	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Bis(2-chloroethyl)ether	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Bis(2-ethylhexyl) phthalate	ND		950	320	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Butyl benzyl phthalate	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Caprolactam	ND		950	280	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Carbazole	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Chrysene	1300		950	210	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Date Collected: 02/07/19 10:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	240	J	950	170	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Di-n-butyl phthalate	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Di-n-octyl phthalate	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Dibenzofuran	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Diethyl phthalate	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Dimethyl phthalate	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Fluoranthene	2400		950	100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Fluorene	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Hexachlorobenzene	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Hexachlorobutadiene	ND		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Hexachlorocyclopentadiene	ND		950	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Hexachloroethane	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Indeno[1,2,3-cd]pyrene	740	J	950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Isophorone	ND		950	200	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
N-Nitrosodi-n-propylamine	ND		950	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
N-Nitrosodiphenylamine	ND		950	770	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Naphthalene	ND		950	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Nitrobenzene	ND		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Pentachlorophenol	ND		1800	950	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Phenanthrene	1000		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Phenol	ND		950	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5
Pyrene	2200		950	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:15	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	98		53 - 120	02/11/19 14:25	02/12/19 22:15	5
Phenol-d5 (Surr)	89		54 - 120	02/11/19 14:25	02/12/19 22:15	5
p-Terphenyl-d14 (Surr)	122	X	65 - 121	02/11/19 14:25	02/12/19 22:15	5
2,4,6-Tribromophenol (Surr)	97		54 - 120	02/11/19 14:25	02/12/19 22:15	5
2-Fluorobiphenyl	101		60 - 120	02/11/19 14:25	02/12/19 22:15	5
2-Fluorophenol (Surr)	87		52 - 120	02/11/19 14:25	02/12/19 22:15	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		19	3.6	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
4,4'-DDE	ND		19	3.9	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
4,4'-DDT	11	J	19	4.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Aldrin	ND		19	4.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
alpha-BHC	ND		19	3.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
cis-Chlordane	ND		19	9.2	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
beta-BHC	ND		19	3.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
delta-BHC	ND		19	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Dieldrin	ND		19	4.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Endosulfan I	ND		19	3.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Endosulfan II	ND		19	3.3	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Endosulfan sulfate	ND		19	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Endrin	ND		19	3.7	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Endrin aldehyde	ND		19	4.7	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
Endrin ketone	ND		19	4.5	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
gamma-BHC (Lindane)	ND		19	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10
trans-Chlordane	ND		19	5.9	ug/Kg	☼	02/12/19 14:56	02/13/19 16:48	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Date Collected: 02/07/19 10:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		19	4.0	ug/Kg	☆	02/12/19 14:56	02/13/19 16:48	10
Heptachlor epoxide	ND		19	4.8	ug/Kg	☆	02/12/19 14:56	02/13/19 16:48	10
Methoxychlor	30		19	3.8	ug/Kg	☆	02/12/19 14:56	02/13/19 16:48	10
Toxaphene	ND		190	110	ug/Kg	☆	02/12/19 14:56	02/13/19 16:48	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	161	X	45 - 120				02/12/19 14:56	02/13/19 16:48	10
Tetrachloro-m-xylene	77		30 - 124				02/12/19 14:56	02/13/19 16:48	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.042	mg/Kg	☆	02/08/19 14:30	02/10/19 18:10	1
PCB-1221	ND		0.22	0.042	mg/Kg	☆	02/08/19 14:30	02/10/19 18:10	1
PCB-1232	ND		0.22	0.042	mg/Kg	☆	02/08/19 14:30	02/10/19 18:10	1
PCB-1242	ND		0.22	0.042	mg/Kg	☆	02/08/19 14:30	02/10/19 18:10	1
PCB-1248	ND		0.22	0.042	mg/Kg	☆	02/08/19 14:30	02/10/19 18:10	1
PCB-1254	ND		0.22	0.10	mg/Kg	☆	02/08/19 14:30	02/10/19 18:10	1
PCB-1260	ND		0.22	0.10	mg/Kg	☆	02/08/19 14:30	02/10/19 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		60 - 154				02/08/19 14:30	02/10/19 18:10	1
DCB Decachlorobiphenyl	67		65 - 174				02/08/19 14:30	02/10/19 18:10	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.0	ug/Kg	☆	02/11/19 14:31	02/15/19 12:05	1
2,4-D	ND		19	12	ug/Kg	☆	02/11/19 14:31	02/15/19 12:05	1
Silvex (2,4,5-TP)	ND		19	6.7	ug/Kg	☆	02/11/19 14:31	02/15/19 12:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	83		28 - 129				02/11/19 14:31	02/15/19 12:05	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9080		11.4	5.0	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Antimony	ND		17.0	0.45	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Arsenic	5.2		2.3	0.45	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Barium	56.8		0.57	0.12	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Beryllium	0.51		0.23	0.032	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Cadmium	0.32		0.23	0.034	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Calcium	53800	B	56.8	3.7	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Chromium	13.8		0.57	0.23	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Cobalt	6.0		0.57	0.057	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Copper	21.9		1.1	0.24	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Iron	13200		11.4	4.0	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Lead	52.3		1.1	0.27	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Magnesium	21700	B	22.7	1.1	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Manganese	308	B	0.23	0.036	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Nickel	16.6		5.7	0.26	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Potassium	2890		34.1	22.7	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1
Selenium	ND		4.5	0.45	mg/Kg	☆	02/09/19 09:24	02/11/19 13:11	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Date Collected: 02/07/19 10:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.68	0.23	mg/Kg	☼	02/09/19 09:24	02/11/19 13:11	1
Sodium	123	J	159	14.8	mg/Kg	☼	02/09/19 09:24	02/11/19 13:11	1
Thallium	ND		6.8	0.34	mg/Kg	☼	02/09/19 09:24	02/11/19 13:11	1
Vanadium	20.1		0.57	0.12	mg/Kg	☼	02/09/19 09:24	02/11/19 13:11	1
Zinc	47.8		2.3	0.73	mg/Kg	☼	02/09/19 09:24	02/11/19 13:11	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.072		0.022	0.0091	mg/Kg	☼	02/14/19 12:00	02/14/19 13:48	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (0 -2)

Lab Sample ID: 480-148804-9

Date Collected: 02/07/19 11:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		940	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
bis (2-chloroisopropyl) ether	ND		940	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2,4,5-Trichlorophenol	ND		940	260	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2,4,6-Trichlorophenol	ND		940	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2,4-Dichlorophenol	ND		940	100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2,4-Dimethylphenol	ND		940	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2,4-Dinitrophenol	ND		9200	4300	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2,4-Dinitrotoluene	ND		940	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2,6-Dinitrotoluene	ND		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2-Chloronaphthalene	ND		940	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2-Chlorophenol	ND		940	170	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2-Methylphenol	ND		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2-Methylnaphthalene	ND		940	190	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
2-Nitrophenol	ND		940	270	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4,6-Dinitro-2-methylphenol	ND		1800	940	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4-Bromophenyl phenyl ether	ND		940	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4-Chloro-3-methylphenol	ND		940	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4-Chloroaniline	ND		940	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4-Chlorophenyl phenyl ether	ND		940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
4-Nitrophenol	ND		1800	660	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Acenaphthene	ND		940	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Acenaphthylene	490	J	940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Acetophenone	ND		940	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Anthracene	1300		940	230	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Atrazine	ND		940	330	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Benzaldehyde	ND		940	750	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Benzo[a]anthracene	5300		940	94	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Benzo[a]pyrene	5000		940	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Benzo[b]fluoranthene	5400		940	150	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Benzo[g,h,i]perylene	3500		940	100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Benzo[k]fluoranthene	2800		940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Bis(2-chloroethoxy)methane	ND		940	200	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Bis(2-chloroethyl)ether	ND		940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Bis(2-ethylhexyl) phthalate	ND		940	320	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Butyl benzyl phthalate	ND		940	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Caprolactam	ND		940	280	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Carbazole	ND		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Chrysene	5800		940	210	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Dibenz(a,h)anthracene	1100		940	170	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Di-n-butyl phthalate	ND		940	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Di-n-octyl phthalate	ND		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Dibenzofuran	ND		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Diethyl phthalate	ND		940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Dimethyl phthalate	ND		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (0 -2)

Lab Sample ID: 480-148804-9

Date Collected: 02/07/19 11:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	6500		940	100	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Fluorene	160	J	940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Hexachlorobenzene	ND		940	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Hexachlorobutadiene	ND		940	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Hexachlorocyclopentadiene	ND		940	130	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Hexachloroethane	ND		940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Indeno[1,2,3-cd]pyrene	3000		940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Isophorone	ND		940	200	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
N-Nitrosodi-n-propylamine	ND		940	160	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
N-Nitrosodiphenylamine	ND		940	770	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Naphthalene	ND		940	120	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Nitrobenzene	ND		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Pentachlorophenol	ND		1800	940	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Phenanthrene	1200		940	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Phenol	ND		940	140	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Pyrene	8700		940	110	ug/Kg	☼	02/11/19 14:25	02/12/19 22:40	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	102		53 - 120				02/11/19 14:25	02/12/19 22:40	5
Phenol-d5 (Surr)	100		54 - 120				02/11/19 14:25	02/12/19 22:40	5
p-Terphenyl-d14 (Surr)	138	X	65 - 121				02/11/19 14:25	02/12/19 22:40	5
2,4,6-Tribromophenol (Surr)	116		54 - 120				02/11/19 14:25	02/12/19 22:40	5
2-Fluorobiphenyl	108		60 - 120				02/11/19 14:25	02/12/19 22:40	5
2-Fluorophenol (Surr)	100		52 - 120				02/11/19 14:25	02/12/19 22:40	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.7	0.71	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
4,4'-DDE	ND		3.7	0.77	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
4,4'-DDT	3.7		3.7	0.86	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Aldrin	ND		3.7	0.90	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
alpha-BHC	ND		3.7	0.66	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
cis-Chlordane	ND		3.7	1.8	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
beta-BHC	ND		3.7	0.66	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
delta-BHC	ND		3.7	0.68	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Dieldrin	ND		3.7	0.88	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Endosulfan I	ND		3.7	0.71	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Endosulfan II	ND		3.7	0.66	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Endosulfan sulfate	ND		3.7	0.69	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Endrin	ND		3.7	0.73	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Endrin aldehyde	ND		3.7	0.94	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Endrin ketone	1.7	J	3.7	0.90	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
gamma-BHC (Lindane)	ND		3.7	0.67	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
trans-Chlordane	ND		3.7	1.2	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Heptachlor	ND		3.7	0.80	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Heptachlor epoxide	ND		3.7	0.95	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Methoxychlor	ND		3.7	0.75	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2
Toxaphene	ND		37	21	ug/Kg	☼	02/12/19 14:56	02/13/19 17:08	2

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (0 -2)

Date Collected: 02/07/19 11:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-9

Matrix: Solid

Percent Solids: 87.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	144	X	45 - 120	02/12/19 14:56	02/13/19 17:08	2
Tetrachloro-m-xylene	50		30 - 124	02/12/19 14:56	02/13/19 17:08	2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.22	0.043	mg/Kg	✱	02/08/19 14:30	02/10/19 18:26	1
PCB-1221	ND		0.22	0.043	mg/Kg	✱	02/08/19 14:30	02/10/19 18:26	1
PCB-1232	ND		0.22	0.043	mg/Kg	✱	02/08/19 14:30	02/10/19 18:26	1
PCB-1242	ND		0.22	0.043	mg/Kg	✱	02/08/19 14:30	02/10/19 18:26	1
PCB-1248	ND		0.22	0.043	mg/Kg	✱	02/08/19 14:30	02/10/19 18:26	1
PCB-1254	ND		0.22	0.10	mg/Kg	✱	02/08/19 14:30	02/10/19 18:26	1
PCB-1260	ND		0.22	0.10	mg/Kg	✱	02/08/19 14:30	02/10/19 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		60 - 154	02/08/19 14:30	02/10/19 18:26	1
DCB Decachlorobiphenyl	68		65 - 174	02/08/19 14:30	02/10/19 18:26	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.0	ug/Kg	✱	02/11/19 14:31	02/15/19 13:11	1
2,4-D	ND		19	12	ug/Kg	✱	02/11/19 14:31	02/15/19 13:11	1
Silvex (2,4,5-TP)	ND		19	6.7	ug/Kg	✱	02/11/19 14:31	02/15/19 13:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	69		28 - 129	02/11/19 14:31	02/15/19 13:11	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5810		11.6	5.1	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Antimony	ND		17.4	0.46	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Arsenic	3.2		2.3	0.46	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Barium	73.3		0.58	0.13	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Beryllium	0.24		0.23	0.032	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Cadmium	0.75		0.23	0.035	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Calcium	130000	B	116	7.6	mg/Kg	✱	02/09/19 09:24	02/12/19 11:21	2
Chromium	14.3		0.58	0.23	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Cobalt	3.8		0.58	0.058	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Copper	33.2		2.3	0.49	mg/Kg	✱	02/09/19 09:24	02/12/19 11:21	2
Iron	9200		11.6	4.1	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Lead	81.3		1.2	0.28	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Magnesium	34600	B	23.2	1.1	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Manganese	224	B	0.23	0.037	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Nickel	14.0		5.8	0.27	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Potassium	1840		34.8	23.2	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Selenium	ND		4.6	0.46	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Silver	ND		0.70	0.23	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Sodium	137	J	162	15.1	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Thallium	ND		7.0	0.35	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Vanadium	12.8		0.58	0.13	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1
Zinc	122		2.3	0.74	mg/Kg	✱	02/09/19 09:24	02/11/19 13:15	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (0 -2)

Lab Sample ID: 480-148804-9

Date Collected: 02/07/19 11:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.022	0.0088	mg/Kg	☼	02/14/19 12:00	02/14/19 13:49	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (6 -12)

Lab Sample ID: 480-148804-10

Date Collected: 02/07/19 11:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.59	J	7.9	0.57	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,1,1,2,2-Tetrachloroethane	ND		7.9	1.3	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,1,2-Trichloroethane	ND		7.9	1.0	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.9	1.8	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,1-Dichloroethane	ND		7.9	0.96	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,1-Dichloroethene	ND		7.9	0.97	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,2,4-Trichlorobenzene	ND		7.9	0.48	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,2-Dibromo-3-Chloropropane	ND		7.9	3.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,2-Dichlorobenzene	ND		7.9	0.62	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,2-Dichloroethane	ND		7.9	0.40	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,2-Dichloropropane	ND		7.9	3.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,3-Dichlorobenzene	ND		7.9	0.41	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,4-Dichlorobenzene	ND		7.9	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
2-Butanone (MEK)	ND		39	2.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
2-Hexanone	ND		39	3.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
4-Methyl-2-pentanone (MIBK)	ND		39	2.6	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Acetone	ND		39	6.6	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Benzene	ND		7.9	0.39	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Bromodichloromethane	ND		7.9	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Bromoform	ND		7.9	3.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Bromomethane	ND		7.9	0.71	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Carbon disulfide	ND		7.9	3.9	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Carbon tetrachloride	ND		7.9	0.76	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Chlorobenzene	ND		7.9	1.0	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Dibromochloromethane	ND		7.9	1.0	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Chloroethane	ND		7.9	1.8	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Chloroform	ND		7.9	0.49	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Chloromethane	ND		7.9	0.48	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
cis-1,2-Dichloroethene	ND		7.9	1.0	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
cis-1,3-Dichloropropene	ND		7.9	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Cyclohexane	ND		7.9	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Dichlorodifluoromethane	ND		7.9	0.65	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Ethylbenzene	ND		7.9	0.54	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
1,2-Dibromoethane	ND		7.9	1.0	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Isopropylbenzene	ND		7.9	1.2	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Methyl acetate	ND		39	4.8	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Methyl tert-butyl ether	ND		7.9	0.78	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Methylcyclohexane	ND		7.9	1.2	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Methylene Chloride	ND		7.9	3.6	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Styrene	ND		7.9	0.39	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Tetrachloroethene	ND		7.9	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Toluene	ND		7.9	0.60	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
trans-1,2-Dichloroethene	ND		7.9	0.81	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
trans-1,3-Dichloropropene	ND		7.9	3.5	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Trichloroethene	ND		7.9	1.7	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Trichlorofluoromethane	ND		7.9	0.75	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Vinyl chloride	ND		7.9	0.96	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1
Xylenes, Total	ND		16	1.3	ug/Kg	☼	02/08/19 07:15	02/11/19 16:53	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (6 -12)

Date Collected: 02/07/19 11:15

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-10

Matrix: Solid

Percent Solids: 84.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		71 - 125	02/08/19 07:15	02/11/19 16:53	1
1,2-Dichloroethane-d4 (Surr)	107		64 - 126	02/08/19 07:15	02/11/19 16:53	1
4-Bromofluorobenzene (Surr)	97		72 - 126	02/08/19 07:15	02/11/19 16:53	1
Dibromofluoromethane (Surr)	103		60 - 140	02/08/19 07:15	02/11/19 16:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		990	150	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
bis (2-chloroisopropyl) ether	ND		990	200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2,4,5-Trichlorophenol	ND		990	270	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2,4,6-Trichlorophenol	ND		990	200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2,4-Dichlorophenol	ND		990	100	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2,4-Dimethylphenol	ND		990	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2,4-Dinitrophenol	ND		9600	4600	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2,4-Dinitrotoluene	ND		990	200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2,6-Dinitrotoluene	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2-Chloronaphthalene	ND		990	160	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2-Chlorophenol	ND		990	180	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2-Methylphenol	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2-Methylnaphthalene	ND		990	200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2-Nitroaniline	ND		1900	150	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
2-Nitrophenol	ND		990	280	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
3,3'-Dichlorobenzidine	ND		1900	1200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
3-Nitroaniline	ND		1900	270	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4,6-Dinitro-2-methylphenol	ND		1900	990	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4-Bromophenyl phenyl ether	ND		990	140	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4-Chloro-3-methylphenol	ND		990	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4-Chloroaniline	ND		990	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4-Chlorophenyl phenyl ether	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4-Methylphenol	ND		1900	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4-Nitroaniline	ND		1900	520	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
4-Nitrophenol	ND		1900	690	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Acenaphthene	ND		990	150	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Acenaphthylene	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Acetophenone	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Anthracene	ND		990	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Atrazine	ND		990	340	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Benzaldehyde	ND		990	780	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Benzo[a]anthracene	340	J	990	99	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Benzo[a]pyrene	330	J	990	150	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Benzo[b]fluoranthene	360	J	990	160	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Benzo[g,h,i]perylene	230	J	990	100	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Benzo[k]fluoranthene	160	J	990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Bis(2-chloroethoxy)methane	ND		990	210	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Bis(2-chloroethyl)ether	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Bis(2-ethylhexyl) phthalate	ND		990	340	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Butyl benzyl phthalate	ND		990	160	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Caprolactam	ND		990	300	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Carbazole	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Chrysene	260	J	990	220	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (6 -12)

Lab Sample ID: 480-148804-10

Date Collected: 02/07/19 11:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		990	170	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Di-n-butyl phthalate	ND		990	170	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Di-n-octyl phthalate	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Dibenzofuran	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Diethyl phthalate	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Dimethyl phthalate	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Fluoranthene	440	J	990	100	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Fluorene	ND		990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Hexachlorobenzene	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Hexachlorobutadiene	ND		990	150	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Hexachlorocyclopentadiene	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Hexachloroethane	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Indeno[1,2,3-cd]pyrene	190	J	990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Isophorone	ND		990	210	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
N-Nitrosodi-n-propylamine	ND		990	170	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
N-Nitrosodiphenylamine	ND		990	800	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Naphthalene	ND		990	130	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Nitrobenzene	ND		990	110	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Pentachlorophenol	ND		1900	990	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Phenanthrene	ND		990	150	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Phenol	ND		990	150	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5
Pyrene	510	J	990	120	ug/Kg	☼	02/11/19 14:25	02/12/19 23:05	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	97		53 - 120	02/11/19 14:25	02/12/19 23:05	5
Phenol-d5 (Surr)	92		54 - 120	02/11/19 14:25	02/12/19 23:05	5
p-Terphenyl-d14 (Surr)	118		65 - 121	02/11/19 14:25	02/12/19 23:05	5
2,4,6-Tribromophenol (Surr)	104		54 - 120	02/11/19 14:25	02/12/19 23:05	5
2-Fluorobiphenyl	98		60 - 120	02/11/19 14:25	02/12/19 23:05	5
2-Fluorophenol (Surr)	91		52 - 120	02/11/19 14:25	02/12/19 23:05	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		3.9	0.76	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
4,4'-DDE	ND		3.9	0.82	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
4,4'-DDT	2.7	J	3.9	0.91	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Aldrin	ND		3.9	0.96	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
alpha-BHC	ND		3.9	0.70	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
cis-Chlordane	ND		3.9	1.9	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
beta-BHC	ND		3.9	0.70	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
delta-BHC	ND		3.9	0.73	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Dieldrin	ND		3.9	0.94	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Endosulfan I	ND		3.9	0.75	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Endosulfan II	ND		3.9	0.70	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Endosulfan sulfate	ND		3.9	0.73	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Endrin	ND		3.9	0.77	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Endrin aldehyde	ND		3.9	1.0	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
Endrin ketone	ND		3.9	0.96	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
gamma-BHC (Lindane)	ND		3.9	0.72	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2
trans-Chlordane	ND		3.9	1.2	ug/Kg	☼	02/12/19 14:56	02/13/19 17:27	2

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (6 -12)

Date Collected: 02/07/19 11:15

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-10

Matrix: Solid

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		3.9	0.84	ug/Kg	☆	02/12/19 14:56	02/13/19 17:27	2
Heptachlor epoxide	ND		3.9	1.0	ug/Kg	☆	02/12/19 14:56	02/13/19 17:27	2
Methoxychlor	ND		3.9	0.80	ug/Kg	☆	02/12/19 14:56	02/13/19 17:27	2
Toxaphene	ND		39	23	ug/Kg	☆	02/12/19 14:56	02/13/19 17:27	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	190	X	45 - 120				02/12/19 14:56	02/13/19 17:27	2
Tetrachloro-m-xylene	47		30 - 124				02/12/19 14:56	02/13/19 17:27	2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.25	0.048	mg/Kg	☆	02/08/19 14:30	02/10/19 18:42	1
PCB-1221	ND		0.25	0.048	mg/Kg	☆	02/08/19 14:30	02/10/19 18:42	1
PCB-1232	ND		0.25	0.048	mg/Kg	☆	02/08/19 14:30	02/10/19 18:42	1
PCB-1242	ND		0.25	0.048	mg/Kg	☆	02/08/19 14:30	02/10/19 18:42	1
PCB-1248	ND		0.25	0.048	mg/Kg	☆	02/08/19 14:30	02/10/19 18:42	1
PCB-1254	ND		0.25	0.11	mg/Kg	☆	02/08/19 14:30	02/10/19 18:42	1
PCB-1260	ND		0.25	0.11	mg/Kg	☆	02/08/19 14:30	02/10/19 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		60 - 154				02/08/19 14:30	02/10/19 18:42	1
DCB Decachlorobiphenyl	71		65 - 174				02/08/19 14:30	02/10/19 18:42	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.1	ug/Kg	☆	02/11/19 14:31	02/15/19 13:41	1
2,4-D	ND		19	12	ug/Kg	☆	02/11/19 14:31	02/15/19 13:41	1
Silvex (2,4,5-TP)	ND		19	6.9	ug/Kg	☆	02/11/19 14:31	02/15/19 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	68		28 - 129				02/11/19 14:31	02/15/19 13:41	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9010		12.0	5.3	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Antimony	ND		18.0	0.48	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Arsenic	3.9		2.4	0.48	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Barium	63.9		0.60	0.13	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Beryllium	0.35		0.24	0.034	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Cadmium	0.84		0.24	0.036	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Calcium	140000	B	120	7.9	mg/Kg	☆	02/09/19 09:24	02/12/19 11:25	2
Chromium	12.1		0.60	0.24	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Cobalt	5.1		0.60	0.060	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Copper	20.9		2.4	0.50	mg/Kg	☆	02/09/19 09:24	02/12/19 11:25	2
Iron	10600		12.0	4.2	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Lead	44.0		1.2	0.29	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Magnesium	36800	B	24.0	1.1	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Manganese	294	B	0.24	0.038	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Nickel	13.1		6.0	0.28	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Potassium	3610		36.0	24.0	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1
Selenium	ND		4.8	0.48	mg/Kg	☆	02/09/19 09:24	02/11/19 13:30	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (6 -12)

Lab Sample ID: 480-148804-10

Date Collected: 02/07/19 11:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.72	0.24	mg/Kg	☼	02/09/19 09:24	02/11/19 13:30	1
Sodium	195		168	15.6	mg/Kg	☼	02/09/19 09:24	02/11/19 13:30	1
Thallium	ND		7.2	0.36	mg/Kg	☼	02/09/19 09:24	02/11/19 13:30	1
Vanadium	15.4		0.60	0.13	mg/Kg	☼	02/09/19 09:24	02/11/19 13:30	1
Zinc	71.6		2.4	0.77	mg/Kg	☼	02/09/19 09:24	02/11/19 13:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022	J	0.024	0.0097	mg/Kg	☼	02/14/19 12:00	02/14/19 13:50	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 6 (0 -2)

Date Collected: 02/07/19 11:30

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-11

Matrix: Solid

Percent Solids: 38.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		2200	330	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
bis (2-chloroisopropyl) ether	ND		2200	440	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2,4,5-Trichlorophenol	ND		2200	600	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2,4,6-Trichlorophenol	ND		2200	440	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2,4-Dichlorophenol	ND		2200	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2,4-Dimethylphenol	ND		2200	540	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2,4-Dinitrophenol	ND		22000	10000	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2,4-Dinitrotoluene	ND		2200	460	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2,6-Dinitrotoluene	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2-Chloronaphthalene	ND		2200	370	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2-Chlorophenol	ND		2200	410	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2-Methylphenol	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2-Methylnaphthalene	ND		2200	440	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2-Nitroaniline	ND		4300	330	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
2-Nitrophenol	ND		2200	630	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
3,3'-Dichlorobenzidine	ND		4300	2600	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
3-Nitroaniline	ND		4300	610	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4,6-Dinitro-2-methylphenol	ND		4300	2200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4-Bromophenyl phenyl ether	ND		2200	310	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4-Chloro-3-methylphenol	ND		2200	550	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4-Chloroaniline	ND		2200	550	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4-Chlorophenyl phenyl ether	ND		2200	270	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4-Methylphenol	ND		4300	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4-Nitroaniline	ND		4300	1200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
4-Nitrophenol	ND		4300	1600	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Acenaphthene	ND		2200	330	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Acenaphthylene	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Acetophenone	ND		2200	300	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Anthracene	ND		2200	550	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Atrazine	ND		2200	770	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Benzaldehyde	ND		2200	1800	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Benzo[a]anthracene	ND		2200	220	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Benzo[a]pyrene	ND		2200	330	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Benzo[b]fluoranthene	ND		2200	350	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Benzo[g,h,i]perylene	ND		2200	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Benzo[k]fluoranthene	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Bis(2-chloroethoxy)methane	ND		2200	470	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Bis(2-chloroethyl)ether	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Bis(2-ethylhexyl) phthalate	ND		2200	760	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Butyl benzyl phthalate	ND		2200	370	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Caprolactam	ND		2200	670	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Carbazole	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Chrysene	ND		2200	500	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Dibenz(a,h)anthracene	ND		2200	390	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Di-n-butyl phthalate	ND		2200	380	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Di-n-octyl phthalate	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Dibenzofuran	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Diethyl phthalate	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Dimethyl phthalate	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 6 (0 -2)

Lab Sample ID: 480-148804-11

Date Collected: 02/07/19 11:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 38.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		2200	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Fluorene	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Hexachlorobenzene	ND		2200	300	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Hexachlorobutadiene	ND		2200	330	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Hexachlorocyclopentadiene	ND		2200	300	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Hexachloroethane	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Indeno[1,2,3-cd]pyrene	ND		2200	270	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Isophorone	ND		2200	470	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
N-Nitrosodi-n-propylamine	ND		2200	380	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
N-Nitrosodiphenylamine	ND		2200	1800	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Naphthalene	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Nitrobenzene	ND		2200	250	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Pentachlorophenol	ND		4300	2200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Phenanthrene	ND		2200	330	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Phenol	ND		2200	340	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5
Pyrene	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:31	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	94		53 - 120	02/11/19 14:25	02/12/19 23:31	5
Phenol-d5 (Surr)	93		54 - 120	02/11/19 14:25	02/12/19 23:31	5
p-Terphenyl-d14 (Surr)	123	X	65 - 121	02/11/19 14:25	02/12/19 23:31	5
2,4,6-Tribromophenol (Surr)	102		54 - 120	02/11/19 14:25	02/12/19 23:31	5
2-Fluorobiphenyl	100		60 - 120	02/11/19 14:25	02/12/19 23:31	5
2-Fluorophenol (Surr)	89		52 - 120	02/11/19 14:25	02/12/19 23:31	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		4.3	0.84	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
4,4'-DDE	ND		4.3	0.91	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
4,4'-DDT	2.4	J	4.3	1.0	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Aldrin	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
alpha-BHC	ND		4.3	0.78	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
cis-Chlordane	ND		4.3	2.2	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
beta-BHC	ND		4.3	0.78	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
delta-BHC	ND		4.3	0.80	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Dieldrin	ND		4.3	1.0	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Endosulfan I	ND		4.3	0.83	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Endosulfan II	ND		4.3	0.78	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Endosulfan sulfate	ND		4.3	0.81	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Endrin	ND		4.3	0.86	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Endrin aldehyde	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Endrin ketone	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
gamma-BHC (Lindane)	ND		4.3	0.79	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
trans-Chlordane	ND		4.3	1.4	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Heptachlor	ND		4.3	0.94	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Heptachlor epoxide	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Methoxychlor	ND		4.3	0.88	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1
Toxaphene	ND		43	25	ug/Kg	☼	02/12/19 14:56	02/13/19 17:47	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 6 (0 -2)

Date Collected: 02/07/19 11:30

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-11

Matrix: Solid

Percent Solids: 38.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	58		45 - 120	02/12/19 14:56	02/13/19 17:47	1
Tetrachloro-m-xylene	41		30 - 124	02/12/19 14:56	02/13/19 17:47	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.098	mg/Kg	☼	02/08/19 14:30	02/10/19 18:57	1
PCB-1221	ND		0.50	0.098	mg/Kg	☼	02/08/19 14:30	02/10/19 18:57	1
PCB-1232	ND		0.50	0.098	mg/Kg	☼	02/08/19 14:30	02/10/19 18:57	1
PCB-1242	ND		0.50	0.098	mg/Kg	☼	02/08/19 14:30	02/10/19 18:57	1
PCB-1248	ND		0.50	0.098	mg/Kg	☼	02/08/19 14:30	02/10/19 18:57	1
PCB-1254	ND		0.50	0.23	mg/Kg	☼	02/08/19 14:30	02/10/19 18:57	1
PCB-1260	ND		0.50	0.23	mg/Kg	☼	02/08/19 14:30	02/10/19 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		60 - 154	02/08/19 14:30	02/10/19 18:57	1
DCB Decachlorobiphenyl	58	X	65 - 174	02/08/19 14:30	02/10/19 18:57	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		43	14	ug/Kg	☼	02/11/19 14:31	02/15/19 14:11	1
2,4-D	ND		43	27	ug/Kg	☼	02/11/19 14:31	02/15/19 14:11	1
Silvex (2,4,5-TP)	ND		43	15	ug/Kg	☼	02/11/19 14:31	02/15/19 14:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	51		28 - 129	02/11/19 14:31	02/15/19 14:11	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7970		26.3	11.6	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Antimony	ND		39.5	1.1	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Arsenic	3.0	J	5.3	1.1	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Barium	45.9		1.3	0.29	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Beryllium	0.56		0.53	0.074	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Cadmium	0.26	J	0.53	0.079	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Calcium	203000	B	132	8.7	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Chromium	42.7		1.3	0.53	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Cobalt	3.4		1.3	0.13	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Copper	9.5		2.6	0.55	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Iron	7900		26.3	9.2	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Lead	9.6		2.6	0.63	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Magnesium	33700	B	52.7	2.4	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Manganese	167	B	0.53	0.084	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Nickel	15.2		13.2	0.61	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Potassium	3390		79.0	52.7	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Selenium	ND		10.5	1.1	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Silver	ND		1.6	0.53	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Sodium	792		369	34.2	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Thallium	ND		15.8	0.79	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Vanadium	73.3		1.3	0.29	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1
Zinc	36.9		5.3	1.7	mg/Kg	☼	02/09/19 09:24	02/11/19 13:34	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 6 (0 -2)

Date Collected: 02/07/19 11:30

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-11

Matrix: Solid

Percent Solids: 38.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.053	0.021	mg/Kg	☼	02/14/19 12:00	02/14/19 13:52	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (0 -2)

Lab Sample ID: 480-148804-12

Date Collected: 02/07/19 11:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 38.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		2200	320	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
bis (2-chloroisopropyl) ether	ND		2200	440	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2,4,5-Trichlorophenol	ND		2200	590	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2,4,6-Trichlorophenol	ND		2200	440	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2,4-Dichlorophenol	ND		2200	230	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2,4-Dimethylphenol	ND		2200	530	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2,4-Dinitrophenol	ND		21000	10000	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2,4-Dinitrotoluene	ND		2200	450	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2,6-Dinitrotoluene	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2-Chloronaphthalene	ND		2200	360	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2-Chlorophenol	ND		2200	400	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2-Methylphenol	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2-Methylnaphthalene	ND		2200	440	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2-Nitroaniline	ND		4200	320	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
2-Nitrophenol	ND		2200	610	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
3,3'-Dichlorobenzidine	ND		4200	2600	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
3-Nitroaniline	ND		4200	600	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4,6-Dinitro-2-methylphenol	ND		4200	2200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4-Bromophenyl phenyl ether	ND		2200	310	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4-Chloro-3-methylphenol	ND		2200	540	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4-Chloroaniline	ND		2200	540	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4-Chlorophenyl phenyl ether	ND		2200	270	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4-Methylphenol	ND		4200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4-Nitroaniline	ND		4200	1100	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
4-Nitrophenol	ND		4200	1500	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Acenaphthene	ND		2200	320	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Acenaphthylene	ND		2200	280	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Acetophenone	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Anthracene	ND		2200	540	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Atrazine	ND		2200	760	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Benzaldehyde	ND		2200	1700	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Benzo[a]anthracene	ND		2200	220	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Benzo[a]pyrene	ND		2200	320	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Benzo[b]fluoranthene	ND		2200	350	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Benzo[g,h,i]perylene	260	J	2200	230	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Benzo[k]fluoranthene	ND		2200	280	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Bis(2-chloroethoxy)methane	ND		2200	460	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Bis(2-chloroethyl)ether	ND		2200	280	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Bis(2-ethylhexyl) phthalate	ND		2200	740	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Butyl benzyl phthalate	ND		2200	360	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Caprolactam	ND		2200	650	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Carbazole	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Chrysene	ND		2200	490	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Dibenz(a,h)anthracene	ND		2200	380	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Di-n-butyl phthalate	ND		2200	370	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Di-n-octyl phthalate	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Dibenzofuran	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Diethyl phthalate	ND		2200	280	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Dimethyl phthalate	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (0 -2)

Date Collected: 02/07/19 11:45

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-12

Matrix: Solid

Percent Solids: 38.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	530	J	2200	230	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Fluorene	ND		2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Hexachlorobenzene	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Hexachlorobutadiene	ND		2200	320	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Hexachlorocyclopentadiene	ND		2200	290	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Hexachloroethane	ND		2200	280	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Indeno[1,2,3-cd]pyrene	ND		2200	270	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Isophorone	ND		2200	460	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
N-Nitrosodi-n-propylamine	ND		2200	370	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
N-Nitrosodiphenylamine	ND		2200	1800	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Naphthalene	ND		2200	280	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Nitrobenzene	ND		2200	240	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Pentachlorophenol	ND		4200	2200	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Phenanthrene	ND		2200	320	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Phenol	ND		2200	330	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Pyrene	490	J	2200	260	ug/Kg	☼	02/11/19 14:25	02/12/19 23:56	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	98		53 - 120				02/11/19 14:25	02/12/19 23:56	5
Phenol-d5 (Surr)	87		54 - 120				02/11/19 14:25	02/12/19 23:56	5
p-Terphenyl-d14 (Surr)	130	X	65 - 121				02/11/19 14:25	02/12/19 23:56	5
2,4,6-Tribromophenol (Surr)	96		54 - 120				02/11/19 14:25	02/12/19 23:56	5
2-Fluorobiphenyl	97		60 - 120				02/11/19 14:25	02/12/19 23:56	5
2-Fluorophenol (Surr)	84		52 - 120				02/11/19 14:25	02/12/19 23:56	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		4.3	0.84	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
4,4'-DDE	ND		4.3	0.91	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
4,4'-DDT	2.6	J	4.3	1.0	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Aldrin	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
alpha-BHC	ND		4.3	0.78	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
cis-Chlordane	ND		4.3	2.2	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
beta-BHC	ND		4.3	0.78	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
delta-BHC	1.3	J	4.3	0.81	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Dieldrin	ND		4.3	1.0	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Endosulfan I	ND		4.3	0.83	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Endosulfan II	ND		4.3	0.78	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Endosulfan sulfate	ND		4.3	0.81	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Endrin	ND		4.3	0.86	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Endrin aldehyde	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Endrin ketone	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
gamma-BHC (Lindane)	ND		4.3	0.79	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
trans-Chlordane	ND		4.3	1.4	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Heptachlor	ND		4.3	0.94	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Heptachlor epoxide	ND		4.3	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Methoxychlor	ND		4.3	0.88	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1
Toxaphene	ND		43	25	ug/Kg	☼	02/12/19 14:56	02/13/19 18:06	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (0 -2)

Date Collected: 02/07/19 11:45

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-12

Matrix: Solid

Percent Solids: 38.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	82		45 - 120	02/12/19 14:56	02/13/19 18:06	1
Tetrachloro-m-xylene	50		30 - 124	02/12/19 14:56	02/13/19 18:06	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.46	0.091	mg/Kg	✱	02/08/19 14:30	02/10/19 19:45	1
PCB-1221	ND		0.46	0.091	mg/Kg	✱	02/08/19 14:30	02/10/19 19:45	1
PCB-1232	ND		0.46	0.091	mg/Kg	✱	02/08/19 14:30	02/10/19 19:45	1
PCB-1242	ND		0.46	0.091	mg/Kg	✱	02/08/19 14:30	02/10/19 19:45	1
PCB-1248	ND		0.46	0.091	mg/Kg	✱	02/08/19 14:30	02/10/19 19:45	1
PCB-1254	ND		0.46	0.22	mg/Kg	✱	02/08/19 14:30	02/10/19 19:45	1
PCB-1260	ND		0.46	0.22	mg/Kg	✱	02/08/19 14:30	02/10/19 19:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		60 - 154	02/08/19 14:30	02/10/19 19:45	1
DCB Decachlorobiphenyl	65		65 - 174	02/08/19 14:30	02/10/19 19:45	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		43	14	ug/Kg	✱	02/11/19 14:31	02/15/19 14:40	1
2,4-D	ND		43	27	ug/Kg	✱	02/11/19 14:31	02/15/19 14:40	1
Silvex (2,4,5-TP)	ND		43	16	ug/Kg	✱	02/11/19 14:31	02/15/19 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	74		28 - 129	02/11/19 14:31	02/15/19 14:40	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10600		25.7	11.3	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Antimony	ND		38.5	1.0	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Arsenic	4.5	J	5.1	1.0	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Barium	128		1.3	0.28	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Beryllium	0.44	J	0.51	0.072	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Cadmium	0.26	J	0.51	0.077	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Calcium	454000	B	642	42.3	mg/Kg	✱	02/09/19 09:24	02/12/19 11:28	5
Chromium	17.8		1.3	0.51	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Cobalt	5.4		1.3	0.13	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Copper	14.2		12.8	2.7	mg/Kg	✱	02/09/19 09:24	02/12/19 11:28	5
Iron	14700		25.7	9.0	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Lead	6.7		2.6	0.62	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Magnesium	184000	B	257	11.9	mg/Kg	✱	02/09/19 09:24	02/12/19 11:28	5
Manganese	610	B	0.51	0.082	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Nickel	15.4		12.8	0.59	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Potassium	4590		77.0	51.3	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Selenium	ND		10.3	1.0	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Silver	ND		1.5	0.51	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Sodium	468		359	33.4	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Thallium	ND		15.4	0.77	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Vanadium	21.0		1.3	0.28	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1
Zinc	28.5		5.1	1.6	mg/Kg	✱	02/09/19 09:24	02/11/19 13:38	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (0 -2)

Lab Sample ID: 480-148804-12

Date Collected: 02/07/19 11:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 38.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036	J	0.050	0.020	mg/Kg	☼	02/14/19 12:00	02/14/19 13:53	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (6 -12)

Lab Sample ID: 480-148804-13

Date Collected: 02/07/19 12:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.8	0.35	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,1,1,2-Tetrachloroethane	ND		4.8	0.78	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,1,2-Trichloroethane	ND		4.8	0.62	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,1-Dichloroethane	ND		4.8	0.58	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,1-Dichloroethene	ND		4.8	0.59	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,2,4-Trichlorobenzene	ND		4.8	0.29	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,2-Dibromo-3-Chloropropane	ND		4.8	2.4	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,2-Dichlorobenzene	ND		4.8	0.37	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,2-Dichloroethane	ND		4.8	0.24	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,2-Dichloropropane	ND		4.8	2.4	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,3-Dichlorobenzene	ND		4.8	0.25	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,4-Dichlorobenzene	ND		4.8	0.67	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
2-Butanone (MEK)	ND		24	1.8	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Acetone	4.6	J	24	4.0	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Benzene	ND		4.8	0.23	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Bromodichloromethane	ND		4.8	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Bromoform	ND		4.8	2.4	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Bromomethane	ND		4.8	0.43	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Carbon disulfide	ND		4.8	2.4	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Carbon tetrachloride	ND		4.8	0.46	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Chlorobenzene	ND		4.8	0.63	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Dibromochloromethane	ND		4.8	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Chloroethane	ND		4.8	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Chloroform	ND		4.8	0.30	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Chloromethane	ND		4.8	0.29	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
cis-1,2-Dichloroethene	ND		4.8	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
cis-1,3-Dichloropropene	ND		4.8	0.69	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Cyclohexane	ND		4.8	0.67	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Dichlorodifluoromethane	ND		4.8	0.40	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Ethylbenzene	ND		4.8	0.33	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
1,2-Dibromoethane	ND		4.8	0.61	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Isopropylbenzene	ND		4.8	0.72	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Methyl acetate	ND		24	2.9	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Methyl tert-butyl ether	ND		4.8	0.47	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Methylcyclohexane	ND		4.8	0.73	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Methylene Chloride	ND		4.8	2.2	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Styrene	ND		4.8	0.24	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Tetrachloroethene	ND		4.8	0.64	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Toluene	ND		4.8	0.36	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
trans-1,2-Dichloroethene	ND		4.8	0.49	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
trans-1,3-Dichloropropene	ND		4.8	2.1	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Trichloroethene	ND		4.8	1.1	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Trichlorofluoromethane	ND		4.8	0.45	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Vinyl chloride	ND		4.8	0.58	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1
Xylenes, Total	ND		9.6	0.80	ug/Kg	☼	02/08/19 07:15	02/11/19 17:19	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (6 -12)

Date Collected: 02/07/19 12:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-13

Matrix: Solid

Percent Solids: 87.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 125	02/08/19 07:15	02/11/19 17:19	1
1,2-Dichloroethane-d4 (Surr)	107		64 - 126	02/08/19 07:15	02/11/19 17:19	1
4-Bromofluorobenzene (Surr)	98		72 - 126	02/08/19 07:15	02/11/19 17:19	1
Dibromofluoromethane (Surr)	104		60 - 140	02/08/19 07:15	02/11/19 17:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		960	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
bis (2-chloroisopropyl) ether	ND		960	190	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2,4,5-Trichlorophenol	ND		960	260	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2,4,6-Trichlorophenol	ND		960	190	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2,4-Dichlorophenol	ND		960	100	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2,4-Dimethylphenol	ND		960	230	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2,4-Dinitrophenol	ND		9400	4400	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2,4-Dinitrotoluene	ND		960	200	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2,6-Dinitrotoluene	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2-Chloronaphthalene	ND		960	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2-Chlorophenol	ND		960	180	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2-Methylphenol	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2-Methylnaphthalene	ND		960	190	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2-Nitroaniline	ND		1900	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
2-Nitrophenol	ND		960	270	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
3,3'-Dichlorobenzidine	ND		1900	1100	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
3-Nitroaniline	ND		1900	270	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4,6-Dinitro-2-methylphenol	ND		1900	960	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4-Bromophenyl phenyl ether	ND		960	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4-Chloro-3-methylphenol	ND		960	240	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4-Chloroaniline	ND		960	240	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4-Chlorophenyl phenyl ether	ND		960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4-Methylphenol	ND		1900	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4-Nitroaniline	ND		1900	500	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
4-Nitrophenol	ND		1900	670	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Acenaphthene	ND		960	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Acenaphthylene	200	J	960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Acetophenone	ND		960	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Anthracene	ND		960	240	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Atrazine	ND		960	330	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Benzaldehyde	ND		960	770	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Benzo[a]anthracene	540	J	960	96	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Benzo[a]pyrene	570	J	960	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Benzo[b]fluoranthene	630	J	960	150	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Benzo[g,h,i]perylene	440	J	960	100	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Benzo[k]fluoranthene	400	J	960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Bis(2-chloroethoxy)methane	ND		960	200	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Bis(2-chloroethyl)ether	ND		960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Bis(2-ethylhexyl) phthalate	ND		960	330	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Butyl benzyl phthalate	ND		960	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Caprolactam	ND		960	290	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Carbazole	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Chrysene	650	J	960	220	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (6 -12)

Lab Sample ID: 480-148804-13

Date Collected: 02/07/19 12:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		960	170	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Di-n-butyl phthalate	ND		960	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Di-n-octyl phthalate	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Dibenzofuran	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Diethyl phthalate	ND		960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Dimethyl phthalate	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Fluoranthene	1100		960	100	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Fluorene	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Hexachlorobenzene	ND		960	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Hexachlorobutadiene	ND		960	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Hexachlorocyclopentadiene	ND		960	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Hexachloroethane	ND		960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Indeno[1,2,3-cd]pyrene	370	J	960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Isophorone	ND		960	200	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
N-Nitrosodi-n-propylamine	ND		960	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
N-Nitrosodiphenylamine	ND		960	780	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Naphthalene	ND		960	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Nitrobenzene	ND		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Pentachlorophenol	ND		1900	960	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Phenanthrene	470	J	960	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Phenol	ND		960	150	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5
Pyrene	1100		960	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:21	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	95		53 - 120	02/11/19 14:25	02/13/19 00:21	5
Phenol-d5 (Surr)	88		54 - 120	02/11/19 14:25	02/13/19 00:21	5
p-Terphenyl-d14 (Surr)	114		65 - 121	02/11/19 14:25	02/13/19 00:21	5
2,4,6-Tribromophenol (Surr)	93		54 - 120	02/11/19 14:25	02/13/19 00:21	5
2-Fluorobiphenyl	94		60 - 120	02/11/19 14:25	02/13/19 00:21	5
2-Fluorophenol (Surr)	90		52 - 120	02/11/19 14:25	02/13/19 00:21	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		19	3.7	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
4,4'-DDE	ND		19	4.0	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
4,4'-DDT	10	J	19	4.5	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Aldrin	ND		19	4.7	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
alpha-BHC	ND		19	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
cis-Chlordane	ND		19	9.5	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
beta-BHC	ND		19	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
delta-BHC	ND		19	3.5	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Dieldrin	ND		19	4.6	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Endosulfan I	ND		19	3.7	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Endosulfan II	ND		19	3.4	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Endosulfan sulfate	ND		19	3.6	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Endrin	ND		19	3.8	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Endrin aldehyde	ND		19	4.9	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
Endrin ketone	ND		19	4.7	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
gamma-BHC (Lindane)	ND		19	3.5	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10
trans-Chlordane	ND		19	6.1	ug/Kg	☼	02/12/19 14:56	02/13/19 18:26	10

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (6 -12)

Date Collected: 02/07/19 12:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-13

Matrix: Solid

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		19	4.1	ug/Kg	☆	02/12/19 14:56	02/13/19 18:26	10
Heptachlor epoxide	ND		19	4.9	ug/Kg	☆	02/12/19 14:56	02/13/19 18:26	10
Methoxychlor	ND		19	3.9	ug/Kg	☆	02/12/19 14:56	02/13/19 18:26	10
Toxaphene	ND		190	110	ug/Kg	☆	02/12/19 14:56	02/13/19 18:26	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	94		45 - 120				02/12/19 14:56	02/13/19 18:26	10
Tetrachloro-m-xylene	54		30 - 124				02/12/19 14:56	02/13/19 18:26	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.041	mg/Kg	☆	02/08/19 14:30	02/10/19 20:01	1
PCB-1221	ND		0.21	0.041	mg/Kg	☆	02/08/19 14:30	02/10/19 20:01	1
PCB-1232	ND		0.21	0.041	mg/Kg	☆	02/08/19 14:30	02/10/19 20:01	1
PCB-1242	ND		0.21	0.041	mg/Kg	☆	02/08/19 14:30	02/10/19 20:01	1
PCB-1248	ND		0.21	0.041	mg/Kg	☆	02/08/19 14:30	02/10/19 20:01	1
PCB-1254	ND		0.21	0.098	mg/Kg	☆	02/08/19 14:30	02/10/19 20:01	1
PCB-1260	ND		0.21	0.098	mg/Kg	☆	02/08/19 14:30	02/10/19 20:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		60 - 154				02/08/19 14:30	02/10/19 20:01	1
DCB Decachlorobiphenyl	72		65 - 174				02/08/19 14:30	02/10/19 20:01	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		19	6.0	ug/Kg	☆	02/11/19 14:31	02/15/19 15:10	1
2,4-D	ND		19	12	ug/Kg	☆	02/11/19 14:31	02/15/19 15:10	1
Silvex (2,4,5-TP)	ND		19	6.7	ug/Kg	☆	02/11/19 14:31	02/15/19 15:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	71		28 - 129				02/11/19 14:31	02/15/19 15:10	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11900		11.2	4.9	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Antimony	ND		16.9	0.45	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Arsenic	5.4		2.2	0.45	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Barium	94.3		0.56	0.12	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Beryllium	0.47		0.22	0.031	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Cadmium	0.41		0.22	0.034	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Calcium	133000	B	112	7.4	mg/Kg	☆	02/09/19 09:24	02/12/19 11:32	2
Chromium	15.2		0.56	0.22	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Cobalt	7.3		0.56	0.056	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Copper	21.6		2.2	0.47	mg/Kg	☆	02/09/19 09:24	02/12/19 11:32	2
Iron	13500		11.2	3.9	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Lead	40.5		1.1	0.27	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Magnesium	68000	B	45.0	2.1	mg/Kg	☆	02/09/19 09:24	02/12/19 11:32	2
Manganese	540	B	0.22	0.036	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Nickel	18.1		5.6	0.26	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Potassium	4390		33.7	22.5	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1
Selenium	ND		4.5	0.45	mg/Kg	☆	02/09/19 09:24	02/11/19 13:42	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (6 -12)

Lab Sample ID: 480-148804-13

Date Collected: 02/07/19 12:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.67	0.22	mg/Kg	☼	02/09/19 09:24	02/11/19 13:42	1
Sodium	174		157	14.6	mg/Kg	☼	02/09/19 09:24	02/11/19 13:42	1
Thallium	ND		6.7	0.34	mg/Kg	☼	02/09/19 09:24	02/11/19 13:42	1
Vanadium	19.7		0.56	0.12	mg/Kg	☼	02/09/19 09:24	02/11/19 13:42	1
Zinc	52.2		2.2	0.72	mg/Kg	☼	02/09/19 09:24	02/11/19 13:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.096		0.023	0.0092	mg/Kg	☼	02/14/19 12:00	02/14/19 13:54	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (0 -2)

Date Collected: 02/07/19 12:15

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-14

Matrix: Solid

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
bis (2-chloroisopropyl) ether	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2,4,5-Trichlorophenol	ND		1100	300	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2,4,6-Trichlorophenol	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2,4-Dichlorophenol	ND		1100	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2,4-Dimethylphenol	ND		1100	260	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2,4-Dinitrophenol	ND		11000	5000	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2,4-Dinitrotoluene	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2-Chlorophenol	ND		1100	200	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2-Methylnaphthalene	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
2-Nitrophenol	ND		1100	310	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
3-Nitroaniline	ND		2100	300	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4,6-Dinitro-2-methylphenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4-Bromophenyl phenyl ether	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4-Chloro-3-methylphenol	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4-Chloroaniline	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4-Chlorophenyl phenyl ether	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4-Methylphenol	ND		2100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4-Nitroaniline	ND		2100	570	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
4-Nitrophenol	ND		2100	760	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Acenaphthene	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Acenaphthylene	200	J	1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Acetophenone	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Anthracene	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Atrazine	ND		1100	380	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Benzaldehyde	ND		1100	870	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Benzo[a]anthracene	950	J	1100	110	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Benzo[a]pyrene	1000	J	1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Benzo[b]fluoranthene	1300		1100	170	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Benzo[g,h,i]perylene	820	J	1100	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Benzo[k]fluoranthene	720	J	1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Bis(2-ethylhexyl) phthalate	ND		1100	370	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Caprolactam	ND		1100	330	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Carbazole	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Chrysene	1100		1100	240	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Dibenz(a,h)anthracene	250	J	1100	190	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Di-n-butyl phthalate	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Dibenzofuran	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Diethyl phthalate	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (0 -2)

Lab Sample ID: 480-148804-14

Date Collected: 02/07/19 12:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	2000		1100	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Fluorene	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Hexachlorobenzene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Hexachlorocyclopentadiene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Indeno[1,2,3-cd]pyrene	740 J		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Isophorone	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
N-Nitrosodi-n-propylamine	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
N-Nitrosodiphenylamine	ND		1100	890	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Naphthalene	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Pentachlorophenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Phenanthrene	890 J		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Phenol	ND		1100	170	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Pyrene	1900		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 00:46	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	92		53 - 120				02/11/19 14:25	02/13/19 00:46	5
Phenol-d5 (Surr)	87		54 - 120				02/11/19 14:25	02/13/19 00:46	5
p-Terphenyl-d14 (Surr)	119		65 - 121				02/11/19 14:25	02/13/19 00:46	5
2,4,6-Tribromophenol (Surr)	99		54 - 120				02/11/19 14:25	02/13/19 00:46	5
2-Fluorobiphenyl	97		60 - 120				02/11/19 14:25	02/13/19 00:46	5
2-Fluorophenol (Surr)	85		52 - 120				02/11/19 14:25	02/13/19 00:46	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F2	2.1	0.41	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
4,4'-DDE	1.9 J F2		2.1	0.44	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
4,4'-DDT	8.6 F2		2.1	0.50	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Aldrin	ND	F2	2.1	0.52	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
alpha-BHC	0.53 J F2		2.1	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
cis-Chlordane	ND	F2	2.1	1.1	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
beta-BHC	ND	F2	2.1	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
delta-BHC	ND	F2	2.1	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Dieldrin	ND	F2	2.1	0.51	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Endosulfan I	ND	F2	2.1	0.41	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Endosulfan II	ND		2.1	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Endrin	ND	F2	2.1	0.42	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Endrin aldehyde	ND		2.1	0.54	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Endrin ketone	ND		2.1	0.52	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
gamma-BHC (Lindane)	ND	F2	2.1	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
trans-Chlordane	ND	F2	2.1	0.67	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Heptachlor	ND	F2	2.1	0.46	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Heptachlor epoxide	ND	F2	2.1	0.55	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Methoxychlor	ND	F1 F2	2.1	0.43	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1
Toxaphene	ND		21	12	ug/Kg	☼	02/12/19 14:56	02/13/19 13:51	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (0 -2)

Lab Sample ID: 480-148804-14

Date Collected: 02/07/19 12:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	231	X	45 - 120	02/12/19 14:56	02/13/19 13:51	1
Tetrachloro-m-xylene	45		30 - 124	02/12/19 14:56	02/13/19 13:51	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.29	0.057	mg/Kg	☼	02/08/19 14:30	02/10/19 20:17	1
PCB-1221	ND		0.29	0.057	mg/Kg	☼	02/08/19 14:30	02/10/19 20:17	1
PCB-1232	ND		0.29	0.057	mg/Kg	☼	02/08/19 14:30	02/10/19 20:17	1
PCB-1242	ND		0.29	0.057	mg/Kg	☼	02/08/19 14:30	02/10/19 20:17	1
PCB-1248	ND		0.29	0.057	mg/Kg	☼	02/08/19 14:30	02/10/19 20:17	1
PCB-1254	ND		0.29	0.14	mg/Kg	☼	02/08/19 14:30	02/10/19 20:17	1
PCB-1260	ND		0.29	0.14	mg/Kg	☼	02/08/19 14:30	02/10/19 20:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		60 - 154	02/08/19 14:30	02/10/19 20:17	1
DCB Decachlorobiphenyl	67		65 - 174	02/08/19 14:30	02/10/19 20:17	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.7	ug/Kg	☼	02/11/19 14:31	02/15/19 15:40	1
2,4-D	ND		21	13	ug/Kg	☼	02/11/19 14:31	02/15/19 15:40	1
Silvex (2,4,5-TP)	ND		21	7.5	ug/Kg	☼	02/11/19 14:31	02/15/19 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	76		28 - 129	02/11/19 14:31	02/15/19 15:40	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11700		13.0	5.7	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Antimony	ND		19.6	0.52	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Arsenic	12.0		2.6	0.52	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Barium	190		0.65	0.14	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Beryllium	0.52		0.26	0.037	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Cadmium	1.4		0.26	0.039	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Calcium	20500	B	65.2	4.3	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Chromium	20.2		0.65	0.26	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Cobalt	7.9		0.65	0.065	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Copper	60.6		1.3	0.27	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Iron	15900		13.0	4.6	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Lead	463		1.3	0.31	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Magnesium	7280	B	26.1	1.2	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Manganese	393	B	0.26	0.042	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Nickel	19.7		6.5	0.30	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Potassium	2400		39.1	26.1	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Selenium	1.1	J	5.2	0.52	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Silver	ND		0.78	0.26	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Sodium	129	J	183	17.0	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Thallium	ND		7.8	0.39	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Vanadium	27.6		0.65	0.14	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1
Zinc	339		2.6	0.83	mg/Kg	☼	02/09/19 09:24	02/11/19 13:46	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (0 -2)

Lab Sample ID: 480-148804-14

Date Collected: 02/07/19 12:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50		0.026	0.010	mg/Kg	☼	02/14/19 12:00	02/14/19 13:55	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Date Collected: 02/07/19 12:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.6	0.40	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,1,2,2-Tetrachloroethane	ND		5.6	0.90	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,1,2-Trichloroethane	ND		5.6	0.72	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	1.3	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,1-Dichloroethane	ND		5.6	0.68	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,1-Dichloroethene	ND		5.6	0.68	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,2,4-Trichlorobenzene	ND		5.6	0.34	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,2-Dibromo-3-Chloropropane	ND		5.6	2.8	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,2-Dichlorobenzene	ND		5.6	0.43	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,2-Dichloroethane	ND		5.6	0.28	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,2-Dichloropropane	ND		5.6	2.8	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,3-Dichlorobenzene	ND		5.6	0.29	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,4-Dichlorobenzene	ND		5.6	0.78	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
2-Butanone (MEK)	ND		28	2.0	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.8	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Acetone	ND		28	4.7	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Benzene	ND		5.6	0.27	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Bromodichloromethane	ND		5.6	0.74	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Bromoform	ND		5.6	2.8	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Bromomethane	ND		5.6	0.50	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Carbon disulfide	ND		5.6	2.8	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Carbon tetrachloride	ND		5.6	0.54	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Chlorobenzene	ND		5.6	0.73	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Dibromochloromethane	ND		5.6	0.71	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Chloroethane	ND		5.6	1.3	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Chloroform	ND		5.6	0.34	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Chloromethane	ND		5.6	0.34	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
cis-1,2-Dichloroethene	ND		5.6	0.71	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
cis-1,3-Dichloropropene	ND		5.6	0.80	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Cyclohexane	ND		5.6	0.78	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Dichlorodifluoromethane	ND		5.6	0.46	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Ethylbenzene	ND		5.6	0.38	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
1,2-Dibromoethane	ND		5.6	0.71	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Isopropylbenzene	ND		5.6	0.84	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Methyl acetate	ND		28	3.4	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Methyl tert-butyl ether	ND		5.6	0.55	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Methylcyclohexane	ND		5.6	0.84	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Methylene Chloride	ND		5.6	2.6	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Styrene	ND		5.6	0.28	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Tetrachloroethene	ND		5.6	0.75	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Toluene	ND		5.6	0.42	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
trans-1,2-Dichloroethene	ND		5.6	0.57	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
trans-1,3-Dichloropropene	ND		5.6	2.4	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Trichloroethene	ND		5.6	1.2	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Trichlorofluoromethane	ND		5.6	0.53	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Vinyl chloride	ND		5.6	0.68	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1
Xylenes, Total	ND		11	0.93	ug/Kg	☼	02/08/19 07:15	02/11/19 17:45	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (6 -12)

Date Collected: 02/07/19 12:30

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-15

Matrix: Solid

Percent Solids: 77.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		71 - 125	02/08/19 07:15	02/11/19 17:45	1
1,2-Dichloroethane-d4 (Surr)	107		64 - 126	02/08/19 07:15	02/11/19 17:45	1
4-Bromofluorobenzene (Surr)	98		72 - 126	02/08/19 07:15	02/11/19 17:45	1
Dibromofluoromethane (Surr)	104		60 - 140	02/08/19 07:15	02/11/19 17:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
bis (2-chloroisopropyl) ether	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2,4,5-Trichlorophenol	ND		1100	290	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2,4,6-Trichlorophenol	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2,4-Dichlorophenol	ND		1100	110	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2,4-Dimethylphenol	ND		1100	260	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2,4-Dinitrophenol	ND		11000	5000	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2,4-Dinitrotoluene	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2-Chlorophenol	ND		1100	200	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2-Methylnaphthalene	ND		1100	220	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
2-Nitrophenol	ND		1100	310	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
3-Nitroaniline	ND		2100	300	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4,6-Dinitro-2-methylphenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4-Bromophenyl phenyl ether	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4-Chloro-3-methylphenol	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4-Chloroaniline	ND		1100	270	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4-Chlorophenyl phenyl ether	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4-Methylphenol	ND		2100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4-Nitroaniline	ND		2100	570	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
4-Nitrophenol	ND		2100	760	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Acenaphthene	220	J	1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Acenaphthylene	220	J	1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Acetophenone	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Anthracene	1100		1100	270	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Atrazine	ND		1100	380	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Benzaldehyde	ND		1100	860	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Benzo[a]anthracene	2400		1100	110	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Benzo[a]pyrene	2100		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Benzo[b]fluoranthene	2400		1100	170	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Benzo[g,h,i]perylene	1300		1100	110	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Benzo[k]fluoranthene	1400		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Bis(2-ethylhexyl) phthalate	760	J	1100	370	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Caprolactam	ND		1100	320	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Carbazole	600	J	1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Chrysene	2200		1100	240	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Date Collected: 02/07/19 12:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Di-n-butyl phthalate	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Dibenzofuran	320	J	1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Diethyl phthalate	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Fluoranthene	5300		1100	110	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Fluorene	470	J	1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Hexachlorobenzene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Hexachlorocyclopentadiene	ND		1100	150	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Indeno[1,2,3-cd]pyrene	1300		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Isophorone	ND		1100	230	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
N-Nitrosodi-n-propylamine	ND		1100	180	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
N-Nitrosodiphenylamine	ND		1100	880	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Naphthalene	ND		1100	140	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Pentachlorophenol	ND		2100	1100	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Phenanthrene	4300		1100	160	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Phenol	ND		1100	170	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5
Pyrene	3900		1100	130	ug/Kg	☼	02/11/19 14:25	02/13/19 01:11	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	98		53 - 120	02/11/19 14:25	02/13/19 01:11	5
Phenol-d5 (Surr)	92		54 - 120	02/11/19 14:25	02/13/19 01:11	5
p-Terphenyl-d14 (Surr)	118		65 - 121	02/11/19 14:25	02/13/19 01:11	5
2,4,6-Tribromophenol (Surr)	101		54 - 120	02/11/19 14:25	02/13/19 01:11	5
2-Fluorobiphenyl	97		60 - 120	02/11/19 14:25	02/13/19 01:11	5
2-Fluorophenol (Surr)	87		52 - 120	02/11/19 14:25	02/13/19 01:11	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.53	J B	2.1	0.41	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
4,4'-DDE	0.77	J	2.1	0.44	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
4,4'-DDT	3.8		2.1	0.49	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Aldrin	ND		2.1	0.52	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
alpha-BHC	ND		2.1	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
cis-Chlordane	ND		2.1	1.0	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
beta-BHC	ND		2.1	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
delta-BHC	ND		2.1	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Dieldrin	ND		2.1	0.51	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Endosulfan I	ND		2.1	0.40	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Endosulfan II	ND		2.1	0.38	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Endosulfan sulfate	ND		2.1	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Endrin	ND		2.1	0.42	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Endrin aldehyde	ND		2.1	0.54	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
Endrin ketone	ND		2.1	0.52	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
gamma-BHC (Lindane)	ND		2.1	0.39	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1
trans-Chlordane	ND		2.1	0.67	ug/Kg	☼	02/12/19 14:56	02/13/19 18:46	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Date Collected: 02/07/19 12:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		2.1	0.46	ug/Kg	☆	02/12/19 14:56	02/13/19 18:46	1
Heptachlor epoxide	ND		2.1	0.54	ug/Kg	☆	02/12/19 14:56	02/13/19 18:46	1
Methoxychlor	ND		2.1	0.43	ug/Kg	☆	02/12/19 14:56	02/13/19 18:46	1
Toxaphene	ND		21	12	ug/Kg	☆	02/12/19 14:56	02/13/19 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	157	X	45 - 120				02/12/19 14:56	02/13/19 18:46	1
Tetrachloro-m-xylene	47		30 - 124				02/12/19 14:56	02/13/19 18:46	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.31	0.061	mg/Kg	☆	02/08/19 14:30	02/10/19 20:33	1
PCB-1221	ND		0.31	0.061	mg/Kg	☆	02/08/19 14:30	02/10/19 20:33	1
PCB-1232	ND		0.31	0.061	mg/Kg	☆	02/08/19 14:30	02/10/19 20:33	1
PCB-1242	ND		0.31	0.061	mg/Kg	☆	02/08/19 14:30	02/10/19 20:33	1
PCB-1248	ND		0.31	0.061	mg/Kg	☆	02/08/19 14:30	02/10/19 20:33	1
PCB-1254	ND		0.31	0.15	mg/Kg	☆	02/08/19 14:30	02/10/19 20:33	1
PCB-1260	ND		0.31	0.15	mg/Kg	☆	02/08/19 14:30	02/10/19 20:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		60 - 154				02/08/19 14:30	02/10/19 20:33	1
DCB Decachlorobiphenyl	71		65 - 174				02/08/19 14:30	02/10/19 20:33	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		21	6.8	ug/Kg	☆	02/11/19 14:31	02/15/19 16:10	1
2,4-D	ND		21	13	ug/Kg	☆	02/11/19 14:31	02/15/19 16:10	1
Silvex (2,4,5-TP)	ND		21	7.7	ug/Kg	☆	02/11/19 14:31	02/15/19 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	88		28 - 129				02/11/19 14:31	02/15/19 16:10	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12100		12.7	5.6	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Antimony	ND		19.1	0.51	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Arsenic	9.1		2.5	0.51	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Barium	170		0.64	0.14	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Beryllium	0.52		0.25	0.036	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Cadmium	0.96		0.25	0.038	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Calcium	14100	B	63.5	4.2	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Chromium	18.9		0.64	0.25	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Cobalt	8.5		0.64	0.064	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Copper	49.5		1.3	0.27	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Iron	19400		12.7	4.4	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Lead	333		1.3	0.30	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Magnesium	8290	B	25.4	1.2	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Manganese	494	B	0.25	0.041	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Nickel	21.0		6.4	0.29	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Potassium	2620		38.1	25.4	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1
Selenium	ND		5.1	0.51	mg/Kg	☆	02/09/19 09:24	02/11/19 13:50	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Date Collected: 02/07/19 12:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.76	0.25	mg/Kg	☼	02/09/19 09:24	02/11/19 13:50	1
Sodium	127	J	178	16.5	mg/Kg	☼	02/09/19 09:24	02/11/19 13:50	1
Thallium	ND		7.6	0.38	mg/Kg	☼	02/09/19 09:24	02/11/19 13:50	1
Vanadium	27.2		0.64	0.14	mg/Kg	☼	02/09/19 09:24	02/11/19 13:50	1
Zinc	243		2.5	0.81	mg/Kg	☼	02/09/19 09:24	02/11/19 13:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.71		0.026	0.011	mg/Kg	☼	02/14/19 12:00	02/14/19 13:59	1

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: MW-7

Date Collected: 02/07/19 12:45

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-16

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		800	660	ug/L			02/11/19 14:13	800
1,1,2,2-Tetrachloroethane	ND		800	170	ug/L			02/11/19 14:13	800
1,1,2-Trichloroethane	ND		800	180	ug/L			02/11/19 14:13	800
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		800	250	ug/L			02/11/19 14:13	800
1,1-Dichloroethane	ND		800	300	ug/L			02/11/19 14:13	800
1,1-Dichloroethene	ND		800	230	ug/L			02/11/19 14:13	800
1,2,4-Trichlorobenzene	ND		800	330	ug/L			02/11/19 14:13	800
1,2-Dibromo-3-Chloropropane	ND		800	310	ug/L			02/11/19 14:13	800
1,2-Dichlorobenzene	ND		800	630	ug/L			02/11/19 14:13	800
1,2-Dichloroethane	ND		800	170	ug/L			02/11/19 14:13	800
1,2-Dichloropropane	ND		800	580	ug/L			02/11/19 14:13	800
1,3-Dichlorobenzene	ND		800	620	ug/L			02/11/19 14:13	800
1,4-Dichlorobenzene	ND		800	670	ug/L			02/11/19 14:13	800
2-Butanone (MEK)	ND		8000	1100	ug/L			02/11/19 14:13	800
2-Hexanone	ND		4000	990	ug/L			02/11/19 14:13	800
4-Methyl-2-pentanone (MIBK)	ND		4000	1700	ug/L			02/11/19 14:13	800
Acetone	ND		8000	2400	ug/L			02/11/19 14:13	800
Benzene	ND		800	330	ug/L			02/11/19 14:13	800
Bromodichloromethane	ND		800	310	ug/L			02/11/19 14:13	800
Bromoform	ND		800	210	ug/L			02/11/19 14:13	800
Bromomethane	ND		800	550	ug/L			02/11/19 14:13	800
Carbon disulfide	ND		800	150	ug/L			02/11/19 14:13	800
Carbon tetrachloride	ND		800	220	ug/L			02/11/19 14:13	800
Chlorobenzene	ND		800	600	ug/L			02/11/19 14:13	800
Dibromochloromethane	ND		800	260	ug/L			02/11/19 14:13	800
Chloroethane	ND		800	260	ug/L			02/11/19 14:13	800
Chloroform	ND		800	270	ug/L			02/11/19 14:13	800
Chloromethane	ND		800	280	ug/L			02/11/19 14:13	800
cis-1,2-Dichloroethene	1600		800	650	ug/L			02/11/19 14:13	800
cis-1,3-Dichloropropene	ND		800	290	ug/L			02/11/19 14:13	800
Cyclohexane	ND		800	140	ug/L			02/11/19 14:13	800
Dichlorodifluoromethane	ND *		800	540	ug/L			02/11/19 14:13	800
Ethylbenzene	ND		800	590	ug/L			02/11/19 14:13	800
1,2-Dibromoethane	ND		800	580	ug/L			02/11/19 14:13	800
Isopropylbenzene	ND		800	630	ug/L			02/11/19 14:13	800
Methyl acetate	ND		2000	1000	ug/L			02/11/19 14:13	800
Methyl tert-butyl ether	ND		800	130	ug/L			02/11/19 14:13	800
Methylcyclohexane	ND		800	130	ug/L			02/11/19 14:13	800
Methylene Chloride	ND		800	350	ug/L			02/11/19 14:13	800
Styrene	ND		800	580	ug/L			02/11/19 14:13	800
Tetrachloroethene	ND		800	290	ug/L			02/11/19 14:13	800
Toluene	ND		800	410	ug/L			02/11/19 14:13	800
trans-1,2-Dichloroethene	ND		800	720	ug/L			02/11/19 14:13	800
trans-1,3-Dichloropropene	ND		800	300	ug/L			02/11/19 14:13	800
Trichloroethene	37000		800	370	ug/L			02/11/19 14:13	800
Trichlorofluoromethane	ND		800	700	ug/L			02/11/19 14:13	800
Vinyl chloride	ND		800	720	ug/L			02/11/19 14:13	800
Xylenes, Total	ND		1600	530	ug/L			02/11/19 14:13	800

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: MW-7

Date Collected: 02/07/19 12:45

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-16

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	100		80 - 120		02/11/19 14:13	800
<i>1,2-Dichloroethane-d4 (Surr)</i>	93		77 - 120		02/11/19 14:13	800
<i>4-Bromofluorobenzene (Surr)</i>	100		73 - 120		02/11/19 14:13	800
<i>Dibromofluoromethane (Surr)</i>	94		75 - 123		02/11/19 14:13	800

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: Trip Blank

Lab Sample ID: 480-148804-17

Date Collected: 02/07/19 00:00

Matrix: Water

Date Received: 02/08/19 03:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/11/19 14:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/11/19 14:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/11/19 14:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/11/19 14:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/11/19 14:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/11/19 14:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/11/19 14:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/11/19 14:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/11/19 14:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/11/19 14:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/11/19 14:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/11/19 14:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/11/19 14:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/11/19 14:36	1
2-Hexanone	ND		5.0	1.2	ug/L			02/11/19 14:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/11/19 14:36	1
Acetone	ND		10	3.0	ug/L			02/11/19 14:36	1
Benzene	ND		1.0	0.41	ug/L			02/11/19 14:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/11/19 14:36	1
Bromoform	ND		1.0	0.26	ug/L			02/11/19 14:36	1
Bromomethane	ND		1.0	0.69	ug/L			02/11/19 14:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/11/19 14:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/11/19 14:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/11/19 14:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/11/19 14:36	1
Chloroethane	ND		1.0	0.32	ug/L			02/11/19 14:36	1
Chloroform	ND		1.0	0.34	ug/L			02/11/19 14:36	1
Chloromethane	ND		1.0	0.35	ug/L			02/11/19 14:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/11/19 14:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/11/19 14:36	1
Cyclohexane	ND		1.0	0.18	ug/L			02/11/19 14:36	1
Dichlorodifluoromethane	ND *		1.0	0.68	ug/L			02/11/19 14:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/11/19 14:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/11/19 14:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/11/19 14:36	1
Methyl acetate	ND		2.5	1.3	ug/L			02/11/19 14:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/11/19 14:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/11/19 14:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/11/19 14:36	1
Styrene	ND		1.0	0.73	ug/L			02/11/19 14:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/11/19 14:36	1
Toluene	ND		1.0	0.51	ug/L			02/11/19 14:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/11/19 14:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/11/19 14:36	1
Trichloroethene	ND		1.0	0.46	ug/L			02/11/19 14:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/11/19 14:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/11/19 14:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/11/19 14:36	1

TestAmerica Buffalo

Client Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: Trip Blank

Date Collected: 02/07/19 00:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-17

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	98		80 - 120		02/11/19 14:36	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	98		77 - 120		02/11/19 14:36	1
<i>4-Bromofluorobenzene (Surr)</i>	101		73 - 120		02/11/19 14:36	1
<i>Dibromofluoromethane (Surr)</i>	99		75 - 123		02/11/19 14:36	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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)	DCA (64-126)	BFB (72-126)	DBFM (60-140)
480-148804-2	SS - 1 (6 -12)	101	105	98	104
480-148804-4	SS - 2 (6 -12)	101	105	97	104
480-148804-6	SS - 3 (6 -12)	100	106	99	104
480-148804-8	SS - 4 (6 -12)	100	107	98	104
480-148804-10	SS - 5 (6 -12)	99	107	97	103
480-148804-13	SS - 7 (6 -12)	100	107	98	104
480-148804-15	SS - 8 (6 -12)	101	107	98	104
LCS 480-458491/1-A	Lab Control Sample	101	100	102	105
MB 480-458491/2-A	Method Blank	101	102	99	104

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	DCA (77-120)	BFB (73-120)	DBFM (75-123)
480-148804-16	MW-7	100	93	100	94
480-148804-17	Trip Blank	98	98	101	99
LCS 480-458448/5	Lab Control Sample	97	97	99	100
MB 480-458448/7	Method Blank	98	99	102	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 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 (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-148804-1	SS - 1 (0 -2)	96	87	117	94	99	89
480-148804-2	SS - 1 (6 -12)	102	97	136 X	122 X	107	93
480-148804-3	SS - 2 (0 -2)	96	94	122 X	103	101	94
480-148804-3 MS	SS - 2 (0 -2)	100	94	131 X	126 X	107	94
480-148804-3 MSD	SS - 2 (0 -2)	94	89	118	109	97	86
480-148804-4	SS - 2 (6 -12)	101	97	132 X	117	108	95
480-148804-5	SS - 3 (0 -2)	100	91	120	107	103	91
480-148804-6	SS - 3 (6 -12)	99	91	123 X	95	102	90
480-148804-7	SS - 4 (0 -2)	105	93	118	118	101	101
480-148804-8	SS - 4 (6 -12)	98	89	122 X	97	101	87
480-148804-9	SS - 5 (0 -2)	102	100	138 X	116	108	100

TestAmerica Buffalo

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (53-120)	PHL (54-120)	TPHd14 (65-121)	TBP (54-120)	FBP (60-120)	2FP (52-120)
480-148804-10	SS - 5 (6 -12)	97	92	118	104	98	91
480-148804-11	SS - 6 (0 -2)	94	93	123 X	102	100	89
480-148804-12	SS - 7 (0 -2)	98	87	130 X	96	97	84
480-148804-13	SS - 7 (6 -12)	95	88	114	93	94	90
480-148804-14	SS - 8 (0 -2)	92	87	119	99	97	85
480-148804-15	SS - 8 (6 -12)	98	92	118	101	97	87
LCS 480-458568/2-A	Lab Control Sample	80	79	113	103	87	73
MB 480-458568/1-A	Method Blank	90	90	118	95	96	86

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = 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)	
		DCBP2 (45-120)	TCX2 (30-124)
480-148804-1	SS - 1 (0 -2)	112	53
480-148804-2	SS - 1 (6 -12)	97	48
480-148804-3	SS - 2 (0 -2)	202 X	116
480-148804-4	SS - 2 (6 -12)	184 X	0 X
480-148804-5	SS - 3 (0 -2)	129 X	53
480-148804-6	SS - 3 (6 -12)	101	81
480-148804-7	SS - 4 (0 -2)	216 X	0 X
480-148804-8	SS - 4 (6 -12)	161 X	77
480-148804-9	SS - 5 (0 -2)	144 X	50
480-148804-10	SS - 5 (6 -12)	190 X	47
480-148804-11	SS - 6 (0 -2)	58	41
480-148804-12	SS - 7 (0 -2)	82	50
480-148804-13	SS - 7 (6 -12)	94	54
480-148804-14	SS - 8 (0 -2)	231 X	45
480-148804-14 MS	SS - 8 (0 -2)	219 X	41
480-148804-14 MSD	SS - 8 (0 -2)	197 X	39
480-148804-15	SS - 8 (6 -12)	157 X	47
LCS 480-458779/2-A	Lab Control Sample	75	42
MB 480-458779/1-A	Method Blank	76	38

Surrogate Legend

DCBP = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX2 (60-154)	DCBP2 (65-174)
480-148804-1	SS - 1 (0 -2)	69	67
480-148804-2	SS - 1 (6 -12)	76	72
480-148804-3	SS - 2 (0 -2)	60	63 X
480-148804-4	SS - 2 (6 -12)	70	68
480-148804-5	SS - 3 (0 -2)	81	83
480-148804-6	SS - 3 (6 -12)	72	69
480-148804-7	SS - 4 (0 -2)	61	57 X
480-148804-8	SS - 4 (6 -12)	70	67
480-148804-9	SS - 5 (0 -2)	72	68
480-148804-10	SS - 5 (6 -12)	69	71
480-148804-11	SS - 6 (0 -2)	68	58 X
480-148804-12	SS - 7 (0 -2)	70	65
480-148804-13	SS - 7 (6 -12)	77	72
480-148804-14	SS - 8 (0 -2)	71	67
480-148804-15	SS - 8 (6 -12)	71	71
LCS 480-458359/2-A	Lab Control Sample	90	86
MB 480-458359/1-A	Method Blank	94	96

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA1 (28-129)	
480-148804-1	SS - 1 (0 -2)	61	
480-148804-2	SS - 1 (6 -12)	52	
480-148804-3	SS - 2 (0 -2)	62	
480-148804-4	SS - 2 (6 -12)	54	
480-148804-4 MS	SS - 2 (6 -12)	66	
480-148804-4 MSD	SS - 2 (6 -12)	54	
480-148804-5	SS - 3 (0 -2)	58	
LCS 480-458569/2-A	Lab Control Sample	62	
MB 480-458569/1-A	Method Blank	59	

Surrogate Legend

DCPAA = 2,4-Dichlorophenylacetic acid

Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPAA2 (28-129)	
480-148804-6	SS - 3 (6 -12)	77	
480-148804-7	SS - 4 (0 -2)	58	
480-148804-8	SS - 4 (6 -12)	83	

TestAmerica Buffalo

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Method: 8151A - Herbicides (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	DCPAA2 (28-129)
480-148804-9	SS - 5 (0 -2)	69
480-148804-10	SS - 5 (6 -12)	68
480-148804-11	SS - 6 (0 -2)	51
480-148804-12	SS - 7 (0 -2)	74
480-148804-13	SS - 7 (6 -12)	71
480-148804-14	SS - 8 (0 -2)	76
480-148804-15	SS - 8 (6 -12)	88
Surrogate Legend		
DCPAA = 2,4-Dichlorophenylacetic acid		

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: MB 480-458448/7

Matrix: Water

Analysis Batch: 458448

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/11/19 10:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/11/19 10:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/11/19 10:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/11/19 10:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/11/19 10:50	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/11/19 10:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/11/19 10:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/11/19 10:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/11/19 10:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/11/19 10:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/11/19 10:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/11/19 10:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/11/19 10:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/11/19 10:50	1
2-Hexanone	ND		5.0	1.2	ug/L			02/11/19 10:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/11/19 10:50	1
Acetone	ND		10	3.0	ug/L			02/11/19 10:50	1
Benzene	ND		1.0	0.41	ug/L			02/11/19 10:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/11/19 10:50	1
Bromoform	ND		1.0	0.26	ug/L			02/11/19 10:50	1
Bromomethane	ND		1.0	0.69	ug/L			02/11/19 10:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/11/19 10:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/11/19 10:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/11/19 10:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/11/19 10:50	1
Chloroethane	ND		1.0	0.32	ug/L			02/11/19 10:50	1
Chloroform	ND		1.0	0.34	ug/L			02/11/19 10:50	1
Chloromethane	ND		1.0	0.35	ug/L			02/11/19 10:50	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/11/19 10:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/11/19 10:50	1
Cyclohexane	ND		1.0	0.18	ug/L			02/11/19 10:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/11/19 10:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/11/19 10:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/11/19 10:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/11/19 10:50	1
Methyl acetate	ND		2.5	1.3	ug/L			02/11/19 10:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/11/19 10:50	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/11/19 10:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/11/19 10:50	1
Styrene	ND		1.0	0.73	ug/L			02/11/19 10:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/11/19 10:50	1
Toluene	ND		1.0	0.51	ug/L			02/11/19 10:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/11/19 10:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/11/19 10:50	1
Trichloroethene	ND		1.0	0.46	ug/L			02/11/19 10:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/11/19 10:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/11/19 10:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/11/19 10:50	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		02/11/19 10:50	1
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		02/11/19 10:50	1
4-Bromofluorobenzene (Surr)	102		73 - 120		02/11/19 10:50	1
Dibromofluoromethane (Surr)	101		75 - 123		02/11/19 10:50	1

Lab Sample ID: LCS 480-458448/5

Matrix: Water

Analysis Batch: 458448

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.1		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	76 - 120
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.7		ug/L		95	61 - 148
1,1-Dichloroethane	25.0	24.6		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	23.8		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		100	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.2		ug/L		105	56 - 134
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	23.9		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.2		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 120
2-Butanone (MEK)	125	150		ug/L		120	57 - 140
2-Hexanone	125	141		ug/L		113	65 - 127
4-Methyl-2-pentanone (MIBK)	125	130		ug/L		104	71 - 125
Acetone	125	161		ug/L		128	56 - 142
Benzene	25.0	24.9		ug/L		100	71 - 124
Bromodichloromethane	25.0	25.8		ug/L		103	80 - 122
Bromoform	25.0	28.4		ug/L		114	61 - 132
Bromomethane	25.0	24.4		ug/L		98	55 - 144
Carbon disulfide	25.0	24.5		ug/L		98	59 - 134
Carbon tetrachloride	25.0	23.9		ug/L		96	72 - 134
Chlorobenzene	25.0	24.4		ug/L		98	80 - 120
Dibromochloromethane	25.0	28.8		ug/L		115	75 - 125
Chloroethane	25.0	25.6		ug/L		102	69 - 136
Chloroform	25.0	24.7		ug/L		99	73 - 127
Chloromethane	25.0	28.1		ug/L		112	68 - 124
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	27.0		ug/L		108	74 - 124
Cyclohexane	25.0	24.2		ug/L		97	59 - 135
Dichlorodifluoromethane	25.0	37.5 *		ug/L		150	59 - 135
Ethylbenzene	25.0	24.4		ug/L		98	77 - 123
1,2-Dibromoethane	25.0	25.8		ug/L		103	77 - 120
Isopropylbenzene	25.0	24.9		ug/L		100	77 - 122
Methyl acetate	50.0	49.7		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	25.7		ug/L		103	77 - 120
Methylcyclohexane	25.0	23.8		ug/L		95	68 - 134
Methylene Chloride	25.0	25.7		ug/L		103	75 - 124
Styrene	25.0	26.3		ug/L		105	80 - 120
Tetrachloroethene	25.0	23.7		ug/L		95	74 - 122
Toluene	25.0	24.1		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	73 - 127

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: LCS 480-458448/5

Matrix: Water

Analysis Batch: 458448

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	25.0	26.4		ug/L		106	80 - 120
Trichloroethene	25.0	23.5		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	23.6		ug/L		94	62 - 150
Vinyl chloride	25.0	26.6		ug/L		107	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120
1,2-Dichloroethane-d4 (Surr)	97		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Dibromofluoromethane (Surr)	100		75 - 123

Lab Sample ID: MB 480-458491/2-A

Matrix: Solid

Analysis Batch: 458475

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458491

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
2-Hexanone	ND		25	2.5	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Acetone	ND		25	4.2	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Benzene	ND		5.0	0.25	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Bromoform	ND		5.0	2.5	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Bromomethane	ND		5.0	0.45	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Chloroethane	ND		5.0	1.1	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Chloroform	ND		5.0	0.31	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Chloromethane	ND		5.0	0.30	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Cyclohexane	ND		5.0	0.70	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		02/11/19 09:44	02/11/19 10:58	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: MB 480-458491/2-A

Matrix: Solid

Analysis Batch: 458475

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458491

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		5.0	0.35	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Methyl acetate	ND		25	3.0	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Styrene	ND		5.0	0.25	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Toluene	ND		5.0	0.38	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Trichloroethene	ND		5.0	1.1	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		02/11/19 09:44	02/11/19 10:58	1
Xylenes, Total	ND		10	0.84	ug/Kg		02/11/19 09:44	02/11/19 10:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		71 - 125	02/11/19 09:44	02/11/19 10:58	1
1,2-Dichloroethane-d4 (Surr)	102		64 - 126	02/11/19 09:44	02/11/19 10:58	1
4-Bromofluorobenzene (Surr)	99		72 - 126	02/11/19 09:44	02/11/19 10:58	1
Dibromofluoromethane (Surr)	104		60 - 140	02/11/19 09:44	02/11/19 10:58	1

Lab Sample ID: LCS 480-458491/1-A

Matrix: Solid

Analysis Batch: 458475

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458491

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	53.3		ug/Kg		107	77 - 121
1,1,2,2-Tetrachloroethane	50.0	50.6		ug/Kg		101	80 - 120
1,1,2-Trichloroethane	50.0	51.9		ug/Kg		104	78 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.8		ug/Kg		106	60 - 140
1,1-Dichloroethane	50.0	52.5		ug/Kg		105	73 - 126
1,1-Dichloroethene	50.0	51.8		ug/Kg		104	59 - 125
1,2,4-Trichlorobenzene	50.0	48.7		ug/Kg		97	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	46.5		ug/Kg		93	63 - 124
1,2-Dichlorobenzene	50.0	50.4		ug/Kg		101	75 - 120
1,2-Dichloroethane	50.0	53.4		ug/Kg		107	77 - 122
1,2-Dichloropropane	50.0	51.1		ug/Kg		102	75 - 124
1,3-Dichlorobenzene	50.0	51.1		ug/Kg		102	74 - 120
1,4-Dichlorobenzene	50.0	50.5		ug/Kg		101	73 - 120
2-Butanone (MEK)	250	264		ug/Kg		106	70 - 134
2-Hexanone	250	257		ug/Kg		103	59 - 130
4-Methyl-2-pentanone (MIBK)	250	258		ug/Kg		103	65 - 133
Acetone	250	257		ug/Kg		103	61 - 137
Benzene	50.0	52.9		ug/Kg		106	79 - 127
Bromodichloromethane	50.0	53.3		ug/Kg		107	80 - 122

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: LCS 480-458491/1-A

Matrix: Solid

Analysis Batch: 458475

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458491

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	50.0	55.6		ug/Kg		111	68 - 126
Bromomethane	50.0	57.2		ug/Kg		114	37 - 149
Carbon disulfide	50.0	49.5		ug/Kg		99	64 - 131
Carbon tetrachloride	50.0	55.4		ug/Kg		111	75 - 135
Chlorobenzene	50.0	52.3		ug/Kg		105	76 - 124
Dibromochloromethane	50.0	55.4		ug/Kg		111	76 - 125
Chloroethane	50.0	47.7		ug/Kg		95	69 - 135
Chloroform	50.0	53.9		ug/Kg		108	80 - 120
Chloromethane	50.0	56.4		ug/Kg		113	63 - 127
cis-1,2-Dichloroethene	50.0	52.9		ug/Kg		106	81 - 120
cis-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	80 - 120
Cyclohexane	50.0	47.3		ug/Kg		95	65 - 120
Dichlorodifluoromethane	50.0	56.8		ug/Kg		114	57 - 142
Ethylbenzene	50.0	51.4		ug/Kg		103	80 - 120
1,2-Dibromoethane	50.0	53.9		ug/Kg		108	78 - 120
Isopropylbenzene	50.0	49.6		ug/Kg		99	72 - 120
Methyl acetate	100	108		ug/Kg		108	55 - 136
Methyl tert-butyl ether	50.0	54.0		ug/Kg		108	63 - 125
Methylcyclohexane	50.0	49.8		ug/Kg		100	60 - 140
Methylene Chloride	50.0	48.3		ug/Kg		97	61 - 127
Styrene	50.0	50.2		ug/Kg		100	80 - 120
Tetrachloroethene	50.0	53.2		ug/Kg		106	74 - 122
Toluene	50.0	51.4		ug/Kg		103	74 - 128
trans-1,2-Dichloroethene	50.0	53.8		ug/Kg		108	78 - 126
trans-1,3-Dichloropropene	50.0	52.3		ug/Kg		105	73 - 123
Trichloroethene	50.0	52.5		ug/Kg		105	77 - 129
Trichlorofluoromethane	50.0	54.5		ug/Kg		109	65 - 146
Vinyl chloride	50.0	57.0		ug/Kg		114	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		71 - 125
1,2-Dichloroethane-d4 (Surr)	100		64 - 126
4-Bromofluorobenzene (Surr)	102		72 - 126
Dibromofluoromethane (Surr)	105		60 - 140

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

Lab Sample ID: MB 480-458568/1-A

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		02/11/19 14:25	02/12/19 17:14	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: MB 480-458568/1-A

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		1700	780	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2-Chloronaphthalene	ND		170	28	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2-Chlorophenol	ND		170	31	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2-Methylphenol	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2-Methylnaphthalene	ND		170	34	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2-Nitroaniline	ND		330	25	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
2-Nitrophenol	ND		170	48	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
3-Nitroaniline	ND		330	47	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4-Chloroaniline	ND		170	42	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4-Methylphenol	ND		330	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4-Nitroaniline	ND		330	89	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
4-Nitrophenol	ND		330	120	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Acenaphthene	ND		170	25	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Acenaphthylene	ND		170	22	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Acetophenone	ND		170	23	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Anthracene	ND		170	42	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Atrazine	ND		170	59	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Benzaldehyde	ND		170	130	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Benzo[a]anthracene	ND		170	17	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Benzo[a]pyrene	ND		170	25	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Caprolactam	ND		170	51	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Carbazole	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Chrysene	ND		170	38	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Dibenzofuran	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Diethyl phthalate	ND		170	22	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Dimethyl phthalate	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Fluoranthene	ND		170	18	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Fluorene	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Hexachlorobenzene	ND		170	23	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Hexachlorobutadiene	ND		170	25	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		02/11/19 14:25	02/12/19 17:14	1

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: MB 480-458568/1-A

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		170	22	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Isophorone	ND		170	36	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Naphthalene	ND		170	22	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Nitrobenzene	ND		170	19	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Pentachlorophenol	ND		330	170	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Phenanthrene	ND		170	25	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Phenol	ND		170	26	ug/Kg		02/11/19 14:25	02/12/19 17:14	1
Pyrene	ND		170	20	ug/Kg		02/11/19 14:25	02/12/19 17:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	90		53 - 120	02/11/19 14:25	02/12/19 17:14	1
Phenol-d5 (Surr)	90		54 - 120	02/11/19 14:25	02/12/19 17:14	1
p-Terphenyl-d14 (Surr)	118		65 - 121	02/11/19 14:25	02/12/19 17:14	1
2,4,6-Tribromophenol (Surr)	95		54 - 120	02/11/19 14:25	02/12/19 17:14	1
2-Fluorobiphenyl	96		60 - 120	02/11/19 14:25	02/12/19 17:14	1
2-Fluorophenol (Surr)	86		52 - 120	02/11/19 14:25	02/12/19 17:14	1

Lab Sample ID: LCS 480-458568/2-A

Matrix: Solid

Analysis Batch: 459155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1660	1430		ug/Kg		86	59 - 120
bis (2-chloroisopropyl) ether	1660	849		ug/Kg		51	44 - 120
2,4,5-Trichlorophenol	1660	1470		ug/Kg		89	59 - 126
2,4,6-Trichlorophenol	1660	1520		ug/Kg		92	59 - 123
2,4-Dichlorophenol	1660	1500		ug/Kg		90	61 - 120
2,4-Dimethylphenol	1660	1490		ug/Kg		90	59 - 120
2,4-Dinitrophenol	3310	2140		ug/Kg		64	41 - 146
2,4-Dinitrotoluene	1660	1580		ug/Kg		95	63 - 120
2,6-Dinitrotoluene	1660	1570		ug/Kg		95	66 - 120
2-Chloronaphthalene	1660	1440		ug/Kg		87	57 - 120
2-Chlorophenol	1660	1370		ug/Kg		83	53 - 120
2-Methylphenol	1660	1360		ug/Kg		82	54 - 120
2-Methylnaphthalene	1660	1460		ug/Kg		88	59 - 120
2-Nitroaniline	1660	1400		ug/Kg		85	61 - 120
2-Nitrophenol	1660	1460		ug/Kg		88	56 - 120
3,3'-Dichlorobenzidine	3310	2730		ug/Kg		83	54 - 120
3-Nitroaniline	1660	1210		ug/Kg		73	48 - 120
4,6-Dinitro-2-methylphenol	3310	3490		ug/Kg		105	49 - 122
4-Bromophenyl phenyl ether	1660	1680		ug/Kg		102	58 - 120
4-Chloro-3-methylphenol	1660	1570		ug/Kg		95	61 - 120
4-Chloroaniline	1660	1120		ug/Kg		68	38 - 120
4-Chlorophenyl phenyl ether	1660	1530		ug/Kg		93	63 - 124
4-Methylphenol	1660	1390		ug/Kg		84	55 - 120

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QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: LCS 480-458568/2-A

Matrix: Solid

Analysis Batch: 459155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitroaniline	1660	1440		ug/Kg		87	56 - 120
4-Nitrophenol	3310	3730		ug/Kg		113	43 - 147
Acenaphthene	1660	1450		ug/Kg		87	62 - 120
Acenaphthylene	1660	1500		ug/Kg		91	58 - 121
Acetophenone	1660	1430		ug/Kg		86	54 - 120
Anthracene	1660	1710		ug/Kg		103	62 - 120
Atrazine	3310	3230		ug/Kg		97	60 - 127
Benzaldehyde	3310	2400		ug/Kg		72	10 - 150
Benzo[a]anthracene	1660	1590		ug/Kg		96	65 - 120
Benzo[a]pyrene	1660	1680		ug/Kg		102	64 - 120
Benzo[b]fluoranthene	1660	1620		ug/Kg		98	64 - 120
Benzo[g,h,i]perylene	1660	1670		ug/Kg		101	45 - 145
Benzo[k]fluoranthene	1660	1660		ug/Kg		100	65 - 120
Bis(2-chloroethoxy)methane	1660	1270		ug/Kg		77	55 - 120
Bis(2-chloroethyl)ether	1660	1210		ug/Kg		73	45 - 120
Bis(2-ethylhexyl) phthalate	1660	1940		ug/Kg		117	61 - 133
Butyl benzyl phthalate	1660	1830		ug/Kg		111	61 - 129
Caprolactam	3310	2950		ug/Kg		89	47 - 120
Carbazole	1660	1690		ug/Kg		102	65 - 120
Chrysene	1660	1610		ug/Kg		97	64 - 120
Dibenz(a,h)anthracene	1660	1750		ug/Kg		106	54 - 132
Di-n-butyl phthalate	1660	1870		ug/Kg		113	58 - 130
Di-n-octyl phthalate	1660	1860		ug/Kg		112	57 - 133
Dibenzofuran	1660	1510		ug/Kg		91	63 - 120
Diethyl phthalate	1660	1720		ug/Kg		104	66 - 120
Dimethyl phthalate	1660	1560		ug/Kg		94	65 - 124
Fluoranthene	1660	1720		ug/Kg		104	62 - 120
Fluorene	1660	1550		ug/Kg		94	63 - 120
Hexachlorobenzene	1660	1660		ug/Kg		100	60 - 120
Hexachlorobutadiene	1660	1630		ug/Kg		98	45 - 120
Hexachlorocyclopentadiene	1660	1510		ug/Kg		91	47 - 120
Hexachloroethane	1660	1290		ug/Kg		78	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1720		ug/Kg		104	56 - 134
Isophorone	1660	1330		ug/Kg		80	56 - 120
N-Nitrosodi-n-propylamine	1660	1280		ug/Kg		77	52 - 120
N-Nitrosodiphenylamine	1660	1720		ug/Kg		104	51 - 128
Naphthalene	1660	1390		ug/Kg		84	55 - 120
Nitrobenzene	1660	1290		ug/Kg		78	54 - 120
Pentachlorophenol	3310	2920		ug/Kg		88	51 - 120
Phenanthrene	1660	1660		ug/Kg		100	60 - 120
Phenol	1660	1170		ug/Kg		71	53 - 120
Pyrene	1660	1740		ug/Kg		105	61 - 133

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	80		53 - 120
Phenol-d5 (Surr)	79		54 - 120
p-Terphenyl-d14 (Surr)	113		65 - 121
2,4,6-Tribromophenol (Surr)	103		54 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: LCS 480-458568/2-A

Matrix: Solid

Analysis Batch: 459155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458568

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	87		60 - 120
2-Fluorophenol (Surr)	73		52 - 120

Lab Sample ID: 480-148804-3 MS

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: SS - 2 (0 -2)

Prep Type: Total/NA

Prep Batch: 458568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Rec. Limits
Biphenyl	ND		2170	2340		ug/Kg	☼	108	58 - 120
bis (2-chloroisopropyl) ether	ND		2170	1690		ug/Kg	☼	78	31 - 120
2,4,5-Trichlorophenol	ND		2170	2350		ug/Kg	☼	108	46 - 120
2,4,6-Trichlorophenol	ND		2170	2410		ug/Kg	☼	111	41 - 123
2,4-Dichlorophenol	ND		2170	2370		ug/Kg	☼	109	45 - 120
2,4-Dimethylphenol	ND		2170	2280		ug/Kg	☼	105	52 - 120
2,4-Dinitrophenol	ND		4350	ND		ug/Kg	☼	NC	41 - 146
2,4-Dinitrotoluene	ND	F1	2170	2760	F1	ug/Kg	☼	127	63 - 125
2,6-Dinitrotoluene	ND	F1	2170	2660	F1	ug/Kg	☼	122	66 - 120
2-Chloronaphthalene	ND		2170	2290		ug/Kg	☼	106	57 - 120
2-Chlorophenol	ND		2170	2030		ug/Kg	☼	93	43 - 120
2-Methylphenol	ND		2170	2010		ug/Kg	☼	93	48 - 120
2-Methylnaphthalene	ND		2170	2270		ug/Kg	☼	105	55 - 120
2-Nitroaniline	ND		2170	2490		ug/Kg	☼	114	61 - 120
2-Nitrophenol	ND		2170	2580		ug/Kg	☼	119	37 - 120
3,3'-Dichlorobenzidine	ND		4350	4830		ug/Kg	☼	111	37 - 126
3-Nitroaniline	ND		2170	2220		ug/Kg	☼	102	48 - 120
4,6-Dinitro-2-methylphenol	ND		4350	5290		ug/Kg	☼	122	23 - 149
4-Bromophenyl phenyl ether	ND		2170	2440		ug/Kg	☼	112	58 - 120
4-Chloro-3-methylphenol	ND		2170	2420		ug/Kg	☼	112	49 - 125
4-Chloroaniline	ND		2170	1740		ug/Kg	☼	80	38 - 120
4-Chlorophenyl phenyl ether	ND		2170	2560		ug/Kg	☼	118	63 - 124
4-Methylphenol	ND		2170	2140	J	ug/Kg	☼	98	50 - 120
4-Nitroaniline	ND		2170	2360		ug/Kg	☼	108	47 - 120
4-Nitrophenol	ND		4350	4620		ug/Kg	☼	106	31 - 147
Acenaphthene	ND	F1	2170	2930	F1	ug/Kg	☼	135	60 - 120
Acenaphthylene	ND	F1	2170	2800	F1	ug/Kg	☼	129	58 - 121
Acetophenone	ND		2170	2020		ug/Kg	☼	93	47 - 120
Anthracene	ND	F2 F1	2170	3430	F1	ug/Kg	☼	158	62 - 120
Atrazine	ND		4350	5260		ug/Kg	☼	121	60 - 150
Benzaldehyde	ND		4350	3490		ug/Kg	☼	80	10 - 150
Benzo[a]anthracene	520	J F2 F1	2170	3880	F1	ug/Kg	☼	155	65 - 120
Benzo[a]pyrene	820	J F2 F1	2170	3900	F1	ug/Kg	☼	142	64 - 120
Benzo[b]fluoranthene	1100	F1	2170	3730	F1	ug/Kg	☼	123	64 - 120
Benzo[g,h,i]perylene	750	J	2170	3400		ug/Kg	☼	122	45 - 145
Benzo[k]fluoranthene	400	J F1	2170	3510	F1	ug/Kg	☼	143	65 - 120
Bis(2-chloroethoxy)methane	ND		2170	2130		ug/Kg	☼	98	52 - 120
Bis(2-chloroethyl)ether	ND		2170	1920		ug/Kg	☼	88	45 - 120
Bis(2-ethylhexyl) phthalate	ND	F1	2170	2930	F1	ug/Kg	☼	135	61 - 133
Butyl benzyl phthalate	ND	F1	2170	2750	F1	ug/Kg	☼	126	61 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: 480-148804-3 MS

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: SS - 2 (0 -2)

Prep Type: Total/NA

Prep Batch: 458568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Caprolactam	ND		4350	4390		ug/Kg	✱	101	37 - 133
Carbazole	ND		2170	2590		ug/Kg	✱	119	59 - 120
Chrysene	630	J F2 F1	2170	4310	F1	ug/Kg	✱	169	64 - 120
Dibenz(a,h)anthracene	ND		2170	2840		ug/Kg	✱	131	54 - 132
Di-n-butyl phthalate	ND		2170	2770		ug/Kg	✱	128	58 - 130
Di-n-octyl phthalate	ND	F1	2170	2940	F1	ug/Kg	✱	135	57 - 133
Dibenzofuran	ND	F2 F1	2170	2780	F1	ug/Kg	✱	128	62 - 120
Diethyl phthalate	ND		2170	2520		ug/Kg	✱	116	66 - 120
Dimethyl phthalate	ND		2170	2570		ug/Kg	✱	118	65 - 124
Fluoranthene	950	J F2 F1	2170	6000	F1	ug/Kg	✱	232	62 - 120
Fluorene	ND	F2 F1	2170	3060	F1	ug/Kg	✱	141	63 - 120
Hexachlorobenzene	ND		2170	2580		ug/Kg	✱	119	60 - 120
Hexachlorobutadiene	ND		2170	2140		ug/Kg	✱	99	45 - 120
Hexachlorocyclopentadiene	ND		2170	2080		ug/Kg	✱	95	31 - 120
Hexachloroethane	ND		2170	1730		ug/Kg	✱	80	21 - 120
Indeno[1,2,3-cd]pyrene	530	J	2170	3340		ug/Kg	✱	129	56 - 134
Isophorone	ND		2170	2250		ug/Kg	✱	103	56 - 120
N-Nitrosodi-n-propylamine	ND		2170	2050		ug/Kg	✱	94	46 - 120
N-Nitrosodiphenylamine	ND		2170	2420		ug/Kg	✱	111	20 - 128
Naphthalene	ND		2170	2140		ug/Kg	✱	98	46 - 120
Nitrobenzene	ND		2170	2200		ug/Kg	✱	101	49 - 120
Pentachlorophenol	ND		4350	3000		ug/Kg	✱	69	25 - 136
Phenanthrene	290	J F2 F1	2170	5620	F1	ug/Kg	✱	245	60 - 122
Phenol	ND		2170	2060		ug/Kg	✱	95	50 - 120
Pyrene	860	J F2 F1	2170	5790	F1	ug/Kg	✱	227	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5 (Surr)	100		53 - 120
Phenol-d5 (Surr)	94		54 - 120
p-Terphenyl-d14 (Surr)	131	X	65 - 121
2,4,6-Tribromophenol (Surr)	126	X	54 - 120
2-Fluorobiphenyl	107		60 - 120
2-Fluorophenol (Surr)	94		52 - 120

Lab Sample ID: 480-148804-3 MSD

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: SS - 2 (0 -2)

Prep Type: Total/NA

Prep Batch: 458568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biphenyl	ND		2180	2210		ug/Kg	✱	102	58 - 120	6	20
bis (2-chloroisopropyl) ether	ND		2180	1620		ug/Kg	✱	74	31 - 120	4	24
2,4,5-Trichlorophenol	ND		2180	2370		ug/Kg	✱	109	46 - 120	1	18
2,4,6-Trichlorophenol	ND		2180	2390		ug/Kg	✱	110	41 - 123	1	19
2,4-Dichlorophenol	ND		2180	2210		ug/Kg	✱	102	45 - 120	7	19
2,4-Dimethylphenol	ND		2180	2160		ug/Kg	✱	99	52 - 120	5	42
2,4-Dinitrophenol	ND		4350	ND		ug/Kg	✱	NC	41 - 146	NC	22
2,4-Dinitrotoluene	ND	F1	2180	2620		ug/Kg	✱	120	63 - 125	5	20
2,6-Dinitrotoluene	ND	F1	2180	2590		ug/Kg	✱	119	66 - 120	2	15

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: 480-148804-3 MSD

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: SS - 2 (0 - 2)

Prep Type: Total/NA

Prep Batch: 458568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloronaphthalene	ND		2180	2140		ug/Kg	✱	98	57 - 120	7	21
2-Chlorophenol	ND		2180	1890		ug/Kg	✱	87	43 - 120	7	25
2-Methylphenol	ND		2180	2000		ug/Kg	✱	92	48 - 120	0	27
2-Methylnaphthalene	ND		2180	2080		ug/Kg	✱	95	55 - 120	9	21
2-Nitroaniline	ND		2180	2480		ug/Kg	✱	114	61 - 120	0	15
2-Nitrophenol	ND		2180	2390		ug/Kg	✱	110	37 - 120	8	18
3,3'-Dichlorobenzidine	ND		4350	4560		ug/Kg	✱	105	37 - 126	6	25
3-Nitroaniline	ND		2180	2180	J	ug/Kg	✱	100	48 - 120	2	19
4,6-Dinitro-2-methylphenol	ND		4350	4690		ug/Kg	✱	108	23 - 149	12	15
4-Bromophenyl phenyl ether	ND		2180	2310		ug/Kg	✱	106	58 - 120	6	15
4-Chloro-3-methylphenol	ND		2180	2270		ug/Kg	✱	104	49 - 125	6	27
4-Chloroaniline	ND		2180	1670		ug/Kg	✱	77	38 - 120	4	22
4-Chlorophenyl phenyl ether	ND		2180	2480		ug/Kg	✱	114	63 - 124	3	16
4-Methylphenol	ND		2180	2050	J	ug/Kg	✱	94	50 - 120	4	24
4-Nitroaniline	ND		2180	2400		ug/Kg	✱	110	47 - 120	2	24
4-Nitrophenol	ND		4350	4540		ug/Kg	✱	104	31 - 147	2	25
Acenaphthene	ND	F1	2180	2310		ug/Kg	✱	106	60 - 120	24	35
Acenaphthylene	ND	F1	2180	2530		ug/Kg	✱	116	58 - 121	10	18
Acetophenone	ND		2180	1930		ug/Kg	✱	89	47 - 120	5	20
Anthracene	ND	F2 F1	2180	2630	F1 F2	ug/Kg	✱	121	62 - 120	26	15
Atrazine	ND		4350	5270		ug/Kg	✱	121	60 - 150	0	20
Benzaldehyde	ND		4350	3330		ug/Kg	✱	77	10 - 150	5	20
Benzo[a]anthracene	520	J F2 F1	2180	2710	F2	ug/Kg	✱	101	65 - 120	36	15
Benzo[a]pyrene	820	J F2 F1	2180	3190	F2	ug/Kg	✱	109	64 - 120	20	15
Benzo[b]fluoranthene	1100	F1	2180	3330		ug/Kg	✱	104	64 - 120	12	15
Benzo[g,h,i]perylene	750	J	2180	3110		ug/Kg	✱	108	45 - 145	9	15
Benzo[k]fluoranthene	400	J F1	2180	2820		ug/Kg	✱	111	65 - 120	22	22
Bis(2-chloroethoxy)methane	ND		2180	2020		ug/Kg	✱	93	52 - 120	5	17
Bis(2-chloroethyl)ether	ND		2180	1890		ug/Kg	✱	87	45 - 120	1	21
Bis(2-ethylhexyl) phthalate	ND	F1	2180	2870		ug/Kg	✱	132	61 - 133	2	15
Butyl benzyl phthalate	ND	F1	2180	2630	F1	ug/Kg	✱	121	61 - 120	4	16
Caprolactam	ND		4350	4260		ug/Kg	✱	98	37 - 133	3	20
Carbazole	ND		2180	2360		ug/Kg	✱	109	59 - 120	9	20
Chrysene	630	J F2 F1	2180	3120	F2	ug/Kg	✱	114	64 - 120	32	15
Dibenz(a,h)anthracene	ND		2180	2540		ug/Kg	✱	117	54 - 132	11	15
Di-n-butyl phthalate	ND		2180	2680		ug/Kg	✱	123	58 - 130	3	15
Di-n-octyl phthalate	ND	F1	2180	2880		ug/Kg	✱	133	57 - 133	2	16
Dibenzofuran	ND	F2 F1	2180	2340	F2	ug/Kg	✱	108	62 - 120	17	15
Diethyl phthalate	ND		2180	2440		ug/Kg	✱	112	66 - 120	3	15
Dimethyl phthalate	ND		2180	2400		ug/Kg	✱	110	65 - 124	7	15
Fluoranthene	950	J F2 F1	2180	3650	F1 F2	ug/Kg	✱	124	62 - 120	49	15
Fluorene	ND	F2 F1	2180	2440	F2	ug/Kg	✱	112	63 - 120	23	15
Hexachlorobenzene	ND		2180	2420		ug/Kg	✱	111	60 - 120	6	15
Hexachlorobutadiene	ND		2180	1960		ug/Kg	✱	90	45 - 120	9	44
Hexachlorocyclopentadiene	ND		2180	2040		ug/Kg	✱	94	31 - 120	2	49
Hexachloroethane	ND		2180	1550		ug/Kg	✱	71	21 - 120	11	46
Indeno[1,2,3-cd]pyrene	530	J	2180	2930		ug/Kg	✱	110	56 - 134	13	15
Isophorone	ND		2180	2150		ug/Kg	✱	99	56 - 120	4	17

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: 480-148804-3 MSD

Matrix: Solid

Analysis Batch: 458762

Client Sample ID: SS - 2 (0 -2)

Prep Type: Total/NA

Prep Batch: 458568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosodi-n-propylamine	ND		2180	1930		ug/Kg	✱	88	46 - 120	6	31
N-Nitrosodiphenylamine	ND		2180	2230		ug/Kg	✱	102	20 - 128	8	15
Naphthalene	ND		2180	2000		ug/Kg	✱	92	46 - 120	7	29
Nitrobenzene	ND		2180	2080		ug/Kg	✱	96	49 - 120	6	24
Pentachlorophenol	ND		4350	3040		ug/Kg	✱	70	25 - 136	1	35
Phenanthrene	290	J F2 F1	2180	2900	F2	ug/Kg	✱	120	60 - 122	64	15
Phenol	ND		2180	1920		ug/Kg	✱	88	50 - 120	7	35
Pyrene	860	J F2 F1	2180	3400	F2	ug/Kg	✱	117	61 - 133	52	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Nitrobenzene-d5 (Surr)	94		53 - 120								
Phenol-d5 (Surr)	89		54 - 120								
p-Terphenyl-d14 (Surr)	118		65 - 121								
2,4,6-Tribromophenol (Surr)	109		54 - 120								
2-Fluorobiphenyl	97		60 - 120								
2-Fluorophenol (Surr)	86		52 - 120								

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-458779/1-A

Matrix: Solid

Analysis Batch: 458894

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458779

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.490	J	1.7	0.32	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
4,4'-DDE	ND		1.7	0.35	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
4,4'-DDT	ND		1.7	0.39	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Aldrin	ND		1.7	0.41	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
alpha-BHC	ND		1.7	0.30	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
cis-Chlordane	ND		1.7	0.82	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
beta-BHC	ND		1.7	0.30	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
delta-BHC	ND		1.7	0.31	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Dieldrin	ND		1.7	0.40	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Endosulfan I	ND		1.7	0.32	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Endosulfan II	ND		1.7	0.30	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Endrin	ND		1.7	0.33	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Endrin aldehyde	ND		1.7	0.42	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Endrin ketone	ND		1.7	0.41	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
gamma-BHC (Lindane)	ND		1.7	0.30	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
trans-Chlordane	ND		1.7	0.53	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Heptachlor	ND		1.7	0.36	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Heptachlor epoxide	ND		1.7	0.43	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Methoxychlor	ND		1.7	0.34	ug/Kg		02/12/19 14:56	02/13/19 12:31	1
Toxaphene	ND		17	9.6	ug/Kg		02/12/19 14:56	02/13/19 12:31	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: MB 480-458779/1-A

Matrix: Solid

Analysis Batch: 458894

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458779

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	76		45 - 120	02/12/19 14:56	02/13/19 12:31	1
Tetrachloro-m-xylene	38		30 - 124	02/12/19 14:56	02/13/19 12:31	1

Lab Sample ID: LCS 480-458779/2-A

Matrix: Solid

Analysis Batch: 458894

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458779

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.6	11.8		ug/Kg		71	56 - 120
4,4'-DDE	16.6	10.6		ug/Kg		64	44 - 120
4,4'-DDT	16.6	12.2		ug/Kg		74	38 - 120
Aldrin	16.6	8.25		ug/Kg		50	38 - 120
alpha-BHC	16.6	8.32		ug/Kg		50	39 - 120
cis-Chlordane	16.6	10.1		ug/Kg		61	47 - 120
beta-BHC	16.6	9.14		ug/Kg		55	40 - 120
delta-BHC	16.6	8.83		ug/Kg		53	45 - 120
Dieldrin	16.6	11.1		ug/Kg		67	58 - 120
Endosulfan I	16.6	10.2		ug/Kg		61	49 - 120
Endosulfan II	16.6	10.6		ug/Kg		64	55 - 120
Endosulfan sulfate	16.6	9.36		ug/Kg		56	49 - 124
Endrin	16.6	10.5		ug/Kg		63	58 - 120
Endrin aldehyde	16.6	10.4		ug/Kg		63	37 - 121
Endrin ketone	16.6	12.3		ug/Kg		74	46 - 123
gamma-BHC (Lindane)	16.6	8.67		ug/Kg		52	50 - 120
trans-Chlordane	16.6	9.67		ug/Kg		58	48 - 120
Heptachlor	16.6	9.90		ug/Kg		60	50 - 120
Heptachlor epoxide	16.6	10.3		ug/Kg		62	50 - 120
Methoxychlor	16.6	14.0		ug/Kg		84	58 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	75		45 - 120
Tetrachloro-m-xylene	42		30 - 124

Lab Sample ID: 480-148804-14 MS

Matrix: Solid

Analysis Batch: 458894

Client Sample ID: SS - 8 (0 -2)

Prep Type: Total/NA

Prep Batch: 458779

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	ND	F2	20.8	14.0		ug/Kg	✱	67	37 - 126
4,4'-DDE	1.9	J F2	20.8	13.7		ug/Kg	✱	56	34 - 120
4,4'-DDT	8.6	F2	20.8	21.0		ug/Kg	✱	60	43 - 123
Aldrin	ND	F2	20.8	10.8		ug/Kg	✱	52	37 - 125
alpha-BHC	0.53	J F2	20.8	10.4		ug/Kg	✱	48	39 - 120
cis-Chlordane	ND	F2	20.8	12.0		ug/Kg	✱	58	35 - 120
beta-BHC	ND	F2	20.8	9.11		ug/Kg	✱	44	36 - 120
delta-BHC	ND	F2	20.8	11.1		ug/Kg	✱	53	34 - 120
Dieldrin	ND	F2	20.8	13.5		ug/Kg	✱	65	45 - 120
Endosulfan I	ND	F2	20.8	11.9		ug/Kg	✱	57	39 - 120

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: 480-148804-14 MS

Matrix: Solid

Analysis Batch: 458894

Client Sample ID: SS - 8 (0 -2)

Prep Type: Total/NA

Prep Batch: 458779

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan II	ND		20.8	14.9		ug/Kg	✱	72	34 - 126
Endosulfan sulfate	ND		20.8	12.5		ug/Kg	✱	60	27 - 130
Endrin	ND	F2	20.8	12.0		ug/Kg	✱	58	47 - 121
Endrin aldehyde	ND		20.8	16.7		ug/Kg	✱	80	33 - 123
Endrin ketone	ND		20.8	18.7		ug/Kg	✱	90	43 - 126
gamma-BHC (Lindane)	ND	F2	20.8	12.4		ug/Kg	✱	59	50 - 120
trans-Chlordane	ND	F2	20.8	10.6		ug/Kg	✱	51	31 - 120
Heptachlor	ND	F2	20.8	12.7		ug/Kg	✱	61	42 - 120
Heptachlor epoxide	ND	F2	20.8	12.0		ug/Kg	✱	58	40 - 120
Methoxychlor	ND	F1 F2	20.8	45.3	F1	ug/Kg	✱	218	44 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	219	X	45 - 120
Tetrachloro-m-xylene	41		30 - 124

Lab Sample ID: 480-148804-14 MSD

Matrix: Solid

Analysis Batch: 458894

Client Sample ID: SS - 8 (0 -2)

Prep Type: Total/NA

Prep Batch: 458779

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	ND	F2	32.1	18.2	F4	ug/Kg	✱	57	37 - 126	26	21
4,4'-DDE	1.9	J F2	32.1	18.1	F4	ug/Kg	✱	50	34 - 120	28	18
4,4'-DDT	8.6	F2	32.1	27.2	F4	ug/Kg	✱	58	43 - 123	26	25
Aldrin	ND	F2	32.1	14.5	F4	ug/Kg	✱	45	37 - 125	29	12
alpha-BHC	0.53	J F2	32.1	14.6	F4	ug/Kg	✱	44	39 - 120	33	15
cis-Chlordane	ND	F2	32.1	16.2	F4	ug/Kg	✱	51	35 - 120	30	23
beta-BHC	ND	F2	32.1	11.8	F4	ug/Kg	✱	37	36 - 120	26	19
delta-BHC	ND	F2	32.1	15.2	F4	ug/Kg	✱	47	34 - 120	32	14
Dieldrin	ND	F2	32.1	17.2	F4	ug/Kg	✱	54	45 - 120	25	12
Endosulfan I	ND	F2	32.1	16.1	F4	ug/Kg	✱	50	39 - 120	30	18
Endosulfan II	ND		32.1	19.2		ug/Kg	✱	60	34 - 126	25	26
Endosulfan sulfate	ND		32.1	17.4		ug/Kg	✱	54	27 - 130	32	35
Endrin	ND	F2	32.1	16.2	F4	ug/Kg	✱	51	47 - 121	29	20
Endrin aldehyde	ND		32.1	19.2		ug/Kg	✱	60	33 - 123	14	47
Endrin ketone	ND		32.1	26.5		ug/Kg	✱	83	43 - 126	34	37
gamma-BHC (Lindane)	ND	F2	32.1	16.5	F4	ug/Kg	✱	52	50 - 120	29	12
trans-Chlordane	ND	F2	32.1	14.2	F4	ug/Kg	✱	44	31 - 120	29	15
Heptachlor	ND	F2	32.1	17.3	F4	ug/Kg	✱	54	42 - 120	30	22
Heptachlor epoxide	ND	F2	32.1	16.1	F4	ug/Kg	✱	50	40 - 120	29	15
Methoxychlor	ND	F1 F2	32.1	59.9	F1 F4	ug/Kg	✱	187	44 - 150	28	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	197	X	45 - 120
Tetrachloro-m-xylene	39		30 - 124

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-458359/1-A

Matrix: Solid

Analysis Batch: 458420

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.21	0.041	mg/Kg		02/08/19 14:30	02/10/19 13:55	1
PCB-1221	ND		0.21	0.041	mg/Kg		02/08/19 14:30	02/10/19 13:55	1
PCB-1232	ND		0.21	0.041	mg/Kg		02/08/19 14:30	02/10/19 13:55	1
PCB-1242	ND		0.21	0.041	mg/Kg		02/08/19 14:30	02/10/19 13:55	1
PCB-1248	ND		0.21	0.041	mg/Kg		02/08/19 14:30	02/10/19 13:55	1
PCB-1254	ND		0.21	0.099	mg/Kg		02/08/19 14:30	02/10/19 13:55	1
PCB-1260	ND		0.21	0.099	mg/Kg		02/08/19 14:30	02/10/19 13:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		60 - 154	02/08/19 14:30	02/10/19 13:55	1
DCB Decachlorobiphenyl	96		65 - 174	02/08/19 14:30	02/10/19 13:55	1

Lab Sample ID: LCS 480-458359/2-A

Matrix: Solid

Analysis Batch: 458420

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.79	1.52		mg/Kg		85	51 - 185
PCB-1260	1.79	1.68		mg/Kg		94	61 - 184

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	90		60 - 154
DCB Decachlorobiphenyl	86		65 - 174

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 480-458569/1-A

Matrix: Solid

Analysis Batch: 459027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458569

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	ND		17	5.3	ug/Kg		02/11/19 14:31	02/14/19 08:21	1
2,4-D	ND		17	10	ug/Kg		02/11/19 14:31	02/14/19 08:21	1
Silvex (2,4,5-TP)	ND		17	6.0	ug/Kg		02/11/19 14:31	02/14/19 08:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	59		28 - 129	02/11/19 14:31	02/14/19 08:21	1

Lab Sample ID: LCS 480-458569/2-A

Matrix: Solid

Analysis Batch: 459027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458569

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-T	65.1	40.8		ug/Kg		63	41 - 120
2,4-D	65.1	41.9		ug/Kg		64	40 - 120
Silvex (2,4,5-TP)	65.1	41.3		ug/Kg		63	39 - 125

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 480-458569/2-A

Matrix: Solid

Analysis Batch: 459027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458569

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	62		28 - 129

Lab Sample ID: 480-148804-4 MS

Matrix: Solid

Analysis Batch: 459027

Client Sample ID: SS - 2 (6 -12)

Prep Type: Total/NA

Prep Batch: 458569

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-T	ND		80.7	53.1		ug/Kg	☼	66	29 - 123
2,4-D	ND		80.7	54.9		ug/Kg	☼	68	32 - 115
Silvex (2,4,5-TP)	ND		80.7	51.2		ug/Kg	☼	63	22 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4-Dichlorophenylacetic acid	66		28 - 129

Lab Sample ID: 480-148804-4 MSD

Matrix: Solid

Analysis Batch: 459027

Client Sample ID: SS - 2 (6 -12)

Prep Type: Total/NA

Prep Batch: 458569

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-T	ND		80.3	46.3		ug/Kg	☼	58	29 - 123	14	50
2,4-D	ND		80.3	50.3		ug/Kg	☼	63	32 - 115	9	50
Silvex (2,4,5-TP)	ND		80.3	46.7		ug/Kg	☼	58	22 - 140	9	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	54		28 - 129

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-458368/1-A

Matrix: Solid

Analysis Batch: 458628

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.8	4.3	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Antimony	ND		14.7	0.39	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Arsenic	ND		2.0	0.39	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Barium	ND		0.49	0.11	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Beryllium	ND		0.20	0.027	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Cadmium	ND		0.20	0.029	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Calcium	5.37	J	49.0	3.2	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Chromium	ND		0.49	0.20	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Cobalt	ND		0.49	0.049	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Copper	ND		0.98	0.21	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Iron	ND		9.8	3.4	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Lead	ND		0.98	0.24	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Magnesium	1.50	J	19.6	0.91	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Manganese	0.0716	J	0.20	0.031	mg/Kg		02/09/19 09:24	02/11/19 12:05	1

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: MB 480-458368/1-A

Matrix: Solid

Analysis Batch: 458628

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		4.9	0.23	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Potassium	ND		29.4	19.6	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Selenium	ND		3.9	0.39	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Silver	ND		0.59	0.20	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Sodium	ND		137	12.7	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Thallium	ND		5.9	0.29	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Vanadium	ND		0.49	0.11	mg/Kg		02/09/19 09:24	02/11/19 12:05	1
Zinc	ND		2.0	0.63	mg/Kg		02/09/19 09:24	02/11/19 12:05	1

Lab Sample ID: LCSSRM 480-458368/2-A

Matrix: Solid

Analysis Batch: 458628

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458368

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10100	9171		mg/Kg		90.8	41.6 - 123.8
Antimony	145	46.32		mg/Kg		31.9	10.0 - 137.2
Arsenic	171	144.0		mg/Kg		84.2	66.1 - 122.2
Barium	272	235.3		mg/Kg		86.5	71.7 - 119.5
Beryllium	102	87.95		mg/Kg		86.2	71.8 - 119.6
Cadmium	225	192.6		mg/Kg		85.6	70.2 - 117.3
Calcium	5190	4288		mg/Kg		82.6	66.7 - 117.0
Chromium	144	124.7		mg/Kg		86.6	66.1 - 122.9
Cobalt	48.8	50.47		mg/Kg		103.4	74.0 - 123.4
Copper	174	153.8		mg/Kg		88.4	71.3 - 119.0
Iron	15000	13830		mg/Kg		92.2	32.9 - 154.7
Lead	111	113.0		mg/Kg		101.8	71.0 - 128.8
Magnesium	2570	2223		mg/Kg		86.5	56.4 - 125.3
Manganese	232	216.0		mg/Kg		93.1	71.1 - 125.4
Nickel	98.3	96.14		mg/Kg		97.8	65.4 - 121.1
Potassium	2420	2130		mg/Kg		88.0	49.2 - 117.8
Selenium	206	170.2		mg/Kg		82.6	63.6 - 122.3
Silver	45.5	40.43		mg/Kg		88.9	66.2 - 124.2
Sodium	252	223.4		mg/Kg		88.6	41.7 - 131.7

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: LCSSRM 480-458368/2-A

Matrix: Solid

Analysis Batch: 458628

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458368

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	167	161.9		mg/Kg		96.9	65.9 - 121.0
Vanadium	61.8	57.21		mg/Kg		92.6	52.1 - 131.6
Zinc	207	174.4		mg/Kg		84.2	67.1 - 125.1

Lab Sample ID: 480-148804-1 MS

Matrix: Solid

Analysis Batch: 458628

Client Sample ID: SS - 1 (0 -2)

Prep Type: Total/NA

Prep Batch: 458368

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	6500	F1	2310	10890	F1	mg/Kg	☼	190	75 - 125
Antimony	ND		46.2	45.93		mg/Kg	☼	100	75 - 125
Arsenic	4.2		46.2	57.25		mg/Kg	☼	115	75 - 125
Barium	31.0		46.2	85.58		mg/Kg	☼	118	75 - 125
Beryllium	0.28		46.2	47.61		mg/Kg	☼	103	75 - 125
Cadmium	0.54		46.2	54.08		mg/Kg	☼	116	75 - 125
Calcium	103000	F2 B	2310	159600	E 4	mg/Kg	☼	2437	75 - 125
Chromium	11.2		46.2	54.53		mg/Kg	☼	94	75 - 125
Cobalt	4.2		46.2	53.17		mg/Kg	☼	106	75 - 125
Copper	21.4		46.2	63.48		mg/Kg	☼	91	75 - 125
Iron	12700	F2	2310	8198	4	mg/Kg	☼	-197	75 - 125
Lead	55.7	F1	46.2	72.95	F1	mg/Kg	☼	37	75 - 125
Magnesium	39100	F2 B	2310	81620	E 4	mg/Kg	☼	1841	75 - 125
Manganese	201	B	46.2	191.9	4	mg/Kg	☼	-20	75 - 125
Nickel	13.7		46.2	58.61		mg/Kg	☼	97	75 - 125
Potassium	2340	F1	2310	6432	F1	mg/Kg	☼	177	75 - 125
Selenium	ND		46.2	54.21		mg/Kg	☼	117	75 - 125
Silver	ND		11.5	14.10		mg/Kg	☼	122	75 - 125
Sodium	131	J F1	2310	3073	F1	mg/Kg	☼	127	75 - 125
Thallium	ND		46.2	48.54		mg/Kg	☼	105	75 - 125
Vanadium	13.7		46.2	60.91		mg/Kg	☼	102	75 - 125
Zinc	38.0	F1	46.2	67.27	F1	mg/Kg	☼	64	75 - 125

Lab Sample ID: 480-148804-1 MSD

Matrix: Solid

Analysis Batch: 458628

Client Sample ID: SS - 1 (0 -2)

Prep Type: Total/NA

Prep Batch: 458368

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	6500	F1	2340	10720	F1	mg/Kg	☼	180	75 - 125	2	20
Antimony	ND		46.8	39.72		mg/Kg	☼	85	75 - 125	15	20
Arsenic	4.2		46.8	49.42		mg/Kg	☼	97	75 - 125	15	20
Barium	31.0		46.8	78.93		mg/Kg	☼	102	75 - 125	8	20
Beryllium	0.28		46.8	41.59		mg/Kg	☼	88	75 - 125	13	20
Cadmium	0.54		46.8	45.70		mg/Kg	☼	97	75 - 125	17	20
Calcium	103000	F2 B	2340	100200	4 F2	mg/Kg	☼	-137	75 - 125	46	20
Chromium	11.2		46.8	50.41		mg/Kg	☼	84	75 - 125	8	20
Cobalt	4.2		46.8	47.53		mg/Kg	☼	93	75 - 125	11	20

TestAmerica Buffalo

QC Sample Results

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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

Lab Sample ID: 480-148804-1 MSD

Matrix: Solid

Analysis Batch: 458628

Client Sample ID: SS - 1 (0 -2)

Prep Type: Total/NA

Prep Batch: 458368

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	21.4		46.8	59.95		mg/Kg	✱	83	75 - 125	6	20
Iron	12700	F2	2340	11230	4 F2	mg/Kg	✱	-64	75 - 125	31	20
Lead	55.7	F1	46.8	78.81	F1	mg/Kg	✱	49	75 - 125	8	20
Magnesium	39100	F2 B	2340	53330	E 4 F2	mg/Kg	✱	607	75 - 125	42	20
Manganese	201	B	46.8	192.9	4	mg/Kg	✱	-17	75 - 125	1	20
Nickel	13.7		46.8	54.46		mg/Kg	✱	87	75 - 125	7	20
Potassium	2340	F1	2340	5857	F1	mg/Kg	✱	150	75 - 125	9	20
Selenium	ND		46.8	45.50		mg/Kg	✱	97	75 - 125	17	20
Silver	ND		11.7	11.61		mg/Kg	✱	99	75 - 125	19	20
Sodium	131	J F1	2340	2535		mg/Kg	✱	103	75 - 125	19	20
Thallium	ND		46.8	42.44		mg/Kg	✱	91	75 - 125	13	20
Vanadium	13.7		46.8	56.07		mg/Kg	✱	91	75 - 125	8	20
Zinc	38.0	F1	46.8	72.44	F1	mg/Kg	✱	74	75 - 125	7	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-458985/1-A

Matrix: Solid

Analysis Batch: 459197

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 458985

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0077	mg/Kg		02/14/19 12:00	02/14/19 13:29	1

Lab Sample ID: LCSSRM 480-458985/2-A ^10

Matrix: Solid

Analysis Batch: 459197

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 458985

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	9.16		mg/Kg		76.3	57.3 - 133.3

Lab Sample ID: 480-148804-1 MS

Matrix: Solid

Analysis Batch: 459197

Client Sample ID: SS - 1 (0 -2)

Prep Type: Total/NA

Prep Batch: 458985

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.036		0.362	0.384		mg/Kg	✱	96	80 - 120

Lab Sample ID: 480-148804-1 MSD

Matrix: Solid

Analysis Batch: 459197

Client Sample ID: SS - 1 (0 -2)

Prep Type: Total/NA

Prep Batch: 458985

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.036		0.367	0.392		mg/Kg	✱	97	80 - 120	2	20

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

GC/MS VOA

Analysis Batch: 458448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-16	MW-7	Total/NA	Water	8260C	
480-148804-17	Trip Blank	Total/NA	Water	8260C	
MB 480-458448/7	Method Blank	Total/NA	Water	8260C	
LCS 480-458448/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 458475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	8260C	458491
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	8260C	458491
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	8260C	458491
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	8260C	458491
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	8260C	458491
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	8260C	458491
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	8260C	458491
MB 480-458491/2-A	Method Blank	Total/NA	Solid	8260C	458491
LCS 480-458491/1-A	Lab Control Sample	Total/NA	Solid	8260C	458491

Prep Batch: 458491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	5035A_L	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	5035A_L	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	5035A_L	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	5035A_L	
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	5035A_L	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	5035A_L	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	5035A_L	
MB 480-458491/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-458491/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

GC/MS Semi VOA

Prep Batch: 458568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	3550C	
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	3550C	
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	3550C	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	3550C	
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	3550C	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	3550C	
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	3550C	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	3550C	
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	3550C	
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	3550C	
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	3550C	
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	3550C	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	3550C	
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	3550C	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	3550C	
MB 480-458568/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-458568/2-A	Lab Control Sample	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

GC/MS Semi VOA (Continued)

Prep Batch: 458568 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-3 MS	SS - 2 (0 -2)	Total/NA	Solid	3550C	
480-148804-3 MSD	SS - 2 (0 -2)	Total/NA	Solid	3550C	

Analysis Batch: 458762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	8270D	458568
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	8270D	458568
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	8270D	458568
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	8270D	458568
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	8270D	458568
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	8270D	458568
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	8270D	458568
MB 480-458568/1-A	Method Blank	Total/NA	Solid	8270D	458568
480-148804-3 MS	SS - 2 (0 -2)	Total/NA	Solid	8270D	458568
480-148804-3 MSD	SS - 2 (0 -2)	Total/NA	Solid	8270D	458568

Analysis Batch: 459155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-458568/2-A	Lab Control Sample	Total/NA	Solid	8270D	458568

GC Semi VOA

Prep Batch: 458359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	3550C	
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	3550C	
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	3550C	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	3550C	
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	3550C	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	3550C	
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	3550C	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	3550C	
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	3550C	
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	3550C	
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	3550C	
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	3550C	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	3550C	
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	3550C	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	3550C	
MB 480-458359/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-458359/2-A	Lab Control Sample	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

GC Semi VOA (Continued)

Analysis Batch: 458420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	8082A	458359
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	8082A	458359
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	8082A	458359
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	8082A	458359
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	8082A	458359
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	8082A	458359
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	8082A	458359
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	8082A	458359
MB 480-458359/1-A	Method Blank	Total/NA	Solid	8082A	458359
LCS 480-458359/2-A	Lab Control Sample	Total/NA	Solid	8082A	458359

Prep Batch: 458569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	8151A	
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	8151A	
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	8151A	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	8151A	
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	8151A	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	8151A	
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	8151A	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	8151A	
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	8151A	
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	8151A	
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	8151A	
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	8151A	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	8151A	
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	8151A	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	8151A	
MB 480-458569/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 480-458569/2-A	Lab Control Sample	Total/NA	Solid	8151A	
480-148804-4 MS	SS - 2 (6 -12)	Total/NA	Solid	8151A	
480-148804-4 MSD	SS - 2 (6 -12)	Total/NA	Solid	8151A	

Prep Batch: 458779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	3550C	
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	3550C	
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	3550C	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	3550C	
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	3550C	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	3550C	
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	3550C	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	3550C	
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

GC Semi VOA (Continued)

Prep Batch: 458779 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	3550C	
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	3550C	
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	3550C	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	3550C	
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	3550C	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	3550C	
MB 480-458779/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-458779/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-148804-14 MS	SS - 8 (0 -2)	Total/NA	Solid	3550C	
480-148804-14 MSD	SS - 8 (0 -2)	Total/NA	Solid	3550C	

Analysis Batch: 458894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	8081B	458779
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	8081B	458779
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	8081B	458779
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	8081B	458779
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	8081B	458779
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	8081B	458779
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	8081B	458779
MB 480-458779/1-A	Method Blank	Total/NA	Solid	8081B	458779
LCS 480-458779/2-A	Lab Control Sample	Total/NA	Solid	8081B	458779
480-148804-14 MS	SS - 8 (0 -2)	Total/NA	Solid	8081B	458779
480-148804-14 MSD	SS - 8 (0 -2)	Total/NA	Solid	8081B	458779

Analysis Batch: 459027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	8151A	458569
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	8151A	458569
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	8151A	458569
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	8151A	458569
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	8151A	458569
MB 480-458569/1-A	Method Blank	Total/NA	Solid	8151A	458569
LCS 480-458569/2-A	Lab Control Sample	Total/NA	Solid	8151A	458569
480-148804-4 MS	SS - 2 (6 -12)	Total/NA	Solid	8151A	458569
480-148804-4 MSD	SS - 2 (6 -12)	Total/NA	Solid	8151A	458569

Analysis Batch: 459243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	8151A	458569
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	8151A	458569
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	8151A	458569
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	8151A	458569

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

GC Semi VOA (Continued)

Analysis Batch: 459243 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	8151A	458569
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	8151A	458569
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	8151A	458569
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	8151A	458569
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	8151A	458569
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	8151A	458569

Metals

Prep Batch: 458368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	3050B	
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	3050B	
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	3050B	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	3050B	
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	3050B	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	3050B	
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	3050B	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	3050B	
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	3050B	
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	3050B	
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	3050B	
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	3050B	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	3050B	
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	3050B	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	3050B	
MB 480-458368/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-458368/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-148804-1 MS	SS - 1 (0 -2)	Total/NA	Solid	3050B	
480-148804-1 MSD	SS - 1 (0 -2)	Total/NA	Solid	3050B	

Analysis Batch: 458628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	6010C	458368
MB 480-458368/1-A	Method Blank	Total/NA	Solid	6010C	458368
LCSSRM 480-458368/2-A	Lab Control Sample	Total/NA	Solid	6010C	458368

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Metals (Continued)

Analysis Batch: 458628 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1 MS	SS - 1 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-1 MSD	SS - 1 (0 -2)	Total/NA	Solid	6010C	458368

Analysis Batch: 458755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	6010C	458368
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	6010C	458368
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	6010C	458368

Prep Batch: 458985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	7471B	
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	7471B	
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	7471B	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	7471B	
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	7471B	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	7471B	
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	7471B	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	7471B	
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	7471B	
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	7471B	
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	7471B	
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	7471B	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	7471B	
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	7471B	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	7471B	
MB 480-458985/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-458985/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-148804-1 MS	SS - 1 (0 -2)	Total/NA	Solid	7471B	
480-148804-1 MSD	SS - 1 (0 -2)	Total/NA	Solid	7471B	

Analysis Batch: 459197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	7471B	458985
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	7471B	458985
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	7471B	458985
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	7471B	458985
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	7471B	458985
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	7471B	458985

TestAmerica Buffalo

QC Association Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Metals (Continued)

Analysis Batch: 459197 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	7471B	458985
MB 480-458985/1-A	Method Blank	Total/NA	Solid	7471B	458985
LCSSRM 480-458985/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	458985
480-148804-1 MS	SS - 1 (0 -2)	Total/NA	Solid	7471B	458985
480-148804-1 MSD	SS - 1 (0 -2)	Total/NA	Solid	7471B	458985

General Chemistry

Analysis Batch: 458302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-2	SS - 1 (6 -12)	Total/NA	Solid	Moisture	
480-148804-4	SS - 2 (6 -12)	Total/NA	Solid	Moisture	
480-148804-6	SS - 3 (6 -12)	Total/NA	Solid	Moisture	
480-148804-8	SS - 4 (6 -12)	Total/NA	Solid	Moisture	
480-148804-10	SS - 5 (6 -12)	Total/NA	Solid	Moisture	
480-148804-11	SS - 6 (0 -2)	Total/NA	Solid	Moisture	
480-148804-13	SS - 7 (6 -12)	Total/NA	Solid	Moisture	
480-148804-15	SS - 8 (6 -12)	Total/NA	Solid	Moisture	

Analysis Batch: 458802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-1	SS - 1 (0 -2)	Total/NA	Solid	Moisture	
480-148804-3	SS - 2 (0 -2)	Total/NA	Solid	Moisture	
480-148804-5	SS - 3 (0 -2)	Total/NA	Solid	Moisture	
480-148804-7	SS - 4 (0 -2)	Total/NA	Solid	Moisture	

Analysis Batch: 459142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-148804-9	SS - 5 (0 -2)	Total/NA	Solid	Moisture	
480-148804-12	SS - 7 (0 -2)	Total/NA	Solid	Moisture	
480-148804-14	SS - 8 (0 -2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (0 -2)

Date Collected: 02/07/19 09:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458802	02/12/19 18:00	CDT	TAL BUF

Client Sample ID: SS - 1 (0 -2)

Date Collected: 02/07/19 09:00

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-1

Matrix: Solid

Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 19:44	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		1	458894	02/13/19 14:30	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 16:18	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459027	02/14/19 12:01	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 12:16	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:33	BMB	TAL BUF

Client Sample ID: SS - 1 (6 -12)

Date Collected: 02/07/19 09:15

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:02	ZV	TAL BUF

Client Sample ID: SS - 1 (6 -12)

Date Collected: 02/07/19 09:15

Date Received: 02/08/19 03:00

Lab Sample ID: 480-148804-2

Matrix: Solid

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			458491	02/08/19 07:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	458475	02/11/19 15:11	AEM	TAL BUF
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 20:10	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		1	458894	02/13/19 14:50	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 16:34	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459027	02/14/19 12:30	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Date Collected: 02/07/19 09:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1	458628	02/11/19 12:47	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		2	458755	02/12/19 10:55	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:38	BMB	TAL BUF

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Date Collected: 02/07/19 09:30

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458802	02/12/19 18:00	CDT	TAL BUF

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Date Collected: 02/07/19 09:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 18:54	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		5	458894	02/13/19 15:09	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 16:50	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459027	02/14/19 11:31	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 12:51	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		2	458755	02/12/19 10:59	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:39	BMB	TAL BUF

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Date Collected: 02/07/19 09:45

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:02	ZV	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Date Collected: 02/07/19 09:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			458491	02/08/19 07:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	458475	02/11/19 15:36	AEM	TAL BUF
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 20:35	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		10	458894	02/13/19 15:29	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 17:06	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459027	02/14/19 10:31	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 12:55	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		2	458755	02/12/19 11:14	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:40	BMB	TAL BUF

Client Sample ID: SS - 3 (0 -2)

Lab Sample ID: 480-148804-5

Date Collected: 02/07/19 10:00

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458802	02/12/19 18:00	CDT	TAL BUF

Client Sample ID: SS - 3 (0 -2)

Lab Sample ID: 480-148804-5

Date Collected: 02/07/19 10:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 21:00	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		1	458894	02/13/19 15:49	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 17:22	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459027	02/14/19 13:00	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 12:59	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:44	BMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Date Collected: 02/07/19 10:15

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:02	ZV	TAL BUF

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Date Collected: 02/07/19 10:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			458491	02/08/19 07:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	458475	02/11/19 16:02	AEM	TAL BUF
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 21:25	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		10	458894	02/13/19 16:08	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 17:38	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 11:04	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:03	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		2	458755	02/12/19 11:17	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:46	BMB	TAL BUF

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Date Collected: 02/07/19 10:30

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458802	02/12/19 18:00	CDT	TAL BUF

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Date Collected: 02/07/19 10:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 72.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		10	458762	02/12/19 21:50	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		10	458894	02/13/19 16:28	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 17:54	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Date Collected: 02/07/19 10:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 72.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8151A		1	459243	02/15/19 11:34	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:07	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:47	BMB	TAL BUF

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Date Collected: 02/07/19 10:45

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:02	ZV	TAL BUF

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Date Collected: 02/07/19 10:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			458491	02/08/19 07:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	458475	02/11/19 16:28	AEM	TAL BUF
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 22:15	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		10	458894	02/13/19 16:48	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 18:10	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 12:05	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:11	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:48	BMB	TAL BUF

Client Sample ID: SS - 5 (0 -2)

Lab Sample ID: 480-148804-9

Date Collected: 02/07/19 11:00

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	459142	02/14/19 11:25	KPK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 5 (0 -2)

Lab Sample ID: 480-148804-9

Date Collected: 02/07/19 11:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 22:40	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		2	458894	02/13/19 17:08	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 18:26	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 13:11	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:15	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		2	458755	02/12/19 11:21	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:49	BMB	TAL BUF

Client Sample ID: SS - 5 (6 -12)

Lab Sample ID: 480-148804-10

Date Collected: 02/07/19 11:15

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:02	ZV	TAL BUF

Client Sample ID: SS - 5 (6 -12)

Lab Sample ID: 480-148804-10

Date Collected: 02/07/19 11:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			458491	02/08/19 07:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	458475	02/11/19 16:53	AEM	TAL BUF
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 23:05	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		2	458894	02/13/19 17:27	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 18:42	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 13:41	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:30	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		2	458755	02/12/19 11:25	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:50	BMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 6 (0 -2)

Lab Sample ID: 480-148804-11

Date Collected: 02/07/19 11:30

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:11	ZV	TAL BUF

Client Sample ID: SS - 6 (0 -2)

Lab Sample ID: 480-148804-11

Date Collected: 02/07/19 11:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 38.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 23:31	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		1	458894	02/13/19 17:47	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 18:57	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 14:11	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:34	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:52	BMB	TAL BUF

Client Sample ID: SS - 7 (0 -2)

Lab Sample ID: 480-148804-12

Date Collected: 02/07/19 11:45

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	459142	02/14/19 11:25	KPK	TAL BUF

Client Sample ID: SS - 7 (0 -2)

Lab Sample ID: 480-148804-12

Date Collected: 02/07/19 11:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 38.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/12/19 23:56	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		1	458894	02/13/19 18:06	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 19:45	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 14:40	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:38	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 7 (0 -2)

Lab Sample ID: 480-148804-12

Date Collected: 02/07/19 11:45

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 38.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		5	458755	02/12/19 11:28	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:53	BMB	TAL BUF

Client Sample ID: SS - 7 (6 -12)

Lab Sample ID: 480-148804-13

Date Collected: 02/07/19 12:00

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:11	ZV	TAL BUF

Client Sample ID: SS - 7 (6 -12)

Lab Sample ID: 480-148804-13

Date Collected: 02/07/19 12:00

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 87.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			458491	02/08/19 07:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	458475	02/11/19 17:19	AEM	TAL BUF
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/13/19 00:21	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		10	458894	02/13/19 18:26	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 20:01	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 15:10	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:42	LMH	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		2	458755	02/12/19 11:32	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:54	BMB	TAL BUF

Client Sample ID: SS - 8 (0 -2)

Lab Sample ID: 480-148804-14

Date Collected: 02/07/19 12:15

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	459142	02/14/19 11:25	KPK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: SS - 8 (0 -2)

Lab Sample ID: 480-148804-14

Date Collected: 02/07/19 12:15

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/13/19 00:46	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		1	458894	02/13/19 13:51	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 20:17	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 15:40	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:46	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:55	BMB	TAL BUF

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Date Collected: 02/07/19 12:30

Matrix: Solid

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	458302	02/08/19 11:11	ZV	TAL BUF

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Date Collected: 02/07/19 12:30

Matrix: Solid

Date Received: 02/08/19 03:00

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			458491	02/08/19 07:15	CDC	TAL BUF
Total/NA	Analysis	8260C		1	458475	02/11/19 17:45	AEM	TAL BUF
Total/NA	Prep	3550C			458568	02/11/19 14:25	SGD	TAL BUF
Total/NA	Analysis	8270D		5	458762	02/13/19 01:11	DMR	TAL BUF
Total/NA	Prep	3550C			458779	02/12/19 14:56	AAP	TAL BUF
Total/NA	Analysis	8081B		1	458894	02/13/19 18:46	JLS	TAL BUF
Total/NA	Prep	3550C			458359	02/08/19 14:30	SGD	TAL BUF
Total/NA	Analysis	8082A		1	458420	02/10/19 20:33	W1T	TAL BUF
Total/NA	Prep	8151A			458569	02/11/19 14:31	SGD	TAL BUF
Total/NA	Analysis	8151A		1	459243	02/15/19 16:10	MAN	TAL BUF
Total/NA	Prep	3050B			458368	02/09/19 09:24	JMP	TAL BUF
Total/NA	Analysis	6010C		1	458628	02/11/19 13:50	LMH	TAL BUF
Total/NA	Prep	7471B			458985	02/14/19 12:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	459197	02/14/19 13:59	BMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Client Sample ID: MW-7

Lab Sample ID: 480-148804-16

Date Collected: 02/07/19 12:45

Matrix: Water

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		800	458448	02/11/19 14:13	NMC	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 480-148804-17

Date Collected: 02/07/19 00:00

Matrix: Water

Date Received: 02/08/19 03:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	458448	02/11/19 14:36	NMC	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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

Method Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

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
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
8151A	Extraction (Herbicides)	SW846	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.

TestAmerica Job ID: 480-148804-1

Project/Site: Former Sims Matchplate Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-148804-1	SS - 1 (0 -2)	Solid	02/07/19 09:00	02/08/19 03:00
480-148804-2	SS - 1 (6 -12)	Solid	02/07/19 09:15	02/08/19 03:00
480-148804-3	SS - 2 (0 -2)	Solid	02/07/19 09:30	02/08/19 03:00
480-148804-4	SS - 2 (6 -12)	Solid	02/07/19 09:45	02/08/19 03:00
480-148804-5	SS - 3 (0 -2)	Solid	02/07/19 10:00	02/08/19 03:00
480-148804-6	SS - 3 (6 -12)	Solid	02/07/19 10:15	02/08/19 03:00
480-148804-7	SS - 4 (0 -2)	Solid	02/07/19 10:30	02/08/19 03:00
480-148804-8	SS - 4 (6 -12)	Solid	02/07/19 10:45	02/08/19 03:00
480-148804-9	SS - 5 (0 -2)	Solid	02/07/19 11:00	02/08/19 03:00
480-148804-10	SS - 5 (6 -12)	Solid	02/07/19 11:15	02/08/19 03:00
480-148804-11	SS - 6 (0 -2)	Solid	02/07/19 11:30	02/08/19 03:00
480-148804-12	SS - 7 (0 -2)	Solid	02/07/19 11:45	02/08/19 03:00
480-148804-13	SS - 7 (6 -12)	Solid	02/07/19 12:00	02/08/19 03:00
480-148804-14	SS - 8 (0 -2)	Solid	02/07/19 12:15	02/08/19 03:00
480-148804-15	SS - 8 (6 -12)	Solid	02/07/19 12:30	02/08/19 03:00
480-148804-16	MW-7	Water	02/07/19 12:45	02/08/19 03:00
480-148804-17	Trip Blank	Water	02/07/19 00:00	02/08/19 03:00

[illegible]

Client Information		Company: C&S Engineers, Inc.		Address: 499 Col. Eileen Collins Blvd		City: Syracuse		State: NY		Zip: 13212		Phone: 315-703-4323(Tel)		Email: mawalker@cscos.com		Project Name: Former Sims Matchplate Site		Site:	
Client Contact: Matt Walker		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
Company: C&S Engineers, Inc.		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
Address: 499 Col. Eileen Collins Blvd		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
City: Syracuse		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
State: NY		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
Zip: 13212		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
Phone: 315-703-4323(Tel)		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
Email: mawalker@cscos.com		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
Project Name: Former Sims Matchplate Site		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	
Site:		Lab PM: Stone, Judy L		Carrier Tracking No(s): 480-122577-28125.2		COC No:		Page: Page 2 of 2		Job #:		Due Date Requested:		TAT Requested (days): 3 standard		PO #:		Purchase Order Requested	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8010C, 7471B	8081B, 8082A, 8151A, 8270D	8260C - TCL list OLM04.2	8081B, 8151A, 8270D	8082A, 8270D	Total Number of containers	Special Instructions/Note:
SS-6 (0-2)	2/7	11:30	Solid	Solid			X						
SS-6 (6-12) A.A.	2/7	11:45	Solid	Solid			X						
SS-7 (0-2)	2/7	12:00	Solid	Solid			X						
SS-7 (6-12)	2/7	12:15	Solid	Solid			X						
SS-8 (0-2)	2/7	12:30	Solid	Solid			X						
SS-8 (6-12)	2/7	12:45	Solid	Solid			X						
MW-7			WATER	WATER									
Trip Blank			Solid	Solid									
2-7-19 RES			Solid	Solid									

Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	
Deliverable Requested: I, II, III, IV Other (specify)		Special Instructions/OC Requirements:	
Empty Kit Relinquished by:		Time:	
Relinquished by: Angel Ave		Date: 2/7 15:25	
Relinquished by: R. R. R. R.		Date: 2-7-19, 19:00	
Relinquished by:		Date:	
Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: A.A. #1	

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-148804-1

Login Number: 148804

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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 (Excluding tests with immediate HTs)..	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	Freezer 02/08/19 @ 7:50
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.	True	
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 Engineers, Inc.
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Appendix D

Date Usability Summary Report

DATA USABILITY SUMMARY REPORT (DUSR)

**Site: Former Sims Matchplate ERP
2176 Erie Blvd. East
Syracuse, NY
NYS DEC Site No.: B-00072**

**SDGs: J147622-1, J147693-1, J147755-1, J147860-1,
J147921-1, J148067-1, and J148804-1**

88 Soil and Water Samples

Prepared for:

**C&S Companies
499 Colonel Eileen Collins Blvd.
Syracuse, NY 13212
Attention: Matt Walker**

May 2019



Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585.991.9156

Table of Contents

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4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA	2
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APPENDIX A	Validated Analytical Results
APPENDIX B	Laboratory QC Documentation
APPENDIX C	Validator Qualifications

Tables

Table 3-1	Summary of Laboratory Deliverables
Table 4-1	Data Validation Guidance Documents
Table 4-2	Quality Control Criteria for Validating Laboratory Analytical Data

Summaries of Validated Results

Table 6-1	SDG J147622-1
Table 6-2	SDG J147693-1
Table 6-3	SDG J147755-1
Table 6-4	SDG J147860-1
Table 6-5	SDG J147921-1
Table 6-6	SDG J148067-1
Table 6-7	SDG J148804-1

REVIEWER'S NARRATIVE

C & S Companies Former Sims Matchplate ERP

The data associated with these Sample Delivery Groups (SDGs), analyzed by TestAmerica Buffalo, NY have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, "R". Results qualified as estimated "J", or as non-detects, "U", are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the "R" qualifier means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Values qualified with an "R" should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Reviewer's Signature: Michael K. Perry Date: 5/2/19
Michael K. Perry
Chemist

1.0 SUMMARY

SITE: Former Sims Matchplate ERP
2176 Erie Blvd. East
Syracuse, NY
NYS DEC Site No. B-00072

SAMPLING DATE: January - February, 2019

SAMPLE TYPE: 88 soil and water samples

LABORATORY: TestAmerica
Buffalo, NY

SDG No.: 7 SDGs

2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

3.0 SAMPLE AND ANALYSIS SUMMARY

A summary of the laboratory data deliverables is provided in Table 3-1. The data were supplied on a thumb drive for all of the sample delivery groups (SDGs). The information provided in Table 3-1 is categorized according to SDG to provide a quick reference to the data by any data user.

As shown in Table 3-1, the laboratory deliverables consisted of 7 SDGs that contained the analytical results for 88 total soil and water samples collected from January to February 2019. Samples were analyzed for some or all of the following volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), and metals.

The sample IDs associated with each SDG are provided with the validated analytical results in Appendix A.

All analyses were performed by TestAmerica, Buffalo, NY. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA

The guidance documents used for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results are listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

Table 3-1
Summary of Laboratory Deliverables
Former Sims Matchplate ERP Site No. B-00072

Data SDG No.	SDG	Sample Date	No. of Samples	Matrix	Analysis
1	J147622-1	01/08/19	16	soil	VOCs,SVOCs,PCBs,Metals
2	J147693-1	01/09/19	16	soil	VOCs,SVOCs,PCBs,Metals
3	J147755-1	01/10/19	14	soil	VOCs,SVOCs,PCBs,Metals
4	J1447860-1	01/14/19	10	soil	VOCs,SVOCs,PCBs,Metals
5	J147921-1	01/15/19	8	soil	VOCs,SVOCs,PCBs,Metals
6	J148067-1	01/17/19	7	water	VOCs
7	J148804-1	02/07/19	15	soil	VOCs,SVOCs,Pesticides,PCBs,Herbicides,Metals
			2	water	VOCs

TOTALS

SDGs
7

SAMPLES
88

ANALYTES
6009

REJECTS
7

% USABILITY
99.9%

TABLE 4-1**DATA VALIDATION GUIDANCE DOCUMENTS**

Analyte Type	Validation Guidance
VOCs	USEPA, 2008, Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry; SW-846 Method 8260B; SOP # HW-24, Rev. 2. USEPA, 2008, Statement of Work for Organic Analysis of Low/Medium Concentration of Volatile Organic Compounds SOM01.2; SOP HW-33, Rev. 2.
SVOCs	USEPA, 2007, Statement of Work for Organic Analysis of Low/Medium Concentration of Semivolatile Organic Compounds SOM01.2; SOP HW-35, Rev. 1.
Pesticides/PCBs	USEPA, 2006, CLP Organics Data Review and Preliminary Review (CLP/SOW OLMO 4.3); SOP # HW-6, Rev. 14, Part C.
Metals	USEPA, 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO 5.3 (SOP Revision 13), SOP # HW-2, Rev. 13.
Gen Chemistry	NYSDEC, 2005, Analytical Services Protocols (ASP)
VOCs (Ambient air)	USEPA, 2006, Validating Air Samples, Volatile Organic Analysis of Ambient Air in Canister by Method TO-15; SOP # HW-31, Rev. 4.
Perfluoroalkyl Substances (PFASs)	USEPA, 2018, Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537

TABLE 4-2

**QUALITY CONTROL CRITERIA USED FOR VALIDATING
LABORATORY ANALYTICAL DATA**

VOCs	SVOCs	Pesticides/PCBs	Metals	Gen Chemistry	Method TO-15
Completeness of Pkg Sample Preservation Holding Time System Monitoring Compounds Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Matrix Spikes Blanks Instrument Calibration & Verification Analyte ID Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Initial/Continuing Calibration CRDL Standards Blanks Interference Check Sample Spike Recoveries Lab Duplicate Lab Control Sample ICP Serial Dilutions Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Times Calibration Lab Control Samples Blanks Spike Recoveries Lab Duplicates	Completeness of Pkg Sample Preservation Holding Time Canister Certification Lab Control Sample Instrument Tuning Blanks Initial Calibration & System Performance Daily Calibration Field Duplicate

PFASs
Completeness of Pkg Sample Preservation Holding Time Instr Performance Check Initial Calibration Continuing Calibration Blanks Surrogates Lab Fortified Blank Matrix Spikes Internal Standards

5.0 DATA VALIDATION QUALIFIERS

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

NOTE: The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any $\pm$ value associated with the result is not determined by data validation).
- UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is *approximate* and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- JN** The analyte is considered to be "presumptively present." The associated numerical value represents its *approximate* concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated using red ink. Data sheets having qualified data are signed and dated by the data reviewer.

6.0 RESULTS OF THE DATA REVIEW

The results of the data review are summarized in Tables 6-1 through 6-7, which correspond to the data and SDGs listed in Table 3-1. The tables provide the sample IDs in each SDG where QC criteria were found to exceed acceptable limits and the actions taken to qualify the affected sample results.

Listings of the sample IDs included with each SDG and the sample results (Form 1s) that required qualification are provided in Appendix A. Only the Form 1s that required qualification are included.

Appendix B provides the QC documentation that identifies the specific QC criteria that were found to be outside acceptable limits.

7.0 TOTAL USABLE DATA

For the Former Sims Matchplate project, 88 samples were analyzed and results were reported for 6009. Seven results were rejected. Even though some results were flagged with a "J" as estimated, all other results (99.9 %) are considered usable. See the summary tables for the analyses that have been flagged and the associated QC reasons.

Table 6-1

SUMMARY OF DATA VALIDATION RESULTS**SDG J147622-1**

SDG	Sample Date	Analysis	Sample ID	Analyte	Qualifier	Code
J147622-1	01/08/19	8260C	SB-3 (10-13')	Many Analytes (see Form I)	UJ/J	2
		8270D	All Samples	SVOCs		0
		8082A	All Samples	PCBs		0
		6010C/7471B	All Samples	Metals	J detects	0

Validation Codes

- 0 No analytical results were qualified
- 1 % recovery in spike sample > control limit results may be biased high
- 2 % recovery in spike sample < control limit results may be biased low
- 3 Relative percent difference between duplicate lab samples > control limit
- 4 Relative percent difference between field duplicate and sample > control limit
- 5 Surrogate recoveries > QC control limit
- 6 Surrogate recoveries < QC control limit
- 7 Minimum RF of 0.005 not met
- 8 %D for CCV exceeded for various compounds:
- 9 ICAL was not a minimum of 5 calibration points
- 10 %D for dual column analysis was exceeded
- 11 Laboratory Blank contamination
- 12 LCS Recovery outside QC limit
- 13 Internal Standard area IS2 < 50 % of the 12 hour standard. The following compounds are affected;
MIBK, Toluene, Chlorobenzene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropene, 2-Hexanone,
Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, m,o,p-Xylene, Styrene, Bromoform,
- 14 Internal Standard area IS3 < 50 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 15 Internal Standard area IS3 < 25 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 16 Possible cross contamination from sample storage
- 17 Serial dilution > 10 % J detects
- 18 Extracted/Analyzed outside holding time

Table 6-2

SUMMARY OF DATA VALIDATION RESULTS**SDG J147693-1**

SDG	Sample Date	Analysis	Sample ID	Analyte	Qualifier	Code
J147693-1	01/09/19	8260C	SB-6 (10-15')	Many Analytes (see Form I)	UJ/J	2
		8270D	All Samples	bis(2-Chloroisopropyl)ether	UJ/J	8
		8082A	All Samples	PCBs		0
		6010CA/7471B	All Samples	Na	J detects	11

Validation Codes

- 0 No analytical results were qualified
- 1 % recovery in spike sample > control limit results may be biased high
- 2 % recovery in spike sample < control limit results may be biased low
- 3 Relative percent difference between duplicate lab samples > control limit
- 4 Relative percent difference between field duplicate and sample > control limit
- 5 Surrogate recoveries > QC control limit
- 6 Surrogate recoveries < QC control limit
- 7 Minimum RF of 0.005 not met
- 8 %D for CCV exceeded for various compounds:
- 9 ICAL was not a minimum of 5 calibration points
- 10 %D for dual column analysis was exceeded
- 11 Laboratory Blank contamination
- 12 LCS Recovery outside QC limit
- 13 Internal Standard area IS2 < 50 % of the 12 hour standard. The following compounds are affected;
MIBK, Toluene, Chlorobenzene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropene, 2-Hexanone,
Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, m,o,p-Xylene, Styrene, Bromoform,
- 14 Internal Standard area IS3 < 50 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 15 Internal Standard area IS3 < 25 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 16 Possible cross contamination from sample storage
- 17 Serial dilution > 10 % J detects
- 18 Extracted/Analyzed outside holding time

Table 6-3

SUMMARY OF DATA VALIDATION RESULTS**SDG J147755-1**

SDG	Sample Date	Analysis	Sample ID	Analyte	Qualifier	Code
J147755-1	01/10/19	8260C	SB-12 (15-20')	Many Analytes (see Form I)	UJ/J	2
			SB-8 (15-20')	All analytes	UJ/J	5,6,14
			SB-11 (15-20')	All analytes	UJ/J	5,6,14
			SB-18 (15-20')	Many Analytes	UJ/J	5,6,13
			SB-18 (15-20')	see below	R	15
		8270D	All Samples	All analytes		0
		8082A	All Samples	All analytes		0
		6010C/7470B	All Samples	All metals		0

Validation Codes

- 0 No analytical results were qualified
- 1 % recovery in spike sample > control limit results may be biased high
- 2 % recovery in spike sample < control limit results may be biased low
- 3 Relative percent difference between duplicate lab samples > control limit
- 4 Relative percent difference between field duplicate and sample > control limit
- 5 Surrogate recoveries > QC control limit
- 6 Surrogate recoveries < QC control limit
- 7 Minimum RF of 0.005 not met
- 8 %D for CCV exceeded for various compounds:
- 9 ICAL was not a minimum of 5 calibration points
- 10 %D for dual column analysis was exceeded
- 11 Laboratory Blank contamination
- 12 LCS Recovery outside QC limit
- 13 Internal Standard area IS2 < 50 % of the 12 hour standard. The following compounds are affected:
MIBK, Toluene, Chlorobenzene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropene, 2-Hexanone,
Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, m,o,p-Xylene, Styrene, Bromoform,
- 14 Internal Standard area IS3 < 50 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 15 Internal Standard area IS3 < 25 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 16 Possible cross contamination from sample storage
- 17 Serial dilution > 10 % J detects
- 18 Extracted/Analyzed outside holding time

Table 6-4

SUMMARY OF DATA VALIDATION RESULTS**SDG J147860-1**

SDG	Sample Date	Analysis	Sample ID	Analyte	Qualifier	Code
J147860-1	01/14/19	8260C	SS-27 (10-15')	1,1,2,2-TCA	UJ/J	2
			SS-27 (10-15')	DBCP	UJ/J	2
			SS-27 (10-15')	MEK	UJ/J	2
			SS-27 (10-15')	1,2-DBE	UJ/J	2
		8270D	All Samples	SVOCs		0
		8082A	All Samples	PCBs		0
		6010C/7471B	SB-27 (0-5')	Sb		11
			All Samples	Na	J	11
			SS-29 (0-5')	Al,Ba,Ca,Pb,Mg,Ni,K,Zn	J	1
			SS-29 (0-5')	Al	J	2
			SS-29 (0-5')	Ba,Ca,Cr,Fe,Mg,Mn,V,Zn	J	17

Validation Codes

- 0 No analytical results were qualified
- 1 % recovery in spike sample > control limit results may be biased high
- 2 % recovery in spike sample < control limit results may be biased low
- 3 Relative percent difference between duplicate lab samples > control limit
- 4 Relative percent difference between field duplicate and sample > control limit
- 5 Surrogate recoveries > QC control limit
- 6 Surrogate recoveries < QC control limit
- 7 Minimum RF of 0.005 not met
- 8 %D for CCV exceeded for various compounds:
- 9 ICAL was not a minimum of 5 calibration points
- 10 %D for dual column analysis was exceeded
- 11 Laboratory Blank contamination
- 12 LCS Recovery outside QC limit
- 13 Internal Standard area IS2 < 50 % of the 12 hour standard. The following compounds are affected:
MIBK, Toluene, Chlorobenzene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropene, 2-Hexanone,
Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, m,o,p-Xylene, Styrene, Bromoform,
- 14 Internal Standard area IS3 < 50 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 15 Internal Standard area IS3 < 25 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 16 Possible cross contamination from sample storage
- 17 Serial dilution > 10 % J detects
- 18 Extracted/Analyzed outside holding time

Table 6-5

SUMMARY OF DATA VALIDATION RESULTS**SDG J147921-1**

SDG	Sample Date	Analysis	Sample ID	Analyte	Qualifier	Code
J147921-1	01/15/19	8260C	All Samples	Chloroform	CRQL-U	11
		8270D	All Samples	SVOCs		0
		8082A	All Samples	PCBs		0
		6010C/7471B	All Samples	Na	J	11

Validation Codes

- 0 No analytical results were qualified
- 1 % recovery in spike sample > control limit results may be biased high
- 2 % recovery in spike sample < control limit results may be biased low
- 3 Relative percent difference between duplicate lab samples > control limit
- 4 Relative percent difference between field duplicate and sample > control limit
- 5 Surrogate recoveries > QC control limit
- 6 Surrogate recoveries < QC control limit
- 7 Minimum RF of 0.005 not met
- 8 %D for CCV exceeded for various compounds:
- 9 ICAL was not a minimum of 5 calibration points
- 10 %D for dual column analysis was exceeded
- 11 Laboratory Blank contamination
- 12 LCS Recovery outside QC limit
- 13 Internal Standard area IS2 < 50 % of the 12 hour standard. The following compounds are affected;
MIBK, Toluene, Chlorobenzene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropene, 2-Hexanone,
Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, m,o,p-Xylene, Styrene, Bromoform,
- 14 Internal Standard area IS3 < 50 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 15 Internal Standard area IS3 < 25 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 16 Possible cross contamination from sample storage
- 17 Serial dilution > 10 % J detects
- 18 Extracted/Analyzed outside holding time

Table 6-6

SUMMARY OF DATA VALIDATION RESULTS**SDG J148067-1**

SDG	Sample Date	Analysis	Sample ID	Analyte	Qualifier	Code
J148067-1	01/17/19	8260C	MW-3 DL	TCE	J	2
			MW-3	TCE	J	19

Validation Codes

- 0 No analytical results were qualified
- 1 % recovery in spike sample > control limit results may be biased high
- 2 % recovery in spike sample < control limit results may be biased low
- 3 Relative percent difference between duplicate lab samples > control limit
- 4 Relative percent difference between field duplicate and sample > control limit
- 5 Surrogate recoveries > QC control limit
- 6 Surrogate recoveries < QC control limit
- 7 Minimum RF of 0.005 not met
- 8 %D for CCV exceeded for various compounds:
- 9 ICAL was not a minimum of 5 calibration points
- 10 %D for dual column analysis was exceeded
- 11 Laboratory Blank contamination
- 12 LCS Recovery outside QC limit
- 13 Internal Standard area IS2 < 50 % of the 12 hour standard. The following compounds are affected;
MIBK, Toluene, Chlorobenzene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropene, 2-Hexanone,
Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, m,o,p-Xylene, Styrene, Bromoform,
- 14 Internal Standard area IS3 < 50 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 15 Internal Standard area IS3 < 25 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 16 Possible cross contamination from sample storage
- 17 Serial dilution > 10 % J detects
- 18 Extracted/Analyzed outside holding time
- 19 Value over the calibration range

Table 6-7

SUMMARY OF DATA VALIDATION RESULTS**SDG J148804-1**

SDG	Sample Date	Analysis	Sample ID	Analyte	Qualifier	Code
J148804-1	02/07/19	8260C	All Samples	All analytes		0
		8270D	SS2 (0-2')	Benzo(a)anthracene	J	1,3
				Benzo(a)pyrene	J	1,3
				Benzo(b)fluoranthene	J	1,3
				Benzo(k)fluoranthene	J	1,3
				Chrsene	J	1,3
				Fluoranthene	J	1,3
				Phenanthracene	J	1,3
				Pyrene	J	1,3
		8081B	SS-2 (6-12')	4,4'DDT	J	5
			SS-4 (0-2')	4,4'DDT	J	5
			SS-8 (0-2')	4,4'DDT	J	3
			SS-1 (0-2')	4,4'DDT	J	10
			SS-2 (0-2')	4,4'DDE	J	10
			SS-2 (6-12')	4,4'DDT	J	10
			SS-3 (6-12')	Heptachlor	JN	10
			SS-4 (6-12')	Methoxychlor	JN	10
			SS-6 (0-2')	4,4'DDT	J	10
			SS-8 (0-2')	4,4'DDE,a-BHC	J	3,10
			SS-3 (0-2')	4,4'DDD	CRQL-U	11
			SS-8 (6-12')	4,4'DDD	CRQL-U	11
		8082A	SS-1 (6-12')	PCB 1016	J	10
		8151A	All Samples	Herbicides		0
		6010C/7471B	SS-1 (0-2')	Al,K,Na	J	1
			SS-1 (0-2')	Pb,Zn	J	2
			SS-1 (0-2')	Ca,Mg	J	3
			SS-1 (0-2')	Ca,Fe,Mg,Mn,Zn	J	17

Validation Codes

- 0 No analytical results were qualified
- 1 % recovery in spike sample > control limit results may be biased high
- 2 % recovery in spike sample < control limit results may be biased low
- 3 Relative percent difference between duplicate lab samples > control limit
- 4 Relative percent difference between field duplicate and sample > control limit
- 5 Surrogate recoveries > QC control limit
- 6 Surrogate recoveries < QC control limit
- 7 Minimum RF of 0.005 not met
- 8 %D for CCV exceeded for various compounds:
- 9 ICAL was not a minimum of 5 calibration points
- 10 %D for dual column analysis was exceeded
- 11 Laboratory Blank contamination
- 12 LCS Recovery outside QC limit
- 13 Internal Standard area IS2 < 50 % of the 12 hour standard. The following compounds are affected;
MIBK, Toluene, Chlorobenzene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropene, 2-Hexanone,
Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, m,o,p-Xylene, Styrene, Bromoform,

Table 6-7

- 14 Internal Standard area IS3 < 50 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 15 Internal Standard area IS3 < 25 % of the 12 hour standard. The following compounds are affected:
Compounds: 1,2-DCB, 1,3-DCB, 1,4-DCB, DBCP, 1,2,4-TCB, Isopropylbenzene, 1,1,2,2-Tetrachloroethane
- 16 Possible cross contamination from sample storage
- 17 Serial dilution > 10 % J detects
- 18 Extracted/Analyzed outside holding time

ACRONYMS

BSP	Blank Spike
CCAL	Continuing Calibration
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
%D	Percent Difference
ICAL	Initial Calibration
ICB	Initial Calibration Blank
IS	Internal Standard
LCS	Laboratory Control Sample
MS/MSD	Matrix Spike/Matrix Spike Duplicate
QA	Quality Assurance
QC	Quality Control
%R	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
%RSD	Percent Relative Standard Deviation
TAL	Target Analyte List (metals)
TCL	Target Compound List (organics)

Appendix A

Validated Analytical Results

ANALYTICAL REPORT

Job Number: 480-147622-1

Job Description: Former Sims Matchplate Site

For:

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Attention: Matt Walker



Approved for release.
Judy L. Stone
Senior Project Manager
1/21/2019 7:16 PM

Judy L. Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
01/21/2019

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



Job Narrative
480-147622-1

Comments

No additional comments.

Receipt

The samples were received on 1/9/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-455001 and analytical batch 480-454994 recovered outside control limits for the following analyte: Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. The following samples are affected: SB-2 (15'-20') (480-147622-6), SB-3 (10'-13') (480-147622-7), SB-3 (15'-20') (480-147622-8), SB-4 (9'-15') (480-147622-10), SB-5 (5'-10') (480-147622-13), SB-5 (10'-15') (480-147622-14), SB-10 (10'-15') (480-147622-15), SB-10 (15'-20') (480-147622-16) and SB-9 (10'-15') (480-147622-17).

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-455051 and analytical batch 480-455192 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: SB-1 (12'-15') (480-147622-1), SB-1 (17'-20') (480-147622-2) and SB-2 (10'-15') (480-147622-5).

Method(s) 8260C: The following samples were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-1 (12'-15') (480-147622-1), SB-1 (17'-20') (480-147622-2) and SB-2 (10'-15') (480-147622-5). 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/MS Semi VOA

Method(s) 8270D: The following sample was diluted due to color and, viscosity: SB-2 (2'-5') (480-147622-4). 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.

GC Semi VOA

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-454528/5 and 480-454528/31) that had recoveries for the surrogate Decachlorobiphenyl that were above acceptance limits: SB-2 (2'-5') (480-147622-4) and SB-5 (0'-5') (480-147622-12). The secondary surrogate Tetrachloro-m-xylene is within limits. Therefore, the data has been reported.

Method(s) 8082A: The following samples are associated with a laboratory control sample (LCS 480-454399/2) that had recoveries for the surrogate Decachlorobiphenyl that were above acceptance limits: SB-2 (2'-5') (480-147622-4) and SB-5 (0'-5') (480-147622-12). The secondary surrogate Tetrachloro-m-xylene and all analyte recoveries were within limits. Therefore, the data has been reported.

Method(s) 8082A: All primary data for analytical batch 454528 is reported from the ZB-5 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals

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

Organic Prep

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

Sample Summary

Client: C&S Engineers, Inc.

Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147622-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147622-1	SB-1 (12'-15')	Solid	01/08/19 09:00	01/09/19 01:00
480-147622-2	SB-1 (17'-20')	Solid	01/08/19 09:20	01/09/19 01:00
480-147622-3	SB-2 (2'-5')	Solid	01/08/19 09:40	01/09/19 01:00
480-147622-4	SB-2 (2'-5')	Solid	01/08/19 10:00	01/09/19 01:00
480-147622-5	SB-2 (10'-15')	Solid	01/08/19 10:20	01/09/19 01:00
480-147622-6	SB-2 (15'-20')	Solid	01/08/19 10:40	01/09/19 01:00
480-147622-7	SB-3 (10'-13')	Solid	01/08/19 11:00	01/09/19 01:00
480-147622-8	SB-3 (15'-20')	Solid	01/08/19 11:20	01/09/19 01:00
480-147622-9	SB-4 (4'-9')	Solid	01/08/19 11:40	01/09/19 01:00
480-147622-10	SB-4 (9'-15')	Solid	01/08/19 12:00	01/09/19 01:00
480-147622-11	SB-5 (0'-5')	Solid	01/08/19 12:20	01/09/19 01:00
480-147622-12	SB-5 (0'-5')	Solid	01/08/19 12:40	01/09/19 01:00
480-147622-13	SB-5 (5'-10')	Solid	01/08/19 13:00	01/09/19 01:00
480-147622-14	SB-5 (10'-15')	Solid	01/08/19 13:20	01/09/19 01:00
480-147622-15	SB-10 (10'-15')	Solid	01/08/19 13:40	01/09/19 01:00
480-147622-16	SB-10 (15'-20')	Solid	01/08/19 14:00	01/09/19 01:00
480-147622-17	SB-9 (10'-15')	Solid	01/08/19 14:20	01/09/19 01:00
480-147622-18	SB-9 (15'-20')	Solid	01/08/19 14:40	01/09/19 01:00

Chain of Custody Record

10 Hazelwood Drive
Amherst, NY 14228-2288

#225

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Sampler:	Lab PM:	Cat	COC No:								
Client Contact: Matt Walker		Phone:	Stone, Judy L.		480-147622 COC								
Company: C&S Engineer, Inc.		Address: 499 Col. Eileen Collins Blvd Syracuse State, Zip: NY, 13212	Email: judy.stone@lestametric.com		Page # of 2								
Due Date Requested:		TAT Requested (days):	Analysis Requested										
Purchase Order Requested		PO #:											
Project Name:		Project #:											
Former Sims Matchplate Site		SSOW#:											
Site:													
Sample Identification	Sample Date	Sample Time	Sample Type (G=Comp, G=Grab)	Matrix (Inert, Sensitive, Overridable, Bypass, Auto)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7471B	8081B, 8082A, 8151A, 8270D	8280C - TCL 1st OLH04.2	8081B, 8151A, 8270D	8082A, 8270D	Total Number of Containers	Special Instructions/Note:
SB-1 (12'-15')	1/8/19	9:00		Solid	X	N							
SB-1 (17'-20')	1/8/19	9:20		Solid									
SB-2 (2'-5')	1/8/19	9:40		Solid		X							
SB-2 (2'-5')	1/8/19	10:00		Solid									
SB-2 (10'-15')	1/8/19	10:26		Solid									
SB-2 (15'-20')	1/8/19	10:40		Solid		X							
SB-3 (10'-13')	1/8/19	11:00		Solid									
SB-3 (15'-20')	1/8/19	11:20		Solid		X							
SB-4 (4'-9')	1/8/19	11:40		Solid									
SB-4 (4'-15')	1/8/19	12:00		Solid		X							
SB-5 (0'-5')	1/8/19	12:30		Solid		X							
Possible Hazard Identification													
Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐													
Deliverable Requested: I, II, III, IV, Other (specify)													
Empty Kit Requisitioned by: _____ Date: _____ Time: _____ Method of Shipment: _____													
Requisitioned by: _____ Date/Time: 1/8/19 15:41 Company: C&S													
Returned by: _____ Date/Time: 1-8-19 19:00 Company: EPA													
Received by: _____ Date/Time: 1-8-19 15:41 Company: EPA													
Cooler Temperature(s) °C and Other Remarks: 0.9 #3													
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amelior H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - NaNO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydnite U - Acetone V - MCAA W - pH 4.5 Z - other (specify) Other:													

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2288
Phone (716) 691-2600 Fax (716) 691-7891

Syracuse
#225

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Matt Walker Company: C&S Engineers, Inc. Address: 499 Col. Eileen Collins Blvd City: Syracuse State, Zip: NY, 13212 Phone: 315-703-4323(Tel) Email: mawalker@cscos.com Project Name: Former Sims Matchplate Site Site:		Sampler: Stone, Judy L Lab PM: Stone, Judy L E-Mail: judy.stone@testamericainc.com Carrier Tracking No(s):	COC No: 480-122677-28125.1 Page: 1 of 2 Job #:																																														
Due Date Requested: TAT Requested (days): <i>Standard</i> PO #: Purchase Order Requested WO # Project #: 48018352 SSOW#:		Analysis Requested <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>6010C, 7471B</th> <th>8081B, 8082A, 8151A, 8270D</th> <th>8250C - TCL list OLMD4.2</th> <th>8081B, 8151A, 8270D</th> <th>8082A, 8270D</th> </tr> <tr> <td></td> <td></td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> </tr> </table>		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7471B	8081B, 8082A, 8151A, 8270D	8250C - TCL list OLMD4.2	8081B, 8151A, 8270D	8082A, 8270D			N	N	N	N	N																																
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		N	N	N	N	N																																											
Sample Identification <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=soils/sed, BT=leachate, A=Air)</th> <th>Preservation Code:</th> </tr> </thead> <tbody> <tr> <td>SB-5 (0-5')</td> <td>1/8/19 12:40</td> <td></td> <td>Solid</td> <td></td> </tr> <tr> <td>SB-5 (5'-10')</td> <td>1/8/19 13:00</td> <td></td> <td>Solid</td> <td></td> </tr> <tr> <td>SB-5 (10'-15')</td> <td>1/8/19 13:20</td> <td></td> <td>Solid</td> <td></td> </tr> <tr> <td>SB-10 (10'-15')</td> <td>1/8/19 13:40</td> <td></td> <td>Solid</td> <td></td> </tr> <tr> <td>SB-10 (15'-20')</td> <td>1/8/19 14:00</td> <td></td> <td>Solid</td> <td></td> </tr> <tr> <td>SB-9 (10'-15')</td> <td>1/8/19 14:20</td> <td></td> <td>Solid</td> <td></td> </tr> <tr> <td>SB-9 (15'-20')</td> <td>1/8/19 14:40</td> <td></td> <td>Solid</td> <td></td> </tr> <tr> <td colspan="5" style="text-align: center;"> <i>1-8-19</i> </td> </tr> </tbody> </table>		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soils/sed, BT=leachate, A=Air)	Preservation Code:	SB-5 (0-5')	1/8/19 12:40		Solid		SB-5 (5'-10')	1/8/19 13:00		Solid		SB-5 (10'-15')	1/8/19 13:20		Solid		SB-10 (10'-15')	1/8/19 13:40		Solid		SB-10 (15'-20')	1/8/19 14:00		Solid		SB-9 (10'-15')	1/8/19 14:20		Solid		SB-9 (15'-20')	1/8/19 14:40		Solid		<i>1-8-19</i>					Total Number of containers:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsH ₂ O ₂ D - Nitric Acid P - Na ₂ O ₄ S E - NaHSO ₄ Q - Na ₂ SO ₃ F - MeOH R - Na ₂ S ₂ O ₃ G - Amchlor S - H ₂ SO ₄ H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soils/sed, BT=leachate, A=Air)	Preservation Code:																																													
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<i>1-8-19</i>																																																	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months																																															
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:																																															
Empty Kit Relinquished by: <i>Angel Ariza</i> Relinquished by: <i>REINHOLD</i> Relinquished by:		Date: 1/8/19 15:45 Date/Time: 1-8-19, 19:00 Date/Time:																																															
Company: C+S Company: <i>LYN</i> Company:		Received by: <i>REINHOLD</i> Received by: <i>McGeece</i> Received by:																																															
Date/Time: 1-8-19, 15:45 Date/Time: 01-09-19 000 Date/Time:		Company: <i>lyn</i> Company: Company:																																															
Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.9 #3																																															

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Client Sample ID: SB-3 (10'-13')

Lab Sample ID: 480-147622-7

Matrix: Solid

Lab File ID: F7868.D

Analysis Method: 8260C

Date Collected: 01/08/2019 11:00

Sample wt/vol: 6.73(g)

Date Analyzed: 01/14/2019 23:58

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 12.7

Level: (low/med) Low

Analysis Batch No.: 454994

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.3	0.31
79-34-5	1,1,2,2-Tetrachloroethane	ND	F1 <i>US</i>	4.3	0.69
79-00-5	1,1,2-Trichloroethane	ND	F1 <i>US</i>	4.3	0.55
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	0.97
75-34-3	1,1-Dichloroethane	ND		4.3	0.52
75-35-4	1,1-Dichloroethene	ND		4.3	0.52
120-82-1	1,2,4-Trichlorobenzene	ND		4.3	0.26
96-12-8	1,2-Dibromo-3-Chloropropane	ND	F1 <i>US</i>	4.3	2.1
95-50-1	1,2-Dichlorobenzene	ND		4.3	0.33
107-06-2	1,2-Dichloroethane	ND		4.3	0.21
78-87-5	1,2-Dichloropropane	ND		4.3	2.1
541-73-1	1,3-Dichlorobenzene	ND		4.3	0.22
106-46-7	1,4-Dichlorobenzene	ND		4.3	0.60
78-93-3	2-Butanone (MEK)	3.2	J F1 <i>J</i>	21	1.6
591-78-6	2-Hexanone	ND		21	2.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	F1 <i>US</i>	21	1.4
67-64-1	Acetone	88	F1 <i>US</i>	21	3.6
71-43-2	Benzene	ND		4.3	0.21
75-27-4	Bromodichloromethane	ND		4.3	0.57
75-25-2	Bromoform	ND		4.3	2.1
74-83-9	Bromomethane	ND		4.3	0.38
75-15-0	Carbon disulfide	ND		4.3	2.1
56-23-5	Carbon tetrachloride	ND		4.3	0.41
108-90-7	Chlorobenzene	ND		4.3	0.56
124-48-1	Dibromochloromethane	ND		4.3	0.54
75-00-3	Chloroethane	ND	*	4.3	0.96
67-66-3	Chloroform	ND		4.3	0.26
74-87-3	Chloromethane	ND		4.3	0.26
156-59-2	cis-1,2-Dichloroethene	12	F1 <i>US</i>	4.3	0.54
10061-01-5	cis-1,3-Dichloropropene	ND		4.3	0.61
110-82-7	Cyclohexane	ND		4.3	0.60
75-71-8	Dichlorodifluoromethane	ND		4.3	0.35
100-41-4	Ethylbenzene	ND		4.3	0.29
106-93-4	1,2-Dibromoethane	ND	F1 <i>US</i>	4.3	0.55
98-82-8	Isopropylbenzene	ND		4.3	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147622-1
 SDG No.: _____
 Client Sample ID: SB-3 (10'-13') Lab Sample ID: 480-147622-7
 Matrix: Solid Lab File ID: F7868.D
 Analysis Method: 8260C Date Collected: 01/08/2019 11:00
 Sample wt/vol: 6.73(g) Date Analyzed: 01/14/2019 23:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 12.7 Level: (low/med) Low
 Analysis Batch No.: 454994 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		21	2.6
1634-04-4	Methyl tert-butyl ether	ND		4.3	0.42
108-87-2	Methylcyclohexane	ND		4.3	0.65
75-09-2	Methylene Chloride	ND		4.3	2.0
100-42-5	Styrene	ND		4.3	0.21
127-18-4	Tetrachloroethene	ND		4.3	0.57
108-88-3	Toluene	ND		4.3	0.32
156-60-5	trans-1,2-Dichloroethene	0.80	J	4.3	0.44
10061-02-6	trans-1,3-Dichloropropene	ND		4.3	1.9
79-01-6	Trichloroethene	6.4		4.3	0.94
75-69-4	Trichlorofluoromethane	ND		4.3	0.40
75-01-4	Vinyl chloride	ND		4.3	0.52
1330-20-7	Xylenes, Total	ND		8.5	0.71

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		64-126
460-00-4	4-Bromofluorobenzene (Surr)	99		72-126
1868-53-7	Dibromofluoromethane (Surr)	100		60-140

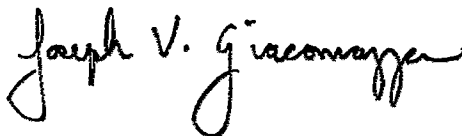
ANALYTICAL REPORT

Job Number: 480-147693-1

Job Description: Former Sims Matchplate Site

For:

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Attention: Matt Walker



Approved for release.
Joe V Giacomazza
Project Management Assistant II
1/18/2019 12:09 PM

Designee for
Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
01/18/2019

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



**Job Narrative
480-147693-1**

Receipt

The samples were received on 1/10/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-455001 and analytical batch 480-454994 recovered outside control limits for the following analyte: Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. The following samples are affected: SB-14 (10'-15') (480-147693-1), SB-14 (15'-20') (480-147693-2), SB-15 (10'-15') (480-147693-5), SB-15 (15'-20') (480-147693-6), SB-20 (10'-15') (480-147693-7), SB-20 (15'-20') (480-147693-8), SB-25 (10'-15') (480-147693-9) and SB-25 (15'-20') (480-147693-10).

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-455051 and analytical batch 480-455192 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: SB-7 (5'-10') (480-147693-17).

Method(s) 8260C: The following sample was analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-7 (5'-10') (480-147693-17). 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/MS Semi VOA

Method(s) 8270D: The following sample was diluted due to color and, viscosity: SB-6 (0-5') (480-147693-14). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-454961 recovered outside acceptance criteria, low biased, for 2,2'-oxybis[1-chloropropane]. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: SB-15 (0-5') (480-147693-4) and SB-6 (0-5') (480-147693-14).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-454961 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: SB-15 (0-5') (480-147693-4) and SB-6 (0-5') (480-147693-14).

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

GC Semi VOA

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-455460/16) that had recoveries for the surrogate Tetrachloro-m-xylene that were below acceptance limits: SB-15 (0-5') (480-147693-4) and SB-6 (0-5') (480-147693-14). The secondary surrogate Decachlorobiphenyl is within limits. Therefore, the data has been reported.

Method(s) 8082A: All primary data for analytical batch 455460 is reported from the ZB-5 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals

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

Organic Prep

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

Sample Summary

Client: C&S Engineers, Inc.

Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147693-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147693-1	SB-14 (10'-15')	Solid	01/09/19 08:00	01/10/19 01:00
480-147693-2	SB-14 (15'-20')	Solid	01/09/19 08:20	01/10/19 01:00
480-147693-3	SB-15 (0-5')	Solid	01/09/19 08:40	01/10/19 01:00
480-147693-4	SB-15 (0-5')	Solid	01/09/19 09:00	01/10/19 01:00
480-147693-5	SB-15 (10'-15')	Solid	01/09/19 09:20	01/10/19 01:00
480-147693-6	SB-15 (15'-20')	Solid	01/09/19 09:40	01/10/19 01:00
480-147693-7	SB-20 (10'-15')	Solid	01/09/19 10:00	01/10/19 01:00
480-147693-8	SB-20 (15'-20')	Solid	01/09/19 10:20	01/10/19 01:00
480-147693-9	SB-25 (10'-15')	Solid	01/09/19 10:40	01/10/19 01:00
480-147693-10	SB-25 (15'-20')	Solid	01/09/19 11:00	01/10/19 01:00
480-147693-11	SB-30 (10'-15')	Solid	01/09/19 11:20	01/10/19 01:00
480-147693-12	SB-30 (15'-20')	Solid	01/09/19 11:40	01/10/19 01:00
480-147693-13	SB-6 (0'-5')	Solid	01/09/19 12:00	01/10/19 01:00
480-147693-14	SB-6 (0-5')	Solid	01/09/19 12:20	01/10/19 01:00
480-147693-15	SB-6 (10'-15')	Solid	01/09/19 12:40	01/10/19 01:00
480-147693-16	SB-6 (15'-20')	Solid	01/09/19 13:00	01/10/19 01:00
480-147693-17	SB-7 (5'-10')	Solid	01/09/19 13:20	01/10/19 01:00
480-147693-18	SB-7 (15'-17')	Solid	01/09/19 13:40	01/10/19 01:00



01/18/2019

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 681-2800 Fax (716) 681-7891

Syracuse

#225

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Matt Walker Company: C&S Engineers, Inc. Address: 499 Col. Eileen Collins Blvd City: Syracuse State, Zip: NY, 13212 Phone: 315-703-4323 (Tel) Email: mawalker@csoos.com Project Name: Former Sims Matchplate Site Site:		Supplier: Angel / ianyne Phone: 315 794-8362 Lab PM: Stone, Judy L E-Mail: judy.stone@testamericainc.com		Center Tracking No(s): COC No: 480-122577-28125.1 Page: 2 of 2 Page # of #																																																																									
Due Date Requested: TAT Requested (days): Standards PO #: Purchase Order Requested NYC #:		Analysis Requested <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>8010C, 7471B</th> <th>8201B, 8302A, 8161A, 8270D</th> <th>8200C - T32, 840100A2</th> <th>8001B, 8164A, 8270D</th> <th>8002A, 8270D</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8010C, 7471B	8201B, 8302A, 8161A, 8270D	8200C - T32, 840100A2	8001B, 8164A, 8270D	8002A, 8270D																																																																	
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Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: 0.8 #3																																																																													

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01/18/2019

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Client Sample ID: SB-20 (10'-15')

Lab Sample ID: 480-147693-7

Matrix: Solid

Lab File ID: F7881.D

Analysis Method: 8260C

Date Collected: 01/09/2019 10:00

Sample wt/vol: 7.48(g)

Date Analyzed: 01/15/2019 05:35

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 9.3

Level: (low/med) Low

Analysis Batch No.: 454994

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		3.7	0.27
79-34-5	1,1,2,2-Tetrachloroethane	ND	F1	3.7	0.60
79-00-5	1,1,2-Trichloroethane	ND	F1	3.7	0.48
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.7	0.84
75-34-3	1,1-Dichloroethane	ND		3.7	0.45
75-35-4	1,1-Dichloroethene	ND		3.7	0.45
120-82-1	1,2,4-Trichlorobenzene	ND		3.7	0.22
96-12-8	1,2-Dibromo-3-Chloropropane	ND	F1	3.7	1.8
95-50-1	1,2-Dichlorobenzene	ND		3.7	0.29
107-06-2	1,2-Dichloroethane	ND		3.7	0.19
78-87-5	1,2-Dichloropropane	ND		3.7	1.8
541-73-1	1,3-Dichlorobenzene	ND		3.7	0.19
106-46-7	1,4-Dichlorobenzene	ND		3.7	0.52
78-93-3	2-Butanone (MEK)	ND	F1	18	1.3
591-78-6	2-Hexanone	ND		18	1.8
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	F1	18	1.2
67-64-1	Acetone	8.6	J	18	3.1
71-43-2	Benzene	ND		3.7	0.18
75-27-4	Bromodichloromethane	ND		3.7	0.49
75-25-2	Bromoform	ND		3.7	1.8
74-83-9	Bromomethane	ND		3.7	0.33
75-15-0	Carbon disulfide	ND		3.7	1.8
56-23-5	Carbon tetrachloride	ND		3.7	0.36
108-90-7	Chlorobenzene	ND		3.7	0.49
124-48-1	Dibromochloromethane	ND		3.7	0.47
75-00-3	Chloroethane	ND	*	3.7	0.83
67-66-3	Chloroform	ND		3.7	0.23
74-87-3	Chloromethane	ND		3.7	0.22
156-59-2	cis-1,2-Dichloroethene	ND	F1	3.7	0.47
10061-01-5	cis-1,3-Dichloropropene	ND	F1	3.7	0.53
110-82-7	Cyclohexane	ND		3.7	0.52
75-71-8	Dichlorodifluoromethane	ND		3.7	0.30
100-41-4	Ethylbenzene	ND	F1	3.7	0.25
106-93-4	1,2-Dibromoethane	ND	F1	3.7	0.47
98-82-8	Isopropylbenzene	ND		3.7	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147693-1
 SDG No.: _____
 Client Sample ID: SB-20 (10'-15') Lab Sample ID: 480-147693-7
 Matrix: Solid Lab File ID: F7881.D
 Analysis Method: 8260C Date Collected: 01/09/2019 10:00
 Sample wt/vol: 7.48(g) Date Analyzed: 01/15/2019 05:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 9.3 Level: (low/med) Low
 Analysis Batch No.: 454994 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		18	2.2
1634-04-4	Methyl tert-butyl ether	ND		3.7	0.36
108-87-2	Methylcyclohexane	ND		3.7	0.56
75-09-2	Methylene Chloride	ND		3.7	1.7
100-42-5	Styrene	ND	F1 <u>UJ</u>	3.7	0.18
127-18-4	Tetrachloroethene	ND		3.7	0.49
108-88-3	Toluene	0.29	J	3.7	0.28
156-60-5	trans-1,2-Dichloroethene	ND		3.7	0.38
10061-02-6	trans-1,3-Dichloropropene	ND		3.7	1.6
79-01-6	Trichloroethene	ND		3.7	0.81
75-69-4	Trichlorofluoromethane	ND		3.7	0.35
75-01-4	Vinyl chloride	ND		3.7	0.45
1330-20-7	Xylenes, Total	ND	F1	7.4	0.62

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		64-126
460-00-4	4-Bromofluorobenzene (Surr)	99		72-126
1868-53-7	Dibromofluoromethane (Surr)	100		60-140

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-4

Matrix: Solid

Lab File ID: U3314744.D

Analysis Method: 8270D

Date Collected: 01/09/2019 09:00

Extract. Method: 3550C

Date Extracted: 01/10/2019 14:39

Sample wt/vol: 30.83(g)

Date Analyzed: 01/14/2019 23:22

Con. Extract Vol.: 1(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

Level: (low/med) Low

% Moisture: 18.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 454961

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		200	30
108-60-1	bis (2-chloroisopropyl) ether	ND	45	200	40
95-95-4	2,4,5-Trichlorophenol	ND		200	55
88-06-2	2,4,6-Trichlorophenol	ND		200	40
120-83-2	2,4-Dichlorophenol	ND		200	21
105-67-9	2,4-Dimethylphenol	ND		200	49
51-28-5	2,4-Dinitrophenol	ND		2000	930
121-14-2	2,4-Dinitrotoluene	ND		200	42
606-20-2	2,6-Dinitrotoluene	ND		200	24
91-58-7	2-Chloronaphthalene	ND		200	33
95-57-8	2-Chlorophenol	ND		200	37
95-48-7	2-Methylphenol	ND		200	24
91-57-6	2-Methylnaphthalene	ND		200	40
88-74-4	2-Nitroaniline	ND		390	30
88-75-5	2-Nitrophenol	ND		200	57
91-94-1	3,3'-Dichlorobenzidine	ND		390	240
99-09-2	3-Nitroaniline	ND		390	56
534-52-1	4,6-Dinitro-2-methylphenol	ND		390	200
101-55-3	4-Bromophenyl phenyl ether	ND		200	29
59-50-7	4-Chloro-3-methylphenol	ND		200	50
106-47-8	4-Chloroaniline	ND		200	50
7005-72-3	4-Chlorophenyl phenyl ether	ND		200	25
106-44-5	4-Methylphenol	ND		390	24
100-01-6	4-Nitroaniline	ND		390	110
100-02-7	4-Nitrophenol	ND		390	140
83-32-9	Acenaphthene	ND		200	30
208-96-8	Acenaphthylene	ND		200	26
98-86-2	Acetophenone	ND		200	27
120-12-7	Anthracene	ND		200	50
1912-24-9	Atrazine	ND		200	70
100-52-7	Benzaldehyde	ND		200	160
56-55-3	Benzo[a]anthracene	ND		200	20
50-32-8	Benzo[a]pyrene	ND		200	30
205-99-2	Benzo[b]fluoranthene	ND		200	32

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-4

Matrix: Solid

Lab File ID: U3314744.D

Analysis Method: 8270D

Date Collected: 01/09/2019 09:00

Extract. Method: 3550C

Date Extracted: 01/10/2019 14:39

Sample wt/vol: 30.83(g)

Date Analyzed: 01/14/2019 23:22

Con. Extract Vol.: 1(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

Level: (low/med) Low

% Moisture: 18.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 454961

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		200	21
207-08-9	Benzo[k]fluoranthene	ND		200	26
111-91-1	Bis(2-chloroethoxy)methane	ND		200	43
111-44-4	Bis(2-chloroethyl)ether	ND		200	26
117-81-7	Bis(2-ethylhexyl) phthalate	ND		200	69
85-68-7	Butyl benzyl phthalate	ND		200	33
105-60-2	Caprolactam	ND		200	61
86-74-8	Carbazole	ND		200	24
218-01-9	Chrysene	ND		200	45
53-70-3	Dibenz(a,h)anthracene	ND		200	36
84-74-2	Di-n-butyl phthalate	ND		200	34
117-84-0	Di-n-octyl phthalate	ND		200	24
132-64-9	Dibenzofuran	ND		200	24
84-66-2	Diethyl phthalate	ND		200	26
131-11-3	Dimethyl phthalate	ND		200	24
206-44-0	Fluoranthene	ND		200	21
86-73-7	Fluorene	ND		200	24
118-74-1	Hexachlorobenzene	ND		200	27
87-68-3	Hexachlorobutadiene	ND		200	30
77-47-4	Hexachlorocyclopentadiene	ND		200	27
67-72-1	Hexachloroethane	ND		200	26
193-39-5	Indeno[1,2,3-cd]pyrene	ND		200	25
78-59-1	Isophorone	ND		200	43
621-64-7	N-Nitrosodi-n-propylamine	ND		200	34
86-30-6	N-Nitrosodiphenylamine	ND		200	160
91-20-3	Naphthalene	ND		200	26
98-95-3	Nitrobenzene	ND		200	23
87-86-5	Pentachlorophenol	ND		390	200
85-01-8	Phenanthrene	ND		200	30
108-95-2	Phenol	ND		200	31
129-00-0	Pyrene	ND		200	24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Client Sample ID: SB-6 (0-5')

Lab Sample ID: 480-147693-14

Matrix: Solid

Lab File ID: U3314745.D

Analysis Method: 8270D

Date Collected: 01/09/2019 12:20

Extract. Method: 3550C

Date Extracted: 01/10/2019 14:39

Sample wt/vol: 30.08(g)

Date Analyzed: 01/14/2019 23:48

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 1(uL)

Level: (low/med) Low

% Moisture: 20.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 454961

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		2100	310
108-60-1	bis (2-chloroisopropyl) ether	ND	WJ	2100	430
95-95-4	2,4,5-Trichlorophenol	ND		2100	580
88-06-2	2,4,6-Trichlorophenol	ND		2100	430
120-83-2	2,4-Dichlorophenol	ND		2100	230
105-67-9	2,4-Dimethylphenol	ND		2100	510
51-28-5	2,4-Dinitrophenol	ND		21000	9800
121-14-2	2,4-Dinitrotoluene	ND		2100	440
606-20-2	2,6-Dinitrotoluene	ND		2100	250
91-58-7	2-Chloronaphthalene	ND		2100	350
95-57-8	2-Chlorophenol	ND		2100	390
95-48-7	2-Methylphenol	ND		2100	250
91-57-6	2-Methylnaphthalene	ND		2100	430
88-74-4	2-Nitroaniline	ND		4100	310
88-75-5	2-Nitrophenol	ND		2100	600
91-94-1	3,3'-Dichlorobenzidine	ND		4100	2500
99-09-2	3-Nitroaniline	ND		4100	590
534-52-1	4,6-Dinitro-2-methylphenol	ND		4100	2100
101-55-3	4-Bromophenyl phenyl ether	ND		2100	300
59-50-7	4-Chloro-3-methylphenol	ND		2100	530
106-47-8	4-Chloroaniline	ND		2100	530
7005-72-3	4-Chlorophenyl phenyl ether	ND		2100	260
106-44-5	4-Methylphenol	ND		4100	250
100-01-6	4-Nitroaniline	ND		4100	1100
100-02-7	4-Nitrophenol	ND		4100	1500
83-32-9	Acenaphthene	370	J	2100	310
208-96-8	Acenaphthylene	520	J	2100	280
98-86-2	Acetophenone	ND		2100	290
120-12-7	Anthracene	1400	J	2100	530
1912-24-9	Atrazine	ND		2100	740
100-52-7	Benzaldehyde	ND		2100	1700
56-55-3	Benzo[a]anthracene	4200		2100	210
50-32-8	Benzo[a]pyrene	3500		2100	310
205-99-2	Benzo[b]fluoranthene	4100		2100	340

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Client Sample ID: SB-6 (0-5')

Lab Sample ID: 480-147693-14

Matrix: Solid

Lab File ID: U3314745.D

Analysis Method: 8270D

Date Collected: 01/09/2019 12:20

Extract. Method: 3550C

Date Extracted: 01/10/2019 14:39

Sample wt/vol: 30.08(g)

Date Analyzed: 01/14/2019 23:48

Con. Extract Vol.: 1(mL)

Dilution Factor: 10

Injection Volume: 1(uL)

Level: (low/med) Low

% Moisture: 20.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 454961

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	1600	J	2100	230
207-08-9	Benzo[k]fluoranthene	2100		2100	280
111-91-1	Bis(2-chloroethoxy)methane	ND		2100	450
111-44-4	Bis(2-chloroethyl)ether	ND		2100	280
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2100	730
85-68-7	Butyl benzyl phthalate	ND		2100	350
105-60-2	Caprolactam	ND		2100	640
86-74-8	Carbazole	470	J	2100	250
218-01-9	Chrysene	3500		2100	480
53-70-3	Dibenz(a,h)anthracene	ND		2100	380
84-74-2	Di-n-butyl phthalate	ND		2100	360
117-84-0	Di-n-octyl phthalate	ND		2100	250
132-64-9	Dibenzofuran	320	J	2100	250
84-66-2	Diethyl phthalate	ND		2100	280
131-11-3	Dimethyl phthalate	ND		2100	250
206-44-0	Fluoranthene	8700		2100	230
86-73-7	Fluorene	470	J	2100	250
118-74-1	Hexachlorobenzene	ND		2100	290
87-68-3	Hexachlorobutadiene	ND		2100	310
77-47-4	Hexachlorocyclopentadiene	ND		2100	290
67-72-1	Hexachloroethane	ND		2100	280
193-39-5	Indeno[1,2,3-cd]pyrene	1900	J	2100	260
78-59-1	Isophorone	ND		2100	450
621-64-7	N-Nitrosodi-n-propylamine	ND		2100	360
86-30-6	N-Nitrosodiphenylamine	ND		2100	1700
91-20-3	Naphthalene	410	J	2100	280
98-95-3	Nitrobenzene	ND		2100	240
87-86-5	Pentachlorophenol	ND		4100	2100
85-01-8	Phenanthrene	5500		2100	310
108-95-2	Phenol	ND		2100	330
129-00-0	Pyrene	5900		2100	250

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SB-15 (0-5')

Lab Sample ID: 480-147693-3

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/09/2019 08:40

Reporting Basis: DRY

Date Received: 01/10/2019 01:00

% Solids: 80.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	13400	12.4	5.5	mg/Kg			1	6010C
7440-36-0	Antimony	ND	18.6	0.50	mg/Kg			1	6010C
7440-38-2	Arsenic	4.1	2.5	0.50	mg/Kg			1	6010C
7440-39-3	Barium	48.6	0.62	0.14	mg/Kg			1	6010C
7440-41-7	Beryllium	0.49	0.25	0.035	mg/Kg			1	6010C
7440-43-9	Cadmium	0.17	0.25	0.037	mg/Kg	J		1	6010C
7440-70-2	Calcium	78600	62.1	4.1	mg/Kg		B	1	6010C
7440-47-3	Chromium	15.4	0.62	0.25	mg/Kg			1	6010C
7440-48-4	Cobalt	7.7	0.62	0.062	mg/Kg			1	6010C
7440-50-8	Copper	19.8	1.2	0.26	mg/Kg			1	6010C
7439-89-6	Iron	14400	12.4	4.3	mg/Kg		B	1	6010C
7439-92-1	Lead	7.0	1.2	0.30	mg/Kg			1	6010C
7439-95-4	Magnesium	48900	24.8	1.2	mg/Kg			1	6010C
7439-96-5	Manganese	338	0.25	0.040	mg/Kg		B	1	6010C
7440-02-0	Nickel	16.0	6.2	0.29	mg/Kg			1	6010C
7440-09-7	Potassium	5040	37.3	24.8	mg/Kg		B	1	6010C
7782-49-2	Selenium	ND	5.0	0.50	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.75	0.25	mg/Kg			1	6010C
7440-23-5	Sodium	1744	174	16.1	mg/Kg	J	B	1	6010C
7440-28-0	Thallium	ND	7.5	0.37	mg/Kg			1	6010C
7440-62-2	Vanadium	20.6	0.62	0.14	mg/Kg			1	6010C
7440-66-6	Zinc	22.8	2.5	0.79	mg/Kg			1	6010C
7439-97-6	Mercury	0.042	0.025	0.010	mg/Kg			1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SB-6 (0'-5')

Lab Sample ID: 480-147693-13

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/09/2019 12:00

Reporting Basis: DRY

Date Received: 01/10/2019 01:00

% Solids: 79.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	15300	12.7	5.6	mg/Kg			1	6010C
7440-36-0	Antimony	0.59	19.1	0.51	mg/Kg	J		1	6010C
7440-38-2	Arsenic	6.6	2.5	0.51	mg/Kg			1	6010C
7440-39-3	Barium	60.7	0.64	0.14	mg/Kg			1	6010C
7440-41-7	Beryllium	0.58	0.25	0.036	mg/Kg			1	6010C
7440-43-9	Cadmium	1.1	0.25	0.038	mg/Kg			1	6010C
7440-70-2	Calcium	54300	63.6	4.2	mg/Kg		B	1	6010C
7440-47-3	Chromium	18.4	0.64	0.25	mg/Kg			1	6010C
7440-48-4	Cobalt	8.3	0.64	0.064	mg/Kg			1	6010C
7440-50-8	Copper	28.2	1.3	0.27	mg/Kg			1	6010C
7439-89-6	Iron	18000	12.7	4.5	mg/Kg		B	1	6010C
7439-92-1	Lead	45.1	1.3	0.31	mg/Kg			1	6010C
7439-95-4	Magnesium	25100	25.4	1.2	mg/Kg			1	6010C
7439-96-5	Manganese	556	0.25	0.041	mg/Kg		B	1	6010C
7440-02-0	Nickel	28.7	6.4	0.29	mg/Kg			1	6010C
7440-09-7	Potassium	4310	38.2	25.4	mg/Kg		B	1	6010C
7782-49-2	Selenium	ND	5.1	0.51	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.76	0.25	mg/Kg			1	6010C
7440-23-5	Sodium	178u 174	178	16.5	mg/Kg	J	B	1	6010C
7440-28-0	Thallium	ND	7.6	0.38	mg/Kg			1	6010C
7440-62-2	Vanadium	24.2	0.64	0.14	mg/Kg			1	6010C
7440-66-6	Zinc	70.7	2.5	0.81	mg/Kg			1	6010C
7439-97-6	Mercury	0.13	0.026	0.010	mg/Kg			1	7471B

ANALYTICAL REPORT

Job Number: 480-147755-1

Job Description: Former Sims Matchplate Site

For:

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Attention: Matt Walker



Approved for release.
Judy L. Stone
Senior Project Manager
1/18/2019 9:35 PM

Judy L. Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
01/18/2019

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TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



Job Narrative
480-147755-1

Comments

No additional comments.

Receipt

The samples were received on 1/11/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-455051 and analytical batch 480-455192 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: SB-12 (5'-10') (480-147755-7).

Method(s) 8260C: The following sample was analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-12 (5'-10') (480-147755-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Internal standard (ISTD) and surrogate responses for the following sample were outside control limits: SB-8 (15'-20') (480-147755-4). The sample was re-analyzed with concurring results, and the re-analyzed set have data has been reported.

Method(s) 8260C: Internal standard (ISTD) and surrogate responses for the following sample were outside of acceptance limits: SB-11 (15'-20') (480-147755-6). The sample was not re-analyzed due to insufficient volume. The data from the original analysis was lost due to instrument/computer issues.

Method(s) 8260C: Internal standard (ISTD) response for the following sample were outside of acceptance limits: SB-12 (15'-20') (480-147755-8). The sample was not re-analyzed due to insufficient volume. The data from the original analysis was lost due to instrument/computer issues.

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-455199 and analytical batch 480-455197 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) 8260C: Internal standard (ISTD) and Surrogate (SURRE) response for the following sample was outside control limits: SB-18 (15'-20') (480-147755-16). The sample was re-analyzed with concurring results, and the second set of data has been reported.

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 continuing calibration verification (CCV) associated with batch 480-455117 recovered outside acceptance criteria, low biased, for 2,2'-oxybis[1-chloropropane]. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: SB-8 (0'-5') (480-147755-2) and SB-16 (0'-5') (480-147755-12).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-455117 recovered above the upper control limit for Diethyl phthalate, Atrazine and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: SB-8 (0'-5') (480-147755-2) and SB-16 (0'-5') (480-147755-12).

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

GC Semi VOA

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-455460/16) that had recoveries for the surrogate Tetrachloro-m-xylene that were below acceptance limits: SB-8 (0'-5') (480-147755-2) and SB-16 (0'-5') (480-147755-12). The secondary surrogate Decachlorobiphenyl is within limits. Therefore, the data has been reported.

Method(s) 8082A: All primary data for analytical batch 455460 is reported from the ZB-5 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals

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

Organic Prep

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

Sample Summary

Client: C&S Engineers, Inc.
Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147755-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147755-1	SB-8 (0'-5')	Solid	01/10/19 08:00	01/11/19 01:00
480-147755-2	SB-8 (0'-5')	Solid	01/10/19 08:20	01/11/19 01:00
480-147755-3	SB-8 (10'-15')	Solid	01/10/19 08:40	01/11/19 01:00
480-147755-4	SB-8 (15'-20')	Solid	01/10/19 09:00	01/11/19 01:00
480-147755-5	SB-11 (10'-15')	Solid	01/10/19 09:20	01/11/19 01:00
480-147755-6	SB-11 (15'-20')	Solid	01/10/19 09:40	01/11/19 01:00
480-147755-7	SB-12 (5'-10')	Solid	01/10/19 10:00	01/11/19 01:00
480-147755-8	SB-12 (15'-20')	Solid	01/10/19 10:20	01/11/19 01:00
480-147755-9	SB-13 (10'-15')	Solid	01/10/19 10:40	01/11/19 01:00
480-147755-10	SB-13 (15'-20')	Solid	01/10/19 11:00	01/11/19 01:00
480-147755-11	SB-16 (0'-5')	Solid	01/10/19 11:20	01/11/19 01:00
480-147755-12	SB-16 (0'-5')	Solid	01/10/19 11:40	01/11/19 01:00
480-147755-13	SB-16 (10'-15')	Solid	01/10/19 12:00	01/11/19 01:00
480-147755-14	SB-16 (15'-20')	Solid	01/10/19 12:20	01/11/19 01:00
480-147755-15	SB-18 (10'-15')	Solid	01/10/19 12:40	01/11/19 01:00
480-147755-16	SB-18 (15'-20')	Solid	01/10/19 13:00	01/11/19 01:00

Phone (716) 691-2600 Fax (716) 691-7991

#225

TestAmerica

THE LEADER IN ENVIRONMENT



480-147755 COC

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FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Client Sample ID: SB-8 (15'-20')

Lab Sample ID: 480-147755-4

Matrix: Solid

Lab File ID: F7921.D

Analysis Method: 8260C

Date Collected: 01/10/2019 09:00

Sample wt/vol: 6.58(g)

Date Analyzed: 01/16/2019 03:14

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 9.2

Level: (low/med) Low

Analysis Batch No.: 455197

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND	UJ	4.2	0.30
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.2	0.68
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.54
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.95
75-34-3	1,1-Dichloroethane	ND		4.2	0.51
75-35-4	1,1-Dichloroethene	ND		4.2	0.51
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.2	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	4.2	2.1
95-50-1	1,2-Dichlorobenzene	ND	*	4.2	0.33
107-06-2	1,2-Dichloroethane	ND		4.2	0.21
78-87-5	1,2-Dichloropropane	ND		4.2	2.1
541-73-1	1,3-Dichlorobenzene	ND	*	4.2	0.22
106-46-7	1,4-Dichlorobenzene	ND	*	4.2	0.59
78-93-3	2-Butanone (MEK)	ND		21	1.5
591-78-6	2-Hexanone	ND		21	2.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		21	1.4
67-64-1	Acetone	9.7	J	21	3.5
71-43-2	Benzene	ND	UJ	4.2	0.21
75-27-4	Bromodichloromethane	ND		4.2	0.56
75-25-2	Bromoform	ND		4.2	2.1
74-83-9	Bromomethane	ND		4.2	0.38
75-15-0	Carbon disulfide	ND		4.2	2.1
56-23-5	Carbon tetrachloride	ND		4.2	0.41
108-90-7	Chlorobenzene	ND		4.2	0.55
124-48-1	Dibromochloromethane	ND		4.2	0.54
75-00-3	Chloroethane	ND		4.2	0.95
67-66-3	Chloroform	0.34	J	4.2	0.26
74-87-3	Chloromethane	ND	UJ	4.2	0.25
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.54
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.60
110-82-7	Cyclohexane	ND		4.2	0.59
75-71-8	Dichlorodifluoromethane	ND		4.2	0.35
100-41-4	Ethylbenzene	ND		4.2	0.29
106-93-4	1,2-Dibromoethane	ND		4.2	0.54
98-82-8	Isopropylbenzene	ND	*	4.2	0.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147755-1
 SDG No.: _____
 Client Sample ID: SB-8 (15'-20') Lab Sample ID: 480-147755-4
 Matrix: Solid Lab File ID: F7921.D
 Analysis Method: 8260C Date Collected: 01/10/2019 09:00
 Sample wt/vol: 6.58(g) Date Analyzed: 01/16/2019 03:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 9.2 Level: (low/med) Low
 Analysis Batch No.: 455197 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND	45	21	2.5
1634-04-4	Methyl tert-butyl ether	ND		4.2	0.41
108-87-2	Methylcyclohexane	ND		4.2	0.64
75-09-2	Methylene Chloride	ND		4.2	1.9
100-42-5	Styrene	ND		4.2	0.21
127-18-4	Tetrachloroethene	ND		4.2	0.56
108-88-3	Toluene	ND		4.2	0.32
156-60-5	trans-1,2-Dichloroethene	ND		4.2	0.43
10061-02-6	trans-1,3-Dichloropropene	ND		4.2	1.8
79-01-6	Trichloroethene	ND		4.2	0.92
75-69-4	Trichlorofluoromethane	ND		4.2	0.40
75-01-4	Vinyl chloride	ND		4.2	0.51
1330-20-7	Xylenes, Total	ND		8.4	0.70

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	126	X	71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		64-126
460-00-4	4-Bromofluorobenzene (Surr)	63	X	72-126
1868-53-7	Dibromofluoromethane (Surr)	105		60-140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Client Sample ID: SB-11 (15'-20')

Lab Sample ID: 480-147755-6

Matrix: Solid

Lab File ID: F7922.D

Analysis Method: 8260C

Date Collected: 01/10/2019 09:40

Sample wt/vol: 6.58(g)

Date Analyzed: 01/16/2019 03:40

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 10.3

Level: (low/med) Low

Analysis Batch No.: 455197

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND	US	4.2	0.31
79-34-5	1,1,2,2-Tetrachloroethane	ND	*	4.2	0.69
79-00-5	1,1,2-Trichloroethane	ND		4.2	0.55
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.97
75-34-3	1,1-Dichloroethane	ND		4.2	0.52
75-35-4	1,1-Dichloroethene	ND		4.2	0.52
120-82-1	1,2,4-Trichlorobenzene	ND	*	4.2	0.26
96-12-8	1,2-Dibromo-3-Chloropropane	ND	*	4.2	2.1
95-50-1	1,2-Dichlorobenzene	ND	*	4.2	0.33
107-06-2	1,2-Dichloroethane	ND		4.2	0.21
78-87-5	1,2-Dichloropropane	ND		4.2	2.1
541-73-1	1,3-Dichlorobenzene	ND	*	4.2	0.22
106-46-7	1,4-Dichlorobenzene	ND	*	4.2	0.59
78-93-3	2-Butanone (MEK)	ND		21	1.6
591-78-6	2-Hexanone	ND		21	2.1
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		21	1.4
67-64-1	Acetone	4.9	J	21	3.6
71-43-2	Benzene	0.30	J	4.2	0.21
75-27-4	Bromodichloromethane	ND	US	4.2	0.57
75-25-2	Bromoform	ND		4.2	2.1
74-83-9	Bromomethane	ND		4.2	0.38
75-15-0	Carbon disulfide	ND		4.2	2.1
56-23-5	Carbon tetrachloride	ND		4.2	0.41
108-90-7	Chlorobenzene	ND		4.2	0.56
124-48-1	Dibromochloromethane	ND		4.2	0.54
75-00-3	Chloroethane	ND		4.2	0.96
67-66-3	Chloroform	0.27	J	4.2	0.26
74-87-3	Chloromethane	ND	US	4.2	0.26
156-59-2	cis-1,2-Dichloroethene	ND		4.2	0.54
10061-01-5	cis-1,3-Dichloropropene	ND		4.2	0.61
110-82-7	Cyclohexane	ND		4.2	0.59
75-71-8	Dichlorodifluoromethane	ND		4.2	0.35
100-41-4	Ethylbenzene	ND		4.2	0.29
106-93-4	1,2-Dibromoethane	ND		4.2	0.54
98-82-8	Isopropylbenzene	ND	*	4.2	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Client Sample ID: SB-11 (15'-20')

Lab Sample ID: 480-147755-6

Matrix: Solid

Lab File ID: F7922.D

Analysis Method: 8260C

Date Collected: 01/10/2019 09:40

Sample wt/vol: 6.58(g)

Date Analyzed: 01/16/2019 03:40

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 10.3

Level: (low/med) Low

Analysis Batch No.: 455197

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND	ND	21	2.6
1634-04-4	Methyl tert-butyl ether	ND	ND	4.2	0.42
108-87-2	Methylcyclohexane	ND	ND	4.2	0.64
75-09-2	Methylene Chloride	ND	ND	4.2	1.9
100-42-5	Styrene	ND	ND	4.2	0.21
127-18-4	Tetrachloroethene	ND	ND	4.2	0.57
108-88-3	Toluene	0.95	J	4.2	0.32
156-60-5	trans-1,2-Dichloroethene	ND	uJ	4.2	0.44
10061-02-6	trans-1,3-Dichloropropene	ND	ND	4.2	1.9
79-01-6	Trichloroethene	ND	ND	4.2	0.93
75-69-4	Trichlorofluoromethane	ND	ND	4.2	0.40
75-01-4	Vinyl chloride	ND	ND	4.2	0.52
1330-20-7	Xylenes, Total	ND	ND	8.5	0.71

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	127	X	71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		64-126
460-00-4	4-Bromofluorobenzene (Surr)	62	X	72-126
1868-53-7	Dibromofluoromethane (Surr)	106		60-140

mm 4/20/19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Client Sample ID: SB-12 (15'-20')

Lab Sample ID: 480-147755-8

Matrix: Solid

Lab File ID: F7923.D

Analysis Method: 8260C

Date Collected: 01/10/2019 10:20

Sample wt/vol: 6.74(g)

Date Analyzed: 01/16/2019 04:06

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 8.4

Level: (low/med) Low

Analysis Batch No.: 455197

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.43	J F1	4.1	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND	* F1	4.1	0.66
79-00-5	1,1,2-Trichloroethane	ND	F1	4.1	0.53
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.1	0.92
75-34-3	1,1-Dichloroethane	ND		4.1	0.49
75-35-4	1,1-Dichloroethene	ND		4.1	0.50
120-82-1	1,2,4-Trichlorobenzene	ND	* F1	4.1	0.25
96-12-8	1,2-Dibromo-3-Chloropropane	ND	* F1	4.1	2.0
95-50-1	1,2-Dichlorobenzene	ND	* F1	4.1	0.32
107-06-2	1,2-Dichloroethane	ND	F1	4.1	0.20
78-87-5	1,2-Dichloropropane	ND	F1	4.1	2.0
541-73-1	1,3-Dichlorobenzene	ND	* F1	4.1	0.21
106-46-7	1,4-Dichlorobenzene	ND	* F1	4.1	0.57
78-93-3	2-Butanone (MEK)	ND	F1	20	1.5
591-78-6	2-Hexanone	ND	F1	20	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	F1	20	1.3
67-64-1	Acetone	13	J	20	3.4
71-43-2	Benzene	ND	F1	4.1	0.20
75-27-4	Bromodichloromethane	ND	F1	4.1	0.54
75-25-2	Bromoform	ND	F1	4.1	2.0
74-83-9	Bromomethane	ND		4.1	0.36
75-15-0	Carbon disulfide	ND		4.1	2.0
56-23-5	Carbon tetrachloride	ND	F1	4.1	0.39
108-90-7	Chlorobenzene	ND	F1	4.1	0.53
124-48-1	Dibromochloromethane	ND	F1	4.1	0.52
75-00-3	Chloroethane	ND		4.1	0.92
67-66-3	Chloroform	0.25	J F1	4.1	0.25
74-87-3	Chloromethane	ND		4.1	0.24
156-59-2	cis-1,2-Dichloroethene	2.6	J F1	4.1	0.52
10061-01-5	cis-1,3-Dichloropropene	ND	F1	4.1	0.58
110-82-7	Cyclohexane	ND	F1	4.1	0.57
75-71-8	Dichlorodifluoromethane	ND		4.1	0.33
100-41-4	Ethylbenzene	ND	F1	4.1	0.28
106-93-4	1,2-Dibromoethane	ND	F1	4.1	0.52
98-82-8	Isopropylbenzene	ND	* F1	4.1	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147755-1
 SDG No.: _____
 Client Sample ID: SB-12 (15'-20') Lab Sample ID: 480-147755-8
 Matrix: Solid Lab File ID: F7923.D
 Analysis Method: 8260C Date Collected: 01/10/2019 10:20
 Sample wt/vol: 6.74(g) Date Analyzed: 01/16/2019 04:06
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 8.4 Level: (low/med) Low
 Analysis Batch No.: 455197 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		20	2.4
1634-04-4	Methyl tert-butyl ether	ND		4.1	0.40
108-87-2	Methylcyclohexane	ND	F1	4.1	0.62
75-09-2	Methylene Chloride	ND		4.1	1.9
100-42-5	Styrene	ND	F1	4.1	0.20
127-18-4	Tetrachloroethene	ND	F1	4.1	0.54
108-88-3	Toluene	ND	F1	4.1	0.31
156-60-5	trans-1,2-Dichloroethene	ND	F1	4.1	0.42
10061-02-6	trans-1,3-Dichloropropene	ND	F1	4.1	1.8
79-01-6	Trichloroethene	110	F1	4.1	0.89
75-69-4	Trichlorofluoromethane	ND		4.1	0.38
75-01-4	Vinyl chloride	ND		4.1	0.49
1330-20-7	Xylenes, Total	ND	F1	8.1	0.68

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	110		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		64-126
460-00-4	4-Bromofluorobenzene (Surr)	73		72-126
1868-53-7	Dibromofluoromethane (Surr)	103		60-140

MP. 4/29/19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Client Sample ID: SB-18 (15'-20')

Lab Sample ID: 480-147755-16

Matrix: Solid

Lab File ID: F7941.D

Analysis Method: 8260C

Date Collected: 01/10/2019 13:00

Sample wt/vol: 6.63(g)

Date Analyzed: 01/16/2019 11:53

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 16.8

Level: (low/med) Low

Analysis Batch No.: 455237

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND	4.5	0.33	
79-34-5	1,1,2,2-Tetrachloroethane	ND *	4.5	0.74	
79-00-5	1,1,2-Trichloroethane	ND *	4.5	0.59	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	4.5	1.0	
75-34-3	1,1-Dichloroethane	ND	4.5	0.55	
75-35-4	1,1-Dichloroethene	ND	4.5	0.55	
120-82-1	1,2,4-Trichlorobenzene	ND *	4.5	0.28	
96-12-8	1,2-Dibromo-3-Chloropropane	ND *	4.5	2.3	
95-50-1	1,2-Dichlorobenzene	ND *	4.5	0.35	
107-06-2	1,2-Dichloroethane	ND	4.5	0.23	
78-87-5	1,2-Dichloropropane	ND	4.5	2.3	
541-73-1	1,3-Dichlorobenzene	ND *	4.5	0.23	
106-46-7	1,4-Dichlorobenzene	ND *	4.5	0.63	
78-93-3	2-Butanone (MEK)	ND	23	1.7	
591-78-6	2-Hexanone	ND *	23	2.3	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND *	23	1.5	
67-64-1	Acetone	45	23	3.8	
71-43-2	Benzene	ND	4.5	0.22	
75-27-4	Bromodichloromethane	ND	4.5	0.61	
75-25-2	Bromoform	ND *	4.5	2.3	
74-83-9	Bromomethane	ND	4.5	0.41	
75-15-0	Carbon disulfide	ND	4.5	2.3	
56-23-5	Carbon tetrachloride	ND	4.5	0.44	
108-90-7	Chlorobenzene	ND *	4.5	0.60	
124-48-1	Dibromochloromethane	ND *	4.5	0.58	
75-00-3	Chloroethane	ND	4.5	1.0	
67-66-3	Chloroform	ND	4.5	0.28	
74-87-3	Chloromethane	ND	4.5	0.27	
156-59-2	cis-1,2-Dichloroethene	ND	4.5	0.58	
10061-01-5	cis-1,3-Dichloropropene	ND	4.5	0.65	
110-82-7	Cyclohexane	ND	4.5	0.63	
75-71-8	Dichlorodifluoromethane	ND	4.5	0.37	
100-41-4	Ethylbenzene	ND *	4.5	0.31	
106-93-4	1,2-Dibromoethane	ND *	4.5	0.58	
98-82-8	Isopropylbenzene	ND *	4.5	0.68	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147755-1
 SDG No.: _____
 Client Sample ID: SB-18 (15'-20') Lab Sample ID: 480-147755-16
 Matrix: Solid Lab File ID: F7941.D
 Analysis Method: 8260C Date Collected: 01/10/2019 13:00
 Sample wt/vol: 6.63(g) Date Analyzed: 01/16/2019 11:53
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 16.8 Level: (low/med) Low
 Analysis Batch No.: 455237 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND	45	23	2.7
1634-04-4	Methyl tert-butyl ether	ND		4.5	0.45
108-87-2	Methylcyclohexane	ND		4.5	0.69
75-09-2	Methylene Chloride	ND		4.5	2.1
100-42-5	Styrene	ND	*	4.5	0.23
127-18-4	Tetrachloroethene	ND	*	4.5	0.61
108-88-3	Toluene	ND	*	4.5	0.34
156-60-5	trans-1,2-Dichloroethene	ND		4.5	0.47
10061-02-6	trans-1,3-Dichloropropene	ND	*	4.5	2.0
79-01-6	Trichloroethene	ND		4.5	1.0
75-69-4	Trichlorofluoromethane	ND		4.5	0.43
75-01-4	Vinyl chloride	ND		4.5	0.55
1330-20-7	Xylenes, Total	ND		9.1	0.76

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	143	* X	71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		64-126
460-00-4	4-Bromofluorobenzene (Surr)	64	* X	72-126
1868-53-7	Dibromofluoromethane (Surr)	109		60-140

ANALYTICAL REPORT

Job Number: 480-147860-1

Job Description: Former Sims Matchplate Site

For:

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Attention: Matt Walker



Approved for release.
Lisa E Shaffer
Senior Project Manager
1/23/2019 3:38 PM

Designee for
Judy L. Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
01/23/2019

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TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



Job Narrative
480-147860-1

Receipt

The samples were received on 1/15/2019 12:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-455521 recovered outside acceptance criteria, low biased, for 2,2'-oxybis[1-chloropropane]. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: SB-29 (0'-5') (480-147860-4) and SB-27 (0'-5') (480-147860-8).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-455521 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: SB-29 (0'-5') (480-147860-4) and SB-27 (0'-5') (480-147860-8).

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

GC Semi VOA

Method(s) 8082A: Surrogate recovery for the following sample was outside control limits: SB-27 (0'-5') (480-147860-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-455591/31) that had recoveries for the surrogate Tetrachloro-m-xylene that were below acceptance limits: SB-29 (0'-5') (480-147860-4) and SB-27 (0'-5') (480-147860-8). The secondary surrogate Decachlorobiphenyl is within limits. Therefore, the data have been reported.

Method(s) 8082A: All primary data for analytical batch 455591 are reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals

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

Organic Prep

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

Sample Summary

Client: C&S Engineers, Inc.

Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-147860-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147860-1	SB-29 (0'-5')	Solid	01/14/19 09:00	01/15/19 12:00
480-147860-2	SB-29 (10'-15')	Solid	01/14/19 09:15	01/15/19 12:00
480-147860-3	SB-29 (15'-20')	Solid	01/14/19 09:15	01/15/19 12:00
480-147860-4	SB-29 (0'-5')	Solid	01/14/19 09:00	01/15/19 12:00
480-147860-5	SB-28 (10'-15')	Solid	01/14/19 09:30	01/15/19 12:00
480-147860-6	SB-28 (15'-20')	Solid	01/14/19 09:30	01/15/19 12:00
480-147860-7	SB-27 (0'-5')	Solid	01/14/19 12:30	01/15/19 12:00
480-147860-8	SB-27 (0'-5')	Solid	01/14/19 12:30	01/15/19 12:00
480-147860-9	SB-27 (10'-15')	Solid	01/14/19 12:45	01/15/19 12:00
480-147860-10	SB-27 (15'-20')	Solid	01/14/19 12:45	01/15/19 12:00
480-147860-11	SB-26 (5'-10')	Solid	01/14/19 14:00	01/15/19 12:00
480-147860-12	SB-26 (10'-15')	Solid	01/14/19 14:00	01/15/19 12:00

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Ver: 08/04/2016

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Client Sample ID: SB-27 (10'-15')

Lab Sample ID: 480-147860-9

Matrix: Solid

Lab File ID: F7953.D

Analysis Method: 8260C

Date Collected: 01/14/2019 12:45

Sample wt/vol: 5.7(g)

Date Analyzed: 01/16/2019 17:03

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 9.5

Level: (low/med) Low

Analysis Batch No.: 455237

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.8	0.35
79-34-5	1,1,2,2-Tetrachloroethane	ND	F1 <u>UJ</u>	4.8	0.79
79-00-5	1,1,2-Trichloroethane	ND		4.8	0.63
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8	1.1
75-34-3	1,1-Dichloroethane	ND		4.8	0.59
75-35-4	1,1-Dichloroethene	ND		4.8	0.59
120-82-1	1,2,4-Trichlorobenzene	ND		4.8	0.29
96-12-8	1,2-Dibromo-3-Chloropropane	ND	F1 <u>UJ</u>	4.8	2.4
95-50-1	1,2-Dichlorobenzene	ND		4.8	0.38
107-06-2	1,2-Dichloroethane	ND		4.8	0.24
78-87-5	1,2-Dichloropropane	ND		4.8	2.4
541-73-1	1,3-Dichlorobenzene	ND		4.8	0.25
106-46-7	1,4-Dichlorobenzene	ND		4.8	0.68
78-93-3	2-Butanone (MEK)	ND	F1 <u>UJ</u>	24	1.8
591-78-6	2-Hexanone	ND		24	2.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		24	1.6
67-64-1	Acetone	6.9	J	24	4.1
71-43-2	Benzene	ND		4.8	0.24
75-27-4	Bromodichloromethane	ND		4.8	0.65
75-25-2	Bromoform	ND		4.8	2.4
74-83-9	Bromomethane	ND		4.8	0.44
75-15-0	Carbon disulfide	ND		4.8	2.4
56-23-5	Carbon tetrachloride	ND		4.8	0.47
108-90-7	Chlorobenzene	ND		4.8	0.64
124-48-1	Dibromochloromethane	ND		4.8	0.62
75-00-3	Chloroethane	ND		4.8	1.1
67-66-3	Chloroform	0.86	J	4.8	0.30
74-87-3	Chloromethane	ND		4.8	0.29
156-59-2	cis-1,2-Dichloroethene	ND		4.8	0.62
10061-01-5	cis-1,3-Dichloropropene	ND		4.8	0.70
110-82-7	Cyclohexane	ND		4.8	0.68
75-71-8	Dichlorodifluoromethane	ND		4.8	0.40
100-41-4	Ethylbenzene	ND		4.8	0.33
106-93-4	1,2-Dibromoethane	ND	F1 <u>UJ</u>	4.8	0.62
98-82-8	Isopropylbenzene	ND		4.8	0.73

mpd 4/29/19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147860-1
 SDG No.: _____
 Client Sample ID: SB-27 (10'-15') Lab Sample ID: 480-147860-9
 Matrix: Solid Lab File ID: F7953.D
 Analysis Method: 8260C Date Collected: 01/14/2019 12:45
 Sample wt/vol: 5.7(g) Date Analyzed: 01/16/2019 17:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 9.5 Level: (low/med) Low
 Analysis Batch No.: 455237 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		24	2.9
1634-04-4	Methyl tert-butyl ether	ND		4.8	0.48
108-87-2	Methylcyclohexane	ND		4.8	0.74
75-09-2	Methylene Chloride	ND		4.8	2.2
100-42-5	Styrene	ND		4.8	0.24
127-18-4	Tetrachloroethene	ND		4.8	0.65
108-88-3	Toluene	ND		4.8	0.37
156-60-5	trans-1,2-Dichloroethene	ND		4.8	0.50
10061-02-6	trans-1,3-Dichloropropene	ND		4.8	2.1
79-01-6	Trichloroethene	ND		4.8	1.1
75-69-4	Trichlorofluoromethane	ND		4.8	0.46
75-01-4	Vinyl chloride	ND		4.8	0.59
1330-20-7	Xylenes, Total	ND		9.7	0.81

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		64-126
460-00-4	4-Bromofluorobenzene (Surr)	98		72-126
1868-53-7	Dibromofluoromethane (Surr)	100		60-140

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SB-27 (0'-5')

Lab Sample ID: 480-147860-7

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/14/2019 12:30

Reporting Basis: DRY

Date Received: 01/15/2019 12:00

% Solids: 86.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	12900	11.2	4.9	mg/Kg		B	1	6010C
7440-36-0	Antimony	16.84 ~~0.01~~	16.8	0.45	mg/Kg	J	B	1	6010C
7440-38-2	Arsenic	3.5	2.2	0.45	mg/Kg			1	6010C
7440-39-3	Barium	27.4	0.56	0.12	mg/Kg			1	6010C
7440-41-7	Beryllium	0.51	0.22	0.031	mg/Kg			1	6010C
7440-43-9	Cadmium	0.13	0.22	0.034	mg/Kg	J		1	6010C
7440-70-2	Calcium	16800	55.9	3.7	mg/Kg		B	1	6010C
7440-47-3	Chromium	15.8	0.56	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	7.1	0.56	0.056	mg/Kg			1	6010C
7440-50-8	Copper	16.3	1.1	0.23	mg/Kg			1	6010C
7439-89-6	Iron	15800	11.2	3.9	mg/Kg			1	6010C
7439-92-1	Lead	7.0	1.1	0.27	mg/Kg			1	6010C
7439-95-4	Magnesium	13900	22.4	1.0	mg/Kg		B	1	6010C
7439-96-5	Manganese	251	0.22	0.036	mg/Kg			1	6010C
7440-02-0	Nickel	21.3	5.6	0.26	mg/Kg		B	1	6010C
7440-09-7	Potassium	3830	33.5	22.4	mg/Kg		B	1	6010C
7782-49-2	Selenium	ND	4.5	0.45	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.67	0.22	mg/Kg			1	6010C
7440-23-5	Sodium	180	157	14.5	mg/Kg		B	1	6010C
7440-28-0	Thallium	ND	6.7	0.34	mg/Kg			1	6010C
7440-62-2	Vanadium	21.0	0.56	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	27.4	2.2	0.72	mg/Kg			1	6010C
7439-97-6	Mercury	0.035	0.023	0.0094	mg/Kg			1	7471B

mxp 4/20/19

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SB-29 (0'-5')

Lab Sample ID: 480-147860-1

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/14/2019 09:00

Reporting Basis: DRY

Date Received: 01/15/2019 12:00

% Solids: 87.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	13500	11.5	5.1	mg/Kg		~~B~~	1	6010C
7440-36-0	Antimony	ND	17.3	0.46	mg/Kg		B	1	6010C
7440-38-2	Arsenic	3.2	2.3	0.46	mg/Kg			1	6010C
7440-39-3	Barium	42.4	0.58	0.13	mg/Kg			1	6010C
7440-41-7	Beryllium	0.51	0.23	0.032	mg/Kg			1	6010C
7440-43-9	Cadmium	0.16	0.23	0.035	mg/Kg	J		1	6010C
7440-70-2	Calcium	81600	57.6	3.8	mg/Kg		B	1	6010C
7440-47-3	Chromium	15.0	0.58	0.23	mg/Kg			1	6010C
7440-48-4	Cobalt	7.2	0.58	0.058	mg/Kg			1	6010C
7440-50-8	Copper	15.6	1.2	0.24	mg/Kg			1	6010C
7439-89-6	Iron	13500	11.5	4.0	mg/Kg			1	6010C
7439-92-1	Lead	6.6	1.2	0.28	mg/Kg			1	6010C
7439-95-4	Magnesium	49500	23.0	1.1	mg/Kg		B	1	6010C
7439-96-5	Manganese	390	0.23	0.037	mg/Kg			1	6010C
7440-02-0	Nickel	16.4	5.8	0.26	mg/Kg		B	1	6010C
7440-09-7	Potassium	4970	34.6	23.0	mg/Kg		B	1	6010C
7782-49-2	Selenium	ND	4.6	0.46	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.69	0.23	mg/Kg			1	6010C
7440-23-5	Sodium	214	161	15.0	mg/Kg		B	1	6010C
7440-28-0	Thallium	ND	6.9	0.35	mg/Kg			1	6010C
7440-62-2	Vanadium	21.0	0.58	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	23.6	2.3	0.74	mg/Kg			1	6010C
7439-97-6	Mercury	0.046	0.021	0.0086	mg/Kg			1	7471B

ANALYTICAL REPORT

Job Number: 480-147921-1

Job Description: Former Sims Matchplate Site

For:

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Attention: Matt Walker



Approved for release.
Judy L. Stone
Senior Project Manager
1/24/2019 1:58 PM

Judy L. Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
01/24/2019

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TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



Job Narrative
480-147921-1

Receipt

The samples were received on 1/16/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7° C.

GC/MS VOA

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

GC/MS Semi VOA

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

GC Semi VOA

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-455591/31) that had recoveries for the surrogate Tetrachloro-m-xylene below acceptance limits: SB - 32 (0' - 5') (480-147921-2) and SB - 21 (0' - 5') (480-147921-8). The secondary surrogate Decachlorobiphenyl is within limits. Therefore, the data have been reported.

Method(s) 8082A: All primary data for analytical batch 455591 are reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals

Method(s) 6010C: The method blank for preparation batch 480-455541 and analytical batch 480-455926 contained Total Potassium above the reporting limit (RL). Associated samples SB - 32 (0' - 5') (480-147921-1) and SB - 21 (0' - 5') (480-147921-7) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 6010C: The following sample was diluted due to the presence of Calcium which interferes with Total Copper: SB - 32 (0' - 5') (480-147921-1). 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.

Organic Prep

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

Sample Summary

Client: C&S Engineers, Inc.

TestAmerica Job ID: 480-147921-1

Project/Site: Former Sims Matchplate Site

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-147921-1	SB - 32 (0' - 5')	Solid	01/15/19 08:45	01/16/19 01:00
480-147921-2	SB - 32 (0' - 5')	Solid	01/15/19 08:45	01/16/19 01:00
480-147921-3	SB - 32 (10' - 15')	Solid	01/15/19 09:15	01/16/19 01:00
480-147921-4	SB - 32 (15' - 20')	Solid	01/15/19 09:15	01/16/19 01:00
480-147921-5	SB - 31 (10' - 15')	Solid	01/15/19 10:30	01/16/19 01:00
480-147921-6	SB - 31 (15' - 20')	Solid	01/15/19 10:30	01/16/19 01:00
480-147921-7	SB - 21 (0' - 5')	Solid	01/15/19 12:00	01/16/19 01:00
480-147921-8	SB - 21 (0' - 5')	Solid	01/15/19 12:00	01/16/19 01:00
480-147921-9	SB - 21 (10' - 15')	Solid	01/15/19 12:00	01/16/19 01:00
480-147921-10	SB - 21 (15' - 20')	Solid	01/15/19 12:00	01/16/19 01:00

TestAmerica

Chain of custody records

Company	Analysis Requested	Notes
CBS Engineers, Inc.		

[illegible]

Possible Hazard Identification	☐ Not Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radioactive
Disposal Method Requested: I, II, III, IV, Other (specify)	☐ Return To Donor ☐ Disposal By Lab ☐ Archiving For _____ Months
Special Instructions/CC Requirements:	

Yes: 06/04/2016

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Client Sample ID: SB - 32 (10' -15')

Lab Sample ID: 480-147921-3

Matrix: Solid

Lab File ID: F7969.D

Analysis Method: 8260C

Date Collected: 01/15/2019 09:15

Sample wt/vol: 5.88(g)

Date Analyzed: 01/17/2019 00:48

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 13.1

Level: (low/med) Low

Analysis Batch No.: 455386

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.9	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.9	0.79
79-00-5	1,1,2-Trichloroethane	ND		4.9	0.64
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1
75-34-3	1,1-Dichloroethane	ND		4.9	0.60
75-35-4	1,1-Dichloroethene	ND		4.9	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.9	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.9	2.4
95-50-1	1,2-Dichlorobenzene	ND		4.9	0.38
107-06-2	1,2-Dichloroethane	ND		4.9	0.25
78-87-5	1,2-Dichloropropane	ND		4.9	2.4
541-73-1	1,3-Dichlorobenzene	ND		4.9	0.25
106-46-7	1,4-Dichlorobenzene	ND		4.9	0.69
78-93-3	2-Butanone (MEK)	ND		24	1.8
591-78-6	2-Hexanone	ND		24	2.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		24	1.6
67-64-1	Acetone	87		24	4.1
71-43-2	Benzene	ND		4.9	0.24
75-27-4	Bromodichloromethane	ND		4.9	0.66
75-25-2	Bromoform	ND		4.9	2.4
74-83-9	Bromomethane	ND		4.9	0.44
75-15-0	Carbon disulfide	ND		4.9	2.4
56-23-5	Carbon tetrachloride	ND		4.9	0.47
108-90-7	Chlorobenzene	ND		4.9	0.65
124-48-1	Dibromochloromethane	ND		4.9	0.63
75-00-3	Chloroethane	ND		4.9	1.1
67-66-3	Chloroform	4.94 0.42 J B		4.9	0.30
74-87-3	Chloromethane	ND		4.9	0.30
156-59-2	cis-1,2-Dichloroethene	ND		4.9	0.63
10061-01-5	cis-1,3-Dichloropropene	ND		4.9	0.70
110-82-7	Cyclohexane	ND		4.9	0.69
75-71-8	Dichlorodifluoromethane	ND		4.9	0.40
100-41-4	Ethylbenzene	ND		4.9	0.34
106-93-4	1,2-Dibromoethane	ND		4.9	0.63
98-82-8	Isopropylbenzene	ND		4.9	0.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147921-1
 SDG No.: _____
 Client Sample ID: SB - 32 (10' -15') Lab Sample ID: 480-147921-3
 Matrix: Solid Lab File ID: F7969.D
 Analysis Method: 8260C Date Collected: 01/15/2019 09:15
 Sample wt/vol: 5.88(g) Date Analyzed: 01/17/2019 00:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25 (mm)
 % Moisture: 13.1 Level: (low/med) Low
 Analysis Batch No.: 455386 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		24	3.0
1634-04-4	Methyl tert-butyl ether	ND		4.9	0.48
108-87-2	Methylcyclohexane	ND		4.9	0.74
75-09-2	Methylene Chloride	ND		4.9	2.3
100-42-5	Styrene	ND		4.9	0.24
127-18-4	Tetrachloroethene	ND		4.9	0.66
108-88-3	Toluene	ND		4.9	0.37
156-60-5	trans-1,2-Dichloroethene	ND		4.9	0.51
10061-02-6	trans-1,3-Dichloropropene	ND		4.9	2.2
79-01-6	Trichloroethene	ND		4.9	1.1
75-69-4	Trichlorofluoromethane	ND		4.9	0.46
75-01-4	Vinyl chloride	ND		4.9	0.60
1330-20-7	Xylenes, Total	ND		9.8	0.82

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		64-126
460-00-4	4-Bromofluorobenzene (Surr)	96		72-126
1868-53-7	Dibromofluoromethane (Surr)	102		60-140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Client Sample ID: SB - 32 (15' - 20')

Lab Sample ID: 480-147921-4

Matrix: Solid

Lab File ID: F7970.D

Analysis Method: 8260C

Date Collected: 01/15/2019 09:15

Sample wt/vol: 5.49(g)

Date Analyzed: 01/17/2019 01:14

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25 (mm)

% Moisture: 11.8

Level: (low/med) Low

Analysis Batch No.: 455386

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.75	J	5.2	0.37
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.2	0.84
79-00-5	1,1,2-Trichloroethane	ND		5.2	0.67
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2
75-34-3	1,1-Dichloroethane	ND		5.2	0.63
75-35-4	1,1-Dichloroethene	ND		5.2	0.63
120-82-1	1,2,4-Trichlorobenzene	ND		5.2	0.31
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.2	2.6
95-50-1	1,2-Dichlorobenzene	ND		5.2	0.40
107-06-2	1,2-Dichloroethane	ND		5.2	0.26
78-87-5	1,2-Dichloropropane	ND		5.2	2.6
541-73-1	1,3-Dichlorobenzene	ND		5.2	0.27
106-46-7	1,4-Dichlorobenzene	ND		5.2	0.72
78-93-3	2-Butanone (MEK)	ND		26	1.9
591-78-6	2-Hexanone	ND		26	2.6
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		26	1.7
67-64-1	Acetone	4.3	J	26	4.3
71-43-2	Benzene	ND		5.2	0.25
75-27-4	Bromodichloromethane	ND		5.2	0.69
75-25-2	Bromoform	ND		5.2	2.6
74-83-9	Bromomethane	ND		5.2	0.46
75-15-0	Carbon disulfide	ND		5.2	2.6
56-23-5	Carbon tetrachloride	ND		5.2	0.50
108-90-7	Chlorobenzene	ND		5.2	0.68
124-48-1	Dibromochloromethane	ND		5.2	0.66
75-00-3	Chloroethane	ND		5.2	1.2
67-66-3	Chloroform	5.24	~~2.5~~ JB	5.2	0.32
74-87-3	Chloromethane	ND		5.2	0.31
156-59-2	cis-1,2-Dichloroethene	ND		5.2	0.66
10061-01-5	cis-1,3-Dichloropropene	ND		5.2	0.74
110-82-7	Cyclohexane	ND		5.2	0.72
75-71-8	Dichlorodifluoromethane	ND		5.2	0.43
100-41-4	Ethylbenzene	ND		5.2	0.36
106-93-4	1,2-Dibromoethane	ND		5.2	0.66
98-82-8	Isopropylbenzene	ND		5.2	0.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147921-1
 SDG No.: _____
 Client Sample ID: SB - 32 (15' - 20') Lab Sample ID: 480-147921-4
 Matrix: Solid Lab File ID: F7970.D
 Analysis Method: 8260C Date Collected: 01/15/2019 09:15
 Sample wt/vol: 5.49(g) Date Analyzed: 01/17/2019 01:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25 (mm)
 % Moisture: 11.8 Level: (low/med) Low
 Analysis Batch No.: 455386 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		26	3.1
1634-04-4	Methyl tert-butyl ether	ND		5.2	0.51
108-87-2	Methylcyclohexane	ND		5.2	0.79
75-09-2	Methylene Chloride	ND		5.2	2.4
100-42-5	Styrene	ND		5.2	0.26
127-18-4	Tetrachloroethene	ND		5.2	0.69
108-88-3	Toluene	ND		5.2	0.39
156-60-5	trans-1,2-Dichloroethene	ND		5.2	0.53
10061-02-6	trans-1,3-Dichloropropene	ND		5.2	2.3
79-01-6	Trichloroethene	ND		5.2	1.1
75-69-4	Trichlorofluoromethane	ND		5.2	0.49
75-01-4	Vinyl chloride	ND		5.2	0.63
1330-20-7	Xylenes, Total	ND		10	0.87

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		64-126
460-00-4	4-Bromofluorobenzene (Surr)	97		72-126
1868-53-7	Dibromofluoromethane (Surr)	102		60-140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Client Sample ID: SB - 31 (10' - 15')

Lab Sample ID: 480-147921-5

Matrix: Solid

Lab File ID: F7971.D

Analysis Method: 8260C

Date Collected: 01/15/2019 10:30

Sample wt/vol: 6.46(g)

Date Analyzed: 01/17/2019 01:40

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 10.9

Level: (low/med) Low

Analysis Batch No.: 455386

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.3	0.32
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.3	0.70
79-00-5	1,1,2-Trichloroethane	ND		4.3	0.56
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	0.99
75-34-3	1,1-Dichloroethane	ND		4.3	0.53
75-35-4	1,1-Dichloroethene	ND		4.3	0.53
120-82-1	1,2,4-Trichlorobenzene	ND		4.3	0.26
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.3	2.2
95-50-1	1,2-Dichlorobenzene	ND		4.3	0.34
107-06-2	1,2-Dichloroethane	ND		4.3	0.22
78-87-5	1,2-Dichloropropane	ND		4.3	2.2
541-73-1	1,3-Dichlorobenzene	ND		4.3	0.22
106-46-7	1,4-Dichlorobenzene	ND		4.3	0.61
78-93-3	2-Butanone (MEK)	ND		22	1.6
591-78-6	2-Hexanone	ND		22	2.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		22	1.4
67-64-1	Acetone	39		22	3.7
71-43-2	Benzene	ND		4.3	0.21
75-27-4	Bromodichloromethane	ND		4.3	0.58
75-25-2	Bromoform	ND		4.3	2.2
74-83-9	Bromomethane	ND		4.3	0.39
75-15-0	Carbon disulfide	ND		4.3	2.2
56-23-5	Carbon tetrachloride	ND		4.3	0.42
108-90-7	Chlorobenzene	ND		4.3	0.57
124-48-1	Dibromochloromethane	ND		4.3	0.56
75-00-3	Chloroethane	ND		4.3	0.98
67-66-3	Chloroform	4.34	~~20.44~~ J-B	4.3	0.27
74-87-3	Chloromethane	ND		4.3	0.26
156-59-2	cis-1,2-Dichloroethene	ND		4.3	0.56
10061-01-5	cis-1,3-Dichloropropene	ND		4.3	0.63
110-82-7	Cyclohexane	ND		4.3	0.61
75-71-8	Dichlorodifluoromethane	ND		4.3	0.36
100-41-4	Ethylbenzene	ND		4.3	0.30
106-93-4	1,2-Dibromoethane	ND		4.3	0.56
98-82-8	Isopropylbenzene	ND		4.3	0.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147921-1
 SDG No.: _____
 Client Sample ID: SB - 31 (10' - 15') Lab Sample ID: 480-147921-5
 Matrix: Solid Lab File ID: F7971.D
 Analysis Method: 8260C Date Collected: 01/15/2019 10:30
 Sample wt/vol: 6.46(g) Date Analyzed: 01/17/2019 01:40
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 10.9 Level: (low/med) Low
 Analysis Batch No.: 455386 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		22	2.6
1634-04-4	Methyl tert-butyl ether	ND		4.3	0.43
108-87-2	Methylcyclohexane	ND		4.3	0.66
75-09-2	Methylene Chloride	ND		4.3	2.0
100-42-5	Styrene	ND		4.3	0.22
127-18-4	Tetrachloroethene	ND		4.3	0.58
108-88-3	Toluene	ND		4.3	0.33
156-60-5	trans-1,2-Dichloroethene	ND		4.3	0.45
10061-02-6	trans-1,3-Dichloropropene	ND		4.3	1.9
79-01-6	Trichloroethene	ND		4.3	0.96
75-69-4	Trichlorofluoromethane	ND		4.3	0.41
75-01-4	Vinyl chloride	ND		4.3	0.53
1330-20-7	Xylenes, Total	ND		8.7	0.73

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		64-126
460-00-4	4-Bromofluorobenzene (Surr)	97		72-126
1868-53-7	Dibromofluoromethane (Surr)	101		60-140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Client Sample ID: SB - 31 (15' - 20')

Lab Sample ID: 480-147921-6

Matrix: Solid

Lab File ID: F7972.D

Analysis Method: 8260C

Date Collected: 01/15/2019 10:30

Sample wt/vol: 6.34(g)

Date Analyzed: 01/17/2019 02:05

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 19.3

Level: (low/med) Low

Analysis Batch No.: 455386

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.9	0.35
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.9	0.79
79-00-5	1,1,2-Trichloroethane	ND		4.9	0.64
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1
75-34-3	1,1-Dichloroethane	ND		4.9	0.60
75-35-4	1,1-Dichloroethene	ND		4.9	0.60
120-82-1	1,2,4-Trichlorobenzene	ND		4.9	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.9	2.4
95-50-1	1,2-Dichlorobenzene	ND		4.9	0.38
107-06-2	1,2-Dichloroethane	ND		4.9	0.25
78-87-5	1,2-Dichloropropane	ND		4.9	2.4
541-73-1	1,3-Dichlorobenzene	ND		4.9	0.25
106-46-7	1,4-Dichlorobenzene	ND		4.9	0.68
78-93-3	2-Butanone (MEK)	ND		24	1.8
591-78-6	2-Hexanone	ND		24	2.4
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		24	1.6
67-64-1	Acetone	75		24	4.1
71-43-2	Benzene	ND		4.9	0.24
75-27-4	Bromodichloromethane	ND		4.9	0.65
75-25-2	Bromoform	ND		4.9	2.4
74-83-9	Bromomethane	ND		4.9	0.44
75-15-0	Carbon disulfide	ND		4.9	2.4
56-23-5	Carbon tetrachloride	ND		4.9	0.47
108-90-7	Chlorobenzene	ND		4.9	0.65
124-48-1	Dibromochloromethane	ND		4.9	0.63
75-00-3	Chloroethane	ND		4.9	1.1
67-66-3	Chloroform	4.94 ~~0.35~~	J B	4.9	0.30
74-87-3	Chloromethane	ND		4.9	0.30
156-59-2	cis-1,2-Dichloroethene	ND		4.9	0.63
10061-01-5	cis-1,3-Dichloropropene	ND		4.9	0.70
110-82-7	Cyclohexane	ND		4.9	0.68
75-71-8	Dichlorodifluoromethane	ND		4.9	0.40
100-41-4	Ethylbenzene	ND		4.9	0.34
106-93-4	1,2-Dibromoethane	ND		4.9	0.63
98-82-8	Isopropylbenzene	ND		4.9	0.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147921-1
 SDG No.: _____
 Client Sample ID: SB - 31 (15' - 20') Lab Sample ID: 480-147921-6
 Matrix: Solid Lab File ID: F7972.D
 Analysis Method: 8260C Date Collected: 01/15/2019 10:30
 Sample wt/vol: 6.34(g) Date Analyzed: 01/17/2019 02:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 19.3 Level: (low/med) Low
 Analysis Batch No.: 455386 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		24	3.0
1634-04-4	Methyl tert-butyl ether	ND		4.9	0.48
108-87-2	Methylcyclohexane	ND		4.9	0.74
75-09-2	Methylene Chloride	ND		4.9	2.2
100-42-5	Styrene	ND		4.9	0.24
127-18-4	Tetrachloroethene	ND		4.9	0.66
108-88-3	Toluene	ND		4.9	0.37
156-60-5	trans-1,2-Dichloroethene	ND		4.9	0.50
10061-02-6	trans-1,3-Dichloropropene	ND		4.9	2.2
79-01-6	Trichloroethene	ND		4.9	1.1
75-69-4	Trichlorofluoromethane	ND		4.9	0.46
75-01-4	Vinyl chloride	ND		4.9	0.60
1330-20-7	Xylenes, Total	ND		9.8	0.82

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		64-126
460-00-4	4-Bromofluorobenzene (Surr)	98		72-126
1868-53-7	Dibromofluoromethane (Surr)	101		60-140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Client Sample ID: SB - 21 (10' - 15')

Lab Sample ID: 480-147921-9

Matrix: Solid

Lab File ID: F7973.D

Analysis Method: 8260C

Date Collected: 01/15/2019 12:00

Sample wt/vol: 4.71(g)

Date Analyzed: 01/17/2019 02:31

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 9.4

Level: (low/med) Low

Analysis Batch No.: 455386

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.4	J	5.9	0.43
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.9	0.95
79-00-5	1,1,2-Trichloroethane	ND		5.9	0.76
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.3
75-34-3	1,1-Dichloroethane	ND		5.9	0.71
75-35-4	1,1-Dichloroethene	ND		5.9	0.72
120-82-1	1,2,4-Trichlorobenzene	ND		5.9	0.36
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.9	2.9
95-50-1	1,2-Dichlorobenzene	ND		5.9	0.46
107-06-2	1,2-Dichloroethane	ND		5.9	0.29
78-87-5	1,2-Dichloropropane	ND		5.9	2.9
541-73-1	1,3-Dichlorobenzene	ND		5.9	0.30
106-46-7	1,4-Dichlorobenzene	ND		5.9	0.82
78-93-3	2-Butanone (MEK)	ND		29	2.1
591-78-6	2-Hexanone	ND		29	2.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		29	1.9
67-64-1	Acetone	72		29	4.9
71-43-2	Benzene	ND		5.9	0.29
75-27-4	Bromodichloromethane	ND		5.9	0.79
75-25-2	Bromoform	ND		5.9	2.9
74-83-9	Bromomethane	ND		5.9	0.53
75-15-0	Carbon disulfide	ND		5.9	2.9
56-23-5	Carbon tetrachloride	ND		5.9	0.57
108-90-7	Chlorobenzene	ND		5.9	0.77
124-48-1	Dibromochloromethane	ND		5.9	0.75
75-00-3	Chloroethane	ND		5.9	1.3
67-66-3	Chloroform	ND		5.9	0.36
74-87-3	Chloromethane	ND		5.9	0.35
156-59-2	cis-1,2-Dichloroethene	ND		5.9	0.75
10061-01-5	cis-1,3-Dichloropropene	ND		5.9	0.84
110-82-7	Cyclohexane	ND		5.9	0.82
75-71-8	Dichlorodifluoromethane	ND		5.9	0.48
100-41-4	Ethylbenzene	ND		5.9	0.40
106-93-4	1,2-Dibromoethane	ND		5.9	0.75
98-82-8	Isopropylbenzene	ND		5.9	0.88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147921-1
 SDG No.: _____
 Client Sample ID: SB - 21 (10' - 15') Lab Sample ID: 480-147921-9
 Matrix: Solid Lab File ID: F7973.D
 Analysis Method: 8260C Date Collected: 01/15/2019 12:00
 Sample wt/vol: 4.71(g) Date Analyzed: 01/17/2019 02:31
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 9.4 Level: (low/med) Low
 Analysis Batch No.: 455386 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		29	3.5
1634-04-4	Methyl tert-butyl ether	ND		5.9	0.58
108-87-2	Methylcyclohexane	ND		5.9	0.89
75-09-2	Methylene Chloride	ND		5.9	2.7
100-42-5	Styrene	ND		5.9	0.29
127-18-4	Tetrachloroethene	ND		5.9	0.79
108-88-3	Toluene	ND		5.9	0.44
156-60-5	trans-1,2-Dichloroethene	ND		5.9	0.60
10061-02-6	trans-1,3-Dichloropropene	ND		5.9	2.6
79-01-6	Trichloroethene	35		5.9	1.3
75-69-4	Trichlorofluoromethane	ND		5.9	0.55
75-01-4	Vinyl chloride	ND		5.9	0.71
1330-20-7	Xylenes, Total	ND		12	0.98

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		64-126
460-00-4	4-Bromofluorobenzene (Surr)	98		72-126
1868-53-7	Dibromofluoromethane (Surr)	102		60-140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Client Sample ID: SB - 21 (15' - 20')

Lab Sample ID: 480-147921-10

Matrix: Solid

Lab File ID: F7974.D

Analysis Method: 8260C

Date Collected: 01/15/2019 12:00

Sample wt/vol: 6.32(g)

Date Analyzed: 01/17/2019 02:57

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: 9.5

Level: (low/med) Low

Analysis Batch No.: 455386

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.70	J	4.4	0.32
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.4	0.71
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.57
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0
75-34-3	1,1-Dichloroethane	ND		4.4	0.53
75-35-4	1,1-Dichloroethene	ND		4.4	0.54
120-82-1	1,2,4-Trichlorobenzene	ND		4.4	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.4	2.2
95-50-1	1,2-Dichlorobenzene	ND		4.4	0.34
107-06-2	1,2-Dichloroethane	ND		4.4	0.22
78-87-5	1,2-Dichloropropane	ND		4.4	2.2
541-73-1	1,3-Dichlorobenzene	ND		4.4	0.22
106-46-7	1,4-Dichlorobenzene	ND		4.4	0.61
78-93-3	2-Butanone (MEK)	ND		22	1.6
591-78-6	2-Hexanone	ND		22	2.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		22	1.4
67-64-1	Acetone	11	J	22	3.7
71-43-2	Benzene	ND		4.4	0.21
75-27-4	Bromodichloromethane	ND		4.4	0.59
75-25-2	Bromoform	ND		4.4	2.2
74-83-9	Bromomethane	ND		4.4	0.39
75-15-0	Carbon disulfide	ND		4.4	2.2
56-23-5	Carbon tetrachloride	ND		4.4	0.42
108-90-7	Chlorobenzene	ND		4.4	0.58
124-48-1	Dibromochloromethane	ND		4.4	0.56
75-00-3	Chloroethane	ND		4.4	0.99
67-66-3	Chloroform	4.44	Q 76 J B	4.4	0.27
74-87-3	Chloromethane	ND		4.4	0.26
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.56
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.63
110-82-7	Cyclohexane	ND		4.4	0.61
75-71-8	Dichlorodifluoromethane	ND		4.4	0.36
100-41-4	Ethylbenzene	ND		4.4	0.30
106-93-4	1,2-Dibromoethane	ND		4.4	0.56
98-82-8	Isopropylbenzene	ND		4.4	0.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-147921-1
 SDG No.: _____
 Client Sample ID: SB - 21 (15' - 20') Lab Sample ID: 480-147921-10
 Matrix: Solid Lab File ID: F7974.D
 Analysis Method: 8260C Date Collected: 01/15/2019 12:00
 Sample wt/vol: 6.32(g) Date Analyzed: 01/17/2019 02:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (30) VOA ID: 0.25(mm)
 % Moisture: 9.5 Level: (low/med) Low
 Analysis Batch No.: 455386 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		22	2.6
1634-04-4	Methyl tert-butyl ether	ND		4.4	0.43
108-87-2	Methylcyclohexane	ND		4.4	0.66
75-09-2	Methylene Chloride	ND		4.4	2.0
100-42-5	Styrene	ND		4.4	0.22
127-18-4	Tetrachloroethene	ND		4.4	0.59
108-88-3	Toluene	0.35	J	4.4	0.33
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.45
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	1.9
79-01-6	Trichloroethene	22		4.4	0.96
75-69-4	Trichlorofluoromethane	ND		4.4	0.41
75-01-4	Vinyl chloride	ND		4.4	0.53
1330-20-7	Xylenes, Total	ND		8.7	0.73

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		71-125
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		64-126
460-00-4	4-Bromofluorobenzene (Surr)	98		72-126
1868-53-7	Dibromofluoromethane (Surr)	102		60-140

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SB - 32 (0' - 5')

Lab Sample ID: 480-147921-1

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/15/2019 08:45

Reporting Basis: DRY

Date Received: 01/16/2019 01:00

% Solids: 78.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	2980	12.5	5.5	mg/Kg		B	1	6010C
7440-36-0	Antimony	ND	18.7	0.50	mg/Kg			1	6010C
7440-38-2	Arsenic	1.1	2.5	0.50	mg/Kg	J		1	6010C
7440-39-3	Barium	11.4	0.62	0.14	mg/Kg			1	6010C
7440-41-7	Beryllium	0.14	0.25	0.035	mg/Kg	J		1	6010C
7440-43-9	Cadmium	0.059	0.25	0.037	mg/Kg	J		1	6010C
7440-70-2	Calcium	233000	312	20.6	mg/Kg		B	5	6010C
7440-47-3	Chromium	3.1	0.62	0.25	mg/Kg			1	6010C
7440-48-4	Cobalt	1.1	0.62	0.062	mg/Kg			1	6010C
7440-50-8	Copper	1.5	6.2	1.3	mg/Kg	J		5	6010C
7439-89-6	Iron	4700	12.5	4.4	mg/Kg			1	6010C
7439-92-1	Lead	3.6	1.2	0.30	mg/Kg			1	6010C
7439-95-4	Magnesium	149000	125	5.8	mg/Kg		B	5	6010C
7439-96-5	Manganese	103	0.25	0.040	mg/Kg			1	6010C
7440-02-0	Nickel	3.8	6.2	0.29	mg/Kg	J	B	1	6010C
7440-09-7	Potassium	1470	37.5	25.0	mg/Kg		B	1	6010C
7782-49-2	Selenium	ND	5.0	0.50	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.75	0.25	mg/Kg			1	6010C
7440-23-5	Sodium	330	175	16.2	mg/Kg		B	1	6010C
7440-28-0	Thallium	ND	7.5	0.37	mg/Kg			1	6010C
7440-62-2	Vanadium	8.3	0.62	0.14	mg/Kg			1	6010C
7440-66-6	Zinc	6.4	2.5	0.80	mg/Kg			1	6010C
7439-97-6	Mercury	0.018	0.026	0.010	mg/Kg	J		1	7471B

mep/ba/p

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SB - 21 (0' - 5')

Lab Sample ID: 480-147921-7

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG ID.:

Matrix: Solid

Date Sampled: 01/15/2019 12:00

Reporting Basis: DRY

Date Received: 01/16/2019 01:00

% Solids: 87.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	11300	11.2	4.9	mg/Kg		B	1	6010C
7440-36-0	Antimony	ND	16.8	0.45	mg/Kg			1	6010C
7440-38-2	Arsenic	3.4	2.2	0.45	mg/Kg			1	6010C
7440-39-3	Barium	50.5	0.56	0.12	mg/Kg			1	6010C
7440-41-7	Beryllium	0.43	0.22	0.031	mg/Kg			1	6010C
7440-43-9	Cadmium	0.12	0.22	0.034	mg/Kg	J		1	6010C
7440-70-2	Calcium	82700	56.0	3.7	mg/Kg		B	1	6010C
7440-47-3	Chromium	12.8	0.56	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	5.6	0.56	0.056	mg/Kg			1	6010C
7440-50-8	Copper	19.7	1.1	0.24	mg/Kg			1	6010C
7439-89-6	Iron	12300	11.2	3.9	mg/Kg			1	6010C
7439-92-1	Lead	5.0	1.1	0.27	mg/Kg			1	6010C
7439-95-4	Magnesium	42900	22.4	1.0	mg/Kg		B	1	6010C
7439-96-5	Manganese	273	0.22	0.036	mg/Kg			1	6010C
7440-02-0	Nickel	13.9	5.6	0.26	mg/Kg		B	1	6010C
7440-09-7	Potassium	4520	33.6	22.4	mg/Kg		B	1	6010C
7782-49-2	Selenium	ND	4.5	0.45	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.67	0.22	mg/Kg			1	6010C
7440-23-5	Sodium	212	157	14.6	mg/Kg		B	1	6010C
7440-28-0	Thallium	ND	6.7	0.34	mg/Kg			1	6010C
7440-62-2	Vanadium	17.5	0.56	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	19.8	2.2	0.72	mg/Kg			1	6010C
7439-97-6	Mercury	0.018	0.022	0.0089	mg/Kg	J		1	7471B

ANALYTICAL REPORT

Job Number: 480-148067-1

Job Description: Former Sims Matchplate Site

For:

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Attention: Matt Walker



Approved for release.
Judy L. Stone
Senior Project Manager
1/25/2019 11:58 AM

Judy L. Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
01/25/2019

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



Job Narrative
480-148067-1

Receipt

The samples were received on 1/18/2019 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-455740 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: MW-1 (480-148067-1), TW-1 (480-148067-2), MW-2 (480-148067-3), TW-3 (480-148067-4), MW-3 (480-148067-5), MW-6 (480-148067-6), Dupe (480-148067-7) and Trip Blank (480-148067-8).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: TW-1 (480-148067-2), MW-3 (480-148067-5), (480-148067-B-5 MS), (480-148067-B-5 MSD) and Dupe (480-148067-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-2 (480-148067-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: TW-3 (480-148067-4). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-455755 recovered above the upper control limit for Dichlorobromomethane, Chlorodibromomethane, 1,1,2-Trichloro-1,2,2-trifluoroethane and Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: MW-3 (480-148067-5).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-455755 recovered outside control limits for the following analytes: cis-1,3-Dichloropropene and Ethylene Dibromide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-3 (480-148067-5).

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone (MEK) in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) associated with batch 480-455755. The following sample was affected: MW-3 (480-148067-5).

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

Sample Summary

Client: C&S Engineers, Inc.

Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148067-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-148067-1	MW-1	Water	01/17/19 09:00	01/18/19 01:00
480-148067-2	TW-1	Water	01/17/19 10:00	01/18/19 01:00
480-148067-3	MW-2	Water	01/17/19 11:00	01/18/19 01:00
480-148067-4	TW-3	Water	01/17/19 12:00	01/18/19 01:00
480-148067-5	MW-3	Water	01/17/19 13:00	01/18/19 01:00
480-148067-6	MW-6	Water	01/17/19 14:00	01/18/19 01:00
480-148067-7	Dupe	Water	01/17/19 15:00	01/18/19 01:00
480-148067-8	Trip Blank	Water	01/17/19 00:00	01/18/19 01:00

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Syracuse
#225

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Sampler: <u>Angel Reyes</u>		Lab PM: <u>Stone, Judy L</u>		Carrier Tracking No(s):		COC No: <u>480-122578-28126.1</u>											
Client Contact: <u>Matt Walker</u>		Phone: <u>(315) 720-5335</u>		E-Mail: <u>judy.stone@testamericainc.com</u>				Page 1 of 1											
Company: <u>C&S Engineers, Inc.</u>				Analysis Requested															
Address: <u>489 Col. Eileen Collins Blvd</u>				 480-148067 COC															
City: <u>Syracuse</u>																			
State, Zip: <u>NY, 13212</u>																			
Phone: <u>315-703-4323(Tel)</u>																			
Email: <u>mawalker@cscos.com</u>				Preservation Codes:															
Project Name: <u>Former Sims Matchplate Site</u>				A - HCL M - Hexano B - NaOH N - Nona C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)															
Site: <u></u>				Other: <u></u>															
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, B=solid, G=waterfall, ET=Tissue, A=Al)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers		Special Instructions/Note:			
						Preservation Code:													
<u>MW-1</u>		<u>1-17-19</u>		<u>9:00</u>				<u>Water</u>		<u>X</u>		<u>X</u>							
<u>TW-1</u>		<u>1-17-19</u>		<u>10:00</u>				<u>Water</u>		<u>X</u>									
<u>MW-2</u>		<u>1-17-19</u>		<u>11:00</u>				<u>Water</u>		<u>X</u>									
<u>TW-3</u>		<u>1-17-19</u>		<u>12:00</u>				<u>Water</u>		<u>X</u>									
<u>MW-3</u>		<u>1-17-19</u>		<u>13:00</u>				<u>Water</u>		<u>X</u>									
<u>MW-6</u>		<u>1-17-19</u>		<u>14:00</u>				<u>Water</u>		<u>X</u>									
<u>Dupe</u>		<u>1-17-19</u>		<u>15:00</u>				<u>Water</u>		<u>X</u>									
<u>1-17-19 AP</u>								<u>Water</u>											
								<u>Water</u>											
								<u>Water</u>											
								<u>Water</u>											
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 ☐ Radiological										☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months									
Deliverable Requested: I, II, III, (IV) Other (specify)										Special Instructions/QC Requirements:									
Empty Kit Relinquished by:										Date:									
Relinquished by: <u>Angel Reyes</u>										Time: <u>1/17/19 15:30</u>									
Relinquished by: <u>RE Reyes</u>										Company: <u>C&S</u>									
Relinquished by: <u>RE Reyes</u>										Received by: <u>RE Reyes</u>									
Relinquished by: <u>RE Reyes</u>										Date/Time: <u>1-17-19, 19:00</u>									
Relinquished by: <u>RE Reyes</u>										Company: <u>Syr</u>									
Relinquished by: <u>RE Reyes</u>										Received by: <u>RE Reyes</u>									
Relinquished by: <u>RE Reyes</u>										Date/Time: <u>1/17/19 1530</u>									
Relinquished by: <u>RE Reyes</u>										Company: <u>Syr</u>									
Relinquished by: <u>RE Reyes</u>										Received by: <u>RE Reyes</u>									
Relinquished by: <u>RE Reyes</u>										Date/Time: <u>1/17/19 1530</u>									
Relinquished by: <u>RE Reyes</u>										Company: <u>Syr</u>									
Custody Seals Intact: <u>Δ Yes Δ No</u>										Custody Seal No.: <u></u>									
Cooler Temperature(s) °C and Other Remarks: <u>4.8</u>										# <u>1</u>									

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Client Sample ID: MW-3

Lab Sample ID: 480-148067-5

Matrix: Water

Lab File ID: C3748.D

Analysis Method: 8260C

Date Collected: 01/17/2019 13:00

Sample wt/vol: 5(mL)

Date Analyzed: 01/19/2019 02:10

Soil Aliquot Vol: _____

Dilution Factor: 10

Soil Extract Vol.: _____

GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 455740

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
75-34-3	1,1-Dichloroethane	ND		10	3.8
75-35-4	1,1-Dichloroethene	ND		10	2.9
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
124-48-1	Dibromochloromethane	ND		10	3.2
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	33		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
106-93-4	1,2-Dibromoethane	ND		10	7.3
98-82-8	Isopropylbenzene	ND		10	7.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-148067-1
 SDG No.: _____
 Client Sample ID: MW-3 Lab Sample ID: 480-148067-5
 Matrix: Water Lab File ID: C3748.D
 Analysis Method: 8260C Date Collected: 01/17/2019 13:00
 Sample wt/vol: 5(mL) Date Analyzed: 01/19/2019 02:10
 Soil Aliquot Vol: _____ Dilution Factor: 10
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 455740 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	1100	E J	10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	108		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Client Sample ID: MW-3 DL

Lab Sample ID: 480-148067-5 DL

Matrix: Water

Lab File ID: C3770.D

Analysis Method: 8260C

Date Collected: 01/17/2019 13:00

Sample wt/vol: 5(mL)

Date Analyzed: 01/19/2019 13:19

Soil Aliquot Vol: _____

Dilution Factor: 20

Soil Extract Vol.: _____

GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 455755

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		20	16
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	4.2
79-00-5	1,1,2-Trichloroethane	ND		20	4.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2
75-34-3	1,1-Dichloroethane	ND		20	7.6
75-35-4	1,1-Dichloroethene	ND		20	5.8
120-82-1	1,2,4-Trichlorobenzene	ND		20	8.2
96-12-8	1,2-Dibromo-3-Chloropropane	ND		20	7.8
95-50-1	1,2-Dichlorobenzene	ND		20	16
107-06-2	1,2-Dichloroethane	ND		20	4.2
78-87-5	1,2-Dichloropropane	ND		20	14
541-73-1	1,3-Dichlorobenzene	ND		20	16
106-46-7	1,4-Dichlorobenzene	ND		20	17
78-93-3	2-Butanone (MEK)	ND	*	200	26
591-78-6	2-Hexanone	ND		100	25
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		100	42
67-64-1	Acetone	ND		200	60
71-43-2	Benzene	ND		20	8.2
75-27-4	Bromodichloromethane	ND	F1	20	7.8
75-25-2	Bromoform	ND		20	5.2
74-83-9	Bromomethane	ND		20	14
75-15-0	Carbon disulfide	3.9	J	20	3.8
56-23-5	Carbon tetrachloride	ND		20	5.4
108-90-7	Chlorobenzene	ND		20	15
124-48-1	Dibromochloromethane	ND		20	6.4
75-00-3	Chloroethane	ND		20	6.4
67-66-3	Chloroform	ND		20	6.8
74-87-3	Chloromethane	ND		20	7.0
156-59-2	cis-1,2-Dichloroethene	35		20	16
10061-01-5	cis-1,3-Dichloropropene	ND	*	20	7.2
110-82-7	Cyclohexane	ND		20	3.6
75-71-8	Dichlorodifluoromethane	ND		20	14
100-41-4	Ethylbenzene	ND		20	15
106-93-4	1,2-Dibromoethane	ND	F1 *	20	15
98-82-8	Isopropylbenzene	ND		20	16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-148067-1
 SDG No.: _____
 Client Sample ID: MW-3 DL Lab Sample ID: 480-148067-5 DL
 Matrix: Water Lab File ID: C3770.D
 Analysis Method: 8260C Date Collected: 01/17/2019 13:00
 Sample wt/vol: 5 (mL) Date Analyzed: 01/19/2019 13:19
 Soil Aliquot Vol: _____ Dilution Factor: 20
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 455755 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		50	26
1634-04-4	Methyl tert-butyl ether	ND		20	3.2
108-87-2	Methylcyclohexane	ND		20	3.2
75-09-2	Methylene Chloride	ND		20	8.8
100-42-5	Styrene	ND		20	15
127-18-4	Tetrachloroethene	ND		20	7.2
108-88-3	Toluene	ND		20	10
156-60-5	trans-1,2-Dichloroethene	ND		20	18
10061-02-6	trans-1,3-Dichloropropene	ND		20	7.4
79-01-6	Trichloroethene	1200	F1 J	20	9.2
75-69-4	Trichlorofluoromethane	ND		20	18
75-01-4	Vinyl chloride	ND		20	18
1330-20-7	Xylenes, Total	ND		40	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		80-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		75-123

mm 4/29/19

ANALYTICAL REPORT

Job Number: 480-148804-1

Job Description: Former Sims Matchplate Site

For:

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd
Syracuse, NY 13212
Attention: Matt Walker



Approved for release.
Judy L. Stone
Senior Project Manager
2/19/2019 2:31 PM

Judy L. Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
02/19/2019
Revision: 1

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

Job Narrative
480-148804-1

Revision (1)

The report has been revised to remove an unnecessary comment from the narrative. The comment in Organic Prep section about pesticides by 3510 has been removed.

Receipt

The samples were received on 2/8/2019 3:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-7 (480-148804-16). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-458448 recovered outside control limits for the following analyte: Dichlorodifluoromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-7 (480-148804-16) and Trip Blank (480-148804-17).

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: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base surrogate to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (6 -12) (480-148804-6), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12) and (480-148804-B-3-B MS). These results have been reported and qualified.

Method(s) 8270D: The following samples were diluted due to color and viscosity: SS - 1 (0 -2) (480-148804-1), SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (0 -2) (480-148804-5), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14), SS - 8 (6 -12) (480-148804-15), (480-148804-B-3-B MS) and (480-148804-B-3-C MSD). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 480-458568 and analytical batch 480-458762 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-458568 and analytical batch 480-458762 were diluted below the method detection limit (MDL) for 2,4-Dinitrophenol and therefore percent recovery and RPD were not calculated. The associated laboratory control sample (LCS) recovery was within acceptance limits.

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 following samples were diluted due to the nature of the sample matrix: SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8) and SS - 7 (6 -12) (480-148804-13). As such, surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: For method 8081, the recovery of the one surrogate in samples SS - 3 (0 -2) (480-148804-5), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 8 (0 -2) (480-148804-14), SS - 8 (6 -12) (480-148804-15), (480-148804-A-14-B MS) and (480-148804-B-14-E MSD) exceeds quality control limits due to the sample matrix. The recovery of the secondary surrogate is within quality control criteria; no corrective action is required.

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: SS - 5 (0 -2) (480-148804-9) and SS - 5 (6 -12) (480-148804-10). Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 480-458779 and analytical batch 480-458894 were outside control limits: (480-148804-A-14-B MS) and (480-148804-B-14-E MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8081B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-458779 and analytical batch 480-458894 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) 8081B: All primary data for analytical batch 458894 are reported from the RTX-CLPII column.

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-458420/6 and CCV 480-458420/32) that had recoveries for the surrogate Decachlorobiphenyl slightly below acceptance limits: SS - 1 (0 -2) (480-148804-1),

SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (0 -2) (480-148804-5), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14) and SS - 8 (6 -12) (480-148804-15). The secondary surrogate Tetrachloro-m-xylene is within limits. Therefore, the data have been reported.

Method(s) 8082A: Surrogate recoveries for the following samples were outside control limits: SS - 2 (0 -2) (480-148804-3), SS - 4 (0 -2) (480-148804-7) and SS - 6 (0 -2) (480-148804-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082A: All primary data for analytical batch 458420 are reported from the ZB-35 column.

Method(s) 8151A: The continuing calibration verifications (CCV 480-459243/31) and (CCV 480-459243/42) recovered above the upper control limit for the surrogate 2,4-Dichlorophenylacetic acid. The samples associated with these CCVs were non-detects all target analytes and the surrogate recoveries were not adversely affected; therefore, the data have been reported. The following samples are impacted: SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14) and SS - 8 (6 -12) (480-148804-15).

Method(s) 8151A: All primary data for analytical batch 459027 are reported from the RTX-CLPI column, while all primary data for analytical batch 459243 are reported from the RTX-CLPII column.

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

Metals

Method(s) 6010C: The Serial Dilution (480-148804-B-1-A SD ^5) in batch 480-458368, exhibited results outside the quality control limits for Total Calcium, Iron, Magnesium, Manganese, and Zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method(s) 6010C: The following samples were diluted due to the presence of Total Calcium which interferes with Copper: SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (6 -12) (480-148804-6), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 7 (0 -2) (480-148804-12) and SS - 7 (6 -12) (480-148804-13). 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.

Organic Prep

Method(s) 3550C: The following samples required a Florisil clean-up, via 3620C, to reduce matrix interferences: SS - 1 (0 -2) (480-148804-1), SS - 1 (6 -12) (480-148804-2), SS - 2 (0 -2) (480-148804-3), SS - 2 (6 -12) (480-148804-4), SS - 3 (0 -2) (480-148804-5), SS - 3 (6 -12) (480-148804-6), SS - 4 (0 -2) (480-148804-7), SS - 4 (6 -12) (480-148804-8), SS - 5 (0 -2) (480-148804-9), SS - 5 (6 -12) (480-148804-10), SS - 6 (0 -2) (480-148804-11), SS - 7 (0 -2) (480-148804-12), SS - 7 (6 -12) (480-148804-13), SS - 8 (0 -2) (480-148804-14), SS - 8 (6 -12) (480-148804-15), (480-148804-A-14 MS) and (480-148804-B-14 MSD).

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

Sample Summary

Client: C&S Engineers, Inc.

Project/Site: Former Sims Matchplate Site

TestAmerica Job ID: 480-148804-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-148804-1	SS - 1 (0 -2)	Solid	02/07/19 09:00	02/08/19 03:00
480-148804-2	SS - 1 (6 -12)	Solid	02/07/19 09:15	02/08/19 03:00
480-148804-3	SS - 2 (0 -2)	Solid	02/07/19 09:30	02/08/19 03:00
480-148804-4	SS - 2 (6 -12)	Solid	02/07/19 09:45	02/08/19 03:00
480-148804-5	SS - 3 (0 -2)	Solid	02/07/19 10:00	02/08/19 03:00
480-148804-6	SS - 3 (6 -12)	Solid	02/07/19 10:15	02/08/19 03:00
480-148804-7	SS - 4 (0 -2)	Solid	02/07/19 10:30	02/08/19 03:00
480-148804-8	SS - 4 (6 -12)	Solid	02/07/19 10:45	02/08/19 03:00
480-148804-9	SS - 5 (0 -2)	Solid	02/07/19 11:00	02/08/19 03:00
480-148804-10	SS - 5 (6 -12)	Solid	02/07/19 11:15	02/08/19 03:00
480-148804-11	SS - 6 (0 -2)	Solid	02/07/19 11:30	02/08/19 03:00
480-148804-12	SS - 7 (0 -2)	Solid	02/07/19 11:45	02/08/19 03:00
480-148804-13	SS - 7 (6 -12)	Solid	02/07/19 12:00	02/08/19 03:00
480-148804-14	SS - 8 (0 -2)	Solid	02/07/19 12:15	02/08/19 03:00
480-148804-15	SS - 8 (6 -12)	Solid	02/07/19 12:30	02/08/19 03:00
480-148804-16	MW-7	Water	02/07/19 12:45	02/08/19 03:00
480-148804-17	Trip Blank	Water	02/07/19 00:00	02/08/19 03:00

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Syracuse

#225

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Sample: Angel Aieja Phone: 315-703-5835		Lab PM: Stone, Judy L E-Mail: judy.stone@testamericainc.com		Carrier Tracking No(s)		COC No: 480-122577-28125.2				
Client Contact: Matt Walker								Page: Page 1 of 2				
Company: C&S Engineers, Inc.		Due Date Requested:		Analysis Requested								
Address: 499 Col. Eileen Collins Blvd		TAT Requested (days): Standard		 480-148804 Chain of Custody								
City: Syracuse		PO #:										
State, Zip: NY, 13212		Purchase Order Requested		Total Number of containers								
Phone: 315-703-4323(Tel)		WO #:										
Email: mawalker@cscos.com		Project #: 48019352		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)								
Project Name: Former Sims Matchplate Site		SSOW#:										
Site:												
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	6010C, 7471B	8081B, 8082A, 8151A, 8270D	8260C - TCL list OLMD4.2	8081B, 8151A, 8270D	8082A, 8270D	Special Instructions/Note:
				Preservation Code:		X X	N	N	N	N	N	
SS-1(0-2)		2/7	9:00		Solid		X	X				
SS-1(6-12)		2/7	9:15		Solid		X	X	X			
SS-2(0-2)		2/7	9:30		Solid		X	X				
SS-2(6-12)		2/7	9:45		Solid		X	X	X			
SS-3(0-2)		2/7	10:00		Solid		X	X				
SS-3(6-12)		2/7	10:15		Solid		X	X	X			
SS-4(0-2)		2/7	10:30		Solid		X	X				
SS-4(6-12)		2/7	10:45		Solid		X	X	X			
SS-5(0-2)		2/7	11:00		Solid		X	X				
SS-5(6-12)		2/7	11:15		Solid		X	X	X			
RE					Solid							
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months						
Deliverable Requested: I, II, III, (IV) Other (specify)						Special Instructions/QC Requirements:						
Empty Kit Relinquished by:			Date:	Time:	Method of Shipment:							
Relinquished by: Angel Aieja			Date/Time: 2/7 15:25	Company: C+S	Received by: [Signature]			Date/Time: 2/7/19 1525	Company: SYR			
Relinquished by: REINHOLD			Date/Time: 2-7-19, 19:00	Company: SYR	Received by: [Signature]			Date/Time: 02/08/19 0300	Company:			
Relinquished by:			Date/Time:	Company:	Received by:			Date/Time:	Company:			
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: R.R #1								

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

#225

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

Ver: 08/04/2016

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Matrix: Solid

Lab File ID: X21458277.D

Analysis Method: 8270D

Date Collected: 02/07/2019 09:30

Extract. Method: 3550C

Date Extracted: 02/11/2019 14:25

Sample wt/vol: 30.18(g)

Date Analyzed: 02/12/2019 18:54

Con. Extract Vol.: 1(mL)

Dilution Factor: 5

Injection Volume: 1(uL)

Level: (low/med) Low

% Moisture: 23.5

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458762

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		1100	160
108-60-1	bis (2-chloroisopropyl) ether	ND		1100	220
95-95-4	2,4,5-Trichlorophenol	ND		1100	300
88-06-2	2,4,6-Trichlorophenol	ND		1100	220
120-83-2	2,4-Dichlorophenol	ND		1100	120
105-67-9	2,4-Dimethylphenol	ND		1100	270
51-28-5	2,4-Dinitrophenol	ND		11000	5100
121-14-2	2,4-Dinitrotoluene	ND	F1	1100	230
606-20-2	2,6-Dinitrotoluene	ND	F1	1100	130
91-58-7	2-Chloronaphthalene	ND		1100	180
95-57-8	2-Chlorophenol	ND		1100	200
95-48-7	2-Methylphenol	ND		1100	130
91-57-6	2-Methylnaphthalene	ND		1100	220
88-74-4	2-Nitroaniline	ND		2100	160
88-75-5	2-Nitrophenol	ND		1100	310
91-94-1	3,3'-Dichlorobenzidine	ND		2100	1300
99-09-2	3-Nitroaniline	ND		2100	310
534-52-1	4,6-Dinitro-2-methylphenol	ND		2100	1100
101-55-3	4-Bromophenyl phenyl ether	ND		1100	160
59-50-7	4-Chloro-3-methylphenol	ND		1100	270
106-47-8	4-Chloroaniline	ND		1100	270
7005-72-3	4-Chlorophenyl phenyl ether	ND		1100	140
106-44-5	4-Methylphenol	ND		2100	130
100-01-6	4-Nitroaniline	ND		2100	580
100-02-7	4-Nitrophenol	ND		2100	770
83-32-9	Acenaphthene	ND	F1	1100	160
208-96-8	Acenaphthylene	ND	F1	1100	140
98-86-2	Acetophenone	ND		1100	150
120-12-7	Anthracene	ND	F2 F1	1100	270
1912-24-9	Atrazine	ND		1100	380
100-52-7	Benzaldehyde	ND		1100	880
56-55-3	Benzo[a]anthracene	520	J F2 F1	1100	110
50-32-8	Benzo[a]pyrene	820	J F2 F1	1100	160

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Matrix: Solid

Lab File ID: X21458277.D

Analysis Method: 8270D

Date Collected: 02/07/2019 09:30

Extract. Method: 3550C

Date Extracted: 02/11/2019 14:25

Sample wt/vol: 30.18(g)

Date Analyzed: 02/12/2019 18:54

Con. Extract Vol.: 1(mL)

Dilution Factor: 5

Injection Volume: 1(uL)

Level: (low/med) Low

% Moisture: 23.5

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458762

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	1100	F1 J	1100	180
191-24-2	Benzo[g,h,i]perylene	750	J	1100	120
207-08-9	Benzo[k]fluoranthene	400	J F1 J	1100	140
111-91-1	Bis(2-chloroethoxy)methane	ND		1100	230
111-44-4	Bis(2-chloroethyl)ether	ND		1100	140
117-81-7	Bis(2-ethylhexyl) phthalate	ND	F1	1100	380
85-68-7	Butyl benzyl phthalate	ND	F1	1100	180
105-60-2	Caprolactam	ND		1100	330
86-74-8	Carbazole	ND		1100	130
218-01-9	Chrysene	630	J F2 F1 J	1100	250
53-70-3	Dibenz(a,h)anthracene	ND		1100	190
84-74-2	Di-n-butyl phthalate	ND		1100	190
117-84-0	Di-n-octyl phthalate	ND	F1	1100	130
132-64-9	Dibenzofuran	ND	F2 F1	1100	130
84-66-2	Diethyl phthalate	ND		1100	140
131-11-3	Dimethyl phthalate	ND		1100	130
206-44-0	Fluoranthene	950	J F2 F1 J	1100	120
86-73-7	Fluorene	ND	F2 F1	1100	130
118-74-1	Hexachlorobenzene	ND		1100	150
87-68-3	Hexachlorobutadiene	ND		1100	160
77-47-4	Hexachlorocyclopentadiene	ND		1100	150
67-72-1	Hexachloroethane	ND		1100	140
193-39-5	Indeno[1,2,3-cd]pyrene	530	J	1100	140
78-59-1	Isophorone	ND		1100	230
621-64-7	N-Nitrosodi-n-propylamine	ND		1100	190
86-30-6	N-Nitrosodiphenylamine	ND		1100	900
91-20-3	Naphthalene	ND		1100	140
98-95-3	Nitrobenzene	ND		1100	120
87-86-5	Pentachlorophenol	ND		2100	1100
85-01-8	Phenanthrene	290	J F2 F1 J	1100	160
108-95-2	Phenol	ND		1100	170
129-00-0	Pyrene	860	J F2 F1 J	1100	130

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 1 (0 -2)

Lab Sample ID: 480-148804-1

Matrix: Solid

Lab File ID: 25_17-016.D

Analysis Method: 8081B

Date Collected: 02/07/2019 09:00

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.59(g)

Date Analyzed: 02/13/2019 14:30

Con. Extract Vol.: 10(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 13.3

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		1.9	0.37
72-55-9	4,4'-DDE	ND		1.9	0.40
50-29-3	4,4'-DDT	1.9	J	1.9	0.44
309-00-2	Aldrin	ND		1.9	0.46
319-84-6	alpha-BHC	ND		1.9	0.34
5103-71-9	cis-Chlordane	ND		1.9	0.94
319-85-7	beta-BHC	ND		1.9	0.34
319-86-8	delta-BHC	ND		1.9	0.35
60-57-1	Dieldrin	ND		1.9	0.45
959-98-8	Endosulfan I	ND		1.9	0.36
33213-65-9	Endosulfan II	ND		1.9	0.34
1031-07-8	Endosulfan sulfate	ND		1.9	0.35
72-20-8	Endrin	ND		1.9	0.37
7421-93-4	Endrin aldehyde	ND		1.9	0.48
53494-70-5	Endrin ketone	ND		1.9	0.46
58-89-9	gamma-BHC (Lindane)	ND		1.9	0.35
5103-74-2	trans-Chlordane	ND		1.9	0.60
76-44-8	Heptachlor	ND		1.9	0.41
1024-57-3	Heptachlor epoxide	ND		1.9	0.49
72-43-5	Methoxychlor	ND		1.9	0.38
8001-35-2	Toxaphene	ND		19	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	112		45-120
877-09-8	Tetrachloro-m-xylene	53		30-124

mmp 4/30/19

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-148804-1</u>
SDG No.: _____	
Client Sample ID: <u>SS - 1 (6 -12)</u>	Lab Sample ID: <u>480-148804-2</u>
Matrix: <u>Solid</u>	Lab File ID: <u>25_17-017.D</u>
Analysis Method: <u>8081B</u>	Date Collected: <u>02/07/2019 09:15</u>
Extraction Method: <u>3550C</u>	Date Extracted: <u>02/12/2019 14:56</u>
Sample wt/vol: <u>30.10(g)</u>	Date Analyzed: <u>02/13/2019 14:50</u>
Con. Extract Vol.: <u>10(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>1(uL)</u>	GC Column: <u>RTX-CLPII</u> ID: <u>0.53(mm)</u>
% Moisture: <u>18.5</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>458894</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		2.0	0.40
72-55-9	4,4'-DDE	ND		2.0	0.43
50-29-3	4,4'-DDT	ND		2.0	0.48
309-00-2	Aldrin	ND		2.0	0.50
319-84-6	alpha-BHC	ND		2.0	0.37
5103-71-9	cis-Chlordane	ND		2.0	1.0
319-85-7	beta-BHC	ND		2.0	0.37
319-86-8	delta-BHC	ND		2.0	0.38
60-57-1	Dieldrin	ND		2.0	0.49
959-98-8	Endosulfan I	ND		2.0	0.39
33213-65-9	Endosulfan II	ND		2.0	0.37
1031-07-8	Endosulfan sulfate	ND		2.0	0.38
72-20-8	Endrin	ND		2.0	0.40
7421-93-4	Endrin aldehyde	ND		2.0	0.52
53494-70-5	Endrin ketone	ND		2.0	0.50
58-89-9	gamma-BHC (Lindane)	ND		2.0	0.37
5103-74-2	trans-Chlordane	ND		2.0	0.65
76-44-8	Heptachlor	ND		2.0	0.44
1024-57-3	Heptachlor epoxide	ND		2.0	0.53
72-43-5	Methoxychlor	ND		2.0	0.42
8001-35-2	Toxaphene	ND		20	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	97		45-120
877-09-8	Tetrachloro-m-xylene	48		30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Matrix: Solid

Lab File ID: 25_17-018.D

Analysis Method: 8081B

Date Collected: 02/07/2019 09:30

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.61(g)

Date Analyzed: 02/13/2019 15:09

Con. Extract Vol.: 10(mL)

Dilution Factor: 5

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 23.5

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		11	2.1
72-55-9	4,4'-DDE	4.1	J J	11	2.2
50-29-3	4,4'-DDT	ND		11	2.5
309-00-2	Aldrin	ND		11	2.6
319-84-6	alpha-BHC	ND		11	1.9
5103-71-9	cis-Chlordane	ND		11	5.3
319-85-7	beta-BHC	ND		11	1.9
319-86-8	delta-BHC	ND		11	2.0
60-57-1	Dieldrin	ND		11	2.6
959-98-8	Endosulfan I	ND		11	2.1
33213-65-9	Endosulfan II	ND		11	1.9
1031-07-8	Endosulfan sulfate	ND		11	2.0
72-20-8	Endrin	ND		11	2.1
7421-93-4	Endrin aldehyde	ND		11	2.7
53494-70-5	Endrin ketone	ND		11	2.6
58-89-9	gamma-BHC (Lindane)	ND		11	2.0
5103-74-2	trans-Chlordane	ND		11	3.4
76-44-8	Heptachlor	ND		11	2.3
1024-57-3	Heptachlor epoxide	ND		11	2.8
72-43-5	Methoxychlor	ND		11	2.2
8001-35-2	Toxaphene	ND		110	62

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	202	X	45-120
877-09-8	Tetrachloro-m-xylene	116		30-124

mkp 4/30/19

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Matrix: Solid

Lab File ID: 25_17-019.D

Analysis Method: 8081B

Date Collected: 02/07/2019 09:45

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.65(g)

Date Analyzed: 02/13/2019 15:29

Con. Extract Vol.: 10(mL)

Dilution Factor: 10

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 18.4

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		20	3.9
72-55-9	4,4'-DDE	ND		20	4.2
50-29-3	4,4'-DDT	14	J 5	20	4.7
309-00-2	Aldrin	ND		20	4.9
319-84-6	alpha-BHC	ND		20	3.6
5103-71-9	cis-Chlordane	ND		20	10
319-85-7	beta-BHC	ND		20	3.6
319-86-8	delta-BHC	ND		20	3.7
60-57-1	Dieldrin	ND		20	4.8
959-98-8	Endosulfan I	ND		20	3.8
33213-65-9	Endosulfan II	ND		20	3.6
1031-07-8	Endosulfan sulfate	ND		20	3.7
72-20-8	Endrin	ND		20	4.0
7421-93-4	Endrin aldehyde	ND		20	5.1
53494-70-5	Endrin ketone	ND		20	4.9
58-89-9	gamma-BHC (Lindane)	ND		20	3.7
5103-74-2	trans-Chlordane	ND		20	6.4
76-44-8	Heptachlor	ND		20	4.3
1024-57-3	Heptachlor epoxide	ND		20	5.2
72-43-5	Methoxychlor	ND		20	4.1
8001-35-2	Toxaphene	ND		200	120

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	184	X	45-120
877-09-8	Tetrachloro-m-xylene	0	X	30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 3 (0 -2)

Lab Sample ID: 480-148804-5

Matrix: Solid

Lab File ID: 25_17-020.D

Analysis Method: 8081B

Date Collected: 02/07/2019 10:00

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.33(g)

Date Analyzed: 02/13/2019 15:49

Con. Extract Vol.: 10(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 23.5

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	<u>2.24</u> ~~0.88~~	J B	2.2	0.42
72-55-9	4,4'-DDE	ND		2.2	0.45
50-29-3	4,4'-DDT	2.1	J	2.2	0.50
309-00-2	Aldrin	ND		2.2	0.53
319-84-6	alpha-BHC	0.41	J	2.2	0.39
5103-71-9	cis-Chlordane	ND		2.2	1.1
319-85-7	beta-BHC	ND		2.2	0.39
319-86-8	delta-BHC	ND		2.2	0.40
60-57-1	Dieldrin	ND		2.2	0.52
959-98-8	Endosulfan I	ND		2.2	0.41
33213-65-9	Endosulfan II	0.50	J	2.2	0.39
1031-07-8	Endosulfan sulfate	ND		2.2	0.40
72-20-8	Endrin	ND		2.2	0.43
7421-93-4	Endrin aldehyde	ND		2.2	0.55
53494-70-5	Endrin ketone	ND		2.2	0.53
58-89-9	gamma-BHC (Lindane)	ND		2.2	0.40
5103-74-2	trans-Chlordane	ND		2.2	0.69
76-44-8	Heptachlor	ND		2.2	0.47
1024-57-3	Heptachlor epoxide	ND		2.2	0.56
72-43-5	Methoxychlor	ND		2.2	0.44
8001-35-2	Toxaphene	ND		22	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	<u>129</u>	X	45-120
877-09-8	Tetrachloro-m-xylene	53		30-124

mkp 4/30/18

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 3 (6 -12)

Lab Sample ID: 480-148804-6

Matrix: Solid

Lab File ID: 25_17-021.D

Analysis Method: 8081B

Date Collected: 02/07/2019 10:15

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.15(g)

Date Analyzed: 02/13/2019 16:08

Con. Extract Vol.: 10(mL)

Dilution Factor: 10

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 8.6

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		18	3.5
72-55-9	4,4'-DDE	ND		18	3.8
50-29-3	4,4'-DDT	10	J JN	18	4.2
309-00-2	Aldrin	ND		18	4.5
319-84-6	alpha-BHC	ND		18	3.3
5103-71-9	cis-Chlordane	ND		18	9.0
319-85-7	beta-BHC	ND		18	3.3
319-86-8	delta-BHC	ND		18	3.4
60-57-1	Dieldrin	ND		18	4.4
959-98-8	Endosulfan I	ND		18	3.5
33213-65-9	Endosulfan II	ND		18	3.3
1031-07-8	Endosulfan sulfate	ND		18	3.4
72-20-8	Endrin	ND		18	3.6
7421-93-4	Endrin aldehyde	ND		18	4.6
53494-70-5	Endrin ketone	ND		18	4.5
58-89-9	gamma-BHC (Lindane)	ND		18	3.3
5103-74-2	trans-Chlordane	ND		18	5.8
76-44-8	Heptachlor	ND		18	3.9
1024-57-3	Heptachlor epoxide	ND		18	4.7
72-43-5	Methoxychlor	22		18	3.7
8001-35-2	Toxaphene	ND		180	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	101		45-120
877-09-8	Tetrachloro-m-xylene	81		30-124

MPA/30/19

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 4 (0 -2)

Lab Sample ID: 480-148804-7

Matrix: Solid

Lab File ID: 25_17-022.D

Analysis Method: 8081B

Date Collected: 02/07/2019 10:30

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.62(g)

Date Analyzed: 02/13/2019 16:28

Con. Extract Vol.: 10(mL)

Dilution Factor: 10

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 27.4

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		23	4.4
72-55-9	4,4'-DDE	ND		23	4.7
50-29-3	4,4'-DDT	15	J J	23	5.3
309-00-2	Aldrin	ND		23	5.5
319-84-6	alpha-BHC	ND		23	4.1
5103-71-9	cis-Chlordane	ND		23	11
319-85-7	beta-BHC	ND		23	4.1
319-86-8	delta-BHC	ND		23	4.2
60-57-1	Dieldrin	ND		23	5.4
959-98-8	Endosulfan I	ND		23	4.3
33213-65-9	Endosulfan II	ND		23	4.1
1031-07-8	Endosulfan sulfate	ND		23	4.2
72-20-8	Endrin	ND		23	4.5
7421-93-4	Endrin aldehyde	ND		23	5.8
53494-70-5	Endrin ketone	ND		23	5.5
58-89-9	gamma-BHC (Lindane)	ND		23	4.1
5103-74-2	trans-Chlordane	ND		23	7.2
76-44-8	Heptachlor	ND		23	4.9
1024-57-3	Heptachlor epoxide	ND		23	5.8
72-43-5	Methoxychlor	ND		23	4.6
8001-35-2	Toxaphene	ND		230	130

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	216	X	45-120
877-09-8	Tetrachloro-m-xylene	0	X	30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Matrix: Solid

Lab File ID: 25_17-023.D

Analysis Method: 8081B

Date Collected: 02/07/2019 10:45

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.78(g)

Date Analyzed: 02/13/2019 16:48

Con. Extract Vol.: 10(mL)

Dilution Factor: 10

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 12.1

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		19	3.6
72-55-9	4,4'-DDE	ND		19	3.9
50-29-3	4,4'-DDT	11	J	19	4.3
309-00-2	Aldrin	ND		19	4.5
319-84-6	alpha-BHC	ND		19	3.3
5103-71-9	cis-Chlordane	ND		19	9.2
319-85-7	beta-BHC	ND		19	3.3
319-86-8	delta-BHC	ND		19	3.4
60-57-1	Dieldrin	ND		19	4.4
959-98-8	Endosulfan I	ND		19	3.5
33213-65-9	Endosulfan II	ND		19	3.3
1031-07-8	Endosulfan sulfate	ND		19	3.4
72-20-8	Endrin	ND		19	3.7
7421-93-4	Endrin aldehyde	ND		19	4.7
53494-70-5	Endrin ketone	ND		19	4.5
58-89-9	gamma-BHC (Lindane)	ND		19	3.4
5103-74-2	trans-Chlordane	ND		19	5.9
76-44-8	Heptachlor	ND		19	4.0
1024-57-3	Heptachlor epoxide	ND		19	4.8
72-43-5	Methoxychlor	30	JN	19	3.8
8001-35-2	Toxaphene	ND		190	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	161	X	45-120
877-09-8	Tetrachloro-m-xylene	77		30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-148804-1</u>
SDG No.: _____	
Client Sample ID: <u>SS - 5 (0 -2)</u>	Lab Sample ID: <u>480-148804-9</u>
Matrix: <u>Solid</u>	Lab File ID: <u>25_17-024.D</u>
Analysis Method: <u>8081B</u>	Date Collected: <u>02/07/2019 11:00</u>
Extraction Method: <u>3550C</u>	Date Extracted: <u>02/12/2019 14:56</u>
Sample wt/vol: <u>30.97(g)</u>	Date Analyzed: <u>02/13/2019 17:08</u>
Con. Extract Vol.: <u>10(mL)</u>	Dilution Factor: <u>2</u>
Injection Volume: <u>1(uL)</u>	GC Column: <u>RTX-CLPII</u> ID: <u>0.53(mm)</u>
% Moisture: <u>12.1</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>458894</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		3.7	0.71
72-55-9	4,4'-DDE	ND		3.7	0.77
50-29-3	4,4'-DDT	3.7		3.7	0.86
309-00-2	Aldrin	ND		3.7	0.90
319-84-6	alpha-BHC	ND		3.7	0.66
5103-71-9	cis-Chlordane	ND		3.7	1.8
319-85-7	beta-BHC	ND		3.7	0.66
319-86-8	delta-BHC	ND		3.7	0.68
60-57-1	Dieldrin	ND		3.7	0.88
959-98-8	Endosulfan I	ND		3.7	0.71
33213-65-9	Endosulfan II	ND		3.7	0.66
1031-07-8	Endosulfan sulfate	ND		3.7	0.69
72-20-8	Endrin	ND		3.7	0.73
7421-93-4	Endrin aldehyde	ND		3.7	0.94
53494-70-5	Endrin ketone	1.7	J	3.7	0.90
58-89-9	gamma-BHC (Lindane)	ND		3.7	0.67
5103-74-2	trans-Chlordane	ND		3.7	1.2
76-44-8	Heptachlor	ND		3.7	0.80
1024-57-3	Heptachlor epoxide	ND		3.7	0.95
72-43-5	Methoxychlor	ND		3.7	0.75
8001-35-2	Toxaphene	ND		37	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	144	X	45-120
877-09-8	Tetrachloro-m-xylene	50		30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 5 (6 -12)

Lab Sample ID: 480-148804-10

Matrix: Solid

Lab File ID: 25_17-025.D

Analysis Method: 8081B

Date Collected: 02/07/2019 11:15

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.36(g)

Date Analyzed: 02/13/2019 17:27

Con. Extract Vol.: 10(mL)

Dilution Factor: 2

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 15.6

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		3.9	0.76
72-55-9	4,4'-DDE	ND		3.9	0.82
50-29-3	4,4'-DDT	2.7	J	3.9	0.91
309-00-2	Aldrin	ND		3.9	0.96
319-84-6	alpha-BHC	ND		3.9	0.70
5103-71-9	cis-Chlordane	ND		3.9	1.9
319-85-7	beta-BHC	ND		3.9	0.70
319-86-8	delta-BHC	ND		3.9	0.73
60-57-1	Dieldrin	ND		3.9	0.94
959-98-8	Endosulfan I	ND		3.9	0.75
33213-65-9	Endosulfan II	ND		3.9	0.70
1031-07-8	Endosulfan sulfate	ND		3.9	0.73
72-20-8	Endrin	ND		3.9	0.77
7421-93-4	Endrin aldehyde	ND		3.9	1.0
53494-70-5	Endrin ketone	ND		3.9	0.96
58-89-9	gamma-BHC (Lindane)	ND		3.9	0.72
5103-74-2	trans-Chlordane	ND		3.9	1.2
76-44-8	Heptachlor	ND		3.9	0.84
1024-57-3	Heptachlor epoxide	ND		3.9	1.0
72-43-5	Methoxychlor	ND		3.9	0.80
8001-35-2	Toxaphene	ND		39	23

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	190	X	45-120
877-09-8	Tetrachloro-m-xylene	47		30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 6 (0 -2)

Lab Sample ID: 480-148804-11

Matrix: Solid

Lab File ID: 25_17-026.D

Analysis Method: 8081B

Date Collected: 02/07/2019 11:30

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.25(g)

Date Analyzed: 02/13/2019 17:47

Con. Extract Vol.: 10(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 61.8

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		4.3	0.84
72-55-9	4,4'-DDE	ND		4.3	0.91
50-29-3	4,4'-DDT	2.4	J J	4.3	1.0
309-00-2	Aldrin	ND		4.3	1.1
319-84-6	alpha-BHC	ND		4.3	0.78
5103-71-9	cis-Chlordane	ND		4.3	2.2
319-85-7	beta-BHC	ND		4.3	0.78
319-86-8	delta-BHC	ND		4.3	0.80
60-57-1	Dieldrin	ND		4.3	1.0
959-98-8	Endosulfan I	ND		4.3	0.83
33213-65-9	Endosulfan II	ND		4.3	0.78
1031-07-8	Endosulfan sulfate	ND		4.3	0.81
72-20-8	Endrin	ND		4.3	0.86
7421-93-4	Endrin aldehyde	ND		4.3	1.1
53494-70-5	Endrin ketone	ND		4.3	1.1
58-89-9	gamma-BHC (Lindane)	ND		4.3	0.79
5103-74-2	trans-Chlordane	ND		4.3	1.4
76-44-8	Heptachlor	ND		4.3	0.94
1024-57-3	Heptachlor epoxide	ND		4.3	1.1
72-43-5	Methoxychlor	ND		4.3	0.88
8001-35-2	Toxaphene	ND		4.3	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	58		45-120
877-09-8	Tetrachloro-m-xylene	41		30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 7 (0 -2)

Lab Sample ID: 480-148804-12

Matrix: Solid

Lab File ID: 25_17-027.D

Analysis Method: 8081B

Date Collected: 02/07/2019 11:45

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.24(g)

Date Analyzed: 02/13/2019 18:06

Con. Extract Vol.: 10(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 61.8

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		4.3	0.84
72-55-9	4,4'-DDE	ND		4.3	0.91
50-29-3	4,4'-DDT	2.6	J	4.3	1.0
309-00-2	Aldrin	ND		4.3	1.1
319-84-6	alpha-BHC	ND		4.3	0.78
5103-71-9	cis-Chlordane	ND		4.3	2.2
319-85-7	beta-BHC	ND		4.3	0.78
319-86-8	delta-BHC	1.3	J	4.3	0.81
60-57-1	Dieldrin	ND		4.3	1.0
959-98-8	Endosulfan I	ND		4.3	0.83
33213-65-9	Endosulfan II	ND		4.3	0.78
1031-07-8	Endosulfan sulfate	ND		4.3	0.81
72-20-8	Endrin	ND		4.3	0.86
7421-93-4	Endrin aldehyde	ND		4.3	1.1
53494-70-5	Endrin ketone	ND		4.3	1.1
58-89-9	gamma-BHC (Lindane)	ND		4.3	0.79
5103-74-2	trans-Chlordane	ND		4.3	1.4
76-44-8	Heptachlor	ND		4.3	0.94
1024-57-3	Heptachlor epoxide	ND		4.3	1.1
72-43-5	Methoxychlor	ND		4.3	0.88
8001-35-2	Toxaphene	ND		43	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	82		45-120
877-09-8	Tetrachloro-m-xylene	50		30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Buffalo</u>	Job No.: <u>480-148804-1</u>
SDG No.: _____	
Client Sample ID: <u>SS - 7 (6 -12)</u>	Lab Sample ID: <u>480-148804-13</u>
Matrix: <u>Solid</u>	Lab File ID: <u>25_17-028.D</u>
Analysis Method: <u>8081B</u>	Date Collected: <u>02/07/2019 12:00</u>
Extraction Method: <u>3550C</u>	Date Extracted: <u>02/12/2019 14:56</u>
Sample wt/vol: <u>30.15(g)</u>	Date Analyzed: <u>02/13/2019 18:26</u>
Con. Extract Vol.: <u>10(mL)</u>	Dilution Factor: <u>10</u>
Injection Volume: <u>1(uL)</u>	GC Column: <u>RTX-CLPII</u> ID: <u>0.53(mm)</u>
% Moisture: <u>12.9</u>	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>458894</u>	Units: <u>ug/Kg</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND		19	3.7
72-55-9	4,4'-DDE	ND		19	4.0
50-29-3	4,4'-DDT	10	J	19	4.5
309-00-2	Aldrin	ND		19	4.7
319-84-6	alpha-BHC	ND		19	3.4
5103-71-9	cis-Chlordane	ND		19	9.5
319-85-7	beta-BHC	ND		19	3.4
319-86-8	delta-BHC	ND		19	3.5
60-57-1	Dieldrin	ND		19	4.6
959-98-8	Endosulfan I	ND		19	3.7
33213-65-9	Endosulfan II	ND		19	3.4
1031-07-8	Endosulfan sulfate	ND		19	3.6
72-20-8	Endrin	ND		19	3.8
7421-93-4	Endrin aldehyde	ND		19	4.9
53494-70-5	Endrin ketone	ND		19	4.7
58-89-9	gamma-BHC (Lindane)	ND		19	3.5
5103-74-2	trans-Chlordane	ND		19	6.1
76-44-8	Heptachlor	ND		19	4.1
1024-57-3	Heptachlor epoxide	ND		19	4.9
72-43-5	Methoxychlor	ND		19	3.9
8001-35-2	Toxaphene	ND		190	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	94		45-120
877-09-8	Tetrachloro-m-xylene	54		30-124

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 8 (0 -2)

Lab Sample ID: 480-148804-14

Matrix: Solid

Lab File ID: 25_17-014.D

Analysis Method: 8081B

Date Collected: 02/07/2019 12:15

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.37(g)

Date Analyzed: 02/13/2019 13:51

Con. Extract Vol.: 10(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 22.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	ND	F2	2.1	0.41
72-55-9	4,4'-DDE	1.9	J F2	2.1	0.44
50-29-3	4,4'-DDT	8.6	F2	2.1	0.50
309-00-2	Aldrin	ND	F2	2.1	0.52
319-84-6	alpha-BHC	0.53	J F2	2.1	0.38
5103-71-9	cis-Chlordane	ND	F2	2.1	1.1
319-85-7	beta-BHC	ND	F2	2.1	0.38
319-86-8	delta-BHC	ND	F2	2.1	0.39
60-57-1	Dieldrin	ND	F2	2.1	0.51
959-98-8	Endosulfan I	ND	F2	2.1	0.41
33213-65-9	Endosulfan II	ND		2.1	0.38
1031-07-8	Endosulfan sulfate	ND		2.1	0.39
72-20-8	Endrin	ND	F2	2.1	0.42
7421-93-4	Endrin aldehyde	ND		2.1	0.54
53494-70-5	Endrin ketone	ND		2.1	0.52
58-89-9	gamma-BHC (Lindane)	ND	F2	2.1	0.39
5103-74-2	trans-Chlordane	ND	F2	2.1	0.67
76-44-8	Heptachlor	ND	F2	2.1	0.46
1024-57-3	Heptachlor epoxide	ND	F2	2.1	0.55
72-43-5	Methoxychlor	ND	F1 F2	2.1	0.43
8001-35-2	Toxaphene	ND		21	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	231	X	45-120
877-09-8	Tetrachloro-m-xylene	45		30-124

mkp 4/30/19

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 8 (6 -12)

Lab Sample ID: 480-148804-15

Matrix: Solid

Lab File ID: 25_17-029.D

Analysis Method: 8081B

Date Collected: 02/07/2019 12:30

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.54(g)

Date Analyzed: 02/13/2019 18:46

Con. Extract Vol.: 10(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: 22.2

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	~~0.53~~ 2.14	J B	2.1	0.41
72-55-9	4,4'-DDE	0.77	J	2.1	0.44
50-29-3	4,4'-DDT	3.8		2.1	0.49
309-00-2	Aldrin	ND		2.1	0.52
319-84-6	alpha-BHC	ND		2.1	0.38
5103-71-9	cis-Chlordane	ND		2.1	1.0
319-85-7	beta-BHC	ND		2.1	0.38
319-86-8	delta-BHC	ND		2.1	0.39
60-57-1	Dieldrin	ND		2.1	0.51
959-98-8	Endosulfan I	ND		2.1	0.40
33213-65-9	Endosulfan II	ND		2.1	0.38
1031-07-8	Endosulfan sulfate	ND		2.1	0.39
72-20-8	Endrin	ND		2.1	0.42
7421-93-4	Endrin aldehyde	ND		2.1	0.54
53494-70-5	Endrin ketone	ND		2.1	0.52
58-89-9	gamma-BHC (Lindane)	ND		2.1	0.39
5103-74-2	trans-Chlordane	ND		2.1	0.67
76-44-8	Heptachlor	ND		2.1	0.46
1024-57-3	Heptachlor epoxide	ND		2.1	0.54
72-43-5	Methoxychlor	ND		2.1	0.43
8001-35-2	Toxaphene	ND		21	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	157	X	45-120
877-09-8	Tetrachloro-m-xylene	47		30-124

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-148804-1
 SDG No.: _____
 Client Sample ID: SS - 1 (6 -12) Lab Sample ID: 480-148804-2
 Matrix: Solid Lab File ID: 6_024-294.D
 Analysis Method: 8082A Date Collected: 02/07/2019 09:15
 Extraction Method: 3550C Date Extracted: 02/08/2019 14:30
 Sample wt/vol: 2.97(g) Date Analyzed: 02/10/2019 16:34
 Con. Extract Vol.: 10(mL) Dilution Factor: 1
 Injection Volume: 1(uL) GC Column: ZB-35 ID: 0.53(mm)
 % Moisture: 18.5 GPC Cleanup: (Y/N) N
 Analysis Batch No.: 458420 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	0.087	J <u>J</u>	0.21	0.040
11104-28-2	PCB-1221	ND		0.21	0.040
11141-16-5	PCB-1232	ND		0.21	0.040
53469-21-9	PCB-1242	ND		0.21	0.040
12672-29-6	PCB-1248	ND		0.21	0.040
11097-69-1	PCB-1254	0.17	J	0.21	0.097
11096-82-5	PCB-1260	ND		0.21	0.097

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	76		60-154
2051-24-3	DCB Decachlorobiphenyl	72		65-174

MKP 4/30/19

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS - 1 (0 -2)

Lab Sample ID: 480-148804-1

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG ID.:

Matrix: Solid

Date Sampled: 02/07/2019 09:00

Reporting Basis: DRY

Date Received: 02/08/2019 03:00

% Solids: 86.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6500	J 11.7	5.2	mg/Kg		F1	1	6010C
7440-36-0	Antimony	ND	17.6	0.47	mg/Kg			1	6010C
7440-38-2	Arsenic	4.2	2.3	0.47	mg/Kg			1	6010C
7440-39-3	Barium	31.0	0.59	0.13	mg/Kg			1	6010C
7440-41-7	Beryllium	0.28	0.23	0.033	mg/Kg			1	6010C
7440-43-9	Cadmium	0.54	0.23	0.035	mg/Kg			1	6010C
7440-70-2	Calcium	103000	J 58.6	3.9	mg/Kg		F2 B	1	6010C
7440-47-3	Chromium	11.2	0.59	0.23	mg/Kg			1	6010C
7440-48-4	Cobalt	4.2	0.59	0.059	mg/Kg			1	6010C
7440-50-8	Copper	21.4	1.2	0.25	mg/Kg			1	6010C
7439-89-6	Iron	12700	J 11.7	4.1	mg/Kg		F2	1	6010C
7439-92-1	Lead	55.7	J 1.2	0.28	mg/Kg		F1	1	6010C
7439-95-4	Magnesium	39100	J 23.4	1.1	mg/Kg		F2 B	1	6010C
7439-96-5	Manganese	201	J 0.23	0.037	mg/Kg		B	1	6010C
7440-02-0	Nickel	13.7	J 5.9	0.27	mg/Kg			1	6010C
7440-09-7	Potassium	2340	J 35.2	23.4	mg/Kg		F1	1	6010C
7782-49-2	Selenium	ND	4.7	0.47	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.70	0.23	mg/Kg			1	6010C
7440-23-5	Sodium	131	J 164	15.2	mg/Kg	J	F1	1	6010C
7440-28-0	Thallium	ND	7.0	0.35	mg/Kg			1	6010C
7440-62-2	Vanadium	13.7	0.59	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	38.0	J 2.3	0.75	mg/Kg		F1	1	6010C
7439-97-6	Mercury	0.036	0.023	0.0091	mg/Kg			1	7471B

Appendix B

Laboratory QC Documentation

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7864.D

Lab ID: LCS 480-455001/1-A

Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	45.4	91	77-121	
1,1,2,2-Tetrachloroethane	50.0	44.2	88	80-120	
1,1,2-Trichloroethane	50.0	44.2	88	78-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.9	90	60-140	
1,1-Dichloroethane	50.0	45.6	91	73-126	
1,1-Dichloroethene	50.0	44.4	89	59-125	
1,2,4-Trichlorobenzene	50.0	45.3	91	64-120	
1,2-Dibromo-3-Chloropropane	50.0	44.2	88	63-124	
1,2-Dichlorobenzene	50.0	44.2	88	75-120	
1,2-Dichloroethane	50.0	45.1	90	77-122	
1,2-Dichloropropane	50.0	45.6	91	75-124	
1,3-Dichlorobenzene	50.0	44.9	90	74-120	
1,4-Dichlorobenzene	50.0	44.6	89	73-120	
2-Butanone (MEK)	250	252	101	70-134	
2-Hexanone	250	250	100	59-130	
4-Methyl-2-pentanone (MIBK)	250	240	96	65-133	
Acetone	250	239	96	61-137	
Benzene	50.0	45.7	91	79-127	
Bromodichloromethane	50.0	45.1	90	80-122	
Bromoform	50.0	46.5	93	68-126	
Bromomethane	50.0	39.6	79	37-149	
Carbon disulfide	50.0	44.9	90	64-131	
Carbon tetrachloride	50.0	46.2	92	75-135	
Chlorobenzene	50.0	44.8	90	76-124	
Dibromochloromethane	50.0	45.5	91	76-125	
Chloroethane	50.0	33.9	68	69-135	*
Chloroform	50.0	45.5	91	80-120	
Chloromethane	50.0	45.8	92	63-127	
cis-1,2-Dichloroethene	50.0	44.9	90	81-120	
cis-1,3-Dichloropropene	50.0	45.8	92	80-120	
Cyclohexane	50.0	44.0	88	65-120	
Dichlorodifluoromethane	50.0	47.3	95	57-142	
Ethylbenzene	50.0	44.8	90	80-120	
1,2-Dibromoethane	50.0	44.8	90	78-120	
Isopropylbenzene	50.0	43.6	87	72-120	
Methyl acetate	100	95.2	95	55-136	
Methyl tert-butyl ether	50.0	46.2	92	63-125	
Methylcyclohexane	50.0	44.5	89	60-140	
Methylene Chloride	50.0	42.6	85	61-127	
Styrene	50.0	44.6	89	80-120	
Tetrachloroethene	50.0	45.3	91	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Matrix: Solid

Level: Medium

Lab File ID: N7547.D

Lab ID: LCS 480-455051/1-A

Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	2730	109	68-130	
1,1,2,2-Tetrachloroethane	2500	2350	94	73-120	
1,1,2-Trichloroethane	2500	2380	95	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2350	94	10-179	
1,1-Dichloroethane	2500	2460	99	78-121	
1,1-Dichloroethene	2500	2350	94	48-133	
1,2,4-Trichlorobenzene	2500	2430	97	70-140	
1,2-Dibromo-3-Chloropropane	2500	2410	97	56-122	
1,2-Dichlorobenzene	2500	2510	100	78-125	
1,2-Dichloroethane	2500	2500	100	74-127	
1,2-Dichloropropane	2500	2640	106	80-120	
1,3-Dichlorobenzene	2500	2530	101	80-120	
1,4-Dichlorobenzene	2500	2520	101	80-120	
2-Butanone (MEK)	12500	12700	102	54-149	
2-Hexanone	12500	12400	99	59-127	
4-Methyl-2-pentanone (MIBK)	12500	11700	93	74-120	
Acetone	12500	14600	117	47-141	
Benzene	2500	2450	98	77-125	
Bromodichloromethane	2500	2810	113	71-121	
Bromoform	2500	3150	126	48-125	*
Bromomethane	2500	2960	118	39-149	
Carbon disulfide	2500	2170	87	40-136	
Carbon tetrachloride	2500	2960	119	54-135	
Chlorobenzene	2500	2500	100	76-126	
Dibromochloromethane	2500	2780	111	64-120	
Chloroethane	2500	3000	120	23-150	
Chloroform	2500	2380	95	78-120	
Chloromethane	2500	2710	108	61-124	
cis-1,2-Dichloroethene	2500	2430	97	79-124	
cis-1,3-Dichloropropene	2500	2560	103	75-121	
Cyclohexane	2500	2660	107	49-129	
Dichlorodifluoromethane	2500	2620	105	10-150	
Ethylbenzene	2500	2490	100	78-124	
1,2-Dibromoethane	2500	2390	96	80-120	
Isopropylbenzene	2500	2530	101	76-120	
Methyl acetate	5000	4860	97	71-123	
Methyl tert-butyl ether	2500	2330	93	67-137	
Methylcyclohexane	2500	2620	105	50-130	
Methylene Chloride	2500	2540	102	75-118	
Styrene	2500	2560	102	80-120	
Tetrachloroethene	2500	2510	100	73-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7854.D

Lab ID: 480-147622-7 MS

Client ID: SB-3 (10'-13') MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	41.6	ND	38.4	92	77-121	
1,1,2,2-Tetrachloroethane	41.6	ND	27.6	66	80-120	F1
1,1,2-Trichloroethane	41.6	ND	32.2	77	78-122	F1
1,1,2-Trichloro-1,2,2-trifluoroethane	41.6	ND	38.0	91	60-140	
1,1-Dichloroethane	41.6	ND	39.1	94	73-126	
1,1-Dichloroethene	41.6	ND	37.2	89	59-125	
1,2,4-Trichlorobenzene	41.6	ND	29.9	72	64-120	
1,2-Dibromo-3-Chloropropane	41.6	ND	23.4	56	63-124	F1
1,2-Dichlorobenzene	41.6	ND	34.0	82	75-120	
1,2-Dichloroethane	41.6	ND	35.1	84	77-122	
1,2-Dichloropropane	41.6	ND	38.6	93	75-124	
1,3-Dichlorobenzene	41.6	ND	34.9	84	74-120	
1,4-Dichlorobenzene	41.6	ND	34.5	83	73-120	
2-Butanone (MEK)	208	3.2 J	124	58	70-134	F1
2-Hexanone	208	ND	126	61	59-130	
4-Methyl-2-pentanone (MIBK)	208	ND	129	62	65-133	F1
Acetone	208	88	127	19	61-137	F1
Benzene	41.6	ND	38.7	93	79-127	
Bromodichloromethane	41.6	ND	37.8	91	80-122	
Bromoform	41.6	ND	31.3	75	68-126	
Bromomethane	41.6	ND	39.5	95	37-149	
Carbon disulfide	41.6	ND	37.0	89	64-131	
Carbon tetrachloride	41.6	ND	39.4	95	75-135	
Chlorobenzene	41.6	ND	36.8	88	76-124	
Dibromochloromethane	41.6	ND	35.1	84	76-125	
Chloroethane	41.6	ND	37.5	90	69-135	
Chloroform	41.6	ND	39.1	94	80-120	
Chloromethane	41.6	ND	35.8	86	63-127	
cis-1,2-Dichloroethene	41.6	12	43.9	77	80-120	F1
cis-1,3-Dichloropropene	41.6	ND	36.6	88	80-120	
Cyclohexane	41.6	ND	37.5	90	65-120	
Dichlorodifluoromethane	41.6	ND	36.9	89	57-142	
Ethylbenzene	41.6	ND	37.4	90	80-120	
1,2-Dibromoethane	41.6	ND	30.7	74	78-120	F1
Isopropylbenzene	41.6	ND	36.3	87	72-120	
Methyl acetate	83.2	ND	51.7	62	55-136	
Methyl tert-butyl ether	41.6	ND	33.7	81	63-125	
Methylcyclohexane	41.6	ND	36.8	88	60-140	
Methylene Chloride	41.6	ND	33.9	81	61-127	
Styrene	41.6	ND	36.1	87	80-120	
Tetrachloroethene	41.6	ND	37.3	90	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7855.D

Lab ID: 480-147622-7 MSD

Client ID: SB-3 (10'-13') MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	41.5	37.3	90	3	30	77-121	
1,1,2,2-Tetrachloroethane	41.5	28.7	69	4	30	80-120	F1
1,1,2-Trichloroethane	41.5	32.5	78	1	30	78-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	41.5	36.5	88	4	30	60-140	
1,1-Dichloroethane	41.5	37.8	91	3	30	73-126	
1,1-Dichloroethene	41.5	35.6	86	4	30	59-125	
1,2,4-Trichlorobenzene	41.5	30.2	73	1	30	64-120	
1,2-Dibromo-3-Chloropropane	41.5	24.1	58	3	30	63-124	F1
1,2-Dichlorobenzene	41.5	33.7	81	1	30	75-120	
1,2-Dichloroethane	41.5	35.1	85	0	30	77-122	
1,2-Dichloropropane	41.5	37.8	91	2	30	75-124	
1,3-Dichlorobenzene	41.5	34.0	82	3	30	74-120	
1,4-Dichlorobenzene	41.5	33.7	81	2	30	73-120	
2-Butanone (MEK)	207	132	62	6	30	70-134	F1
2-Hexanone	207	134	65	6	30	59-130	
4-Methyl-2-pentanone (MIBK)	207	137	66	6	30	65-133	
Acetone	207	135	23	6	30	61-137	F1
Benzene	41.5	37.6	91	3	30	79-127	
Bromodichloromethane	41.5	37.3	90	1	30	80-122	
Bromoform	41.5	31.8	77	2	30	68-126	
Bromomethane	41.5	39.1	94	1	30	37-149	
Carbon disulfide	41.5	35.1	85	5	30	64-131	
Carbon tetrachloride	41.5	37.8	91	4	30	75-135	
Chlorobenzene	41.5	35.7	86	3	30	76-124	
Dibromochloromethane	41.5	34.7	84	1	30	76-125	
Chloroethane	41.5	36.4	88	3	30	69-135	
Chloroform	41.5	38.0	92	3	30	80-120	
Chloromethane	41.5	35.2	85	2	30	63-127	
cis-1,2-Dichloroethene	41.5	39.4	66	11	30	80-120	F1
cis-1,3-Dichloropropene	41.5	36.3	88	1	30	80-120	
Cyclohexane	41.5	35.6	86	5	30	65-120	
Dichlorodifluoromethane	41.5	36.7	88	1	30	57-142	
Ethylbenzene	41.5	35.7	86	5	30	80-120	
1,2-Dibromoethane	41.5	31.2	75	1	30	78-120	F1
Isopropylbenzene	41.5	35.2	85	3	30	72-120	
Methyl acetate	83.0	55.5	67	7	30	55-136	
Methyl tert-butyl ether	41.5	34.4	83	2	30	63-125	
Methylcyclohexane	41.5	35.3	85	4	30	60-140	
Methylene Chloride	41.5	33.9	82	0	30	61-127	
Styrene	41.5	34.8	84	3	30	80-120	
Tetrachloroethene	41.5	35.8	86	4	30	74-122	

Column to be used to flag recovery and RPD values

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Lab Sample ID: CCVIS 480-455192/3

Calibration Date: 01/15/2019 19:49

Instrument ID: HP5973N

Calib Start Date: 01/08/2019 00:37

GC Column: ZB-624 (20)

ID: 0.18(mm)

Calib End Date: 01/08/2019 03:47

Lab File ID: N7544.D

Conc. Units: ug/L

Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.127	1.404	0.1000	31.1	25.0	24.6	50.0
Chloromethane	Ave	1.866	2.158	0.1000	28.9	25.0	15.6	20.0
Vinyl chloride	Ave	1.529	1.755	0.1000	28.7	25.0	14.8	20.0
Butadiene	Ave	1.779	2.123		29.8	25.0	19.4	20.0
Bromomethane	Lin1		1.033	0.1000	27.5	25.0	9.9	50.0
Chloroethane	Ave	1.030	1.045	0.1000	25.4	25.0	1.5	50.0
Dichlorofluoromethane	Ave	2.259	2.325		25.7	25.0	2.9	20.0
Trichlorofluoromethane	Ave	2.027	2.324	0.1000	28.7	25.0	14.7	20.0
Ethyl ether	Ave	1.564	1.467		23.4	25.0	-6.2	20.0
Acrolein	Lin1		0.2622		390	125	211.7*	50.0
1,1-Dichloroethene	Ave	1.226	1.150	0.1000	23.5	25.0	-6.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.235	1.196	0.1000	24.2	25.0	-3.2	20.0
Acetone	Ave	0.6657	0.7589	0.1000	142	125	14.0	50.0
Iodomethane	Ave	2.407	2.318		24.1	25.0	-3.7	20.0
Carbon disulfide	Ave	3.789	3.473	0.1000	22.9	25.0	-8.3	20.0
Allyl chloride	Ave	2.915	2.874		24.7	25.0	-1.4	20.0
Methyl acetate	Ave	1.898	1.729	0.1000	45.6	50.0	-8.9	50.0
Methylene Chloride	Lin1		1.386	0.1000	25.6	25.0	2.4	20.0
2-Methyl-2-propanol	Ave	0.1415	0.1209		213	250	-14.6	50.0
Methyl tert-butyl ether	Ave	4.097	3.645	0.1000	22.2	25.0	-11.0	20.0
trans-1,2-Dichloroethene	Ave	1.411	1.302	0.1000	23.1	25.0	-7.8	20.0
Acrylonitrile	Ave	0.8891	0.7908		222	250	-11.1	20.0
Hexane	Ave	2.612	2.704		25.9	25.0	3.5	20.0
1,1-Dichloroethane	Ave	2.801	2.682	0.2000	23.9	25.0	-4.2	20.0
Vinyl acetate	Ave	3.288	3.661		55.7	50.0	11.3	20.0
2,2-Dichloropropane	Ave	1.187	1.130		23.8	25.0	-4.8	20.0
cis-1,2-Dichloroethene	Ave	1.612	1.537	0.1000	23.8	25.0	-4.6	20.0
2-Butanone (MEK)	Ave	1.054	1.075	0.1000	127	125	2.0	20.0
Chlorobromomethane	Ave	0.9021	0.8685		24.1	25.0	-3.7	20.0
Tetrahydrofuran	Ave	0.7310	0.6439		44.0	50.0	-11.9	20.0
Chloroform	Ave	2.570	2.396	0.2000	23.3	25.0	-6.8	20.0
1,1,1-Trichloroethane	Ave	1.887	2.002	0.1000	26.5	25.0	6.1	20.0
Cyclohexane	Ave	2.878	2.960	0.1000	25.7	25.0	2.9	20.0
Carbon tetrachloride	Ave	1.541	1.835	0.1000	29.8	25.0	19.1	20.0
1,1-Dichloropropene	Ave	1.814	1.772		24.4	25.0	-2.3	20.0
Benzene	Ave	5.717	5.375	0.5000	23.5	25.0	-6.0	20.0
Isobutyl alcohol	Ave	0.0580	0.0634		683	625	9.3	50.0
1,2-Dichloroethane	Ave	2.416	2.374	0.1000	24.6	25.0	-1.7	20.0
n-Heptane	Ave	2.740	3.327		30.4	25.0	21.4*	20.0
Trichloroethene	Ave	1.454	1.437	0.2000	24.7	25.0	-1.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Lab Sample ID: CCVIS 480-454994/4

Calibration Date: 01/14/2019 21:03

Instrument ID: HP5973F

Calib Start Date: 01/11/2019 11:17

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Calib End Date: 01/11/2019 13:52

Lab File ID: F7862.D

Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.188	1.151	0.1000	48.4	50.0	-3.1	50.0
Chloromethane	Ave	1.325	1.239	0.1000	46.7	50.0	-6.5	20.0
Vinyl chloride	Ave	1.203	1.157	0.1000	48.1	50.0	-3.9	20.0
Butadiene	Ave	1.195	1.107		46.3	50.0	-7.4	20.0
Bromomethane	Ave	0.7005	0.5665	0.1000	40.4	50.0	-19.1	50.0
Chloroethane	Ave	0.6694	0.4448	0.1000	33.2	50.0	-33.5	50.0
Dichlorofluoromethane	Ave	1.535	1.236		40.2	50.0	-19.5	20.0
Trichlorofluoromethane	Ave	1.623	1.375	0.1000	42.4	50.0	-15.3	20.0
Ethyl ether	Ave	1.345	1.339		49.8	50.0	-0.4	20.0
Acrolein	Ave	0.2523	0.2646		262	250	4.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.078	1.094	0.1000	50.7	50.0	1.5	20.0
1,1-Dichloroethene	Ave	1.148	1.116	0.1000	48.6	50.0	-2.7	20.0
Acetone	Ave	0.5474	0.5797	0.1000	265	250	5.9	50.0
Iodomethane	Ave	1.947	1.933		49.7	50.0	-0.7	20.0
Carbon disulfide	Ave	3.873	3.753	0.1000	48.4	50.0	-3.1	20.0
Methyl acetate	Ave	1.509	1.584	0.1000	105	100	5.0	50.0
Allyl chloride	Ave	2.439	2.422		49.7	50.0	-0.7	20.0
Methylene Chloride	Ave	1.526	1.432	0.1000	46.9	50.0	-6.1	20.0
2-Methyl-2-propanol	Ave	0.1981	0.2038		515	500	2.9	50.0
Methyl tert-butyl ether	Ave	4.237	4.355	0.1000	51.4	50.0	2.8	20.0
Acrylonitrile	Ave	0.6243	0.6464		518	500	3.5	20.0
trans-1,2-Dichloroethene	Ave	1.350	1.368	0.1000	50.7	50.0	1.4	20.0
Hexane	Ave	2.677	2.528		47.2	50.0	-5.6	20.0
Vinyl acetate	Ave	3.024	3.266		108	100	8.0	20.0
1,1-Dichloroethane	Ave	2.484	2.508	0.2000	50.5	50.0	1.0	20.0
2-Butanone (MEK)	Ave	0.9024	0.9849	0.1000	273	250	9.1	20.0
2,2-Dichloropropane	Ave	1.900	1.912		50.3	50.0	0.6	20.0
cis-1,2-Dichloroethene	Ave	1.548	1.533	0.1000	49.5	50.0	-0.9	20.0
Chlorobromomethane	Ave	0.7382	0.7378		50.0	50.0	-0.0	20.0
Tetrahydrofuran	Ave	0.6101	0.6348		104	100	4.1	20.0
Chloroform	Ave	2.291	2.281	0.2000	49.8	50.0	-0.4	20.0
1,1,1-Trichloroethane	Ave	1.845	1.848	0.1000	50.1	50.0	0.2	20.0
Cyclohexane	Ave	2.502	2.453	0.1000	49.0	50.0	-1.9	20.0
1,1-Dichloropropene	Ave	1.960	1.994		50.9	50.0	1.7	20.0
Carbon tetrachloride	Ave	1.656	1.689	0.1000	51.0	50.0	2.0	20.0
Isobutyl alcohol	Ave	0.0947	0.1110		1470	1250	17.2	50.0
Benzene	Ave	5.721	5.713	0.5000	49.9	50.0	-0.1	20.0
1,2-Dichloroethane	Ave	1.879	1.887	0.1000	50.2	50.0	0.5	20.0
n-Heptane	Ave	2.672	2.697		50.5	50.0	0.9	20.0
Trichloroethene	Ave	1.424	1.444	0.2000	50.7	50.0	1.4	20.0

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-147622-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-454322/1-A

Instrument Code: ICAP1

Batch No.: 454668

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	4.60	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.104	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	17.52	J		6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7864.D

Lab ID: LCS 480-455001/1-A

Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	45.4	91	77-121	
1,1,2,2-Tetrachloroethane	50.0	44.2	88	80-120	
1,1,2-Trichloroethane	50.0	44.2	88	78-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.9	90	60-140	
1,1-Dichloroethane	50.0	45.6	91	73-126	
1,1-Dichloroethene	50.0	44.4	89	59-125	
1,2,4-Trichlorobenzene	50.0	45.3	91	64-120	
1,2-Dibromo-3-Chloropropane	50.0	44.2	88	63-124	
1,2-Dichlorobenzene	50.0	44.2	88	75-120	
1,2-Dichloroethane	50.0	45.1	90	77-122	
1,2-Dichloropropane	50.0	45.6	91	75-124	
1,3-Dichlorobenzene	50.0	44.9	90	74-120	
1,4-Dichlorobenzene	50.0	44.6	89	73-120	
2-Butanone (MEK)	250	252	101	70-134	
2-Hexanone	250	250	100	59-130	
4-Methyl-2-pentanone (MIBK)	250	240	96	65-133	
Acetone	250	239	96	61-137	
Benzene	50.0	45.7	91	79-127	
Bromodichloromethane	50.0	45.1	90	80-122	
Bromoform	50.0	46.5	93	68-126	
Bromomethane	50.0	39.6	79	37-149	
Carbon disulfide	50.0	44.9	90	64-131	
Carbon tetrachloride	50.0	46.2	92	75-135	
Chlorobenzene	50.0	44.8	90	76-124	
Dibromochloromethane	50.0	45.5	91	76-125	
Chloroethane	50.0	33.9	68	69-135	*
Chloroform	50.0	45.5	91	80-120	
Chloromethane	50.0	45.8	92	63-127	
cis-1,2-Dichloroethene	50.0	44.9	90	81-120	
cis-1,3-Dichloropropene	50.0	45.8	92	80-120	
Cyclohexane	50.0	44.0	88	65-120	
Dichlorodifluoromethane	50.0	47.3	95	57-142	
Ethylbenzene	50.0	44.8	90	80-120	
1,2-Dibromoethane	50.0	44.8	90	78-120	
Isopropylbenzene	50.0	43.6	87	72-120	
Methyl acetate	100	95.2	95	55-136	
Methyl tert-butyl ether	50.0	46.2	92	63-125	
Methylcyclohexane	50.0	44.5	89	60-140	
Methylene Chloride	50.0	42.6	85	61-127	
Styrene	50.0	44.6	89	80-120	
Tetrachloroethene	50.0	45.3	91	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Matrix: Solid

Level: Medium

Lab File ID: N7547.D

Lab ID: LCS 480-455051/1-A

Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2500	2730	109	68-130	
1,1,2,2-Tetrachloroethane	2500	2350	94	73-120	
1,1,2-Trichloroethane	2500	2380	95	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2350	94	10-179	
1,1-Dichloroethane	2500	2460	99	78-121	
1,1-Dichloroethene	2500	2350	94	48-133	
1,2,4-Trichlorobenzene	2500	2430	97	70-140	
1,2-Dibromo-3-Chloropropane	2500	2410	97	56-122	
1,2-Dichlorobenzene	2500	2510	100	78-125	
1,2-Dichloroethane	2500	2500	100	74-127	
1,2-Dichloropropane	2500	2640	106	80-120	
1,3-Dichlorobenzene	2500	2530	101	80-120	
1,4-Dichlorobenzene	2500	2520	101	80-120	
2-Butanone (MEK)	12500	12700	102	54-149	
2-Hexanone	12500	12400	99	59-127	
4-Methyl-2-pentanone (MIBK)	12500	11700	93	74-120	
Acetone	12500	14600	117	47-141	
Benzene	2500	2450	98	77-125	
Bromodichloromethane	2500	2810	113	71-121	
Bromoform	2500	3150	126	48-125	*
Bromomethane	2500	2960	118	39-149	
Carbon disulfide	2500	2170	87	40-136	
Carbon tetrachloride	2500	2960	119	54-135	
Chlorobenzene	2500	2500	100	76-126	
Dibromochloromethane	2500	2780	111	64-120	
Chloroethane	2500	3000	120	23-150	
Chloroform	2500	2380	95	78-120	
Chloromethane	2500	2710	108	61-124	
cis-1,2-Dichloroethene	2500	2430	97	79-124	
cis-1,3-Dichloropropene	2500	2560	103	75-121	
Cyclohexane	2500	2660	107	49-129	
Dichlorodifluoromethane	2500	2620	105	10-150	
Ethylbenzene	2500	2490	100	78-124	
1,2-Dibromoethane	2500	2390	96	80-120	
Isopropylbenzene	2500	2530	101	76-120	
Methyl acetate	5000	4860	97	71-123	
Methyl tert-butyl ether	2500	2330	93	67-137	
Methylcyclohexane	2500	2620	105	50-130	
Methylene Chloride	2500	2540	102	75-118	
Styrene	2500	2560	102	80-120	
Tetrachloroethene	2500	2510	100	73-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7885.D

Lab ID: 480-147693-7 MS

Client ID: SB-20 (10'-15') MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	37.6	ND	35.3	94	77-121	
1,1,2,2-Tetrachloroethane	37.6	ND	25.8	69	80-120	F1
1,1,2-Trichloroethane	37.6	ND	29.3	78	78-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	37.6	ND	34.2	91	60-140	
1,1-Dichloroethane	37.6	ND	36.0	96	73-126	
1,1-Dichloroethene	37.6	ND	33.8	90	59-125	
1,2,4-Trichlorobenzene	37.6	ND	30.3	81	64-120	
1,2-Dibromo-3-Chloropropane	37.6	ND	21.3	57	63-124	F1
1,2-Dichlorobenzene	37.6	ND	31.8	85	75-120	
1,2-Dichloroethane	37.6	ND	32.8	87	77-122	
1,2-Dichloropropane	37.6	ND	34.8	93	75-124	
1,3-Dichlorobenzene	37.6	ND	32.8	87	74-120	
1,4-Dichlorobenzene	37.6	ND	32.5	87	73-120	
2-Butanone (MEK)	188	ND	120	64	70-134	F1
2-Hexanone	188	ND	120	64	59-130	
4-Methyl-2-pentanone (MIBK)	188	ND	123	65	65-133	
Acetone	188	8.6 J	132	66	61-137	
Benzene	37.6	ND	35.5	94	79-127	
Bromodichloromethane	37.6	ND	34.2	91	80-122	
Bromoform	37.6	ND	28.4	76	68-126	
Bromomethane	37.6	ND	38.2	102	37-149	
Carbon disulfide	37.6	ND	34.2	91	64-131	
Carbon tetrachloride	37.6	ND	35.3	94	75-135	
Chlorobenzene	37.6	ND	33.3	89	76-124	
Dibromochloromethane	37.6	ND	30.9	82	76-125	
Chloroethane	37.6	ND	36.1	96	69-135	
Chloroform	37.6	ND	35.4	94	80-120	
Chloromethane	37.6	ND	37.7	100	63-127	
cis-1,2-Dichloroethene	37.6	ND	34.6	92	80-120	
cis-1,3-Dichloropropene	37.6	ND	33.1	88	80-120	
Cyclohexane	37.6	ND	33.4	89	65-120	
Dichlorodifluoromethane	37.6	ND	35.5	95	57-142	
Ethylbenzene	37.6	ND	33.9	90	80-120	
1,2-Dibromoethane	37.6	ND	28.0	75	78-120	F1
Isopropylbenzene	37.6	ND	33.5	89	72-120	
Methyl acetate	75.1	ND	49.7	66	55-136	
Methyl tert-butyl ether	37.6	ND	31.2	83	63-125	
Methylcyclohexane	37.6	ND	32.8	87	60-140	
Methylene Chloride	37.6	ND	31.7	84	61-127	
Styrene	37.6	ND	32.5	87	80-120	
Tetrachloroethene	37.6	ND	33.3	89	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7885.D

Lab ID: 480-147693-7 MS

Client ID: SB-20 (10'-15') MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Toluene	37.6	0.29 J	33.6	89	74-128	
trans-1,2-Dichloroethene	37.6	ND	34.9	93	78-126	
trans-1,3-Dichloropropene	37.6	ND	30.1	80	73-123	
Trichloroethene	37.6	ND	35.1	93	77-129	
Trichlorofluoromethane	37.6	ND	35.9	96	65-146	
Vinyl chloride	37.6	ND	36.1	96	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7886.D

Lab ID: 480-147693-7 MSD

Client ID: SB-20 (10'-15') MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	40.6	32.9	81	7	30	77-121	
1,1,2,2-Tetrachloroethane	40.6	25.6	63	1	30	80-120	F1
1,1,2-Trichloroethane	40.6	29.3	72	0	30	78-122	F1
1,1,2-Trichloro-1,2,2-trifluoroethane	40.6	31.6	78	8	30	60-140	
1,1-Dichloroethane	40.6	33.7	83	6	30	73-126	
1,1-Dichloroethene	40.6	31.3	77	8	30	59-125	
1,2,4-Trichlorobenzene	40.6	28.8	71	5	30	64-120	
1,2-Dibromo-3-Chloropropane	40.6	22.4	55	5	30	63-124	F1
1,2-Dichlorobenzene	40.6	30.5	75	4	30	75-120	
1,2-Dichloroethane	40.6	32.2	79	2	30	77-122	
1,2-Dichloropropane	40.6	33.7	83	3	30	75-124	
1,3-Dichlorobenzene	40.6	31.1	77	5	30	74-120	
1,4-Dichlorobenzene	40.6	30.9	76	5	30	73-120	
2-Butanone (MEK)	203	125	62	4	30	70-134	F1
2-Hexanone	203	125	62	4	30	59-130	
4-Methyl-2-pentanone (MIBK)	203	128	63	4	30	65-133	F1
Acetone	203	136	63	3	30	61-137	
Benzene	40.6	33.5	82	6	30	79-127	
Bromodichloromethane	40.6	32.8	81	4	30	80-122	
Bromoform	40.6	28.3	70	0	30	68-126	
Bromomethane	40.6	37.2	92	3	30	37-149	
Carbon disulfide	40.6	31.0	76	10	30	64-131	
Carbon tetrachloride	40.6	32.9	81	7	30	75-135	
Chlorobenzene	40.6	31.8	78	4	30	76-124	
Dibromochloromethane	40.6	31.0	76	0	30	76-125	
Chloroethane	40.6	33.4	82	8	30	69-135	
Chloroform	40.6	33.2	82	6	30	80-120	
Chloromethane	40.6	35.4	87	6	30	63-127	
cis-1,2-Dichloroethene	40.6	32.2	79	7	30	80-120	F1
cis-1,3-Dichloropropene	40.6	32.1	79	3	30	80-120	F1
Cyclohexane	40.6	31.0	76	8	30	65-120	
Dichlorodifluoromethane	40.6	30.9	76	14	30	57-142	
Ethylbenzene	40.6	32.0	79	6	30	80-120	F1
1,2-Dibromoethane	40.6	28.3	70	1	30	78-120	F1
Isopropylbenzene	40.6	31.1	77	7	30	72-120	
Methyl acetate	81.2	50.1	62	1	30	55-136	
Methyl tert-butyl ether	40.6	31.1	76	0	30	63-125	
Methylcyclohexane	40.6	30.8	76	6	30	60-140	
Methylene Chloride	40.6	30.5	75	4	30	61-127	
Styrene	40.6	31.3	77	4	30	80-120	F1
Tetrachloroethene	40.6	31.5	78	5	30	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-147693-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: F7886.D
 Lab ID: 480-147693-7 MSD Client ID: SB-20 (10'-15') MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Toluene	40.6	32.7	80	3	30	74-128	
trans-1,2-Dichloroethene	40.6	32.5	80	7	30	78-126	
trans-1,3-Dichloropropene	40.6	29.8	73	1	30	73-123	
Trichloroethene	40.6	32.8	81	7	30	77-129	
Trichlorofluoromethane	40.6	32.8	81	9	30	65-146	
Vinyl chloride	40.6	34.0	84	6	30	61-133	

Column to be used to flag recovery and RPD values

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Lab Sample ID: CCVIS 480-454961/3

Calibration Date: 01/14/2019 15:20

Instrument ID: HP5973U

Calib Start Date: 12/13/2018 12:18

GC Column: RXI-5Si1 MS(0.5 ID: 0.25(mm))

Calib End Date: 12/13/2018 15:13

Lab File ID: U3314725.D

Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5535	0.4591	0.0100	41500	50000	-17.0	20.0
N-Nitrosodimethylamine	Ave	0.7042	0.6087	0.0100	43200	50000	-13.6	50.0
Pyridine	Ave	0.8624	0.5717	0.0100	66300	100000	-33.7	50.0
Benzaldehyde	Ave	0.9485	0.8475	0.0100	44700	50000	-10.6	50.0
Aniline	Ave	2.017	1.834	0.0100	45500	50000	-9.1	20.0
Phenol	Lin2		1.600	0.8000	45000	50000	-10.0	20.0
Bis(2-chloroethyl)ether	Ave	1.224	1.091	0.7000	44600	50000	-10.9	20.0
2-Chlorophenol	Lin2		1.412	0.8000	50500	50000	0.9	20.0
n-Decane	Ave	1.382	0.9898	0.0100	35800	50000	-28.4*	20.0
1,3-Dichlorobenzene	Ave	1.497	1.505	0.0100	50300	50000	0.5	20.0
1,4-Dichlorobenzene	Ave	1.518	1.536	0.0100	50600	50000	1.2	20.0
Benzyl alcohol	Lin2		0.7982	0.0100	49300	50000	-1.3	20.0
1,2-Dichlorobenzene	Ave	1.414	1.465	0.0100	51800	50000	3.6	20.0
Indene	Ave	2.308	2.407	0.0100	156000	150000	4.3	20.0
2-Methylphenol	Lin2		1.132	0.7000	48500	50000	-3.0	20.0
bis (2-chloroisopropyl) ether	Ave	1.621	0.9355	0.0100	28900	50000	-42.3*	20.0
Acetophenone	Lin2		1.758	0.0100	50000	50000	0.0	20.0
N-Nitrosodi-n-propylamine	Lin2		0.7955	0.5000	44200	50000	-11.6	20.0
4-Methylphenol	Lin2		1.209	0.6000	49500	50000	-1.1	20.0
Hexachloroethane	Ave	0.5507	0.5640	0.3000	51200	50000	2.4	20.0
Nitrobenzene	Ave	0.3605	0.3563	0.2000	49400	50000	-1.2	20.0
Isophorone	Lin2		0.6016	0.4000	47800	50000	-4.5	20.0
2-Nitrophenol	Lin2		0.2119	0.1000	56000	50000	12.0	20.0
2,4-Dimethylphenol	Lin2		0.3783	0.2000	54900	50000	9.8	20.0
Bis(2-chloroethoxy)methane	Ave	0.3740	0.3576	0.3000	47800	50000	-4.4	20.0
Benzoic acid	Lin2		0.1710	0.0100	124000	150000	-17.6	50.0
2,4-Dichlorophenol	Lin2		0.3016	0.2000	54200	50000	8.4	20.0
1,2,4-Trichlorobenzene	Ave	0.3065	0.3365	0.0100	54900	50000	9.8	20.0
Naphthalene	Ave	1.022	1.092	0.7000	53400	50000	6.8	20.0
4-Chloroaniline	Lin2		0.4522	0.0100	53300	50000	6.6	20.0
2,6-Dichlorophenol	Ave	0.2675	0.3079	0.0100	57600	50000	15.1	20.0
Hexachlorobutadiene	Ave	0.1637	0.2033	0.0100	62100	50000	24.2*	20.0
Caprolactam	Lin2		0.1015	0.0100	49000	50000	-2.0	50.0
4-Chloro-3-methylphenol	Lin2		0.3179	0.2000	56500	50000	13.0	20.0
2-Methylnaphthalene	Ave	0.6625	0.7436	0.4000	56100	50000	12.2	20.0
1-Methylnaphthalene	Ave	0.6102	0.6725	0.0100	55100	50000	10.2	20.0
Hexachlorocyclopentadiene	Lin2		0.4958	0.0500	56200	50000	12.4	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6215	0.6795	0.0100	54700	50000	9.3	20.0
2,4,6-Trichlorophenol	Lin2		0.4387	0.2000	53600	50000	7.3	20.0
2,4,5-Trichlorophenol	Lin2		0.4552	0.2000	52800	50000	5.6	20.0

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-147693-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-454975/1-A

Instrument Code: ICAP1

Batch No.: 455246

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	4.79	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	5.13	J		6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.0548	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	23.47	J		6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	44.27	J		6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Matrix: Solid

Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB-8 (10'-15')	480-147755-3	101	103	105	84
SB-8 (15'-20')	480-147755-4	105	103	126 X	63 X
SB-11 (10'-15')	480-147755-5	101	105	100	94
SB-11 (15'-20')	480-147755-6	106	104	127 X	62 X
SB-12 (15'-20')	480-147755-8	103	106	110	73
SB-13 (10'-15')	480-147755-9	100	105	97	98
SB-13 (15'-20')	480-147755-10	101	105	98	95
SB-16 (10'-15')	480-147755-13	102	107	99	90
SB-16 (15'-20')	480-147755-14	103	106	100	87
SB-18 (10'-15')	480-147755-15	100	104	97	97
SB-18 (15'-20')	480-147755-16	109	98	143 * X	64 * X
	MB 480-455052/2-A	100	101	99	98
	MB 480-455199/2-A	102	105	97	98
	MB 480-455234/2-A	99	103	101	98
	LCS 480-455052/1-A	102	103	99	102
	LCS 480-455199/1-A	101	104	97	103
	LCS 480-455234/1-A	102	105	100	101
SB-12 (15'-20') MS	480-147755-8 MS	102	97	98	98
SB-12 (15'-20') MSD	480-147755-8 MSD	103	95	98	97

QC LIMITS

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

60-140
64-126
71-125
72-126

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7932.D

Lab ID: 480-147755-8 MS

Client ID: SB-12 (15'-20') MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	41.1	0.43 J	30.2	72	77-121	F1
1,1,2,2-Tetrachloroethane	41.1	ND	20.6	50	80-120	F1
1,1,2-Trichloroethane	41.1	ND	23.6	57	78-122	F1
1,1,2-Trichloro-1,2,2-trifluoroethane	41.1	ND	29.5	72	60-140	
1,1-Dichloroethane	41.1	ND	31.8	77	73-126	
1,1-Dichloroethene	41.1	ND	28.8	70	59-125	
1,2,4-Trichlorobenzene	41.1	ND	4.46	11	64-120	F1
1,2-Dibromo-3-Chloropropane	41.1	ND	14.5	35	63-124	F1
1,2-Dichlorobenzene	41.1	ND	14.2	34	75-120	F1
1,2-Dichloroethane	41.1	ND	29.4	71	77-122	F1
1,2-Dichloropropane	41.1	ND	28.7	70	75-124	F1
1,3-Dichlorobenzene	41.1	ND	12.9	31	74-120	F1
1,4-Dichlorobenzene	41.1	ND	12.7	31	73-120	F1
2-Butanone (MEK)	206	ND	132	64	70-134	F1
2-Hexanone	206	ND	99.2	48	59-130	F1
4-Methyl-2-pentanone (MIBK)	206	ND	115	56	65-133	F1
Acetone	206	13 J	156	69	61-137	
Benzene	41.1	ND	29.2	71	79-127	F1
Bromodichloromethane	41.1	ND	28.1	68	80-122	F1
Bromoform	41.1	ND	19.5	47	68-126	F1
Bromomethane	41.1	ND	38.9	95	37-149	
Carbon disulfide	41.1	ND	27.4	67	64-131	
Carbon tetrachloride	41.1	ND	28.9	70	75-135	F1
Chlorobenzene	41.1	ND	20.8	51	76-124	F1
Dibromochloromethane	41.1	ND	23.4	57	76-125	F1
Chloroethane	41.1	ND	34.8	85	69-135	
Chloroform	41.1	0.25 J	31.0	75	80-120	F1
Chloromethane	41.1	ND	38.4	94	63-127	
cis-1,2-Dichloroethene	41.1	2.6 J	29.8	66	80-120	F1
cis-1,3-Dichloropropene	41.1	ND	24.1	59	80-120	F1
Cyclohexane	41.1	ND	26.0	63	65-120	F1
Dichlorodifluoromethane	41.1	ND	32.7	80	57-142	
Ethylbenzene	41.1	ND	20.7	50	80-120	F1
1,2-Dibromoethane	41.1	ND	19.9	48	78-120	F1
Isopropylbenzene	41.1	ND	20.4	50	72-120	F1
Methyl acetate	82.2	ND	56.0	68	55-136	
Methyl tert-butyl ether	41.1	ND	32.9	80	63-125	
Methylcyclohexane	41.1	ND	22.0	54	60-140	F1
Methylene Chloride	41.1	ND	30.1	73	61-127	
Styrene	41.1	ND	17.6	43	80-120	F1
Tetrachloroethene	41.1	ND	20.9	51	74-122	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7932.D

Lab ID: 480-147755-8 MS

Client ID: SB-12 (15'-20') MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Toluene	41.1	ND	23.8	58	74-128	F1
trans-1,2-Dichloroethene	41.1	ND	28.5	69	78-126	F1
trans-1,3-Dichloropropene	41.1	ND	20.6	50	73-123	F1
Trichloroethene	41.1	110	40.8	180	77-129	F1
Trichlorofluoromethane	41.1	ND	32.9	80	65-146	
Vinyl chloride	41.1	ND	35.7	87	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: F7933.D

Lab ID: 480-147755-8 MSD

Client ID: SB-12 (15'-20') MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	42.6	31.8	74	5	30	77-121	F1
1,1,2,2-Tetrachloroethane	42.6	22.4	53	8	30	80-120	F1
1,1,2-Trichloroethane	42.6	25.4	60	7	30	78-122	F1
1,1,2-Trichloro-1,2,2-trifluoroethane	42.6	31.0	73	5	30	60-140	
1,1-Dichloroethane	42.6	32.9	77	3	30	73-126	
1,1-Dichloroethene	42.6	29.6	69	3	30	59-125	
1,2,4-Trichlorobenzene	42.6	4.60	11	3	30	64-120	F1
1,2-Dibromo-3-Chloropropane	42.6	16.4	39	12	30	63-124	F1
1,2-Dichlorobenzene	42.6	15.3	36	7	30	75-120	F1
1,2-Dichloroethane	42.6	30.3	71	3	30	77-122	F1
1,2-Dichloropropane	42.6	30.3	71	5	30	75-124	F1
1,3-Dichlorobenzene	42.6	13.3	31	3	30	74-120	F1
1,4-Dichlorobenzene	42.6	13.3	31	4	30	73-120	F1
2-Butanone (MEK)	213	127	59	4	30	70-134	F1
2-Hexanone	213	103	48	4	30	59-130	F1
4-Methyl-2-pentanone (MIBK)	213	118	55	2	30	65-133	F1
Acetone	213	148	64	5	30	61-137	
Benzene	42.6	30.5	72	4	30	79-127	F1
Bromodichloromethane	42.6	29.8	70	6	30	80-122	F1
Bromoform	42.6	20.8	49	6	30	68-126	F1
Bromomethane	42.6	38.7	91	1	30	37-149	
Carbon disulfide	42.6	28.3	66	3	30	64-131	
Carbon tetrachloride	42.6	30.7	72	6	30	75-135	F1
Chlorobenzene	42.6	22.0	52	5	30	76-124	F1
Dibromochloromethane	42.6	25.1	59	7	30	76-125	F1
Chloroethane	42.6	37.2	87	7	30	69-135	
Chloroform	42.6	32.1	75	4	30	80-120	F1
Chloromethane	42.6	39.3	92	2	30	63-127	
cis-1,2-Dichloroethene	42.6	30.4	65	2	30	80-120	F1
cis-1,3-Dichloropropene	42.6	25.5	60	6	30	80-120	F1
Cyclohexane	42.6	27.8	65	7	30	65-120	
Dichlorodifluoromethane	42.6	32.7	77	0	30	57-142	
Ethylbenzene	42.6	21.8	51	5	30	80-120	F1
1,2-Dibromoethane	42.6	21.1	50	6	30	78-120	F1
Isopropylbenzene	42.6	22.2	52	8	30	72-120	F1
Methyl acetate	85.2	53.5	63	5	30	55-136	
Methyl tert-butyl ether	42.6	33.3	78	1	30	63-125	
Methylcyclohexane	42.6	23.5	55	6	30	60-140	F1
Methylene Chloride	42.6	31.1	73	4	30	61-127	
Styrene	42.6	18.4	43	4	30	80-120	F1
Tetrachloroethene	42.6	21.7	51	4	30	74-122	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7933.D

Lab ID: 480-147755-8 MSD

Client ID: SB-12 (15'-20') MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Toluene	42.6	24.8	58	4	30	74-128	F1
trans-1,2-Dichloroethene	42.6	28.7	67	1	30	78-126	F1
trans-1,3-Dichloropropene	42.6	21.6	51	5	30	73-123	F1
Trichloroethene	42.6	36.1	185	12	30	77-129	F1
Trichlorofluoromethane	42.6	34.3	81	4	30	65-146	
Vinyl chloride	42.6	36.9	87	3	30	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Sample No.: CCVIS 480-455197/4

Date Analyzed: 01/15/2019 22:34

Instrument ID: HP5973F

GC Column: ZB-624 (30) VOA ID: 0.25 (mm)

Lab File ID (Standard): F7911.D

Heated Purge: (Y/N) Y

Calibration ID: 35757

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		186669	5.73	390386	8.58	394924	10.87
UPPER LIMIT		373338	6.23	780772	9.08	789848	11.37
LOWER LIMIT		93335	5.23	195193	8.08	197462	10.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-455199/1-A		206244	5.73	438614	8.58	440185	10.87
MB 480-455199/2-A		201218	5.73	427331	8.58	400696	10.87
480-147755-9	SB-13 (10'-15')	204053	5.73	435681	8.58	398836	10.87
480-147755-10	SB-13 (15'-20')	196351	5.72	408377	8.58	355043	10.87
480-147755-13	SB-16 (10'-15')	194219	5.73	401486	8.58	283794	10.87
480-147755-14	SB-16 (15'-20')	190109	5.73	383237	8.58	253845	10.87
480-147755-4	SB-8 (15'-20')	170262	5.73	237507	8.58	106661*	10.87
480-147755-6	SB-11 (15'-20')	172461	5.73	237220	8.58	99746*	10.87
480-147755-8	SB-12 (15'-20')	179371	5.73	315074	8.58	155910*	10.87
480-147755-15	SB-18 (10'-15')	193235	5.73	404274	8.58	372270	10.87
480-147755-8 MS	SB-12 (15'-20') MS	193526	5.73	407612	8.58	366572	10.87
480-147755-8 MSD	SB-12 (15'-20') MSD	197571	5.73	416826	8.58	372383	10.87

27%
25.2%
39%

FB = Fluorobenzene (IS)

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Sample No.: CCVIS 480-455237/2

Date Analyzed: 01/16/2019 09:14

Instrument ID: HP5973F

GC Column: ZB-624 (30) VOA ID: 0.25 (mm)

Lab File ID (Standard): F7936.D

Heated Purge: (Y/N) Y

Calibration ID: 35757

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		201695	5.72	406389	8.58	395161	10.87
UPPER LIMIT		403390	6.22	812778	9.08	790322	11.37
LOWER LIMIT		100848	5.22	203195	8.08	197581	10.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-455234/1-A		208049	5.73	424479	8.58	416029	10.87
MB 480-455234/2-A		203359	5.73	405850	8.58	375842	10.87
480-147755-16	SB-18 (15'-20')	136967	5.73	146622*	8.58	67988*	10.87

362

172 (4252) R

FB = Fluorobenzene (IS)

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-147755-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-454780/1-A

Instrument Code: ICAP1

Batch No.: 455035

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	5.96	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.0429	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7959.D

Lab ID: 480-147860-9 MS

Client ID: SB-27 (10'-15') MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	42.1	ND	38.7	92	77-121	
1,1,2,2-Tetrachloroethane	42.1	ND	30.5	72	80-120	F1
1,1,2-Trichloroethane	42.1	ND	33.4	79	78-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	42.1	ND	37.6	89	60-140	
1,1-Dichloroethane	42.1	ND	38.5	91	73-126	
1,1-Dichloroethene	42.1	ND	36.2	86	59-125	
1,2,4-Trichlorobenzene	42.1	ND	31.0	74	64-120	
1,2-Dibromo-3-Chloropropane	42.1	ND	25.2	60	63-124	F1
1,2-Dichlorobenzene	42.1	ND	34.7	82	75-120	
1,2-Dichloroethane	42.1	ND	37.1	88	77-122	
1,2-Dichloropropane	42.1	ND	37.7	89	75-124	
1,3-Dichlorobenzene	42.1	ND	35.5	84	74-120	
1,4-Dichlorobenzene	42.1	ND	35.3	84	73-120	
2-Butanone (MEK)	211	ND	141	67	70-134	F1
2-Hexanone	211	ND	142	67	59-130	
4-Methyl-2-pentanone (MIBK)	211	ND	145	69	65-133	
Acetone	211	6.9 J	145	66	61-137	
Benzene	42.1	ND	38.4	91	79-127	
Bromodichloromethane	42.1	ND	38.1	90	80-122	
Bromoform	42.1	ND	32.5	77	68-126	
Bromomethane	42.1	ND	46.3	110	37-149	
Carbon disulfide	42.1	ND	36.7	87	64-131	
Carbon tetrachloride	42.1	ND	39.2	93	75-135	
Chlorobenzene	42.1	ND	36.7	87	76-124	
Dibromochloromethane	42.1	ND	35.2	83	76-125	
Chloroethane	42.1	ND	43.8	104	69-135	
Chloroform	42.1	0.86 J	39.6	92	80-120	
Chloromethane	42.1	ND	40.0	95	63-127	
cis-1,2-Dichloroethene	42.1	ND	36.7	87	80-120	
cis-1,3-Dichloropropene	42.1	ND	36.4	86	80-120	
Cyclohexane	42.1	ND	36.7	87	65-120	
Dichlorodifluoromethane	42.1	ND	35.3	84	57-142	
Ethylbenzene	42.1	ND	37.7	90	80-120	
1,2-Dibromoethane	42.1	ND	31.6	75	78-120	F1
Isopropylbenzene	42.1	ND	37.2	88	72-120	
Methyl acetate	84.3	ND	55.9	66	55-136	
Methyl tert-butyl ether	42.1	ND	34.3	81	63-125	
Methylcyclohexane	42.1	ND	36.8	87	60-140	
Methylene Chloride	42.1	ND	33.3	79	61-127	
Styrene	42.1	ND	35.8	85	80-120	
Tetrachloroethene	42.1	ND	37.4	89	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7959.D

Lab ID: 480-147860-9 MS

Client ID: SB-27 (10'-15') MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Toluene	42.1	ND	37.4	89	74-128	
trans-1,2-Dichloroethene	42.1	ND	37.1	88	78-126	
trans-1,3-Dichloropropene	42.1	ND	34.6	82	73-123	
Trichloroethene	42.1	ND	37.4	89	77-129	
Trichlorofluoromethane	42.1	ND	43.5	103	65-146	
Vinyl chloride	42.1	ND	40.8	97	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7960.D

Lab ID: 480-147860-9 MSD

Client ID: SB-27 (10'-15') MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	43.4	38.0	88	2	30	77-121	
1,1,2,2-Tetrachloroethane	43.4	31.7	73	4	30	80-120	F1
1,1,2-Trichloroethane	43.4	34.5	79	3	30	78-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	43.4	38.1	88	1	30	60-140	
1,1-Dichloroethane	43.4	38.2	88	1	30	73-126	
1,1-Dichloroethene	43.4	36.6	84	1	30	59-125	
1,2,4-Trichlorobenzene	43.4	33.7	78	9	30	64-120	
1,2-Dibromo-3-Chloropropane	43.4	27.5	63	9	30	63-124	
1,2-Dichlorobenzene	43.4	35.3	81	2	30	75-120	
1,2-Dichloroethane	43.4	37.1	86	0	30	77-122	
1,2-Dichloropropane	43.4	37.5	86	1	30	75-124	
1,3-Dichlorobenzene	43.4	36.0	83	1	30	74-120	
1,4-Dichlorobenzene	43.4	35.6	82	1	30	73-120	
2-Butanone (MEK)	217	152	70	7	30	70-134	
2-Hexanone	217	154	71	8	30	59-130	
4-Methyl-2-pentanone (MIBK)	217	156	72	7	30	65-133	
Acetone	217	159	70	9	30	61-137	
Benzene	43.4	37.8	87	2	30	79-127	
Bromodichloromethane	43.4	37.8	87	1	30	80-122	
Bromoform	43.4	33.8	78	4	30	68-126	
Bromomethane	43.4	43.6	100	6	30	37-149	
Carbon disulfide	43.4	35.7	82	3	30	64-131	
Carbon tetrachloride	43.4	39.1	90	0	30	75-135	
Chlorobenzene	43.4	36.6	84	0	30	76-124	
Dibromochloromethane	43.4	36.0	83	2	30	76-125	
Chloroethane	43.4	43.6	101	0	30	69-135	
Chloroform	43.4	38.9	88	2	30	80-120	
Chloromethane	43.4	39.6	91	1	30	63-127	
cis-1,2-Dichloroethene	43.4	36.6	84	0	30	80-120	
cis-1,3-Dichloropropene	43.4	36.6	84	0	30	80-120	
Cyclohexane	43.4	36.9	85	1	30	65-120	
Dichlorodifluoromethane	43.4	36.2	83	2	30	57-142	
Ethylbenzene	43.4	37.1	86	2	30	80-120	
1,2-Dibromoethane	43.4	32.9	76	4	30	78-120	F1
Isopropylbenzene	43.4	36.4	84	2	30	72-120	
Methyl acetate	86.8	59.5	69	6	30	55-136	
Methyl tert-butyl ether	43.4	35.9	83	5	30	63-125	
Methylcyclohexane	43.4	36.5	84	1	30	60-140	
Methylene Chloride	43.4	33.6	77	1	30	61-127	
Styrene	43.4	35.8	82	0	30	80-120	
Tetrachloroethene	43.4	36.3	84	3	30	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: F7960.D

Lab ID: 480-147860-9 MSD

Client ID: SB-27 (10'-15') MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Toluene	43.4	36.9	85	1	30	74-128	
trans-1,2-Dichloroethene	43.4	37.0	85	0	30	78-126	
trans-1,3-Dichloropropene	43.4	35.2	81	2	30	73-123	
Trichloroethene	43.4	37.1	86	1	30	77-129	
Trichlorofluoromethane	43.4	42.2	97	3	30	65-146	
Vinyl chloride	43.4	39.8	92	2	30	61-133	

Column to be used to flag recovery and RPD values

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Matrix: Solid

Level: Low

GC Column (2): ZB-35

ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX2 #	DCBP2 #
SB-29 (0'-5')	480-147860-4	75	72
SB-27 (0'-5')	480-147860-8	60	55 X
	MB 480-455210/1-A	82	84
	LCS 480-455210/2-A	87	89

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

QC LIMITS
60-154
65-174

Column to be used to flag recovery values

FORM II 8082A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-455541/1-A

Instrument Code: ICAP1

Batch No.: 455926

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	8.409	J		6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	10.19	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	2.97	J		6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	0.323	J		6010C
7440-09-7	Potassium	30.08			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-455541/1-A

Instrument Code: ICAP2

Batch No.: 455934

CAS No.	Analyte	Concentration	C	Q	Method
7440-23-5	Sodium	50.10	J		6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SB-29 (0'-5') MS

Lab ID: 480-147860-1 MS

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 87.4

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	21770	13500	2320	355	75-125	4	6010C
Antimony	25.97	ND	46.4	56	75-125	F1	6010C
Arsenic	46.99	3.2	46.4	95	75-125		6010C
Barium	104.3	42.4	46.4	134	75-125	F1	6010C
Beryllium	40.65	0.51	46.4	87	75-125		6010C
Cadmium	42.00	0.16 J	46.4	90	75-125		6010C
Calcium	84020	81600	2320	103	75-125	4	6010C
Chromium	57.43	15.0	46.4	91	75-125		6010C
Cobalt	50.00	7.2	46.4	92	75-125		6010C
Copper	57.01	15.6	46.4	89	75-125		6010C
Iron	15760	13500	2320	98	75-125	4	6010C
Lead	54.07	6.6	46.4	102	75-125		6010C
Magnesium	55820	49500	2320	272	75-125	E 4	6010C
Manganese	312.2	390	46.4	-167	75-125	4	6010C
Nickel	62.39	16.4	46.4	99	75-125		6010C
Potassium	10460	4970	2320	237	75-125	F1	6010C
Selenium	43.06	ND	46.4	93	75-125		6010C
Silver	10.72	ND	11.6	92	75-125		6010C
Sodium	2487	214	2320	98	75-125		6010C
Thallium	44.73	ND	46.4	96	75-125		6010C
Vanadium	67.86	21.0	46.4	101	75-125		6010C
Zinc	63.67	23.6	46.4	86	75-125		6010C
Mercury	0.458	0.046	0.376	110	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SB-29 (0'-5') MSD

Lab ID: 480-147860-1 MSD

Lab Name: TestAmerica Buffalo

Job No.: 480-147860-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 87.4

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	24640	2280	488	75-125	12	20	4	6010C
Antimony	22.53	45.5	49	75-125	14	20	F1	6010C
Arsenic	45.08	45.5	92	75-125	4	20		6010C
Barium	104.7	45.5	137	75-125	0	20	F1	6010C
Beryllium	39.44	45.5	85	75-125	3	20		6010C
Cadmium	39.20	45.5	86	75-125	7	20		6010C
Calcium	18290	2280	-2782	75-125	128	20	4 F2	6010C
Chromium	64.71	45.5	109	75-125	12	20		6010C
Cobalt	51.80	45.5	98	75-125	4	20		6010C
Copper	57.73	45.5	93	75-125	1	20		6010C
Iron	20220	2280	295	75-125	25	20	4 F2	6010C
Lead	68.38	45.5	136	75-125	23	20	F1 F2	6010C
Magnesium	16870	2280	-1434	75-125	107	20	4 F2	6010C
Manganese	244.6	45.5	-318	75-125	24	20	4 F2	6010C
Nickel	76.40	45.5	132	75-125	20	20	F1	6010C
Potassium	9251	2280	188	75-125	12	20	F1	6010C
Selenium	40.17	45.5	88	75-125	7	20		6010C
Silver	10.25	11.4	90	75-125	4	20		6010C
Sodium	2326	2280	93	75-125	7	20		6010C
Thallium	44.23	45.5	97	75-125	1	20		6010C
Vanadium	72.22	45.5	113	75-125	6	20		6010C
Zinc	86.01	45.5	137	75-125	30	20	F1 F2	6010C
Mercury	0.456	0.366	112	80-120	0	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-147860-1

SDG No: _____

Lab Name: TestAmerica Buffalo

Job No: 480-147860-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I) C		Serial Dilution Result (S) C		% Difference	Q	Method
Aluminum	13500		14480		7.0		6010C
Antimony	ND		ND		NC		6010C
Arsenic	3.2		2.32	J	NC		6010C
Barium	42.4		46.88		11 V		6010C
Beryllium	0.51		0.576	J	NC		6010C
Cadmium	0.16	J	0.225	J	NC		6010C
Calcium	81600		96600		18 V		6010C
Chromium	15.0		17.32		15 V		6010C
Cobalt	7.2		6.86		4.3		6010C
Copper	15.6		16.11		3.5		6010C
Iron	13500		15590		16 V		6010C
Lead	6.6		6.69		NC		6010C
Magnesium	49500		58260		18 V		6010C
Manganese	390		453.1		16 V		6010C
Nickel	16.4		16.14	J	1.5		6010C
Potassium	4970		5048		1.6		6010C
Selenium	ND		ND		NC		6010C
Silver	ND		ND		NC		6010C
Sodium	214		322.0	J	NC		6010C
Thallium	ND		ND		NC		6010C
Vanadium	21.0		23.22		11 V		6010C
Zinc	23.6		27.35		16 V		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: MB 480-455390/2-A

Matrix: Solid

Lab File ID: F7966.D

Analysis Method: 8260C

Date Collected: _____

Sample wt/vol: 5(g)

Date Analyzed: 01/16/2019 23:15

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 455386

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.778		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
98-82-8	Isopropylbenzene	ND		5.0	0.75

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-455541/1-A

Instrument Code: ICAP1

Batch No.: 455926

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	0.409	J		6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	10.19	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	2.97	J		6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	0.323	J		6010C
7440-09-7	Potassium	30.08			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-147921-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-455541/1-A

Instrument Code: ICAP2

Batch No.: 455934

CAS No.	Analyte	Concentration	C	Q	Method
7440-23-5	Sodium	50.10	J		6010C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3767.D

Lab ID: LCS 480-455755/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.8	103	73-126	
1,1,2,2-Tetrachloroethane	25.0	27.6	110	76-120	
1,1,2-Trichloroethane	25.0	26.3	105	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.4	98	61-148	
1,1-Dichloroethane	25.0	24.0	96	77-120	
1,1-Dichloroethene	25.0	24.1	96	66-127	
1,2,4-Trichlorobenzene	25.0	25.1	100	79-122	
1,2-Dibromo-3-Chloropropane	25.0	27.2	109	56-134	
1,2-Dichlorobenzene	25.0	25.5	102	80-124	
1,2-Dichloroethane	25.0	26.8	107	75-120	
1,2-Dichloropropane	25.0	25.5	102	76-120	
1,3-Dichlorobenzene	25.0	24.9	100	77-120	
1,4-Dichlorobenzene	25.0	25.1	101	80-120	
2-Butanone (MEK)	125	201	161	57-140	*
2-Hexanone	125	139	111	65-127	
4-Methyl-2-pentanone (MIBK)	125	131	104	71-125	
Acetone	125	163	131	56-142	
Benzene	25.0	25.8	103	71-124	
Bromodichloromethane	25.0	29.8	119	80-122	
Bromoform	25.0	29.6	118	61-132	
Bromomethane	25.0	23.5	94	55-144	
Carbon disulfide	25.0	21.5	86	59-134	
Carbon tetrachloride	25.0	27.0	108	72-134	
Chlorobenzene	25.0	25.7	103	80-120	
Dibromochloromethane	25.0	30.9	124	75-125	
Chloroethane	25.0	22.9	92	69-136	
Chloroform	25.0	24.9	100	73-127	
Chloromethane	25.0	20.7	83	68-124	
cis-1,2-Dichloroethene	25.0	24.6	99	74-124	
cis-1,3-Dichloropropene	25.0	31.4	125	74-124	*
Cyclohexane	25.0	24.2	97	59-135	
Dichlorodifluoromethane	25.0	19.7	79	59-135	
Ethylbenzene	25.0	24.4	97	77-123	
1,2-Dibromoethane	25.0	30.2	121	77-120	*
Isopropylbenzene	25.0	25.3	101	77-122	
Methyl acetate	50.0	51.7	103	74-133	
Methyl tert-butyl ether	25.0	26.3	105	77-120	
Methylcyclohexane	25.0	25.4	102	68-134	
Methylene Chloride	25.0	24.1	96	75-124	
Styrene	25.0	26.2	105	80-120	
Tetrachloroethene	25.0	27.3	109	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-148067-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: C3767.D
 Lab ID: LCS 480-455755/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	24.9	100	80-122	
trans-1,2-Dichloroethene	25.0	24.4	98	73-127	
trans-1,3-Dichloropropene	25.0	29.9	120	80-120	
Trichloroethene	25.0	26.0	104	74-123	
Trichlorofluoromethane	25.0	22.1	89	62-150	
Vinyl chloride	25.0	21.2	85	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3760.D

Lab ID: 480-148067-1 MS

Client ID: MW-1 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	ND	31.8	127	73-126	F1
1,1,2,2-Tetrachloroethane	25.0	ND	28.1	112	76-120	
1,1,2-Trichloroethane	25.0	ND	28.3	113	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	ND	29.1	116	61-148	
1,1-Dichloroethane	25.0	ND	27.5	110	77-120	
1,1-Dichloroethene	25.0	ND	30.3	121	66-127	
1,2,4-Trichlorobenzene	25.0	ND	25.3	101	79-122	
1,2-Dibromo-3-Chloropropane	25.0	ND	26.4	106	56-134	
1,2-Dichlorobenzene	25.0	ND	27.4	110	80-124	
1,2-Dichloroethane	25.0	ND	28.1	112	75-120	
1,2-Dichloropropane	25.0	ND	28.4	113	76-120	
1,3-Dichlorobenzene	25.0	ND	27.5	110	77-120	
1,4-Dichlorobenzene	25.0	ND	27.1	109	78-124	
2-Butanone (MEK)	125	ND	151	121	57-140	
2-Hexanone	125	ND	144	115	65-127	
4-Methyl-2-pentanone (MIBK)	125	ND	138	110	71-125	
Acetone	125	ND	134	107	56-142	
Benzene	25.0	ND	29.2	117	71-124	
Bromodichloromethane	25.0	ND	31.1	125	80-122	F1
Bromoform	25.0	ND	29.4	118	61-132	
Bromomethane	25.0	ND	29.0	116	55-144	
Carbon disulfide	25.0	ND	25.1	100	59-134	
Carbon tetrachloride	25.0	ND	34.6	138	72-134	F1
Chlorobenzene	25.0	ND	29.2	117	80-120	
Dibromochloromethane	25.0	ND	32.2	129	75-125	F1
Chloroethane	25.0	ND	28.9	116	69-136	
Chloroform	25.0	ND	27.8	111	73-127	
Chloromethane	25.0	ND	24.6	98	68-124	
cis-1,2-Dichloroethene	25.0	ND	27.6	111	74-124	
cis-1,3-Dichloropropene	25.0	ND	30.3	121	74-124	
Cyclohexane	25.0	ND	29.6	119	59-135	
Dichlorodifluoromethane	25.0	ND	20.6	82	59-135	
Ethylbenzene	25.0	ND	29.4	118	77-123	
1,2-Dibromoethane	25.0	ND	31.8	127	77-120	F1
Isopropylbenzene	25.0	ND	29.8	119	77-122	
Methyl acetate	50.0	ND	50.7	101	74-133	
Methyl tert-butyl ether	25.0	ND	27.0	108	77-120	
Methylcyclohexane	25.0	ND	28.8	115	68-134	
Methylene Chloride	25.0	ND	25.4	102	75-124	
Styrene	25.0	ND	29.7	119	80-120	
Tetrachloroethene	25.0	ND	32.8	131	74-122	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3760.D

Lab ID: 480-148067-1 MS

Client ID: MW-1 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	25.0	ND	28.9	116	80-122	
trans-1,2-Dichloroethene	25.0	ND	28.8	115	73-127	
trans-1,3-Dichloropropene	25.0	ND	29.9	119	80-120	
Trichloroethene	25.0	0.62 J	30.3	119	74-123	
Trichlorofluoromethane	25.0	ND	30.7	123	62-150	
Vinyl chloride	25.0	ND	27.3	109	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3761.D

Lab ID: 480-148067-1 MSD

Client ID: MW-1 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	25.0	31.8	127	0	15	73-126	F1
1,1,2,2-Tetrachloroethane	25.0	27.8	111	1	15	76-120	
1,1,2-Trichloroethane	25.0	26.9	107	5	15	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.6	118	2	20	61-148	
1,1-Dichloroethane	25.0	27.7	111	1	20	77-120	
1,1-Dichloroethene	25.0	30.8	123	2	16	66-127	
1,2,4-Trichlorobenzene	25.0	25.5	102	1	20	79-122	
1,2-Dibromo-3-Chloropropane	25.0	27.2	109	3	15	56-134	
1,2-Dichlorobenzene	25.0	26.7	107	3	20	80-124	
1,2-Dichloroethane	25.0	27.7	111	1	20	75-120	
1,2-Dichloropropane	25.0	27.2	109	4	20	76-120	
1,3-Dichlorobenzene	25.0	26.3	105	4	20	77-120	
1,4-Dichlorobenzene	25.0	26.4	106	3	20	78-124	
2-Butanone (MEK)	125	143	115	5	20	57-140	
2-Hexanone	125	133	107	8	15	65-127	
4-Methyl-2-pentanone (MIBK)	125	132	106	4	35	71-125	
Acetone	125	133	106	1	15	56-142	
Benzene	25.0	28.7	115	2	13	71-124	
Bromodichloromethane	25.0	30.8	123	1	15	80-122	F1
Bromoform	25.0	29.5	118	0	15	61-132	
Bromomethane	25.0	27.7	111	5	15	55-144	
Carbon disulfide	25.0	26.2	105	4	15	59-134	
Carbon tetrachloride	25.0	34.5	138	0	15	72-134	F1
Chlorobenzene	25.0	27.0	108	8	25	80-120	
Dibromochloromethane	25.0	30.8	123	5	15	75-125	
Chloroethane	25.0	28.6	114	1	15	69-136	
Chloroform	25.0	27.9	112	1	20	73-127	
Chloromethane	25.0	24.8	99	1	15	68-124	
cis-1,2-Dichloroethene	25.0	27.8	111	1	15	74-124	
cis-1,3-Dichloropropene	25.0	29.6	118	3	15	74-124	
Cyclohexane	25.0	29.5	118	0	20	59-135	
Dichlorodifluoromethane	25.0	20.5	82	0	20	59-135	
Ethylbenzene	25.0	27.9	112	5	15	77-123	
1,2-Dibromoethane	25.0	30.0	120	6	15	77-120	
Isopropylbenzene	25.0	29.2	117	2	20	77-122	
Methyl acetate	50.0	50.4	101	0	20	74-133	
Methyl tert-butyl ether	25.0	27.0	108	0	37	77-120	
Methylcyclohexane	25.0	28.9	116	0	20	68-134	
Methylene Chloride	25.0	25.7	103	1	15	75-124	
Styrene	25.0	28.0	112	6	20	80-120	
Tetrachloroethene	25.0	31.0	124	6	20	74-122	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3761.D

Lab ID: 480-148067-1 MSD

Client ID: MW-1 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Toluene	25.0	27.5	110	5	15	80-122	
trans-1,2-Dichloroethene	25.0	29.1	116	1	20	73-127	
trans-1,3-Dichloropropene	25.0	28.1	112	6	15	80-120	
Trichloroethene	25.0	30.8	121	2	16	74-123	
Trichlorofluoromethane	25.0	30.9	124	1	20	62-150	
Vinyl chloride	25.0	28.0	112	3	15	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3782.D

Lab ID: 480-148067-5 MS

Client ID: MW-3 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	500	ND	601	120	73-126	
1,1,2,2-Tetrachloroethane	500	ND	527	105	76-120	
1,1,2-Trichloroethane	500	ND	539	108	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	500	ND	657	131	61-148	
1,1-Dichloroethane	500	ND	535	107	77-120	
1,1-Dichloroethene	500	ND	599	120	66-127	
1,2,4-Trichlorobenzene	500	ND	477	95	79-122	
1,2-Dibromo-3-Chloropropane	500	ND	482	96	56-134	
1,2-Dichlorobenzene	500	ND	514	103	80-124	
1,2-Dichloroethane	500	ND	536	107	75-120	
1,2-Dichloropropane	500	ND	537	107	76-120	
1,3-Dichlorobenzene	500	ND	510	102	77-120	
1,4-Dichlorobenzene	500	ND	509	102	78-124	
2-Butanone (MEK)	2500	ND	2850	114	57-140	
2-Hexanone	2500	ND	2720	109	65-127	
4-Methyl-2-pentanone (MIBK)	2500	ND	2580	103	71-125	
Acetone	2500	ND	2520	101	56-142	
Benzene	500	ND	569	114	71-124	
Bromodichloromethane	500	ND	615	123	80-122	F1
Bromoform	500	ND	549	110	61-132	
Bromomethane	500	ND	526	105	55-144	
Carbon disulfide	500	3.9 J	508	101	59-134	
Carbon tetrachloride	500	ND	657	131	72-134	
Chlorobenzene	500	ND	543	109	80-120	
Dibromochloromethane	500	ND	588	118	75-125	
Chloroethane	500	ND	517	103	69-136	
Chloroform	500	ND	545	109	73-127	
Chloromethane	500	ND	480	96	68-124	
cis-1,2-Dichloroethene	500	35	571	107	74-124	
cis-1,3-Dichloropropene	500	ND	588	118	74-124	
Cyclohexane	500	ND	619	124	59-135	
Dichlorodifluoromethane	500	ND	531	106	59-135	
Ethylbenzene	500	ND	549	110	77-123	
1,2-Dibromoethane	500	ND	586	117	77-120	
Isopropylbenzene	500	ND	544	109	77-122	
Methyl acetate	1000	ND	1010	101	74-133	
Methyl tert-butyl ether	500	ND	536	107	77-120	
Methylcyclohexane	500	ND	616	123	68-134	
Methylene Chloride	500	ND	504	101	75-124	
Styrene	500	ND	549	110	80-120	
Tetrachloroethene	500	ND	609	122	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3782.D

Lab ID: 480-148067-5 MS

Client ID: MW-3 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	500	ND	540	108	80-122	
trans-1,2-Dichloroethene	500	ND	559	112	73-127	
trans-1,3-Dichloropropene	500	ND	558	112	80-120	
Trichloroethene	500	1200	1540	77	74-123	
Trichlorofluoromethane	500	ND	600	120	62-150	
Vinyl chloride	500	ND	524	105	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3783.D

Lab ID: 480-148067-5 MSD

Client ID: MW-3 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	500	581	116	3	15	73-126	
1,1,2,2-Tetrachloroethane	500	534	107	1	15	76-120	
1,1,2-Trichloroethane	500	537	107	0	15	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	500	611	122	7	20	61-148	
1,1-Dichloroethane	500	519	104	3	20	77-120	
1,1-Dichloroethene	500	566	113	6	16	66-127	
1,2,4-Trichlorobenzene	500	466	93	2	20	79-122	
1,2-Dibromo-3-Chloropropane	500	518	104	7	15	56-134	
1,2-Dichlorobenzene	500	514	103	0	20	80-124	
1,2-Dichloroethane	500	532	106	1	20	75-120	
1,2-Dichloropropane	500	546	109	2	20	76-120	
1,3-Dichlorobenzene	500	513	103	1	20	77-120	
1,4-Dichlorobenzene	500	519	104	2	20	78-124	
2-Butanone (MEK)	2500	2950	118	3	20	57-140	
2-Hexanone	2500	2810	113	3	15	65-127	
4-Methyl-2-pentanone (MIBK)	2500	2590	104	0	35	71-125	
Acetone	2500	2540	102	1	15	56-142	
Benzene	500	550	110	3	13	71-124	
Bromodichloromethane	500	608	122	1	15	80-122	
Bromoform	500	565	113	3	15	61-132	
Bromomethane	500	502	100	5	15	55-144	
Carbon disulfide	500	479	95	6	15	59-134	
Carbon tetrachloride	500	643	129	2	15	72-134	
Chlorobenzene	500	535	107	1	25	80-120	
Dibromochloromethane	500	598	120	2	15	75-125	
Chloroethane	500	498	100	4	15	69-136	
Chloroform	500	529	106	3	20	73-127	
Chloromethane	500	452	90	6	15	68-124	
cis-1,2-Dichloroethene	500	542	101	5	15	74-124	
cis-1,3-Dichloropropene	500	618	124	5	15	74-124	
Cyclohexane	500	600	120	3	20	59-135	
Dichlorodifluoromethane	500	497	99	7	20	59-135	
Ethylbenzene	500	525	105	4	15	77-123	
1,2-Dibromoethane	500	607	121	3	15	77-120	F1
Isopropylbenzene	500	533	107	2	20	77-122	
Methyl acetate	1000	1010	101	0	20	74-133	
Methyl tert-butyl ether	500	521	104	3	37	77-120	
Methylcyclohexane	500	585	117	5	20	68-134	
Methylene Chloride	500	494	99	2	15	75-124	
Styrene	500	544	109	1	20	80-120	
Tetrachloroethene	500	588	118	3	20	74-122	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: C3783.D

Lab ID: 480-148067-5 MSD

Client ID: MW-3 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Toluene	500	527	105	2	15	80-122	
trans-1,2-Dichloroethene	500	544	109	3	20	73-127	
trans-1,3-Dichloropropene	500	575	115	3	15	80-120	
Trichloroethene	500	1510	71	2	16	74-123	F1
Trichlorofluoromethane	500	563	113	6	20	62-150	
Vinyl chloride	500	494	99	6	15	65-133	

Column to be used to flag recovery and RPD values

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Lab Sample ID: CCVIS 480-455755/8

Calibration Date: 01/19/2019 10:38

Instrument ID: HP5973C

Calib Start Date: 01/09/2019 14:30

GC Column: ZB-624 (20)

ID: 0.18 (mm)

Calib End Date: 01/09/2019 17:38

Lab File ID: C3766.D

Conc. Units: ug/L

Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.683	1.630	0.1000	24.2	25.0	-3.1	50.0
Chloromethane	Ave	2.129	2.005	0.1000	23.5	25.0	-5.9	20.0
Vinyl chloride	Ave	1.734	1.705	0.1000	24.6	25.0	-1.6	20.0
Butadiene	Ave	1.716	1.752		25.5	25.0	2.1	20.0
Bromomethane	Ave	1.199	1.268	0.1000	26.4	25.0	5.7	50.0
Chloroethane	Ave	1.094	1.143	0.1000	26.1	25.0	4.4	50.0
Dichlorofluoromethane	Ave	2.771	2.760		24.9	25.0	-0.4	20.0
Trichlorofluoromethane	Ave	2.312	2.486	0.1000	26.9	25.0	7.6	20.0
Ethyl ether	Ave	1.421	1.486		26.1	25.0	4.6	20.0
Acrolein	Ave	0.3214	0.0951		37.0	125	-70.4*	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.184	1.491	0.1000	31.5	25.0	26.0*	20.0
1,1-Dichloroethene	Ave	1.282	1.438	0.1000	28.1	25.0	12.2	20.0
Acetone	Ave	0.6553	0.8831	0.1000	168	125	34.8	50.0
Iodomethane	Ave	2.549	2.867		28.1	25.0	12.5	20.0
Carbon disulfide	Ave	4.251	4.288	0.1000	25.2	25.0	0.9	20.0
Allyl chloride	Ave	2.745	2.843		25.9	25.0	3.6	20.0
Methyl acetate	Ave	1.728	1.748	0.1000	50.6	50.0	1.1	50.0
Methylene Chloride	Ave	1.652	1.724	0.1000	26.1	25.0	4.3	20.0
2-Methyl-2-propanol	Ave	0.2378	0.2633		277	250	10.7	50.0
Methyl tert-butyl ether	Ave	4.493	4.919	0.1000	27.4	25.0	9.5	20.0
trans-1,2-Dichloroethene	Ave	1.567	1.742	0.1000	27.8	25.0	11.1	20.0
Acrylonitrile	Ave	0.7441	0.7888		265	250	6.0	20.0
Hexane	Ave	1.789	2.057		28.7	25.0	15.0	20.0
1,1-Dichloroethane	Ave	2.828	3.016	0.2000	26.7	25.0	6.7	20.0
Vinyl acetate	Ave	3.107	3.573		57.5	50.0	15.0	20.0
2,2-Dichloropropane	Ave	1.489	1.702		28.6	25.0	14.3	20.0
cis-1,2-Dichloroethene	Ave	1.872	2.019	0.1000	27.0	25.0	7.9	20.0
2-Butanone (MEK)	Ave	0.8851	1.043	0.1000	147	125	17.8	20.0
Chlorobromomethane	Ave	0.9539	1.036		27.2	25.0	8.6	20.0
Tetrahydrofuran	Ave	0.6615	0.6485		49.0	50.0	-2.0	20.0
Chloroform	Ave	2.846	3.063	0.2000	26.9	25.0	7.6	20.0
1,1,1-Trichloroethane	Ave	2.218	2.580	0.1000	29.1	25.0	16.3	20.0
Cyclohexane	Ave	2.352	2.818	0.1000	30.0	25.0	19.8	20.0
1,1-Dichloropropene	Ave	1.877	2.182		29.1	25.0	16.3	20.0
Carbon tetrachloride	Ave	1.741	2.224	0.1000	31.9	25.0	27.7*	20.0
Benzene	Ave	5.858	6.472	0.5000	27.6	25.0	10.5	20.0
Isobutyl alcohol	Ave	0.0922	0.1086		737	625	17.8	50.0
1,2-Dichloroethane	Ave	2.460	2.696	0.1000	27.4	25.0	9.6	20.0
n-Heptane	Ave	1.690	2.022		29.9	25.0	19.6	20.0
Trichloroethene	Ave	1.555	1.761	0.2000	28.3	25.0	13.3	20.0

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FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Lab Sample ID: CCVIS 480-455755/8

Calibration Date: 01/19/2019 10:38

Instrument ID: HP5973C

Calib Start Date: 01/09/2019 14:30

GC Column: ZB-624 (20)

ID: 0.18 (mm)

Calib End Date: 01/09/2019 17:38

Lab File ID: C3766.D

Conc. Units: ug/L

Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.076	2.485	0.1000	29.9	25.0	19.7	20.0
1,2-Dichloropropane	Ave	1.500	1.585	0.1000	26.4	25.0	5.7	20.0
1,4-Dioxane	Ave	0.0096	0.0113		587	500	17.4	50.0
Dibromomethane	Ave	1.012	1.143	0.1000	28.2	25.0	13.0	20.0
Bromodichloromethane	Ave	1.721	2.096	0.2000	30.4	25.0	21.8*	20.0
2-Chloroethyl vinyl ether	Ave	0.8916	0.9878		27.7	25.0	10.8	20.0
cis-1,3-Dichloropropene	Ave	1.960	2.338	0.2000	29.8	25.0	19.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9408	0.9816	0.1000	130	125	4.3	20.0
Toluene	Ave	1.779	1.903	0.4000	26.7	25.0	7.0	20.0
trans-1,3-Dichloropropene	Ave	0.8671	1.006	0.1000	29.0	25.0	16.0	20.0
Ethyl methacrylate	Ave	0.8332	0.8682		26.0	25.0	4.2	20.0
1,1,2-Trichloroethane	Ave	0.5304	0.5471	0.1000	25.8	25.0	3.1	20.0
Tetrachloroethene	Ave	0.7676	0.8857	0.2000	28.8	25.0	15.4	20.0
1,3-Dichloropropane	Ave	1.028	1.125		27.3	25.0	9.4	20.0
2-Hexanone	Ave	0.5907	0.6199	0.1000	131	125	4.9	20.0
Dibromochloromethane	Ave	0.5798	0.7116	0.1000	30.7	25.0	22.7*	20.0
1,2-Dibromoethane	Ave	0.6394	0.7607		29.7	25.0	19.0	20.0
Chlorobenzene	Ave	2.070	2.189	0.5000	26.4	25.0	5.8	20.0
Ethylbenzene	Ave	3.383	3.604	0.1000	26.6	25.0	6.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6825	0.8139		29.8	25.0	19.2	20.0
m,p-Xylene	Ave	1.361	1.437	0.1000	26.4	25.0	5.6	20.0
o-Xylene	Ave	1.440	1.484	0.3000	25.8	25.0	3.1	20.0
Styrene	Ave	2.117	2.246	0.3000	26.5	25.0	6.1	20.0
Bromoform	Ave	0.3372	0.3950	0.1000	29.3	25.0	17.1	50.0
Isopropylbenzene	Ave	3.420	3.805	0.1000	27.8	25.0	11.3	20.0
Bromobenzene	Ave	0.8653	0.9805		28.3	25.0	13.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8530	0.9325	0.3000	27.3	25.0	9.3	20.0
N-Propylbenzene	Ave	3.755	4.111		27.4	25.0	9.5	20.0
1,2,3-Trichloropropane	Ave	0.2919	0.3274		28.0	25.0	12.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2556	0.2275		22.3	25.0	-11.0	50.0
2-Chlorotoluene	Ave	0.8813	0.9331		26.5	25.0	5.9	20.0
1,3,5-Trimethylbenzene	Ave	2.848	3.233		28.4	25.0	13.5	20.0
4-Chlorotoluene	Ave	0.8680	0.9282		26.7	25.0	6.9	20.0
tert-Butylbenzene	Ave	0.6328	0.7191		28.4	25.0	13.6	20.0
1,2,4-Trimethylbenzene	Ave	3.006	3.445		28.6	25.0	14.6	20.0
sec-Butylbenzene	Ave	3.374	3.865		28.6	25.0	14.6	20.0
4-Isopropyltoluene	Ave	2.968	3.376		28.4	25.0	13.7	20.0
1,3-Dichlorobenzene	Ave	1.776	1.888	0.6000	26.6	25.0	6.3	20.0
1,4-Dichlorobenzene	Ave	1.799	1.943	0.5000	27.0	25.0	8.0	20.0
n-Butylbenzene	Ave	2.536	2.737		27.0	25.0	7.9	20.0
1,2-Dichlorobenzene	Ave	1.766	1.888	0.4000	26.7	25.0	6.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Lab Sample ID: CCVIS 480-455755/8

Calibration Date: 01/19/2019 10:38

Instrument ID: HP5973C

Calib Start Date: 01/09/2019 14:30

GC Column: ZB-624 (20)

ID: 0.18(mm)

Calib End Date: 01/09/2019 17:38

Lab File ID: C3766.D

Conc. Units: ug/L

Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1561	0.1689	0.0500	27.0	25.0	8.1	50.0
1,2,4-Trichlorobenzene	Ave	1.283	1.351	0.2000	26.3	25.0	5.3	20.0
Hexachlorobutadiene	Ave	0.4756	0.5348		28.1	25.0	12.5	20.0
Naphthalene	Ave	3.595	3.855		26.8	25.0	7.2	20.0
1,2,3-Trichlorobenzene	Ave	1.224	1.322		27.0	25.0	8.0	20.0
Dibromofluoromethane (Surr)	Ave	1.428	1.538		26.9	25.0	7.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8767	0.9213		26.3	25.0	5.1	20.0
Toluene-d8 (Surr)	Ave	2.569	2.585		25.1	25.0	0.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7882	0.8225		26.1	25.0	4.3	20.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148067-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: MB 480-455740/7

Matrix: Water

Lab File ID: C3742.D

Analysis Method: 8260C

Date Collected: _____

Sample wt/vol: 5 (mL)

Date Analyzed: 01/18/2019 23:22

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: ZB-624 (20) ID: 0.18 (mm)

% Moisture: _____

Level: (low/med) Low

Analysis Batch No.: 455740

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	0.221	J	1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: S1254.D

Lab ID: LCS 480-458448/5

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.1	100	73-126	
1,1,2,2-Tetrachloroethane	25.0	26.1	104	76-120	
1,1,2-Trichloroethane	25.0	24.9	100	76-122	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.7	95	61-148	
1,1-Dichloroethane	25.0	24.6	98	77-120	
1,1-Dichloroethene	25.0	23.8	95	66-127	
1,2,4-Trichlorobenzene	25.0	24.9	100	79-122	
1,2-Dibromo-3-Chloropropane	25.0	26.2	105	56-134	
1,2-Dichlorobenzene	25.0	25.5	102	80-124	
1,2-Dichloroethane	25.0	23.9	96	75-120	
1,2-Dichloropropane	25.0	24.7	99	76-120	
1,3-Dichlorobenzene	25.0	25.2	101	77-120	
1,4-Dichlorobenzene	25.0	24.0	96	80-120	
2-Butanone (MEK)	125	150	120	57-140	
2-Hexanone	125	141	113	65-127	
4-Methyl-2-pentanone (MIBK)	125	130	104	71-125	
Acetone	125	161	128	56-142	
Benzene	25.0	24.9	100	71-124	
Bromodichloromethane	25.0	25.8	103	80-122	
Bromoform	25.0	28.4	114	61-132	
Bromomethane	25.0	24.4	98	55-144	
Carbon disulfide	25.0	24.5	98	59-134	
Carbon tetrachloride	25.0	23.9	96	72-134	
Chlorobenzene	25.0	24.4	98	80-120	
Dibromochloromethane	25.0	28.8	115	75-125	
Chloroethane	25.0	25.6	102	69-136	
Chloroform	25.0	24.7	99	73-127	
Chloromethane	25.0	28.1	112	68-124	
cis-1,2-Dichloroethene	25.0	25.0	100	74-124	
cis-1,3-Dichloropropene	25.0	27.0	108	74-124	
Cyclohexane	25.0	24.2	97	59-135	
Dichlorodifluoromethane	25.0	37.5	150	59-135	*
Ethylbenzene	25.0	24.4	98	77-123	
1,2-Dibromoethane	25.0	25.8	103	77-120	
Isopropylbenzene	25.0	24.9	100	77-122	
Methyl acetate	50.0	49.7	99	74-133	
Methyl tert-butyl ether	25.0	25.7	103	77-120	
Methylcyclohexane	25.0	23.8	95	68-134	
Methylene Chloride	25.0	25.7	103	75-124	
Styrene	25.0	26.3	105	80-120	
Tetrachloroethene	25.0	23.7	95	74-122	

Column to be used to flag recovery and RPD values

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
SS - 1 (0 -2)	480-148804-1	89	87	96	99	94	117
SS - 1 (6 -12)	480-148804-2	93	97	102	107	122 X	136 X
SS - 2 (0 -2)	480-148804-3	94	94	96	101	103	122 X
SS - 2 (6 -12)	480-148804-4	95	97	101	108	117	122 X
SS - 3 (0 -2)	480-148804-5	91	91	100	103	107	120
SS - 3 (6 -12)	480-148804-6	90	91	99	102	95	123 X
SS - 4 (0 -2)	480-148804-7	101	93	105	101	118	118
SS - 4 (6 -12)	480-148804-8	87	89	98	101	97	122 X
SS - 5 (0 -2)	480-148804-9	100	100	102	108	116	138 X
SS - 5 (6 -12)	480-148804-10	91	92	97	98	104	118
SS - 6 (0 -2)	480-148804-11	89	93	94	100	102	123 X
SS - 7 (0 -2)	480-148804-12	84	87	98	97	96	130 X
SS - 7 (6 -12)	480-148804-13	90	88	95	94	93	114
SS - 8 (0 -2)	480-148804-14	85	87	92	97	99	119
SS - 8 (6 -12)	480-148804-15	87	92	98	97	101	118
	MB 480-458568/1-A	86	90	90	96	95	118
	LCS 480-458568/2-A	73	79	80	87	103	113
SS - 2 (0 -2) MS	480-148804-3 MS	94	94	100	107	126 X	131 X
SS - 2 (0 -2) MSD	480-148804-3 MSD	86	89	94	97	109	118

QC LIMITS

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

52-120
54-120
53-120
60-120
54-120
65-121

Column to be used to flag recovery values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: X21458275.D

Lab ID: 480-148804-3 MS

Client ID: SS - 2 (0 -2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Biphenyl	2170	ND	2340	108	58-120	
bis (2-chloroisopropyl) ether	2170	ND	1690	78	31-120	
2,4,5-Trichlorophenol	2170	ND	2350	108	46-120	
2,4,6-Trichlorophenol	2170	ND	2410	111	41-123	
2,4-Dichlorophenol	2170	ND	2370	109	45-120	
2,4-Dimethylphenol	2170	ND	2280	105	52-120	
2,4-Dinitrophenol	4350	ND	ND	NC	41-146	
2,4-Dinitrotoluene	2170	ND	2760	127	63-125	F1
2,6-Dinitrotoluene	2170	ND	2660	122	66-120	F1
2-Chloronaphthalene	2170	ND	2290	106	57-120	
2-Chlorophenol	2170	ND	2030	93	43-120	
2-Methylphenol	2170	ND	2010	93	48-120	
2-Methylnaphthalene	2170	ND	2270	105	55-120	
2-Nitroaniline	2170	ND	2490	114	61-120	
2-Nitrophenol	2170	ND	2580	119	37-120	
3,3'-Dichlorobenzidine	4350	ND	4830	111	37-126	
3-Nitroaniline	2170	ND	2220	102	48-120	
4,6-Dinitro-2-methylphenol	4350	ND	5290	122	23-149	
4-Bromophenyl phenyl ether	2170	ND	2440	112	58-120	
4-Chloro-3-methylphenol	2170	ND	2420	112	49-125	
4-Chloroaniline	2170	ND	1740	80	38-120	
4-Chlorophenyl phenyl ether	2170	ND	2560	118	63-124	
4-Methylphenol	2170	ND	2140 J	98	50-120	
4-Nitroaniline	2170	ND	2360	108	47-120	
4-Nitrophenol	4350	ND	4620	106	31-147	
Acenaphthene	2170	ND	2930	135	60-120	F1
Acenaphthylene	2170	ND	2800	129	58-121	F1
Acetophenone	2170	ND	2020	93	47-120	
Anthracene	2170	ND	3430	158	62-120	F1
Atrazine	4350	ND	5260	121	60-150	
Benzaldehyde	4350	ND	3490	80	10-150	
Benzo[a]anthracene	2170	520 J	3880	155	65-120	F1
Benzo[a]pyrene	2170	820 J	3900	142	64-120	F1
Benzo[b]fluoranthene	2170	1100	3730	123	64-120	F1
Benzo[g,h,i]perylene	2170	750 J	3400	122	45-145	
Benzo[k]fluoranthene	2170	400 J	3510	143	65-120	F1
Bis(2-chloroethoxy)methane	2170	ND	2130	98	52-120	
Bis(2-chloroethyl)ether	2170	ND	1920	88	45-120	
Bis(2-ethylhexyl) phthalate	2170	ND	2930	135	61-133	F1
Butyl benzyl phthalate	2170	ND	2750	126	61-120	F1
Caprolactam	4350	ND	4390	101	37-133	
Carbazole	2170	ND	2590	119	59-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: X21458275.D

Lab ID: 480-148804-3 MS

Client ID: SS - 2 (0 -2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Chrysene	2170	630 J	4310	169	64-120	F1
Dibenz(a,h)anthracene	2170	ND	2840	131	54-132	
Di-n-butyl phthalate	2170	ND	2770	128	58-130	
Di-n-octyl phthalate	2170	ND	2940	135	57-133	F1
Dibenzofuran	2170	ND	2780	128	62-120	F1
Diethyl phthalate	2170	ND	2520	116	66-120	
Dimethyl phthalate	2170	ND	2570	118	65-124	
Fluoranthene	2170	950 J	6000	232	62-120	F1
Fluorene	2170	ND	3060	141	63-120	F1
Hexachlorobenzene	2170	ND	2580	119	60-120	
Hexachlorobutadiene	2170	ND	2140	99	45-120	
Hexachlorocyclopentadiene	2170	ND	2080	95	31-120	
Hexachloroethane	2170	ND	1730	80	21-120	
Indeno[1,2,3-cd]pyrene	2170	530 J	3340	129	56-134	
Isophorone	2170	ND	2250	103	56-120	
N-Nitrosodi-n-propylamine	2170	ND	2050	94	46-120	
N-Nitrosodiphenylamine	2170	ND	2420	111	20-128	
Naphthalene	2170	ND	2140	98	46-120	
Nitrobenzene	2170	ND	2200	101	49-120	
Pentachlorophenol	4350	ND	3000	69	25-136	
Phenanthrene	2170	290 J	5620	245	60-122	F1
Phenol	2170	ND	2060	95	50-120	
Pyrene	2170	860 J	5790	227	61-133	F1

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: X21458276.D

Lab ID: 480-148804-3 MSD

Client ID: SS - 2 (0 -2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Biphenyl	2180	2210	102	6	20	58-120	
bis (2-chloroisopropyl) ether	2180	1620	74	4	24	31-120	
2,4,5-Trichlorophenol	2180	2370	109	1	18	46-120	
2,4,6-Trichlorophenol	2180	2390	110	1	19	41-123	
2,4-Dichlorophenol	2180	2210	102	7	19	45-120	
2,4-Dimethylphenol	2180	2160	99	5	42	52-120	
2,4-Dinitrophenol	4350	ND	NC	NC	22	41-146	
2,4-Dinitrotoluene	2180	2620	120	5	20	63-125	
2,6-Dinitrotoluene	2180	2590	119	2	15	66-120	
2-Chloronaphthalene	2180	2140	98	7	21	57-120	
2-Chlorophenol	2180	1890	87	7	25	43-120	
2-Methylphenol	2180	2000	92	0	27	48-120	
2-Methylnaphthalene	2180	2080	95	9	21	55-120	
2-Nitroaniline	2180	2480	114	0	15	61-120	
2-Nitrophenol	2180	2390	110	8	18	37-120	
3,3'-Dichlorobenzidine	4350	4560	105	6	25	37-126	
3-Nitroaniline	2180	2180 J	100	2	19	48-120	
4,6-Dinitro-2-methylphenol	4350	4690	108	12	15	23-149	
4-Bromophenyl phenyl ether	2180	2310	106	6	15	58-120	
4-Chloro-3-methylphenol	2180	2270	104	6	27	49-125	
4-Chloroaniline	2180	1670	77	4	22	38-120	
4-Chlorophenyl phenyl ether	2180	2480	114	3	16	63-124	
4-Methylphenol	2180	2050 J	94	4	24	50-120	
4-Nitroaniline	2180	2400	110	2	24	47-120	
4-Nitrophenol	4350	4540	104	2	25	31-147	
Acenaphthene	2180	2310	106	24	35	60-120	
Acenaphthylene	2180	2530	116	10	18	58-121	
Acetophenone	2180	1930	89	5	20	47-120	
Anthracene	2180	2630	121	26	15	62-120	F1 F2
Atrazine	4350	5270	121	0	20	60-150	
Benzaldehyde	4350	3330	77	5	20	10-150	
Benzo[a]anthracene	2180	2710	101	36	15	65-120	F2
Benzo[a]pyrene	2180	3190	109	20	15	64-120	F2
Benzo[b]fluoranthene	2180	3330	104	12	15	64-120	
Benzo[g,h,i]perylene	2180	3110	108	9	15	45-145	
Benzo[k]fluoranthene	2180	2820	111	22	22	65-120	
Bis(2-chloroethoxy)methane	2180	2020	93	5	17	52-120	
Bis(2-chloroethyl)ether	2180	1890	87	1	21	45-120	
Bis(2-ethylhexyl) phthalate	2180	2870	132	2	15	61-133	
Butyl benzyl phthalate	2180	2630	121	4	16	61-120	F1
Caprolactam	4350	4260	98	3	20	37-133	
Carbazole	2180	2360	109	9	20	59-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: X21458276.D

Lab ID: 480-148804-3 MSD

Client ID: SS - 2 (0 -2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chrysene	2180	3120	114	32	15	64-120	F2
Dibenz(a,h)anthracene	2180	2540	117	11	15	54-132	
Di-n-butyl phthalate	2180	2680	123	3	15	58-130	
Di-n-octyl phthalate	2180	2880	133	2	16	57-133	
Dibenzofuran	2180	2340	108	17	15	62-120	F2
Diethyl phthalate	2180	2440	112	3	15	66-120	
Dimethyl phthalate	2180	2400	110	7	15	65-124	
Fluoranthene	2180	3650	124	49	15	62-120	F1 F2
Fluorene	2180	2440	112	23	15	63-120	F2
Hexachlorobenzene	2180	2420	111	6	15	60-120	
Hexachlorobutadiene	2180	1960	90	9	44	45-120	
Hexachlorocyclopentadiene	2180	2040	94	2	49	31-120	
Hexachloroethane	2180	1550	71	11	46	21-120	
Indeno[1,2,3-cd]pyrene	2180	2930	110	13	15	56-134	
Isophorone	2180	2150	99	4	17	56-120	
N-Nitrosodi-n-propylamine	2180	1930	88	6	31	46-120	
N-Nitrosodiphenylamine	2180	2230	102	8	15	20-128	
Naphthalene	2180	2000	92	7	29	46-120	
Nitrobenzene	2180	2080	96	6	24	49-120	
Pentachlorophenol	4350	3040	70	1	35	25-136	
Phenanthrene	2180	2900	120	64	15	60-122	F2
Phenol	2180	1920	88	7	35	50-120	
Pyrene	2180	3400	117	52	35	61-133	F2

Column to be used to flag recovery and RPD values

FORM II
PESTICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

GC Column (2): RTX-CLPII ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX2 #	DCBP2 #
SS - 1 (0 -2)	480-148804-1	53	112
SS - 1 (6 -12)	480-148804-2	48	97
SS - 2 (0 -2)	480-148804-3	116	202 X
SS - 2 (6 -12)	480-148804-4	0 X	184 X
SS - 3 (0 -2)	480-148804-5	53	129 X
SS - 3 (6 -12)	480-148804-6	81	101
SS - 4 (0 -2)	480-148804-7	0 X	216 X
SS - 4 (6 -12)	480-148804-8	77	161 X
SS - 5 (0 -2)	480-148804-9	50	144 X
SS - 5 (6 -12)	480-148804-10	47	190 X
SS - 6 (0 -2)	480-148804-11	41	58
SS - 7 (0 -2)	480-148804-12	50	82
SS - 7 (6 -12)	480-148804-13	54	94
SS - 8 (0 -2)	480-148804-14	45	231 X
SS - 8 (6 -12)	480-148804-15	47	157 X
	MB 480-458779/1-A	38	76
	LCS 480-458779/2-A	42	75
SS - 8 (0 -2) MS	480-148804-14 MS	41	219 X
SS - 8 (0 -2) MSD	480-148804-14 MSD	39	197 X

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

QC LIMITS
30-124
45-120

Column to be used to flag recovery values

FORM II 8081B

FORM III
PESTICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: 25_17-012.D

Lab ID: 480-148804-14 MS

Client ID: SS - 8 (0 -2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
4,4'-DDD	20.8	ND	14.0	67	37-126	
4,4'-DDE	20.8	1.9 J	13.7	56	34-120	
4,4'-DDT	20.8	8.6	21.0	60	43-123	
Aldrin	20.8	ND	10.8	52	37-125	
alpha-BHC	20.8	0.53 J	10.4	48	39-120	
cis-Chlordane	20.8	ND	12.0	58	35-120	
beta-BHC	20.8	ND	9.11	44	36-120	
delta-BHC	20.8	ND	11.1	53	34-120	
Dieldrin	20.8	ND	13.5	65	45-120	
Endosulfan I	20.8	ND	11.9	57	39-120	
Endosulfan II	20.8	ND	14.9	72	34-126	
Endosulfan sulfate	20.8	ND	12.5	60	27-130	
Endrin	20.8	ND	12.0	58	47-121	
Endrin aldehyde	20.8	ND	16.7	80	33-123	
Endrin ketone	20.8	ND	18.7	90	43-126	
gamma-BHC (Lindane)	20.8	ND	12.4	59	50-120	
trans-Chlordane	20.8	ND	10.6	51	31-120	
Heptachlor	20.8	ND	12.7	61	42-120	
Heptachlor epoxide	20.8	ND	12.0	58	40-120	
Methoxychlor	20.8	ND	45.3	218	44-150	F1

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Level: Low

Lab File ID: 25_17-013.D

Lab ID: 480-148804-14 MSD

Client ID: SS - 8 (0 -2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
4,4'-DDD	32.1	18.2	57	26	21	37-126	F4
4,4'-DDE	32.1	18.1	50	28	18	34-120	F4
4,4'-DDT	32.1	27.2	58	26	25	43-123	F4
Aldrin	32.1	14.5	45	29	12	37-125	F4
alpha-BHC	32.1	14.6	44	33	15	39-120	F4
cis-Chlordane	32.1	16.2	51	30	23	35-120	F4
beta-BHC	32.1	11.8	37	26	19	36-120	F4
delta-BHC	32.1	15.2	47	32	14	34-120	F4
Dieldrin	32.1	17.2	54	25	12	45-120	F4
Endosulfan I	32.1	16.1	50	30	18	39-120	F4
Endosulfan II	32.1	19.2	60	25	26	34-126	
Endosulfan sulfate	32.1	17.4	54	32	35	27-130	
Endrin	32.1	16.2	51	29	20	47-121	F4
Endrin aldehyde	32.1	19.2	60	14	47	33-123	
Endrin ketone	32.1	26.5	83	34	37	43-126	
gamma-BHC (Lindane)	32.1	16.5	52	29	12	50-120	F4
trans-Chlordane	32.1	14.2	44	29	15	31-120	F4
Heptachlor	32.1	17.3	54	30	22	42-120	F4
Heptachlor epoxide	32.1	16.1	50	29	15	40-120	F4
Methoxychlor	32.1	59.9	187	28	24	44-150	F1 F4

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-148804-1
 SDG No.: _____
 Client Sample ID: SS - 1 (0 -2) Lab Sample ID: 480-148804-1
 Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25
 Date Analyzed (1): 02/13/2019 14:30 Date Analyzed (2): 02/13/2019 14:30
 GC Column (1): RTX-CLPI ID: 0.53(mm) GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDT	1		5.65	5.62	5.68	1.5		26.6
	2		6.04	6.00	6.06	1.9		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 2 (0 -2)

Lab Sample ID: 480-148804-3

Instrument ID (1): HP6890-25

Instrument ID (2): HP6890-25

Date Analyzed (1): 02/13/2019 15:09

Date Analyzed (2): 02/13/2019 15:09

GC Column (1): RTX-CLPI ID: 0.53(mm)

GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		4.74	4.73	4.79	2.6		45.0
	2		5.14	5.09	5.15	4.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 2 (6 -12)

Lab Sample ID: 480-148804-4

Instrument ID (1): HP6890-25

Instrument ID (2): HP6890-25

Date Analyzed (1): 02/13/2019 15:29

Date Analyzed (2): 02/13/2019 15:29

GC Column (1): RTX-CLPI ID: 0.53 (mm)

GC Column (2): RTX-CLPII ID: 0.53 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDT	1		5.64	5.62	5.68	9.3		36.7
	2		6.03	6.00	6.06	14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 4 (6 -12)

Lab Sample ID: 480-148804-8

Instrument ID (1): HP6890-25

Instrument ID (2): HP6890-25

Date Analyzed (1): 02/13/2019 16:48

Date Analyzed (2): 02/13/2019 16:48

GC Column (1): RTX-CLPI ID: 0.53(mm)

GC Column (2): RTX-CLPII ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDT	1		5.65	5.62	5.68	10		5.4
	2		6.03	6.00	6.06	11		
Methoxychlor	1		6.14	6.13	6.19	6.9		126.4
	2		6.70	6.70	6.76	30		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-148804-1
SDG No.: _____
Client Sample ID: SS - 6 (0 -2) Lab Sample ID: 480-148804-11
Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25
Date Analyzed (1): 02/13/2019 17:47 Date Analyzed (2): 02/13/2019 17:47
GC Column (1): RTX-CLPI ID: 0.53 (mm) GC Column (2): RTX-CLPII ID: 0.53 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDT	1		5.65	5.62	5.68	1.6		35.8
	2		6.03	6.00	6.06	2.4		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-148804-1
 SDG No.: _____
 Client Sample ID: SS - 8 (0 -2) Lab Sample ID: 480-148804-14
 Instrument ID (1): HP6890-25 Instrument ID (2): HP6890-25
 Date Analyzed (1): 02/13/2019 13:51 Date Analyzed (2): 02/13/2019 13:51
 GC Column (1): RTX-CLPI ID: 0.53 (mm) GC Column (2): RTX-CLPII ID: 0.53 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		2.88	2.86	2.92	0.68		25.5
	2		2.95	2.94	3.00	0.53		
4,4'-DDE	1		4.75	4.73	4.79	2.8		35.6
	2		5.11	5.09	5.15	1.9		
4,4'-DDT	1		5.65	5.62	5.68	8.2		5.2
	2		6.03	6.00	6.06	8.6		

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: MB 480-458779/1-A

Matrix: Solid

Lab File ID: 25_17-010.D

Analysis Method: 8081B

Date Collected: _____

Extraction Method: 3550C

Date Extracted: 02/12/2019 14:56

Sample wt/vol: 30.22(g)

Date Analyzed: 02/13/2019 12:31

Con. Extract Vol.: 10(mL)

Dilution Factor: 1

Injection Volume: 1(uL)

GC Column: RTX-CLPII ID: 0.53(mm)

% Moisture: _____

GPC Cleanup: (Y/N) N

Analysis Batch No.: 458894

Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
72-54-8	4,4'-DDD	0.490	J	1.7	0.32
72-55-9	4,4'-DDE	ND		1.7	0.35
50-29-3	4,4'-DDT	ND		1.7	0.39
309-00-2	Aldrin	ND		1.7	0.41
319-84-6	alpha-BHC	ND		1.7	0.30
5103-71-9	cis-Chlordane	ND		1.7	0.82
319-85-7	beta-BHC	ND		1.7	0.30
319-86-8	delta-BHC	ND		1.7	0.31
60-57-1	Dieldrin	ND		1.7	0.40
959-98-8	Endosulfan I	ND		1.7	0.32
33213-65-9	Endosulfan II	ND		1.7	0.30
1031-07-8	Endosulfan sulfate	ND		1.7	0.31
72-20-8	Endrin	ND		1.7	0.33
7421-93-4	Endrin aldehyde	ND		1.7	0.42
53494-70-5	Endrin ketone	ND		1.7	0.41
58-89-9	gamma-BHC (Lindane)	ND		1.7	0.30
5103-74-2	trans-Chlordane	ND		1.7	0.53
76-44-8	Heptachlor	ND		1.7	0.36
1024-57-3	Heptachlor epoxide	ND		1.7	0.43
72-43-5	Methoxychlor	ND		1.7	0.34
8001-35-2	Toxaphene	ND		17	9.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	76		45-120
877-09-8	Tetrachloro-m-xylene	38		30-124

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid Level: Low

GC Column (2): ZB-35 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TCX2 #	DCBP2 #
SS - 1 (0 -2)	480-148804-1	69	67
SS - 1 (6 -12)	480-148804-2	76	72
SS - 2 (0 -2)	480-148804-3	60	63 X
SS - 2 (6 -12)	480-148804-4	70	68
SS - 3 (0 -2)	480-148804-5	81	83
SS - 3 (6 -12)	480-148804-6	72	69
SS - 4 (0 -2)	480-148804-7	61	57 X
SS - 4 (6 -12)	480-148804-8	70	67
SS - 5 (0 -2)	480-148804-9	72	68
SS - 5 (6 -12)	480-148804-10	69	71
SS - 6 (0 -2)	480-148804-11	68	58 X
SS - 7 (0 -2)	480-148804-12	70	65
SS - 7 (6 -12)	480-148804-13	77	72
SS - 8 (0 -2)	480-148804-14	71	67
SS - 8 (6 -12)	480-148804-15	71	71
	MB 480-458359/1-A	94	96
	LCS 480-458359/2-A	90	86

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

QC LIMITS
60-154
65-174

Column to be used to flag recovery values

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: SS - 1 (6 -12)

Lab Sample ID: 480-148804-2

Instrument ID (1): HP6890-6

Instrument ID (2): HP6890-6

Date Analyzed (1): 02/10/2019 16:34

Date Analyzed (2): 02/10/2019 16:34

GC Column (1): ZB-5

ID: 0.53(mm)

GC Column (2): ZB-35

ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD		
				FROM	TO	PEAK	MEAN			
PCB-1016	1	1	2.95	2.95	2.98	0.0922	0.21	82.3		
		2	3.28	3.25	3.28	0.127				
		3	3.46	3.44	3.47	0.211				
		4	3.74	3.72	3.75	0.255				
		5	3.99	3.98	4.01	0.362				
	2	1	2.42	2.39	2.42	0.0588	0.087			
		2	2.73	2.71	2.74	0.0765				
		5	3.22	3.20	3.23	0.179				
	PCB-1254	1	1	3.99	3.98	4.01	0.267		0.15	12.5
			2	4.17	4.16	4.19	0.101			
3			4.48	4.46	4.49	0.146				
4			4.68	4.66	4.69	0.116				
5			4.91	4.89	4.92	0.131				
2		1	3.64	3.62	3.65	0.107	0.17			
		2	4.02	4.00	4.03	0.184				
		3	4.16	4.14	4.17	0.160				
		4	4.46	4.44	4.47	0.214				
		5	4.58	4.57	4.60	0.197				

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: LCS 480-458359/2-A

Instrument ID (1): HP6890-6

Instrument ID (2): HP6890-6

Date Analyzed (1): 02/10/2019 14:11

Date Analyzed (2): 02/10/2019 14:11

GC Column (1): ZB-5

ID: 0.53(mm)

GC Column (2): ZB-35

ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
PCB-1016	1	1	2.97	2.95	2.98	1.81	1.40	8.0
		2	3.27	3.25	3.28	1.53		
		3	3.46	3.44	3.47	1.51		
		4	3.74	3.72	3.75	1.25		
		5	3.99	3.98	4.01	0.905		
	2	1	2.41	2.39	2.42	1.52	1.52	
		2	2.73	2.71	2.74	1.59		
		3	2.84	2.82	2.85	1.55		
		4	2.93	2.92	2.95	1.47		
		5	3.21	3.20	3.23	1.47		
PCB-1260	1	1	4.67	4.66	4.69	0.982	1.10	41.7
		2	4.86	4.84	4.87	1.00		
		3	5.09	5.07	5.10	1.06		
		4	5.62	5.60	5.63	1.26		
		5	5.86	5.84	5.87	1.21		
	2	1	4.16	4.15	4.18	1.58	1.68	
		2	4.28	4.26	4.29	1.62		
		3	4.59	4.57	4.60	1.43		
		4	5.04	5.02	5.05	1.97		
		5	5.36	5.35	5.38	1.81		

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Concentration Units: mg/Kg

Lab Sample ID: MB 480-458368/1-A

Instrument Code: ICAP1

Batch No.: 458628

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	5.37	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.50	J		6010C
7439-96-5	Manganese	0.0716	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS - 1 (0 -2) MS

Lab ID: 480-148804-1 MS

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 86.7

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	10890	6500	2310	190	75-125	F1	6010C
Antimony	45.93	ND	46.2	100	75-125		6010C
Arsenic	57.25	4.2	46.2	115	75-125		6010C
Barium	85.58	31.0	46.2	118	75-125		6010C
Beryllium	47.61	0.28	46.2	103	75-125		6010C
Cadmium	54.08	0.54	46.2	116	75-125		6010C
Calcium	159600	103000	2310	2437	75-125	E 4	6010C
Chromium	54.53	11.2	46.2	94	75-125		6010C
Cobalt	53.17	4.2	46.2	106	75-125		6010C
Copper	63.48	21.4	46.2	91	75-125		6010C
Iron	8198	12700	2310	-197	75-125	4	6010C
Lead	72.95	55.7	46.2	37	75-125	F1	6010C
Magnesium	81620	39100	2310	1841	75-125	E 4	6010C
Manganese	191.9	201	46.2	-20	75-125	4	6010C
Nickel	58.61	13.7	46.2	97	75-125		6010C
Potassium	6432	2340	2310	177	75-125	F1	6010C
Selenium	54.21	ND	46.2	117	75-125		6010C
Silver	14.10	ND	11.5	122	75-125		6010C
Sodium	3073	131 J	2310	127	75-125	F1	6010C
Thallium	48.54	ND	46.2	105	75-125		6010C
Vanadium	60.91	13.7	46.2	102	75-125		6010C
Zinc	67.27	38.0	46.2	64	75-125	F1	6010C
Mercury	0.384	0.036	0.362	96	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS - 1 (0 -2) MSD

Lab ID: 480-148804-1 MSD

Lab Name: TestAmerica Buffalo

Job No.: 480-148804-1

SDG No.: _____

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 86.7

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	10720	2340	180	75-125	2	20	F1	6010C
Antimony	39.72	46.8	85	75-125	15	20		6010C
Arsenic	49.42	46.8	97	75-125	15	20		6010C
Barium	78.93	46.8	102	75-125	8	20		6010C
Beryllium	41.59	46.8	88	75-125	13	20		6010C
Cadmium	45.70	46.8	97	75-125	17	20		6010C
Calcium	100200	2340	-137	75-125	46	20	4 F2	6010C
Chromium	50.41	46.8	84	75-125	8	20		6010C
Cobalt	47.53	46.8	93	75-125	11	20		6010C
Copper	59.95	46.8	83	75-125	6	20		6010C
Iron	11230	2340	-64	75-125	31	20	4 F2	6010C
Lead	78.81	46.8	49	75-125	8	20	F1	6010C
Magnesium	53330	2340	607	75-125	42	20	E 4 F2	6010C
Manganese	192.9	46.8	-17	75-125	1	20	4	6010C
Nickel	54.46	46.8	87	75-125	7	20		6010C
Potassium	5857	2340	150	75-125	9	20	F1	6010C
Selenium	45.50	46.8	97	75-125	17	20		6010C
Silver	11.61	11.7	99	75-125	19	20		6010C
Sodium	2535	2340	103	75-125	19	20		6010C
Thallium	42.44	46.8	91	75-125	13	20		6010C
Vanadium	56.07	46.8	91	75-125	8	20		6010C
Zinc	72.44	46.8	74	75-125	7	20	F1	6010C
Mercury	0.392	0.367	97	80-120	2	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-148804-1

SDG No:

Lab Name: TestAmerica Buffalo

Job No: 480-148804-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I) C		Serial Dilution Result (S) C		% Difference	Q	Method
Aluminum	6500		6631		2.0		6010C
Antimony	ND		ND		NC		6010C
Arsenic	4.2		6.01	J	NC		6010C
Barium	31.0		32.85		5.8		6010C
Beryllium	0.28		0.299	J	NC		6010C
Cadmium	0.54		0.650	J	NC		6010C
Calcium	103000		120700		17	V	6010C
Chromium	11.2		12.17		8.9		6010C
Cobalt	4.2		4.16		0.08		6010C
Copper	21.4		21.37		0.06		6010C
Iron	12700		14230		12	V	6010C
Lead	55.7		58.44		4.9		6010C
Magnesium	39100		44070		13	V	6010C
Manganese	201		225.9		12	V	6010C
Nickel	13.7		14.20	J	3.3		6010C
Potassium	2340		2252		3.9		6010C
Selenium	ND		ND		NC		6010C
Silver	ND		ND		NC		6010C
Sodium	131	J	125.7	J	NC		6010C
Thallium	ND		ND		NC		6010C
Vanadium	13.7		14.86		8.3		6010C
Zinc	38.0		46.19		22	V	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

Appendix C

Validator Qualifications

KENNETH R. APPLIN
Geochemist/Data Validator

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

MICHAEL K. PERRY
Chemist/Data Validator

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).