From David Locey **Date** Wednesday, May 08, 2013 2:39:42 PM
To Mark Colmerauer
Cc Martin Doster
Subject Re: Backfill results for Webster Block

Mark
Based upon the test results you submitted, NYSDEC believes that the material is acceptable for use as backfill on the Webster Block site (# C915270).
David

David P. Locey
NYSDEC - Region 9
270 Michigan Avenue
Buffalo, New York 14203-2915
(716) 851-7220
(716) 851-7226 (fax)
e-mail - dplocey@gw.dec.state.ny.us

>>> Mark Colmerauer <mcolmerauer@cscos.com> 05/07/13 18:01 >>>
Hi Dave,

As discussed on the phone today, please review the attached letter detailing the results of the fill analysis for the Harborcenter project at the Webster Block.

We would like to start placing fill this week if acceptable.

Best regards

Mark

[cid:image001.gif@01CE4B4C.F6DBA2F0]
www.cscos.com< http://www.cscos.com/>

Mark Colmerauer
Regional Environmental Services Manager
C & S Engineers
mcolmerauer@cscos.com< mailto:jhurley@cscos.com>
office: (716) 847-1630 | mobile (716) 570-3457
90 Broadway, Buffalo, New York 14203

C&S Companies
90 Broadway
Buffalo, NY 14203
p: (716) 847-1630
f: (716) 847-1454
www.cscos.com

May 07, 2013

David P. Locey, PE
New York State Department of Environmental Conservation
Region 9
Project Manager
270 Michigan Ave.
Buffalo, NY 14203-2915

Re: NYSDEC BCP Site # C915270
Webster Block Backfill Material Approval

Dear Mr. Locey:

C&S Engineers, Inc. ("C&S") is providing the analytical data for samples collected from the proposed source of fill material that is scheduled for use at the Webster Block Site. This material was collected from Buffalo Crushed Stone's Como Park Quarry. A description of the material, the analytical testing protocol and results of the analysis is provided in this letter. C&S is requesting that, based on the information presented in this letter, that the NYSDEC approve the use of the fill on-site.

I. WEBSTER BLOCK REMEDIATION

HARBORcenter Development LLC ("HARBORcenter") is undertaking the construction of a multi use parking garage, ice rink and hotel facility at the site. As part of the development, HARBORcenter has entered into the Brownfield Cleanup Program ("BCP") and is excavating contaminated urban fill from beneath the site as part of the approved Interim Remedial Measures. The fill ranges in thickness from 7 to 14 feet beneath the site. The project cleanup up goal is to reach either Residential or Commercial Use soil cleanup objectives.

Following the fill removal, HARBORcenter will place engineered fill (virgin crushed stone) in the excavated hole and will bring the site back up to approximately 2 feet from grade.

II. BACKFILL MATERIAL

As previously provided to the NYSDEC in emails dated April 24, 2013 and May 2, 2013, the backfill material is being imported from Buffalo Crushed Stone's Como Park facility in Cheektowaga, New York. The source of the material is virgin cherty limestone that is crushed on-site at the Como Park facility and screened for stone size. Geotechnical analysis indicated that on average, 18% of the material passes through the #80 sieve. This exceeds the DER-10 recommended value of 10% or less below #80 sieve size. The larger percentage of fines is required to meet the compaction and loading criteria for the proposed building.

Based on this geotechnical data, the NYSDEC requested that C&S collect 7 samples of the fill "fines" material for VOC analysis and 2 additional composite samples of the fines for SVOC, Metals, PCBs and Pesticides analysis.

III. BACKFILL SAMPLING

On May 3, 2013, C&S collected 7 samples for VOC analysis and 2 composite samples for Metals, SVOC, PCBs and Pesticides analysis. The samples were collected directly from the source pile that will be used for backfill material on the Webster Block. C&S geologist Norman Wohlabuagh verified that the material is generated from the onsite crushing of limestone rock that is actively being removed from the quarry walls.

Following collection, the samples were hand delivered by C&S to Test America's Amherst New York facility.

IV. ANALYTICAL RESULTS

The Analytical report is provided is attached.

The results of the analysis indicated the following:

1. No VOCs were detected in 5 of the 7 grab samples (S-1, S-2, S-3, S-6, and S-7)
2. Trace VOCs were detected in one grab sample (S-5), all below Residential Use and Protection of Groundwater SCOs
3. Acetone was detected in S-4 at a concentration of 0.480 mg/kg, exceeding the Protection of Groundwater SCO of 0.05 mg/kg but well below the Residential Use SCO of 100 mg/kg.
4. Trace SVOCs were detected in both composite samples (Comp 1-3 and Comp 4-6), all well below Residential Use and Protection of Groundwater SCOs
5. No PCBs or Pesticides were detected in either of the two composite samples
6. No metals were detected at concentrations that exceeded either the Residential Use or Protection of Groundwater SCOs in either of the two composite samples

Metals were detected at concentrations consistent with virgin rock material. With the exception of acetone, the VOCs and SVOCs detected (at trace levels) were compounds (and at concentrations) consistent with the operation of heavy machinery and the associated exhaust.

The presence of acetone is not anticipated in the samples and no discernible source of acetone was identified on site. Acetone is a common cross contaminant in field sampling and analysis and based on the other VOC analysis on site, C&S feels that the acetone is likely a lab or container contaminant and not actually present in the material.

Based on the enclosed data, C&S requests that the NYSDEC approve the use of this fill within the BCP boundary areas as part of the ongoing remedial program on site.

HARBORcenter and C&S Engineers appreciate your assistance in on this site. Please feel free to contact me at 716.847.1630 if you require additional information.

Sincerely,
C&S ENGINEERS, INC.

Mark Colmerauer
Regional Environmental Services Manager

Attachments:
Backfill Geotechnical Data
Laboratory Analytical Data

cc: M. Doster, NYSDEC Region 9

f:\project\m86- harborcenter development llc\m86001001 - harborcenter\environmental\correspondence\backfill- letter 1.docx

ATACHMENT: BACKFILL GEOTECHNICAL DATA

BUFFALO CRUSHED STONE, INC.
Subsidiary of New Enterprise Stone & Lime Co., Inc.

2544 Clinton St. · P.O. Box 710 · Buffalo, NY 14224 · (716) 826-7310 · FAX (716) 826-1342

April 25, 2013

Frank Meehan USMC Retired
Mortenson Construction
HARBORcenter
1 Seymour H Knox III Plaza
Buffalo, N.Y. 14203

RE: HARBORcenter Gradation
Suitable Granular Fill

Dear Frank,

Enclosed with this letter is the Gradation Report for the Suitable Granular Fill. I penned in a recent test.

Another proctor sample will be delivered to another lab today. I do not have a projected completion at this time.

Sincerely,

Gary Nelson, Q.C. Dept.

Gradation Sheet

Como Park Buffalo Crushed Stone

Sample of	Date	4/25/13	
From Pt. 21	**Como Park**		

Sieve Size	Sieve Size	Weight Retained	% Retained	% Passing	Spec.
90mm	3-1/2"				
75mm	3"				
63mm	2-1/2"				
50mm	2"			100.0	100
37.5mm	1-1/2"			100.0	100
25.0mm	1"			99.0	99.4
19.0mm	3/4"			97.0	96.7
12.5mm	1/2"			89.0	
9.5mm	3/8"				
6.3mm	1/4"			65.0	57.4
4.75mm	4				
3.2mm	1/8"				
2.36mm	8				
2.0mm	10			**46.0**	44.0
1.4mm	14				
1.18mm	16				
850µm	20				
600µm	30				
425µm	40			**25.0**	25.1
300µm	50				
180µm	80			**19.0**	18.7
150µm	100				
75µm	200			**12.0**	14.1
	Pan				
	Total				

Suitable Granular Fill
Average Gradation

Wash Loss:		
Before:		
After:		
Loss:	0.0	
	#DIV/0! %	

→ Recent Test: companion to sample submitted to contractor

→ Average of 3 Tests Prior to Bidding

CME Associates, Inc.

402 Vulcan Street
Buffalo, New York 14207
(716) 877-9577
(716) 877-9629 (Fax)

www.cmeassociates.com

LABORATORY TEST REPORT

Client: Buffalo Crushed Stone **Page** 1 of 2 **Date:** 5/2/13

Project: Source Pre-Qualification **Report No.:** 16522L-03-0513

On April 25, 2013, a representative from Buffalo Crushed Stone delivered a sample of crushed limestone to be tested. As requested a gradation test was performed to verify that the material met NYSDOT requirements.

Sample Identification as follows:

Sample No.:	Location:
BL2550	On-site stockpile (Como Park, Plant #21) – Cheektowaga, New York

MECHANICAL ANALYSIS (ASTM C-136, C-117)

Sieve Size	Percent Passing by Weight Sample BL2550	NYSDOT Specification 203-2.02C.1 for Select Granular Fill
4"	100	100
2"	100	-
1"	97	-
¾"	87	-
½"	80	-
¼"	62	-
No. 4	59	-
No. 10	43	-
No. 40	21	0-70
No. 200	11.8	0-15

BURMISTER CLASSIFICATION

Classification: GREY 2" Minus Run-of-Crush Limestone

LABORATORY MOISTURE-DENSITY RELATIONSHIP ASTM D-1557

		Uncorrected	Corrected	
100% Maximum Dry Density	=	136.9	144.0	pcf
Optimum Moisture Content	=	6.3	5.5	%

Feel free to contact this office should you have any questions.

Respectfully Submitted,

CME ASSOCIATES, INC.

Brianna Ciccone

Brianna Ciccone, EIT
Division Manager

CME Associates, Inc.

MATERIALS TESTING DIVISION

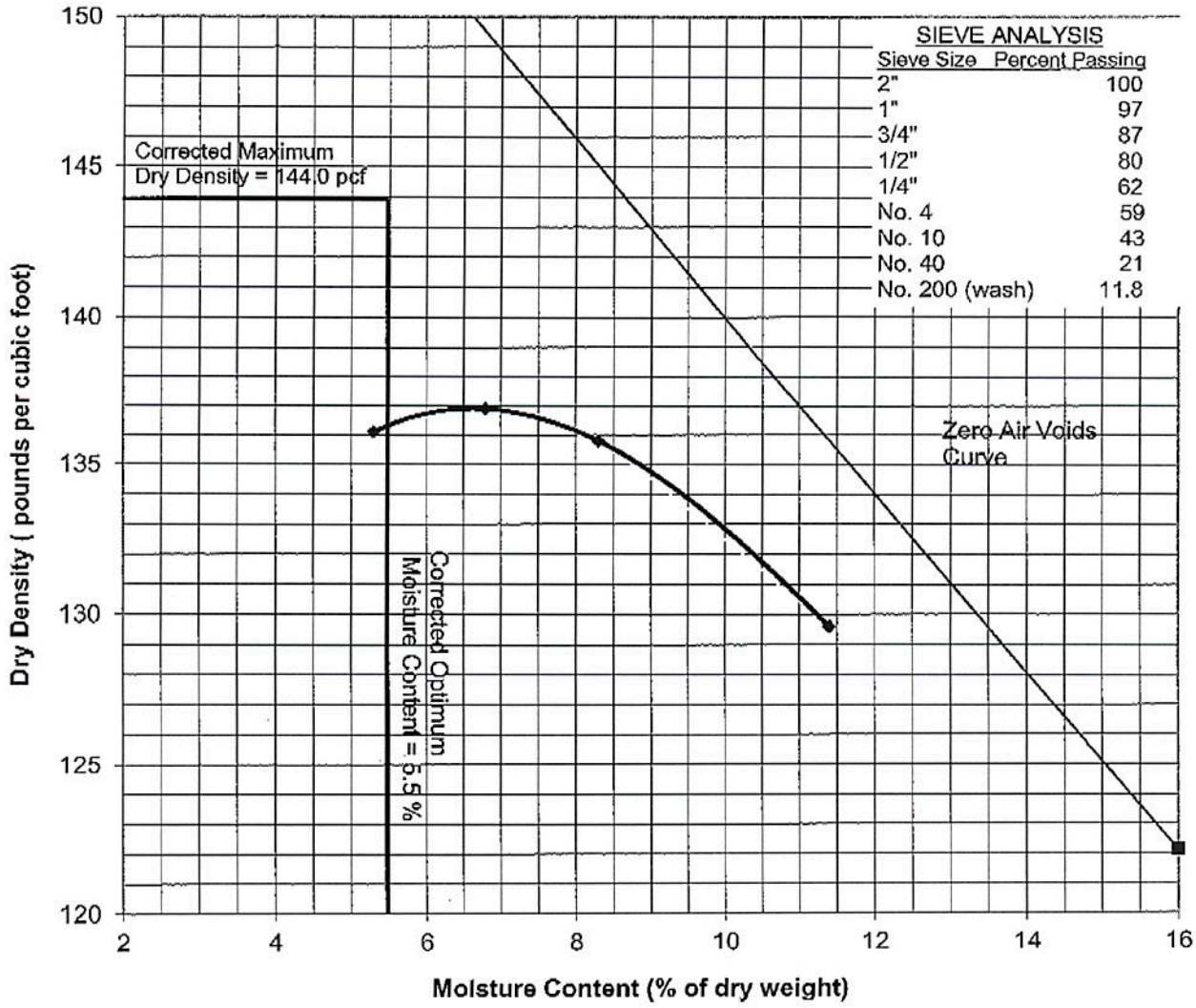
CLIENT: Buffalo Crushed Stone PROJECT: Source Pre-Qualification

REPORT NO: 16522L-03-0513 SAMPLE NO: BL2550 DATE DELIVERED: 4/25/2013

SAMPLE LOCATION: On-site Stockpile (Como Park)

SOIL CLASSIFICATION: GREY 2" minus Run-of-Crush Limestone

MOISTURE DENSITY RELATIONSHIP CURVE



MAXIMUM DRY DENSITY	136.9 pcf	**OPTIMUM MOISTURE CONTENT**	6.3 %
CORRECTED MAX DRY DENSITY	144.0 pcf	CORRECTED OPTIMUM MOISTURE	5.5 %

TESTED IN ACCORDANCE WITH ASTM **D1557** X D698 MIL STD 621 CE

4/23/13 1:00

BUFFALO CRUSHED STONE, INC.
CONSTRUCTION MATERIALS

2544 Clinton St., P.O. Box 710, Buffalo, NY 14224
(716) 826-7310 Fax: (716) 826-1342

April 22, 2013

Mark Cerrone Inc.
P.O. Box 3009
Niagara Falls, NY 14304

Attn: Chris Ganje

Re: Harbor Center Recreation /Training project, Webster Block. Buffalo, New York.

Dear Chris,

We hereby certify the Select Granular Fill (Item 203.07) as produced at our Como Park Boulevard quarry (NYSDOT Source #5-1R) and shipped to the above referenced project meet all specifications and quality requirements of the New York State Department of Transportation. This material is mined from virgin stone and the gradations are as follows:

Select Granular Fill Item 203.07

Sieve Size	% Passing
4"	100
#40	0 – 70
#200	0 – 15

* Please note that the Select Fill Item top size will be right around 2".

We trust this information meets with your approval.

Sincerely,

John W. Norton
Account Representative

a member of the GLYNN GROUP

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

ASTM D-4318 10

Civil ◦ Structural ◦ Geotechnical ◦ Materials Testing ◦ Consulting

Project : Various Testing
Client: Buffalo Crushed Stone

Date: 03.18.13
GGE # : 13-1024

Material : ***1-1/2" Crushed Stone Subbase Fill***
Lab # : ***13-04***

LIQUID LIMIT = NV

PLASTIC LIMIT = NP

PASTICITY INDEX = NP **Non-Plastic**

Reported by: C.M. Dann
CHRIS M. DANN

Reviewed by:
G. EDWARD LOVER

GLYNN GEOTECHNICAL ENGINEERING

415 South Transit Street, Lockport, New York 14094
voice 716.625.6933 / fax 716.625.6983
www.glynngroup.com

NEW YORK STATE
DEPARTMENT OF TRANSPORTATION
MATERIALS BUREAU
COARSE AGGREGATE ANALYSIS FOR 703-02 PHYSICAL REQUIREMENTS

SOURCE #: **5- 1RS** TEST #: **11AR 76S** BR3a SERIAL #: **191519** SM LAB #: **11044463**

Buffalo Crushed Stone, Inc.
Cheektowaga, NY

On 01/23/12 results of tests on material represented by sample 191519 were evaluated

Material meets specifications for Item 703-02. Consult friction aggregate requirements for approved use.

REMARKS:

NYSDOT Sizes	No. 2	No. 1	No. 1A
10 Cycle MgS0 4		0.9	
25 Cycle 3% freeze -thaw		5.4	

% Non-carbonate	34	Percent non-carbonate and percent insoluble residue values represent this sample only. When designing mixes, follow procedures in the appropriate Materials Method.
% Insoluble residue	38.1	
L.A. Abrasion		

Bulk Specific Gravity SSD	2.65	Gravity and Absorption values represent this sample only. They may not be appropriate for designing mixes
Bulk Specific Gravity	2.643	
Apparent Specific Gravity	2.674	
Absorption	0.4	

COMPOSITION (Size No.)	%

COMPOSITION (Size No. 1)	%
Limestone	54
Chert	34
Limestone (W/Chert)	9
Chert & Cherty Limestone	4

ATTACHMENT: LABORATORY ANALYTICAL DATA

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: 480-37637-1
Client Project/Site: HARBORcenter

For:
C&S Engineers, Inc.
90 Broadway
Buffalo, New York 14203

Attn: Mr. Mark Colmerauer

Joseph V. Giacomazza

Authorized for release by:
5/7/2013 5:09:43 PM
Joe Giacomazza, Project Administrator
joe.giacomazza@testamericainc.com

Designee for

Sally Hoffman, Project Manager II
sally.hoffman@testamericainc.com

Table of Contents

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.

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.
B	Compound was found in the blank and sample.

GC Semi VOA

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

Metals

Qualifier	Qualifier Description
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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-37637-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-37637-1

Receipt
The samples were received on 5/3/2013 5:16 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
No analytical or quality issues were noted.

GC Semi VOA
Method(s) 8081A: The continuing calibration verification (CCV) for Alachlor associated with batch 116930 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8081A: The following samples were diluted due to the nature of the sample matrix : COMP 1-3 (480-37637-8), COMP 4-7 (480-37637-9). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8082: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl was decreased and slightly exceeded 15% on the ZB-35 column, indicating a low bias. (CCV 480-116812/13), (CCV 480-116812/2), (CCV 480-116812/22), (CCV 480-116812/8)

No other analytical or quality issues were noted.

Metals
Method(s) 6010B: The following samples were diluted to bring the concentration of target analyte total calcium within the linear range: COMP 1-3 (480-37637-8), COMP 4-7 (480-37637-9). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The Method Blank for batch 480-116831 contained total calcium, iron, and manganese above the method detection limits. These target analyte concentrations were less than the reporting limits (RLs); therefore, re-extraction and/or re-analysis of samples COMP 1-3 (480-37637-8), COMP 4-7 (480-37637-9) was not performed.

No other analytical or quality issues were noted.

Organic Prep
Method(s) 3550B: The following samples required a Florisil clean-up, via 3620C, to reduce matrix interferences: COMP 1-3 (480-37637-8), COMP 4-7 (480-37637-9).

No other analytical or quality issues were noted.

Detection Summary

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-1 — Lab Sample ID: 480-37637-1

No Detections.

Client Sample ID: S-2 — Lab Sample ID: 480-37637-2

No Detections.

Client Sample ID: S-3 — Lab Sample ID: 480-37637-3

No Detections.

Client Sample ID: S-4 — Lab Sample ID: 480-37637-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Hexanone	23	J	24	2.4	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	74		24	1.8	ug/Kg	1	☼	8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	6.5	J	24	1.6	ug/Kg	1	☼	8260B	Total/NA
Acetone	480		24	4.1	ug/Kg	1	☼	8260B	Total/NA
Toluene	0.86	J	4.9	0.37	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	1.3	J	9.8	0.82	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-5 — Lab Sample ID: 480-37637-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	24	4.0	ug/Kg	1	☼	8260B	Total/NA
Toluene	0.38	J	4.7	0.36	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: S-6 — Lab Sample ID: 480-37637-6

No Detections.

Client Sample ID: S-7 — Lab Sample ID: 480-37637-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0	J	5.6	0.27	ug/Kg	1	☼	8260B	Total/NA
Cyclohexane	17		5.6	0.78	ug/Kg	1	☼	8260B	Total/NA
Ethylbenzene	2.2	J	5.6	0.39	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	15		5.6	0.85	ug/Kg	1	☼	8260B	Total/NA
Toluene	3.9	J	5.6	0.42	ug/Kg	1	☼	8260B	Total/NA
Xylenes, Total	14		11	0.94	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: COMP 1-3 — Lab Sample ID: 480-37637-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biphenyl	27	J	170	10	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	35	J	170	2.0	ug/Kg	1	☼	8270C	Total/NA
Anthracene	12	J	170	4.3	ug/Kg	1	☼	8270C	Total/NA
Benzo(b)fluoranthene	23	J	170	3.3	ug/Kg	1	☼	8270C	Total/NA
Benzo(k)fluoranthene	12	J	170	1.8	ug/Kg	1	☼	8270C	Total/NA
Carbazole	6.4	J	170	1.9	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	4.5	J	170	1.7	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	24	J	170	2.4	ug/Kg	1	☼	8270C	Total/NA
Fluorene	6.2	J	170	3.9	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: COMP 1-3 (Continued)

Lab Sample ID: 480-37637-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	6.2	J	170	2.8	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	61	J B	170	3.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	28	J	170	1.1	ug/Kg	1	☼	8270C	Total/NA
Aluminum	1220		9.0	4.0	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.4		1.8	0.36	mg/Kg	1	☼	6010B	Total/NA
Barium	8.6		0.45	0.099	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.053	J	0.18	0.025	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J	0.18	0.027	mg/Kg	1	☼	6010B	Total/NA
Calcium	228000	B	225	14.9	mg/Kg	5	☼	6010B	Total/NA
Chromium	6.6		0.45	0.18	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.2		0.45	0.045	mg/Kg	1	☼	6010B	Total/NA
Copper	6.7		0.90	0.19	mg/Kg	1	☼	6010B	Total/NA
Iron	3620	B	9.0	0.99	mg/Kg	1	☼	6010B	Total/NA
Lead	7.6		0.90	0.22	mg/Kg	1	☼	6010B	Total/NA
Magnesium	6900		18.0	0.84	mg/Kg	1	☼	6010B	Total/NA
Manganese	153	B	0.18	0.029	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.3		4.5	0.21	mg/Kg	1	☼	6010B	Total/NA
Potassium	541		27.1	18.0	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.74	J	3.6	0.36	mg/Kg	1	☼	6010B	Total/NA
Sodium	150		126	11.7	mg/Kg	1	☼	6010B	Total/NA
Vanadium	4.2		0.45	0.099	mg/Kg	1	☼	6010B	Total/NA
Zinc	18.3		1.8	0.14	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.011	J	0.020	0.0081	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: COMP 4-7

Lab Sample ID: 480-37637-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Biphenyl	35	J	170	11	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	70	J	170	2.1	ug/Kg	1	☼	8270C	Total/NA
Anthracene	13	J	170	4.3	ug/Kg	1	☼	8270C	Total/NA
Benzo(a)pyrene	20	J	170	4.1	ug/Kg	1	☼	8270C	Total/NA
Benzo(b)fluoranthene	20	J	170	3.3	ug/Kg	1	☼	8270C	Total/NA
Benzo(k)fluoranthene	12	J	170	1.9	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	24	J	170	2.5	ug/Kg	1	☼	8270C	Total/NA
Fluorene	13	J	170	3.9	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	11	J	170	2.8	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	80	J B	170	3.6	ug/Kg	1	☼	8270C	Total/NA
Pyrene	26	J	170	1.1	ug/Kg	1	☼	8270C	Total/NA
Aluminum	1600		10.4	4.6	mg/Kg	1	☼	6010B	Total/NA
Arsenic	2.5		2.1	0.42	mg/Kg	1	☼	6010B	Total/NA
Barium	10.5		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.060	J	0.21	0.029	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10	J	0.21	0.031	mg/Kg	1	☼	6010B	Total/NA
Calcium	240000	B	261	17.2	mg/Kg	5	☼	6010B	Total/NA
Chromium	3.5		0.52	0.21	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.3		0.52	0.052	mg/Kg	1	☼	6010B	Total/NA
Copper	5.3		1.0	0.22	mg/Kg	1	☼	6010B	Total/NA
Iron	4120	B	10.4	1.1	mg/Kg	1	☼	6010B	Total/NA
Lead	1.9		1.0	0.25	mg/Kg	1	☼	6010B	Total/NA
Magnesium	7830		20.9	0.97	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 4-7 (Continued)

Lab Sample ID: 480-37637-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	185	B	0.21	0.033	mg/Kg	1	☼	6010B	Total/NA
Nickel	6.0		5.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Potassium	500		31.3	20.9	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.49	J	4.2	0.42	mg/Kg	1	☼	6010B	Total/NA
Sodium	160		146	13.6	mg/Kg	1	☼	6010B	Total/NA
Vanadium	3.8		0.52	0.11	mg/Kg	1	☼	6010B	Total/NA
Zinc	16.4		2.1	0.16	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-1
Date Collected: 05/03/13 14:45
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-1
Matrix: Solid
Percent Solids: 99.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.3	0.39	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,1,2,2-Tetrachloroethane	ND		5.3	0.86	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,1-Dichloroethane	ND		5.3	0.65	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.7	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,2-Dibromoethane	ND		5.3	0.68	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,2-Dichlorobenzene	ND		5.3	0.42	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,2-Dichloroethane	ND		5.3	0.27	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,2-Dichloropropane	ND		5.3	2.7	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
2-Butanone (MEK)	ND		27	1.9	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.7	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Acetone	ND		27	4.5	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Benzene	ND		5.3	0.26	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Bromodichloromethane	ND		5.3	0.71	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Bromoform	ND		5.3	2.7	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Bromomethane	ND		5.3	0.48	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Carbon disulfide	ND		5.3	2.7	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Dibromochloromethane	ND		5.3	0.68	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
cis-1,2-Dichloroethene	ND		5.3	0.68	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
cis-1,3-Dichloropropene	ND		5.3	0.77	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Cyclohexane	ND		5.3	0.74	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Ethylbenzene	ND		5.3	0.37	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Isopropylbenzene	ND		5.3	0.80	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Methyl acetate	ND		5.3	0.99	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Methylcyclohexane	ND		5.3	0.81	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Styrene	ND		5.3	0.27	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Toluene	ND		5.3	0.40	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
trans-1,2-Dichloroethene	ND		5.3	0.55	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Vinyl chloride	ND		5.3	0.65	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1
Xylenes, Total	ND		11	0.89	ug/Kg	☼	05/03/13 20:38	05/03/13 23:47	1

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-1

Lab Sample ID: 480-37637-1

Date Collected: 05/03/13 14:45
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*05/03/13 20:38*	*05/03/13 23:47*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*05/03/13 20:38*	*05/03/13 23:47*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*05/03/13 20:38*	*05/03/13 23:47*	*1*

Client Sample ID: S-2

Lab Sample ID: 480-37637-2

Date Collected: 05/03/13 14:51
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.6	0.33	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.75	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,1,2-Trichloroethane	ND		4.6	0.60	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.1	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,1-Dichloroethane	ND		4.6	0.56	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,1-Dichloroethene	ND		4.6	0.56	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,2,4-Trichlorobenzene	ND		4.6	0.28	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,2-Dibromo-3-Chloropropane	ND		4.6	2.3	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,2-Dibromoethane	ND		4.6	0.59	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,2-Dichloropropane	ND		4.6	2.3	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
2-Butanone (MEK)	ND		23	1.7	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Acetone	ND		23	3.9	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Benzene	ND		4.6	0.23	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Bromodichloromethane	ND		4.6	0.62	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Bromoform	ND		4.6	2.3	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Bromomethane	ND		4.6	0.41	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Carbon disulfide	ND		4.6	2.3	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Carbon tetrachloride	ND		4.6	0.45	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Dibromochloromethane	ND		4.6	0.59	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Chloroethane	ND		4.6	1.0	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Chloroform	ND		4.6	0.28	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Chloromethane	ND		4.6	0.28	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
cis-1,2-Dichloroethene	ND		4.6	0.59	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
cis-1,3-Dichloropropene	ND		4.6	0.66	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Cyclohexane	ND		4.6	0.65	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Dichlorodifluoromethane	ND		4.6	0.38	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Isopropylbenzene	ND		4.6	0.69	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Methyl acetate	ND		4.6	0.86	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Methyl tert-butyl ether	ND		4.6	0.45	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Methylcyclohexane	ND		4.6	0.70	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Styrene	ND		4.6	0.23	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-2

Date Collected: 05/03/13 14:51
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-2

Matrix: Solid
Percent Solids: 99.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Toluene	ND		4.6	0.35	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
trans-1,2-Dichloroethene	ND		4.6	0.48	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
trans-1,3-Dichloropropene	ND		4.6	2.0	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Trichlorofluoromethane	ND		4.6	0.44	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Vinyl chloride	ND		4.6	0.56	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1
Xylenes, Total	ND		9.2	0.77	ug/Kg	☼	05/04/13 14:19	05/04/13 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*64 - 126*	*05/04/13 14:19*	*05/04/13 15:25*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*05/04/13 14:19*	*05/04/13 15:25*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*05/04/13 14:19*	*05/04/13 15:25*	*1*

Client Sample ID: S-3

Date Collected: 05/03/13 14:58
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-3

Matrix: Solid
Percent Solids: 97.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.8	0.49	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,1,2,2-Tetrachloroethane	ND		6.8	1.1	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,1,2-Trichloroethane	ND		6.8	0.89	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.8	1.6	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,1-Dichloroethane	ND		6.8	0.83	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,1-Dichloroethene	ND		6.8	0.83	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,2,4-Trichlorobenzene	ND		6.8	0.41	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,2-Dibromo-3-Chloropropane	ND		6.8	3.4	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,2-Dibromoethane	ND		6.8	0.88	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,2-Dichlorobenzene	ND		6.8	0.53	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,2-Dichloroethane	ND		6.8	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,2-Dichloropropane	ND		6.8	3.4	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,3-Dichlorobenzene	ND		6.8	0.35	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
1,4-Dichlorobenzene	ND		6.8	0.95	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
2-Hexanone	ND		34	3.4	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
2-Butanone (MEK)	ND		34	2.5	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
4-Methyl-2-pentanone (MIBK)	ND		34	2.2	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Acetone	ND		34	5.7	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Benzene	ND		6.8	0.33	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Bromodichloromethane	ND		6.8	0.91	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Bromoform	ND		6.8	3.4	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Bromomethane	ND		6.8	0.61	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Carbon disulfide	ND		6.8	3.4	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Carbon tetrachloride	ND		6.8	0.66	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Chlorobenzene	ND		6.8	0.90	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Dibromochloromethane	ND		6.8	0.87	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Chloroethane	ND		6.8	1.5	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Chloroform	ND		6.8	0.42	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Chloromethane	ND		6.8	0.41	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
cis-1,2-Dichloroethene	ND		6.8	0.87	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-3

Lab Sample ID: 480-37637-3

Date Collected: 05/03/13 14:58
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 97.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		6.8	0.98	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Cyclohexane	ND		6.8	0.95	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Dichlorodifluoromethane	ND		6.8	0.56	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Ethylbenzene	ND		6.8	0.47	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Isopropylbenzene	ND		6.8	1.0	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Methyl acetate	ND		6.8	1.3	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Methyl tert-butyl ether	ND		6.8	0.67	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Methylcyclohexane	ND		6.8	1.0	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Methylene Chloride	ND		6.8	3.1	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Styrene	ND		6.8	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Tetrachloroethene	ND		6.8	0.91	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Toluene	ND		6.8	0.52	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
trans-1,2-Dichloroethene	ND		6.8	0.70	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
trans-1,3-Dichloropropene	ND		6.8	3.0	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Trichloroethene	ND		6.8	1.5	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Trichlorofluoromethane	ND		6.8	0.64	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Vinyl chloride	ND		6.8	0.83	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1
Xylenes, Total	ND		14	1.1	ug/Kg	☼	05/03/13 20:38	05/04/13 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*05/03/13 20:38*	*05/04/13 00:38*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*05/03/13 20:38*	*05/04/13 00:38*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*	*05/03/13 20:38*	*05/04/13 00:38*	*1*

Client Sample ID: S-4

Lab Sample ID: 480-37637-4

Date Collected: 05/03/13 15:07
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.79	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,1,2-Trichloroethane	ND		4.9	0.63	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,2-Dibromo-3-Chloropropane	ND		4.9	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,2-Dibromoethane	ND		4.9	0.63	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,2-Dichloropropane	ND		4.9	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
1,4-Dichlorobenzene	ND		4.9	0.68	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
2-Hexanone	**23**	**J**	24	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
2-Butanone (MEK)	**74**		24	1.8	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
4-Methyl-2-pentanone (MIBK)	**6.5**	**J**	24	1.6	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Acetone	**480**		24	4.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Benzene	ND		4.9	0.24	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Bromodichloromethane	ND		4.9	0.65	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1

Client Sample ID: S-4
Date Collected: 05/03/13 15:07
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-4
Matrix: Solid
Percent Solids: 99.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		4.9	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Bromomethane	ND		4.9	0.44	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Carbon disulfide	ND		4.9	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Chlorobenzene	ND		4.9	0.64	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Dibromochloromethane	ND		4.9	0.63	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Chloroethane	ND		4.9	1.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Chloromethane	ND		4.9	0.29	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
cis-1,2-Dichloroethene	ND		4.9	0.63	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
cis-1,3-Dichloropropene	ND		4.9	0.70	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Cyclohexane	ND		4.9	0.68	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Dichlorodifluoromethane	ND		4.9	0.40	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Ethylbenzene	ND		4.9	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Isopropylbenzene	ND		4.9	0.74	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Methyl acetate	ND		4.9	0.91	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Methylcyclohexane	ND		4.9	0.74	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Methylene Chloride	ND		4.9	2.2	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Styrene	ND		4.9	0.24	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Toluene	**0.86**	**J**	4.9	0.37	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
trans-1,3-Dichloropropene	ND		4.9	2.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Trichlorofluoromethane	ND		4.9	0.46	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Vinyl chloride	ND		4.9	0.60	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1
Xylenes, Total	**1.3**	**J**	9.8	0.82	ug/Kg	☼	05/03/13 20:38	05/04/13 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*05/03/13 20:38*	*05/04/13 01:03*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*05/03/13 20:38*	*05/04/13 01:03*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*	*05/03/13 20:38*	*05/04/13 01:03*	*1*

Client Sample ID: S-5
Date Collected: 05/03/13 15:17
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-5
Matrix: Solid
Percent Solids: 99.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,1,2,2-Tetrachloroethane	ND		4.7	0.77	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,1,2-Trichloroethane	ND		4.7	0.62	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,1-Dichloroethane	ND		4.7	0.58	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,2,4-Trichlorobenzene	ND		4.7	0.29	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,2-Dibromo-3-Chloropropane	ND		4.7	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,2-Dibromoethane	ND		4.7	0.61	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,2-Dichlorobenzene	ND		4.7	0.37	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-5
Date Collected: 05/03/13 15:17
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-5
Matrix: Solid
Percent Solids: 99.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,2-Dichloropropane	ND		4.7	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,3-Dichlorobenzene	ND		4.7	0.24	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
1,4-Dichlorobenzene	ND		4.7	0.66	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
2-Butanone (MEK)	ND		24	1.7	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Acetone	**11**	**J**	24	4.0	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Benzene	ND		4.7	0.23	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Bromodichloromethane	ND		4.7	0.63	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Bromoform	ND		4.7	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Bromomethane	ND		4.7	0.43	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Carbon disulfide	ND		4.7	2.4	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Carbon tetrachloride	ND		4.7	0.46	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Chlorobenzene	ND		4.7	0.63	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Dibromochloromethane	ND		4.7	0.61	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Chloroethane	ND		4.7	1.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Chloroform	ND		4.7	0.29	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Chloromethane	ND		4.7	0.29	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
cis-1,2-Dichloroethene	ND		4.7	0.61	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
cis-1,3-Dichloropropene	ND		4.7	0.68	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Cyclohexane	ND		4.7	0.66	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Dichlorodifluoromethane	ND		4.7	0.39	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Ethylbenzene	ND		4.7	0.33	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Isopropylbenzene	ND		4.7	0.71	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Methyl acetate	ND		4.7	0.88	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Methyl tert-butyl ether	ND		4.7	0.47	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Methylcyclohexane	ND		4.7	0.72	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Methylene Chloride	ND		4.7	2.2	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Styrene	ND		4.7	0.24	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Tetrachloroethene	ND		4.7	0.64	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Toluene	**0.38**	**J**	4.7	0.36	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
trans-1,2-Dichloroethene	ND		4.7	0.49	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
trans-1,3-Dichloropropene	ND		4.7	2.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Trichlorofluoromethane	ND		4.7	0.45	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Vinyl chloride	ND		4.7	0.58	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1
Xylenes, Total	ND		9.5	0.80	ug/Kg	☼	05/03/13 20:38	05/04/13 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*05/03/13 20:38*	*05/04/13 01:28*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*05/03/13 20:38*	*05/04/13 01:28*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*05/03/13 20:38*	*05/04/13 01:28*	*1*

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-6
Date Collected: 05/03/13 15:24
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-6
Matrix: Solid
Percent Solids: 97.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.6	0.41	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,1,2,2-Tetrachloroethane	ND		5.6	0.91	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,1,2-Trichloroethane	ND		5.6	0.73	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	1.3	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,1-Dichloroethane	ND		5.6	0.69	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,1-Dichloroethene	ND		5.6	0.69	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,2,4-Trichlorobenzene	ND		5.6	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,2-Dibromo-3-Chloropropane	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,2-Dibromoethane	ND		5.6	0.72	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,2-Dichlorobenzene	ND		5.6	0.44	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,2-Dichloroethane	ND		5.6	0.28	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,2-Dichloropropane	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,3-Dichlorobenzene	ND		5.6	0.29	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
1,4-Dichlorobenzene	ND		5.6	0.79	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
2-Butanone (MEK)	ND		28	2.1	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.8	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Acetone	ND		28	4.7	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Benzene	ND		5.6	0.28	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Bromodichloromethane	ND		5.6	0.76	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Bromoform	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Bromomethane	ND		5.6	0.51	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Carbon disulfide	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Carbon tetrachloride	ND		5.6	0.55	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Chlorobenzene	ND		5.6	0.74	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Dibromochloromethane	ND		5.6	0.72	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Chloroethane	ND		5.6	1.3	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Chloroform	ND		5.6	0.35	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Chloromethane	ND		5.6	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
cis-1,2-Dichloroethene	ND		5.6	0.72	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
cis-1,3-Dichloropropene	ND		5.6	0.81	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Cyclohexane	ND		5.6	0.79	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Dichlorodifluoromethane	ND		5.6	0.47	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Ethylbenzene	ND		5.6	0.39	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Isopropylbenzene	ND		5.6	0.85	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Methyl acetate	ND		5.6	1.0	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Methyl tert-butyl ether	ND		5.6	0.55	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Methylcyclohexane	ND		5.6	0.86	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Methylene Chloride	ND		5.6	2.6	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Styrene	ND		5.6	0.28	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Tetrachloroethene	ND		5.6	0.76	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Toluene	ND		5.6	0.43	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
trans-1,2-Dichloroethene	ND		5.6	0.58	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
trans-1,3-Dichloropropene	ND		5.6	2.5	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Trichloroethene	ND		5.6	1.2	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Trichlorofluoromethane	ND		5.6	0.53	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Vinyl chloride	ND		5.6	0.69	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1
Xylenes, Total	ND		11	0.95	ug/Kg	☼	05/03/13 20:38	05/04/13 01:53	1

Client Sample ID: S-6

Lab Sample ID: 480-37637-6

Date Collected: 05/03/13 15:24
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 97.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*	*05/03/13 20:38*	*05/04/13 01:53*	*1*
Toluene-d8 (Surr)	*101*		*71 - 125*	*05/03/13 20:38*	*05/04/13 01:53*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 126*	*05/03/13 20:38*	*05/04/13 01:53*	*1*

Client Sample ID: S-7

Lab Sample ID: 480-37637-7

Date Collected: 05/03/13 15:35
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 98.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.6	0.41	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,1,2,2-Tetrachloroethane	ND		5.6	0.91	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,1,2-Trichloroethane	ND		5.6	0.73	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	1.3	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,1-Dichloroethane	ND		5.6	0.68	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,1-Dichloroethene	ND		5.6	0.68	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,2,4-Trichlorobenzene	ND		5.6	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,2-Dibromo-3-Chloropropane	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,2-Dibromoethane	ND		5.6	0.72	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,2-Dichlorobenzene	ND		5.6	0.44	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,2-Dichloroethane	ND		5.6	0.28	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,2-Dichloropropane	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,3-Dichlorobenzene	ND		5.6	0.29	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
1,4-Dichlorobenzene	ND		5.6	0.78	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
2-Butanone (MEK)	ND		28	2.0	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.8	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Acetone	ND		28	4.7	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Benzene	**1.0**	**J**	5.6	0.27	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Bromodichloromethane	ND		5.6	0.75	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Bromoform	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Bromomethane	ND		5.6	0.50	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Carbon disulfide	ND		5.6	2.8	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Carbon tetrachloride	ND		5.6	0.54	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Chlorobenzene	ND		5.6	0.74	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Dibromochloromethane	ND		5.6	0.71	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Chloroethane	ND		5.6	1.3	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Chloroform	ND		5.6	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Chloromethane	ND		5.6	0.34	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
cis-1,2-Dichloroethene	ND		5.6	0.71	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
cis-1,3-Dichloropropene	ND		5.6	0.80	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Cyclohexane	**17**		5.6	0.78	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Dichlorodifluoromethane	ND		5.6	0.46	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Ethylbenzene	**2.2**	**J**	5.6	0.39	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Isopropylbenzene	ND		5.6	0.84	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Methyl acetate	ND		5.6	1.0	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Methyl tert-butyl ether	ND		5.6	0.55	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Methylcyclohexane	**15**		5.6	0.85	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Methylene Chloride	ND		5.6	2.6	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Styrene	ND		5.6	0.28	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1

Client Sample ID: S-7

Lab Sample ID: 480-37637-7

Date Collected: 05/03/13 15:35

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 98.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.6	0.75	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Toluene	**3.9**	**J**	5.6	0.42	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
trans-1,2-Dichloroethene	ND		5.6	0.58	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
trans-1,3-Dichloropropene	ND		5.6	2.5	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Trichloroethene	ND		5.6	1.2	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Trichlorofluoromethane	ND		5.6	0.53	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Vinyl chloride	ND		5.6	0.68	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1
Xylenes, Total	**14**		11	0.94	ug/Kg	☼	05/03/13 20:38	05/04/13 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*05/03/13 20:38*	*05/04/13 02:18*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*05/03/13 20:38*	*05/04/13 02:18*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*05/03/13 20:38*	*05/04/13 02:18*	*1*

Client Sample ID: COMP 1-3

Lab Sample ID: 480-37637-8

Date Collected: 05/03/13 17:00

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 99.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	**27**	**J**	170	10	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
bis (2-chloroisopropyl) ether	ND		170	18	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2,4,5-Trichlorophenol	ND		170	37	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2,4-Dichlorophenol	ND		170	8.8	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2,4-Dimethylphenol	ND		170	45	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2,4-Dinitrophenol	ND		330	59	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2-Chloronaphthalene	ND		170	11	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2-Chlorophenol	ND		170	8.5	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2-Methylnaphthalene	**35**	**J**	170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2-Methylphenol	ND		170	5.2	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2-Nitroaniline	ND		330	54	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
2-Nitrophenol	ND		170	7.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
3-Nitroaniline	ND		330	39	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4-Chloroaniline	ND		170	49	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4-Methylphenol	ND		330	9.3	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4-Nitroaniline	ND		330	19	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
4-Nitrophenol	ND		330	41	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Acenaphthene	ND		170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Acetophenone	ND		170	8.6	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Anthracene	**12**	**J**	170	4.3	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Atrazine	ND		170	7.5	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 1-3
Date Collected: 05/03/13 17:00
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-8
Matrix: Solid
Percent Solids: 99.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	ND		170	18	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Benzo(b)fluoranthene	**23**	**J**	170	3.3	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Benzo(k)fluoranthene	**12**	**J**	170	1.8	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Bis(2-chloroethoxy)methane	ND		170	9.1	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Butyl benzyl phthalate	ND		170	45	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Caprolactam	ND		170	73	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Carbazole	**6.4**	**J**	170	1.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Chrysene	ND		170	1.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Di-n-butyl phthalate	ND		170	58	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Dibenzofuran	**4.5**	**J**	170	1.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Diethyl phthalate	ND		170	5.1	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Dimethyl phthalate	ND		170	4.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Fluoranthene	**24**	**J**	170	2.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Fluorene	**6.2**	**J**	170	3.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Hexachlorobenzene	ND		170	8.3	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Hexachlorobutadiene	ND		170	8.6	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Hexachlorocyclopentadiene	ND		170	51	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Hexachloroethane	ND		170	13	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Isophorone	ND		170	8.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
N-Nitrosodiphenylamine	ND		170	9.2	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Naphthalene	**6.2**	**J**	170	2.8	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Nitrobenzene	ND		170	7.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Pentachlorophenol	ND		330	57	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Phenanthrene	**61**	**J B**	170	3.5	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Phenol	ND		170	18	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1
Pyrene	**28**	**J**	170	1.1	ug/Kg	☼	05/03/13 18:59	05/07/13 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*68*		*39 - 146*	*05/03/13 18:59*	*05/07/13 14:07*	*1*
2-Fluorobiphenyl	*71*		*37 - 120*	*05/03/13 18:59*	*05/07/13 14:07*	*1*
2-Fluorophenol	*63*		*18 - 120*	*05/03/13 18:59*	*05/07/13 14:07*	*1*
Nitrobenzene-d5	*62*		*34 - 132*	*05/03/13 18:59*	*05/07/13 14:07*	*1*
p-Terphenyl-d14	*98*		*65 - 153*	*05/03/13 18:59*	*05/07/13 14:07*	*1*
Phenol-d5	*63*		*11 - 120*	*05/03/13 18:59*	*05/07/13 14:07*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	ND		33	15	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
2,4'-DDE	ND		33	6.9	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
2,4'-DDT	ND		33	6.5	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
4,4'-DDD	ND		33	6.4	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 1-3
Date Collected: 05/03/13 17:00
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-8
Matrix: Solid
Percent Solids: 99.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	ND		33	4.9	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
4,4'-DDT	ND		33	3.4	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Chlordane (technical)	ND		330	73	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
beta-BHC	ND		33	3.6	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
alpha-Chlordane	ND		33	16	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
alpha-BHC	ND		33	5.9	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Aldrin	ND		33	8.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
delta-BHC	ND		33	4.3	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Dieldrin	ND		33	7.9	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Endosulfan I	ND		33	4.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Endosulfan II	ND		33	5.9	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Endosulfan sulfate	ND		33	6.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Endrin	ND		33	4.5	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Endrin aldehyde	ND		33	8.4	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Endrin ketone	ND		33	8.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Chlorobenzilate	ND		330	110	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
gamma-BHC (Lindane)	ND		33	4.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
gamma-Chlordane	ND		33	10	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Heptachlor	ND		33	5.2	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Heptachlor epoxide	ND		33	8.5	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Methoxychlor	ND		33	4.5	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Mirex	ND		33	8.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Toxaphene	ND		330	190	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Alachlor	ND		33	15	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
Hexachlorobenzene	ND		33	3.6	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20
BHC, Total	ND		33	9.9	ug/Kg	☼	05/04/13 00:06	05/06/13 09:23	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*55 - 136*	*05/04/13 00:06*	*05/06/13 09:23*	*20*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*05/04/13 00:06*	*05/06/13 09:23*	*20*

Method: 8082 - 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	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1221	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1232	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1242	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1248	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*47 - 176*	*05/03/13 13:19*	*05/04/13 08:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1220**		9.0	4.0	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Antimony	ND		13.5	0.36	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Arsenic	**3.4**		1.8	0.36	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Barium	**8.6**		0.45	0.099	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1

Client Sample ID: COMP 1-3

Lab Sample ID: 480-37637-8

Date Collected: 05/03/13 17:00

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 99.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.053**	**J**	0.18	0.025	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Cadmium	**0.10**	**J**	0.18	0.027	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Calcium	**228000**	**B**	225	14.9	mg/Kg	☼	05/04/13 12:50	05/06/13 14:27	5
Chromium	**6.6**		0.45	0.18	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Cobalt	**1.2**		0.45	0.045	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Copper	**6.7**		0.90	0.19	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Iron	**3620**	**B**	9.0	0.99	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Lead	**7.6**		0.90	0.22	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Magnesium	**6900**		18.0	0.84	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Manganese	**153**	**B**	0.18	0.029	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Nickel	**8.3**		4.5	0.21	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Potassium	**541**		27.1	18.0	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Selenium	**0.74**	**J**	3.6	0.36	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Silver	ND		0.45	0.18	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Sodium	**150**		126	11.7	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Thallium	ND		5.4	0.27	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Vanadium	**4.2**		0.45	0.099	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1
Zinc	**18.3**		1.8	0.14	mg/Kg	☼	05/04/13 12:50	05/06/13 13:57	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.020	0.0081	mg/Kg	☼	05/04/13 07:00	05/06/13 12:46	1

Client Sample ID: COMP 4-7

Lab Sample ID: 480-37637-9

Date Collected: 05/03/13 17:07

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 99.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	**35**	**J**	170	11	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
bis (2-chloroisopropyl) ether	ND		170	18	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2,4,5-Trichlorophenol	ND		170	37	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2,4-Dichlorophenol	ND		170	8.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2,4-Dimethylphenol	ND		170	46	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2,4-Dinitrophenol	ND		330	59	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2,6-Dinitrotoluene	ND		170	41	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2-Chloronaphthalene	ND		170	11	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2-Chlorophenol	ND		170	8.6	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2-Methylnaphthalene	**70**	**J**	170	2.1	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2-Methylphenol	ND		170	5.2	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2-Nitroaniline	ND		330	54	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
2-Nitrophenol	ND		170	7.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
3-Nitroaniline	ND		330	39	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
4-Bromophenyl phenyl ether	ND		170	54	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
4-Chloro-3-methylphenol	ND		170	7.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
4-Chloroaniline	ND		170	50	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 4-7
Date Collected: 05/03/13 17:07
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-9
Matrix: Solid
Percent Solids: 99.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
4-Methylphenol	ND		330	9.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
4-Nitroaniline	ND		330	19	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
4-Nitrophenol	ND		330	41	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Acenaphthene	ND		170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Acenaphthylene	ND		170	1.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Acetophenone	ND		170	8.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Anthracene	**13**	**J**	170	4.3	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Atrazine	ND		170	7.5	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Benzaldehyde	ND		170	19	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Benzo(a)pyrene	**20**	**J**	170	4.1	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Benzo(b)fluoranthene	**20**	**J**	170	3.3	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Benzo(k)fluoranthene	**12**	**J**	170	1.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Bis(2-chloroethoxy)methane	ND		170	9.2	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Bis(2-chloroethyl)ether	ND		170	15	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Bis(2-ethylhexyl) phthalate	ND		170	55	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Butyl benzyl phthalate	ND		170	45	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Caprolactam	ND		170	73	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Carbazole	ND		170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Chrysene	ND		170	1.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Di-n-butyl phthalate	ND		170	59	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Di-n-octyl phthalate	ND		170	4.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Dibenzofuran	ND		170	1.8	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Diethyl phthalate	ND		170	5.1	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Dimethyl phthalate	ND		170	4.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Fluoranthene	**24**	**J**	170	2.5	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Fluorene	**13**	**J**	170	3.9	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Hexachlorobenzene	ND		170	8.4	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Hexachlorobutadiene	ND		170	8.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Hexachlorocyclopentadiene	ND		170	51	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Hexachloroethane	ND		170	13	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Indeno(1,2,3-cd)pyrene	ND		170	4.7	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Isophorone	ND		170	8.5	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
N-Nitrosodiphenylamine	ND		170	9.3	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Naphthalene	**11**	**J**	170	2.8	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Nitrobenzene	ND		170	7.5	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Pentachlorophenol	ND		330	58	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Phenanthrene	**80**	**J B**	170	3.6	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Phenol	ND		170	18	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1
Pyrene	**26**	**J**	170	1.1	ug/Kg	☼	05/03/13 18:59	05/07/13 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*64*		*39 - 146*	*05/03/13 18:59*	*05/07/13 14:31*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*05/03/13 18:59*	*05/07/13 14:31*	*1*
2-Fluorophenol	*62*		*18 - 120*	*05/03/13 18:59*	*05/07/13 14:31*	*1*
Nitrobenzene-d5	*59*		*34 - 132*	*05/03/13 18:59*	*05/07/13 14:31*	*1*

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 4-7
Date Collected: 05/03/13 17:07
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-9
Matrix: Solid
Percent Solids: 99.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14	*99*		*65 - 153*	*05/03/13 18:59*	*05/07/13 14:31*	*1*
Phenol-d5	*64*		*11 - 120*	*05/03/13 18:59*	*05/07/13 14:31*	*1*

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	ND		33	16	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
2,4'-DDE	ND		33	7.0	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
2,4'-DDT	ND		33	6.5	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
4,4'-DDD	ND		33	6.5	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
4,4'-DDE	ND		33	5.0	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
4,4'-DDT	ND		33	3.4	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Chlordane (technical)	ND		330	74	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
beta-BHC	ND		33	3.6	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
alpha-Chlordane	ND		33	17	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
alpha-BHC	ND		33	6.0	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Aldrin	ND		33	8.2	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
delta-BHC	ND		33	4.4	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Dieldrin	ND		33	8.0	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Endosulfan I	ND		33	4.2	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Endosulfan II	ND		33	6.0	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Endosulfan sulfate	ND		33	6.2	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Endrin	ND		33	4.6	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Endrin aldehyde	ND		33	8.5	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Endrin ketone	ND		33	8.2	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Chlorobenzilate	ND		330	110	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
gamma-BHC (Lindane)	ND		33	4.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
gamma-Chlordane	ND		33	11	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Heptachlor	ND		33	5.2	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Heptachlor epoxide	ND		33	8.6	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Methoxychlor	ND		33	4.6	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Mirex	ND		33	8.1	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Toxaphene	ND		330	190	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Alachlor	ND		33	15	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
Hexachlorobenzene	ND		33	3.6	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20
BHC, Total	ND		33	10	ug/Kg	☼	05/04/13 00:06	05/06/13 09:38	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	*0*	*X*	*55 - 136*	*05/04/13 00:06*	*05/06/13 09:38*	*20*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*05/04/13 00:06*	*05/06/13 09:38*	*20*

Method: 8082 - 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	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1221	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1232	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1242	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1248	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 4-7
Date Collected: 05/03/13 17:07
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-9
Matrix: Solid
Percent Solids: 99.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		47 - 176	05/03/13 13:19	05/04/13 08:55	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1600		10.4	4.6	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Antimony	ND		15.7	0.42	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Arsenic	2.5		2.1	0.42	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Barium	10.5		0.52	0.11	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Beryllium	0.060	J	0.21	0.029	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Cadmium	0.10	J	0.21	0.031	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Calcium	240000	B	261	17.2	mg/Kg	☼	05/04/13 12:50	05/06/13 14:29	5
Chromium	3.5		0.52	0.21	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Cobalt	1.3		0.52	0.052	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Copper	5.3		1.0	0.22	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Iron	4120	B	10.4	1.1	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Lead	1.9		1.0	0.25	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Magnesium	7830		20.9	0.97	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Manganese	185	B	0.21	0.033	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Nickel	6.0		5.2	0.24	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Potassium	500		31.3	20.9	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Selenium	0.49	J	4.2	0.42	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Silver	ND		0.52	0.21	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Sodium	160		146	13.6	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Thallium	ND		6.3	0.31	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Vanadium	3.8		0.52	0.11	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1
Zinc	16.4		2.1	0.16	mg/Kg	☼	05/04/13 12:50	05/06/13 14:00	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.018	0.0075	mg/Kg	☼	05/04/13 07:00	05/06/13 12:52	1

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		12DCE	TOL	BFB
Lab Sample ID	Client Sample ID	(64-126)	(71-125)	(72-126)
480-37637-1	S-1	108	97	98
480-37637-2	S-2	114	96	97
480-37637-3	S-3	110	103	101
480-37637-4	S-4	110	98	101
480-37637-5	S-5	109	98	98
480-37637-6	S-6	112	101	102
480-37637-7	S-7	109	99	100
LCS 480-116770/4	Lab Control Sample	105	103	104
LCS 480-116833/4	Lab Control Sample	106	101	97
MB 480-116770/5	Method Blank	104	100	100
MB 480-116833/5	Method Blank	97	102	99

Surrogate Legend

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

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPH	PHL
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(65-153)	(11-120)
480-37637-8	COMP 1-3	68	71	63	62	98	63
480-37637-9	COMP 4-7	64	70	62	59	99	64
LCS 480-116764/2-A	Lab Control Sample	79	73	63	65	87	64
MB 480-116764/1-A	Method Blank	68	70	63	60	98	65

Surrogate Legend

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

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(55-136)	(30-124)
480-37637-8	COMP 1-3	0 X	0 X
480-37637-9	COMP 4-7	0 X	0 X
LCS 480-116790/2-A	Lab Control Sample	69	69
LCSD 480-116790/3-A	Lab Control Sample Dup	72	69
MB 480-116790/1-A	Method Blank	77	72

Surrogate Legend

DCB = DCB Decachlorobiphenyl

Surrogate Summary

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

TCX = Tetrachloro-m-xylene

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCB2							
Lab Sample ID	Client Sample ID	(47-176)							
480-37637-8	COMP 1-3	86							
480-37637-9	COMP 4-7	85							
LCS 480-116705/2-A	Lab Control Sample	97							
MB 480-116705/1-A	Method Blank	84							

Surrogate Legend

DCB = DCB Decachlorobiphenyl

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-116770/5
Matrix: Solid
Analysis Batch: 116770

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		5.0	0.36	ug/Kg			05/03/13 22:48	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			05/03/13 22:48	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			05/03/13 22:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			05/03/13 22:48	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			05/03/13 22:48	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			05/03/13 22:48	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			05/03/13 22:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			05/03/13 22:48	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			05/03/13 22:48	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			05/03/13 22:48	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			05/03/13 22:48	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			05/03/13 22:48	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			05/03/13 22:48	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			05/03/13 22:48	1
2-Hexanone	ND		25	2.5	ug/Kg			05/03/13 22:48	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			05/03/13 22:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			05/03/13 22:48	1
Acetone	ND		25	4.2	ug/Kg			05/03/13 22:48	1
Benzene	ND		5.0	0.25	ug/Kg			05/03/13 22:48	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			05/03/13 22:48	1
Bromoform	ND		5.0	2.5	ug/Kg			05/03/13 22:48	1
Bromomethane	ND		5.0	0.45	ug/Kg			05/03/13 22:48	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			05/03/13 22:48	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			05/03/13 22:48	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			05/03/13 22:48	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			05/03/13 22:48	1
Chloroethane	ND		5.0	1.1	ug/Kg			05/03/13 22:48	1
Chloroform	ND		5.0	0.31	ug/Kg			05/03/13 22:48	1
Chloromethane	ND		5.0	0.30	ug/Kg			05/03/13 22:48	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			05/03/13 22:48	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			05/03/13 22:48	1
Cyclohexane	ND		5.0	0.70	ug/Kg			05/03/13 22:48	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			05/03/13 22:48	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			05/03/13 22:48	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			05/03/13 22:48	1
Methyl acetate	ND		5.0	0.93	ug/Kg			05/03/13 22:48	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			05/03/13 22:48	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			05/03/13 22:48	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			05/03/13 22:48	1
Styrene	ND		5.0	0.25	ug/Kg			05/03/13 22:48	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			05/03/13 22:48	1
Toluene	ND		5.0	0.38	ug/Kg			05/03/13 22:48	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			05/03/13 22:48	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			05/03/13 22:48	1
Trichloroethene	ND		5.0	1.1	ug/Kg			05/03/13 22:48	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			05/03/13 22:48	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			05/03/13 22:48	1
Xylenes, Total	ND		10	0.84	ug/Kg			05/03/13 22:48	1

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

Lab Sample ID: MB 480-116770/5
Matrix: Solid
Analysis Batch: 116770

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 126		05/03/13 22:48	1
Toluene-d8 (Surr)	100		71 - 125		05/03/13 22:48	1
4-Bromofluorobenzene (Surr)	100		72 - 126		05/03/13 22:48	1

Lab Sample ID: LCS 480-116770/4
Matrix: Solid
Analysis Batch: 116770

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	50.0		ug/Kg		100	73 - 126
1,1-Dichloroethene	50.0	43.0		ug/Kg		86	59 - 125
1,2-Dichlorobenzene	50.0	52.4		ug/Kg		105	75 - 120
1,2-Dichloroethane	50.0	53.4		ug/Kg		107	77 - 122
Benzene	50.0	51.4		ug/Kg		103	79 - 127
Chlorobenzene	50.0	52.9		ug/Kg		106	76 - 124
cis-1,2-Dichloroethene	50.0	51.5		ug/Kg		103	81 - 117
Ethylbenzene	50.0	51.8		ug/Kg		104	80 - 120
Methyl tert-butyl ether	50.0	50.9		ug/Kg		102	63 - 125
Tetrachloroethene	50.0	50.9		ug/Kg		102	74 - 122
Toluene	50.0	51.4		ug/Kg		103	74 - 128
trans-1,2-Dichloroethene	50.0	51.3		ug/Kg		103	78 - 126
Trichloroethene	50.0	51.5		ug/Kg		103	77 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		64 - 126
Toluene-d8 (Surr)	103		71 - 125
4-Bromofluorobenzene (Surr)	104		72 - 126

Lab Sample ID: MB 480-116833/5
Matrix: Solid
Analysis Batch: 116833

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		5.0	0.36	ug/Kg			05/04/13 14:32	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			05/04/13 14:32	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			05/04/13 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			05/04/13 14:32	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			05/04/13 14:32	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			05/04/13 14:32	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			05/04/13 14:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			05/04/13 14:32	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			05/04/13 14:32	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			05/04/13 14:32	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			05/04/13 14:32	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			05/04/13 14:32	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			05/04/13 14:32	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			05/04/13 14:32	1
2-Hexanone	ND		25	2.5	ug/Kg			05/04/13 14:32	1

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

Lab Sample ID: MB 480-116833/5
Matrix: Solid
Analysis Batch: 116833

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		25	1.8	ug/Kg			05/04/13 14:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			05/04/13 14:32	1
Acetone	ND		25	4.2	ug/Kg			05/04/13 14:32	1
Benzene	ND		5.0	0.25	ug/Kg			05/04/13 14:32	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg			05/04/13 14:32	1
Bromoform	ND		5.0	2.5	ug/Kg			05/04/13 14:32	1
Bromomethane	ND		5.0	0.45	ug/Kg			05/04/13 14:32	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			05/04/13 14:32	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			05/04/13 14:32	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			05/04/13 14:32	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			05/04/13 14:32	1
Chloroethane	ND		5.0	1.1	ug/Kg			05/04/13 14:32	1
Chloroform	ND		5.0	0.31	ug/Kg			05/04/13 14:32	1
Chloromethane	ND		5.0	0.30	ug/Kg			05/04/13 14:32	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			05/04/13 14:32	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			05/04/13 14:32	1
Cyclohexane	ND		5.0	0.70	ug/Kg			05/04/13 14:32	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			05/04/13 14:32	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			05/04/13 14:32	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			05/04/13 14:32	1
Methyl acetate	ND		5.0	0.93	ug/Kg			05/04/13 14:32	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			05/04/13 14:32	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			05/04/13 14:32	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			05/04/13 14:32	1
Styrene	ND		5.0	0.25	ug/Kg			05/04/13 14:32	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			05/04/13 14:32	1
Toluene	ND		5.0	0.38	ug/Kg			05/04/13 14:32	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			05/04/13 14:32	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			05/04/13 14:32	1
Trichloroethene	ND		5.0	1.1	ug/Kg			05/04/13 14:32	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			05/04/13 14:32	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			05/04/13 14:32	1
Xylenes, Total	ND		10	0.84	ug/Kg			05/04/13 14:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*		*05/04/13 14:32*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*		*05/04/13 14:32*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*		*05/04/13 14:32*	*1*

Lab Sample ID: LCS 480-116833/4
Matrix: Solid
Analysis Batch: 116833

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	51.6		ug/Kg		103	73 - 126
1,1-Dichloroethene	50.0	43.6		ug/Kg		87	59 - 125
1,2-Dichlorobenzene	50.0	55.8		ug/Kg		112	75 - 120
1,2-Dichloroethane	50.0	58.2		ug/Kg		116	77 - 122

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

Lab Sample ID: LCS 480-116833/4
Matrix: Solid
Analysis Batch: 116833

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	52.5		ug/Kg		105	79 - 127
Chlorobenzene	50.0	54.8		ug/Kg		110	76 - 124
cis-1,2-Dichloroethene	50.0	53.2		ug/Kg		106	81 - 117
Ethylbenzene	50.0	54.3		ug/Kg		109	80 - 120
Methyl tert-butyl ether	50.0	52.0		ug/Kg		104	63 - 125
Tetrachloroethene	50.0	52.2		ug/Kg		104	74 - 122
Toluene	50.0	52.7		ug/Kg		105	74 - 128
trans-1,2-Dichloroethene	50.0	52.7		ug/Kg		105	78 - 126
Trichloroethene	50.0	54.3		ug/Kg		109	77 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*
Toluene-d8 (Surr)	*101*		*71 - 125*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*

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

Lab Sample ID: MB 480-116764/1-A
Matrix: Solid
Analysis Batch: 117056

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	10	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
bis (2-chloroisopropyl) ether	ND		170	17	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2,4,5-Trichlorophenol	ND		170	36	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2,4,6-Trichlorophenol	ND		170	11	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2,4-Dichlorophenol	ND		170	8.7	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2,4-Dimethylphenol	ND		170	45	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2,4-Dinitrophenol	ND		320	58	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2,4-Dinitrotoluene	ND		170	26	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2,6-Dinitrotoluene	ND		170	40	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2-Chloronaphthalene	ND		170	11	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2-Chlorophenol	ND		170	8.4	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2-Methylnaphthalene	ND		170	2.0	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2-Methylphenol	ND		170	5.1	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2-Nitroaniline	ND		320	53	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
2-Nitrophenol	ND		170	7.6	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
3,3'-Dichlorobenzidine	ND		170	140	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
3-Nitroaniline	ND		320	38	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4,6-Dinitro-2-methylphenol	ND		320	57	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4-Bromophenyl phenyl ether	ND		170	53	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4-Chloro-3-methylphenol	ND		170	6.8	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4-Chloroaniline	ND		170	49	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4-Chlorophenyl phenyl ether	ND		170	3.5	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4-Methylphenol	ND		320	9.2	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4-Nitroaniline	ND		320	18	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
4-Nitrophenol	ND		320	40	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Acenaphthene	ND		170	1.9	ug/Kg		05/03/13 18:59	05/07/13 11:38	1

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

Lab Sample ID: MB 480-116764/1-A
Matrix: Solid
Analysis Batch: 117056

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116764

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		170	1.4	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Acetophenone	ND		170	8.5	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Anthracene	ND		170	4.2	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Atrazine	ND		170	7.4	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Benzaldehyde	ND		170	18	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Benzo(a)anthracene	ND		170	2.9	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Benzo(a)pyrene	ND		170	4.0	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Benzo(b)fluoranthene	ND		170	3.2	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Benzo(g,h,i)perylene	ND		170	2.0	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Benzo(k)fluoranthene	ND		170	1.8	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Bis(2-chloroethoxy)methane	ND		170	9.0	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Bis(2-chloroethyl)ether	ND		170	14	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Bis(2-ethylhexyl) phthalate	ND		170	53	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Butyl benzyl phthalate	ND		170	44	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Caprolactam	ND		170	71	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Carbazole	ND		170	1.9	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Chrysene	ND		170	1.7	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Di-n-butyl phthalate	ND		170	57	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Dibenz(a,h)anthracene	ND		170	1.9	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Dibenzofuran	ND		170	1.7	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Diethyl phthalate	ND		170	5.0	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Dimethyl phthalate	ND		170	4.3	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Fluoranthene	ND		170	2.4	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Fluorene	ND		170	3.8	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Hexachlorobenzene	ND		170	8.2	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Hexachlorobutadiene	ND		170	8.5	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Hexachlorocyclopentadiene	ND		170	50	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Hexachloroethane	ND		170	13	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Indeno(1,2,3-cd)pyrene	ND		170	4.6	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Isophorone	ND		170	8.3	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
N-Nitrosodiphenylamine	ND		170	9.0	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Naphthalene	ND		170	2.8	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Nitrobenzene	ND		170	7.3	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Pentachlorophenol	ND		320	57	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Phenanthrene	6.55	J	170	3.5	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Phenol	ND		170	17	ug/Kg		05/03/13 18:59	05/07/13 11:38	1
Pyrene	ND		170	1.1	ug/Kg		05/03/13 18:59	05/07/13 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*68*		*39 - 146*	*05/03/13 18:59*	*05/07/13 11:38*	*1*
2-Fluorobiphenyl	*70*		*37 - 120*	*05/03/13 18:59*	*05/07/13 11:38*	*1*
2-Fluorophenol	*63*		*18 - 120*	*05/03/13 18:59*	*05/07/13 11:38*	*1*
Nitrobenzene-d5	*60*		*34 - 132*	*05/03/13 18:59*	*05/07/13 11:38*	*1*
p-Terphenyl-d14	*98*		*65 - 153*	*05/03/13 18:59*	*05/07/13 11:38*	*1*
Phenol-d5	*65*		*11 - 120*	*05/03/13 18:59*	*05/07/13 11:38*	*1*

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

Lab Sample ID: LCS 480-116764/2-A
Matrix: Solid
Analysis Batch: 117056

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116764

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	1650	1510		ug/Kg		91	55 - 125
2-Chlorophenol	1650	1260		ug/Kg		76	38 - 120
4-Chloro-3-methylphenol	1650	1400		ug/Kg		85	49 - 125
4-Nitrophenol	3310	2780		ug/Kg		84	43 - 137
Acenaphthene	1650	1480		ug/Kg		89	53 - 120
Bis(2-ethylhexyl) phthalate	1650	1730		ug/Kg		105	61 - 133
Fluorene	1650	1480		ug/Kg		90	63 - 126
Hexachloroethane	1650	1130		ug/Kg		69	41 - 120
N-Nitrosodi-n-propylamine	1650	1400		ug/Kg		85	46 - 120
Pentachlorophenol	3310	2700		ug/Kg		82	33 - 136
Phenol	1650	1250		ug/Kg		76	36 - 120
Pyrene	1650	1700		ug/Kg		103	51 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*79*		*39 - 146*
2-Fluorobiphenyl	*73*		*37 - 120*
2-Fluorophenol	*63*		*18 - 120*
Nitrobenzene-d5	*65*		*34 - 132*
p-Terphenyl-d14	*87*		*65 - 153*
Phenol-d5	*64*		*11 - 120*

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 480-116790/1-A
Matrix: Solid
Analysis Batch: 116930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	ND		1.7	0.78	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
2,4'-DDE	ND		1.7	0.35	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
2,4'-DDT	ND		1.7	0.33	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
4,4'-DDD	ND		1.7	0.32	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
4,4'-DDE	ND		1.7	0.25	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
4,4'-DDT	ND		1.7	0.17	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Chlordane (technical)	ND		17	3.7	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
beta-BHC	ND		1.7	0.18	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
alpha-Chlordane	ND		1.7	0.83	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
alpha-BHC	0.302	J	1.7	0.30	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Aldrin	ND		1.7	0.41	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
delta-BHC	0.284	J	1.7	0.22	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Dieldrin	ND		1.7	0.40	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Endosulfan I	ND		1.7	0.21	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Endosulfan II	ND		1.7	0.30	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Endosulfan sulfate	ND		1.7	0.31	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Endrin	ND		1.7	0.23	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Endrin aldehyde	ND		1.7	0.42	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Endrin ketone	ND		1.7	0.41	ug/Kg		05/04/13 00:06	05/06/13 08:37	1

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

Lab Sample ID: MB 480-116790/1-A
Matrix: Solid
Analysis Batch: 116930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzilate	ND		17	5.6	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
gamma-BHC (Lindane)	0.265	J	1.7	0.21	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
gamma-Chlordane	ND		1.7	0.53	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Heptachlor	ND		1.7	0.26	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Heptachlor epoxide	ND		1.7	0.43	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Methoxychlor	ND		1.7	0.23	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Mirex	ND		1.7	0.41	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Toxaphene	ND		17	9.7	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Alachlor	ND		1.7	0.77	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
Hexachlorobenzene	ND		1.7	0.18	ug/Kg		05/04/13 00:06	05/06/13 08:37	1
BHC, Total	0.851	J	1.7	0.50	ug/Kg		05/04/13 00:06	05/06/13 08:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*77*		*55 - 136*	*05/04/13 00:06*	*05/06/13 08:37*	*1*
Tetrachloro-m-xylene	*72*		*30 - 124*	*05/04/13 00:06*	*05/06/13 08:37*	*1*

Lab Sample ID: LCS 480-116790/2-A
Matrix: Solid
Analysis Batch: 116930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116790

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.2	13.6		ug/Kg		84	52 - 138
4,4'-DDE	16.2	13.1		ug/Kg		81	52 - 131
4,4'-DDT	16.2	13.4		ug/Kg		82	52 - 131
beta-BHC	16.2	12.2		ug/Kg		75	52 - 127
alpha-Chlordane	16.2	12.6		ug/Kg		78	40 - 133
alpha-BHC	16.2	11.9		ug/Kg		73	49 - 120
Aldrin	16.2	11.9		ug/Kg		74	35 - 120
delta-BHC	16.2	13.4		ug/Kg		83	45 - 123
Dieldrin	16.2	13.8		ug/Kg		85	53 - 131
Endosulfan I	16.2	13.8		ug/Kg		85	53 - 121
Endosulfan II	16.2	14.5		ug/Kg		90	48 - 134
Endosulfan sulfate	16.2	14.4		ug/Kg		89	46 - 144
Endrin	16.2	15.0		ug/Kg		93	56 - 134
Endrin aldehyde	16.2	14.7		ug/Kg		91	31 - 137
Endrin ketone	16.2	15.2		ug/Kg		93	54 - 140
gamma-BHC (Lindane)	16.2	12.1		ug/Kg		75	50 - 120
gamma-Chlordane	16.2	12.5		ug/Kg		77	52 - 129
Heptachlor	16.2	13.7		ug/Kg		85	54 - 121
Heptachlor epoxide	16.2	13.4		ug/Kg		83	52 - 129
Methoxychlor	16.2	14.4		ug/Kg		89	55 - 149

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*69*		*55 - 136*
Tetrachloro-m-xylene	*69*		*30 - 124*

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

Lab Sample ID: LCSD 480-116790/3-A
Matrix: Solid
Analysis Batch: 116930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116790

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD			16.5	13.8		ug/Kg		83	52 - 138	1	18
4,4'-DDE			16.5	13.1		ug/Kg		79	52 - 131	1	16
4,4'-DDT			16.5	13.7		ug/Kg		83	52 - 131	3	17
beta-BHC			16.5	11.8		ug/Kg		71	52 - 127	3	17
alpha-Chlordane			16.5	12.7		ug/Kg		77	40 - 133	0	13
alpha-BHC			16.5	11.9		ug/Kg		72	49 - 120	0	19
Aldrin			16.5	12.0		ug/Kg		72	35 - 120	0	24
delta-BHC			16.5	12.7		ug/Kg		77	45 - 123	5	14
Dieldrin			16.5	13.9		ug/Kg		84	53 - 131	1	13
Endosulfan I			16.5	13.6		ug/Kg		82	53 - 121	1	16
Endosulfan II			16.5	14.6		ug/Kg		89	48 - 134	1	17
Endosulfan sulfate			16.5	14.5		ug/Kg		88	46 - 144	0	14
Endrin			16.5	15.2		ug/Kg		92	56 - 134	1	19
Endrin aldehyde			16.5	14.7		ug/Kg		89	31 - 137	0	23
Endrin ketone			16.5	15.3		ug/Kg		93	54 - 140	1	14
gamma-BHC (Lindane)			16.5	12.1		ug/Kg		73	50 - 120	0	20
gamma-Chlordane			16.5	12.5		ug/Kg		75	52 - 129	1	14
Heptachlor			16.5	13.8		ug/Kg		83	54 - 121	0	16
Heptachlor epoxide			16.5	13.6		ug/Kg		82	52 - 129	1	17
Methoxychlor			16.5	14.7		ug/Kg		89	55 - 149	2	14

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*72*		*55 - 136*
Tetrachloro-m-xylene	*69*		*30 - 124*

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

Lab Sample ID: MB 480-116705/1-A
Matrix: Solid
Analysis Batch: 116812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg		05/03/13 13:19	05/04/13 08:10	1
PCB-1221	ND		0.24	0.047	mg/Kg		05/03/13 13:19	05/04/13 08:10	1
PCB-1232	ND		0.24	0.047	mg/Kg		05/03/13 13:19	05/04/13 08:10	1
PCB-1242	ND		0.24	0.047	mg/Kg		05/03/13 13:19	05/04/13 08:10	1
PCB-1248	ND		0.24	0.047	mg/Kg		05/03/13 13:19	05/04/13 08:10	1
PCB-1254	ND		0.24	0.11	mg/Kg		05/03/13 13:19	05/04/13 08:10	1
PCB-1260	ND		0.24	0.11	mg/Kg		05/03/13 13:19	05/04/13 08:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*84*		*47 - 176*	*05/03/13 13:19*	*05/04/13 08:10*	*1*

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

Lab Sample ID: LCS 480-116705/2-A
Matrix: Solid
Analysis Batch: 116812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116705

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			2.39	3.11		mg/Kg		130	51 - 185		
PCB-1260			2.39	2.85		mg/Kg		119	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*97*		*47 - 176*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 480-116831/1-A
Matrix: Solid
Analysis Batch: 117052

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116831

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.3	4.1	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Antimony	ND		14.0	0.37	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Arsenic	ND		1.9	0.37	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Barium	ND		0.47	0.10	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Beryllium	ND		0.19	0.026	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Cadmium	ND		0.19	0.028	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Calcium	5.98	J	46.6	3.1	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Chromium	ND		0.47	0.19	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Cobalt	ND		0.47	0.047	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Copper	ND		0.93	0.20	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Iron	3.59	J	9.3	1.0	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Lead	ND		0.93	0.22	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Magnesium	ND		18.6	0.86	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Manganese	0.0783	J	0.19	0.030	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Nickel	ND		4.7	0.21	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Potassium	ND		28.0	18.6	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Selenium	ND		3.7	0.37	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Silver	ND		0.47	0.19	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Sodium	ND		131	12.1	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Thallium	ND		5.6	0.28	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Vanadium	ND		0.47	0.10	mg/Kg		05/04/13 12:50	05/06/13 13:03	1
Zinc	ND		1.9	0.14	mg/Kg		05/04/13 12:50	05/06/13 13:03	1

Lab Sample ID: LCSSRM 480-116831/2-A
Matrix: Solid
Analysis Batch: 117052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116831

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Aluminum			9050	7940		mg/Kg		87.8	42.6 - 156.7		
Antimony			106	71.73		mg/Kg		67.8	23.1 - 255.7		
Arsenic			182	188.5		mg/Kg		103.7	70.9 - 129.7		
Barium			143	145.7		mg/Kg		102.1	72.7 - 128.0		

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

Lab Sample ID: LCSSRM 480-116831/2-A
Matrix: Solid
Analysis Batch: 117052

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116831

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	98.1	106.0		mg/Kg		108.0	74.6 - 125.1
Cadmium	60.3	62.75		mg/Kg		104.1	73.2 - 129.3
Calcium	6030	6158		mg/Kg		102.1	73.7 - 126.2
Chromium	125	126.8		mg/Kg		101.6	69.8 - 129.6
Cobalt	163	178.5		mg/Kg		109.7	74.2 - 125.2
Copper	80.0	84.57		mg/Kg		105.7	73.7 - 129.8
Iron	12900	10890		mg/Kg		84.5	32.3 - 168.2
Lead	136	143.7		mg/Kg		105.9	73.1 - 127.2
Magnesium	2640	2508		mg/Kg		95.2	64.0 - 135.6
Manganese	279	282.5		mg/Kg		101.4	74.2 - 126.2
Nickel	128	141.2		mg/Kg		110.5	73.1 - 129.7
Potassium	2820	2770		mg/Kg		98.4	62.1 - 137.9
Selenium	85.8	91.22		mg/Kg		106.4	63.9 - 136.2
Silver	61.2	61.90		mg/Kg		101.1	66.9 - 133.1
Sodium	438	438.3		mg/Kg		100.0	48.3 - 151.7
Thallium	144	156.7		mg/Kg		109.0	68.3 - 131.9
Vanadium	104	103.2		mg/Kg		99.4	66.0 - 133.7
Zinc	204	207.3		mg/Kg		101.8	69.6 - 129.9

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-116821/1-A
Matrix: Solid
Analysis Batch: 117010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116821

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0076	mg/Kg		05/04/13 07:00	05/06/13 12:09	1

Lab Sample ID: LCSSRM 480-116821/2-A
Matrix: Solid
Analysis Batch: 117010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116821

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	4.74		mg/Kg		125.6	50.9 - 149.1

GC/MS VOA

Analysis Batch: 116770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-1	S-1	Total/NA	Solid	8260B	116774
480-37637-3	S-3	Total/NA	Solid	8260B	116774
480-37637-4	S-4	Total/NA	Solid	8260B	116774
480-37637-5	S-5	Total/NA	Solid	8260B	116774
480-37637-6	S-6	Total/NA	Solid	8260B	116774
480-37637-7	S-7	Total/NA	Solid	8260B	116774
LCS 480-116770/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-116770/5	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 116774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-1	S-1	Total/NA	Solid	5035	
480-37637-3	S-3	Total/NA	Solid	5035	
480-37637-4	S-4	Total/NA	Solid	5035	
480-37637-5	S-5	Total/NA	Solid	5035	
480-37637-6	S-6	Total/NA	Solid	5035	
480-37637-7	S-7	Total/NA	Solid	5035	

Analysis Batch: 116833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-2	S-2	Total/NA	Solid	8260B	116837
LCS 480-116833/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 480-116833/5	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 116837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-2	S-2	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 116764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	3550B	
480-37637-9	COMP 4-7	Total/NA	Solid	3550B	
LCS 480-116764/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-116764/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 117056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	8270C	116764
480-37637-9	COMP 4-7	Total/NA	Solid	8270C	116764
LCS 480-116764/2-A	Lab Control Sample	Total/NA	Solid	8270C	116764
MB 480-116764/1-A	Method Blank	Total/NA	Solid	8270C	116764

GC Semi VOA

Prep Batch: 116705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	3550B	
480-37637-9	COMP 4-7	Total/NA	Solid	3550B	

GC Semi VOA (Continued)

Prep Batch: 116705 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-116705/2-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 480-116705/1-A	Method Blank	Total/NA	Solid	3550B	

Prep Batch: 116790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	3550B	
480-37637-9	COMP 4-7	Total/NA	Solid	3550B	
LCS 480-116790/2-A	Lab Control Sample	Total/NA	Solid	3550B	
LCSD 480-116790/3-A	Lab Control Sample Dup	Total/NA	Solid	3550B	
MB 480-116790/1-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 116812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	8082	116705
480-37637-9	COMP 4-7	Total/NA	Solid	8082	116705
LCS 480-116705/2-A	Lab Control Sample	Total/NA	Solid	8082	116705
MB 480-116705/1-A	Method Blank	Total/NA	Solid	8082	116705

Analysis Batch: 116930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	8081A	116790
480-37637-9	COMP 4-7	Total/NA	Solid	8081A	116790
LCS 480-116790/2-A	Lab Control Sample	Total/NA	Solid	8081A	116790
LCSD 480-116790/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	116790
MB 480-116790/1-A	Method Blank	Total/NA	Solid	8081A	116790

Metals

Prep Batch: 116821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	7471A	
480-37637-9	COMP 4-7	Total/NA	Solid	7471A	
LCSSRM 480-116821/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-116821/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 116831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	3050B	
480-37637-9	COMP 4-7	Total/NA	Solid	3050B	
LCSSRM 480-116831/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-116831/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 117010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	7471A	116821
480-37637-9	COMP 4-7	Total/NA	Solid	7471A	116821
LCSSRM 480-116821/2-A	Lab Control Sample	Total/NA	Solid	7471A	116821
MB 480-116821/1-A	Method Blank	Total/NA	Solid	7471A	116821

Metals (Continued)

Analysis Batch: 117052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-8	COMP 1-3	Total/NA	Solid	6010B	116831
480-37637-8	COMP 1-3	Total/NA	Solid	6010B	116831
480-37637-9	COMP 4-7	Total/NA	Solid	6010B	116831
480-37637-9	COMP 4-7	Total/NA	Solid	6010B	116831
LCSSRM 480-116831/2-A	Lab Control Sample	Total/NA	Solid	6010B	116831
MB 480-116831/1-A	Method Blank	Total/NA	Solid	6010B	116831

General Chemistry

Analysis Batch: 116781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-37637-1	S-1	Total/NA	Solid	Moisture	
480-37637-2	S-2	Total/NA	Solid	Moisture	
480-37637-3	S-3	Total/NA	Solid	Moisture	
480-37637-4	S-4	Total/NA	Solid	Moisture	
480-37637-5	S-5	Total/NA	Solid	Moisture	
480-37637-6	S-6	Total/NA	Solid	Moisture	
480-37637-7	S-7	Total/NA	Solid	Moisture	
480-37637-8	COMP 1-3	Total/NA	Solid	Moisture	
480-37637-9	COMP 4-7	Total/NA	Solid	Moisture	

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-1

Lab Sample ID: 480-37637-1

Date Collected: 05/03/13 14:45
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			116774	05/03/13 20:38	CDC	TAL BUF
Total/NA	Analysis	8260B		1	116770	05/03/13 23:47	ND	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: S-2

Lab Sample ID: 480-37637-2

Date Collected: 05/03/13 14:51
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			116837	05/04/13 14:19	ND	TAL BUF
Total/NA	Analysis	8260B		1	116833	05/04/13 15:25	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: S-3

Lab Sample ID: 480-37637-3

Date Collected: 05/03/13 14:58
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			116774	05/03/13 20:38	CDC	TAL BUF
Total/NA	Analysis	8260B		1	116770	05/04/13 00:38	ND	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: S-4

Lab Sample ID: 480-37637-4

Date Collected: 05/03/13 15:07
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			116774	05/03/13 20:38	CDC	TAL BUF
Total/NA	Analysis	8260B		1	116770	05/04/13 01:03	ND	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: S-5

Lab Sample ID: 480-37637-5

Date Collected: 05/03/13 15:17
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			116774	05/03/13 20:38	CDC	TAL BUF
Total/NA	Analysis	8260B		1	116770	05/04/13 01:28	ND	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: S-6

Lab Sample ID: 480-37637-6

Date Collected: 05/03/13 15:24
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 97.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			116774	05/03/13 20:38	CDC	TAL BUF
Total/NA	Analysis	8260B		1	116770	05/04/13 01:53	ND	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: S-7

Lab Sample ID: 480-37637-7

Date Collected: 05/03/13 15:35
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 98.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			116774	05/03/13 20:38	CDC	TAL BUF
Total/NA	Analysis	8260B		1	116770	05/04/13 02:18	ND	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: COMP 1-3

Lab Sample ID: 480-37637-8

Date Collected: 05/03/13 17:00
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			116764	05/03/13 18:59	TG	TAL BUF
Total/NA	Analysis	8270C		1	117056	05/07/13 14:07	AR	TAL BUF
Total/NA	Prep	3550B			116705	05/03/13 13:19	TG	TAL BUF
Total/NA	Analysis	8082		1	116812	05/04/13 08:40	JM	TAL BUF
Total/NA	Prep	3550B			116790	05/04/13 00:06	TG	TAL BUF
Total/NA	Analysis	8081A		20	116930	05/06/13 09:23	LW	TAL BUF
Total/NA	Prep	7471A			116821	05/04/13 07:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	117010	05/06/13 12:46	JRK	TAL BUF
Total/NA	Prep	3050B			116831	05/04/13 12:50	SS	TAL BUF
Total/NA	Analysis	6010B		1	117052	05/06/13 13:57	LH	TAL BUF
Total/NA	Prep	3050B			116831	05/04/13 12:50	SS	TAL BUF
Total/NA	Analysis	6010B		5	117052	05/06/13 14:27	LH	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Client Sample ID: COMP 4-7

Lab Sample ID: 480-37637-9

Date Collected: 05/03/13 17:07
Matrix: Solid
Date Received: 05/03/13 17:16
Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			116764	05/03/13 18:59	TG	TAL BUF
Total/NA	Analysis	8270C		1	117056	05/07/13 14:31	AR	TAL BUF
Total/NA	Prep	3550B			116705	05/03/13 13:19	TG	TAL BUF
Total/NA	Analysis	8082		1	116812	05/04/13 08:55	JM	TAL BUF
Total/NA	Prep	3550B			116790	05/04/13 00:06	TG	TAL BUF
Total/NA	Analysis	8081A		20	116930	05/06/13 09:38	LW	TAL BUF

Lab Chronicle

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 4-7
Date Collected: 05/03/13 17:07
Date Received: 05/03/13 17:16

Lab Sample ID: 480-37637-9
Matrix: Solid
Percent Solids: 99.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			116821	05/04/13 07:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	117010	05/06/13 12:52	JRK	TAL BUF
Total/NA	Prep	3050B			116831	05/04/13 12:50	SS	TAL BUF
Total/NA	Analysis	6010B		1	117052	05/06/13 14:00	LH	TAL BUF
Total/NA	Prep	3050B			116831	05/04/13 12:50	SS	TAL BUF
Total/NA	Analysis	6010B		5	117052	05/06/13 14:29	LH	TAL BUF
Total/NA	Analysis	Moisture		1	116781	05/03/13 21:46		TAL BUF

Laboratory References:

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

Certification Summary

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-13
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13 *
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-13
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAP	10	NY200003	06-09-13
Pennsylvania	NELAP	3	68-00281	07-31-13
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

* Expired certification is currently pending renewal and is considered valid.

Method Summary

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081A	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010B	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: C&S Engineers, Inc.
Project/Site: HARBORcenter

TestAmerica Job ID: 480-37637-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-37637-1	S-1	Solid	05/03/13 14:45	05/03/13 17:16
480-37637-2	S-2	Solid	05/03/13 14:51	05/03/13 17:16
480-37637-3	S-3	Solid	05/03/13 14:58	05/03/13 17:16
480-37637-4	S-4	Solid	05/03/13 15:07	05/03/13 17:16
480-37637-5	S-5	Solid	05/03/13 15:17	05/03/13 17:16
480-37637-6	S-6	Solid	05/03/13 15:24	05/03/13 17:16
480-37637-7	S-7	Solid	05/03/13 15:35	05/03/13 17:16
480-37637-8	COMP 1-3	Solid	05/03/13 17:00	05/03/13 17:16
480-37637-9	COMP 4-7	Solid	05/03/13 17:07	05/03/13 17:16

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
C&S Engineers	Mark Colmerauer	5/3/13	245464
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page _____ of _____**
90 Broadway			
City	**State**	**Zip Code**	**Site Contact** / **Lab Contact**
Buffalo	NY	14203	
Project Name and Location (State)	**Carrier/Waybill Number**		
Harbor Center			
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	MeOH	H2O	8260	8270C	8082	8021A	6010B	7471A
S-1	5/3/13	2:45PM				X	X						X	X	X					
S-2	5/3/13	2:51				X	X						X	X	X					
S-3	5/3/13	2:58				X	X						X	X	X					
S-4	5/3/13	3:07				X	X						X	X	X					
S-5	5/3/13	3:17				X	X						X	X	X					
S-6	5/3/13	3:24				X	X						X	X	X					
S-7	5/3/13	3:35				X	X						X	X	X					
Comp 1-3	5/3/13	5:00				X										X	X	X	X	X
Comp 4-7	5/3/13	5:07				X										X	X	X	X	X

480-37637 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☒ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: NK Wohlabaugh	5/3/13	5:16	1. Received By: Zachary J Robin TA Buffalo	5/3/13	17:16
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

#2 5.1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-37637-1

Login Number: 37637

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	