



January 15, 2025

Mr. Burke Robertson
City of Graham
201 South Main Street
Graham, North Carolina 27253

ECS Project No. 49:24488

Reference: Environmental Assessment
Sesquicentennial Park
2 NW Court Square
Graham, Alamance County, North Carolina

Dear Mr. Robertson:

ECS Southeast, LLC (ECS) is pleased to provide you with this Environmental Assessment letter report for the City of Graham - Sesquicentennial Park property, located at 2 NW Court Square, Graham, North Carolina (**Figure 1**). Our services were provided in general accordance with ECS Proposal No. 49:47279P, dated October 18, 2024, and authorized on October 24, 2024. ECS has conducted an environmental assessment of site soils for the above referenced project in conjunction with the Geotechnical Data Report (ECS Project No. 09:30425) to assist in determining if environmental concerns may exist during remediation and/or material haul-off prior to engineered soil backfill.

ECS environmental personnel were present onsite on December 11, 2024, during the advancement of two (2) geotechnical Standard Penetration Test (SPT) borings, for the purpose of soil sample collection. Two (2) soil samples, one from each boring, were collected from soil borings B-1 [Previously identified as Geotechnical boring B-02 in ECS Southeast, LLC *Geotechnical Data Report*, dated January 18, 2025 (ECS Project No. 09:30425)] and B-2 [Previously identified as Geotechnical boring B-01 in ECS Southeast, LLC *Geotechnical Data Report*, dated January 18, 2025 (ECS Project No. 09:30425)]. Sample locations are depicted in **Figure 2**. During drilling, soil cores from each boring location were screened at 2.5-foot intervals in the upper 10 feet and at 5-foot intervals thereafter using a MiniRAE 3000 photoionization detector (PID) with a 10.6 electron-volt bulb, calibrated to a 100-parts per million (ppm) isobutylene span gas prior to use. Based on PID readings and other observations (visual and olfactory), one soil sample from each boring was collected for laboratory analysis. Photographic documentation of site activities is included in **Attachment I**. Selected soil samples were packed into clean, laboratory-grade containers, labeled, packed on ice, and submitted under chain-of-custody (COC) protocol to a North Carolina certified laboratory for analysis. Appropriate COC procedures were utilized to track the samples from collection to final disposition. Selected samples were analyzed by the laboratory for common contaminants of concern including volatile organic compounds (VOCs) via EPA Method 8260, semi-volatile organic compounds (SVOCs) via EPA Method

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NC Engineering No. F-1519 NC Geology No. C-553 SC Engineering No. 3239
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8270, Resource Conservation and Recovery (RCRA) 8-metals by EPA Method 6010/7471, hexavalent chromium (Hex Cr) by EPA Method 7199, pesticides by EPA Method 8081, herbicides by EPA Method 8151, and polychlorinated biphenyls (PCBs) by EPA Method 8082.

ECS proposed to collect one (1) groundwater sample to be analyzed for VOCs and SVOCs if groundwater infiltrated the borings during drilling activities; however, groundwater was not encountered in borings B-01 or B-02 and a groundwater sample was not collected.

A North Carolina asbestos inspector was also present onsite during soil sample collection and six (6) soil samples, two from boring B-01, and four from boring B-02, were collected and submitted to a North Carolina certified laboratory for quantitative analysis of asbestos by polarizing light microscopy (PLM) and with transmission electron microscopy (TEM) for qualitative check.

Review of the environmental laboratory analytical results indicated that a concentration of hexavalent chromium (Hex Cr) was detected in soil sample B-2 that was greater than the Protection of Groundwater Preliminary Soil Remediation Goal (PSRG) and the Residential PSRG, but less than the Industrial/Commercial PSRG. Review of the RCRA metals analytical results indicated that concentrations of barium, total chromium, and lead were detected at concentrations greater than the laboratory reporting limits, but less than their respective PSRGs. Additional targeted VOC, SVOC, pesticides, herbicides, and PCB compounds were not detected above laboratory reporting limits. Review of the asbestos laboratory analytical results indicated that asbestos was not detected above laboratory reporting limits in the samples collected. A Summary of Soil Analytical Data is attached as a **Table**, and the full laboratory analytical reports and COC records are included in **Attachment II**.

Due to the Protection of Groundwater PSRG and Residential PSRG exceedance of Hex Cr detected in soil sample B-2, special profiling of soils will be required to a permitted disposal facility. Loads of soil and debris would need to be accompanied by manifests that are obtained from the disposal facility following their acceptance of the profile. ECS can assist with this process. If you have any questions or need additional services, please feel free to contact us at the e-mail and phone numbers below.

Respectfully,

ECS Southeast, LLC

Seth Greene
Environmental Staff Project Manager
sgreene@ecslimited.com
704-525-5152

Scott M. Werley, P.G.
Environmental Principal
swerley@ecslimited.com
984-297-7285

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Geotechnical • Construction Materials • Environmental • Facilities

Figure 1 - Site Topographic Map

Figure 2 - Site Aerial and Sample Location Map

Table - Summary of Soil Analytical Data

Attachment I - Photo Documentation

Attachment II - Laboratory Analytical Reports and Chain-of-Custody Records

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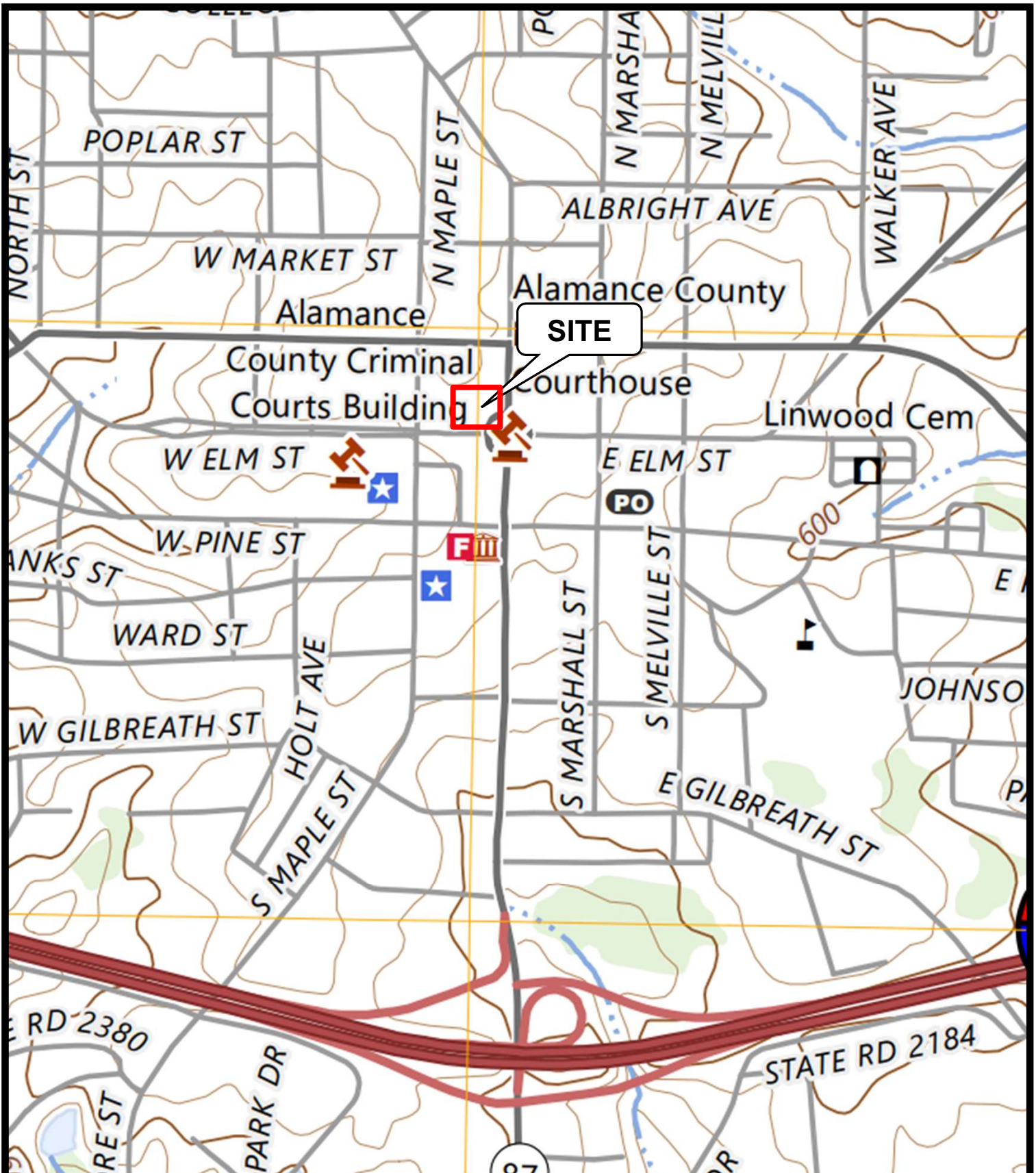
NC Engineering No. F-1519 NC Geology No. C-553 SC Engineering No. 3239

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FIGURES



SOURCE:

USGS TOPOGRAPHIC MAP
7.5 - MINUTE SERIES
BURLINGTON QUADRANGLES
DATED: 2023
SCALE:

0' ————— 500'

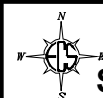
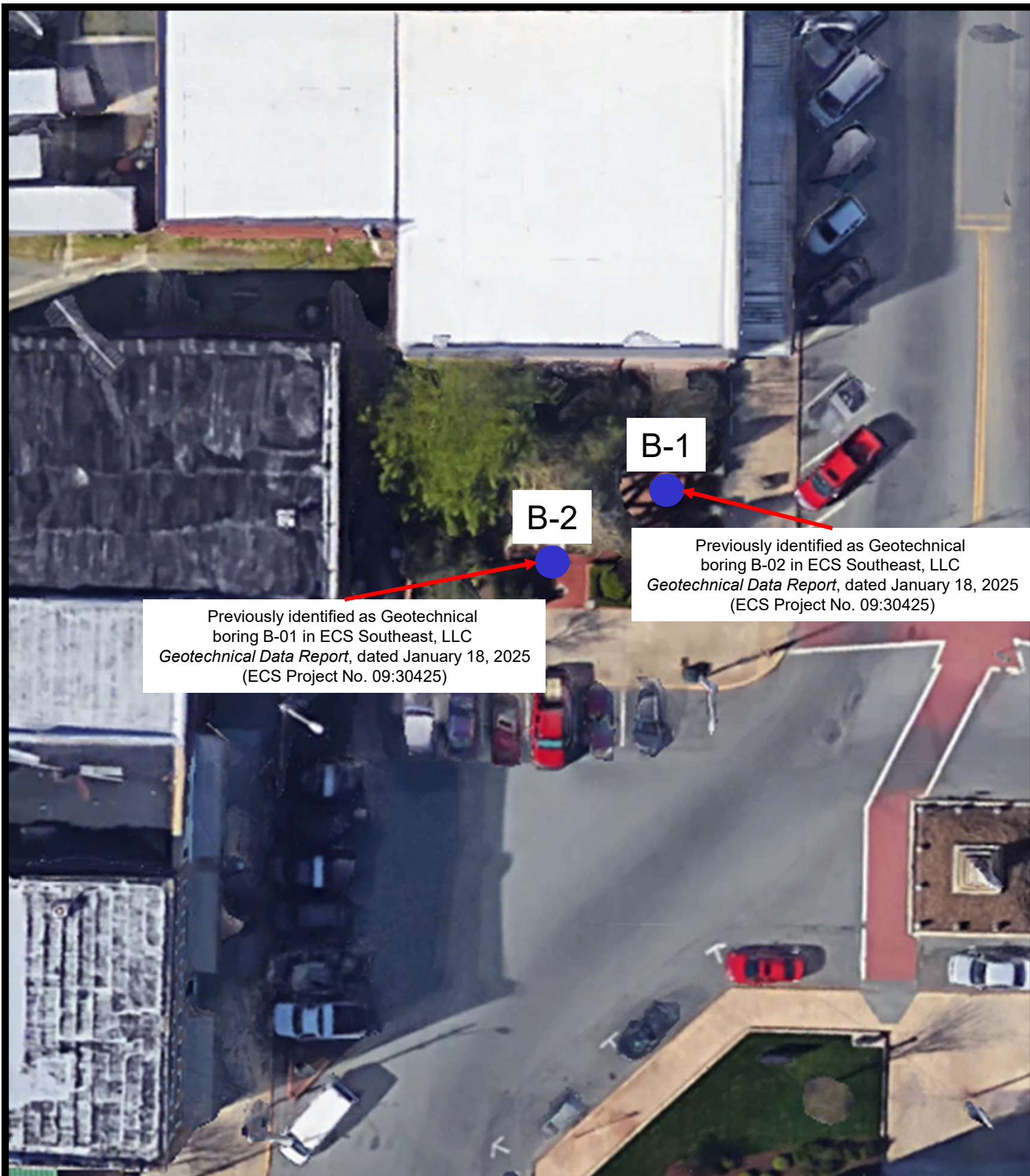


FIGURE 1 SITE TOPOGRAPHIC MAP

CITY OF GRAHAM - SESQUICENTENNIAL PARK
2 NW COURT SQUARE
GRAHAM, NORTH CAROLINA 27253

ECS PROJECT NO. 49:24488



B-1

B-2

Previously identified as Geotechnical boring B-02 in ECS Southeast, LLC *Geotechnical Data Report*, dated January 18, 2025 (ECS Project No. 09:30425)

Previously identified as Geotechnical boring B-01 in ECS Southeast, LLC *Geotechnical Data Report*, dated January 18, 2025 (ECS Project No. 09:30425)



SOURCE:

GOOGLE EARTH AERIAL
2024 IMAGERY

SCALE:

0' ————— 40'



**FIGURE 2
SITE AERIAL AND SAMPLE
LOCATION MAP**

CITY OF GRAHAM – SESQUICENTENNIAL PARK
2 NW COURT SQUARE
GRAHAM, NORTH CAROLINA 27253

ECS PROJECT NO. 49:24488

TABLES

Table
Summary of Soil Analytical Data
City of Graham - Sesquicentennial Park
2 NW Court Square
Graham, Alamance County, North Carolina
ECS Project No. 49:24488

Sample ID	Sample Depth	Sample Date	VOCs by EPA Method 8260	SVOCs by EPA Method 8270	RCRA 8-metals by EPA Method 6010/7471				Hex Cr by EPA Method 7199	Pesticides by EPA Method 8081	Herbicides by EPA Method 8151	PCBs by EPA Method 8082
			Targeted Compounds	Targeted Compounds	Barium	Total Chromium	Trivalent Chromium*	Lead	Hexavalent Chromium	Targeted Compounds	Targeted Compounds	Targeted Compounds
Protection of Groundwater PSRGs			Various	Various	580	NE	360,000	270	3.8	Various	Various	Various
Residential PSRGs			Various	Various	3,100	NE	740,000	200	0.31	Various	Various	Various
Industrial/Commercial PSRGs			Various	Various	47,000	NE	3,100,000	800	6.5	Various	Various	Various
B-1	18.5 - 20 ft bgs	12/11/24	BRL	BRL	154	58.9	57.4	15.9	<1.5	BRL	BRL	BRL
B-2	13.5 - 15 ft bgs	12/11/24	BRL	BRL	158	90.7	87.1	16.4	3.6	BRL	BRL	BRL

Notes:

Results presented in micrograms per kilogram (mg/kg)

Compounds not shown were not detected

NE = No Established Standard

VOCs = Volatile Organic Compounds

SVOCs = Semi-Volatile Organic Compounds

RCRA = Resource Conservation and Recovery Act

Hex Cr = Hexavalent Chromium

PCB = Polychlorinated Biphenyls

NCDEQ = North Carolina Department of Environmental Quality

PSRGs = Preliminary Soil Remediation Goals (PSRGs) (July 2024)

ft bgs = Feet Below Ground Surface

<0.00 = Less than the laboratory reporting limit

* Trivalent chromium was calculated by subtracting hexavalent chromium concentration from total chromium concentration

VALUE	= concentration greater than the Protection of Groundwater PSRGs
VALUE	= concentration greater than the Residential PSRGs

ATTACHMENT I



Photo 1 – Drill Rig Set Up at B-1



Photo 2 – Boring Abandoned after Sampling

Photolog



City of Graham – Sesquicentennial Park
2 NW Court Square
Graham, North Carolina 27253

ECS Project No. 49:24488

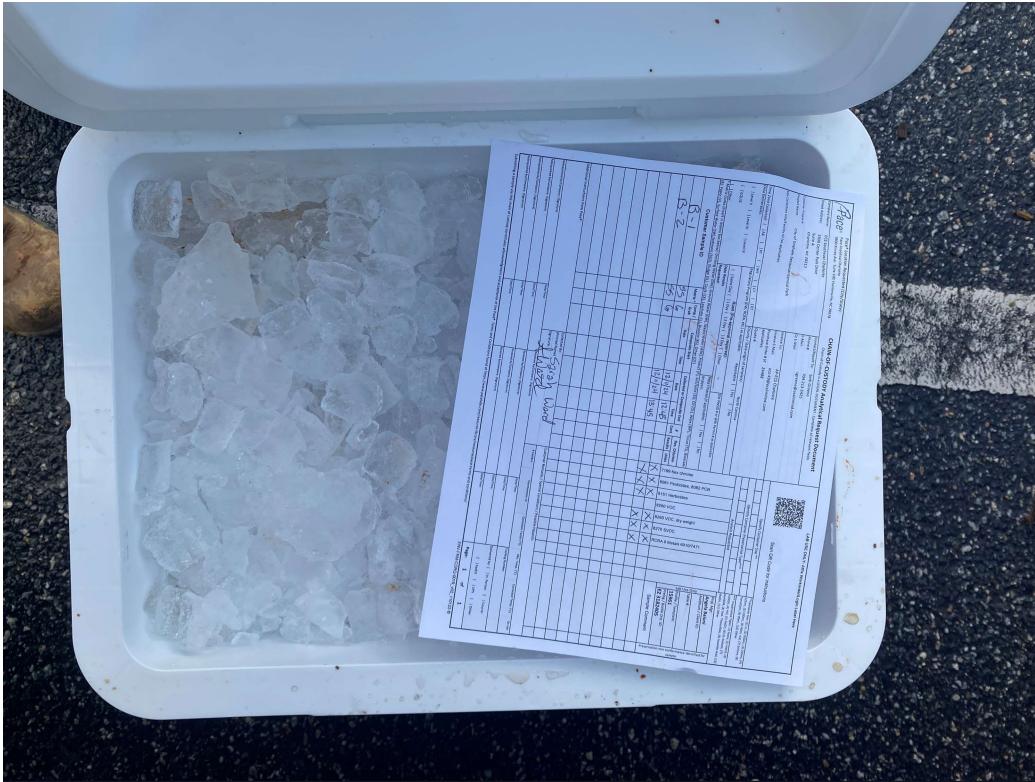


Photo 3 –Samples on Ice Prior to Drop Off

Photolog



City of Graham – Sesquicentennial Park
2 NW Court Square
Graham, North Carolina 27253

ECS Project No. 49:24488

ATTACHMENT II



December 31, 2024

Seth Greene
ECS Southeast, LLC-Charlotte
1900 Center Park Drive
Suite A
Charlotte, NC 28217

RE: Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

Dear Seth Greene:

Enclosed are the analytical results for sample(s) received by the laboratory on December 11, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660

Alaska Certification #: 17-026

Arizona Certification #: AZ0612

Arkansas Certification #: 88-0469

California Certification #: 2932

Canada Certification #: 1461.01

Colorado Certification #: TN00003

Connecticut Certification #: PH-0197

DOD Certification #: #1461.01

EPA# TN00003

Florida Certification #: E87487

Georgia DW Certification #: 923

Georgia Certification: NELAP

Idaho Certification #: TN00003

Illinois Certification #: 200008

Indiana Certification #: C-TN-01

Iowa Certification #: 364

Kansas Certification #: E-10277

Kentucky UST Certification #: 16

Kentucky Certification #: 90010

Louisiana Certification #: AI30792

Louisiana DW Certification #: LA180010

Maine Certification #: TN0002

Maryland Certification #: 324

Massachusetts Certification #: M-TN003

Michigan Certification #: 9958

Minnesota Certification #: 047-999-395

Mississippi Certification #: TN00003

Missouri Certification #: 340

Montana Certification #: CERT0086

Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LA000356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Mold Certification #: LAB0152

Texas Certification #: T 104704245-17-14

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Virginia Certification #: VT2006

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078

North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

South Carolina Laboratory ID: 99006

South Carolina Certification #: 99006001

South Carolina Drinking Water Cert. #: 99006003

Florida/NELAP Certification #: E87627

Kentucky UST Certification #: 84

Louisiana DoH Drinking Water #: LA029

Virginia/VELAP Certification #: 460221

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92768794001	B-1	EPA 8151A	LTB	12	PAN
		EPA 7199	VJM	1	PASI-C
		EPA 8081B	BAJ	24	PASI-C
		EPA 8082A	BAJ	8	PASI-C
		EPA 6010D	AJM, MJS2	7	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 8270E	SEM	75	PASI-C
		EPA 8260D	LMB	70	PASI-C
		SW-846	KDF	1	PASI-C
		SM 2540G	CMB	1	PAN
92768794002	B-2	EPA 8151A	LTB	12	PAN
		EPA 7199	VJM	1	PASI-C
		EPA 8081B	BAJ	24	PASI-C
		EPA 8082A	BAJ	8	PASI-C
		EPA 6010D	AJM, MJS2	7	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 8270E	SEM	75	PASI-C
		EPA 8260D	LMB	70	PASI-C
		SW-846	KDF	1	PASI-C
		SM 2540G	CMB	1	PAN

PAN = Pace National - Mt. Juliet

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-1 Lab ID: 92768794001 Collected: 12/11/24 12:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Pace National - Mt. Juliet								
2,4,5-T	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	93-76-5	
2,4,5-TP (Silvex)	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	93-72-1	
2,4-D	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	94-75-7	
2,4-DB	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	94-82-6	
2-(2-methyl-4-chlorophenoxy)pa	ND	mg/kg	9.57	1	12/20/24 02:20	12/24/24 18:48	93-65-2	
Dalapon	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	127-20-8	
Dicamba	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	1918-00-9	
Dichlorprop	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	120-36-5	
Dinoseb	ND	mg/kg	0.103	1	12/20/24 02:20	12/24/24 18:48	88-85-7	
MCPA	ND	mg/kg	9.57	1	12/20/24 02:20	12/24/24 18:48	94-74-6	
Pentachlorophenol	ND	mg/kg	0.0442	1	12/20/24 02:20	12/24/24 18:48	87-86-5	L0
Surrogates								
2,4-DCAA (S)	67.3	%	22.0-132	1	12/20/24 02:20	12/24/24 18:48	19719-28-9	
7199 Chromium, Hexavalent								
Analytical Method: EPA 7199 Preparation Method: EPA 7199								
Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	mg/kg	1.5	1	12/13/24 10:18	12/13/24 16:44	18540-29-9	
8081 GCS Pesticides								
Analytical Method: EPA 8081B Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
alpha-BHC	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	319-84-6	
gamma-BHC (Lindane)	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	58-89-9	
beta-BHC	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	319-85-7	
Heptachlor	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	76-44-8	
delta-BHC	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	319-86-8	
Aldrin	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	309-00-2	
Heptachlor epoxide	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	1024-57-3	
Endosulfan I	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	959-98-8	
4,4'-DDE	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	72-55-9	
Dieldrin	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	60-57-1	
Endrin	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	72-20-8	
4,4'-DDD	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	72-54-8	
Endosulfan II	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	33213-65-9	
4,4'-DDT	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	50-29-3	
Endrin aldehyde	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	7421-93-4	
Endosulfan sulfate	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	1031-07-8	
Methoxychlor	ND	mg/kg	0.0078	1	12/13/24 13:44	12/16/24 23:32	72-43-5	
Endrin ketone	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	53494-70-5	
Chlordane (Technical)	ND	mg/kg	0.016	1	12/13/24 13:44	12/16/24 23:32	57-74-9	
Toxaphene	ND	mg/kg	0.011	1	12/13/24 13:44	12/16/24 23:32	8001-35-2	
Mirex	ND	mg/kg	0.0078	1	12/13/24 13:44	12/16/24 23:32	2385-85-5	
Hexachlorobenzene	ND	mg/kg	0.0031	1	12/13/24 13:44	12/16/24 23:32	118-74-1	
Surrogates								
Tetrachloro-m-xylene (S)	79	%	10-133	1	12/13/24 13:44	12/16/24 23:32	877-09-8	
Decachlorobiphenyl (S)	87	%	10-179	1	12/13/24 13:44	12/16/24 23:32	2051-24-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

Sample: B-1 Lab ID: 92768794001 Collected: 12/11/24 12:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB								
Analytical Method: EPA 8082A Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
PCB-1016 (Aroclor 1016)	ND	mg/kg	0.052	1	12/13/24 13:44	12/16/24 20:10	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	mg/kg	0.052	1	12/13/24 13:44	12/16/24 20:10	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	mg/kg	0.052	1	12/13/24 13:44	12/16/24 20:10	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	mg/kg	0.052	1	12/13/24 13:44	12/16/24 20:10	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	mg/kg	0.052	1	12/13/24 13:44	12/16/24 20:10	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	mg/kg	0.052	1	12/13/24 13:44	12/16/24 20:10	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	mg/kg	0.052	1	12/13/24 13:44	12/16/24 20:10	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	78	%	10-166	1	12/13/24 13:44	12/16/24 20:10	2051-24-3	
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/kg	4.3	1	12/13/24 15:51	12/14/24 02:34	7440-38-2	
Barium	154	mg/kg	1.4	1	12/13/24 15:51	12/14/24 02:34	7440-39-3	
Cadmium	ND	mg/kg	7.1	5	12/13/24 15:51	12/15/24 14:31	7440-43-9	D3
Chromium	58.9	mg/kg	1.4	1	12/13/24 15:51	12/14/24 02:34	7440-47-3	
Lead	15.9	mg/kg	3.6	1	12/13/24 15:51	12/14/24 02:34	7439-92-1	
Selenium	ND	mg/kg	7.1	1	12/13/24 15:51	12/14/24 02:34	7782-49-2	
Silver	ND	mg/kg	1.4	1	12/13/24 15:51	12/14/24 02:34	7440-22-4	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.050	1	12/20/24 08:30	12/20/24 11:58	7439-97-6	
8270E MSSV Microwave								
Analytical Method: EPA 8270E Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
Acenaphthene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	83-32-9	
Acenaphthylene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	208-96-8	
Aniline	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	62-53-3	
Anthracene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	207-08-9	
Benzoic Acid	ND	mg/kg	2.6	1	12/13/24 10:59	12/16/24 14:07	65-85-0	
Benzyl alcohol	ND	mg/kg	1.0	1	12/13/24 10:59	12/16/24 14:07	100-51-6	
4-Bromophenylphenyl ether	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	101-55-3	
Butylbenzylphthalate	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	1.0	1	12/13/24 10:59	12/16/24 14:07	59-50-7	
4-Chloroaniline	ND	mg/kg	1.0	1	12/13/24 10:59	12/16/24 14:07	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	111-44-4	
2-Chloronaphthalene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	91-58-7	
2-Chlorophenol	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	95-57-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-1 Lab ID: 92768794001 Collected: 12/11/24 12:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Microwave		Analytical Method: EPA 8270E Preparation Method: EPA 3546 Pace Analytical Services - Charlotte						
4-Chlorophenylphenyl ether	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	7005-72-3	
Chrysene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	53-70-3	
Dibenzofuran	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	132-64-9	
1,2-Dichlorobenzene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	106-46-7	
3,3'-Dichlorobenzidine	ND	mg/kg	1.0	1	12/13/24 10:59	12/16/24 14:07	91-94-1	
2,4-Dichlorophenol	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	120-83-2	
Diethylphthalate	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	105-67-9	
Dimethylphthalate	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	131-11-3	
Di-n-butylphthalate	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	84-74-2	
4,6-Dinitro-2-methylphenol	ND	mg/kg	1.0	1	12/13/24 10:59	12/16/24 14:07	534-52-1	v1
2,4-Dinitrophenol	ND	mg/kg	2.6	1	12/13/24 10:59	12/16/24 14:07	51-28-5	v1
2,4-Dinitrotoluene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	117-81-7	
Fluoranthene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	206-44-0	
Fluorene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	86-73-7	
Hexachloro-1,3-butadiene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	87-68-3	
Hexachlorobenzene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	118-74-1	
Hexachlorocyclopentadiene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	77-47-4	
Hexachloroethane	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	193-39-5	v1
Isophorone	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	78-59-1	
1-Methylnaphthalene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	15831-10-4	
Naphthalene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	91-20-3	
2-Nitroaniline	ND	mg/kg	2.6	1	12/13/24 10:59	12/16/24 14:07	88-74-4	
3-Nitroaniline	ND	mg/kg	2.6	1	12/13/24 10:59	12/16/24 14:07	99-09-2	
4-Nitroaniline	ND	mg/kg	1.0	1	12/13/24 10:59	12/16/24 14:07	100-01-6	
Nitrobenzene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	98-95-3	
2-Nitrophenol	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	88-75-5	
4-Nitrophenol	ND	mg/kg	2.6	1	12/13/24 10:59	12/16/24 14:07	100-02-7	
N-Nitrosodimethylamine	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	62-75-9	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	108-60-1	
Pentachlorophenol	ND	mg/kg	1.0	1	12/13/24 10:59	12/16/24 14:07	87-86-5	
Phenanthrene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	85-01-8	
Phenol	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	108-95-2	

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-1 Lab ID: 92768794001 Collected: 12/11/24 12:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Microwave								
Analytical Method: EPA 8270E Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
Pyrene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	129-00-0	
Pyridine	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	110-86-1	
1,2,4-Trichlorobenzene	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	120-82-1	
2,4,5-Trichlorophenol	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.51	1	12/13/24 10:59	12/16/24 14:07	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	68	%	10-130	1	12/13/24 10:59	12/16/24 14:07	4165-60-0	
2-Fluorobiphenyl (S)	55	%	10-130	1	12/13/24 10:59	12/16/24 14:07	321-60-8	
Terphenyl-d14 (S)	54	%	10-130	1	12/13/24 10:59	12/16/24 14:07	1718-51-0	
Phenol-d6 (S)	63	%	10-130	1	12/13/24 10:59	12/16/24 14:07	13127-88-3	
2-Fluorophenol (S)	62	%	10-130	1	12/13/24 10:59	12/16/24 14:07	367-12-4	
2,4,6-Tribromophenol (S)	94	%	10-130	1	12/13/24 10:59	12/16/24 14:07	118-79-6	
8260D/5035A/5030B Volatiles								
Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B								
Pace Analytical Services - Charlotte								
Acetone	ND	mg/kg	0.22	1	12/16/24 18:43	12/17/24 18:34	67-64-1	v2
Benzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	71-43-2	
Bromobenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	108-86-1	
Bromochloromethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	74-97-5	
Bromodichloromethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	75-27-4	
Bromoform	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	75-25-2	
Bromomethane	ND	mg/kg	0.044	1	12/16/24 18:43	12/17/24 18:34	74-83-9	v2
2-Butanone (MEK)	ND	mg/kg	0.22	1	12/16/24 18:43	12/17/24 18:34	78-93-3	
n-Butylbenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	104-51-8	
sec-Butylbenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	135-98-8	
tert-Butylbenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	98-06-6	
Carbon tetrachloride	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	56-23-5	
Chlorobenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	108-90-7	
Chloroethane	ND	mg/kg	0.022	1	12/16/24 18:43	12/17/24 18:34	75-00-3	v2
Chloroform	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	67-66-3	
Chloromethane	ND	mg/kg	0.022	1	12/16/24 18:43	12/17/24 18:34	74-87-3	
2-Chlorotoluene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	95-49-8	
4-Chlorotoluene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	96-12-8	
Dibromochloromethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	106-93-4	
Dibromomethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	74-95-3	
1,2-Dichlorobenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	106-46-7	
Dichlorodifluoromethane	ND	mg/kg	0.022	1	12/16/24 18:43	12/17/24 18:34	75-71-8	
1,1-Dichloroethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	75-34-3	
1,2-Dichloroethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	107-06-2	
1,1-Dichloroethene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	75-35-4	
cis-1,2-Dichloroethene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	156-59-2	

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-1 Lab ID: 92768794001 Collected: 12/11/24 12:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
trans-1,2-Dichloroethene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	156-60-5	
1,2-Dichloropropane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	78-87-5	
1,3-Dichloropropane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	142-28-9	
2,2-Dichloropropane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	594-20-7	
1,1-Dichloropropene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	563-58-6	
cis-1,3-Dichloropropene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	10061-02-6	
Diisopropyl ether	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	108-20-3	
Ethylbenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/kg	0.022	1	12/16/24 18:43	12/17/24 18:34	87-68-3	
2-Hexanone	ND	mg/kg	0.11	1	12/16/24 18:43	12/17/24 18:34	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	98-82-8	
p-Isopropyltoluene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	99-87-6	
Methylene Chloride	ND	mg/kg	0.044	1	12/16/24 18:43	12/17/24 18:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.11	1	12/16/24 18:43	12/17/24 18:34	108-10-1	
Methyl-tert-butyl ether	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	1634-04-4	
Naphthalene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	91-20-3	
n-Propylbenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	103-65-1	
Styrene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	79-34-5	
Tetrachloroethene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	127-18-4	
Toluene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	108-88-3	
1,2,3-Trichlorobenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	87-61-6	
1,2,4-Trichlorobenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	120-82-1	
1,1,1-Trichloroethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	71-55-6	
1,1,2-Trichloroethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	79-00-5	
Trichloroethene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	79-01-6	
Trichlorofluoromethane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	75-69-4	
1,2,3-Trichloropropane	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	96-18-4	
1,2,4-Trimethylbenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	108-67-8	
Vinyl acetate	ND	mg/kg	0.11	1	12/16/24 18:43	12/17/24 18:34	108-05-4	
Vinyl chloride	ND	mg/kg	0.022	1	12/16/24 18:43	12/17/24 18:34	75-01-4	
Xylene (Total)	ND	mg/kg	0.022	1	12/16/24 18:43	12/17/24 18:34	1330-20-7	
m&p-Xylene	ND	mg/kg	0.022	1	12/16/24 18:43	12/17/24 18:34	179601-23-1	
o-Xylene	ND	mg/kg	0.011	1	12/16/24 18:43	12/17/24 18:34	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%	70-130	1	12/16/24 18:43	12/17/24 18:34	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1	12/16/24 18:43	12/17/24 18:34	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-135	1	12/16/24 18:43	12/17/24 18:34	17060-07-0	

Percent Moisture

Analytical Method: SW-846

Pace Analytical Services - Charlotte

Percent Moisture	35.2	%	0.10	1	12/17/24 13:35	N2
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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

Sample: B-1		Lab ID: 92768794001		Collected: 12/11/24 12:45		Received: 12/11/24 15:25		Matrix: Solid	
Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.									
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Total Solids 2540 G-2011		Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet							
Total Solids		67.9	%		1	12/14/24 12:05	12/14/24 12:23		

REPORT OF LABORATORY ANALYSIS



ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-2 Lab ID: 92768794002 Collected: 12/11/24 13:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Pace National - Mt. Juliet								
2,4,5-T	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	93-76-5	
2,4,5-TP (Silvex)	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	93-72-1	
2,4-D	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	94-75-7	
2,4-DB	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	94-82-6	
2-(2-methyl-4-chlorophenoxy)pa	ND	mg/kg	9.79	1	12/20/24 02:20	12/24/24 19:29	93-65-2	
Dalapon	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	127-20-8	
Dicamba	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	1918-00-9	
Dichlorprop	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	120-36-5	
Dinoseb	ND	mg/kg	0.105	1	12/20/24 02:20	12/24/24 19:29	88-85-7	
MCPA	ND	mg/kg	9.79	1	12/20/24 02:20	12/24/24 19:29	94-74-6	
Pentachlorophenol	ND	mg/kg	0.0452	1	12/20/24 02:20	12/24/24 19:29	87-86-5	L0
Surrogates								
2,4-DCAA (S)	65.7	%	22.0-132	1	12/20/24 02:20	12/24/24 19:29	19719-28-9	
7199 Chromium, Hexavalent								
Analytical Method: EPA 7199 Preparation Method: EPA 7199								
Pace Analytical Services - Charlotte								
Chromium, Hexavalent	3.6	mg/kg	1.4	1	12/13/24 10:18	12/13/24 17:38	18540-29-9	
8081 GCS Pesticides								
Analytical Method: EPA 8081B Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
alpha-BHC	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	319-84-6	
gamma-BHC (Lindane)	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	58-89-9	
beta-BHC	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	319-85-7	
Heptachlor	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	76-44-8	
delta-BHC	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	319-86-8	
Aldrin	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	309-00-2	
Heptachlor epoxide	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	1024-57-3	
Endosulfan I	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	959-98-8	
4,4'-DDE	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	72-55-9	
Dieldrin	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	60-57-1	
Endrin	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	72-20-8	
4,4'-DDD	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	72-54-8	
Endosulfan II	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	33213-65-9	
4,4'-DDT	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	50-29-3	
Endrin aldehyde	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	7421-93-4	
Endosulfan sulfate	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	1031-07-8	
Methoxychlor	ND	mg/kg	0.0075	1	12/13/24 13:44	12/16/24 23:43	72-43-5	
Endrin ketone	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	53494-70-5	
Chlordane (Technical)	ND	mg/kg	0.015	1	12/13/24 13:44	12/16/24 23:43	57-74-9	
Toxaphene	ND	mg/kg	0.010	1	12/13/24 13:44	12/16/24 23:43	8001-35-2	
Mirex	ND	mg/kg	0.0075	1	12/13/24 13:44	12/16/24 23:43	2385-85-5	
Hexachlorobenzene	ND	mg/kg	0.0030	1	12/13/24 13:44	12/16/24 23:43	118-74-1	
Surrogates								
Tetrachloro-m-xylene (S)	77	%	10-133	1	12/13/24 13:44	12/16/24 23:43	877-09-8	
Decachlorobiphenyl (S)	94	%	10-179	1	12/13/24 13:44	12/16/24 23:43	2051-24-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-2 Lab ID: 92768794002 Collected: 12/11/24 13:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB								
Analytical Method: EPA 8082A Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
PCB-1016 (Aroclor 1016)	ND	mg/kg	0.049	1	12/13/24 13:44	12/16/24 20:23	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	mg/kg	0.049	1	12/13/24 13:44	12/16/24 20:23	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	mg/kg	0.049	1	12/13/24 13:44	12/16/24 20:23	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	mg/kg	0.049	1	12/13/24 13:44	12/16/24 20:23	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	mg/kg	0.049	1	12/13/24 13:44	12/16/24 20:23	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	mg/kg	0.049	1	12/13/24 13:44	12/16/24 20:23	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	mg/kg	0.049	1	12/13/24 13:44	12/16/24 20:23	11096-82-5	
Surrogates								
Decachlorobiphenyl (S)	84	%	10-166	1	12/13/24 13:44	12/16/24 20:23	2051-24-3	
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/kg	4.3	1	12/13/24 15:51	12/14/24 02:39	7440-38-2	
Barium	158	mg/kg	1.4	1	12/13/24 15:51	12/14/24 02:39	7440-39-3	
Cadmium	ND	mg/kg	7.2	5	12/13/24 15:51	12/15/24 16:00	7440-43-9	D3
Chromium	90.7	mg/kg	1.4	1	12/13/24 15:51	12/14/24 02:39	7440-47-3	
Lead	16.4	mg/kg	3.6	1	12/13/24 15:51	12/14/24 02:39	7439-92-1	
Selenium	ND	mg/kg	7.2	1	12/13/24 15:51	12/14/24 02:39	7782-49-2	
Silver	ND	mg/kg	1.4	1	12/13/24 15:51	12/14/24 02:39	7440-22-4	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.046	1	12/20/24 08:30	12/20/24 12:28	7439-97-6	
8270E MSSV Microwave								
Analytical Method: EPA 8270E Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
Acenaphthene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	83-32-9	
Acenaphthylene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	208-96-8	
Aniline	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	62-53-3	
Anthracene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	120-12-7	
Benzo(a)anthracene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	56-55-3	
Benzo(a)pyrene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	50-32-8	
Benzo(b)fluoranthene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	205-99-2	
Benzo(g,h,i)perylene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	191-24-2	
Benzo(k)fluoranthene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	207-08-9	
Benzoic Acid	ND	mg/kg	2.4	1	12/13/24 10:59	12/16/24 14:34	65-85-0	
Benzyl alcohol	ND	mg/kg	0.98	1	12/13/24 10:59	12/16/24 14:34	100-51-6	
4-Bromophenylphenyl ether	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	101-55-3	
Butylbenzylphthalate	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	85-68-7	
4-Chloro-3-methylphenol	ND	mg/kg	0.98	1	12/13/24 10:59	12/16/24 14:34	59-50-7	
4-Chloroaniline	ND	mg/kg	0.98	1	12/13/24 10:59	12/16/24 14:34	106-47-8	
bis(2-Chloroethoxy)methane	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	111-91-1	
bis(2-Chloroethyl) ether	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	111-44-4	
2-Chloronaphthalene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	91-58-7	
2-Chlorophenol	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	95-57-8	

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-2 Lab ID: 92768794002 Collected: 12/11/24 13:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Microwave								
Analytical Method: EPA 8270E Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
4-Chlorophenylphenyl ether	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	7005-72-3	
Chrysene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	53-70-3	
Dibenzofuran	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	132-64-9	
1,2-Dichlorobenzene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	106-46-7	
3,3'-Dichlorobenzidine	ND	mg/kg	0.98	1	12/13/24 10:59	12/16/24 14:34	91-94-1	
2,4-Dichlorophenol	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	120-83-2	
Diethylphthalate	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	84-66-2	
2,4-Dimethylphenol	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	105-67-9	
Dimethylphthalate	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	131-11-3	
Di-n-butylphthalate	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	84-74-2	
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.98	1	12/13/24 10:59	12/16/24 14:34	534-52-1	v1
2,4-Dinitrophenol	ND	mg/kg	2.4	1	12/13/24 10:59	12/16/24 14:34	51-28-5	v1
2,4-Dinitrotoluene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	121-14-2	
2,6-Dinitrotoluene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	606-20-2	
Di-n-octylphthalate	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	117-81-7	
Fluoranthene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	206-44-0	
Fluorene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	86-73-7	
Hexachloro-1,3-butadiene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	87-68-3	
Hexachlorobenzene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	118-74-1	
Hexachlorocyclopentadiene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	77-47-4	
Hexachloroethane	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	193-39-5	v1
Isophorone	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	78-59-1	
1-Methylnaphthalene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	91-57-6	
2-Methylphenol(o-Cresol)	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	15831-10-4	
Naphthalene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	91-20-3	
2-Nitroaniline	ND	mg/kg	2.4	1	12/13/24 10:59	12/16/24 14:34	88-74-4	
3-Nitroaniline	ND	mg/kg	2.4	1	12/13/24 10:59	12/16/24 14:34	99-09-2	
4-Nitroaniline	ND	mg/kg	0.98	1	12/13/24 10:59	12/16/24 14:34	100-01-6	
Nitrobenzene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	98-95-3	
2-Nitrophenol	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	88-75-5	
4-Nitrophenol	ND	mg/kg	2.4	1	12/13/24 10:59	12/16/24 14:34	100-02-7	
N-Nitrosodimethylamine	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	62-75-9	
N-Nitroso-di-n-propylamine	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	621-64-7	
N-Nitrosodiphenylamine	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	108-60-1	
Pentachlorophenol	ND	mg/kg	0.98	1	12/13/24 10:59	12/16/24 14:34	87-86-5	
Phenanthrene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	85-01-8	
Phenol	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	108-95-2	

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-2 Lab ID: 92768794002 Collected: 12/11/24 13:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV Microwave								
Analytical Method: EPA 8270E Preparation Method: EPA 3546								
Pace Analytical Services - Charlotte								
Pyrene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	129-00-0	
Pyridine	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	110-86-1	
1,2,4-Trichlorobenzene	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	120-82-1	
2,4,5-Trichlorophenol	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	95-95-4	
2,4,6-Trichlorophenol	ND	mg/kg	0.49	1	12/13/24 10:59	12/16/24 14:34	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	69	%	10-130	1	12/13/24 10:59	12/16/24 14:34	4165-60-0	
2-Fluorobiphenyl (S)	64	%	10-130	1	12/13/24 10:59	12/16/24 14:34	321-60-8	
Terphenyl-d14 (S)	73	%	10-130	1	12/13/24 10:59	12/16/24 14:34	1718-51-0	
Phenol-d6 (S)	65	%	10-130	1	12/13/24 10:59	12/16/24 14:34	13127-88-3	
2-Fluorophenol (S)	63	%	10-130	1	12/13/24 10:59	12/16/24 14:34	367-12-4	
2,4,6-Tribromophenol (S)	87	%	10-130	1	12/13/24 10:59	12/16/24 14:34	118-79-6	
8260D/5035A/5030B Volatiles								
Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B								
Pace Analytical Services - Charlotte								
Acetone	ND	mg/kg	0.20	1	12/16/24 18:43	12/17/24 18:51	67-64-1	v2
Benzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	71-43-2	
Bromobenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	108-86-1	
Bromochloromethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	74-97-5	
Bromodichloromethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	75-27-4	
Bromoform	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	75-25-2	
Bromomethane	ND	mg/kg	0.039	1	12/16/24 18:43	12/17/24 18:51	74-83-9	v2
2-Butanone (MEK)	ND	mg/kg	0.20	1	12/16/24 18:43	12/17/24 18:51	78-93-3	
n-Butylbenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	104-51-8	
sec-Butylbenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	135-98-8	
tert-Butylbenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	98-06-6	
Carbon tetrachloride	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	56-23-5	
Chlorobenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	108-90-7	
Chloroethane	ND	mg/kg	0.020	1	12/16/24 18:43	12/17/24 18:51	75-00-3	v2
Chloroform	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	67-66-3	
Chloromethane	ND	mg/kg	0.020	1	12/16/24 18:43	12/17/24 18:51	74-87-3	
2-Chlorotoluene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	95-49-8	
4-Chlorotoluene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	96-12-8	
Dibromochloromethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	106-93-4	
Dibromomethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	74-95-3	
1,2-Dichlorobenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	95-50-1	
1,3-Dichlorobenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	541-73-1	
1,4-Dichlorobenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	106-46-7	
Dichlorodifluoromethane	ND	mg/kg	0.020	1	12/16/24 18:43	12/17/24 18:51	75-71-8	
1,1-Dichloroethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	75-34-3	
1,2-Dichloroethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	107-06-2	
1,1-Dichloroethene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	75-35-4	
cis-1,2-Dichloroethene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	156-59-2	

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Sample: B-2 Lab ID: 92768794002 Collected: 12/11/24 13:45 Received: 12/11/24 15:25 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
trans-1,2-Dichloroethene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	156-60-5	
1,2-Dichloropropane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	78-87-5	
1,3-Dichloropropane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	142-28-9	
2,2-Dichloropropane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	594-20-7	
1,1-Dichloropropene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	563-58-6	
cis-1,3-Dichloropropene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	10061-02-6	
Diisopropyl ether	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	108-20-3	
Ethylbenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	100-41-4	
Hexachloro-1,3-butadiene	ND	mg/kg	0.020	1	12/16/24 18:43	12/17/24 18:51	87-68-3	
2-Hexanone	ND	mg/kg	0.098	1	12/16/24 18:43	12/17/24 18:51	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	98-82-8	
p-Isopropyltoluene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	99-87-6	
Methylene Chloride	ND	mg/kg	0.039	1	12/16/24 18:43	12/17/24 18:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/kg	0.098	1	12/16/24 18:43	12/17/24 18:51	108-10-1	
Methyl-tert-butyl ether	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	1634-04-4	
Naphthalene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	91-20-3	
n-Propylbenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	103-65-1	
Styrene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	79-34-5	
Tetrachloroethene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	127-18-4	
Toluene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	108-88-3	
1,2,3-Trichlorobenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	87-61-6	
1,2,4-Trichlorobenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	120-82-1	
1,1,1-Trichloroethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	71-55-6	
1,1,2-Trichloroethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	79-00-5	
Trichloroethene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	79-01-6	
Trichlorofluoromethane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	75-69-4	
1,2,3-Trichloropropane	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	96-18-4	
1,2,4-Trimethylbenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	95-63-6	
1,3,5-Trimethylbenzene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	108-67-8	
Vinyl acetate	ND	mg/kg	0.098	1	12/16/24 18:43	12/17/24 18:51	108-05-4	
Vinyl chloride	ND	mg/kg	0.020	1	12/16/24 18:43	12/17/24 18:51	75-01-4	
Xylene (Total)	ND	mg/kg	0.020	1	12/16/24 18:43	12/17/24 18:51	1330-20-7	
m&p-Xylene	ND	mg/kg	0.020	1	12/16/24 18:43	12/17/24 18:51	179601-23-1	
o-Xylene	ND	mg/kg	0.0098	1	12/16/24 18:43	12/17/24 18:51	95-47-6	
Surrogates								
Toluene-d8 (S)	101	%	70-130	1	12/16/24 18:43	12/17/24 18:51	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1	12/16/24 18:43	12/17/24 18:51	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-135	1	12/16/24 18:43	12/17/24 18:51	17060-07-0	

Percent Moisture

Analytical Method: SW-846

Pace Analytical Services - Charlotte

Percent Moisture	32.8	%	0.10	1	12/17/24 13:35	N2
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

Sample: B-2		Lab ID: 92768794002		Collected: 12/11/24 13:45		Received: 12/11/24 15:25		Matrix: Solid	
Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.									
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Total Solids 2540 G-2011		Analytical Method: SM 2540G Preparation Method: SM 2540 G Pace National - Mt. Juliet							
Total Solids		66.4	%		1	12/14/24 11:49	12/14/24 12:02		

REPORT OF LABORATORY ANALYSIS



QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch: 2419346 Analysis Method: EPA 8151A
QC Batch Method: 8151A Analysis Description: Chlorinated Herb. (GC) 8151A
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: R4162051-1 Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-T	mg/kg	ND	0.0700	12/24/24 13:35	
2,4,5-TP (Silvex)	mg/kg	ND	0.0700	12/24/24 13:35	
2,4-D	mg/kg	ND	0.0700	12/24/24 13:35	
2,4-DB	mg/kg	ND	0.0700	12/24/24 13:35	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	6.50	12/24/24 13:35	
Dalapon	mg/kg	ND	0.0700	12/24/24 13:35	
Dicamba	mg/kg	ND	0.0700	12/24/24 13:35	
Dichlorprop	mg/kg	ND	0.0700	12/24/24 13:35	
Dinoseb	mg/kg	ND	0.0700	12/24/24 13:35	
MCPA	mg/kg	ND	6.50	12/24/24 13:35	
Pentachlorophenol	mg/kg	ND	0.0300	12/24/24 13:35	
2,4-DCAA (S)	%	61.1	22.0-132	12/24/24 13:35	

LABORATORY CONTROL SAMPLE: R4162051-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-T	mg/kg	0.0833	0.0538	64.6	41.0-120	
2,4,5-TP (Silvex)	mg/kg	0.0833	0.0533	64.0	42.0-120	
2,4-D	mg/kg	0.0833	0.0560	67.2	40.0-120	
2,4-DB	mg/kg	0.0833	0.0516	61.9	25.0-143	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	8.33	5.17	62.1	28.0-133	
Dalapon	mg/kg	0.0833	0.0157	18.8	15.0-120	
Dicamba	mg/kg	0.0833	0.0529	63.5	43.0-120	
Dichlorprop	mg/kg	0.0833	0.0590	70.8	32.0-129	
Dinoseb	mg/kg	0.0833	0.00852	10.2	10.0-120	
MCPA	mg/kg	8.33	4.72	56.7	31.0-121	
Pentachlorophenol	mg/kg	0.0167	0.00476	28.5	50.0-150 L0	
2,4-DCAA (S)	%			57.4	22.0-132	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4162051-3 R4162051-4

Parameter	Units	L1808220-01		MS		MSD		MS		MSD		% Rec		RPD	Qual
		Result	Conc.	Spike Conc.	Result	Result	Conc.	% Rec	Result	% Rec	Conc.	Limit	Limit		
2,4,5-T	mg/kg	ND	0.0973	0.0979	0.0651	0.0563		66.9		57.5	10.0-157	14.4			
2,4,5-TP (Silvex)	mg/kg	ND	0.0973	0.0979	0.0684	0.0552		70.4		56.4	10.0-156	21.4	R1		
2,4-D	mg/kg	ND	0.0973	0.0979	0.0670	0.0640		68.9		65.4	10.0-160	4.58			
2,4-DB	mg/kg	ND	0.0973	0.0979	0.0884	0.0441		90.9		45.0	10.0-160	66.9	P9, R1		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:											
Parameter	Units	R4162051-3			R4162051-4			% Rec	% Rec	% Rec	Qual
		L1808220-01	MS	MSD	MS	MSD	MS				
		Result	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD	
2-(2-methyl-4-chlorophenoxy)pa	mg/kg	ND	9.73	9.79	15.0	5.66	154	57.8	10.0-160	90.5	P9,R1
Dalapon	mg/kg	ND	0.0973	0.0979	U	U	4.09	12.4	10.0-121	101	ML,R1
Dicamba	mg/kg	ND	0.0973	0.0979	0.0647	0.0597	66.5	61.0	10.0-154	8.11	
Dichlorprop	mg/kg	ND	0.0973	0.0979	0.0743	0.0748	76.4	76.4	10.0-158	0.644	
Dinoseb	mg/kg	ND	0.0973	0.0979	0.0521	0.0322	53.6	32.9	10.0-120	47.3	R1
MCPA	mg/kg	ND	9.73	9.79	5.72	5.25	58.8	53.6	10.0-160	8.54	
Pentachlorophenol	mg/kg	ND	0.0195	0.0196	0.00911	0.00838	46.9	42.8	50.0-150	8.37	ML
2,4-DCAA (S)	%						67.9	56.1	22.0-132		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch: 902564 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: 4645296 Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	2.9	12/14/24 01:36	
Barium	mg/kg	ND	0.98	12/14/24 01:36	
Cadmium	mg/kg	ND	0.98	12/14/24 01:36	
Chromium	mg/kg	ND	0.98	12/14/24 01:36	
Lead	mg/kg	ND	2.5	12/14/24 01:36	
Selenium	mg/kg	ND	4.9	12/14/24 01:36	
Silver	mg/kg	ND	0.98	12/14/24 01:36	

LABORATORY CONTROL SAMPLE: 4645297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	94.3	89.2	95	80-120	
Barium	mg/kg	94.3	88.6	94	80-120	
Cadmium	mg/kg	94.3	87.4	93	80-120	
Chromium	mg/kg	94.3	92.7	98	80-120	
Lead	mg/kg	94.3	84.9	90	80-120	
Selenium	mg/kg	94.3	89.8	95	80-120	
Silver	mg/kg	94.3	85.6	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4645298 4645299

Parameter	92768492013		MS		MSD		MS		MSD		% Rec	
	Units	Result	Spike Conc.	MS Spike Conc.	MS Result	MSD Result	% Rec	MS % Rec	MSD % Rec	Limits	RPD	Qual
Arsenic	mg/kg	ND	104	104	96.7	97.4	92	92	92	75-125	1	
Barium	mg/kg	5.6	104	104	103	102	93	93	93	75-125	0	
Cadmium	mg/kg	ND	104	104	96.0	95.9	92	92	92	75-125	0	
Chromium	mg/kg	3.8	104	104	105	105	98	98	98	75-125	0	
Lead	mg/kg	11.0	104	104	108	108	93	93	93	75-125	0	
Selenium	mg/kg	ND	104	104	95.6	97.0	92	93	93	75-125	1	
Silver	mg/kg	ND	104	104	94.1	93.9	90	90	90	75-125	0	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch: 904043 Analysis Method: EPA 7471B
QC Batch Method: EPA 7471B Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: 4653091 Matrix: Solid
Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.032	12/20/24 10:55	

LABORATORY CONTROL SAMPLE: 4653092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.33	0.33	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4653093 4653094

Parameter	Units	92768794001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Mercury	mg/kg	ND	0.51	0.51	0.50	0.52	98	102	75-125	4	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch: 903088 Analysis Method: EPA 8260D
QC Batch Method: EPA 5035A/5030B Analysis Description: 8260D 5035A 5030B
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: 4648049 Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.0050	12/17/24 16:30	
1,1,1-Trichloroethane	mg/kg	ND	0.0050	12/17/24 16:30	
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.0050	12/17/24 16:30	
1,1,2-Trichloroethane	mg/kg	ND	0.0050	12/17/24 16:30	
1,1-Dichloroethane	mg/kg	ND	0.0050	12/17/24 16:30	
1,1-Dichloroethene	mg/kg	ND	0.0050	12/17/24 16:30	
1,1-Dichloropropene	mg/kg	ND	0.0050	12/17/24 16:30	
1,2,3-Trichlorobenzene	mg/kg	ND	0.0050	12/17/24 16:30	
1,2,3-Trichloropropane	mg/kg	ND	0.0050	12/17/24 16:30	
1,2,4-Trichlorobenzene	mg/kg	ND	0.0050	12/17/24 16:30	
1,2,4-Trimethylbenzene	mg/kg	ND	0.0050	12/17/24 16:30	
1,2-Dibromo-3-chloropropane	mg/kg	ND	0.0050	12/17/24 16:30	
1,2-Dibromoethane (EDB)	mg/kg	ND	0.0050	12/17/24 16:30	
1,2-Dichlorobenzene	mg/kg	ND	0.0050	12/17/24 16:30	
1,2-Dichloroethane	mg/kg	ND	0.0050	12/17/24 16:30	
1,2-Dichloropropane	mg/kg	ND	0.0050	12/17/24 16:30	
1,3,5-Trimethylbenzene	mg/kg	ND	0.0050	12/17/24 16:30	
1,3-Dichlorobenzene	mg/kg	ND	0.0050	12/17/24 16:30	
1,3-Dichloropropane	mg/kg	ND	0.0050	12/17/24 16:30	
1,4-Dichlorobenzene	mg/kg	ND	0.0050	12/17/24 16:30	
2,2-Dichloropropane	mg/kg	ND	0.0050	12/17/24 16:30	
2-Butanone (MEK)	mg/kg	ND	0.10	12/17/24 16:30	
2-Chlorotoluene	mg/kg	ND	0.0050	12/17/24 16:30	
2-Hexanone	mg/kg	ND	0.050	12/17/24 16:30	
4-Chlorotoluene	mg/kg	ND	0.0050	12/17/24 16:30	
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	0.050	12/17/24 16:30	
Acetone	mg/kg	ND	0.10	12/17/24 16:30	v2
Benzene	mg/kg	ND	0.0050	12/17/24 16:30	
Bromobenzene	mg/kg	ND	0.0050	12/17/24 16:30	
Bromochloromethane	mg/kg	ND	0.0050	12/17/24 16:30	
Bromodichloromethane	mg/kg	ND	0.0050	12/17/24 16:30	
Bromoform	mg/kg	ND	0.0050	12/17/24 16:30	
Bromomethane	mg/kg	ND	0.020	12/17/24 16:30	v2
Carbon tetrachloride	mg/kg	ND	0.0050	12/17/24 16:30	
Chlorobenzene	mg/kg	ND	0.0050	12/17/24 16:30	
Chloroethane	mg/kg	ND	0.010	12/17/24 16:30	v2
Chloroform	mg/kg	ND	0.0050	12/17/24 16:30	
Chloromethane	mg/kg	ND	0.010	12/17/24 16:30	
cis-1,2-Dichloroethene	mg/kg	ND	0.0050	12/17/24 16:30	
cis-1,3-Dichloropropene	mg/kg	ND	0.0050	12/17/24 16:30	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

METHOD BLANK: 4648049

Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	mg/kg	ND	0.0050	12/17/24 16:30	
Dibromomethane	mg/kg	ND	0.0050	12/17/24 16:30	
Dichlorodifluoromethane	mg/kg	ND	0.010	12/17/24 16:30	
Diisopropyl ether	mg/kg	ND	0.0050	12/17/24 16:30	
Ethylbenzene	mg/kg	ND	0.0050	12/17/24 16:30	
Hexachloro-1,3-butadiene	mg/kg	ND	0.010	12/17/24 16:30	
Isopropylbenzene (Cumene)	mg/kg	ND	0.0050	12/17/24 16:30	
m&p-Xylene	mg/kg	ND	0.010	12/17/24 16:30	
Methyl-tert-butyl ether	mg/kg	ND	0.0050	12/17/24 16:30	
Methylene Chloride	mg/kg	ND	0.020	12/17/24 16:30	
n-Butylbenzene	mg/kg	ND	0.0050	12/17/24 16:30	
n-Propylbenzene	mg/kg	ND	0.0050	12/17/24 16:30	
Naphthalene	mg/kg	ND	0.0050	12/17/24 16:30	
o-Xylene	mg/kg	ND	0.0050	12/17/24 16:30	
p-Isopropyltoluene	mg/kg	ND	0.0050	12/17/24 16:30	
sec-Butylbenzene	mg/kg	ND	0.0050	12/17/24 16:30	
Styrene	mg/kg	ND	0.0050	12/17/24 16:30	
tert-Butylbenzene	mg/kg	ND	0.0050	12/17/24 16:30	
Tetrachloroethene	mg/kg	ND	0.0050	12/17/24 16:30	
Toluene	mg/kg	ND	0.0050	12/17/24 16:30	
trans-1,2-Dichloroethene	mg/kg	ND	0.0050	12/17/24 16:30	
trans-1,3-Dichloropropene	mg/kg	ND	0.0050	12/17/24 16:30	
Trichloroethene	mg/kg	ND	0.0050	12/17/24 16:30	
Trichlorofluoromethane	mg/kg	ND	0.0050	12/17/24 16:30	
Vinyl acetate	mg/kg	ND	0.050	12/17/24 16:30	
Vinyl chloride	mg/kg	ND	0.010	12/17/24 16:30	
Xylene (Total)	mg/kg	ND	0.010	12/17/24 16:30	
1,2-Dichloroethane-d4 (S)	%	100	70-135	12/17/24 16:30	
4-Bromofluorobenzene (S)	%	104	70-130	12/17/24 16:30	
Toluene-d8 (S)	%	101	70-130	12/17/24 16:30	

LABORATORY CONTROL SAMPLE: 4648050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	0.5	0.45	89	70-130	
1,1,1-Trichloroethane	mg/kg	0.5	0.44	88	68-130	
1,1,2,2-Tetrachloroethane	mg/kg	0.5	0.43	87	70-130	
1,1,2-Trichloroethane	mg/kg	0.5	0.44	88	70-130	
1,1-Dichloroethane	mg/kg	0.5	0.47	93	70-130	
1,1-Dichloroethene	mg/kg	0.5	0.47	93	67-139	
1,1-Dichloropropene	mg/kg	0.5	0.43	86	68-132	
1,2,3-Trichlorobenzene	mg/kg	0.5	0.44	88	68-130	
1,2,3-Trichloropropane	mg/kg	0.5	0.42	84	70-130	
1,2,4-Trichlorobenzene	mg/kg	0.5	0.45	90	67-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

LABORATORY CONTROL SAMPLE: 4648050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	0.5	0.47	95	70-130	
1,2-Dibromo-3-chloropropane	mg/kg	0.5	0.45	90	68-130	
1,2-Dibromoethane (EDB)	mg/kg	0.5	0.43	85	70-130	
1,2-Dichlorobenzene	mg/kg	0.5	0.43	86	70-130	
1,2-Dichloroethane	mg/kg	0.5	0.45	89	68-130	
1,2-Dichloropropane	mg/kg	0.5	0.46	91	70-130	
1,3,5-Trimethylbenzene	mg/kg	0.5	0.46	92	70-130	
1,3-Dichlorobenzene	mg/kg	0.5	0.44	89	70-130	
1,3-Dichloropropane	mg/kg	0.5	0.44	89	70-130	
1,4-Dichlorobenzene	mg/kg	0.5	0.45	90	70-130	
2,2-Dichloropropane	mg/kg	0.5	0.45	89	49-137	
2-Butanone (MEK)	mg/kg	1	0.85	85	59-136	
2-Chlorotoluene	mg/kg	0.5	0.46	93	70-130	
2-Hexanone	mg/kg	1	0.87	87	63-143	
4-Chlorotoluene	mg/kg	0.5	0.47	94	70-130	
4-Methyl-2-pentanone (MIBK)	mg/kg	1	0.86	86	67-134	
Acetone	mg/kg	1	0.78	78	59-132 v3	
Benzene	mg/kg	0.5	0.48	95	70-130	
Bromobenzene	mg/kg	0.5	0.44	88	70-130	
Bromochloromethane	mg/kg	0.5	0.45	91	70-130	
Bromodichloromethane	mg/kg	0.5	0.44	88	70-130	
Bromoform	mg/kg	0.5	0.44	88	70-130	
Bromomethane	mg/kg	0.5	0.38	77	36-180 v3	
Carbon tetrachloride	mg/kg	0.5	0.45	90	69-133	
Chlorobenzene	mg/kg	0.5	0.44	88	70-130	
Chloroethane	mg/kg	0.5	0.37	74	61-147 v3	
Chloroform	mg/kg	0.5	0.44	88	69-130	
Chloromethane	mg/kg	0.5	0.49	97	66-154	
cis-1,2-Dichloroethene	mg/kg	0.5	0.46	92	69-130	
cis-1,3-Dichloropropene	mg/kg	0.5	0.45	91	70-130	
Dibromochloromethane	mg/kg	0.5	0.44	88	70-130	
Dibromomethane	mg/kg	0.5	0.45	89	70-130	
Dichlorodifluoromethane	mg/kg	0.5	0.43	86	40-194	
Diisopropyl ether	mg/kg	0.5	0.47	94	64-130	
Ethylbenzene	mg/kg	0.5	0.42	84	69-130	
Hexachloro-1,3-butadiene	mg/kg	0.5	0.44	88	59-134	
Isopropylbenzene (Cumene)	mg/kg	0.5	0.48	96	70-130	
m&p-Xylene	mg/kg	1	0.93	93	70-130	
Methyl-tert-butyl ether	mg/kg	0.5	0.43	87	66-130	
Methylene Chloride	mg/kg	0.5	0.48	95	67-130	
n-Butylbenzene	mg/kg	0.5	0.45	90	66-130	
n-Propylbenzene	mg/kg	0.5	0.47	93	70-130	
Naphthalene	mg/kg	0.5	0.46	91	70-130	
o-Xylene	mg/kg	0.5	0.46	91	70-130	
p-Isopropyltoluene	mg/kg	0.5	0.46	92	69-130	
sec-Butylbenzene	mg/kg	0.5	0.46	93	70-130	
Styrene	mg/kg	0.5	0.45	91	70-130	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

LABORATORY CONTROL SAMPLE: 4648050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	mg/kg	0.5	0.41	82	61-130	
Tetrachloroethene	mg/kg	0.5	0.44	89	70-130	
Toluene	mg/kg	0.5	0.45	90	70-130	
trans-1,2-Dichloroethene	mg/kg	0.5	0.47	94	68-133	
trans-1,3-Dichloropropene	mg/kg	0.5	0.47	93	70-130	
Trichloroethene	mg/kg	0.5	0.44	88	70-130	
Trichlorofluoromethane	mg/kg	0.5	0.48	96	59-147	
Vinyl acetate	mg/kg	1	1.1	106	67-136	
Vinyl chloride	mg/kg	0.5	0.44	89	59-148	
Xylene (Total)	mg/kg	1.5	1.4	92	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-135	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE SAMPLE: 4648051

Parameter	Units	92769272001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	0.81	0.48	59	10-174	
1,1,1-Trichloroethane	mg/kg	ND	0.81	0.48	59	10-178	
1,1,2,2-Tetrachloroethane	mg/kg	ND	0.81	0.44	54	10-164	
1,1,2-Trichloroethane	mg/kg	ND	0.81	0.46	56	10-167	
1,1-Dichloroethane	mg/kg	ND	0.81	0.46	57	10-175	
1,1-Dichloroethene	mg/kg	ND	0.81	0.45	56	10-189	
1,1-Dichloropropene	mg/kg	ND	0.81	0.44	55	10-179	
1,2,3-Trichlorobenzene	mg/kg	ND	0.81	0.40	50	10-154	
1,2,3-Trichloropropane	mg/kg	ND	0.81	0.39	49	10-157	
1,2,4-Trichlorobenzene	mg/kg	ND	0.81	0.42	52	10-156	
1,2,4-Trimethylbenzene	mg/kg	ND	0.81	0.45	56	10-169	
1,2-Dibromo-3-chloropropane	mg/kg	ND	0.81	0.43	53	10-148	
1,2-Dibromoethane (EDB)	mg/kg	ND	0.81	0.45	56	10-166	
1,2-Dichlorobenzene	mg/kg	ND	0.81	0.44	54	10-166	
1,2-Dichloroethane	mg/kg	ND	0.81	0.44	54	10-171	
1,2-Dichloropropane	mg/kg	ND	0.81	0.49	60	10-175	
1,3,5-Trimethylbenzene	mg/kg	ND	0.81	0.45	56	10-171	
1,3-Dichlorobenzene	mg/kg	ND	0.81	0.45	55	10-166	
1,3-Dichloropropane	mg/kg	ND	0.81	0.45	56	10-167	
1,4-Dichlorobenzene	mg/kg	ND	0.81	0.43	53	10-163	
2,2-Dichloropropane	mg/kg	ND	0.81	0.33	40	10-158	
2-Butanone (MEK)	mg/kg	ND	1.6	0.70	43	10-156	
2-Chlorotoluene	mg/kg	ND	0.81	0.45	56	10-167	
2-Hexanone	mg/kg	ND	1.6	0.72	44	10-159	
4-Chlorotoluene	mg/kg	ND	0.81	0.45	56	10-167	
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	1.6	0.74	46	10-162	
Acetone	mg/kg	ND	1.6	0.63	39	10-131	
Benzene	mg/kg	ND	0.81	0.54	67	10-175	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

MATRIX SPIKE SAMPLE:		4648051					
Parameter	Units	92769272001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	mg/kg	ND	0.81	0.45	56	10-166	
Bromochloromethane	mg/kg	ND	0.81	0.46	56	10-173	
Bromodichloromethane	mg/kg	ND	0.81	0.46	57	10-169	
Bromoform	mg/kg	ND	0.81	0.46	57	10-165	
Bromomethane	mg/kg	ND	0.81	0.13	16	10-130	
Carbon tetrachloride	mg/kg	ND	0.81	0.51	64	10-182	
Chlorobenzene	mg/kg	ND	0.81	0.48	60	10-171	
Chloroethane	mg/kg	ND	0.81	0.12	15	10-130	v3
Chloroform	mg/kg	ND	0.81	0.46	57	10-171	
Chloromethane	mg/kg	ND	0.81	0.45	56	10-200	
cis-1,2-Dichloroethene	mg/kg	ND	0.81	0.47	58	10-172	
cis-1,3-Dichloropropene	mg/kg	ND	0.81	0.44	54	10-160	
Dibromochloromethane	mg/kg	ND	0.81	0.46	56	10-168	
Dibromomethane	mg/kg	ND	0.81	0.50	61	10-173	
Dichlorodifluoromethane	mg/kg	ND	0.81	0.38	47	10-200	v3
Diisopropyl ether	mg/kg	ND	0.81	0.42	52	10-169	
Ethylbenzene	mg/kg	ND	0.81	0.46	57	10-169	
Hexachloro-1,3-butadiene	mg/kg	ND	0.81	0.49	60	10-190	
Isopropylbenzene (Cumene)	mg/kg	ND	0.81	0.52	64	10-179	
m&p-Xylene	mg/kg	ND	1.6	0.99	61	10-174	
Methyl-tert-butyl ether	mg/kg	ND	0.81	0.40	49	10-157	
Methylene Chloride	mg/kg	ND	0.81	0.27	33	10-177	
n-Butylbenzene	mg/kg	ND	0.81	0.42	52	10-174	
n-Propylbenzene	mg/kg	ND	0.81	0.45	55	10-170	
Naphthalene	mg/kg	ND	0.81	0.42	52	10-155	
o-Xylene	mg/kg	ND	0.81	0.49	60	10-175	
p-Isopropyltoluene	mg/kg	ND	0.81	0.45	55	10-174	
sec-Butylbenzene	mg/kg	ND	0.81	0.45	56	10-177	
Styrene	mg/kg	ND	0.81	0.48	59	10-174	
tert-Butylbenzene	mg/kg	ND	0.81	0.38	47	10-142	
Tetrachloroethene	mg/kg	ND	0.81	0.46	57	10-166	
Toluene	mg/kg	ND	0.81	0.50	62	10-173	
trans-1,2-Dichloroethene	mg/kg	ND	0.81	0.46	57	10-173	
trans-1,3-Dichloropropene	mg/kg	ND	0.81	0.43	53	10-159	
Trichloroethene	mg/kg	ND	0.81	0.49	61	10-181	
Trichlorofluoromethane	mg/kg	ND	0.81	0.060	7	10-130	M1
Vinyl acetate	mg/kg	ND	1.6	0.84	52	10-158	
Vinyl chloride	mg/kg	ND	0.81	0.42	52	10-189	
Xylene (Total)	mg/kg	ND	2.4	1.5	61	10-174	
1,2-Dichloroethane-d4 (S)	%				85	70-135	
4-Bromofluorobenzene (S)	%				102	70-130	
Toluene-d8 (S)	%				101	70-130	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

SAMPLE DUPLICATE: 4648052

Parameter	Units	92769272002 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	mg/kg	ND	ND		
1,1,1-Trichloroethane	mg/kg	ND	ND		
1,1,2,2-Tetrachloroethane	mg/kg	ND	ND		
1,1,2-Trichloroethane	mg/kg	ND	ND		
1,1-Dichloroethane	mg/kg	ND	ND		
1,1-Dichloroethene	mg/kg	ND	ND		
1,1-Dichloropropene	mg/kg	ND	ND		
1,2,3-Trichlorobenzene	mg/kg	ND	ND		
1,2,3-Trichloropropane	mg/kg	ND	ND		
1,2,4-Trichlorobenzene	mg/kg	ND	ND		
1,2,4-Trimethylbenzene	mg/kg	ND	ND		
1,2-Dibromo-3-chloropropane	mg/kg	ND	ND		
1,2-Dibromoethane (EDB)	mg/kg	ND	ND		
1,2-Dichlorobenzene	mg/kg	ND	ND		
1,2-Dichloroethane	mg/kg	ND	ND		
1,2-Dichloropropane	mg/kg	ND	ND		
1,3,5-Trimethylbenzene	mg/kg	ND	ND		
1,3-Dichlorobenzene	mg/kg	ND	ND		
1,3-Dichloropropane	mg/kg	ND	ND		
1,4-Dichlorobenzene	mg/kg	ND	ND		
2,2-Dichloropropane	mg/kg	ND	ND		
2-Butanone (MEK)	mg/kg	ND	ND		
2-Chlorotoluene	mg/kg	ND	ND		
2-Hexanone	mg/kg	ND	ND		
4-Chlorotoluene	mg/kg	ND	ND		
4-Methyl-2-pentanone (MIBK)	mg/kg	ND	ND		
Acetone	mg/kg	ND	ND		v2
Benzene	mg/kg	ND	ND		
Bromobenzene	mg/kg	ND	ND		
Bromochloromethane	mg/kg	ND	ND		
Bromodichloromethane	mg/kg	ND	ND		
Bromoform	mg/kg	ND	ND		
Bromomethane	mg/kg	ND	ND		v2
Carbon tetrachloride	mg/kg	ND	ND		
Chlorobenzene	mg/kg	ND	ND		
Chloroethane	mg/kg	ND	ND		v2
Chloroform	mg/kg	ND	ND		
Chloromethane	mg/kg	ND	ND		
cis-1,2-Dichloroethene	mg/kg	ND	ND		
cis-1,3-Dichloropropene	mg/kg	ND	ND		
Dibromochloromethane	mg/kg	ND	ND		
Dibromomethane	mg/kg	ND	ND		
Dichlorodifluoromethane	mg/kg	ND	ND		
Diisopropyl ether	mg/kg	ND	ND		
Ethylbenzene	mg/kg	ND	ND		
Hexachloro-1,3-butadiene	mg/kg	ND	ND		
Isopropylbenzene (Cumene)	mg/kg	ND	ND		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

SAMPLE DUPLICATE: 4648052

Parameter	Units	92769272002 Result	Dup Result	RPD	Qualifiers
m&p-Xylene	mg/kg	ND	ND		
Methyl-tert-butyl ether	mg/kg	ND	ND		
Methylene Chloride	mg/kg	ND	ND		
n-Butylbenzene	mg/kg	ND	ND		
n-Propylbenzene	mg/kg	ND	ND		
Naphthalene	mg/kg	ND	ND		
o-Xylene	mg/kg	ND	ND		
p-Isopropyltoluene	mg/kg	ND	ND		
sec-Butylbenzene	mg/kg	ND	ND		
Styrene	mg/kg	ND	ND		
tert-Butylbenzene	mg/kg	ND	ND		
Tetrachloroethene	mg/kg	ND	ND		
Toluene	mg/kg	ND	ND		
trans-1,2-Dichloroethene	mg/kg	ND	ND		
trans-1,3-Dichloropropene	mg/kg	ND	ND		
Trichloroethene	mg/kg	ND	ND		
Trichlorofluoromethane	mg/kg	ND	ND		
Vinyl acetate	mg/kg	ND	ND		
Vinyl chloride	mg/kg	ND	ND		
Xylene (Total)	mg/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	94	93		
4-Bromofluorobenzene (S)	%	103	101		
Toluene-d8 (S)	%	101	101		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch: 902486 Analysis Method: EPA 7199
QC Batch Method: EPA 7199 Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: 4645014 Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/kg	ND	1.0	12/13/24 15:31	

LABORATORY CONTROL SAMPLE: 4645015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	10	9.4	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4645016 4645017

Parameter	Units	92768794001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Chromium, Hexavalent	mg/kg	ND	16.1	16.1	15.6	15.8	93	95	75-125	2	

MATRIX SPIKE SAMPLE: 4645018

Parameter	Units	92768794002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/kg	3.6	1680	1770	105	75-125	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch: 902495 Analysis Method: EPA 8081B
QC Batch Method: EPA 3546 Analysis Description: 8081 GCS Pesticides
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: 4645030 Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	mg/kg	ND	0.0020	12/17/24 00:06	
4,4'-DDE	mg/kg	ND	0.0020	12/17/24 00:06	
4,4'-DDT	mg/kg	ND	0.0020	12/17/24 00:06	
Aldrin	mg/kg	ND	0.0020	12/17/24 00:06	
alpha-BHC	mg/kg	ND	0.0020	12/17/24 00:06	
beta-BHC	mg/kg	ND	0.0020	12/17/24 00:06	
Chlordane (Technical)	mg/kg	ND	0.0099	12/17/24 00:06	
delta-BHC	mg/kg	ND	0.0020	12/17/24 00:06	
Dieldrin	mg/kg	ND	0.0020	12/17/24 00:06	
Endosulfan I	mg/kg	ND	0.0020	12/17/24 00:06	
Endosulfan II	mg/kg	ND	0.0020	12/17/24 00:06	
Endosulfan sulfate	mg/kg	ND	0.0020	12/17/24 00:06	
Endrin	mg/kg	ND	0.0020	12/17/24 00:06	
Endrin aldehyde	mg/kg	ND	0.0020	12/17/24 00:06	
Endrin ketone	mg/kg	ND	0.0020	12/17/24 00:06	
gamma-BHC (Lindane)	mg/kg	ND	0.0020	12/17/24 00:06	
Heptachlor	mg/kg	ND	0.0020	12/17/24 00:06	
Heptachlor epoxide	mg/kg	ND	0.0020	12/17/24 00:06	
Hexachlorobenzene	mg/kg	ND	0.0020	12/17/24 00:06	
Methoxychlor	mg/kg	ND	0.0050	12/17/24 00:06	
Mirex	mg/kg	ND	0.0050	12/17/24 00:06	
Toxaphene	mg/kg	ND	0.0069	12/17/24 00:06	
Decachlorobiphenyl (S)	%	102	10-179	12/17/24 00:06	
Tetrachloro-m-xylene (S)	%	97	10-133	12/17/24 00:06	

LABORATORY CONTROL SAMPLE: 4645031

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	mg/kg	0.0083	0.0092	111	37-178	
4,4'-DDE	mg/kg	0.0083	0.0088	106	37-164	
4,4'-DDT	mg/kg	0.0083	0.0089	107	19-174	
Aldrin	mg/kg	0.0083	0.0085	102	35-130	
alpha-BHC	mg/kg	0.0083	0.0085	102	34-130	
beta-BHC	mg/kg	0.0083	0.0086	104	36-130	
delta-BHC	mg/kg	0.0083	0.0088	106	37-130	
Dieldrin	mg/kg	0.0083	0.0086	104	36-162	
Endosulfan I	mg/kg	0.0083	0.0084	101	37-130	
Endosulfan II	mg/kg	0.0083	0.0092	111	33-138	
Endosulfan sulfate	mg/kg	0.0083	0.0085	102	27-138	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

LABORATORY CONTROL SAMPLE: 4645031

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/kg	0.0083	0.0093	112	38-163	
Endrin aldehyde	mg/kg	0.0083	0.0085	102	32-130	
Endrin ketone	mg/kg	0.0083	0.0087	105	34-130	
gamma-BHC (Lindane)	mg/kg	0.0083	0.0086	104	36-130	
Heptachlor	mg/kg	0.0083	0.0085	102	32-132	
Heptachlor epoxide	mg/kg	0.0083	0.0088	105	37-130	
Hexachlorobenzene	mg/kg	0.0083	0.0085	102	32-130	
Methoxychlor	mg/kg	0.025	0.025	101	22-130	
Mirex	mg/kg	0.025	0.026	104	34-130	
Decachlorobiphenyl (S)	%			135	10-179	
Tetrachloro-m-xylene (S)	%			114	10-133	

MATRIX SPIKE SAMPLE: 4645032

Parameter	Units	92768922001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	mg/kg	ND	0.0094	0.0090	95	10-170	
4,4'-DDE	mg/kg	ND	0.0094	0.0087	92	10-200	
4,4'-DDT	mg/kg	ND	0.0094	0.0090	95	10-167	
Aldrin	mg/kg	ND	0.0094	0.0085	90	10-143	
alpha-BHC	mg/kg	ND	0.0094	0.0083	88	10-137	
beta-BHC	mg/kg	ND	0.0094	0.0086	91	10-141	
delta-BHC	mg/kg	ND	0.0094	0.0087	92	10-139	
Dieldrin	mg/kg	ND	0.0094	0.0084	89	10-184	
Endosulfan I	mg/kg	ND	0.0094	0.0083	88	10-138	
Endosulfan II	mg/kg	ND	0.0094	0.0090	95	10-152	
Endosulfan sulfate	mg/kg	ND	0.0094	0.0084	89	10-151	
Endrin	mg/kg	ND	0.0094	0.0092	97	10-191	
Endrin aldehyde	mg/kg	ND	0.0094	0.0085	90	10-184	
Endrin ketone	mg/kg	ND	0.0094	0.0089	94	10-144	
gamma-BHC (Lindane)	mg/kg	ND	0.0094	0.0084	89	10-134	
Heptachlor	mg/kg	ND	0.0094	0.0086	91	10-132	
Heptachlor epoxide	mg/kg	ND	0.0094	0.0090	95	10-145	
Hexachlorobenzene	mg/kg	ND	0.0094	0.0082	87	16-130	
Methoxychlor	mg/kg	ND	0.028	0.025	89	10-150	
Mirex	mg/kg	ND	0.028	0.026	91	10-136	
Decachlorobiphenyl (S)	%				109	10-179	
Tetrachloro-m-xylene (S)	%				94	10-133	

SAMPLE DUPLICATE: 4645033

Parameter	Units	92768922002 Result	Dup Result	RPD	Qualifiers
4,4'-DDD	mg/kg	ND	ND		
4,4'-DDE	mg/kg	ND	ND		
4,4'-DDT	mg/kg	ND	ND		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

SAMPLE DUPLICATE: 4645033

Parameter	Units	92768922002 Result	Dup Result	RPD	Qualifiers
Aldrin	mg/kg	ND	ND		
alpha-BHC	mg/kg	ND	ND		
beta-BHC	mg/kg	ND	ND		
delta-BHC	mg/kg	ND	ND		
Dieldrin	mg/kg	ND	ND		
Endosulfan I	mg/kg	ND	ND		
Endosulfan II	mg/kg	ND	ND		
Endosulfan sulfate	mg/kg	ND	ND		
Endrin	mg/kg	ND	ND		
Endrin aldehyde	mg/kg	ND	ND		
Endrin ketone	mg/kg	ND	ND		
gamma-BHC (Lindane)	mg/kg	ND	ND		
Heptachlor	mg/kg	ND	ND		
Heptachlor epoxide	mg/kg	ND	ND		
Hexachlorobenzene	mg/kg	ND	ND		
Methoxychlor	mg/kg	ND	ND		
Mirex	mg/kg	ND	ND		
Decachlorobiphenyl (S)	%	95	92		
Tetrachloro-m-xylene (S)	%	96	101		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch: 902499 Analysis Method: EPA 8082A
QC Batch Method: EPA 3546 Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: 4645044 Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	mg/kg	ND	0.033	12/16/24 20:48	
PCB-1221 (Aroclor 1221)	mg/kg	ND	0.033	12/16/24 20:48	
PCB-1232 (Aroclor 1232)	mg/kg	ND	0.033	12/16/24 20:48	
PCB-1242 (Aroclor 1242)	mg/kg	ND	0.033	12/16/24 20:48	
PCB-1248 (Aroclor 1248)	mg/kg	ND	0.033	12/16/24 20:48	
PCB-1254 (Aroclor 1254)	mg/kg	ND	0.033	12/16/24 20:48	
PCB-1260 (Aroclor 1260)	mg/kg	ND	0.033	12/16/24 20:48	
Decachlorobiphenyl (S)	%	96	10-166	12/16/24 20:48	

LABORATORY CONTROL SAMPLE: 4645045

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	mg/kg	0.17	0.14	86	39-130	
PCB-1260 (Aroclor 1260)	mg/kg	0.17	0.15	88	44-130	
Decachlorobiphenyl (S)	%			111	10-166	

SAMPLE DUPLICATE: 4645047

Parameter	Units	92768922002 Result	Dup Result	RPD	Qualifiers
PCB-1016 (Aroclor 1016)	mg/kg	ND	ND		
PCB-1221 (Aroclor 1221)	mg/kg	ND	ND		
PCB-1232 (Aroclor 1232)	mg/kg	ND	ND		
PCB-1242 (Aroclor 1242)	mg/kg	ND	ND		
PCB-1248 (Aroclor 1248)	mg/kg	ND	ND		
PCB-1254 (Aroclor 1254)	mg/kg	ND	ND		
PCB-1260 (Aroclor 1260)	mg/kg	ND	ND		
Decachlorobiphenyl (S)	%	91	85		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch:	902502	Analysis Method:	EPA 8270E
QC Batch Method:	EPA 3546	Analysis Description:	8270E Solid MSSV Microwave
		Laboratory:	Pace Analytical Services - Charlotte

Associated Lab Samples: 92768794001, 92768794002

METHOD BLANK: 4645052 Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	mg/kg	ND	0.33	12/16/24 07:19	
1,2-Dichlorobenzene	mg/kg	ND	0.33	12/16/24 07:19	
1,3-Dichlorobenzene	mg/kg	ND	0.33	12/16/24 07:19	
1,4-Dichlorobenzene	mg/kg	ND	0.33	12/16/24 07:19	
1-Methylnaphthalene	mg/kg	ND	0.33	12/16/24 07:19	
2,2'-Oxybis(1-chloropropane)	mg/kg	ND	0.33	12/16/24 07:19	
2,4,5-Trichlorophenol	mg/kg	ND	0.33	12/16/24 07:19	
2,4,6-Trichlorophenol	mg/kg	ND	0.33	12/16/24 07:19	
2,4-Dichlorophenol	mg/kg	ND	0.33	12/16/24 07:19	
2,4-Dimethylphenol	mg/kg	ND	0.33	12/16/24 07:19	
2,4-Dinitrophenol	mg/kg	ND	1.6	12/16/24 07:19	v1
2,4-Dinitrotoluene	mg/kg	ND	0.33	12/16/24 07:19	
2,6-Dinitrotoluene	mg/kg	ND	0.33	12/16/24 07:19	
2-Chloronaphthalene	mg/kg	ND	0.33	12/16/24 07:19	
2-Chlorophenol	mg/kg	ND	0.33	12/16/24 07:19	
2-Methylnaphthalene	mg/kg	ND	0.33	12/16/24 07:19	
2-Methylphenol(o-Cresol)	mg/kg	ND	0.33	12/16/24 07:19	
2-Nitroaniline	mg/kg	ND	1.6	12/16/24 07:19	
2-Nitrophenol	mg/kg	ND	0.33	12/16/24 07:19	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.33	12/16/24 07:19	
3,3'-Dichlorobenzidine	mg/kg	ND	0.66	12/16/24 07:19	
3-Nitroaniline	mg/kg	ND	1.6	12/16/24 07:19	
4,6-Dinitro-2-methylphenol	mg/kg	ND	0.66	12/16/24 07:19	v1
4-Bromophenylphenyl ether	mg/kg	ND	0.33	12/16/24 07:19	
4-Chloro-3-methylphenol	mg/kg	ND	0.66	12/16/24 07:19	
4-Chloroaniline	mg/kg	ND	0.66	12/16/24 07:19	
4-Chlorophenylphenyl ether	mg/kg	ND	0.33	12/16/24 07:19	
4-Nitroaniline	mg/kg	ND	0.66	12/16/24 07:19	
4-Nitrophenol	mg/kg	ND	1.6	12/16/24 07:19	
Acenaphthene	mg/kg	ND	0.33	12/16/24 07:19	
Acenaphthylene	mg/kg	ND	0.33	12/16/24 07:19	
Aniline	mg/kg	ND	0.33	12/16/24 07:19	
Anthracene	mg/kg	ND	0.33	12/16/24 07:19	
Benzo(a)anthracene	mg/kg	ND	0.33	12/16/24 07:19	
Benzo(a)pyrene	mg/kg	ND	0.33	12/16/24 07:19	
Benzo(b)fluoranthene	mg/kg	ND	0.33	12/16/24 07:19	
Benzo(g,h,i)perylene	mg/kg	ND	0.33	12/16/24 07:19	
Benzo(k)fluoranthene	mg/kg	ND	0.33	12/16/24 07:19	
Benzoic Acid	mg/kg	ND	1.6	12/16/24 07:19	
Benzyl alcohol	mg/kg	ND	0.66	12/16/24 07:19	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

METHOD BLANK: 4645052

Matrix: Solid

Associated Lab Samples: 92768794001, 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
bis(2-Chloroethoxy)methane	mg/kg	ND	0.33	12/16/24 07:19	
bis(2-Chloroethyl) ether	mg/kg	ND	0.33	12/16/24 07:19	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.33	12/16/24 07:19	
Butylbenzylphthalate	mg/kg	ND	0.33	12/16/24 07:19	
Chrysene	mg/kg	ND	0.33	12/16/24 07:19	
Di-n-butylphthalate	mg/kg	ND	0.33	12/16/24 07:19	
Di-n-octylphthalate	mg/kg	ND	0.33	12/16/24 07:19	
Dibenz(a,h)anthracene	mg/kg	ND	0.33	12/16/24 07:19	
Dibenzofuran	mg/kg	ND	0.33	12/16/24 07:19	
Diethylphthalate	mg/kg	ND	0.33	12/16/24 07:19	
Dimethylphthalate	mg/kg	ND	0.33	12/16/24 07:19	
Fluoranthene	mg/kg	ND	0.33	12/16/24 07:19	
Fluorene	mg/kg	ND	0.33	12/16/24 07:19	
Hexachloro-1,3-butadiene	mg/kg	ND	0.33	12/16/24 07:19	
Hexachlorobenzene	mg/kg	ND	0.33	12/16/24 07:19	
Hexachlorocyclopentadiene	mg/kg	ND	0.33	12/16/24 07:19	
Hexachloroethane	mg/kg	ND	0.33	12/16/24 07:19	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.33	12/16/24 07:19	v1
Isophorone	mg/kg	ND	0.33	12/16/24 07:19	
N-Nitroso-di-n-propylamine	mg/kg	ND	0.33	12/16/24 07:19	
N-Nitrosodimethylamine	mg/kg	ND	0.33	12/16/24 07:19	
N-Nitrosodiphenylamine	mg/kg	ND	0.33	12/16/24 07:19	
Naphthalene	mg/kg	ND	0.33	12/16/24 07:19	
Nitrobenzene	mg/kg	ND	0.33	12/16/24 07:19	
Pentachlorophenol	mg/kg	ND	0.66	12/16/24 07:19	
Phenanthrene	mg/kg	ND	0.33	12/16/24 07:19	
Phenol	mg/kg	ND	0.33	12/16/24 07:19	
Pyrene	mg/kg	ND	0.33	12/16/24 07:19	
Pyridine	mg/kg	ND	0.33	12/16/24 07:19	
2,4,6-Tribromophenol (S)	%	87	10-130	12/16/24 07:19	
2-Fluorobiphenyl (S)	%	70	10-130	12/16/24 07:19	
2-Fluorophenol (S)	%	67	10-130	12/16/24 07:19	
Nitrobenzene-d5 (S)	%	70	10-130	12/16/24 07:19	
Phenol-d6 (S)	%	68	10-130	12/16/24 07:19	
Terphenyl-d14 (S)	%	94	10-130	12/16/24 07:19	

LABORATORY CONTROL SAMPLE: 4645053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	mg/kg	1.7	1.2	71	40-130	
1,2-Dichlorobenzene	mg/kg	1.7	1.1	68	37-130	
1,3-Dichlorobenzene	mg/kg	1.7	1.1	68	36-130	
1,4-Dichlorobenzene	mg/kg	1.7	1.1	68	36-130	
1-Methylnaphthalene	mg/kg	1.7	1.3	80	46-130	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennial

Pace Project No.: 92768794

LABORATORY CONTROL SAMPLE: 4645053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2'-Oxybis(1-chloropropane)	mg/kg	1.7	1.1	70	12-130	
2,4,5-Trichlorophenol	mg/kg	1.7	1.6	94	49-130	
2,4,6-Trichlorophenol	mg/kg	1.7	1.6	95	48-130	
2,4-Dichlorophenol	mg/kg	1.7	1.3	79	45-130	
2,4-Dimethylphenol	mg/kg	1.7	1.3	81	45-130	
2,4-Dinitrophenol	mg/kg	8.3	7.2	87	23-130	v1
2,4-Dinitrotoluene	mg/kg	1.7	1.7	102	50-130	
2,6-Dinitrotoluene	mg/kg	1.7	1.7	100	53-130	
2-Chloronaphthalene	mg/kg	1.7	1.4	82	46-130	
2-Chlorophenol	mg/kg	1.7	1.2	71	39-130	
2-Methylnaphthalene	mg/kg	1.7	1.3	79	45-130	
2-Methylphenol(o-Cresol)	mg/kg	1.7	1.3	78	38-130	
2-Nitroaniline	mg/kg	3.3	3.2	97	43-130	
2-Nitrophenol	mg/kg	1.7	1.4	82	43-130	
3&4-Methylphenol(m&p Cresol)	mg/kg	1.7	1.3	78	34-130	
3,3'-Dichlorobenzidine	mg/kg	3.3	3.1	95	68-130	
3-Nitroaniline	mg/kg	3.3	3.1	94	36-130	
4,6-Dinitro-2-methylphenol	mg/kg	3.3	3.2	98	38-130	v1
4-Bromophenylphenyl ether	mg/kg	1.7	1.6	98	52-130	
4-Chloro-3-methylphenol	mg/kg	3.3	3.0	90	45-130	
4-Chloroaniline	mg/kg	3.3	2.6	79	41-130	
4-Chlorophenylphenyl ether	mg/kg	1.7	1.5	93	46-130	
4-Nitroaniline	mg/kg	3.3	3.2	98	40-130	
4-Nitrophenol	mg/kg	8.3	8.6	104	34-130	
Acenaphthene	mg/kg	1.7	1.4	86	47-130	
Acenaphthylene	mg/kg	1.7	1.5	88	50-130	
Aniline	mg/kg	1.7	1.2	72	33-130	
Anthracene	mg/kg	1.7	1.6	95	46-130	
Benzo(a)anthracene	mg/kg	1.7	1.7	104	49-130	
Benzo(a)pyrene	mg/kg	1.7	1.9	114	45-130	
Benzo(b)fluoranthene	mg/kg	1.7	1.8	112	45-130	
Benzo(g,h,i)perylene	mg/kg	1.7	1.9	114	44-130	
Benzo(k)fluoranthene	mg/kg	1.7	1.9	114	46-130	
Benzoic Acid	mg/kg	8.3	2.1	26	14-130	
Benzyl alcohol	mg/kg	3.3	2.5	77	39-130	
bis(2-Chloroethoxy)methane	mg/kg	1.7	1.3	79	41-130	
bis(2-Chloroethyl) ether	mg/kg	1.7	1.2	73	34-130	
bis(2-Ethylhexyl)phthalate	mg/kg	1.7	1.7	105	39-130	
Butylbenzylphthalate	mg/kg	1.7	1.8	108	48-130	
Chrysene	mg/kg	1.7	1.7	104	50-130	
Di-n-butylphthalate	mg/kg	1.7	1.7	104	46-130	
Di-n-octylphthalate	mg/kg	1.7	1.8	107	49-130	
Dibenz(a,h)anthracene	mg/kg	1.7	1.8	108	46-130	
Dibenzofuran	mg/kg	1.7	1.5	89	49-130	
Diethylphthalate	mg/kg	1.7	1.6	100	49-130	
Dimethylphthalate	mg/kg	1.7	1.6	97	50-130	
Fluoranthene	mg/kg	1.7	1.6	100	49-130	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

LABORATORY CONTROL SAMPLE: 4645053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluorene	mg/kg	1.7	1.5	90	47-130	
Hexachloro-1,3-butadiene	mg/kg	1.7	1.2	73	36-130	
Hexachlorobenzene	mg/kg	1.7	1.6	94	52-130	
Hexachlorocyclopentadiene	mg/kg	1.7	1.3	76	10-130	
Hexachloroethane	mg/kg	1.7	1.1	67	36-130	
Indeno(1,2,3-cd)pyrene	mg/kg	1.7	1.9	115	44-130 v1	
Isophorone	mg/kg	1.7	1.4	85	40-130	
N-Nitroso-di-n-propylamine	mg/kg	1.7	1.5	89	34-130	
N-Nitrosodimethylamine	mg/kg	1.7	1.1	69	29-130	
N-Nitrosodiphenylamine	mg/kg	1.7	1.5	93	47-130	
Naphthalene	mg/kg	1.7	1.2	74	43-130	
Nitrobenzene	mg/kg	1.7	1.2	75	41-130	
Pentachlorophenol	mg/kg	3.3	3.0	90	35-130	
Phenanthrene	mg/kg	1.7	1.6	94	50-130	
Phenol	mg/kg	1.7	1.3	78	39-130	
Pyrene	mg/kg	1.7	1.7	102	51-130	
Pyridine	mg/kg	1.7	1.1	66	21-130	
2,4,6-Tribromophenol (S)	%			108	10-130	
2-Fluorobiphenyl (S)	%			74	10-130	
2-Fluorophenol (S)	%			64	10-130	
Nitrobenzene-d5 (S)	%			68	10-130	
Phenol-d6 (S)	%			68	10-130	
Terphenyl-d14 (S)	%			93	10-130	

MATRIX SPIKE SAMPLE: 4645054

Parameter	Units	92768492001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	mg/kg	ND	1.8	1.2	67	22-130	
1,2-Dichlorobenzene	mg/kg	ND	1.8	1.2	64	22-130	
1,3-Dichlorobenzene	mg/kg	ND	1.8	1.2	65	22-130	
1,4-Dichlorobenzene	mg/kg	ND	1.8	1.2	64	21-130	
1-Methylnaphthalene	mg/kg	ND	1.8	1.3	73	27-130	
2,2'-Oxybis(1-chloropropane)	mg/kg	ND	1.8	1.2	65	10-130	
2,4,5-Trichlorophenol	mg/kg	ND	1.8	1.6	86	18-130	
2,4,6-Trichlorophenol	mg/kg	ND	1.8	1.6	88	17-130	
2,4-Dichlorophenol	mg/kg	ND	1.8	1.4	75	19-130	
2,4-Dimethylphenol	mg/kg	ND	1.8	1.4	75	17-130	
2,4-Dinitrophenol	mg/kg	ND	9	9.0	100	10-130 v1	
2,4-Dinitrotoluene	mg/kg	ND	1.8	1.6	90	31-130	
2,6-Dinitrotoluene	mg/kg	ND	1.8	1.6	90	33-130	
2-Chloronaphthalene	mg/kg	ND	1.8	1.3	74	26-130	
2-Chlorophenol	mg/kg	ND	1.8	1.2	66	19-130	
2-Methylnaphthalene	mg/kg	ND	1.8	1.3	72	26-130	
2-Methylphenol(o-Cresol)	mg/kg	ND	1.8	1.3	70	19-130	
2-Nitroaniline	mg/kg	ND	3.6	3.2	88	29-130	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

MATRIX SPIKE SAMPLE:		4645054					
		92768492001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
2-Nitrophenol	mg/kg	ND	1.8	1.4	77	16-130	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	1.8	1.3	71	14-130	
3,3'-Dichlorobenzidine	mg/kg	ND	3.6	3.1	84	16-130	
3-Nitroaniline	mg/kg	ND	3.6	2.9	80	28-130	
4,6-Dinitro-2-methylphenol	mg/kg	ND	3.6	3.5	97	10-131	v1
4-Bromophenylphenyl ether	mg/kg	ND	1.8	1.5	84	32-130	
4-Chloro-3-methylphenol	mg/kg	ND	3.6	3.0	81	26-130	
4-Chloroaniline	mg/kg	ND	3.6	2.6	72	19-130	
4-Chlorophenylphenyl ether	mg/kg	ND	1.8	1.4	79	29-130	
4-Nitroaniline	mg/kg	ND	3.6	3.0	84	22-130	
4-Nitrophenol	mg/kg	ND	9	8.3	92	10-130	
Acenaphthene	mg/kg	ND	1.8	1.4	76	29-130	
Acenaphthylene	mg/kg	ND	1.8	1.4	79	27-130	
Aniline	mg/kg	ND	1.8	1.2	65	10-130	
Anthracene	mg/kg	ND	1.8	1.5	81	26-130	
Benzo(a)anthracene	mg/kg	ND	1.8	1.5	85	31-130	
Benzo(a)pyrene	mg/kg	ND	1.8	1.7	92	24-130	
Benzo(b)fluoranthene	mg/kg	ND	1.8	1.6	90	12-137	
Benzo(g,h,i)perylene	mg/kg	ND	1.8	1.7	91	16-130	
Benzo(k)fluoranthene	mg/kg	ND	1.8	1.7	94	27-130	
Benzoic Acid	mg/kg	ND	9	5.1	56	10-130	
Benzyl alcohol	mg/kg	ND	3.6	2.5	68	25-130	
bis(2-Chloroethoxy)methane	mg/kg	ND	1.8	1.4	76	26-130	
bis(2-Chloroethyl) ether	mg/kg	ND	1.8	1.2	68	23-130	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	1.8	1.5	84	20-130	
Butylbenzylphthalate	mg/kg	ND	1.8	1.6	88	28-130	
Chrysene	mg/kg	ND	1.8	1.6	86	29-130	
Di-n-butylphthalate	mg/kg	ND	1.8	1.5	84	29-130	
Di-n-octylphthalate	mg/kg	ND	1.8	1.5	84	30-130	
Dibenz(a,h)anthracene	mg/kg	ND	1.8	1.6	88	27-130	
Dibenzofuran	mg/kg	ND	1.8	1.4	78	33-130	
Diethylphthalate	mg/kg	ND	1.8	1.6	88	34-130	
Dimethylphthalate	mg/kg	ND	1.8	1.6	89	35-130	
Fluoranthene	mg/kg	ND	1.8	1.5	81	26-130	
Fluorene	mg/kg	ND	1.8	1.4	78	27-130	
Hexachloro-1,3-butadiene	mg/kg	ND	1.8	1.2	67	19-130	
Hexachlorobenzene	mg/kg	ND	1.8	1.5	80	31-130	
Hexachlorocyclopentadiene	mg/kg	ND	1.8	1.2	67	10-130	
Hexachloroethane	mg/kg	ND	1.8	1.1	63	21-130	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	1.8	1.6	91	16-130	v1
Isophorone	mg/kg	ND	1.8	1.4	79	29-130	
N-Nitroso-di-n-propylamine	mg/kg	ND	1.8	1.5	80	22-130	
N-Nitrosodimethylamine	mg/kg	ND	1.8	1.2	64	15-130	
N-Nitrosodiphenylamine	mg/kg	ND	1.8	1.6	86	30-130	
Naphthalene	mg/kg	ND	1.8	1.3	69	24-130	
Nitrobenzene	mg/kg	ND	1.8	1.3	70	25-130	
Pentachlorophenol	mg/kg	ND	3.6	3.4	93	10-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

MATRIX SPIKE SAMPLE: 4645054		92768492001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Phenanthrene	mg/kg	ND	1.8	1.5	81	28-130	
Phenol	mg/kg	ND	1.8	1.3	70	18-130	
Pyrene	mg/kg	ND	1.8	1.6	87	27-130	
Pyridine	mg/kg	ND	1.8	1.2	66	10-130	
2,4,6-Tribromophenol (S)	%				100	10-130	
2-Fluorobiphenyl (S)	%				63	10-130	
2-Fluorophenol (S)	%				59	10-130	
Nitrobenzene-d5 (S)	%				62	10-130	
Phenol-d6 (S)	%				60	10-130	
Terphenyl-d14 (S)	%				78	10-130	

SAMPLE DUPLICATE: 4645055

Parameter	Units	92768492002	Dup	RPD	Qualifiers
		Result	Result		
1,2,4-Trichlorobenzene	mg/kg	ND	ND		
1,2-Dichlorobenzene	mg/kg	ND	ND		
1,3-Dichlorobenzene	mg/kg	ND	ND		
1,4-Dichlorobenzene	mg/kg	ND	ND		
1-Methylnaphthalene	mg/kg	ND	ND		
2,2'-Oxybis(1-chloropropane)	mg/kg	ND	ND		
2,4,5-Trichlorophenol	mg/kg	ND	ND		
2,4,6-Trichlorophenol	mg/kg	ND	ND		
2,4-Dichlorophenol	mg/kg	ND	ND		
2,4-Dimethylphenol	mg/kg	ND	ND		
2,4-Dinitrophenol	mg/kg	ND	ND		v1
2,4-Dinitrotoluene	mg/kg	ND	ND		
2,6-Dinitrotoluene	mg/kg	ND	ND		
2-Chloronaphthalene	mg/kg	ND	ND		
2-Chlorophenol	mg/kg	ND	ND		
2-Methylnaphthalene	mg/kg	ND	ND		
2-Methylphenol(o-Cresol)	mg/kg	ND	ND		
2-Nitroaniline	mg/kg	ND	ND		
2-Nitrophenol	mg/kg	ND	ND		
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	ND		
3,3'-Dichlorobenzidine	mg/kg	ND	ND		
3-Nitroaniline	mg/kg	ND	ND		
4,6-Dinitro-2-methylphenol	mg/kg	ND	ND		v1
4-Bromophenylphenyl ether	mg/kg	ND	ND		
4-Chloro-3-methylphenol	mg/kg	ND	ND		
4-Chloroaniline	mg/kg	ND	ND		
4-Chlorophenylphenyl ether	mg/kg	ND	ND		
4-Nitroaniline	mg/kg	ND	ND		
4-Nitrophenol	mg/kg	ND	ND		
Acenaphthene	mg/kg	ND	ND		
Acenaphthylene	mg/kg	ND	ND		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

SAMPLE DUPLICATE: 4645055

Parameter	Units	92768492002 Result	Dup Result	RPD	Qualifiers
Aniline	mg/kg	ND	ND		
Anthracene	mg/kg	ND	ND		
Benzo(a)anthracene	mg/kg	ND	ND		
Benzo(a)pyrene	mg/kg	ND	ND		
Benzo(b)fluoranthene	mg/kg	ND	ND		
Benzo(g,h,i)perylene	mg/kg	ND	ND		
Benzo(k)fluoranthene	mg/kg	ND	ND		
Benzoic Acid	mg/kg	ND	ND		
Benzyl alcohol	mg/kg	ND	ND		
bis(2-Chloroethoxy)methane	mg/kg	ND	ND		
bis(2-Chloroethyl) ether	mg/kg	ND	ND		
bis(2-Ethylhexyl)phthalate	mg/kg	ND	ND		
Butylbenzylphthalate	mg/kg	ND	ND		
Chrysene	mg/kg	ND	ND		
Di-n-butylphthalate	mg/kg	ND	ND		
Di-n-octylphthalate	mg/kg	ND	ND		
Dibenz(a,h)anthracene	mg/kg	ND	ND		
Dibenzofuran	mg/kg	ND	ND		
Diethylphthalate	mg/kg	ND	ND		
Dimethylphthalate	mg/kg	ND	ND		
Fluoranthene	mg/kg	ND	ND		
Fluorene	mg/kg	ND	ND		
Hexachloro-1,3-butadiene	mg/kg	ND	ND		
Hexachlorobenzene	mg/kg	ND	ND		
Hexachlorocyclopentadiene	mg/kg	ND	ND		
Hexachloroethane	mg/kg	ND	ND		
Indeno(1,2,3-cd)pyrene	mg/kg	ND	ND		v1
Isophorone	mg/kg	ND	ND		
N-Nitroso-di-n-propylamine	mg/kg	ND	ND		
N-Nitrosodimethylamine	mg/kg	ND	ND		
N-Nitrosodiphenylamine	mg/kg	ND	ND		
Naphthalene	mg/kg	ND	ND		
Nitrobenzene	mg/kg	ND	ND		
Pentachlorophenol	mg/kg	ND	ND		
Phenanthrene	mg/kg	ND	ND		
Phenol	mg/kg	ND	ND		
Pyrene	mg/kg	ND	ND		
Pyridine	mg/kg	ND	ND		
2,4,6-Tribromophenol (S)	%	50	97		
2-Fluorobiphenyl (S)	%	36	70		
2-Fluorophenol (S)	%	52	67		
Nitrobenzene-d5 (S)	%	58	71		
Phenol-d6 (S)	%	53	69		
Terphenyl-d14 (S)	%	32	87		

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

QC Batch: 903093

Analysis Method: SW-846

QC Batch Method: SW-846

Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92768794001, 92768794002

SAMPLE DUPLICATE: 4648053

Parameter	Units	92769457001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	20.3	19.8	3	N2

SAMPLE DUPLICATE: 4648054

Parameter	Units	92769518011 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	10.4	10.2	2	N2

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

QC Batch:	2418715	Analysis Method:	SM 2540G
QC Batch Method:	SM 2540 G	Analysis Description:	Total Solids 2540 G-2011
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 92768794001

METHOD BLANK: R4158130-1 Matrix: Solid
Associated Lab Samples: 92768794001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Solids	%	0.00100		12/14/24 12:23	

LABORATORY CONTROL SAMPLE: R4158130-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	90.0-110	

SAMPLE DUPLICATE: R4158130-3

Parameter	Units	L1809317-11 Result	Dup Result	RPD	Qualifiers
Total Solids	%	81.5	81.2	0.328	

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QUALITY CONTROL DATA

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

QC Batch: 2418716

Analysis Method: SM 2540G

QC Batch Method: SM 2540 G

Analysis Description: Total Solids 2540 G-2011

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 92768794002

METHOD BLANK: R4158126-1

Matrix: Solid

Associated Lab Samples: 92768794002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Solids	%	0.00300		12/14/24 12:02	

LABORATORY CONTROL SAMPLE: R4158126-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	90.0-110	

SAMPLE DUPLICATE: R4158126-3

Parameter	Units	L1809239-03 Result	Dup Result	RPD	Qualifiers
Total Solids	%	83.1	83.9	0.865	

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QUALIFIERS

Project: City of Graham-Sesquicentennia
Pace Project No.: 92768794

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 92768794001

- [1] Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data.

Sample: 92768794002

- [1] Chlorinated Acid Herbicides (GC) by Method 8151A - Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data.

ANALYTE QUALIFIERS

- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P9 RPD between the primary and confirmatory analysis exceeded 40%.
R1 RPD value was outside control limits.

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QUALIFIERS

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

ANALYTE QUALIFIERS

- | | |
|----|---|
| v1 | The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias. |
| v2 | The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard. |
| v3 | The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias. |

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: City of Graham-Sesquicentennia

Pace Project No.: 92768794

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92768794001	B-1	8151A	2419346	EPA 8151A	2419346
92768794002	B-2	8151A	2419346	EPA 8151A	2419346
92768794001	B-1	EPA 7199	902486	EPA 7199	902642
92768794002	B-2	EPA 7199	902486	EPA 7199	902642
92768794001	B-1	EPA 3546	902495	EPA 8081B	903157
92768794002	B-2	EPA 3546	902495	EPA 8081B	903157
92768794001	B-1	EPA 3546	902499	EPA 8082A	903159
92768794002	B-2	EPA 3546	902499	EPA 8082A	903159
92768794001	B-1	EPA 3050B	902564	EPA 6010D	902693
92768794002	B-2	EPA 3050B	902564	EPA 6010D	902693
92768794001	B-1	EPA 7471B	904043	EPA 7471B	904244
92768794002	B-2	EPA 7471B	904043	EPA 7471B	904244
92768794001	B-1	EPA 3546	902502	EPA 8270E	902878
92768794002	B-2	EPA 3546	902502	EPA 8270E	902878
92768794001	B-1	EPA 5035A/5030B	903088	EPA 8260D	903338
92768794002	B-2	EPA 5035A/5030B	903088	EPA 8260D	903338
92768794001	B-1	SW-846	903093		
92768794002	B-2	SW-846	903093		
92768794001	B-1	SM 2540 G	2418715	SM 2540G	2418715
92768794002	B-2	SM 2540 G	2418716	SM 2540G	2418716

REPORT OF LABORATORY ANALYSIS

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Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kirex Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company Name: ECS Southeast-Charlotte
Street Address: 1900 Center Park Drive
Suite A
Charlotte, NC 28217

Contact/Report To: Seth Greene
Phone #: 704-213-5425
E-Mail: sgreene@ecslimited.com
Cc E-Mail:

Customer Project #:
Project Name: City of Graham-Sesquicentennial Park

Site Collection Info/Facility ID (as applicable):

Invoice To: AP-ECS Charlotte
Invoice E-Mail: ecs-49@ecslimited.com
Purchase Order # (if applicable): 24488
Quote #:

Time Zone Collected: [] AK [] PT [] MT [] CT [] ET
Data Deliverables: Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [] Yes [] No
County / State origin of sample(s): North Carolina

[] Level II [] Level III [] Level IV
[] EQUIS

Rush (Pre-approval required):
Date Results: [] Same Day [] 1 Day [] 2 Day [] 3 Day [] Other
Field Filtered (if applicable): [] Yes [] No
Analysis: DW PWSID # or WW Permit # as applicable:

[] Other
Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID

B-1	SS	G			12/11/24	12:45		
B-2	SS	G			12/11/24	13:45		

Additional Instructions from Pace®:

Collected By: Sarah Ward
Signature: *[Signature]*

Relinquished by Company (Signature): *[Signature]* ECS
Date/Time: 12/11/24 15:25
Received by Company (Signature): *[Signature]*

Relinquished by Company (Signature):

Date/Time: Received by Company (Signature):

Relinquished by Company (Signature):

Date/Time: Received by Company (Signature):



W0#: 92768794
92768794

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) Erlenmeyer, (8) Test Tube, (9) 90mL, (10) Other
***Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MnO2, (11) Other

Lab Use Only
Proj. Mgr: Angela Baioni
Accession / Client ID:
Table #: 15961
Profile / Template: EZ 3182405
Prelog / Bottle Ord. ID:
Sample Comment

Preservation non-conformance identified for sample.

Customer Remarks / Special Conditions / Possible Hazards:

Thermometer ID: 1
Correction Factor (°C): -0.01
Obs. Temp. (°C): 12.5
Corrected Temp. (°C): 12.5
Date/Time: 12/11/24 15:25
Tracking Number:

Delivered by: [] The Person [] Courier

[] FedEx [] UPS [] Other

Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at <https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/>

	DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt
	Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☒Sample Condition
Upon Receipt

Client Name:

CES

Project #:

92768794

Courier:

☐ Commercial☐ Fed Ex☐ UPS☐ USPS☐ Client☐ Pace☐ Other: _____

Custody Seal Present?

☐ Yes☒ No

Seals Intact?

☐ Yes☐ No☒ N/A

Date/Initials Person Examining Contents: 12-11-24 AR

Packing Material:

☐ Bubble Wrap☒ Bubble Bags☐ None☐ Other

Thermometer:

☐ IR Gun ID: 1002

Type of Ice:

☐ Wet☐ Blue☐ None

Cooler Temp:

12.5

Correction Factor:

Add/Subtract (°C)

-0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

12.4

USDA Regulated Soil (☐ N/A, water sample)Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☒ NoDid samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

			Comments/Discrepancy:
Chain of Custody Present?	☒ Yes	☐ No ☐ N/A	1.
Samples Arrived within Hold Time?	☒ Yes	☐ No ☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☒ No ☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☐ No ☐ N/A	4.
Sufficient Volume?	☒ Yes	☐ No ☐ N/A	5.
Correct Containers Used?	☒ Yes	☐ No ☐ N/A	6.
-Pace Containers Used?	☒ Yes	☐ No ☐ N/A	
Containers Intact?	☐ Yes	☐ No ☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No ☐ N/A	8.
Sample Labels Match COC?	☒ Yes	☐ No ☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: SA			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No ☒ N/A	10.
Trip Blank Present?	☐ Yes	☐ No ☒ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No ☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____

Date/Time: _____

Project Manager SCURF Review: _____

Date: _____

Project Manager SRF Review: _____

Date: _____



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

92768794

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client _____ Profile/EZ (Circle one) _____ Notes _____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGfU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
CC																												
1									S												1							
2									S												1							
3																												
4																												
5																												
6																												
7																												
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11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E



Customer: ECS Southeast, LLP
4811 Koger Blvd
Greensboro, NC 27407

Attn: Olivia Richard
Alex Sayre

Lab Order ID: 10070638
Analysis: PLM
Date Received: 12/11/2024
Date Reported: 12/17/2024

Project: City of Graham - Sesquicentennial Park

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
ACM-B2-B01	Gray and black building material (3.5'-5-)	None Detected		100% Other	Black, Gray Non-Fibrous Heterogeneous
10070638_0005					Dissolved, Crushed
ACM-B2-B02	Gray and black building material (3.5'-5-)	None Detected		100% Other	Black, Gray Non-Fibrous Heterogeneous
10070638_0006					Dissolved, Crushed

Disclaimer: Due to the nature of the EPA 600 method, asbestos may not be detected in samples containing low levels of asbestos. We strongly recommend that analysis of floor tiles, vermiculite, and/or heterogenous soil samples be conducted by TEM for confirmation of "None Detected" by PLM. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government. Analytical uncertainty available upon request. Scientific Analytical Institute participates in the NVLAP Proficiency Testing program. Unless otherwise noted blank sample correction was not performed. Estimated MDL is 0.1%.

Charmel Dozier (2)

Analyst

Approved Signatory

Company Contact Information		
Company: ECS Southeast LLC	Contact: Olivia Richard, Alex Sayre	
Address: 4811 Koger Boulevard	Phone ☐ :	
Greensboro NC 27607	Fax ☐ :	
	Email ☒ : ORichard@ecslimited.com	
	ASayre@ecslimited.com	
Billing/Invoice Information		Turn Around Times
Company: Same	90 Min. ☐	48 Hours ☐
Contact:	3 Hours ☐	72 Hours ☐
Address:	6 Hours ☐	96 Hours ☐
	12 Hours ☐	120 Hours ☒
	24 Hours ☐	144+ Hours ☐

PO Number: 49-24488 (O. Richard)
Project Name/Number: City of Graham - Sesquicentennial Park

Asbestos Test Types		
PLM EPA 600/R-93/116	☒	
(PLM) Positive stop	☒	
PLM Point Count 400 (PT4)	☐	
PLM Point Count 1000 (PTM)	☐	
PCM NIOSH 7400-A Rules (PCM)	☐	
B Rules (PCB) ☐	TWA (PTA) ☐	
TEM AHERA (AHE)	☐	
TEM Level II (LII)	☐	
TEM NIOSH 7402 (TNI)	☐	
TEM Bulk Qualitative (TBL)	☐	
TEM Bulk Chatfield (TBS)	☐	
TEM Bulk Quantitative (TBQ)	☐	
TEM Wipe ASTM D6480-05	☐	
TEM Microvac ASTM D5755-02	☐	
TEM Water EPA 100.2 (TW1)	☐	
Other: TEM Soil Qualitative	☒	

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Disseminated by	Date/Time	Received by	Date/Time
<i>Oliver</i>	12/11/24 15:15	<i>CL</i>	12/11/24 3:15 pm

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Results of Testing by the Protocol for Screening Soil and Sediment Samples for Asbestos Content

ASTM - Standard D7521-16

Customer: ECS Southeast, LLP
4811 Koger Blvd
Greensboro, NC 27407

Attn: Olivia Richard
Alex Sayre

Lab Order ID: 10070638

Analysis: SST

Date Received: 12/11/2024

Date Reported: 12/18/2024

Project: City of Graham - Sesquicentennial Park

Sample ID	Description	Assessment for Asbestos Presence (PLM)	Assessment for Asbestos Presence (TEM)
Lab Sample ID	Lab Notes		
ACM-B1-A01	Boring 1 - soil composite (6'-7.5')	None Detected	None Detected
10070638_0001			
ACM-B1-A02	Boring 1 - soil composite (8.5'-10')	None Detected	None Detected
10070638_0002			
ACM-B2-A01	Boring 2 - soil composite (1'-2.5')	None Detected	None Detected
10070638_0003			
ACM-B2-A02	Boring 2 - soil composite (6'-7.5')	None Detected	None Detected
10070638_0004			

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request.

Russell Shelton (4)

Analyst

Approved Signatory



Results of Testing by the Protocol for Screening Soil and Sediment Samples for Asbestos Content

ASTM - Standard D7521-16

Customer: ECS Southeast, LLP
4811 Koger Blvd
Greensboro, NC 27407

Attn: Olivia Richard
Alex Sayre

Lab Order ID: 10070638

Analysis: SST

Date Received: 12/11/2024

Date Reported: 12/18/2024

Project: City of Graham - Sesquicentennial Park

Summary of Procedure

Step A- Soil Screening and Analysis by PLM:

The soil submitted was initially examined in dry bulk by stereomicroscope and Polarized Light Microscopy (PLM). Excessive moisture was driven off in a low temperature oven. If no asbestos was detected in the primary scan, random portions (splits) of the soil were then suspended in water, stirred, agitated, and then washed through a fine sieve: 60 mesh (250 μ m). The suspension was decanted for later analysis by Transmission Electron Microscopy (TEM, step B below), if necessary (absence of asbestos found in the light microscopy analyses of screened size fractions, and requested by you, our customer). The resultant material was cleaned and examined by stereomicroscope in clean water slurry, with suspect fibers and bundles picked out and dried for analysis by PLM. It is estimated that this screening detection limit is 1% by volume. Results are reported qualitatively (presence or absence and asbestos type), if observed.

Step B- Suspension:

The suspension decanted in the previous step was analyzed by TEM if no asbestos was found in the light microscopy analyses, and was requested. After a 2-minute treatment in an ultrasonic bath, aliquots of the suspension were filtered through a 0.2 μ m filter, which were then dried, collapsed, carbon-coated, and dissolved to create a replicate film with contained particulate on a copper mesh grid for TEM analysis. TEM analysis was conducted on a JEOL 2000, equipped with Energy-Dispersive X-Ray Analyzer (EDXA) and Selected Area Electron Diffraction (SAED). Volumes filtered and areas analyzed are adjusted to obtain an estimated analytical sensitivity of 1.0 X 10⁶ fibers/gram, unless a lower detection limit is requested. Results are reported qualitatively (presence or absence and asbestos type), if observed.

Disclaimer: This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. Analytical uncertainty available upon request.

Russell Shelton (4)

Analyst

Approved Signatory

Company Contact Information		
Company: ECS Southeast LLC	Contact: Olivia Richard, Alex Sayre	
Address: 4811 Koger Boulevard	Phone ☐ :	
Greensboro NC 27607	Fax ☐ :	
	Email ☒ : ORichard@ecslimited.com	
	ASayre@ecslimited.com	
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PO Number: 49-24488 (O. Richard)
Project Name/Number: City of Graham - Sesquicentennial Park

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TEM AHERA (AHE)	☐	
TEM Level II (LII)	☐	
TEM NIOSH 7402 (TNI)	☐	
TEM Bulk Qualitative (TBL)	☐	
TEM Bulk Chatfield (TBS)	☐	
TEM Bulk Quantitative (TBQ)	☐	
TEM Wipe ASTM D6480-05	☐	
TEM Microvac ASTM D5755-02	☐	
TEM Water EPA 100.2 (TW1)	☐	
Other: TEM Soil Qualitative	☒	

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Disseminated by	Date/Time	Received by	Date/Time
<i>Alina</i>	12/11/24 15:15	<i>CL</i>	12/11/24 3:15 pm

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