APPENDIX A
TEST PIT LOGS

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**J3**
			Sheet 1 of:	1
			Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			***Start Date:***	4/30/13
Location:		***Operator:***		***Finish Date:***	4/30/13
Client:	HARBORcenter Development	***Equipment:***	Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					Start- 10:09 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9	S-1			***Clay (black sludge - saturated)***	
10				***Silty Clay (saturated)***	
11	S-2			***Silty Clay (dark grey***	Backfill - 10:19 AM
12				***Silty Clay (dry - trace organic matter - dark grey - high pH)***	
13					
14					
15					
16					
17				***Samples collected for the following analysis:***	
18				***1. VOC (EPA Method 8260)***	
19				***2. SVOC (EPA Method 8270)***	
20				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
21				***4. PCB (EPA Method 8082)***	
22				***5. Pesticides (EPA Method 8082)***	
23				***6. Herbicides (EPA Method 8151)***	
24				***7. Cyanide (EPA Method 9012A)***	
25				***8. Hex Chome (EPA Method 7196)***	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	C1
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/30/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/30/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Concrete	12:52
1				***FILL***	
2					
3					
4					
5					
6					
7					
8	S-1			Silty Clay	Backfill 15:00
9					
10					
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**			**Test Pit No.**	**C3**
					Sheet 1 of:	1
					Project No.:	M86.001.001
Project Name:	Test Pit Investigation - HARBORcenter Site				**Start Date:**	4/24/13
Location:	Webster Block; 75 Main St.	**Operator:**			**Finish Date:**	4/24/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.		**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., caving of sidewalls, excavation difficulties, PID readings)
					start time - 10:06 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					Little Water
9					
10				***Black Soil***	
11					
12				***Native***	backfill - 10:26 AM
13					
14					
15					
16				***Samples collected for the following analysis:*** ***1. VOC (EPA Method 8260)***	
17				***2. SVOC (EPA Method 8270)*** ***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)*** ***5. Pesticides (EPA Method 8082)***	
19				***6. Herbicides (EPA Method 8151)*** ***7. Cyanide (EPA Method 9012A)***	
20				***8. Hex Chome (EPA Method 7196)***	
21					
22					
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	C4
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Native: Silty Clay (soft - dark grey - high organic content)***	
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	D1
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001
Project Name:	Test Pit Investigation - HARBORcenter Site	Start Date:	4/31/2013
Location:	Webster Block; 75 Main St.	Finish Date:	4/31/2013
Client:	HARBORcenter Development	Inspector:	C. Martin

Operator:

Equipment: Track mounted Exc.

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				c - coarse, m - medium, f - fine; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	start time - 7:06 AM
				Concrete	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8	S-1			***Silty Clay***	backfill - 2:10 PM
9					
10					
11					
12					
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)***	
17				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)***	
19				***5. Pesticides (EPA Method 8082)***	
20				***6. Herbicides (EPA Method 8151)***	
21				***7. Cyanide (EPA Method 9012A)***	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	D3
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					Start - 10:30 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					Little Water
9					
10				***Native***	Backfill - 10:39 AM
11					
12					
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)***	
17				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)***	
19				***5. Pesticides (EPA Method 8082)***	
20				***6. Herbicides (EPA Method 8151)***	
21				***7. Cyanide (EPA Method 9012A)***	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	D4
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				c - coarse, m - medium, f - fine; a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	
					start time - 9:50 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Black Sludge with Silty Clay - saturated***	
11	S-2			***Native : Silty Clay (grey to olive - soft - moist - organic matter)***	
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	D5
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					start - 10:00 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8				***Coarse Sand & Gravel -***	
9					
10	S-1			***Silty Clay (trace organic matter - dark grey - dark grey)***	
11					
12	S-2				
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
				2. SVOC (EPA Method 8270)	
16				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
				4. PCB (EPA Method 8082)	
17				***5. Pesticides (EPA Method 8082)***	
				6. Herbicides (EPA Method 8151)	
18				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	
19					
20					
21					
22					
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	E1
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	5/2/12
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/12
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9				***Silty Clay***	
10	S-1			***Silty Clay (trace organic matter - dark grey - dark grey)***	
11					
12					
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)*** ***3. TAL Metals (EPA Method 6010, 7470, 7471)*** ***4. PCB (EPA Method 8082)***	
17				***5. Pesticides (EPA Method 8082)*** ***6. Herbicides (EPA Method 8151)***	
18				***7. Cyanide (EPA Method 9012A)*** ***8. Hex Chome (EPA Method 7196)***	
19					
20					
21					
22					
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	E3
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Reworked Fill Gravel - 0.5" - irregular with black fill - organic matter - some Silt and Clay***	
11					
12	S-2			***Silty Clay (soft - organic matter)***	
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)***	
17				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)***	
19				***5. Pesticides (EPA Method 8082)***	
20				***6. Herbicides (EPA Method 8151)***	
21				***7. Cyanide (EPA Method 9012A)***	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	E4
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Native: Silty Clay***	
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	E5
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Native: Silty Clay (dense)***	
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**F1**
			Sheet 1 of:	1
			Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			***Start Date:***	5/2/13
Location:	Webster Block; 75 Main St.	***Operator:***		***Finish Date:***	5/2/13
Client:	HARBORcenter Development	***Equipment:***	Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					10:13
1				***FILL***	
2					
3					
4					
5					
6					
7					
8	S-1			***Native: Silty Clay - dark grey - organic matter*** ***soft - moist to wet***	Backfill 10:20
9					
10					
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:*** ***1. VOC (EPA Method 8260)***	
19				***2. SVOC (EPA Method 8270)*** ***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
20				***4. PCB (EPA Method 8082)*** ***5. Pesticides (EPA Method 8082)***	
21				***6. Herbicides (EPA Method 8151)*** ***7. Cyanide (EPA Method 9012A)***	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	F2
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Silty Clay***	
11					
12					
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)***	
17				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)***	
19				***5. Pesticides (EPA Method 8082)***	
20				***6. Herbicides (EPA Method 8151)***	
21				***7. Cyanide (EPA Method 9012A)***	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	F3
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/22/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/22/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7				***Foundations***	
8					
9					
10	S-1			***Black Sludge running into pit***	
11					
12	S-2			***Native: Silty Clay (grey to olive - dense - high plasticity)***	
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)***	
17				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)***	
19				***5. Pesticides (EPA Method 8082)***	
20				***6. Herbicides (EPA Method 8151)***	
21				***7. Cyanide (EPA Method 9012A)***	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**			**Test Pit No.**	**F4**
					Sheet 1 of:	1
					Project No.:	M86.001.001
Project Name:	Test Pit Investigation - HARBORcenter Site				**Start Date:**	4/24/13
Location:	Webster Block; 75 Main St.	**Operator:**			**Finish Date:**	4/24/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.		**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., caving of sidewalls, excavation difficulties, PID readings)
					start time - 10:06 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					Little Water
9					
10				***Black Soil***	
11					
12				***Native***	backfill - 10:26 AM
13					
14					
15					
16				***Samples collected for the following analysis:*** ***1. VOC (EPA Method 8260)***	
17				***2. SVOC (EPA Method 8270)*** ***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)*** ***5. Pesticides (EPA Method 8082)***	
19				***6. Herbicides (EPA Method 8151)*** ***7. Cyanide (EPA Method 9012A)***	
20				***8. Hex Chome (EPA Method 7196)***	
21					
22					
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	F5
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					Start - 11:12 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10				***Gravel Fill***	
11					
12					
13				***Native***	
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**G2**
			Sheet 1 of:	1
			Project No.:	M86.001.001
Project Name:	Test Pit Investigation - HARBORcenter Site		***Start Date:***	5/2/13
Location:	Webster Block; 75 Main St.	***Operator:***	***Finish Date:***	5/2/13
Client:	HARBORcenter Development	***Equipment:*** Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	7:50
1				***FILL***	
2					
3					
4					
5					
6					
7	▼			***Hole Flooded***	
8	S-1			***Soft Silty Clay - black sludge organics - saturated***	
9					
10					
11	S-2			***Silty Clay - Native***	Backfill 8:05
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	G3
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Silty Clay - grey - dense - moist***	
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**G4**
			Sheet 1 of:	1
			Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			***Start Date:***	4/18/12
Location:	Webster Block; 75 Main St.	***Operator:***		***Finish Date:***	4/18/12
Client:	HARBORcenter Development	***Equipment:***	Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL: (bricks, concrete, slag, coal, reworked soil,***	Test Pile
2				***clay, silt, trace sand black, ash, metal,***	Pit
				organic matter, general C&D debris)	
3					
4					
5					
6					
7					
8					
9					
10				***Native - Clean Coarse Sand and Gravel (saturated)***	
11					
12				***S-1 : dark grey to black coarse sand and gravel***	
				(0.5" smooth rounded - saturated)	
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
				1. VOC (EPA Method 8260)	
19				***2. SVOC (EPA Method 8270)***	
				3. TAL Metals (EPA Method 6010, 7470, 7471)	
20				***4. PCB (EPA Method 8082)***	
				5. Pesticides (EPA Method 8082)	
21				***6. Herbicides (EPA Method 8151)***	
				7. Cyanide (EPA Method 9012A)	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**G5**
			Sheet 1 of:	1
			Project No.:	M86.001.001
Project Name:	Test Pit Investigation - HARBORcenter Site		***Start Date:***	4/24/12
Location:	Webster Block; 75 Main St.	***Operator:***	***Finish Date:***	4/24/12
Client:	HARBORcenter Development	***Equipment:*** Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					Start - 11:30 AM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10				***Native***	Backfill - 11:36 AM
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**H1**
			Sheet 1 of:	1
			Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			***Start Date:***	5/2/13
Location:	Webster Block; 75 Main St.	***Operator:***		***Finish Date:***	5/2/13
Client:	HARBORcenter Development	***Equipment:***	Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
1				***FILL***	
2					
3					
4					
5					
6					
7					
8				***Native: Silty Clay & Sandy SILT - saturated***	
9					
10					
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	H2
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/12
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/12
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Silty Clay (dense - grey - moist)***	
11					
12					
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)***	
17				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
18				***4. PCB (EPA Method 8082)***	
19				***5. Pesticides (EPA Method 8082)***	
20				***6. Herbicides (EPA Method 8151)***	
21				***7. Cyanide (EPA Method 9012A)***	
22				***8. Hex Chome (EPA Method 7196)***	
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	H3
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10	S-1			***Native: Silty Clay - dark grey - moist - dense with organic matter***	
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	H4
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/12
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/12
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					Start - 1:00 PM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9				***Foundations***	
10				***Black Organic Sludge H2S Odor***	
11				***Black Fill coarse Sand and Gravel***	
12					
13					
14				***Native : Sand SILT (grey brown - saturated)***	
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**H5**
			Sheet 1 of:	1
			Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			***Start Date:***	4/24/12
Location:	Webster Block; 75 Main St.	***Operator:***		***Finish Date:***	4/24/12
Client:	HARBORcenter Development	***Equipment:***	Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					Start - 12:41 PM
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9			▼	***Water***	
10				***Native; Silty Sand (olive - wet to saturated - fine sand)***	Backfill - 12:51 PM
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**J1**
			Sheet 1 of:	1
			Project No.:	M86.001.001
Project Name:	Test Pit Investigation - HARBORcenter Site		***Start Date:***	4/30/13
Location:	Webster Block; 75 Main St.	***Operator:***	***Finish Date:***	4/30/13
Client:	HARBORcenter Development	***Equipment:*** Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
					2:35
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					Backfill 2:43
				Native	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S COMPANIES	C&S Engineers, Inc. 90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com	**TEST PIT**	***Test Pit No.***	**J2**
			Sheet 1 of:	1
			Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			***Start Date:***	4/30/13
Location:	Webster Block; 75 Main St.	***Operator:***		***Finish Date:***	4/30/13
Client:	HARBORcenter Development	***Equipment:***	Track mounted Exc.	***Inspector:***	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	c - coarse m - medium f - fine **MATERIAL DESCRIPTION** S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey a - and - 35-50% s - some - 20-35% l - little - 10-20% t - trace - 0-10%	**COMMENTS** (e.g., caving of sidewalls, excavation difficulties, PID readings)
					3:00
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9					
10				***Native: Sandy SILT***	Backfill 3:05
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

C&S Engineers, Inc.	TEST PIT	Test Pit No.	J3
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/12
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/12
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8					
9				***Silty Clay***	
10	S-1			***Silty Clay (trace organic matter - dark grey - dark grey)***	
11					
12					
13					
14				***Samples collected for the following analysis:***	
15				***1. VOC (EPA Method 8260)***	
16				***2. SVOC (EPA Method 8270)*** ***3. TAL Metals (EPA Method 6010, 7470, 7471)*** ***4. PCB (EPA Method 8082)***	
17				***5. Pesticides (EPA Method 8082)*** ***6. Herbicides (EPA Method 8151)***	
18				***7. Cyanide (EPA Method 9012A)*** ***8. Hex Chome (EPA Method 7196)***	
19					
20					
21					
22					
23					
24					
25					

C&S Engineers, Inc.	TEST PIT	Test Pit No.	J4
90 Broadway Buffalo, New York 14203 Phone: 716-847-1630 Fax: 716-847-1454 www.cscos.com		Sheet 1 of:	1
		Project No.:	M86.001.001

Project Name:	Test Pit Investigation - HARBORcenter Site			**Start Date:**	4/24/13
Location:	Webster Block; 75 Main St.	**Operator:**		**Finish Date:**	4/24/13
Client:	HARBORcenter Development	**Equipment:**	Track mounted Exc.	**Inspector:**	C. Martin

Depth (ft)	Sample No.	Symbol	Exc. Depth	MATERIAL DESCRIPTION c - coarse, m - medium, f - fine a - and - 35-50%, s - some - 20-35%, l - little - 10-20%, t - trace - 0-10% S - Sand, $ - Silt, G - Gravel, C - Clay, cly - clayey	COMMENTS (e.g., caving of sidewalls, excavation difficulties, PID readings)
				Asphalt	
1				***FILL***	
2					
3					
4					
5					
6					
7					
8				***Silty Clay***	
9					
10				***Silty Clay - moist - 50% silt and organic matter - dark grey***	
11					
12					
13					
14					
15					
16					
17					
18				***Samples collected for the following analysis:***	
19				***1. VOC (EPA Method 8260)***	
20				***2. SVOC (EPA Method 8270)***	
21				***3. TAL Metals (EPA Method 6010, 7470, 7471)***	
22				***4. PCB (EPA Method 8082)***	
23				***5. Pesticides (EPA Method 8082)***	
24				***6. Herbicides (EPA Method 8151)***	
25				***7. Cyanide (EPA Method 9012A)***	
				8. Hex Chome (EPA Method 7196)	

APPENDIX C
DAILY LOGS

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, March 26, 2013

Attachments:

1. Site Activities Map
2. Photo Log
3.

Contractor Work Hours: 7:00 AM to 3:30 AM
C&S Work Hours: 10:00 AM to 11:00 AM

	AM	PM
Weather	overcast	
Temp.	35 F	
Pecip.	NA	
Wind Speed	5 mph	
Wind Direct.	W	

Equipment Calibration		
Time	Type	Result

Work Area Description:
Center of Washington Street in front of HSBC Atrium entrance.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Origin	Quantity

DAILY WORK REPORT

3/26/2013

Description of Work:

10:00 AM Called to respond to a ceramic pipe found in storm water trench that contained black oily sludge

10:15 AM Pinto construction installing new storm water system down the center of Washingtion Street. Trench approximately 4 feet wide and 8-10 feet deep. Ceramic pipe had been removed and Pinto was plugging both openings of the pipe with concrete block and portland cement. Pinto was pumping water from trench onto Washington Street. A sheen was observed on the discharge water. Discharged water was flowing from trench to a storm drain inlet at the corner of Washington and Perry Streets. Pinto stopped pumping water out of the trench when C&S arrived onsite. Black sludge and water within the trench was mixed with the surrounding soil and dumped onto the stockpile that will be sent to a landfill.

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, April 09, 2013

Attachments:
1. Site Activities Map
2.
3.

Contractor Work Hours: 7:00 AM to 3:30 AM
C&S Work Hours: 1:00 PM to 1:30 PM

	AM	PM
Weather		Clear
Temp.		65 F
Pecip.		NA
Wind Speed		10
Wind Direct.		S

Equipment Calibration		
Time	Type	Result

Work Area Description:

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Origin	Quantity

DAILY WORK REPORT

4/9/2013

Description of Work:

1:15 PM Utility work along Perry and Scott Streets. Excavated fill/soil dumped onto stockpile along Washington Street. Excavated material generally consists of gravel, industrial fill, construction and demolition debris.

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, April 16, 2013

Attachments:
1. Site Activities Map
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	40 F	55 F
Pecip.	NA	NA
Wind Speed	0	5
Wind Direct.		E

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP DT[1]	0 cal
7:15 AM	UW DT	0 cal

Work Area Description:
Stockpile

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:15	Soil/Fill	MD[2]	70 TL[3]

DAILY WORK REPORT

4/16/2013

Description of Work:

7:00 AM Setup UW (upwind) and DW (downwind) air monitors. Mortenson setup BCP sign.
Cerrione began removal of material from stockpile. Fill/soil was sent to Modern and large pieces of asphalt and concrete will be sent for recycling.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration
Avg
Min
Max
TWA

DW Mass Concentration
Avg
Min
Max
TWA

DW VOC Concentration
Avg
Min
Max
TWA

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Wednesday, April 17, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	45 F	55 F
Pecip.	NA	NA
Wind Speed	5	10
Wind Direct.		E

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP DT[1]	0 cal
7:15 AM	UW DT	0 cal
7:15 AM	CAMP PID	100.1 ppm

Work Area Description:
Stockpile

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:15	Soil/Fill	MD[2]	1550 T[3]

DAILY WORK REPORT

4/17/2013

Description of Work:

7:00 AM Setup UW (upwind) and DW (downwind) air monitors. Mortenson setup BCP sign.
Cerrione began removal of material from stockpile. Fill/soil was sent to Modern and large pieces of asphalt and concrete will be sent for recycling.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.047
Min	0.011
Max	0.53

DW Mass Concentration	
Avg	0.031
Min	0.019
Max	0.065

DW VOC Concentration	
Avg	0.31
Min	0.11
Max	0.77

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, April 18, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Clear
Temp.	60 F	75 F
Pecip.	NA	NA
Wind Speed	5	20
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result

Work Area Description:
Stockpile and area on the corner of Washington and Perry Streets.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Soil/Fill	MD[2]	32 TL[3]

DAILY WORK REPORT

4/18/2013

Description of Work:

7:4600 AM Excavated pit for test pile on the corner of Washington and Perry. Native soil at 10 ft.
8:30 AM Began loading concrete and asphalt to Petagula.
Discussed with Mortenson the DEC concern about dust monitoring. Mortenson will deal with dust
10:30 AM control.
12:00 PM Soil sample collected at G4 grid location

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.083
Min	0
Max	0.281

DW Mass Concentration	
Avg	0.18
Min	0.033
Max	0.649

DW VOC Concentration	
Avg	0.33
Min	0
Max	1.1

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, April 19, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	70 F	40 F
Pecip.	NA	NA
Wind Speed	20	20
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:50 AM	CAMP DT[1]	0 cal
7:50 AM	CAMP PID	100.2 ppm
7:50 AM	DT	0 cal

Work Area Description:
Stockpile.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Soil/Fill	MD[2]	303.61 T[3]
8:30-4:00	Asphalt	PT	6 TL[4]

DAILY WORK REPORT

4/19/2013

Description of Work:

>Purged and sampled groundwater from MW-01 and MW-03.
>Removed material from stockpile.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.142
Min	0.02
Max	0.55

DW Mass Concentration	
Avg	0.027
Min	0.021
Max	0.049

DW VOC Concentration	
Avg	0.151
Min	0.016
Max	0.758

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Monday, April 22, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	40 F	60 F
Pecip.	NA	NA
Wind Speed	10	5
Wind Direct.	E	E

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP PID	100 ppm
7:15 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

4/22/2013

Description of Work:

>No material was excavated.
>Collected soil sample NW1 4-6 ft and NW2 10 ft from the northwest BCP boundary.
>Purged and sampled groundwater from MW-04.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.024
Min	0.022
Max	0.026

DW VOC Concentration	
Avg	0.307
Min	0
Max	0.563

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, April 23, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	40 F	60 F
Pecip.	NA	NA
Wind Speed	10	5
Wind Direct.	SE	SE

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP PID	100 ppm
7:15 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
	Hardscape	PT	3 TL^4

DAILY WORK REPORT

4/23/2013

Description of Work:

>No material was excavated.

>Collected soil sample NE1, NE2 and NW3. Collected soil samples from grid locations B3 and D2.

>Purged and sampled groundwater from MW-06.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.028
Min	0.028
Max	0.028

DW VOC Concentration	
Avg	0.173
Min	0.011
Max	0.605

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Wednesday, April 24, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	60 F	60 F
Pecip.	NA	NA
Wind Speed	10	10
Wind Direct.	SE	SE

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP PID	100 ppm
7:15 AM	CAMP DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary and test pit sampling.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
	Hardscape	PT	5 TL[4]

DAILY WORK REPORT

4/24/2013

Description of Work:

>No material was excavated.

>Collected soil samples from grid locations D3, C3, J4, H3, G3, H5, F4, G5, H4 and F5.

>Purged and sampled groundwater from MW-05 and MW-09.

Air monitoring was conducted at UW and DW locations.

DW Mass Concentration	
Avg	0.029
Min	0.018
Max	0.081

DW VOC Concentration	
Avg	0.02
Min	0
Max	0.268

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, April 25, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	40 F	50 F
Pecip.	NA	NA
Wind Speed	10	10
Wind Direct.	W	W

Equipment Calibration		
Time	Type	Result
7:50 AM	CAMP DT[1]	0 cal
7:50 AM	CAMP PID	100.2 ppm

Work Area Description:
Pre-excavation along BCP boundary and test pit sampling.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

4/25/2013

Description of Work:

>No material was excavated.

>Purged and sampled groundwater from MW-05.

Air monitoring was conducted at UW and DW locations.

DW Mass Concentration	
Avg	0.029
Min	0.018
Max	0.081

DW VOC Concentration	
Avg	0.02
Min	0
Max	0.268

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, April 26, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	40 F	50 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	SW	SW

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT[1]	0 cal
7:30 AM	CAMP PID	100.2 ppm

Work Area Description:
Pre-excavation along BCP boundary and test pit sampling.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

4/26/2013

Description of Work:

>No material was excavated.

>Purged and sampled groundwater from MW-7A.

Air monitoring was conducted at UW and DW locations.

DW Mass Concentration	
Avg	0.033
Min	0
Max	0.087

DW VOC Concentration	
Avg	0.377
Min	0.173
Max	0.485

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Saturday, April 27, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	40 F	70 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	SE	S

Equipment Calibration		
Time	Type	Result
7:40 AM	CAMP DT[1]	0 cal
7:40 AM	CAMP PID	100.0 ppm
7:40 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

4/27/2013

Description of Work:

>No material was excavated.
>Sampled for QAQC from grid locations J4, H4 and F2.
>Pre-excavated along BCP boundary on Perry St.
>Asked Cerrone to separate concrete pulled from excavation due to black staining.
>Collected soil samples from pre-excavation trench. Collected SE3 8-10'; SE2 3-8'; SE1 0-8'; SW3 4-6'; SW3 9-10'; SW2 6-8' and SW2 8-9'.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.032
Min	0.026
Max	0.056

DW Mass Concentration	
Avg	0.026
Min	0.014
Max	0.095

DW VOC Concentration	
Avg	1.17
Min	0.024
Max	23.11

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Monday, April 29, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Overcast	Overcast
Temp.	55 F	65 F
Pecip.	NA	NA
Wind Speed	10	10
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT[1]	0 cal
7:30 AM	CAMP PID	100.1 ppm
7:30 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Hardscape	PT	9 TL[4]

DAILY WORK REPORT

4/29/2013

Description of Work:

>No material was excavated.
>Pre-excavation from Scott Street to Washington Street.
>Collected soil samples from pre-excavation trench. Collected NE4 3-8'; NE5 3-8'; NE4/NE5; SE4 and NE8.
>Between NE4 and NE5 hit abandoned water pipe. Portion of excavation flooded; black sludge trace sheen at 10 ft.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.034
Min	0.024
Max	0.048

DW Mass Concentration	
Avg	0.026
Min	0.016
Max	0.047

DW VOC Concentration	
Avg	0.33
Min	0.162
Max	0.685

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, April 30, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Overcast	Overcast
Temp.	60 F	70 F
Pecip.	NA	NA
Wind Speed	10	10
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT[1]	0 cal
7:30 AM	CAMP PID	100.1 ppm
7:30 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary and excavation of test pits.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Hardscape	PT	18 TL[4]

DAILY WORK REPORT

4/30/2013

Description of Work:

>No material was excavated.
>Pre-excavation from Scott Street to Washington Street.
>Collected soil samples from pre-excavation trench. Collected NE6 3-7' and NE7 4-8'.

>Collected soil samples from test pits. Collected samples from grid locations B1, C1 and D1.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.135
Min	0.013
Max	0.62

DW Mass Concentration	
Avg	0.011
Min	0.005
Max	0.037

DW VOC Concentration	
Avg	0.598
Min	0.221
Max	1.863

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, May 02, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	60 F	70 F
Pecip.	NA	NA
Wind Speed	10	10
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT[1]	0 cal
7:30 AM	CAMP PID	100.0 ppm
7:30 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary and excavation of test pits.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Soil/Fill	MD[2]	409.36 T[3]

DAILY WORK REPORT

5/1/2013

Description of Work:

>Soil and fill was removed from stockpile. Material was sent to Modern Landfill.

>Collected soil samples from test pits. Collected samples from grid locations G1, G2, H1, F1 and E1.

>Collected duplicate soil sample DUP A and DUP B QAQC samples

DUP A= G2 9-10

DUP B= F1 8'

>Collected soil samples SE6 3-6', SE7 3-8', SE8 3-8' and SE9 6-8' from pre-excavation trench.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.021
Min	0.008
Max	0.062

DW Mass Concentration	
Avg	0.046
Min	0.015
Max	0.13

DW VOC Concentration	
Avg	0.474
Min	0.13
Max	0.617

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, May 02, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	60 F	70 F
Pecip.	NA	NA
Wind Speed	10	10
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT[1]	0 cal
7:30 AM	CAMP PID	100.0 ppm
7:30 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary and excavation of test pits.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Soil/Fill	MD[2]	409.36 T[3]

DAILY WORK REPORT

5/2/2013

Description of Work:

>Soil and fill was removed from stockpile. Material was sent to Modern Landfill.

>Collected soil samples from test pits. Collected samples from grid locations G1, G2, H1, F1 and E1.

>Collected duplicate soil sample DUP A and DUP B QAQC samples

DUP A= G2 9-10

DUP B= F1 8'

>Collected soil samples SE6 3-6', SE7 3-8', SE8 3-8' and SE9 6-8' from pre-excavation trench.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.021
Min	0.008
Max	0.062

DW Mass Concentration	
Avg	0.046
Min	0.015
Max	0.13

DW VOC Concentration	
Avg	0.474
Min	0.13
Max	0.617

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, May 03, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	60 F	70 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	E	E

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT[1]	0 cal
7:30 AM	CAMP PID	100.0 ppm
7:30 AM	DT	0 cal

Work Area Description:
Pre-excavation along BCP boundary and excavation of test pits.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

5/3/2013

Description of Work:

>No material was removed.

>Collected soil samples from test pits. Collected samples from grid locations A2, B2, B4, B5, and C5.

>Collected duplicate soil sample:

DUP D= B5 10'

DUP E= B4 13-14'

DUP F= B2 12'

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.044
Min	0.012
Max	0.174

DW Mass Concentration	
Avg	0.507
Min	0.063
Max	1.27

DW VOC Concentration	
Avg	0.36
Min	0
Max	0.58

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Monday, May 06, 2013

Attachments:

1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 3:30 PM
C&S Work Hours: 6:30 AM to 3:30 PM

	AM	PM
Weather	Clear	Clear
Temp.	50 F	75 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	SW	SW

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP DT[1]	0 cal
7:15 AM	UW DT	0 cal
7:15 AM	CAMP PID	0, 100.0

Work Area Description:
Removal of stockpiles of soil/fill and asphalt. Excavation of southeast corner to 7 to 10 feet below grade.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	138 TL[3]

DAILY WORK REPORT

5/6/2013

Description of Work:

7:00 AM Setup UW (upwind) and DW (downwind) air monitors.
8:00 AM Started mass excavation at grid J1 to -13' from benchmark. Native soil observed at 7' below ground surface.
11:27 AM Excavated area within grid J1, J2, H1 and H2. Total of 69 truck loads to Modern.
1:08 PM Total 101 truck loads sent to Modern.
2:49 PM Used water truck to control dust. Excavated area with grids J1, H1, G1, J2, H2 and G2.
3:30 PM Total of 138 truck loads fot soil/fill to Modern

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	2.86
Min	0
Max	30.7
TWA	2.86

DW Mass Concentration	
Avg	0.082
Min	0.008
Max	0.062
TWA	0.067

DW VOC Concentration	
Avg	0.5

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, May 07, 2013

Attachments:

1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 5:30 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	55 F	75 F
Pecip.	NA	NA
Wind Speed	0	10
Wind Direct.		SW

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP DT[1]	0 cal
7:15 AM	UW DT	0 cal
7:15 AM	CAMP PID	0, 100.0

Work Area Description:
Removal of stockpiles of soil/fill and asphalt. Excavation of southeast corner to 7 to 10 feet below grade.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	151 TL[3]

DAILY WORK REPORT

5/7/2013

Description of Work:

7:15 AM Setup UW (upwind) and DW (downwind) air monitors.

7:30 AM Collected soil samples from pre-excavation trench. SW4, NE9 and NE10.

SW4 3'-6'	Gravel with Sand (coarse to medium) some Silt and Clay (0.5 ppm)
NE9 3'-9'	Gravel with Sand (coarse to medium) some Silt and Clay (1 ppm)
NE10 3'-9'	Gravel with Sand (coarse to medium) some Silt and Clay (3 ppm)

10:30 AM Truck 102 drove offsite without canopy closed; Pariso rep was contacted to inform driver.

10:44 AM Total of 61 truck loads to Modern.

2:30 PM Requested that Cerrone preform dust control measures. Jeff (Cerrone) replyed that dust control will take place after trucks have stopped at 3:30 PM

3:44 PM Total of 151 truck loads fot soil/fill to Modern. Excavated grids G3, H3 and J3.

4:00 PM Applied water to ground surface to control dust.

4:30 PM Collected soil samples from pre-excavation trench (SW5).

SW5 0'-7' Gravel, coarse Sand crushed rock with trace Silt and Clay (0.5 ppm)

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	1.14
Min	0
Max	6.97
TWA	0

DW Mass Concentration	
Avg	0.026
Min	0.004
Max	0.075
TWA	0.027

DW VOC Concentration	
Avg	0.3

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Wednesday, May 08, 2013

Attachments:
1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 5:30 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Overcast	Overcast
Temp.	60 F	75 F
Pecip.	NA	Rain
Wind Speed	0	10
Wind Direct.		E

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP DT[1]	0 cal
7:15 AM	UW DT	0 cal
7:15 AM	CAMP PID	0, 100.0

Work Area Description:
Removal of stockpiles of soil/fill and asphalt. Excavation of southeast corner to 7 to 10 feet below grade.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	170 TL[3]

DAILY WORK REPORT

5/8/2013

Description of Work:

7:30 AM Setup UW (upwind) and DW (downwind) air monitors.
7:35 AM Truck drove offsite without canopy closed; Pariso rep was contacted to inform driver.
9:55 AM Total of 52 truck loads to Modern.
10:30 AM Start pre-excavation trench along Main Street. Collect composite soil sample from trench (SW 6).

SW6 3'-9' Gravel, crushed C&D, Silt and Clay - some black sludge (<1 ppm)

12:30 PM Met with Dave Locey (DEC) offsite. He stated that the DEC will approve backfill material by this afternoon.
2:44 PM Stopped air monitoring due to rain.
SW5 0'-7' Gravel, coarse Sand crushed rock with trace Silt and Clay (0.5 ppm)
3:30 PM Total of 170 trucks to Modern. Excavated grids G3, H3, J3 and portions of F1, F2 and F3.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.028
Min	0.021
Max	0.046
TWA	0.009

DW Mass Concentration	
Avg	0.046
Min	0.019
Max	0.243
TWA	0.042

DW VOC Concentration	
Avg	0.3

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, May 09, 2013

Attachments:

1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 5:30 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Overcast	Overcast
Temp.	60 F	60 F
Pecip.	Rain	Rain
Wind Speed	5	10
Wind Direct.	W	W

Equipment Calibration		
Time	Type	Result
8:15 AM	PID	0, 100.1

Work Area Description:
Excavation of the southeast BCP corner to 8 - 9 feet below ground surface.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	181 TL[3]

DAILY WORK REPORT

5/9/2013

Description of Work:

7:30 AM Setup UW (upwind) and DW (downwind) air monitors.

7:35 AM Advancement of excavation further northward and eastward including F1,2,3,4; portions of G4,H4, J4 and E2.

8:00 AM Pre-excavation of Main Street. One composite soil sample (SW7) was collected and will be analyzed for VOC, SVOC, and TAL Metals.

SW7 3'-5' Gravel, crushed C&D, Silt and Clay - some black fill (0.5 ppm)

8:40 AM Cerrone stated that the excavation along Washington Street a strong petroleum odor was present. Cerrone asked C&S to perform air monitoring around the work area. Air monitoring was conducted using a MiniRAE PID around the operator, at ground level, and around the laborer in the excavation. Concentrations of VOCs ranged from 0.6 to 4 ppm. Concentrations were unsustained and localized to a coarse sand and gravel material along the sheeting. Action levels for VOCs in the breathing zone are 5 ppm sustained over 15 minutes. These conditions were not observed at the time of the air monitoring; therefore no corrective action was taken.

10:00 AM Met with Dave Locey (DEC) onsite. C&S discussed site operations, air monitoring and the BCP line change along Main Street. DEC did not have a problem with the modification of the BCP line due to the location of the 48" water line.

10:20 AM Total of 70 truck loads to Modern.

2:30 PM An isolated pocket of black sludge was observed approximately 8 feet below ground surface in grid F3.

3:47 PM Total of 181 truck loads to Modern.

No air monitoring was conducted due to weather conditions.

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, May 10, 2013

Attachments:

1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 3:00 PM
C&S Work Hours: 6:30 AM to 3:00 PM

	AM	PM
Weather	Overcast	Overcast
Temp.	55 F	70 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result

Work Area Description:
Remove stockpiles of asphalt and concrete. Pre-excavated remainder of Main Street.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

5/10/2013

Description of Work:

10:30 AM Began pre-excavation trenching from the corner of Scott and Main Street advancing south. Fill was observed to be from ground surface to approximately 13 feet below grade. Fill material consists of brick rubble overlying black fill and wood planking. Collected composite soil sample.

NE4 0-10: crushed C&D some black sand, silt and clay (0.5 ppm).

11:00 AM Collected composite soil sample.

NE5 3'-8': fill, sand silt and clay (0.5 ppm)

1:30 PM Collected two composite soil samples.

NE6 5': fill, red brown clay, gravel and C&D debris (0.5 ppm)

NE7 5': fill, red brown clay, gravel and C&D debris (0.5 ppm)

No air monitoring was conducted.

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Monday, May 13, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	40 F	40 F
Pecip.	Rain	Rain
Wind Speed	15	15
Wind Direct.	W	W

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP DT[1]	0 cal
7:15 AM	CAMP PID	100.1 ppm
7:15 AM	DT	0 cal

Work Area Description:
Excavation of E grid line to final grade and backfilled.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Soil/Fill	MD[2]	1092.03 T[3]

DAILY WORK REPORT

5/13/2013

Description of Work:

>Soil and fill removed from site to Modern Landfill.

>Oversight of finished grade of grid locations J1, H1, G1, G2, H2, and J2.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.019
Min	0.005
Max	0.033

DW Mass Concentration	
Avg	0.028
Min	0.009
Max	0.119

DW VOC Concentration	
Avg	0.34
Min	0.248
Max	0.412

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, May 14, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	40 F	50 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT[1]	0 cal
7:30 AM	CAMP PID	100.1 ppm
7:30 AM	DT	0 cal

Work Area Description:
Excavation of SW corner advancing north and finished grade on SE corner.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:30-4:00	Soil/Fill	MD[2]	3008.92 T[3]

DAILY WORK REPORT

5/14/2013

Description of Work:

>Soil and fill removed from site to Modern Landfill.

>Oily fill and concrete rubble at grade. Asked operator to excavate rubble and fill deeper than the intended grade. Rubble and oily fill encountered in grid locations H4 and J4 at approximately 8 ft.

>Asked operator to scrape off black silt. Black silt no oily sheen or petroleum odor was observed. Excavated in area between H/J4 to approximately 10 ft.

>Disscussed with Cerrone they need to excavate further in areas of J5, J4, H5 and H4. C&S concern about black silt beneath oily fill. Sample was collected and will be sent to the lab for a 24 hr turnaround time.

>Oversight of finished grade at grid locations J5, J4, H5 and H4.

Air monitoring was conducted at UW and DW locations.

UW Mass Concentration	
Avg	0.036
Min	0.009
Max	0.068

DW Mass Concentration	
Avg	0.057
Min	0.024
Max	0.521

DW VOC Concentration	
Avg	0.157
Min	0.022
Max	0.309

1 - Dust Track DRXAerosol Monitor
2 - Modern Landfill
3 - Tons
4- Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Wednesday, May 15, 2013

Attachments:

1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 6:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Overcast	Clear
Temp.	50 F	70 F
Pecip.	NA	NA
Wind Speed	0	25
Wind Direct.	SE	SW

Equipment Calibration		
Time	Type	Result
8:00 AM	CAMP 1 DT[1]	0 cal
8:00 AM	CAMP1 PID	0, 100.1
8:00 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate fill material from Area A (southwest corner advancing north) and constructing access ramp and roadway along Washington Street. Backfill southeast corner.

Material Imported			
Time	Type	Origin	Quantity
8:00-6:30	Crushed Stn	BCS[4]	

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	123 TL[3]

DAILY WORK REPORT

5/15/2013

Description of Work:

7:30 AM Setup UW (upwind) and DW (downwind) air monitors.

8:00 AM Excavation of the southwest corner, Area A (G5,G4,F5, F4), advancing north along Main Street. Removal of fill material from 7 to 8 feet below ground surface. Construction of access ramp along Washington Street and backfill southeast corner (grids G1, G2, H1, H2, J1 and J2).

12:30 PM Installed geo-grid and began second lift of backfill.

2:00 PM Removed underground storage tank. No liquids were observed coming out of the tank when it was removed. Tank size is estimated at 50 gallons.

3:30 PM Total of 123 truck loads of soil/fill material was sent to Modern Landfill.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were above action levels for the day.

UW Mass Concentration

Avg	0.565
Min	0.027
Max	5.81
TWA	0.565

Elevated readings due to construction activities around the monitor, and do not represent conditions were corrective actions are needed.

DW Mass Concentration

Avg	0.114
Min	0.035
Max	0.23
TWA	0.074

DW VOC Concentration

Avg	0.3

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads
4- Buffalo Crushed Stone

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, May 16, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 6:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Overcast	Clear
Temp.	50 F	70 F
Pecip.	NA	NA
Wind Speed	0	25
Wind Direct.	SE	SW

Equipment Calibration		
Time	Type	Result
8:00 AM	CAMP 1 DT[1]	0 cal
8:00 AM	CAMP1 PID	0, 100.1
8:00 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate fill material from Area A (southwest corner advancing north) and constructing access ramp and roadway along Washington Street. Backfill southeast corner.

Material Imported			
Time	Type	Origin	Quantity
8:00-6:30	Crushed Stn	BCS[4]	

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	2561.27 T[3]

DAILY WORK REPORT

5/16/2013

Description of Work:

7:30 AM Setup UW (upwind) and DW (downwind) air monitors.

8:00 AM Excavation of the southwest corner, Area A (G5,G4,F5, F4), advancing north along Main Street. Removal of fill material from 7 to 8 feet below ground surface. Construction of access ramp along Washington Street and backfill southeast corner (grids G1, G2, H1, H2, J1 and J2).

9:00 AM Disscussed with Cerrone about implementing dust control measures on truck access and Perry Street.

9:45 AM Excavated test pit on grid location A3 and collected soil samples at 10 and 13 ft below ground surface.

12:00 PM Implemented dust control to truck road.

12:30 PM Installed geo-grid and began second lift of backfill.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were above action levels for the day.

UW Mass Concentration	
Avg	0.141
Min	0.07
Max	0.219

DW Mass Concentration	
Avg	0.073
Min	0.038
Max	0.449

DW VOC Concentration	
Avg	0.322
Min	0.307
Max	0.339

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons
4- Buffalo Crushed Stone

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, May 17, 2013

Attachments:
1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	55 F	70 F
Pecip.	NA	NA
Wind Speed	5	10
Wind Direct.	NE	NE

Equipment Calibration		
Time	Type	Result
8:30 AM	CAMP 1 DT[1]	0 cal
8:30 AM	CAMP1 PID	0, 100.1
8:30 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate Area A, southwest corner advancing north along Main Street, to approximately 8-9 feet below ground surface. Backfill Area D, southeast corner to grid line E, and a portion of Area A.

Material Imported			
Time	Type	Origin	Quantity
8:00-3:30	Crushed Stn	BCS	

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	3306.833

DAILY WORK REPORT

5/17/2013

Description of Work:

8:30 AM Setup UW (upwind) and DW (downwind) air monitors.

9:00 AM Dust was observed migrating offsite as trucks were leaving on Scott Street. Disscussed with Cerrone about dust control. Reducing the speed of the trucks accessing the site and spraying water on the access roads.

9:45 AM Began excavation of test pit in grid A3. Fill material was observed to extent to approximately 13' below ground surface. Native material at 13' consists of silty clay. Two samples were collected.

12:00 PM Applied water to truck road.

3:30 PM Total of 128 truck loads of soil/fill material was sent to Modern Landfill.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.073
Min	0.038
Max	0.449
TWA	0.062

DW Mass Concentration	
Avg	0.141
Min	0.07
Max	0.219
TWA	0.114

DW VOC Concentration	
Avg	0.3
Min	0.28
Max	0.348

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Monday, May 20, 2013

Attachments:
1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 3:00 PM
C&S Work Hours: 6:30 AM to 3:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	60 F	80 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP 1 DT[1]	0 cal
7:30 AM	CAMP1 PID	0, 100.1
7:30 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate Area A, southwest corner advancing north along Main Street, to approximately 8-9 feet below ground surface. Backfill Area D, southeast corner to grid line E, and a portion of Area A.

Material Imported			
Time	Type	Origin	Quantity
8:00-3:30	Crushed Stn	BCS	

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

5/1/2013

Description of Work:

7:30 AM Setup UW (upwind) and DW (downwind) air monitors.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.073
Min	0.038
Max	0.449
TWA	0.062

DW Mass Concentration	
Avg	0.141
Min	0.07
Max	0.219
TWA	0.114

DW VOC Concentration	
Avg	0.3
Min	0.28
Max	0.348

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, May 21, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	70 F	80 F
Pecip.	NA	Rain
Wind Speed	5	10
Wind Direct.	NE	NE

Equipment Calibration		
Time	Type	Result
7:00 AM	CAMP 1 DT[1]	0 cal
7:00 AM	CAMP1 PID	0, 100.1
7:00 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate Area A, southwest corner advancing north along Main Street, to approximately 8-9 feet below ground surface. Backfill Area D, southeast corner to grid line E, and a portion of Area A.

Material Imported			
Time	Type	Origin	Quantity
8:00-3:30	Crushed Stn	BCS	

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	220.41

DAILY WORK REPORT

5/21/2013

Description of Work:

>Setup UW (upwind) and DW (downwind) air monitors.
>Re-sampled grid location D3 at finished grade.

>Oversight of finished grade at grid locations D3 and E3. Excavated backfill and native soil for pile cap installation. All material was sent to Modern landfill.

>Excavated three wood plank pits in grid location D3. Black sludge material was removed from pits. Two pits were excavated to approx. 4 ft; one pit was excavated to over 9 ft.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.119
Min	0.076
Max	0.189

DW Mass Concentration	
Avg	0.071
Min	0.058
Max	0.104

DW VOC Concentration	
Avg	0.403
Min	0.044
Max	0.585

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, May 21, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	70 F	80 F
Pecip.	NA	Rain
Wind Speed	5	20
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
8:00 AM	CAMP 1 DT[1]	0 cal
8:00 AM	CAMP1 PID	0, 100.1
8:00 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate Area B, pile caps in Area D and along Perry Street.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	2929.57 T

DAILY WORK REPORT

5/21/2013

Description of Work:

>Setup UW (upwind) and DW (downwind) air monitors.
>Excavated grid locations D4, E4, D5, E5. Pile cap excavation in Area D.
>Collected sidewall samples SW8, SW9 and SW10.
11:15 AM >Asked Cerrone to perform dust control on truck access.
>DEC onsite to discuss progress.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.044
Min	0.033
Max	0.071

DW Mass Concentration	
Avg	0.161
Min	0.05
Max	0.334

DW VOC Concentration	
Avg	0.393
Min	0.154
Max	0.939

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, May 23, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	70 F	70 F
Pecip.	NA	Rain
Wind Speed	15	15
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP 1 DT[1]	0 cal
7:15 AM	CAMP1 PID	0, 100.1
7:15 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate Area B.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	2923.41 T

DAILY WORK REPORT

5/23/2013

Description of Work:

>Setup UW (upwind) and DW (downwind) air monitors.
>Excavated grid locations D4, E4, D5, E5.
>Collected sidewall sample NW8-5'.
1:00 PM >Asked Cerrone to perform dust control on truck access.

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.05
Min	0.047
Max	0.054

DW Mass Concentration		DW VOC Concentration	
Avg	0.068	Avg	0.239
Min	0.037	Min	0.073
Max	0.123	Max	0.348

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, May 24, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	40 F	50 F
Pecip.	Rain	Rain
Wind Speed	15	15
Wind Direct.	N	N

Equipment Calibration		
Time	Type	Result
7:15 AM	CAMP 1 DT[1]	0 cal
7:15 AM	CAMP1 PID	0, 100.1
7:15 AM	CAMP 2 DT	0 cal

Work Area Description:
Excavate Area B.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	2663.25 T

DAILY WORK REPORT

5/24/2013

Description of Work:

>Setup UW (upwind) and DW (downwind) air monitors.
>Excavated grid locations D4, E4, D5, E5.

>While pumping out water from pile excavation along Perry and Washington (MW-04 area). Workers noticed black-high odor water coming out of ground. C&S was informed. Collected one jar sample from pit for sulfur testing.

2:00 PM >Crushed stone brought onsite to build excavation ramp.
4:30 PM >Cleaned Scott and Washington Streets

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.05
Min	0.047
Max	0.054

DW Mass Concentration	
Avg	0.068
Min	0.037
Max	0.123

DW VOC Concentration	
Avg	0.239
Min	0.073
Max	0.348

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, May 28, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	50 F	60 F
Pecip.	Rain	Rain
Wind Speed	5	5
Wind Direct.	SE	SE

Equipment Calibration		
Time	Type	Result

Work Area Description:
Excavate grid locations E2, D3 and C3.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	2176.64 T

DAILY WORK REPORT

5/28/2013

Description of Work:

>No air monitors were setup due to weather conditions.
>Oversight finished grade to native material on grid locations F4, E4, D4, F5, E5, D5, G5.
>Excavate for pile caps along Perry St to 7'. No black fill or sludge was observed.

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Wednesday, May 29, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	65 F	75 F
Pecip.	NA	NA
Wind Speed	5	20
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:40 AM	DT	0

Work Area Description:
Mass excavation along Scott Street and pile cap excvation along Perry Street.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	2358.54 T

DAILY WORK REPORT

5/29/2013

Description of Work:

>Upwind monitor damaged on 5-28-13. Set second monitor only.

9:22 AM >Asked Cerrone to sweep Scott St.

9:45 AM >Cleaned Scott St of sediment.

10:37 AM >Moved air monitor to the northeast.

>Crew excavating northwest corner for wailer installation.

>Crew excavating pile caps along Perry St to 7 ft. Excavated material direct loaded onto dump trucks.

11:17 AM >Asked Cerrone to sweep Scott St.

12:00 PM >Cleaned Scott and Washington Streets.

12:15 PM >Discussed progress with DEC.

1:00 PM >Moved air monitor to the southwest.

2:00 PM >Stopped Mortenson from pumping water from sump along Washington into excavation and contaminating cleared areas.

	Mass Concentration
Avg	0.068
Min	0.037
Max	0.123

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, May 30, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	65 F	80 F
Pecip.	NA	NA
Wind Speed	5	20
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	DT	0

Work Area Description:
Mass excavation in northeast corner advancing east. Grid locations C3, C2 and D3.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	630.28 T

DAILY WORK REPORT

5/30/2013

Description of Work:

>Upwind monitor damaged on 5-28-13. Set second monitor only.
>Pump out sump along Washington Street into baker tanks.

>Removed sump area.

>Opened UST discovered sand with strong acetone odor when tank was opened. Soil concrete 2700 ppm at mass. Asked operator to break mass into smaller pieces. VOC concentration DW at ground surface ranging btween 0.5 and 2.6 ppm. Elevated PID readings between 30-60 ppm when mass was being broken. Breaking the concrete mass was stopped and soil placed on top mass to minimize VOC exposure concrete mass will be allowed to dissipate overnight.

>Oversight of finished grade at grid locations C4 and B4.

	Mass Concentration
Avg	0.135
Min	0.013
Max	0.62

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, May 31, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Clear
Temp.	65 F	80 F
Pecip.	NA	NA
Wind Speed	5	20
Wind Direct.	S	S

Equipment Calibration		
Time	Type	Result
7:30 AM	DT	0

Work Area Description:
Backfill grid locations C4 and C5. Excavate along Perry St.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	1579.05 T

DAILY WORK REPORT

5/31/2013

Description of Work:

>Upwind monitor damaged on 5-28-13. Set second monitor only.
10:25 AM >Cleaned Scott St and preformed dust control.
>Oversight finished grade of grid locations D1 and E1.

Mass Concentration	
Avg	0.114
Min	0.058
Max	0.312

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Monday, June 03, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	65 F	65 F
Pecip.	NA	NA
Wind Speed	5	10
Wind Direct.	W	W

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT	0
7:30 AM	CAMP PID	100

Work Area Description:
Backfill along grid locations D1 and E1. Excavate grid locations C1 and B1.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	375.69 T

DAILY WORK REPORT

6/3/2013

Description of Work:

>Asked Cerrone to preform dust control.

>Moved CAMP monitor to corner of Main and Scott St.

>Crushed concrete mass and sent to MD. Air monitoring adjacent to operator ranged from 0-0.5 ppm.

DW Mass Concentration	
Avg	0.093
Min	0.03
Max	0.206

DW VOC Concentration	
Avg	0.014
Min	0
Max	0.341

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Tuesday, June 04, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Cloudy
Temp.	65 F	65 F
Pecip.	NA	NA
Wind Speed	5	10
Wind Direct.	W	W

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT	0
7:30 AM	CAMP PID	100

Work Area Description:
Excavated grid locations B1, B4, and C3. Removed Scott Street ramp.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	1497.76 T

DAILY WORK REPORT

6/4/2013

Description of Work:

>Oversight of finished grade at grid locations B1, B4, and C3.

DW Mass Concentration	
Avg	0.102
Min	0.022
Max	0.326

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Wednesday, June 05, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Clear	Cloudy
Temp.	65 F	65 F
Pecip.	NA	NA
Wind Speed	5	10
Wind Direct.	W	W

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT	0
7:30 AM	CAMP PID	100

Work Area Description:
Excavated grid locations B1, B4, and C3. Removed Scott Street ramp.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	1497.76 T

DAILY WORK REPORT

6/5/2013

Description of Work:

>Backfilled grid locations B4 and C3.

>Oversight of finished grade at grid location C2.

>Black water observed on micro-pile hole. Cerrone will pump water into frac tank.

UW Mass Concentration	
Avg	0.088
Min	0.045
Max	0.247

DW Mass Concentration	
Avg	0.019
Min	0
Max	0.207

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Thursday, June 06, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	65 F	65 F
Pecip.	NA	NA
Wind Speed	5	10
Wind Direct.	W	W

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT	0
7:30 AM	CAMP PID	100

Work Area Description:
Excavated grid locations B1, B4, and C3. Removed Scott Street ramp.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	1904.19 T

DAILY WORK REPORT

6/6/2013

Description of Work:

>No air monitoring was conducted due to weather conditions.
>Backfilled grid locations B4 and C3.
>Oversight of finished grade at grid location C2.
>Black water observed on micro-pile hole. Cerrone will pump water into frac tank.

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Friday, June 07, 2013

Attachments:
1.
2.
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Cloudy	Cloudy
Temp.	55 F	55 F
Pecip.	NA	NA
Wind Speed	5	5
Wind Direct.	N	N

Equipment Calibration		
Time	Type	Result
7:30 AM	CAMP DT	0
7:30 AM	CAMP PID	100

Work Area Description:
Mass excavation grid locations B2 and A2.

Material Imported			
Time	Type	Origin	Quantity

Material Exported			
Time	Type	Destination	Quantity
8:00-3:30	Soil/Fill	MD[2]	1856.83 T

DAILY WORK REPORT

6/7/2013

Description of Work:

>Told R. Poropat (Mortenson) that dewatering from pit to sanitary is acceptable to C&S as long as it

UW Mass Concentration	
Avg	0.033
Min	0.013
Max	0.08

DW Mass Concentration	
Avg	0.035
Min	0.019
Max	0.06

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Tons

DAILY WORK REPORT

Location

Webster Block
75 Main Street
Buffalo, New York

Site No. C915270

Date: Monday, June 10, 2013

Attachments:

1. Site Activities Map
2. Photographic Log
3.

Contractor Work Hours: 7:00 AM to 4:00 PM
C&S Work Hours: 6:30 AM to 4:00 PM

	AM	PM
Weather	Overcast	Overcast
Temp.	65 F	65 F
Pecip.	Rain	Rain
Wind Speed	0	10
Wind Direct.	E	E

Equipment Calibration		
Time	Type	Result

Work Area Description:
Excavate northwest corner along wailer.

Material Imported			
Time	Type	Origin	Quantity
8:00-3:30	Crushed Stn	BCS	

Material Exported			
Time	Type	Destination	Quantity

DAILY WORK REPORT

6/10/2013

Description of Work:

7:30 AM Setup UW (upwind) and DW (downwind) air monitors.

1:00 PM Dave Locey (DEC)

Air monitoring was conducted at UW and DW locations. Particulate and VOC concentrations were below action levels for the day.

UW Mass Concentration	
Avg	0.073
Min	0.038
Max	0.449
TWA	0.062

DW Mass Concentration	
Avg	0.141
Min	0.07
Max	0.219
TWA	0.114

DW VOC Concentration	
Avg	0.3
Min	0.28
Max	0.348

1 - Dust Track DRX Aerosol Monitor
2 - Modern Landfill
3 - Truck Loads

APPENDIX D
MATERIAL DISPOSAL TABLE

Date	Disposal Site	Material	Weight	Trucks
17-Apr	Modern	Contaminated Material	1,550.94	72
18-Apr	Bataglia Recycling	Concrete/Asphalt	NA	32
18-Apr	Modern	Contaminated Material	2,143.59	95
19-Apr	Modern	Contaminated Material	303.61	14
19-Apr	Swift River	Concrete/Asphalt	NA	6
23-Apr		Asphalt	NA	3
24-Apr		Asphalt	NA	2
24-Feb	Bataglia Recycling	Concrete	NA	3
29-Apr	Bataglia Recycling	Hardscape	NA	9
30-Apr	Bataglia Recycling	Hardscape	NA	18
1-May	Modern	Contaminated Material	1,328.52	59
1-May	Bataglia Recycling	Hardscape	NA	17
2-May	Modern	Contaminated Material	409.36	18
2-May	Bataglia Recycling	Hardscape	NA	11
6-May	Modern	Contaminated Material	3,036.00	144
7-May	Modern	Contaminated Material	3,446.75	151
7-May	Peabody	Hardscape	NA	5
8-May	Modern	Contaminated Material	3,698.78	168
9-May	Modern	Contaminated Material	4,085.63	181
10-May	Bataglia Recycling	Concrete/Asphalt	NA	10
13-May	Waste Management	Contaminated Material	1,092.03	47
14-May	Waste Management	Contaminated Material	3,008.92	128
15-May	Modern	Contaminated Material	2,868.59	123
16-May	Modern	Contaminated Material	2,561.27	110
17-May	Modern	Contaminated Material	3,306.83	137
21-May	Waste Management	Contaminated Material	220.41	10
22-May	Waste Management	Contaminated Material	2,929.57	125
23-May	Waste Management	Contaminated Material	2,993.41	135
24-May	Waste Management	Contaminated Material	2,663.25	119
28-May	Waste Management	Contaminated Material	2,176.64	96
29-May	Waste Management	Contaminated Material	2,358.54	102
30-May	Waste Management	Contaminated Material	630.24	29
31-May	Modern	Contaminated Material	1,579.05	65
1-Jun	Modern	Contaminated Material	619.87	26
3-Jun	Modern	Contaminated Material	1,886.44	78
4-Jun	Modern	Contaminated Material	1,497.76	63
5-Jun	Waste Management	Contaminated Material	1,854.59	80
6-Jun	Waste Management	Contaminated Material	1,904.19	76
7-Jun	Waste Management	Contaminated Material	1,856.83	73
8-Jun	Modern	Contaminated Material	157.03	7
10-Jun	Modern	Contaminated Material	357.69	15
11-Jun	Modern	Contaminated Material	178.23	7
	Total		**58,704.56**	**2669**

APPENDIX E
PHOTO LOG

PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
1	4/17/2013	

Description:

Former Webster Block (75 Main Street) Brownfield cleanup site.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
2	4/22/2013	

Description:

Excavation of test pit at grid location F3.

PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
3	4/22/2013	

Description:

Groundwater and oily sludge from F3 test pit.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
4	5/6/2013	

Description:

Excavation of contaminated fill from northeast corner.

PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
5	5/7/2013	

Description:

Excavation of contaminated fill. Native silty clay material underneath fill.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
6	5/8/2013	

Description:

Profile of subsurface. Fill material overlaying native soil.

PHOTOGRAPHIC LOG

Exhibit:	Date:
7	5/9/2013

HARBORcenter Brownfield Cleanup

Description:

Excavation of fill material from grid locations F2 and F3.

Exhibit:	Date:
8	5/9/2013

HARBORcenter Brownfield Cleanup

Description:

Offset earth retention shoring (BCP Boundary) due to location of active water line.

PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
9	5/14/2013	

Description:

Finish grading excavation bottom.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
10	5/17/2013	

Description:

View of finished excavation bottom at grid location H5.

PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
11	5/20/2013	

Description:

View of finished excavation bottom at grid location G5.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
12	5/21/2013	

Description:

Removal of wood frame pit in grids E3.

PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
13	5/21/2013	

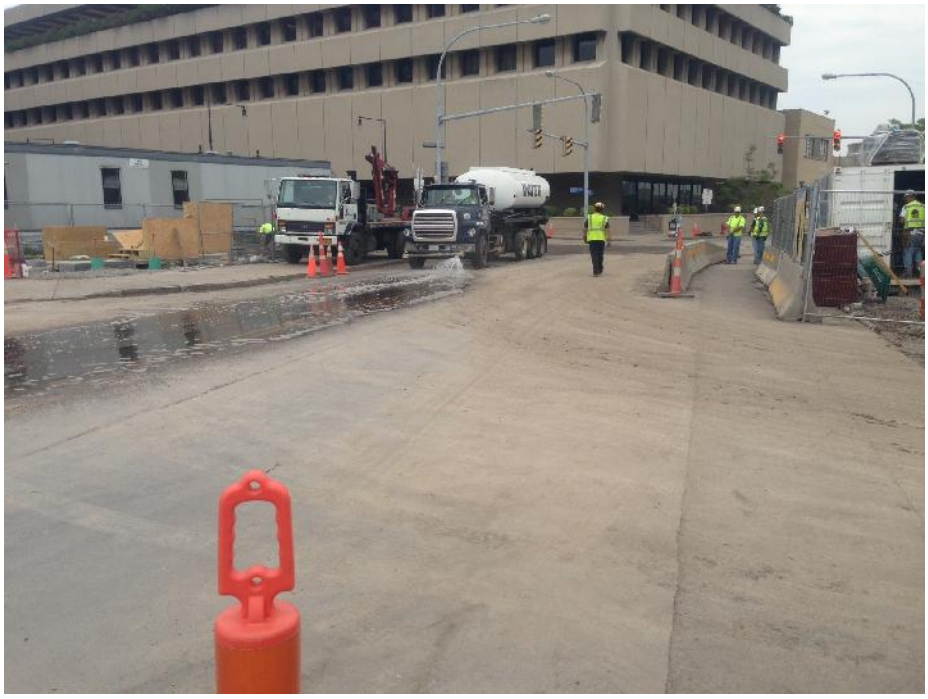
Description:

Finished excavation bottom at grid location E3.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
14	5/23/2013	

Description:

Contractor preforming dust control and sediment cleanup.



PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
15	6/1/2013	

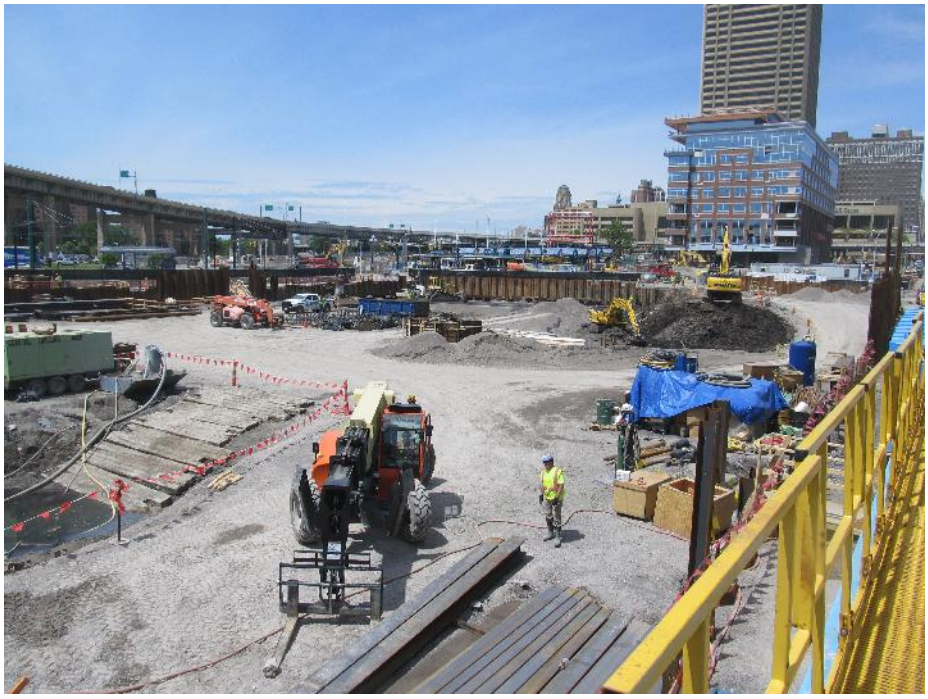
Description:

View of finished excavation bottom at grid location C3.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
16	6/5/2013	

Description:

View of site.



PHOTOGRAPHIC LOG

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
17	6/7/2013	

Description:

Backfilling pit from casion removal with flowable fill.

Exhibit:	Date:	HARBORcenter Brownfield Cleanup
18	6/10/2013	

Description:

Excavation of fill material along wailer section to 13 - 14 ft below ground surface.

APPENDIX F
BACKFILL APPROVAL

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

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

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

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

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

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

Best regards

Mark

[cid:image001.gif@01CE4B4C.F6DBA2F0]
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Mark Colmerauer
Regional Environmental Services Manager
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May 07, 2013

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

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

Dear Mr. Locey:

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

I. WEBSTER BLOCK REMEDIATION

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

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

II. BACKFILL MATERIAL

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

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

III. BACKFILL SAMPLING

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

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

IV. ANALYTICAL RESULTS

The Analytical report is provided is attached.

The results of the analysis indicated the following:

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

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

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

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

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

Sincerely,
C&S ENGINEERS, INC.

Mark Colmerauer
Regional Environmental Services Manager

Attachments:
Backfill Geotechnical Data
Laboratory Analytical Data

cc: M. Doster, NYSDEC Region 9

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

ATACHMENT: BACKFILL GEOTECHNICAL DATA

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

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

April 25, 2013

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

RE: HARBORcenter Gradation
Suitable Granular Fill

Dear Frank,

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

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

Sincerely,

Gary Nelson, Q.C. Dept.

Gradation Sheet

Como Park Buffalo Crushed Stone

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

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

Suitable Granular Fill
Average Gradation

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

→ Recent Test: companion to sample submitted to contractor

→ Average of 3 Tests Prior to Bidding

CME Associates, Inc.

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

www.cmeassociates.com

LABORATORY TEST REPORT

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

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

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

Sample Identification as follows:

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

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

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

BURMISTER CLASSIFICATION

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

LABORATORY MOISTURE-DENSITY RELATIONSHIP ASTM D-1557

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

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

Respectfully Submitted,

CME ASSOCIATES, INC.

Brianna Ciccone

Brianna Ciccone, EIT
Division Manager

CME Associates, Inc.

MATERIALS TESTING DIVISION

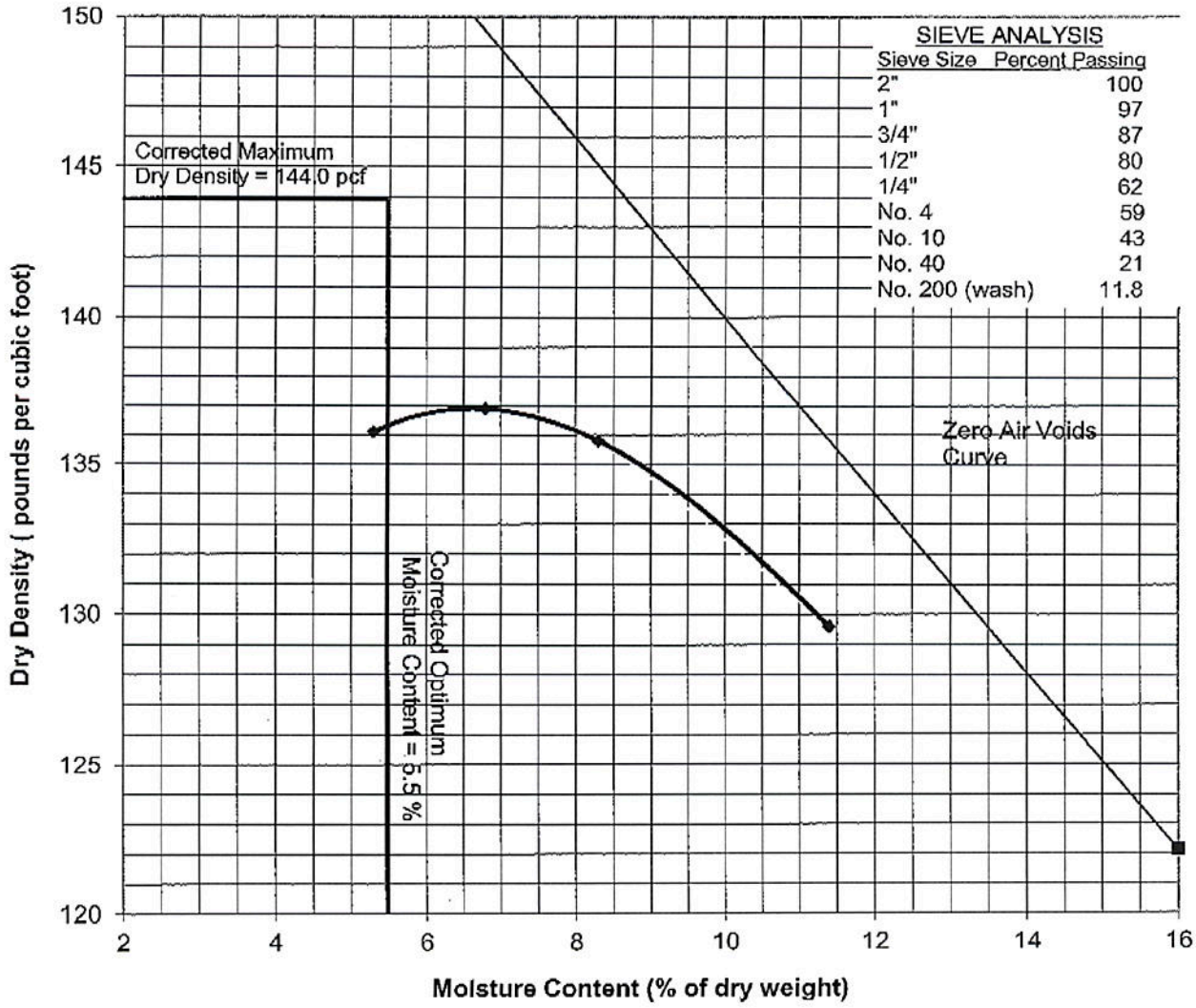
CLIENT: Buffalo Crushed Stone PROJECT: Source Pre-Qualification

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

SAMPLE LOCATION: On-site Stockpile (Como Park)

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

MOISTURE DENSITY RELATIONSHIP CURVE



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

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

4/23/13 1:00

BUFFALO CRUSHED STONE, INC.
CONSTRUCTION MATERIALS

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

CHECKED
by rmccrary
M.A. MORTENSON COMPANY
Sub. #: SUBM-00251 Select Backfill Product Data
04/24/2013
This check does not in any way relieve the subcontractor or supplier of his responsibility to comply with the Contract Documents or to verify accuracy of details, quantities, and dimensions.

April 22, 2013

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

Attn: Chris Ganje

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

Dear Chris,

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

Select Granular Fill Item 203.07

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

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

We trust this information meets with your approval.

Sincerely,

John W. Norton
Account Representative

a member of the GLYNN GROUP

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

ASTM D-4318 10

Civil ◦ Structural ◦ Geotechnical ◦ Materials Testing ◦ Consulting

Project : Various Testing
Client: Buffalo Crushed Stone

Date: 03.18.13
GGE # : 13-1024

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

LIQUID LIMIT = NV

PLASTIC LIMIT = NP

PASTICITY INDEX = NP **Non-Plastic**

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

Reviewed by:
G. EDWARD LOVER

GLYNN GEOTECHNICAL ENGINEERING

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

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

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

Buffalo Crushed Stone, Inc.
Cheektowaga, NY

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

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

REMARKS:

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

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

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

COMPOSITION (Size No.)	%

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

ATTACHMENT: LABORATORY ANALYTICAL DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-37637-1
Client Project/Site: HARBORcenter

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

Attn: Mr. Mark Colmerauer

Joseph V. Giacomazza

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

Designee for

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

Table of Contents

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

GC Semi VOA

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

Metals

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

Glossary

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

Job ID: 480-37637-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-37637-1

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

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

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

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

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

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

No other analytical or quality issues were noted.

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

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

No other analytical or quality issues were noted.

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

No other analytical or quality issues were noted.

Detection Summary

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

TestAmerica Job ID: 480-37637-1

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

No Detections.

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

No Detections.

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

No Detections.

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

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

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

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

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

No Detections.

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

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

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

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

This Detection Summary does not include radiochemical test results.

Client Sample ID: COMP 1-3 (Continued)

Lab Sample ID: 480-37637-8

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

Client Sample ID: COMP 4-7

Lab Sample ID: 480-37637-9

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

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 4-7 (Continued)

Lab Sample ID: 480-37637-9

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

This Detection Summary does not include radiochemical test results.

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

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

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-1

Lab Sample ID: 480-37637-1

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

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

Client Sample ID: S-2

Lab Sample ID: 480-37637-2

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

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

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

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

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-2

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

Lab Sample ID: 480-37637-2

Matrix: Solid
Percent Solids: 99.6

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

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

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

Client Sample ID: S-3

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

Lab Sample ID: 480-37637-3

Matrix: Solid
Percent Solids: 97.0

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

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

Client Sample ID: S-3

Lab Sample ID: 480-37637-3

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

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

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

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

Client Sample ID: S-4

Lab Sample ID: 480-37637-4

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

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

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

Client Sample ID: S-4

Lab Sample ID: 480-37637-4

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

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

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

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

Client Sample ID: S-5

Lab Sample ID: 480-37637-5

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

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

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

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

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

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

Client Sample ID: S-6

Lab Sample ID: 480-37637-6

Date Collected: 05/03/13 15:24

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 97.5

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

Client Sample ID: S-7

Lab Sample ID: 480-37637-7

Date Collected: 05/03/13 15:35

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 98.6

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

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

Client Sample ID: S-7

Lab Sample ID: 480-37637-7

Date Collected: 05/03/13 15:35

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 98.6

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

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

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

Client Sample ID: COMP 1-3

Lab Sample ID: 480-37637-8

Date Collected: 05/03/13 17:00

Matrix: Solid

Date Received: 05/03/13 17:16

Percent Solids: 99.3

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

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

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

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

Method: 8081A - Organochlorine Pesticides (GC)

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

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1221	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1232	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1242	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1248	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:40	1

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

Method: 6010B - Metals (ICP)

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

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

TestAmerica Job ID: 480-37637-1

Client Sample ID: COMP 1-3

Lab Sample ID: 480-37637-8

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

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

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

Method: 7471A - Mercury (CVAA)

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

Client Sample ID: COMP 4-7

Lab Sample ID: 480-37637-9

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

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

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

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

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

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

Method: 8081A - Organochlorine Pesticides (GC)

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

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

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1221	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1232	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1242	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1248	ND		0.23	0.046	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	05/03/13 13:19	05/04/13 08:55	1

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

TestAmerica Job ID: 480-37637-1

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

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

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

Method: 6010B - Metals (ICP)

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

Method: 7471A - Mercury (CVAA)

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

Surrogate Summary

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

TestAmerica Job ID: 480-37637-1

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

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

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

Surrogate Legend

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

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

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

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

Surrogate Legend

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

Method: 8081A - Organochlorine Pesticides (GC)

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

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

Surrogate Legend

DCB = DCB Decachlorobiphenyl

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

TestAmerica Job ID: 480-37637-1

TCX = Tetrachloro-m-xylene

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

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

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

Surrogate Legend

DCB = DCB Decachlorobiphenyl

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

TestAmerica Job ID: 480-37637-1

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			05/04/13 14:32	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			05/04/13 14:32	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			05/04/13 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			05/04/13 14:32	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			05/04/13 14:32	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			05/04/13 14:32	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			05/04/13 14:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			05/04/13 14:32	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			05/04/13 14:32	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			05/04/13 14:32	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			05/04/13 14:32	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			05/04/13 14:32	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			05/04/13 14:32	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			05/04/13 14:32	1
2-Hexanone	ND		25	2.5	ug/Kg			05/04/13 14:32	1

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Method: 8081A - Organochlorine Pesticides (GC)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Method: 6010B - Metals (ICP)

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

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

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

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

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

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

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

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

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

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

Method: 7471A - Mercury (CVAA)

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

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

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

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

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

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

GC/MS VOA

Analysis Batch: 116770

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

Prep Batch: 116774

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

Analysis Batch: 116833

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

Prep Batch: 116837

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

GC/MS Semi VOA

Prep Batch: 116764

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

Analysis Batch: 117056

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

GC Semi VOA

Prep Batch: 116705

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

GC Semi VOA (Continued)

Prep Batch: 116705 (Continued)

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

Prep Batch: 116790

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

Analysis Batch: 116812

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

Analysis Batch: 116930

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

Metals

Prep Batch: 116821

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

Prep Batch: 116831

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

Analysis Batch: 117010

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

Metals (Continued)

Analysis Batch: 117052

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

General Chemistry

Analysis Batch: 116781

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

Lab Chronicle

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

TestAmerica Job ID: 480-37637-1

Client Sample ID: S-1

Lab Sample ID: 480-37637-1

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

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

Client Sample ID: S-2

Lab Sample ID: 480-37637-2

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

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

Client Sample ID: S-3

Lab Sample ID: 480-37637-3

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

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

Client Sample ID: S-4

Lab Sample ID: 480-37637-4

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

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

Client Sample ID: S-5

Lab Sample ID: 480-37637-5

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

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

Client Sample ID: S-6

Lab Sample ID: 480-37637-6

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

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

Client Sample ID: S-7

Lab Sample ID: 480-37637-7

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

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

Client Sample ID: COMP 1-3

Lab Sample ID: 480-37637-8

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

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

Client Sample ID: COMP 4-7

Lab Sample ID: 480-37637-9

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

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

Lab Chronicle

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

TestAmerica Job ID: 480-37637-1

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

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

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

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 480-37637-1

Laboratory: TestAmerica Buffalo

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

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

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

Method Summary

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

TestAmerica Job ID: 480-37637-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 480-37637-1

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

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

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

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

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

480-37637 Chain of Custody

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

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

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

QC Requirements (Specify)

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

Comments

#2 5.1

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

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

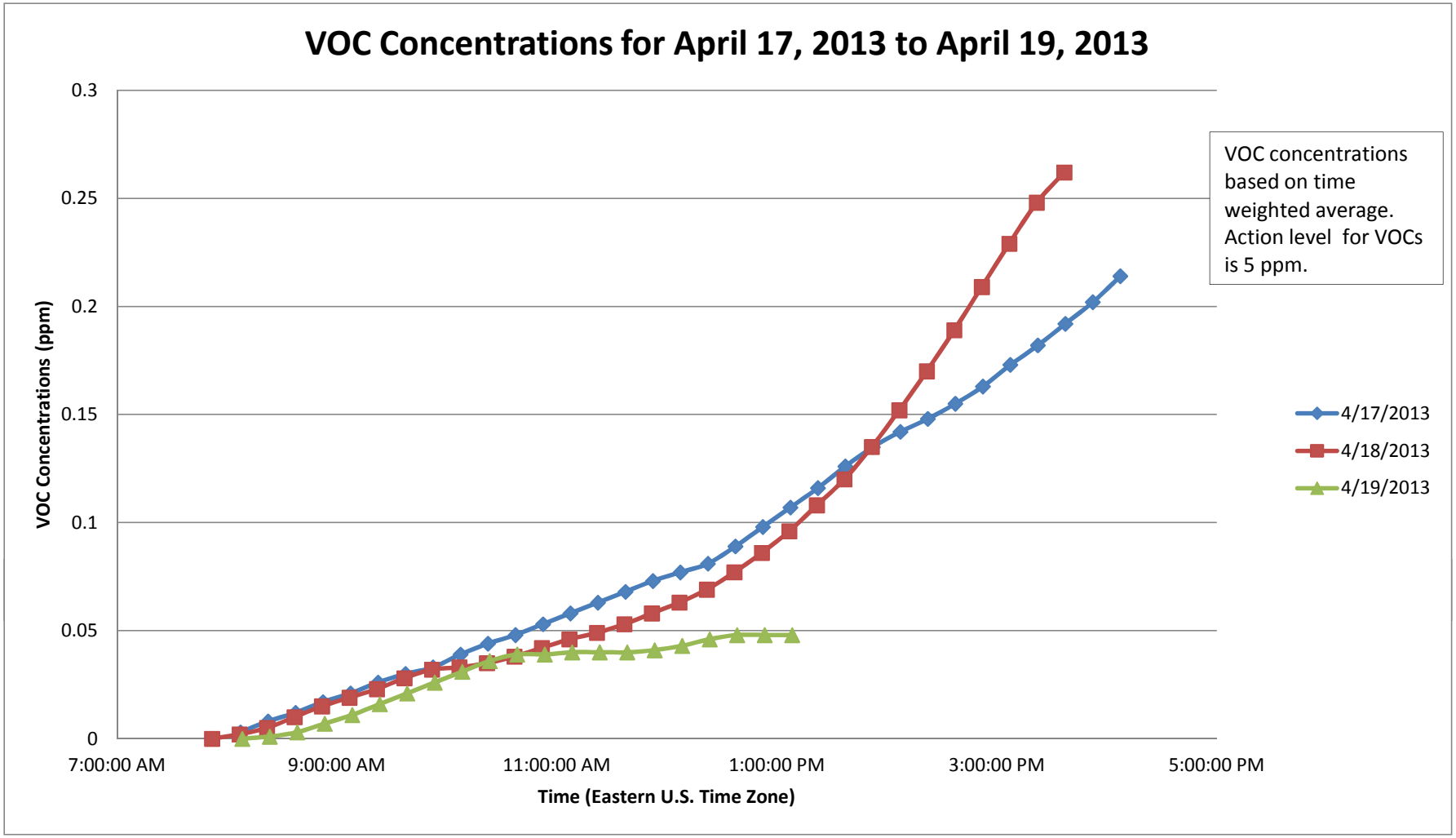
Job Number: 480-37637-1

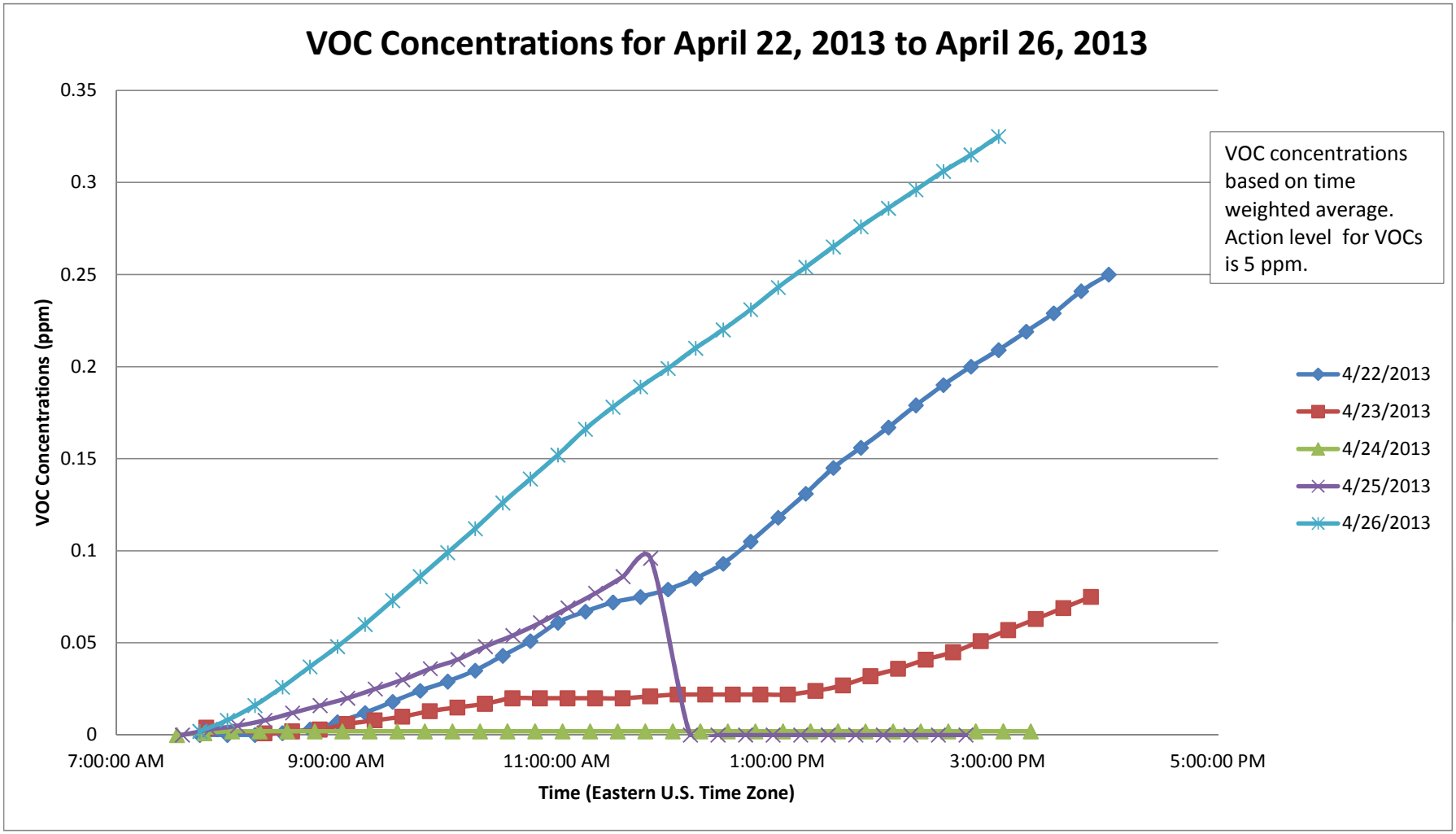
Login Number: 37637
List Number: 1
Creator: Kolb, Chris M

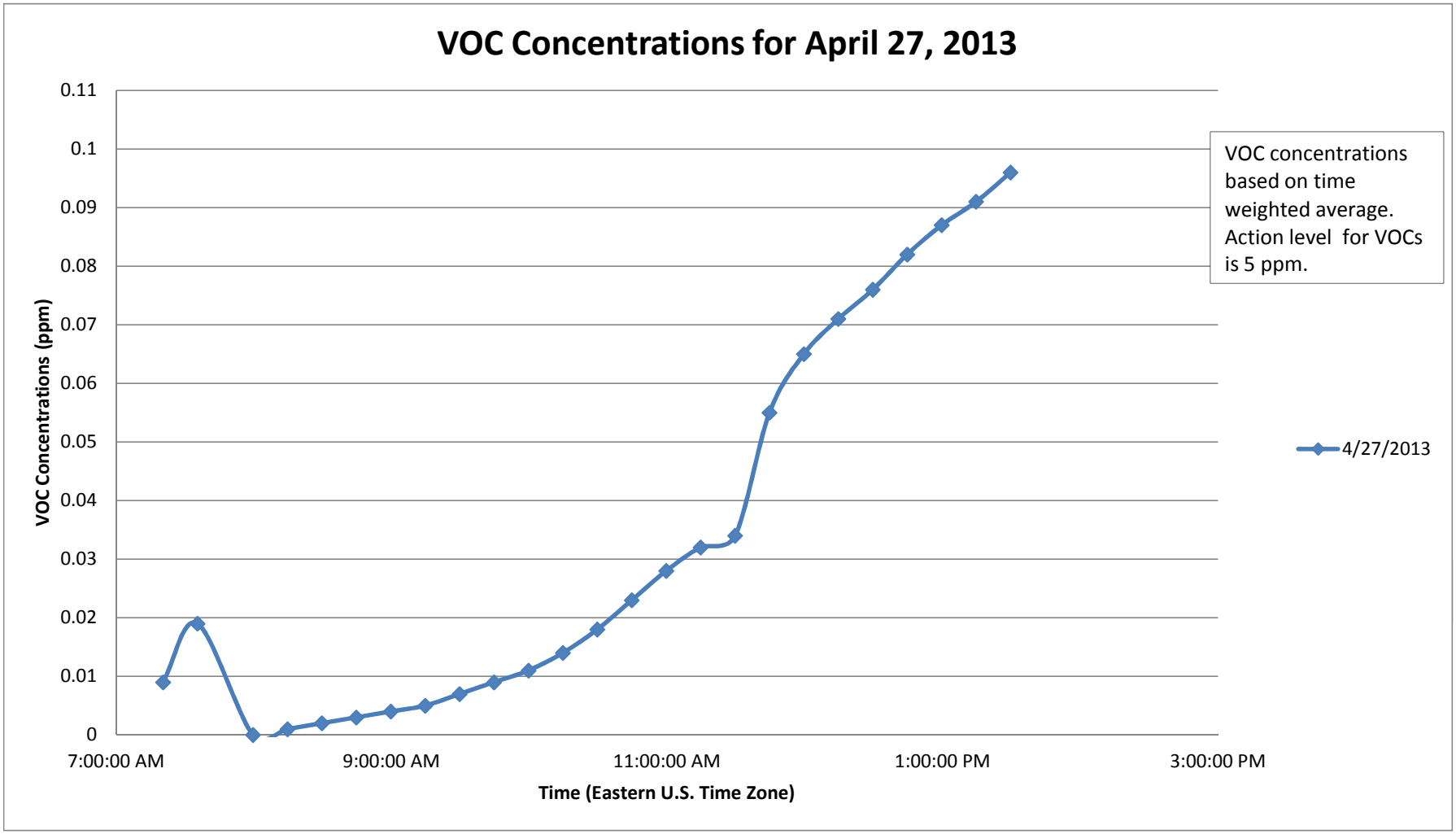
List Source: TestAmerica Buffalo

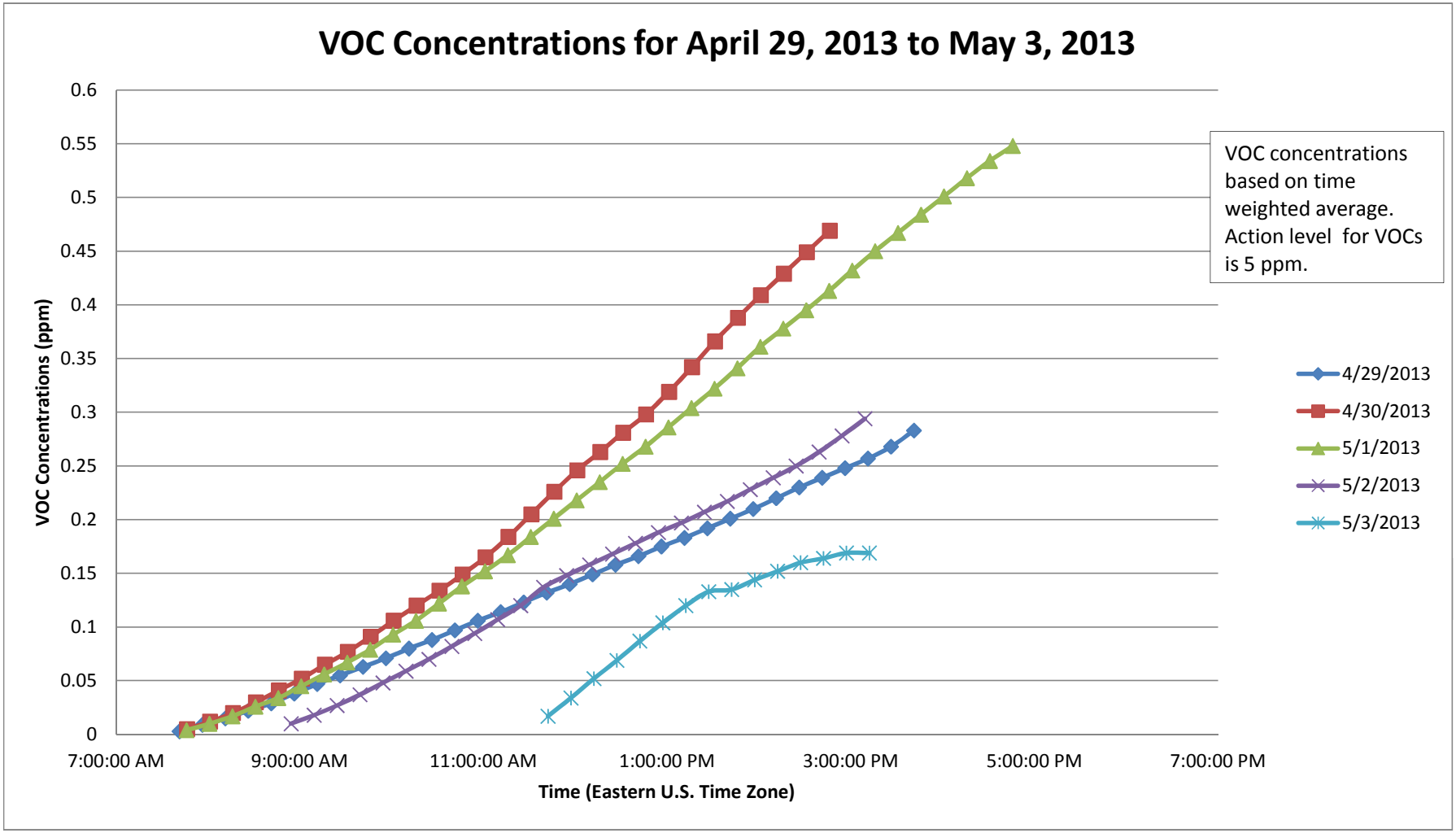
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature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

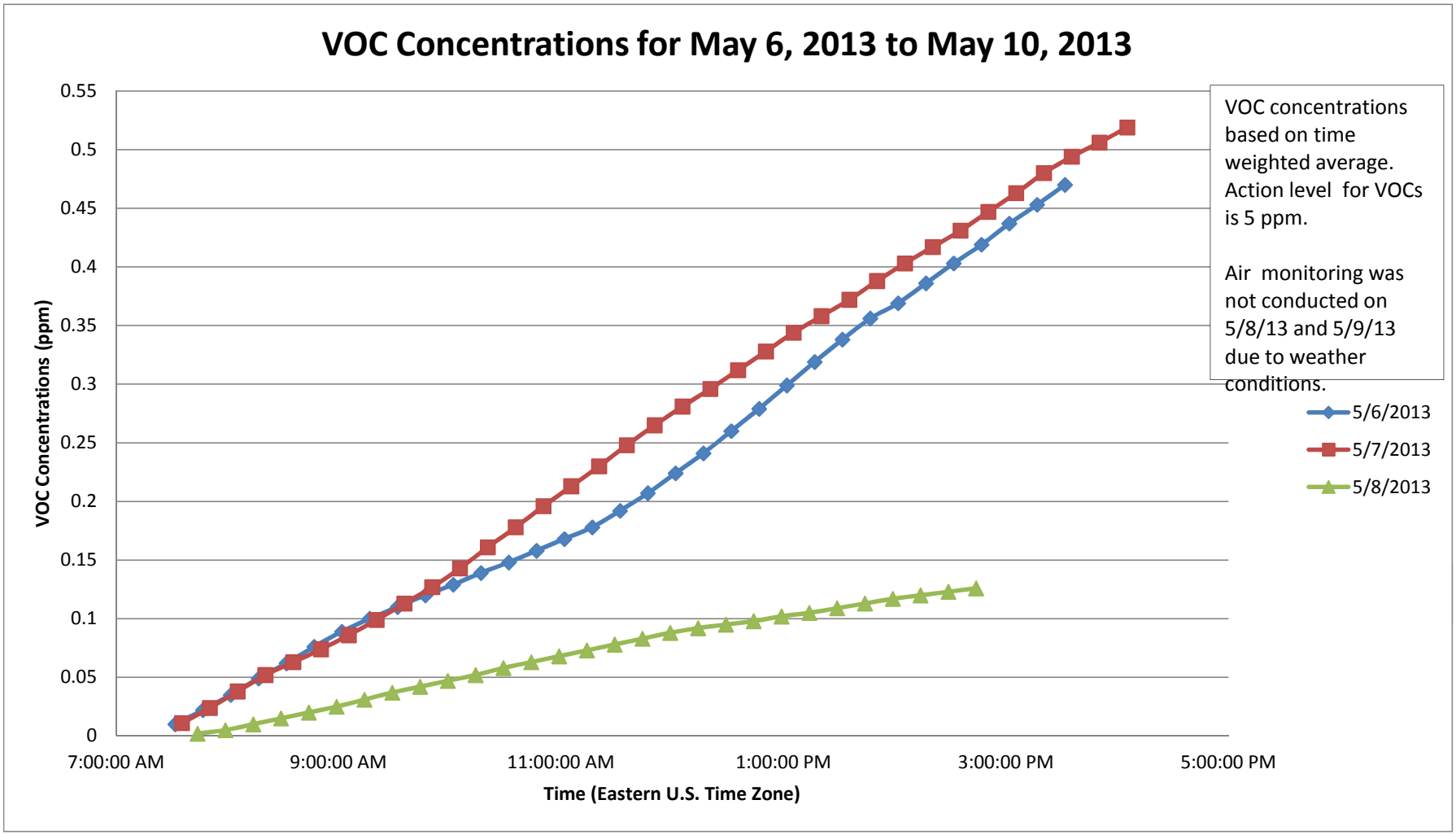
APPENDIX G
AIR MONITORING DATA

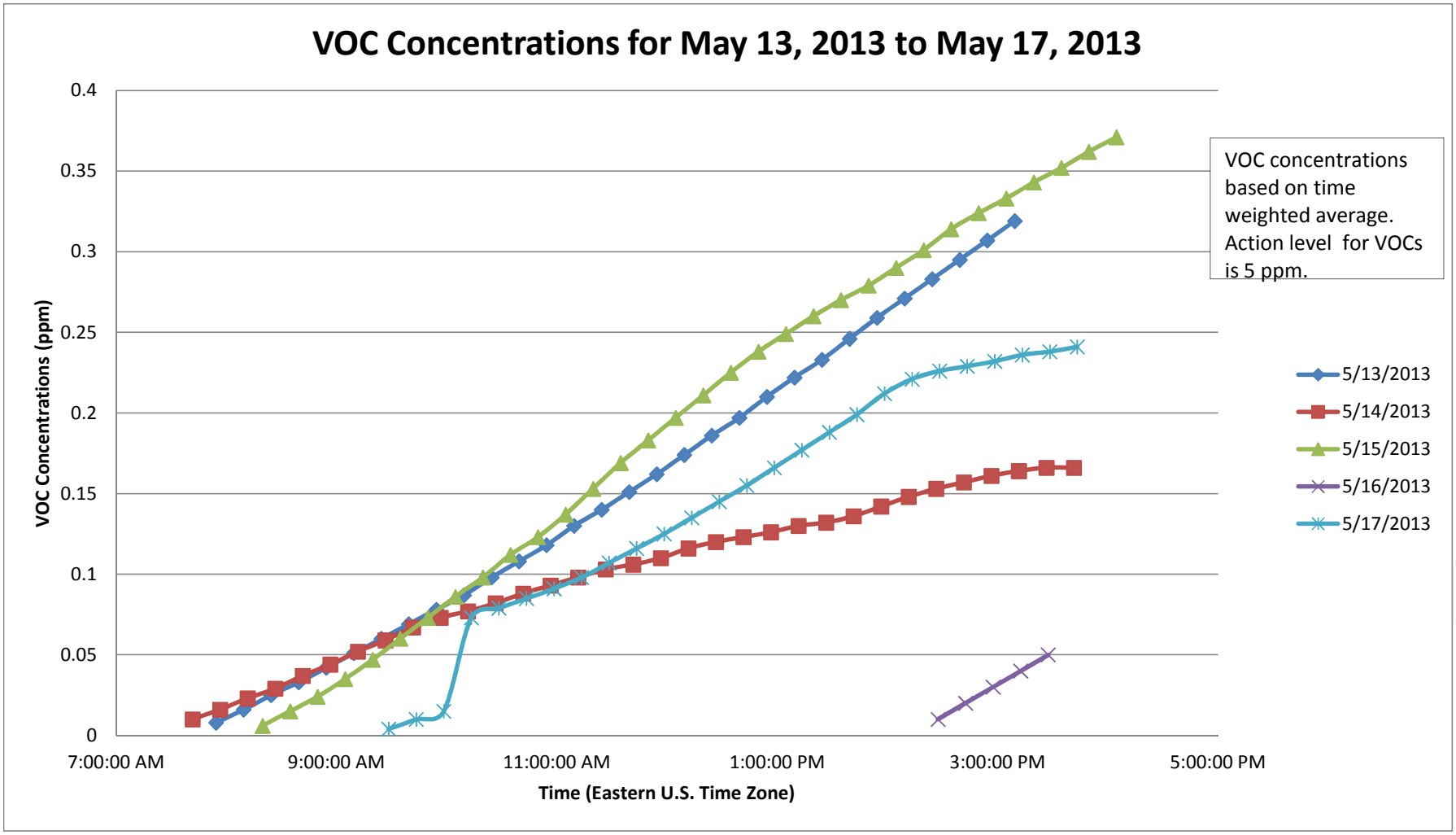

VOC Concentrations for April 17, 2013 to April 19, 2013
VOC Concentrations (ppm)
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
5:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
4/17/2013
4/18/2013
4/19/2013

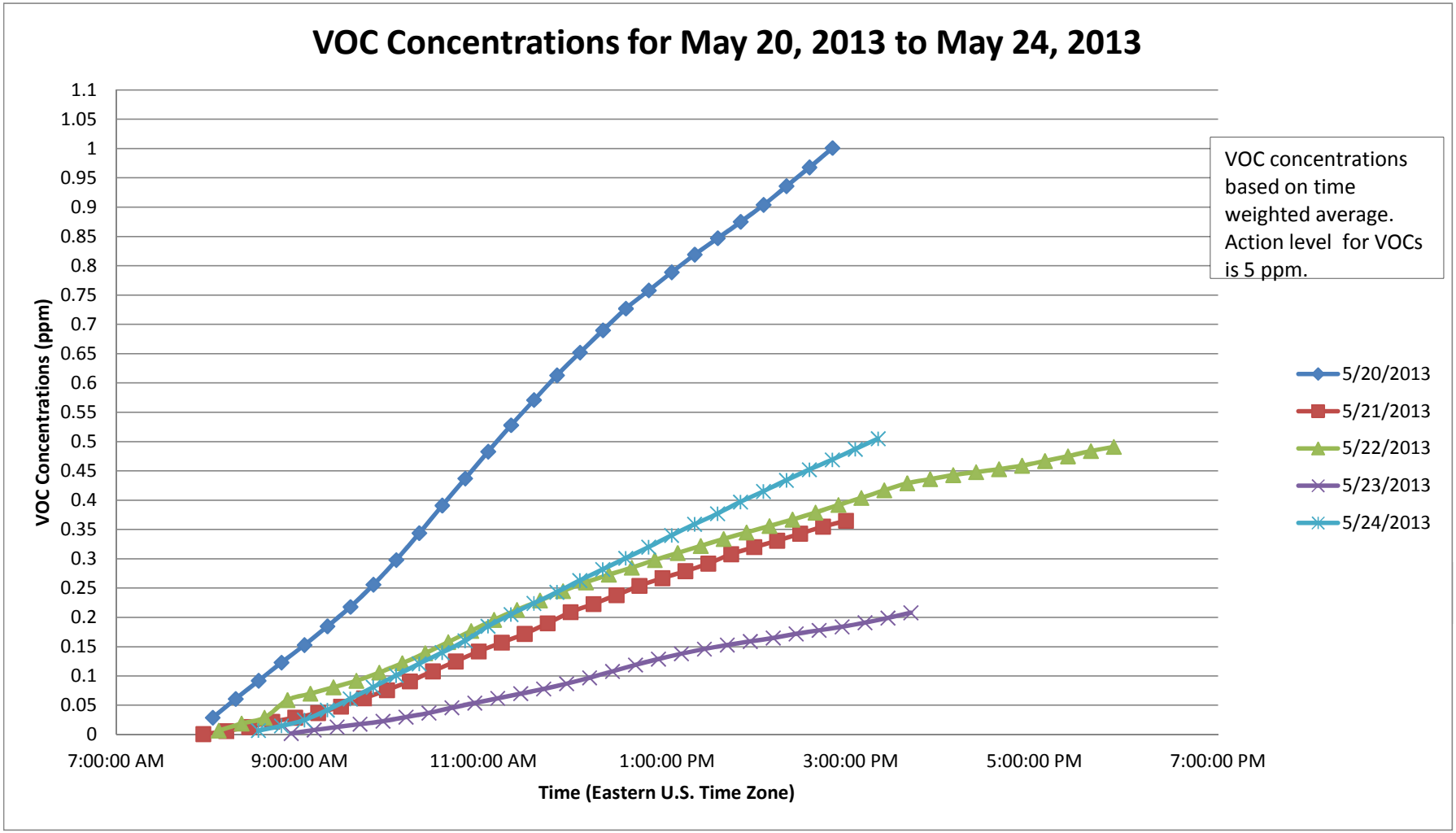

VOC Concentrations for April 22, 2013 to April 26, 2013
VOC Concentrations (ppm)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
5:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
4/22/2013
4/23/2013
4/24/2013
4/25/2013
4/26/2013

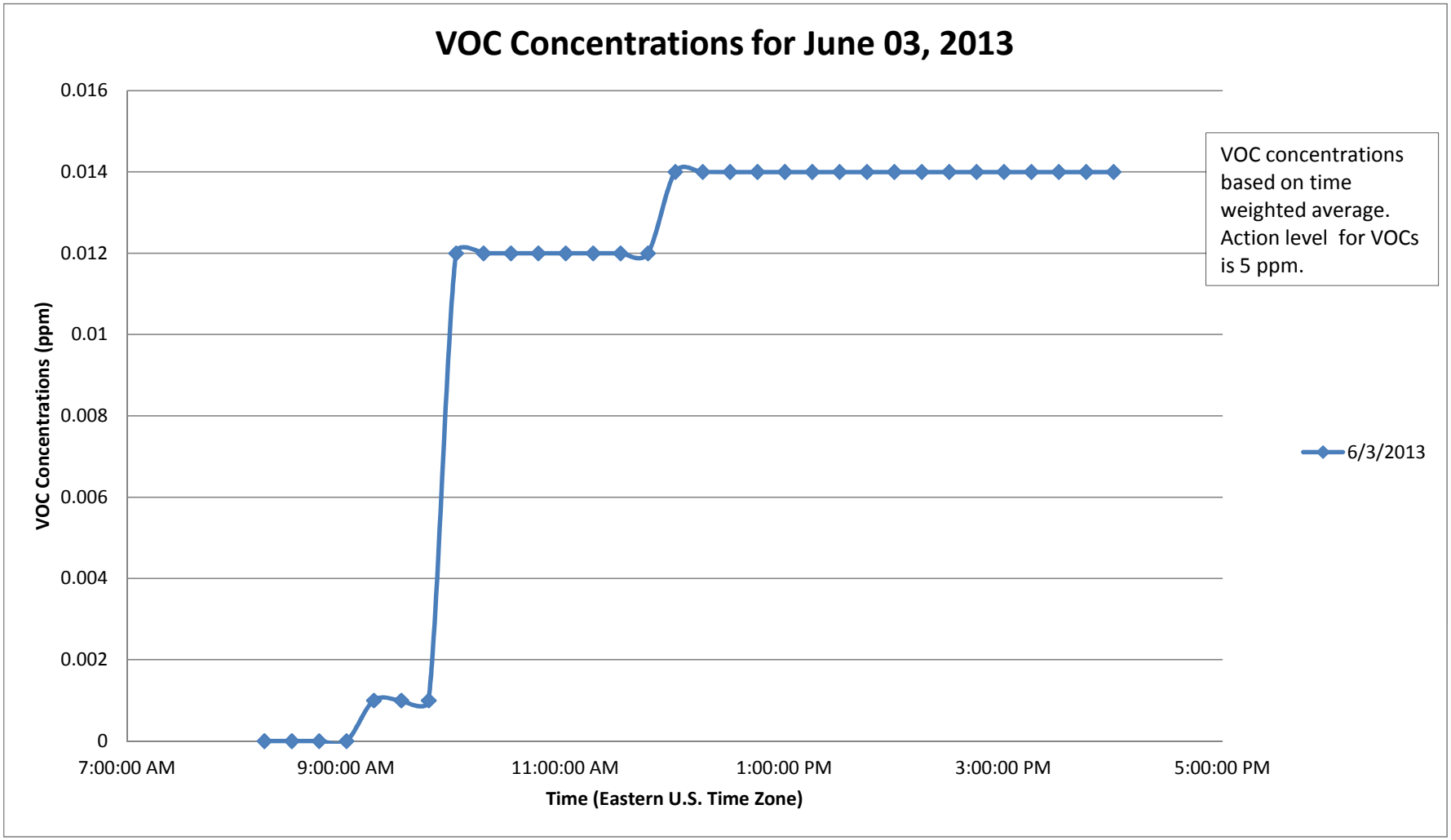

VOC Concentrations for April 27, 2013
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
VOC Concentrations (ppm)
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
4/27/2013

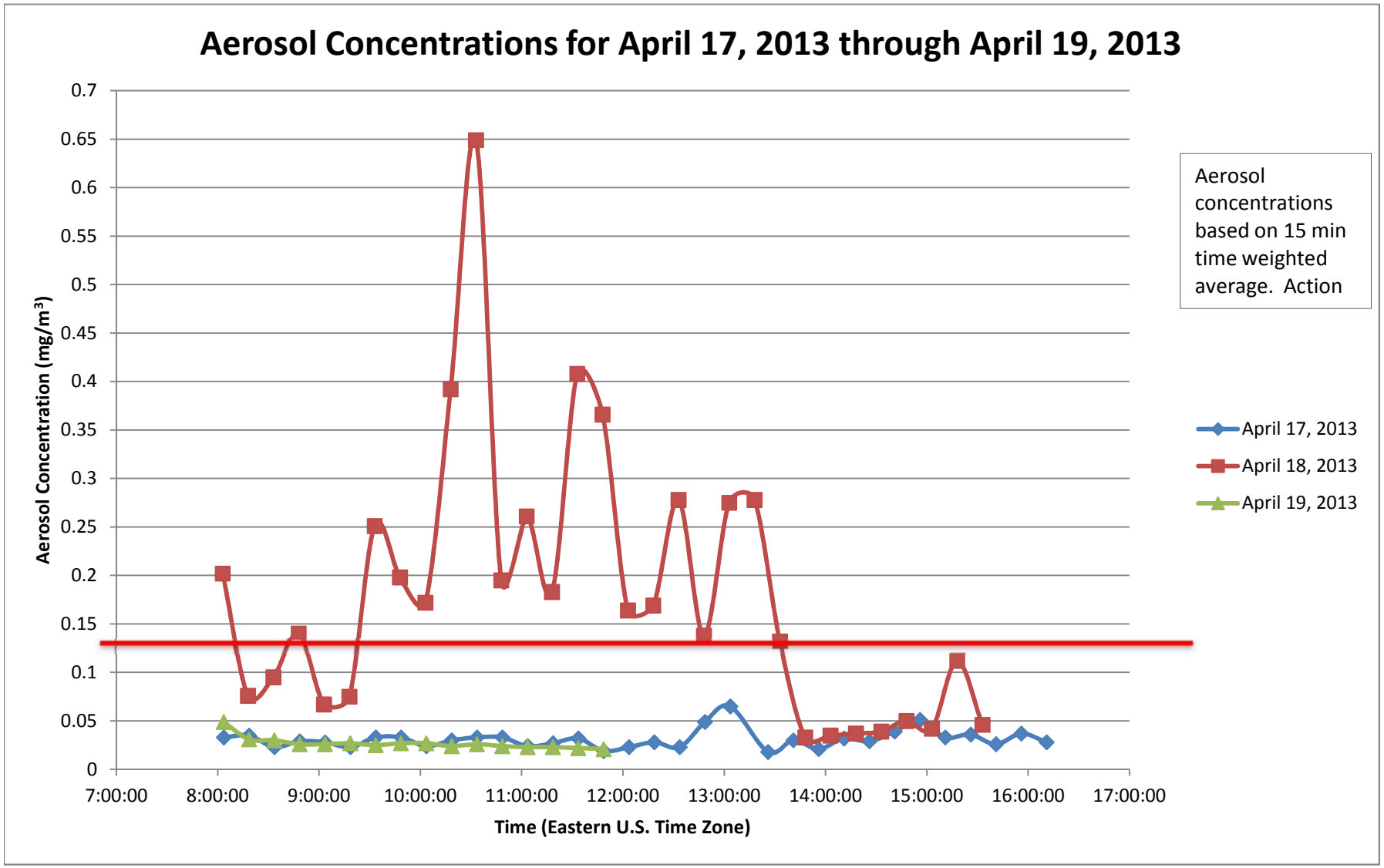

VOC Concentrations for April 29, 2013 to May 3, 2013
VOC Concentrations (ppm)
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
5:00:00 PM
7:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
4/29/2013
4/30/2013
5/1/2013
5/2/2013
5/3/2013

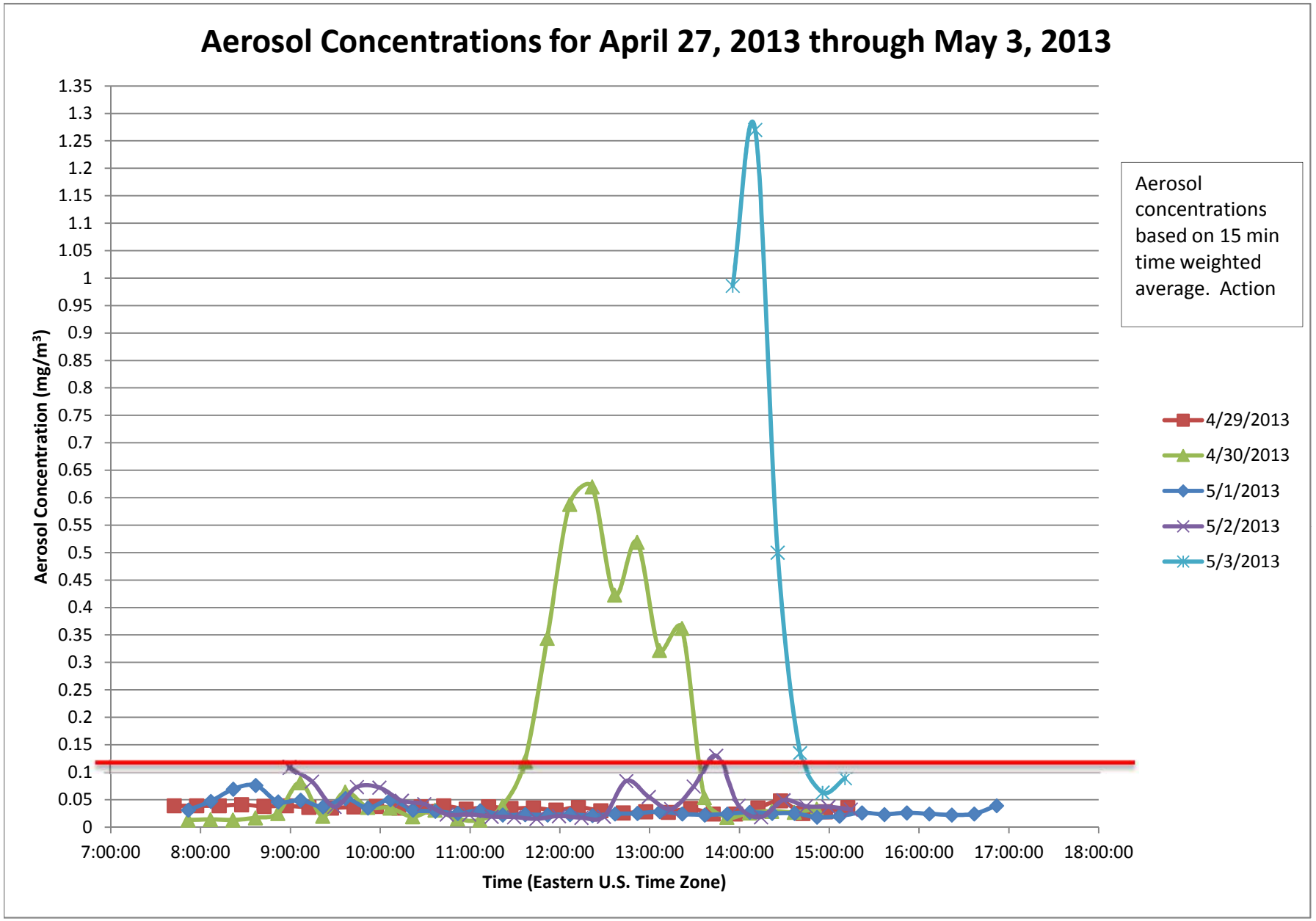

VOC Concentrations for May 6, 2013 to May 10, 2013
VOC Concentrations (ppm)
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
5:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
Air monitoring was not conducted on 5/8/13 and 5/9/13 due to weather conditions.
5/6/2013
5/7/2013
5/8/2013

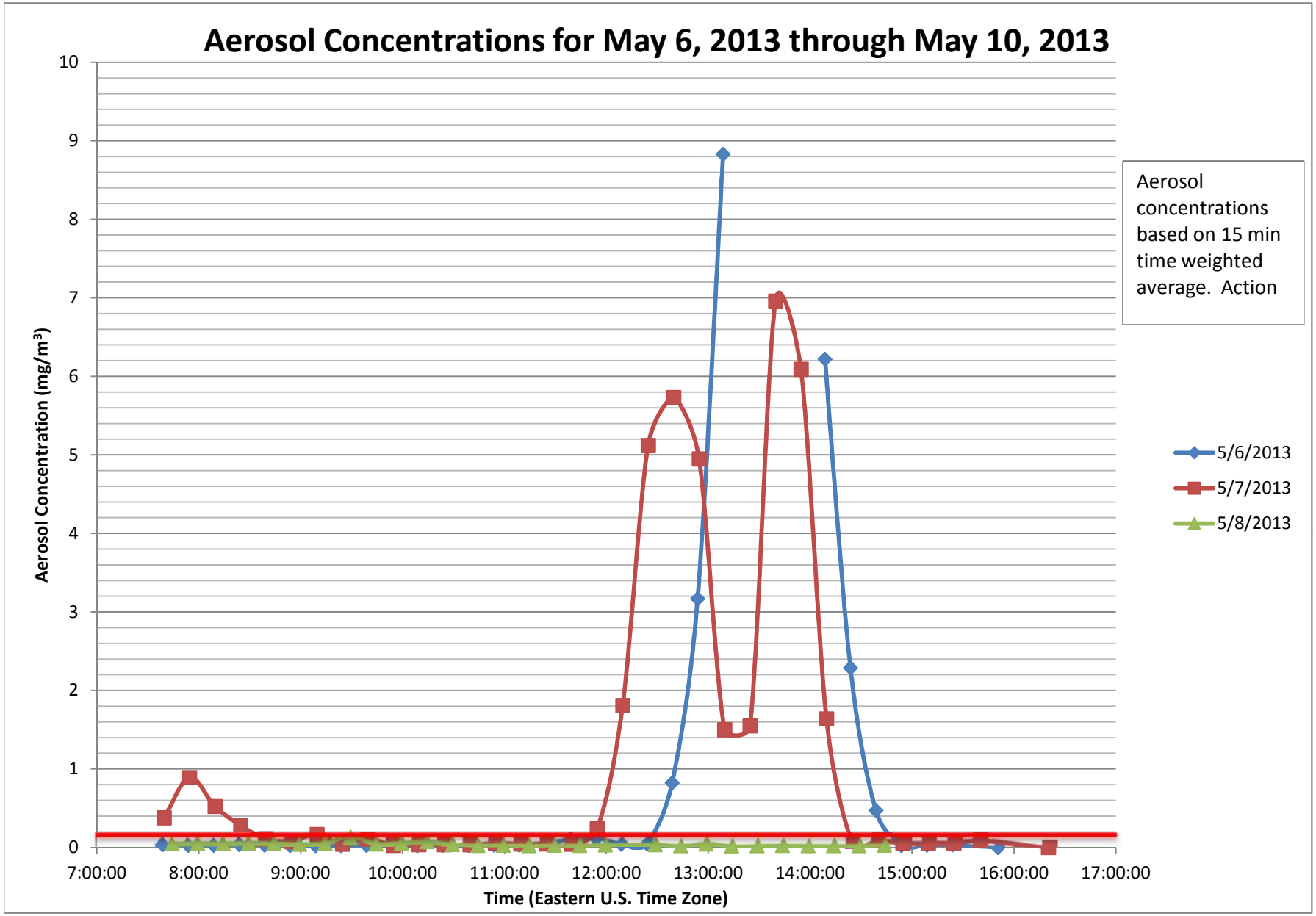

VOC Concentrations for May 13, 2013 to May 17, 2013
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
VOC Concentrations (ppm)
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
5:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
5/13/2013
5/14/2013
5/15/2013
5/16/2013
5/17/2013

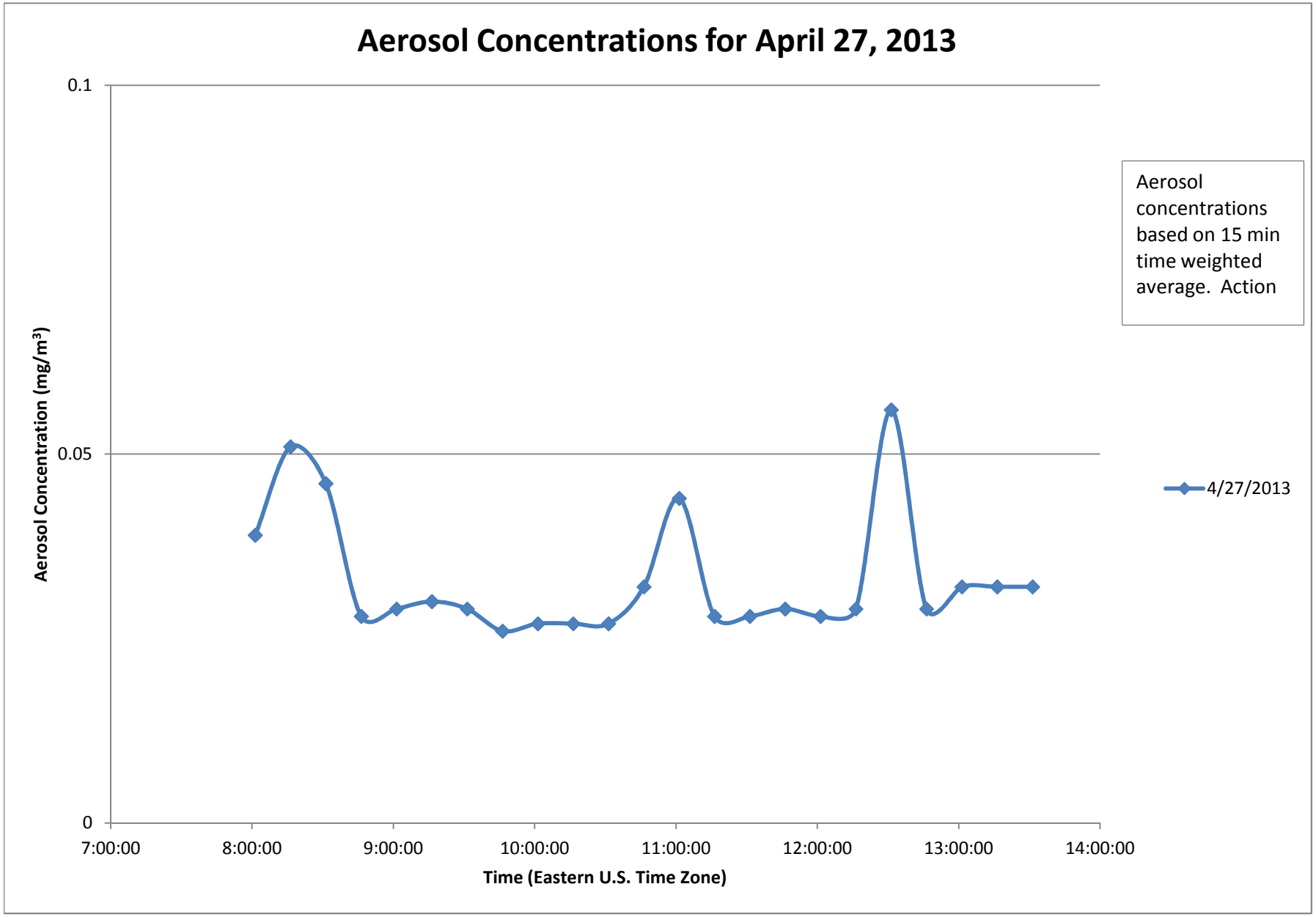

VOC Concentrations for May 20, 2013 to May 24, 2013
VOC Concentrations (ppm)
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
5:00:00 PM
7:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
5/20/2013
5/21/2013
5/22/2013
5/23/2013
5/24/2013

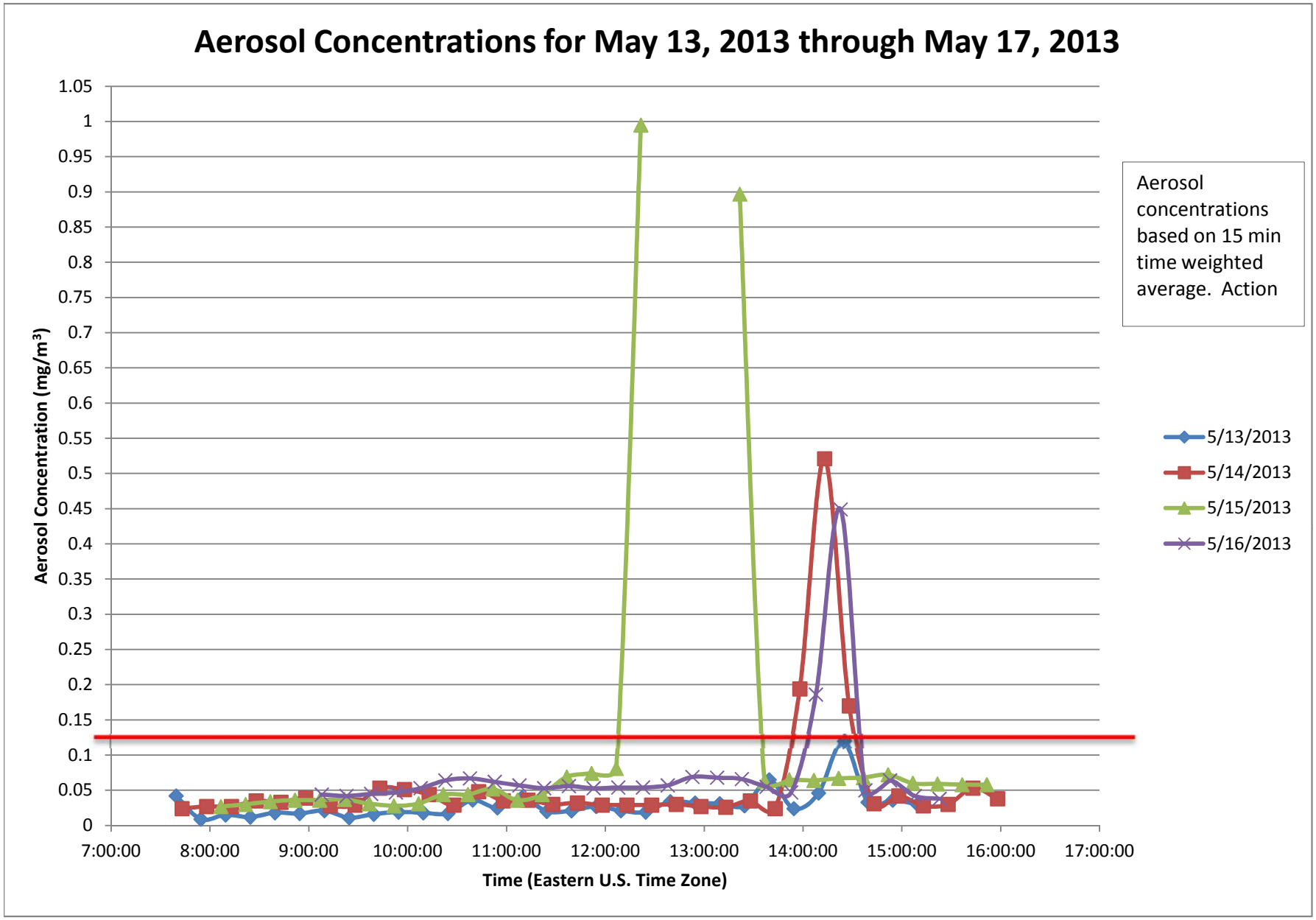

VOC Concentrations for June 03, 2013
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
VOC Concentrations (ppm)
7:00:00 AM
9:00:00 AM
11:00:00 AM
1:00:00 PM
3:00:00 PM
5:00:00 PM
Time (Eastern U.S. Time Zone)
VOC concentrations based on time weighted average. Action level for VOCs is 5 ppm.
6/3/2013

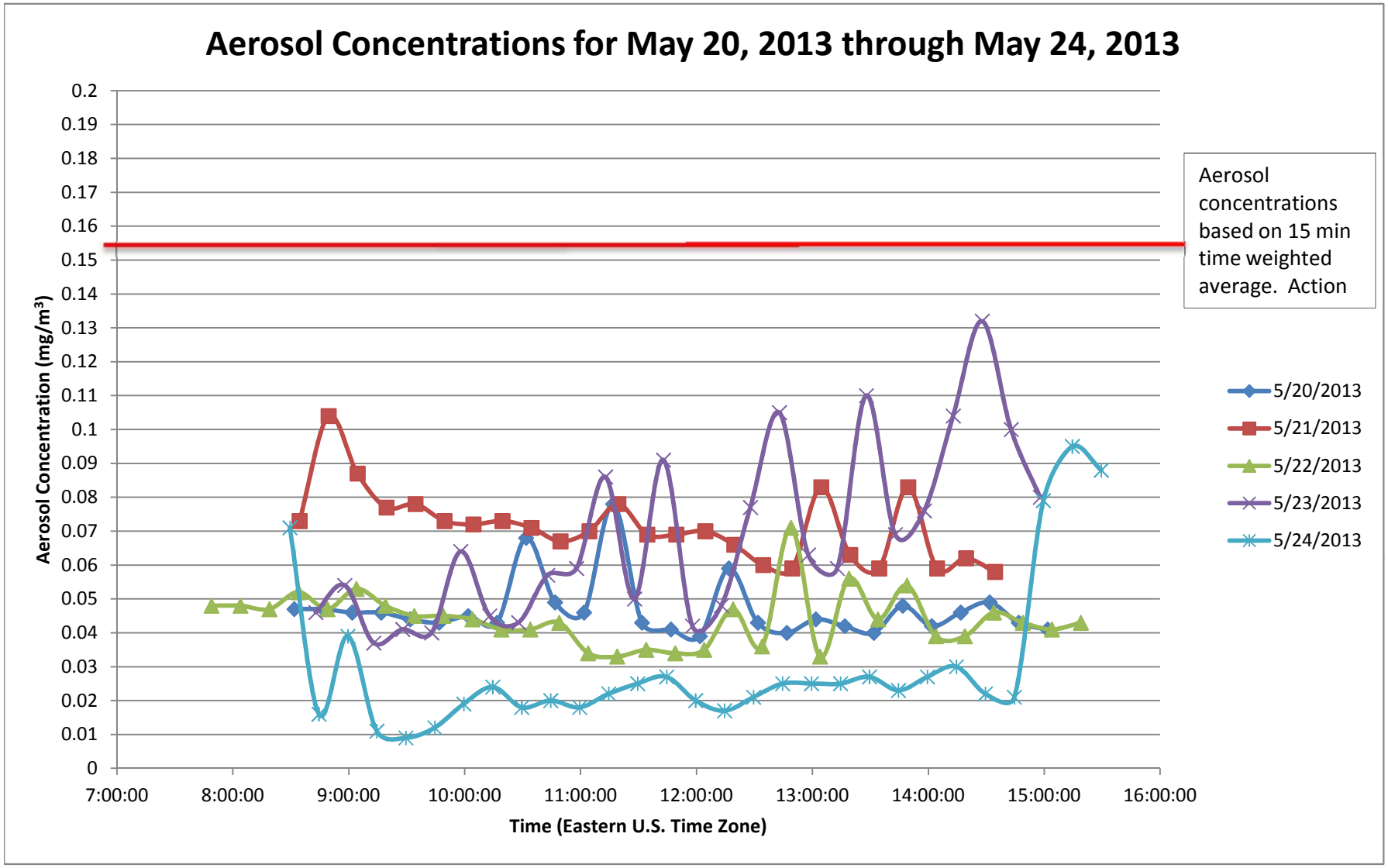

Aerosol Concentrations for April 17, 2013 through April 19, 2013
Aerosol Concentration (mg/m³)
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
April 17, 2013
April 18, 2013
April 19, 2013

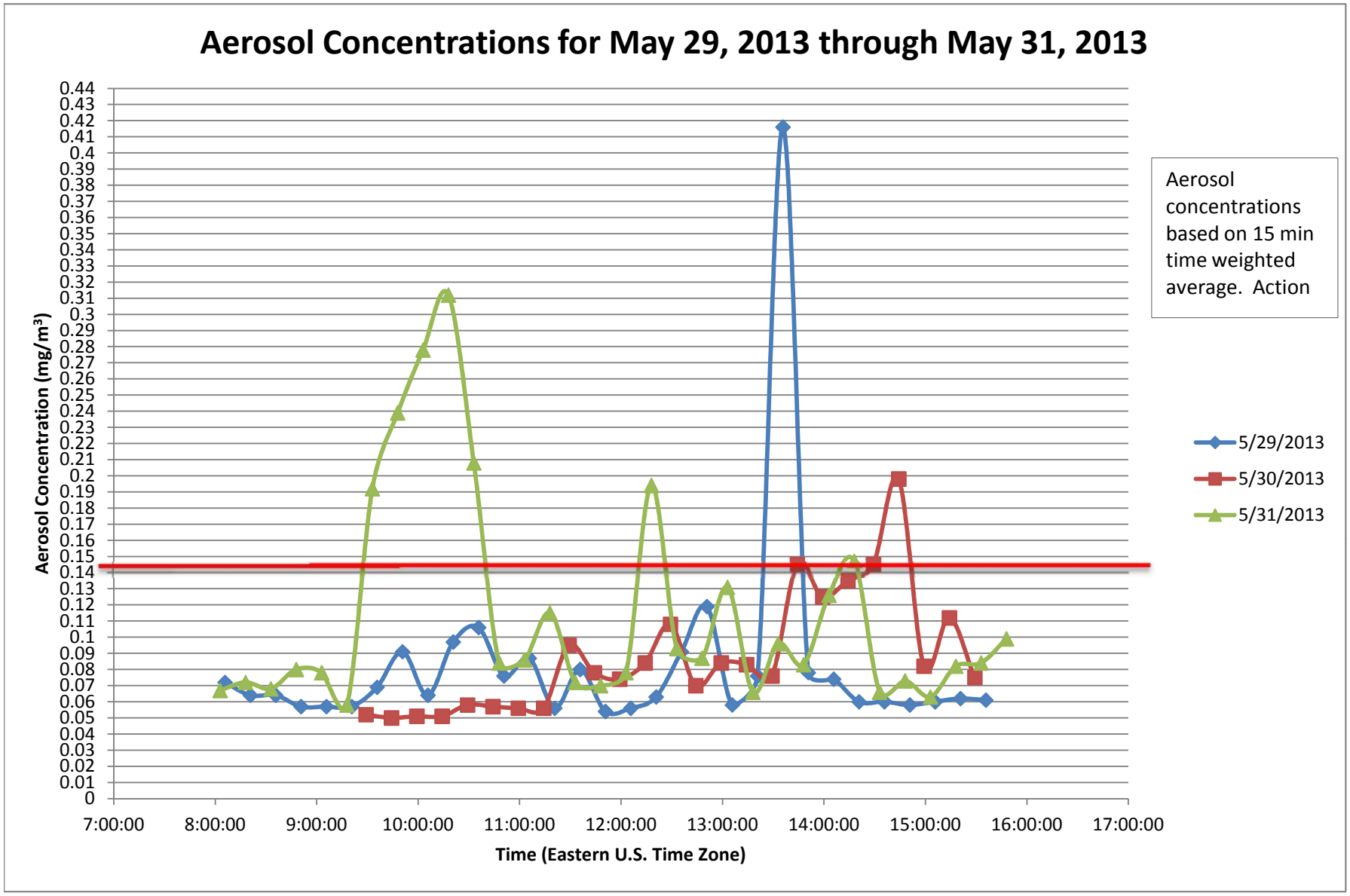

Aerosol Concentrations for April 27, 2013 through May 3, 2013
Aerosol Concentration (mg/m³)
1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
4/29/2013
4/30/2013
5/1/2013
5/2/2013
5/3/2013

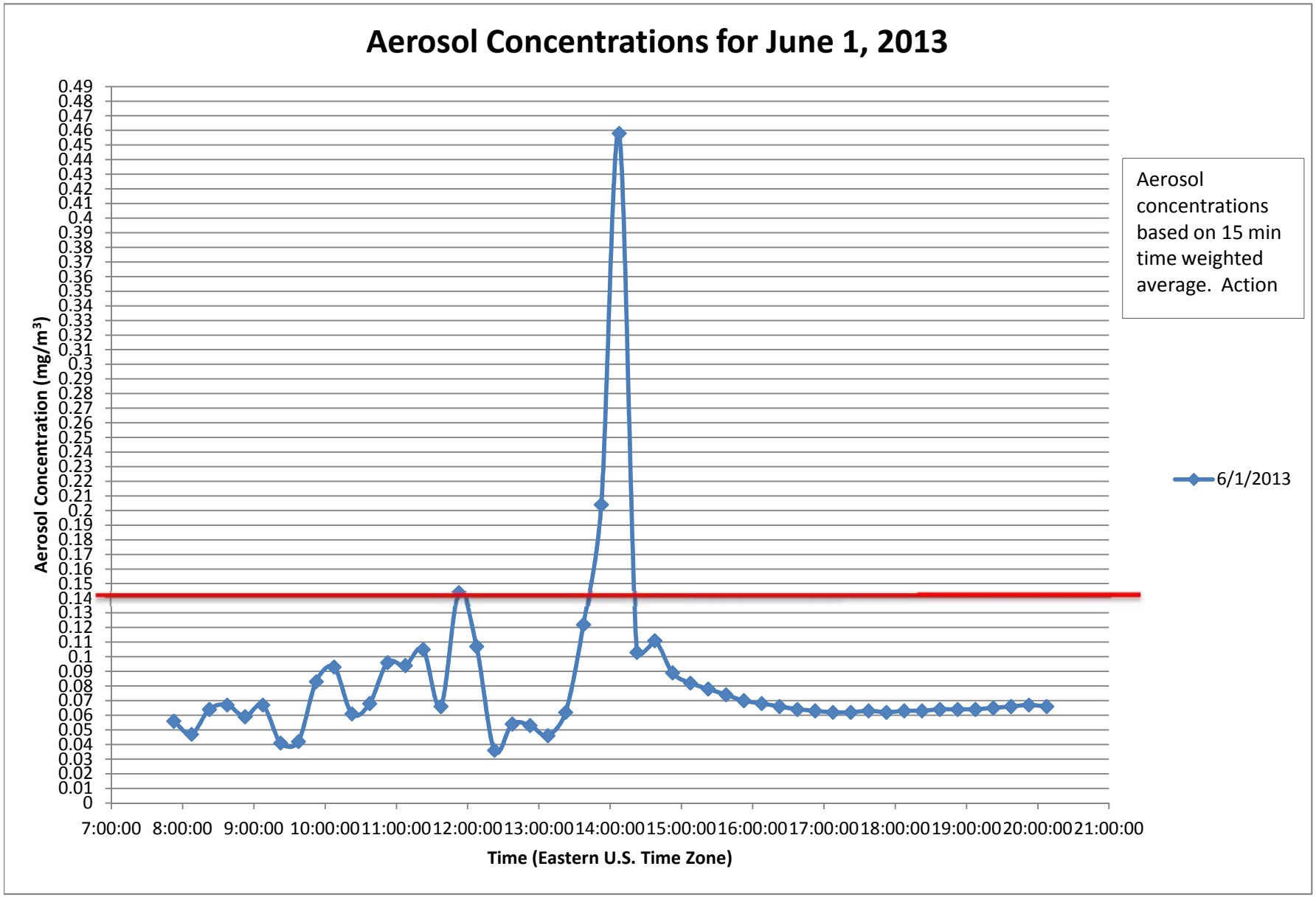

Aerosol Concentrations for May 6, 2013 through May 10, 2013
Aerosol Concentration (mg/m³)
10
9
8
7
6
5
4
3
2
1
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
5/6/2013
5/7/2013
5/8/2013

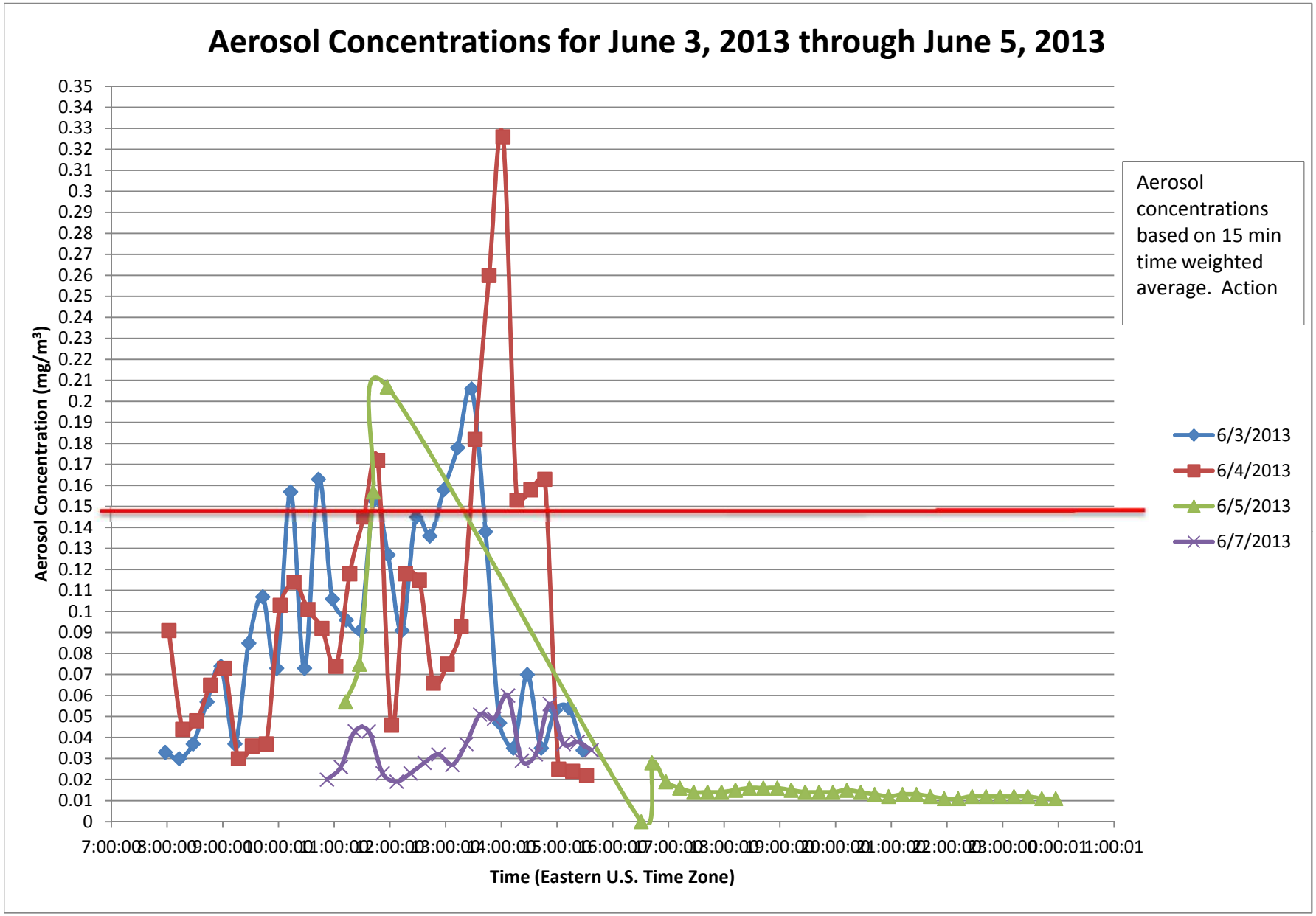

Aerosol Concentrations for April 27, 2013
0.1
0.05
0
Aerosol Concentration (mg/m³)
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
4/27/2013


Aerosol Concentrations for May 13, 2013 through May 17, 2013
Aerosol Concentration (mg/m³)
1.05
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0.6
0.55
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
5/13/2013
5/14/2013
5/15/2013
5/16/2013


Aerosol Concentrations for May 20, 2013 through May 24, 2013
Aerosol Concentration (mg/m³)
0.2
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
5/20/2013
5/21/2013
5/22/2013
5/23/2013
5/24/2013


Aerosol Concentrations for May 29, 2013 through May 31, 2013
Aerosol Concentration (mg/m³)
0.44
0.43
0.42
0.41
0.4
0.39
0.38
0.37
0.36
0.35
0.34
0.33
0.32
0.31
0.3
0.29
0.28
0.27
0.26
0.25
0.24
0.23
0.22
0.21
0.2
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
5/29/2013
5/30/2013
5/31/2013


Aerosol Concentrations for June 1, 2013
Aerosol Concentration (mg/m³)
0.49
0.48
0.47
0.46
0.45
0.44
0.43
0.42
0.41
0.4
0.39
0.38
0.37
0.36
0.35
0.34
0.33
0.32
0.31
0.3
0.29
0.28
0.27
0.26
0.25
0.24
0.23
0.22
0.21
0.2
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
6/1/2013


Aerosol Concentrations for June 3, 2013 through June 5, 2013
Aerosol Concentration (mg/m³)
0.35
0.34
0.33
0.32
0.31
0.3
0.29
0.28
0.27
0.26
0.25
0.24
0.23
0.22
0.21
0.2
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
7:00:00
8:00:00
9:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
22:00:00
23:00:00
0:00:01
1:00:01
Time (Eastern U.S. Time Zone)
Aerosol concentrations based on 15 min time weighted average. Action
6/3/2013
6/4/2013
6/5/2013
6/7/2013

APPENDIX H
DUSR

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

October 16, 2013

Cody Martin
C&S Companies
90 Broadway
Buffalo, NY 14203

RE: **D**ata **U**sability **S**ummary **R**eport (DUSR) for HARBORcenter Site Analytical Laboratory Data
TAL-Buffalo SDG Nos. 480-36619-1, 480-36717-1, 480-36833-1, 480-36915-1, 480-37016-1, 480-37165-1, 480-37238-1, 480-37308-1, 480-37388-1, 480-37529-1, 480-37529-2, 480-37596-1, 480-37636-1, 480-37638-1, 480-37782-1, 480-38089-1, 480-38259-1, 480-38262-1, 480-38447-1, 480-38627-1, 480-38691-1, 480-38873-1, 480-38875-1, 480-42606-1, and 480-42606-2
Paradigm SDG No. 132817

Dear Mr. Martin:

Review has been completed for the analytical data packages noted above, generated by TestAmerica Laboratories, that pertain to samples collected between 04/17/13 and 07/24/13 HARBORcenter site. One hundred four samples, ten field duplicates, nine aqueous samples, and two aqueous field duplicates were processed for TCL volatiles, TCL semivolatiles, and TAL metals. The aqueous samples were also processed for dissolved samples. Six soil samples were processed for acetone on one container, and hexavalent chromium and acetone on a second container; a field duplicate was also processed for hexavalent chromium. Trip blanks and sample matrix spikes were processed. The analytical methods that were utilized are those of the USEPA SW846 8260C, 8270D, 6010C, 7470/7471, and 7196. The hexavalent chromium analyses and half of the acetone analyses were conducted by TAL-Edison.

The laboratory data packages that were submitted contain full deliverables for validation, and this usability report is primarily generated from review of the summary form information, with full review of sample raw data, and limited review of associated QC raw data. The reported summary forms have been reviewed for application of validation qualifiers with guidance from the USEPA national and regional validation guidelines.

The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Blind Field Duplicate Correlations

* Preparation/Calibration Blanks
* Laboratory Control Samples (LCSs)
* Calibration/Low Level Standards
* ICP Serial Dilution
* Instrument MDLs
* Sample Result Verification

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c). The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found within the laboratory data packages.

In summary, analyses were primarily conducted in compliance with the required analytical protocols. Most sample results are usable either as reported or with qualification as estimated in value. However, the results for semivolatile phenolic analytes in three soil samples and for the acetone analyses performed on the hexavalent chromium soil containers are rejected and not usable.

Due to delayed preservation, the results for filtered metals in the samples have been qualified as estimated in value, with a possible low bias.

Copies of the sample identification summaries and the validation qualifier definitions are attached to this text. Also included with the report are client results tables edited with the qualifications recommended within this report.

The following text discusses quality issues of concern.

Blind Field Duplicates

The blind field duplicates were collected at locations MW-04, MW-06, G2 9-10, F1 8, SE11 3-6, B4 13-14, B2 12', B5 10', NE9 3-8, NE10 3-8, SW6 3-9, SW-10 7, and B-B2 5 bg. Correlations fall within validation guidelines, with the following exceptions, results for which are qualified as estimated in the parent sample and its duplicate:

- caprolactum (>±CRDL) in MW-04
- aluminum (>±CRDL) in MW-06-Total
- iron (110%RPD) in MW-06-Dissolved
- toluene (>2X±CRDL) in G2 9-10
- lead (77%RPD) in F1 8
- aluminum (61%RD) in B5 10'
- methyl acetate (>2X±CRDL), calcium (53%RPD), and mercury (66%RPD) in NE9 3-8
- cyclohexane, methylcyclohexane (both >2X±CRDL), and barium, beryllium, copper, and manganese (75%RPD to 124%RPD) in NE10 3-8
- aluminum, barium, copper, magnesium, manganese, potassium, sodium, vanadium, and zinc (57%RPD to 143%RPD) in SW-10 7

Chain-of-Custody/Sample Receipt

The dissolved metals fractions were not filtered and preserved until sample receipt. Therefore, results for filtered samples have been qualified as estimated in value.

The fact that the aqueous samples submitted for dissolved metals were not filtered and preserved until after laboratory receipt was not mentioned on either the laboratory login forms or the case narrative.

Samples reported in SDG 480-38262 were shipped three days after collection, and received by the laboratory four days after collection, two days beyond the allowable timeframe.

Identifications assigned at collection to eleven of the soil samples were corrected after the data packages were generated. Upon request, the laboratory resubmitted the five affected data packages (480-36833-1, 480-37016-1, 480-36915-1, and 480-38262-1) to reflect the corrected IDs. In some cases the correct IDs were on the containers, but the custody IDs were used during login.

The relinquish entries on the custody forms for samples reported in SDGs 480-36619-1, do not include the date and time that the samples were released.

The final laboratory receipt signatures were not entered on the custody forms associated with samples reported in SDG 480-37636

Discrepancies between container and custody identifications observed at sample receipt were resolved by using the custody identifications (SDG 480-36833-1).

The fields designating the specific sample analytical fraction requirements were not filled in on the custodies associated with samples reported in SDG 480-37165-1. The column headers were filled in.

Trip blanks were submitted with some of the sample batches, but were not logged onto the custody forms.

The down-arrows were omitted from the collection dates of samples reported in SDG 480-37308 and 480-42606.

The first page of the subcontract custody forms for the hexavalent chromium analyses shows no receipt signature, and the second page shows not receipt entries at all. The first page shows a date of 9/26/13 that should be 7/26/13.

The matrix designation on the custody form for the matrix spikes of MW-02 show "soil". The parent sample correctly shows "aqueous."

Strikeovers on the custodies should have been dated and initialed.

TCL Volatile and Acetone Analyses by EPA 8260C

The acetone results reported in SDG 480-42606-2 were from analyses on the same containers used for samples collected 07/24/13 and submitted originally for hexavalent chromium analyses. Because the analyses were conducted from soils in previously opened containers that were possibly used in an environment not protected from volatile analytes, there is potential for external contamination and/or losses. Therefore, those data are not usable, and are to be rejected.

The following detections are qualified as tentative in identification and estimated in value due to interferences in the mass spectra:

- isopropylbenzene in E3 10'
- benzene in B19 10 and SW7 3-5
- o-xylene in SE8 3-8 and DUPA

The following detections are edited to reflect non-detection due to very poor mass spectral quality:

- benzene in NE8 4-6 and DUPH
- methyl acetate in SW4 3-6
- 1,2-dibromo-3-chloropropane in SW7 3-5

The following detections are considered external contamination, and edited to reflect non-detection due to presence in the associated method blanks:

- toluene and xylenes flagged as "B" in the samples reported in SDG 480-36717-1
- methylene chloride DUPJ, and in the samples reported in SDG 480-37238, 480-37308, 480-38262,
- toluene in F2 10
- ethylbenzene, toluene, and xylenes in soils reported in 480-38529

Due to very poor response (signal to noise ratio) in the lowest concentration calibration standard, the reporting limits for 1,1,2-1,2,2-trichloroethane in the aqueous samples reported in SDG 480-36717-1 have been edited upward by a factor of five. Other calibration responses meet analytical and validation requirements, , with the following exceptions, the results for which are qualified as estimated in the indicated samples:

- bromomethane (low RRF), carbon tetrachloride, dibromochloromethane, bromoform, and 1,2-dibromo-3-chloropropane (25%D to33%D) in the aqueous samples reported in SDG 480-36717-1
- acetone, 2-butanone (MEK) and methyl acetate (23%D to 26%D) in C2 10', E2 10' and J5
- bromomethane and chloromethane (21%D and 22%D) in aqueous samples reported in 480-37016
- acetone and 2-butanone (low RRF) in soils reported in 480-37016
- 1,2-dibromo-3-chloropropane (24%D) in MW-05
- bromomethane, bromoform and 1,2-dibromo-3-chloropropane (21%D to 40%D) in SE1 0-8, SW2 6-9, SE2 3-8, SW3 4-10, SE3 3-10, J4 10, H4 14 and SW1 3-9
- bromoform, and 1,1,2-1,2,2-trichlorotrifluoroethane, and 1,2-dibromo-3-chloropropane (29%D and 39%D) in NE5 3'-8'
- bromoform, isopropyl alcohol, and 1,2-dibromo-3-chloroporpane (28%D to 40%D) in all soils reported in SDG 480-37238 except F2 10
- carbon disulfide, 1,2-dibromo-3-chloropropane and bromoform (26%D to 30%D) in B1 9'-10' and NE8 4'-10'
- bromoform (27%D) in MW-02
- dichlorodifluoromethane and carbon disulfide (21%D to 29%D) in SE10 8' and E1 8'-9'
- bromomethane and chlorodifluoromethane (23%D and 29%D) in SE6 3'-6', SE9 6'-8', SE8 3'-8', SE7 3'-8', SE11 3'-6', F1 8', DUP A, DUP B and DUP C
- dichlorofluoromethane (22%D and 29%D) in al samples reported in SDG 480-38638
- carbon disulfide (27%D) in B2 10, A2 10, C5 10 DUPD, DUPE, and DUPF

- bromomethane (21%D and 23%D) in DUPJ and the samples reported in SDG 480-38691
- bromomethane, chloroethane, and acetone (21%D to 24%D) in SDG 480-480-38447

Due to elevated surrogate standard recoveries, the results for detected analytes in F3 10' are qualified as estimated in value. Other surrogate recoveries are acceptable, with the exception of that for BFB in B-D2 3.5'. This sample also exhibited a low internal standard response. The result for acetone in that sample is qualified as estimated.

The detection of acetone in B-D4 Dbg is considered potential external contamination, and is edited to reflect non-detection at a slightly elevated reporting limit. The initial calibration standard linearity of the instrument is very poor (147%RSD), with proportionally elevated responses at lower concentrations that indicate system contamination or noise.

Matrix spikes of TCL volatiles in H4 14, J4 10, F2 10, MW-02, E1 8-9, SE 3-8, 5 10, SW7 3-5, NW4 0-10, NW5 3-5, show acceptable recoveries and correlations for the 13 evaluated analytes, with the following exceptions, results for which are qualified as estimated in the indicated parent sample:

- 1,2-dicholoroethane (56% and 62%) in F2 10
- 1,1-dichloroethane in (74% to 79%) SE7 3-8 and SW7 3-5

The matrix spikes of NE4 3-8 show outlying recoveries for most of the evaluated analytes. However, review of the recoveries of the surrogate recoveries show inconsistencies that may indicate spiking anomalies. For example toluene recovered at 67% and 66%, but surrogate d8-toluene recovered at 102% in both matrix spikes. The recoveries should be nearly identical. No qualification is made.

Because the limited spike analyte list does not include acetone, there was no applicable LCS evaluation for the acetone analyses reported in SDG 480-42606-1.

MW-02 was processed at dilution due to foaming. This results in elevated reporting limits for analytes not detected in the sample.

Some of the samples were processed at medium level (using the methanol fractions rather than the low level fractions), even though there was little or no matrix responses. In some cases, they were processed at medium level due to the holding time exceedence for the low level that was caused by delayed sample receipt. Reporting limits are proportionally elevated.

The report forms in the Paradigm data package do not include the required information for solids content, sample weights, and volumes.

TCL Semivolatile Analyses by EPA 8270

Results for the phenolic compounds in SE6 3-6, SE11 3-6, and DUPC are rejected and not usable due to the failure of surrogate standard 2,4,6-tribromophenol to recover in those samples.

The following detections are qualified as tentative in identification and estimated in value due to interferences in the mass spectra:

- butylbenzylphthtalate in MW-03
- anthracene in J5
- anthracene, benzo(g,h,i)perylene, and chrysene in C2 10'
- benzo(a)anthracene in NW2 10'
- anthracene and fluoranthene in E3 10'
- carbazole in H4 10'
- 2-methylnaphthalene in J4 10', H4 10', SE7 3-8, and DUPA
- naphthalene, anthracene, and biphenyl in SW2 6-9
- anthracene and fluorene in J4 10
- anthracene in B18 asnd SE6 3-6
- fluoranthene in SE7 3-8 and DUPC
- fluorene in DUPA and DUPC
- benzo(k)fluoranthene and chrysene in SE9 6-8

The following detections are edited to non-detection due to very poor mass spectral quality:

- indeno(1,2,3-cd)pyrene in C2 10'
- isophorone in E2 10'
- n-nitrosodiphenylamine and fluoranthene in E3 12'
- 2-methylphenol and 4-methylphenol in MW-09 (the same instrument response was erroneously reported as both)
- fluoranthene in J4 10'
- n-nitrosodiphenylamine in J4 10' and H4 10 '
- benzo(k)fluoranthene and phenol in MW-0
- n-nitrosodiphenylamine in SW2 6-9, SW3 4-10, and J4 10
- carbazole in SE4 3-6
- 2-methylnaphthalene in B19-10
- chrysene in G1 8 and B5 13
- dibenzofuran in G2 9-10 and NW8-5
- bis(2-ethylhexyl)phthalate SE8 3-8 and SE11 3-6
- 4-nitroaniline in B5 10

Results for analytes initially reported with the "E" flag are derived from the dilution analyses of the samples, thus reflecting responses within the established linear range of the instrument.

The following detections are edited to reflect non-detection due to presence in the associated method blanks:

- di-n-butylphthalate in aqueous samples reported in 480-36717, 480-36915, 480-37165
- di-n-butylphthalate and butylbenzylphthalate in aqueous samples reported in 480-36717
- phenanthrene in MW-02, SE4 3-8, J1 6-7, in four samples reported in SDG 480-37636, seven samples reported in SDG 480-38638, and in all samples reported in 480-37338 except B19 -10

The result for 2,4-dinitrophenol in the aqueous samples reported in SDG 480-36915 are qualified as estimated due to low recovery (36%RD) in one of the associated LCSs.

Surrogate recoveries acceptable, unless analyzed at significant dilution, thus prohibiting evaluation). Holding times are met, and internal standards show compliant responses.

The matrix spike evaluations of C2 10', J4 10, F2 10, H4 14, NE4 3-8, MW-02, E1 8, C5 10, SW4 3-6, SW7 3-5, NW4 0-10, and NW5 3-8 show acceptable recoveries and duplicate correlations for the twelve evaluated analytes, or responses that were diluted beyond evaluation. The analytical protocols require that all target analytes be evaluated in the matrix spikes and LCS.

The matrix spikes of SE7 3-8 show no recovery of 2,4-dinitrophenol and 3,3'-dichlorobenzidine, and results for those two compounds are therefore rejected in the parent sample.

Due to low response in the lowest initial calibration standards (RRF<0.05), the results for 2,4-dinitrophenol in the samples reported in SDG 480-36619 are qualified as estimated, with a possible low bias. Other calibration standards meet analytical and validation requirements, with the following exceptions, the results for which are qualified as estimated in the indicated samples:

- hexachlorocyclopentadiene and 2,4-dinitrophenol (24%D and 29%D) in D4 10', D4 11', D5 10', E3 10', E3 12', E4 10', E5 10' and D5 12'
- hexachlorocyclopentadiene (24%D) in samples reported in SDG 480-38691
- bis(2-chloroisopropyl)ether (24%D) in the samples reported in SDG 480-38873

The laboratory indicated that samples J5 and D4 10' were decanted prior to sample preparation, due to the liquid content. This is an acceptable practice, but the solids contents that were used for the dry weight corrections were not aliquot specific. Therefore, the results for those samples are qualified as estimated in value, with a possible high bias.

Some of the samples were processed at dilution due to the viscosity of the extract or other matrix issues. The reporting limits for undetected analytes in those samples are proportionally elevated.

TAL Metals Analyses by EPA 6010C/7471

The aqueous samples were not filtered until after receipt at the laboratory. Due to subsequent delay in preservation, the results for dissolved metals in the samples have been qualified as estimated in value, with a possible low bias.

The following elements were found at significantly higher concentrations in the filtered fractions than in the unfiltered fractions, and results for those have been qualified as estimated in both fractions of the indicated samples:

- MW-01 -manganese
- MW-02 -lead and magnesium
- MW-03 -antimony

The matrix spikes of TAL metals in MW-03-Dissolved, MW-04-Dissolved , MW-09, MW-7A, and MW-02-Total and Dissolved, and of mercury in MW-01-Total, MW-01-Dissolved, D4 11', DUP1, MW-06, NW3, MW-05-Total and Dissolved, SE4 3-8, A3 10, and D3 8-9 show acceptable accuracy and precision.

The following matrix spikes/duplicates show recoveries and/or correlations outside the recommended limits, indicating a matrix effect on analyte recovery from the samples, and results for the listed elements are qualified as estimated in the samples reported in the indicated SDGs:

Parent Sample	Element	%Recoveries	%RPD	Affected Samples
F2 10'	Antimony	51 and 49		Soils in 480-36619, 480-36717, and 480-36833
	Manganese	-8 and 338	64	
	Potassium	139 and 138		
B3 10'	Antimony	50 and 47		Soils in 480-36915
	Manganese		51	
D3 10'	Mercury	158 and 473	52	Soils in 480-37016
J3 10'	Antimony	45 and 48		
J4 10	Antimony	46 and 43		Soils in 480-37238
	Mercury	66 and 71		
F2 10	Antimony	43 and 46		
	Calcium	74 and 70		
H4 14	Antimony	43 and 43		
	Potassium	141 and 134		
	Selenium	57 and 51		
NE4 3-5	Barium	145 and 171		Soils in 480-37308
	Aluminum	239 and 220		
	Calcium		45	
	Magnesium		49	
NE6 5-7	Aluminum	519 and 303		Soils in 480-37338
	Calcium		72	
	Manganese		72	
	Zinc	263 and 122	48	
J2 10	Aluminum	153 and 140		Soils in 480-37529 and 480-37596
E1 8-9	Antimony	49 and 50		Soils in 480-37636
	Potassium	139 and 159		
	Mercury	127 and 177		
SE7 3-8	Iron	23 and 39		
	Magnesium	29 and 42		
	Manganese	69 and 476	70	
	Calcium		43	
C5 10	Antimony	62 and 62		Soils in 480-37638
	Potassium	136 and 137		
SW4 3-6	Aluminum			Soils in 480-37782
	Barium	171 and 206		
	Copper	65 and 137	39	
	Iron	337 and 621	36	
	Nickel	135 and 128		

Parent Sample	Element	%Recoveries	%RPD	Affected Samples
SW4 3-6, cont'd	Potassium	163 and 163		Soils in 480-37782, cont'd
	Vanadium	127 and 128		
	Zinc	-151 and -94		
SW7 3-5	Aluminum	149 and 51		Soils in 480-38089
	Chromium	41 and 73		
	Barium		69	
	Copper		67	
	Calcium		60	
	Iron		137	
	Lead		71	
	Zinc		94	
NW4 0-10	Antimony	62 and 73		Soils in 480-38259 and 480-38262
	Potassium	188 and 170		
	Mercury	153 and 211		
NW5 3-8	Aluminum	215 and 274		
	Magnesium	147 and 27		
	Manganese	821 and 188	88	
	Calcium		42	
NW8-5	Aluminum	149 and 130		Soils in 480-38447, 480-627, 480-38691, 480-38873, and 480-38875
	Barium		37	
	Copper	46 and 50		
	Zinc	34 and 61		

The ICP serial dilution evaluations of MW-03-Dissolved, MW-04, MW-06, B3 10', MW-7A, J4 10, MW-02-Total and Dissolved, J2 10, E1 8-9, and NW4 0-10 show acceptable correlations.

The following ICP serial dilution evaluations show elevated correlations, and therefore results for samples reported in the indicated SDGs have been qualified as estimated in value. A matrix effect that suppresses analyte response is indicated:

Parent Sample	Element	%Difference	Associated Samples
F2 10'	Calcium	21	Soils in 480-36619, 480-36717, and 480-36833
J3 10'	Magnesium	11	Soils in 480-37016
NE4 3-8	Calcium	11	Soils in 480-37308
	Iron	13	
	Zinc	123	
NE6 5-7	Calcium	12	Soils in 480-37338
	Chromium	18	
	Iron	12	
	Manganese	14	

Parent Sample	Element	%Difference	Associated Samples
C5 10	Potassium	13	Soils in 480-37638
SW-7 3-5	Cadmium	12	Soils in 480-37782 and 480-38089
	Calcium	14	
NW8-5	Sodium	11	Soils in 480-38447, 480-627, 480-38691, 480-38873, and 480-38875

Blanks show no contamination above the RL or within tenfold of the sample concentrations. Calibration and low level standards produce acceptable recoveries.

Hexavalent Chromium Analyses by EPA 7196

The soluble and insoluble matrix spikes, and the laboratory duplicate of B-B4-3.5' show acceptable recoveries and correlations. Holding times were met, and blanks show no contamination. LCS recoveries are compliant.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-36619-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-36619-1	G4 10'	Solid	04/17/2013 1200	04/18/2013 1725

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-36717-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-36717-1	MW-01	Water	04/19/2013 1030	04/19/2013 1615
480-36717-2	C2 10'	Solid	04/19/2013 1045	04/19/2013 1615
480-36717-3	E2 10'	Solid	04/19/2013 0940	04/19/2013 1615
480-36717-4	MW-02	Water	04/19/2013 1300	04/19/2013 1615
480-36717-5	MW-03	Water	04/19/2013 0220	04/19/2013 1615
480-36717-6	J5	Solid	04/19/2013 0300	04/19/2013 1615

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-36833-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-36833-1	D4 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-2	D4 11'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-3	D5 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-4	E3 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-5	E3 12'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-6	E4 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-7	E5 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-8	D5 12'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-9	C4 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-10	F3 12'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-11	NW1 4-6	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-12	NW2 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-13	F3 10'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-14	F3 12'	Solid	04/22/2013 0600	04/23/2013 1110
480-36833-15	MW-04	Water	04/22/2013 0600	04/23/2013 1110
480-36833-16	DUP 1	Water	04/22/2013 0600	04/23/2013 1110

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-36915-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-36915-1	MW-06	Water	04/23/2013 1100	04/24/2013 1155
480-36915-2	DUP2	Water	04/23/2013 1100	04/24/2013 1155
480-36915-3	NW3	Solid	04/23/2013 0900	04/24/2013 1155
480-36915-4	NE1	Solid	04/23/2013 1030	04/24/2013 1155
480-36915-5	NE2	Solid	04/23/2013 1040	04/24/2013 1155
480-36915-6	NE3	Solid	04/23/2013 1100	04/24/2013 1155
480-36915-7	D2 10'	Solid	04/23/2013 0400	04/24/2013 1155
480-36915-8	D2 14'	Solid	04/23/2013 0330	04/24/2013 1155
480-36915-9	B2 10'	Solid	04/23/2013 0330	04/24/2013 1155

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-37016-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37016-1	MW-09	Water	04/24/2013 1530	04/25/2013 1140
480-37016-2	D2 10'	Solid	04/24/2013 1230	04/25/2013 1140
480-37016-3	C2 12'	Solid	04/24/2013 1200	04/25/2013 1140
480-37016-4	J4 10'	Solid	04/24/2013 1630	04/25/2013 1140
480-37016-5	J3 10'	Solid	04/24/2013 1630	04/25/2013 1140
480-37016-6	G5 10'	Solid	04/24/2013 1730	04/25/2013 1140
480-37016-7	H5 10'	Solid	04/24/2013 1715	04/25/2013 1140
480-37016-8	G3 10'	Solid	04/24/2013 1710	04/25/2013 1140
480-37016-9	H3 10'	Solid	04/24/2013 1700	04/25/2013 1140
480-37016-10	H4 10'	Solid	04/24/2013 1815	04/25/2013 1140
480-37016-11	H4 14'	Solid	04/24/2013 1800	04/25/2013 1140
480-37016-12	F4 10'	Solid	04/24/2013 1730	04/25/2013 1140
480-37016-13	F5 10'	Solid	04/24/2013 1815	04/25/2013 1140
480-37016-14	F5 12'	Solid	04/24/2013 1810	04/25/2013 1140
480-37016-15	H2 10'	Solid	04/24/2013 1810	04/25/2013 1140

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-37165-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37165-1	MW-05	Water	04/25/2013 0930	04/26/2013 1615
480-37165-2	MW-7A	Water	04/26/2013 1200	04/26/2013 1615

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-37238-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37238-1	SE1 0-8	Solid	04/27/2013 1130	04/29/2013 1235
480-37238-2	SW2 6-9	Solid	04/27/2013 1130	04/29/2013 1235
480-37238-3	SE2 3-8	Solid	04/27/2013 1115	04/29/2013 1235
480-37238-4	SW3 4-10	Solid	04/27/2013 1100	04/29/2013 1235
480-37238-5	SE3 3-10	Solid	04/27/2013 1115	04/29/2013 1235
480-37238-6	J4 10	Solid	04/27/2013 0700	04/29/2013 1235
480-37238-6MS	J4 10	Solid	04/27/2013 0700	04/29/2013 1235
480-37238-6MSD	J4 10	Solid	04/27/2013 0700	04/29/2013 1235
480-37238-7	F2 10	Solid	04/27/2013 0700	04/29/2013 1235
480-37238-7MS	F2 10	Solid	04/27/2013 0700	04/29/2013 1235
480-37238-7MSD	F2 10	Solid	04/27/2013 0700	04/29/2013 1235
480-37238-8	H4 14	Solid	04/27/2013 0730	04/29/2013 1235
480-37238-8MS	H4 14	Solid	04/27/2013 0730	04/29/2013 1235
480-37238-8MSD	H4 14	Solid	04/27/2013 0730	04/29/2013 1235
480-37240-1	SW1 3-9	Solid	04/27/2013 1145	04/29/2013 1600

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-37308-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37308-1	NE5 3'-8'	Solid	04/29/2013 0500	04/30/2013 1100
480-37308-2	NE4 3'-8'	Solid	04/29/2013 0430	04/30/2013 1100
480-37308-2MS	NE4 3'-8'	Solid	04/29/2013 0430	04/30/2013 1100
480-37308-2MSD	NE4 3'-8'	Solid	04/29/2013 0430	04/30/2013 1100
480-37308-3	SE4 3'-6'	Solid	04/29/2013 1400	04/30/2013 1100
480-37308-4	NE4/ NE5	Solid	04/29/2013 1325	04/30/2013 1100

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-37388-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37388-1	B1 9'-10'	Solid	04/30/2013 1130	05/01/2013 1315
480-37388-2	B1 11'	Solid	04/30/2013 1130	05/01/2013 1315
480-37388-3	C1 8'	Solid	04/30/2013 1300	05/01/2013 1315
480-37388-4	D1 8'	Solid	04/30/2013 1500	05/01/2013 1315
480-37388-5	NE6 3'-7'	Solid	04/30/2013 1200	05/01/2013 1315
480-37388-6	NE7 4'-8'	Solid	04/30/2013 1130	05/01/2013 1315
480-37388-7	NE8 4'-10'	Solid	04/30/2013 1500	05/01/2013 1315

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-37529-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37529-1	MW-02	Water	05/01/2013 1500	05/02/2013 1745
480-37529-1MS	MW-02	Water	05/01/2013 1500	05/02/2013 1745
480-37529-1MSD	MW-02	Water	05/01/2013 1500	05/02/2013 1745
480-37529-2	SE4 3'-8'	Solid	05/01/2013 1600	05/02/2013 1745
480-37529-3	SE5 3'-6'	Solid	05/01/2013 1730	05/02/2013 1745
480-37529-4	J1 6'-7'	Solid	05/01/2013 1600	05/02/2013 1745
480-37529-5	J2 10'	Solid	05/01/2013 1600	05/02/2013 1745
480-37529-6	TRIP BLANK	Water	05/01/2013 0000	05/02/2013 1745

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-37596-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37596-1	G1-8'	Solid	05/02/2013 0930	05/03/2013 1255
480-37596-2	G2-9'-10'	Solid	05/02/2013 0930	05/03/2013 1255
480-37596-3	G2-10'-11'	Solid	05/02/2013 0930	05/03/2013 1255
480-37596-4	H1 8'	Solid	05/02/2013 0930	05/03/2013 1255

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-37636-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37636-1	SE10 8'	Solid	05/02/2013 1330	05/03/2013 1255
480-37636-2	SE6 3'-6'	Solid	05/02/2013 1330	05/03/2013 1255
480-37636-3	SE9 6'-8'	Solid	05/02/2013 1340	05/03/2013 1255
480-37636-4	E1 8'-9'	Solid	05/02/2013 1300	05/03/2013 1255
480-37636-4MS	E1 8'-9'	Solid	05/02/2013 1300	05/03/2013 1255
480-37636-4MSD	E1 8'-9'	Solid	05/02/2013 1300	05/03/2013 1255
480-37636-5	SE8 3'-8'	Solid	05/02/2013 1400	05/03/2013 1255
480-37636-6	SE7 3'-8'	Solid	05/02/2013 1415	05/03/2013 1255
480-37636-6MS	SE7 3'-8'	Solid	05/02/2013 1415	05/03/2013 1255
480-37636-6MSD	SE7 3'-8'	Solid	05/02/2013 1415	05/03/2013 1255
480-37636-7	SE11 3'-6'	Solid	05/02/2013 1400	05/03/2013 1255
480-37636-8	F1 8'	Solid	05/02/2013 1250	05/03/2013 1255
480-37636-9	DUP A	Solid	05/02/2013 1230	05/03/2013 1255
480-37636-10	DUP B	Solid	05/02/2013 1250	05/03/2013 1255
480-37636-11	DUP C	Solid	05/02/2013 1400	05/03/2013 1255

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-37637-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37637-1	S-1	Solid	05/03/2013 1445	05/03/2013 1716
480-37637-2	S-2	Solid	05/03/2013 1451	05/03/2013 1716
480-37637-3	S-3	Solid	05/03/2013 1458	05/03/2013 1716
480-37637-4	S-4	Solid	05/03/2013 1507	05/03/2013 1716
480-37637-5	S-5	Solid	05/03/2013 1517	05/03/2013 1716
480-37637-6	S-6	Solid	05/03/2013 1524	05/03/2013 1716
480-37637-7	S-7	Solid	05/03/2013 1535	05/03/2013 1716
480-37637-8	COMP 1-3	Solid	05/03/2013 1700	05/03/2013 1716
480-37637-9	COMP 4-7	Solid	05/03/2013 1707	05/03/2013 1716

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-37638-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37638-1	B2 10'	Solid	05/03/2013 1300	05/03/2013 1545
480-37638-2	B2 12'	Solid	05/03/2013 1300	05/03/2013 1545
480-37638-3	B4 10'	Solid	05/03/2013 1215	05/03/2013 1545
480-37638-4	B4 13'-14'	Solid	05/03/2013 1215	05/03/2013 1545
480-37638-5	B5 10'	Solid	05/03/2013 1030	05/03/2013 1545
480-37638-6	B5 13'	Solid	05/03/2013 1030	05/03/2013 1545
480-37638-7	A2 10'	Solid	05/03/2013 1200	05/03/2013 1545
480-37638-8	A2 12'	Solid	05/03/2013 1200	05/03/2013 1545
480-37638-9	C5 10'	Solid	05/03/2013 1000	05/03/2013 1545
480-37638-9MS	C5 10'	Solid	05/03/2013 1000	05/03/2013 1545
480-37638-9MSD	C5 10'	Solid	05/03/2013 1000	05/03/2013 1545
480-37638-10	DUP D	Solid	05/03/2013 1030	05/03/2013 1545
480-37638-11	DUP E	Solid	05/03/2013 1215	05/03/2013 1545
480-37638-12	DUP F	Solid	05/03/2013 1300	05/03/2013 1545

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-37782-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-37782-1	SW 4 3'-6'	Solid	05/07/2013 0750	05/07/2013 1540
480-37782-1MS	SW 4 3'-6'	Solid	05/07/2013 0750	05/07/2013 1540
480-37782-1MSD	SW 4 3'-6'	Solid	05/07/2013 0750	05/07/2013 1540
480-37782-2	NE 9 3'-8'	Solid	05/07/2013 0821	05/07/2013 1540
480-37782-3	NE 10 3'-8'	Solid	05/07/2013 0840	05/07/2013 1540
480-37782-4	DUP G	Solid	05/07/2013 0821	05/07/2013 1540
480-37782-5	DUP H	Solid	05/07/2013 0840	05/07/2013 1540

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-38089-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38089-1	SW 7 3'-5'	Solid	05/09/2013 1046	05/10/2013 1125
480-38089-1MS	SW 7 3'-5'	Solid	05/09/2013 1046	05/10/2013 1125
480-38089-1MSD	SW 7 3'-5'	Solid	05/09/2013 1046	05/10/2013 1125
480-38089-2	SW 6 3'-9'	Solid	05/08/2013 1215	05/10/2013 1125
480-38089-3	SW 5 0-7	Solid	05/07/2013 1630	05/10/2013 1125
480-38089-4	DUP I	Solid	05/08/2013 1215	05/10/2013 1125

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-38259-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38259-1	H/J 4	Solid	05/14/2013 1140	05/14/2013 1550

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-38262-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38262-1	NE4 0-10'	Solid	05/10/2013 1030	05/14/2013 1550
480-38262-1MS	NE4 0-10'	Solid	05/10/2013 1030	05/14/2013 1550
480-38262-1MSD	NE4 0-10'	Solid	05/10/2013 1030	05/14/2013 1550
480-38262-2	NE5 3'-8'	Solid	05/10/2013 1630	05/14/2013 1550
480-38262-2MS	NE5 3'-8'	Solid	05/10/2013 1630	05/14/2013 1550
480-38262-2MSD	NE5 3'-8'	Solid	05/10/2013 1630	05/14/2013 1550
480-38262-3	NE6 5'	Solid	05/10/2013 1645	05/14/2013 1550
480-38262-4	NE7 5'	Solid	05/10/2013 1700	05/14/2013 1550

SAMPLE SUMMARY

Client: C&S Engineers, Inc. Job Number: 480-38447-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38447-1	A3 10'	Solid	05/16/2013 1000	05/16/2013 1505
480-38447-2	A3 13'	Solid	05/16/2013 1013	05/16/2013 1505

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-38627-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38627-1	E2 8'-9'	Solid	05/20/2013 1400	05/20/2013 1535

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-38691-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38691-1	D3 8'-9'	Solid	05/21/2013 1040	05/21/2013 1455

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-38873-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38873-1	DUP J	Solid	05/22/2013 1330	05/23/2013 1440
480-38873-2	SW8 7'	Solid	05/22/2013 1324	05/23/2013 1440
480-38873-3	SW10 7'	Solid	05/22/2013 1330	05/23/2013 1440
480-38873-4	SW9 7'	Solid	05/22/2013 1338	05/23/2013 1440
480-38873-5	TB	Water	05/22/2013 0000	05/23/2013 1440

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-38875-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-38875-1	NW8-5'	Solid	05/23/2013 1030	05/23/2013 1440
480-38875-2	TB	Water	05/23/2013 0000	05/23/2013 1440

SAMPLE SUMMARY

Client: C&S Engineers, Inc.

Job Number: 480-42606-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-42606-1	B-C1 3' bg	Solid	07/24/2013 1625	07/25/2013 1350
480-42606-2	B-D2 3.5' bg	Solid	07/24/2013 1648	07/25/2013 1350
480-42606-3	B-C3 3.5' bg	Solid	07/24/2013 1701	07/25/2013 1350
480-42606-4	B-E4 4' bg	Solid	07/24/2013 1706	07/25/2013 1350
480-42606-5	B-E3 3' bg	Solid	07/24/2013 1730	07/25/2013 1350
480-42606-6	B-D4 4' bg	Solid	07/24/2013 1757	07/25/2013 1350
480-42606-7	B-F4 3.5' bg	Solid	07/24/2013 1800	07/25/2013 1350
480-42606-8	B-F5 3.5' bg	Solid	07/24/2013 1838	07/25/2013 1350
480-42606-9	B-G5 4.5' bg	Solid	07/24/2013 1900	07/25/2013 1350
480-42606-10	B-C2 4.5' bg	Solid	07/24/2013 1911	07/25/2013 1350
480-42606-11	B-B2 5' bg	Solid	07/24/2013 1924	07/25/2013 1350
480-42606-12	B-B4 3.5' bg	Solid	07/24/2013 1930	07/25/2013 1350
480-42606-12MS	B-B4 3.5' bg ms	Solid	07/24/2013 1930	07/25/2013 1350
480-42606-12MSD	B-B4 3.5' bg msd	Solid	07/24/2013 1930	07/25/2013 1350
480-42606-13	DUP1	Solid	07/24/2013 1924	07/25/2013 1350