APPENDIX F

ANALYTICAL RESULTS



Client:	<u>BE3</u>				
Project Reference:	57 Tonawa	inda			
Sample Identifier:	BH-01 6-8	3'			
Lab Sample ID:	196242-0	1		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Metals</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		3.10	mg/Kg		12/26/2019 19:12
Barium		95.0	mg/Kg		12/26/2019 19:12
Beryllium		0.590	mg/Kg		12/26/2019 19:12
Cadmium		1.80	mg/Kg		12/26/2019 19:12
Chromium		17.3	mg/Kg		12/26/2019 19:12
Copper		14.3	mg/Kg		12/26/2019 19:12
Lead		9.46	mg/Kg		12/26/2019 19:12
Manganese		465	mg/Kg		12/26/2019 19:12
Nickel		19.4	mg/Kg		12/26/2019 19:12
Selenium		< 1.12	mg/Kg		12/26/2019 19:12
Silver		0.503	mg/Kg	J	12/26/2019 19:12
Zinc		57.3	mg/Kg		12/26/2019 19:12
Method Refere		6010C			
Preparation Da Data File:	ate: 12/	x 3050B 23/2019 226C			



Data File:

Hg191223A

Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Referen	nce: 57 To	nawanda			
Sample Identi	i fier: BH-0)1 6-8'			
Lab Sample II	D: 1962	242-01		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Mercury</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.0111	mg/Kg		12/23/2019 10:25
	od Reference(s): aration Date:	EPA 7471B 12/20/2019			
Tiepe	nution Dutti	10/00/0019			



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	anda					
Sample Identifier:	BH-01 6-	8'					
Lab Sample ID:	196242-0	01		Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1221		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1232		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1242		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1248		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1254		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1260		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1262		< 0.0336	mg/Kg			12/20/2019	16:46
PCB-1268		< 0.0336	mg/Kg			12/20/2019	16:46
Surrogate		Pero	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	9		60.9	18.3 - 89.6		12/20/2019	16:46
Method Referen		A 8082A A 3546					
Preparation Da		/20/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-01 6-8'		
Lab Sample ID:	196242-01	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Chlorinated Pesticides

Analyte	<u>Result</u>	<u>Units</u>	Qualifier Date Analyzed
4,4-DDD	< 3.36	ug/Kg	12/20/2019 19:20
4,4-DDE	< 3.36	ug/Kg	12/20/2019 19:20
4,4-DDT	< 3.36	ug/Kg	12/20/2019 19:20
Aldrin	< 3.36	ug/Kg	12/20/2019 19:20
alpha-BHC	< 3.36	ug/Kg	12/20/2019 19:20
beta-BHC	< 3.36	ug/Kg	12/20/2019 19:20
cis-Chlordane	< 3.36	ug/Kg	12/20/2019 19:20
delta-BHC	< 3.36	ug/Kg	12/20/2019 19:20
Dieldrin	< 3.36	ug/Kg	12/20/2019 19:20
Endosulfan I	< 3.36	ug/Kg	12/20/2019 19:20
Endosulfan II	< 3.36	ug/Kg	12/20/2019 19:20
Endosulfan Sulfate	< 3.36	ug/Kg	12/20/2019 19:20
Endrin	< 3.36	ug/Kg	12/20/2019 19:20
Endrin Aldehyde	< 3.36	ug/Kg	12/20/2019 19:20
Endrin Ketone	< 3.36	ug/Kg	12/20/2019 19:20
gamma-BHC (Lindane)	< 3.36	ug/Kg	12/20/2019 19:20
Heptachlor	< 3.36	ug/Kg	12/20/2019 19:20
Heptachlor Epoxide	< 3.36	ug/Kg	12/20/2019 19:20
Methoxychlor	< 3.36	ug/Kg	12/20/2019 19:20
Toxaphene	< 33.6	ug/Kg	12/20/2019 19:20
trans-Chlordane	< 3.36	ug/Kg	12/20/2019 19:20



<u>BE3</u>					
57 Tonawanda					
BH-01 6-8'					
196242-01		Dat	e Sampled:	12/17/2019	9
Soil		Dat	e Received:	12/19/2019	9
	Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
)	40.0	30.7 - 111		12/20/2019	19:20
(1)	50.4	34.7 - 87.3		12/20/2019	19:20
ce(s): EPA 8081B EPA 3546 e: 12/20/2019					
	57 Tonawanda BH-01 6-8' 196242-01 Soil) (1) (1) (20(5): EPA 8081B	57 Tonawanda BH-01 6-8' 196242-01 Soil Percent Recovery 40.0 (1) 50.4 ee(s): EPA 8081B EPA 3546	57 Tonawanda BH-01 6-8' 196242-01 Data Soil Data 196242-01 Data Soil Data 196242-01 Data Soil Data 196242-01 Soil Percent Recovery Limits 10 30.7 - 111 (1) 50.4 34.7 - 87.3 re(s): EPA 8081B EPA 3546 EPA 3546	57 Tonawanda BH-01 6-8' 196242-01 Soil Date Sampled: Date Received: Date Received: 196242-01 Soil Date Received: Date Sampled: Date Received: 196242-01 Soil Date Received: Date Received: 10 30.7 - 111 (1) 50.4 34.7 - 87.3	57 Tonawanda BH-01 6-8' 196242-01 Date Sampled: 12/17/2019 Soil Date Received: 12/19/2019 Mathematical Science 12/19/2019 12/20/2019 Soil Soil Soil Date Analy 10 50.4 34.7 - 87.3 12/20/2019 Soil Soil 12/20/2019 12/20/2019 11 Soil 12/20/2019 12/20/2019 Soil Soil Soil Soil Soil Soil Percent Recovery Limits Outliers Date Analy 11 50.4 34.7 - 87.3 12/20/2019 See(s): EPA 8081B EPA 3546 Soil Soil Soil



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-01 6-8'		
Lab Sample ID:	196242-01	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 336	ug/Kg		12/27/2019 15:23
1,2,4,5-Tetrachlorobenzene	< 336	ug/Kg		12/27/2019 15:23
1,2,4-Trichlorobenzene	< 336	ug/Kg		12/27/2019 15:23
1,2-Dichlorobenzene	< 336	ug/Kg		12/27/2019 15:23
1,3-Dichlorobenzene	< 336	ug/Kg		12/27/2019 15:23
1,4-Dichlorobenzene	< 336	ug/Kg		12/27/2019 15:23
2,2-0xybis (1-chloropropane)	< 336	ug/Kg		12/27/2019 15:23
2,3,4,6-Tetrachlorophenol	< 336	ug/Kg		12/27/2019 15:23
2,4,5-Trichlorophenol	< 336	ug/Kg		12/27/2019 15:23
2,4,6-Trichlorophenol	< 336	ug/Kg		12/27/2019 15:23
2,4-Dichlorophenol	< 336	ug/Kg		12/27/2019 15:23
2,4-Dimethylphenol	< 336	ug/Kg		12/27/2019 15:23
2,4-Dinitrophenol	< 1350	ug/Kg		12/27/2019 15:23
2,4-Dinitrotoluene	< 336	ug/Kg		12/27/2019 15:23
2,6-Dinitrotoluene	< 336	ug/Kg		12/27/2019 15:23
2-Chloronaphthalene	< 336	ug/Kg		12/27/2019 15:23
2-Chlorophenol	< 336	ug/Kg		12/27/2019 15:23
2-Methylnapthalene	< 336	ug/Kg		12/27/2019 15:23
2-Methylphenol	< 336	ug/Kg		12/27/2019 15:23
2-Nitroaniline	< 336	ug/Kg		12/27/2019 15:23
2-Nitrophenol	< 336	ug/Kg		12/27/2019 15:23
3&4-Methylphenol	< 336	ug/Kg		12/27/2019 15:23
3,3'-Dichlorobenzidine	< 336	ug/Kg		12/27/2019 15:23



Lab Project ID: 196242

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	BH-01 6-8'					
Lab Sample ID:	196242-01			Date Sampled:	12/17/2019	
Matrix:	Soil			Date Received:	12/19/2019	
3-Nitroaniline		< 336	ug/Kg		12/27/2019	15:23
4,6-Dinitro-2-methylpl	henol	< 673	ug/Kg		12/27/2019	15:23
4-Bromophenyl pheny	l ether	< 336	ug/Kg		12/27/2019	15:23
4-Chloro-3-methylphe	nol	< 336	ug/Kg		12/27/2019	15:23
4-Chloroaniline		< 336	ug/Kg		12/27/2019	15:23
4-Chlorophenyl pheny	l ether	< 336	ug/Kg		12/27/2019	15:23
4-Nitroaniline		< 336	ug/Kg		12/27/2019	15:23
4-Nitrophenol		< 336	ug/Kg		12/27/2019	15:23
Acenaphthene		< 336	ug/Kg		12/27/2019	15:23
Acenaphthylene		< 336	ug/Kg		12/27/2019	15:23
Acetophenone		< 336	ug/Kg		12/27/2019	15:23
Anthracene		< 336	ug/Kg		12/27/2019	15:23
Atrazine		< 336	ug/Kg		12/27/2019	15:23
Benzaldehyde		< 336	ug/Kg		12/27/2019	15:23
Benzo (a) anthracene		< 336	ug/Kg		12/27/2019	15:23
Benzo (a) pyrene		< 336	ug/Kg		12/27/2019	15:23
Benzo (b) fluoranthene	e	< 336	ug/Kg		12/27/2019	15:23
Benzo (g,h,i) perylene		< 336	ug/Kg		12/27/2019	15:23
Benzo (k) fluoranthene	e	< 336	ug/Kg		12/27/2019	15:23
Bis (2-chloroethoxy) m	nethane	< 336	ug/Kg		12/27/2019	15:23
Bis (2-chloroethyl) eth	er	< 336	ug/Kg		12/27/2019	15:23
Bis (2-ethylhexyl) phth	nalate	< 336	ug/Kg		12/27/2019	15:23
Butylbenzylphthalate		< 336	ug/Kg		12/27/2019	15:23
Caprolactam		< 336	ug/Kg		12/27/2019	15:23
Carbazole		< 336	ug/Kg		12/27/2019	15:23



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier: Lab Sample ID:	BH-01 6-8' 196242-01			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Chrysene		< 336	ug/Kg		12/27/2019 15:23
Dibenz (a,h) anthrace	ene	< 336	ug/Kg		12/27/2019 15:23
Dibenzofuran		< 336	ug/Kg		12/27/2019 15:23
Diethyl phthalate		< 336	ug/Kg		12/27/2019 15:23
Dimethyl phthalate		< 336	ug/Kg		12/27/2019 15:23
Di-n-butyl phthalate		< 336	ug/Kg		12/27/2019 15:23
Di-n-octylphthalate		< 336	ug/Kg		12/27/2019 15:23
Fluoranthene		< 336	ug/Kg		12/27/2019 15:23
Fluorene		< 336	ug/Kg		12/27/2019 15:23
Hexachlorobenzene		< 336	ug/Kg		12/27/2019 15:23
Hexachlorobutadiene	2	< 336	ug/Kg		12/27/2019 15:23
Hexachlorocyclopent	adiene	< 1350	ug/Kg		12/27/2019 15:23
Hexachloroethane		< 336	ug/Kg		12/27/2019 15:23
Indeno (1,2,3-cd) pyr	ene	< 336	ug/Kg		12/27/2019 15:23
Isophorone		< 336	ug/Kg		12/27/2019 15:23
Naphthalene		< 336	ug/Kg		12/27/2019 15:23
Nitrobenzene		< 336	ug/Kg		12/27/2019 15:23
N-Nitroso-di-n-propy	vlamine	< 336	ug/Kg		12/27/2019 15:23
N-Nitrosodiphenylan	nine	< 336	ug/Kg		12/27/2019 15:23
Pentachlorophenol		< 673	ug/Kg		12/27/2019 15:23
Phenanthrene		< 336	ug/Kg		12/27/2019 15:23
Phenol		< 336	ug/Kg		12/27/2019 15:23
Pyrene		< 336	ug/Kg		12/27/2019 15:23



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-01 6-8'					
Lab Sample ID:	196242-01		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Date	e Received:	12/19/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		60.8	35.1 - 89.5		12/27/2019	15:23
2-Fluorobiphenyl		60.9	37.7 - 81.4		12/27/2019	15:23
2-Fluorophenol		60.6	40.2 - 77		12/27/2019	15:23
Nitrobenzene-d5		57.8	36.2 - 78.4		12/27/2019	15:23
Phenol-d5		59.2	41.2 - 77.1		12/27/2019	15:23
Terphenyl-d14		64.7	39.8 - 97.5		12/27/2019	15:23
Method Referen Preparation Dat	EPA 3546 te: 12/20/2019					
Data File:	B43389.D					



Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-01 6-8' 196242-01 Soil			Date Sampled: Date Received:	12/17/2019 12/19/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 4.86	ug/Kg		12/26/2019 20:57
1,1,2,2-Tetrachloroeth	ane	< 4.86	ug/Kg		12/26/2019 20:57
1,1,2-Trichloroethane		< 4.86	ug/Kg		12/26/2019 20:57
1,1-Dichloroethane		< 4.86	ug/Kg		12/26/2019 20:57
1,1-Dichloroethene		< 4.86	ug/Kg		12/26/2019 20:57
1,2,3-Trichlorobenzen	е	< 12.2	ug/Kg		12/26/2019 20:57
1,2,4-Trichlorobenzen	е	< 12.2	ug/Kg		12/26/2019 20:57
1,2,4-Trimethylbenzen	ie	< 4.86	ug/Kg		12/26/2019 20:57
1,2-Dibromo-3-Chloro	propane	< 24.3	ug/Kg		12/26/2019 20:57
1,2-Dibromoethane		< 4.86	ug/Kg		12/26/2019 20:57
1,2-Dichlorobenzene		< 4.86	ug/Kg		12/26/2019 20:57
1,2-Dichloroethane		< 4.86	ug/Kg		12/26/2019 20:57
1,2-Dichloropropane		< 4.86	ug/Kg		12/26/2019 20:57
1,3,5-Trimethylbenzen	ie	< 4.86	ug/Kg		12/26/2019 20:57
1,3-Dichlorobenzene		< 4.86	ug/Kg		12/26/2019 20:57
1,4-Dichlorobenzene		< 4.86	ug/Kg		12/26/2019 20:57
1,4-Dioxane		< 48.6	ug/Kg		12/26/2019 20:57
2-Butanone		< 24.3	ug/Kg		12/26/2019 20:57
2-Hexanone		< 12.2	ug/Kg		12/26/2019 20:57
4-Methyl-2-pentanone		< 12.2	ug/Kg		12/26/2019 20:57
Acetone		< 24.3	ug/Kg		12/26/2019 20:57
Benzene		< 4.86	ug/Kg		12/26/2019 20:57
Bromochloromethane		< 12.2	ug/Kg		12/26/2019 20:57



Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier:	BH-01 6-8'				
Lab Sample ID:	196242-01			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Bromodichloromethan	е	< 4.86	ug/Kg		12/26/2019 20:57
Bromoform		< 12.2	ug/Kg		12/26/2019 20:57
Bromomethane		< 4.86	ug/Kg		12/26/2019 20:57
Carbon disulfide		< 4.86	ug/Kg		12/26/2019 20:57
Carbon Tetrachloride		< 4.86	ug/Kg		12/26/2019 20:57
Chlorobenzene		< 4.86	ug/Kg		12/26/2019 20:57
Chloroethane		< 4.86	ug/Kg		12/26/2019 20:57
Chloroform		< 4.86	ug/Kg		12/26/2019 20:57
Chloromethane		< 4.86	ug/Kg		12/26/2019 20:57
cis-1,2-Dichloroethene		22.4	ug/Kg		12/26/2019 20:57
cis-1,3-Dichloropropen	e	< 4.86	ug/Kg		12/26/2019 20:57
Cyclohexane		< 24.3	ug/Kg		12/26/2019 20:57
Dibromochloromethan	e	< 4.86	ug/Kg		12/26/2019 20:57
Dichlorodifluorometha	ne	< 4.86	ug/Kg		12/26/2019 20:57
Ethylbenzene		< 4.86	ug/Kg		12/26/2019 20:57
Freon 113		< 4.86	ug/Kg		12/26/2019 20:57
Isopropylbenzene		< 4.86	ug/Kg		12/26/2019 20:57
m,p-Xylene		< 4.86	ug/Kg		12/26/2019 20:57
Methyl acetate		< 4.86	ug/Kg		12/26/2019 20:57
Methyl tert-butyl Ether		< 4.86	ug/Kg		12/26/2019 20:57
Methylcyclohexane		< 4.86	ug/Kg		12/26/2019 20:57
Methylene chloride		< 12.2	ug/Kg		12/26/2019 20:57
Naphthalene		< 12.2	ug/Kg		12/26/2019 20:57
n-Butylbenzene		< 4.86	ug/Kg		12/26/2019 20:57
n-Propylbenzene		< 4.86	ug/Kg		12/26/2019 20:57



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	la					
Sample Identifier:	BH-01 6-8'						
Lab Sample ID:	196242-01			Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
o-Xylene		< 4.86	ug/Kg			12/26/2019	20:57
p-Isopropyltoluene		< 4.86	ug/Kg			12/26/2019	20:57
sec-Butylbenzene		< 4.86	ug/Kg			12/26/2019	20:57
Styrene		< 12.2	ug/Kg			12/26/2019	20:57
tert-Butylbenzene		< 4.86	ug/Kg			12/26/2019	20:57
Tetrachloroethene		< 4.86	ug/Kg			12/26/2019	20:57
Toluene		< 4.86	ug/Kg			12/26/2019	20:57
trans-1,2-Dichloroeth	iene	31.4	ug/Kg			12/26/2019	20:57
trans-1,3-Dichloropro	opene	< 4.86	ug/Kg			12/26/2019	20:57
Trichloroethene		8.24	ug/Kg			12/26/2019	
Trichlorofluorometha	ane	< 4.86	ug/Kg			12/26/2019	20:57
Vinyl chloride		< 4.86	ug/Kg			12/26/2019	
Surrogate			rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	
1,2-Dichloroethane-d	4		125	67.9 - 146	<u></u>	12/26/2019	20:57
4-Bromofluorobenzei	ne		76.4	64.6 - 127		12/26/2019	20:57
Pentafluorobenzene			93.6	85.5 - 113		12/26/2019	20:57
Toluene-D8			87.7	83.9 - 114		12/26/2019	20:57
Method Refere	nce(s): EPA 820 EPA 503						

Data File:

EPA 5055A x67490.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-01 6-8'		
Lab Sample ID:	196242-01	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

<u>Total Cyanide</u>

<u>Analyte</u>	Result	<u>Units</u>	Qualifier Date Analyzed
Cyanide, Total	0.704	mg/Kg	12/27/2019
Method Reference(s):	EPA 9014		
	EPA 9010C		
Preparation Date:	12/27/2019		



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-01 6-8'				
Lab Sample ID:	196242-01			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		82.6	%		12/20/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Reference:	57 Tonawa	anda			
Sample Identifier:	BH-01 6-8	8'			
Lab Sample ID:	196242-0)1		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Dioxane</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 33.6	ug/Kg		12/31/2019 11:37
Method Refer	ence(s): EPA	A 8270D SIM			
Preparation I Data File:	Date: 12/	A 3546 /20/2019 3444.D			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawar	nda			
Sample Identifier:	BH-04 1-3'				
Lab Sample ID:	196242-02	2		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Metals</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		14.4	mg/Kg		12/26/2019 19:17
Barium		87.9	mg/Kg		12/26/2019 19:17
Beryllium		1.13	mg/Kg		12/26/2019 19:17
Cadmium		1.36	mg/Kg		12/26/2019 19:17
Chromium		17.6	mg/Kg		12/26/2019 19:17
Copper		23.2	mg/Kg		12/26/2019 19:17
Lead		160	mg/Kg		12/26/2019 19:17
Manganese		594	mg/Kg		12/26/2019 19:17
Nickel		8.49	mg/Kg		12/26/2019 19:17
Selenium		1.59	mg/Kg		12/26/2019 19:17
Silver		0.530	mg/Kg	J	12/26/2019 19:17
Zinc		1810	mg/Kg		1/2/2020 09:58
Method Refere		5010C 3050B			
Preparation Da Data File:		3/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	BH-04 1-3'				
Lab Sample ID:	196242-02			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.167	mg/Kg		12/23/2019 10:27

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/20/2019

 Data File:
 Hg191223A



Client:	<u>BE3</u>						
Project Reference:	57 Tonawa	nda					
Sample Identifier:	BH-04 1-3	3'					
Lab Sample ID:	196242-0	2		Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	<u>yzed</u>
PCB-1016		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1221		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1232		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1242		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1248		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1254		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1260		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1262		< 0.0349	mg/Kg			12/20/2019	17:11
PCB-1268		< 0.0349	mg/Kg			12/20/2019	17:11
<u>Surrogate</u>		Perc	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	2		33.3	18.3 - 89.6		12/20/2019	17:11
Method Referen Preparation Da	EPA	8082A 3546 20/2019					



Р

12/20/2019 19:38

12/20/2019 19:38

12/20/2019 19:38

				•	
Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	la			
Sample Identifier:	BH-04 1-3'				
Lab Sample ID:	196242-02			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Chlorinated Pest	<u>icides</u>				
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		6.99	ug/Kg	Р	12/20/2019 19:38
4,4-DDE		< 3.49	ug/Kg		12/20/2019 19:38
4,4-DDT		4.34	ug/Kg	Р	12/20/2019 19:38
Aldrin		< 3.49	ug/Kg		12/20/2019 19:38
alpha-BHC		< 3.49	ug/Kg		12/20/2019 19:38
beta-BHC		< 3.49	ug/Kg		12/20/2019 19:38
cis-Chlordane		< 3.49	ug/Kg		12/20/2019 19:38
delta-BHC		3.09	ug/Kg	J	12/20/2019 19:38
Dieldrin		< 3.49	ug/Kg		12/20/2019 19:38
Endosulfan I		< 3.49	ug/Kg		12/20/2019 19:38
Endosulfan II		2.27	ug/Kg	JP	12/20/2019 19:38
Endosulfan Sulfate		3.53	ug/Kg	Р	12/20/2019 19:38
Endrin		< 3.49	ug/Kg		12/20/2019 19:38
Endrin Aldehyde		< 3.49	ug/Kg		12/20/2019 19:38
Endrin Ketone		< 3.49	ug/Kg		12/20/2019 19:38
gamma-BHC (Lindan	e)	< 3.49	ug/Kg		12/20/2019 19:38
Heptachlor		< 3.49	ug/Kg		12/20/2019 19:38
Heptachlor Epoxide		< 3.49	ug/Kg		12/20/2019 19:38

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

ug/Kg

ug/Kg

ug/Kg

13.7

< 34.9

< 3.49

Methoxychlor

trans-Chlordane

Toxaphene



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-04 1-3'					
Lab Sample ID:	196242-02		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Date	e Received:	12/19/2019	9
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	42.8	30.7 - 111		12/20/2019	19:38
Tetrachloro-m-xylene	(1)	43.9	34.7 - 87.3		12/20/2019	19:38
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-04 1-3'		
Lab Sample ID:	196242-02	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analyzed
1,1-Biphenyl	< 365	ug/Kg		12/27/2019 15:52
1,2,4,5-Tetrachlorobenzene	< 365	ug/Kg		12/27/2019 15:52
1,2,4-Trichlorobenzene	< 365	ug/Kg		12/27/2019 15:52
1,2-Dichlorobenzene	< 365	ug/Kg		12/27/2019 15:52
1,3-Dichlorobenzene	< 365	ug/Kg		12/27/2019 15:52
1,4-Dichlorobenzene	< 365	ug/Kg		12/27/2019 15:52
2,2-Oxybis (1-chloropropane)	< 365	ug/Kg		12/27/2019 15:52
2,3,4,6-Tetrachlorophenol	< 365	ug/Kg		12/27/2019 15:52
2,4,5-Trichlorophenol	< 365	ug/Kg		12/27/2019 15:52
2,4,6-Trichlorophenol	< 365	ug/Kg		12/27/2019 15:52
2,4-Dichlorophenol	< 365	ug/Kg		12/27/2019 15:52
2,4-Dimethylphenol	< 365	ug/Kg		12/27/2019 15:52
2,4-Dinitrophenol	< 1460	ug/Kg		12/27/2019 15:52
2,4-Dinitrotoluene	< 365	ug/Kg		12/27/2019 15:52
2,6-Dinitrotoluene	< 365	ug/Kg		12/27/2019 15:52
2-Chloronaphthalene	< 365	ug/Kg		12/27/2019 15:52
2-Chlorophenol	< 365	ug/Kg		12/27/2019 15:52
2-Methylnapthalene	1850	ug/Kg		12/27/2019 15:52
2-Methylphenol	< 365	ug/Kg		12/27/2019 15:52
2-Nitroaniline	< 365	ug/Kg		12/27/2019 15:52
2-Nitrophenol	< 365	ug/Kg		12/27/2019 15:52
3&4-Methylphenol	< 365	ug/Kg		12/27/2019 15:52
3,3'-Dichlorobenzidine	< 365	ug/Kg		12/27/2019 15:52



Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	BH-04 1-3'				
Lab Sample ID:	196242-02			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
3-Nitroaniline		< 365	ug/Kg		12/27/2019 15:52
4,6-Dinitro-2-methylp	henol	< 730	ug/Kg		12/27/2019 15:52
4-Bromophenyl pheny	l ether	< 365	ug/Kg		12/27/2019 15:52
4-Chloro-3-methylphe	nol	< 365	ug/Kg		12/27/2019 15:52
4-Chloroaniline		< 365	ug/Kg		12/27/2019 15:52
4-Chlorophenyl pheny	l ether	< 365	ug/Kg		12/27/2019 15:52
4-Nitroaniline		< 365	ug/Kg		12/27/2019 15:52
4-Nitrophenol		< 365	ug/Kg		12/27/2019 15:52
Acenaphthene		< 365	ug/Kg		12/27/2019 15:52
Acenaphthylene		204	ug/Kg	J	12/27/2019 15:52
Acetophenone		< 365	ug/Kg		12/27/2019 15:52
Anthracene		291	ug/Kg	J	12/27/2019 15:52
Atrazine		< 365	ug/Kg		12/27/2019 15:52
Benzaldehyde		< 365	ug/Kg		12/27/2019 15:52
Benzo (a) anthracene		1270	ug/Kg		12/27/2019 15:52
Benzo (a) pyrene		1010	ug/Kg		12/27/2019 15:52
Benzo (b) fluoranthen	е	978	ug/Kg		12/27/2019 15:52
Benzo (g,h,i) perylene		702	ug/Kg		12/27/2019 15:52
Benzo (k) fluoranthene	е	1160	ug/Kg		12/27/2019 15:52
Bis (2-chloroethoxy) n	nethane	< 365	ug/Kg		12/27/2019 15:52
Bis (2-chloroethyl) eth	ier	< 365	ug/Kg		12/27/2019 15:52
Bis (2-ethylhexyl) phtl	nalate	< 365	ug/Kg		12/27/2019 15:52
Butylbenzylphthalate		< 365	ug/Kg		12/27/2019 15:52
Caprolactam		< 365	ug/Kg		12/27/2019 15:52
Carbazole		< 365	ug/Kg		12/27/2019 15:52



Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID: Matrix:	BH-04 1-3' 196242-02 Soil			Date Sampled: Date Received:	12/17/2019 12/19/2019
Chrysene		1340	ug/Kg		12/27/2019 15:52
Dibenz (a,h) anthrace	ne	< 365	ug/Kg		12/27/2019 15:52
Dibenzofuran		571	ug/Kg		12/27/2019 15:52
Diethyl phthalate		< 365	ug/Kg		12/27/2019 15:52
Dimethyl phthalate		< 365	ug/Kg		12/27/2019 15:52
Di-n-butyl phthalate		< 365	ug/Kg		12/27/2019 15:52
Di-n-octylphthalate		< 365	ug/Kg		12/27/2019 15:52
Fluoranthene		2420	ug/Kg		12/27/2019 15:52
Fluorene		< 365	ug/Kg		12/27/2019 15:52
Hexachlorobenzene		< 365	ug/Kg		12/27/2019 15:52
Hexachlorobutadiene		< 365	ug/Kg		12/27/2019 15:52
Hexachlorocyclopenta	diene	< 1460	ug/Kg		12/27/2019 15:52
Hexachloroethane		< 365	ug/Kg		12/27/2019 15:52
Indeno (1,2,3-cd) pyre	ene	761	ug/Kg		12/27/2019 15:52
Isophorone		< 365	ug/Kg		12/27/2019 15:52
Naphthalene		1170	ug/Kg		12/27/2019 15:52
Nitrobenzene		< 365	ug/Kg		12/27/2019 15:52
N-Nitroso-di-n-propyl	amine	< 365	ug/Kg		12/27/2019 15:52
N-Nitrosodiphenylam	ine	< 365	ug/Kg		12/27/2019 15:52
Pentachlorophenol		< 730	ug/Kg		12/27/2019 15:52
Phenanthrene		1940	ug/Kg		12/27/2019 15:52
Phenol		< 365	ug/Kg		12/27/2019 15:52
Pyrene		1840	ug/Kg		12/27/2019 15:52



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-04 1-3'					
Lab Sample ID:	196242-02		Date	e Sampled:	12/17/2019	Э
Matrix:	Soil		Date	e Received:	12/19/2019	Ð
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		52.8	35.1 - 89.5		12/27/2019	15:52
2-Fluorobiphenyl		54.1	37.7 - 81.4		12/27/2019	15:52
2-Fluorophenol		50.4	40.2 - 77		12/27/2019	15:52
Nitrobenzene-d5		50.1	36.2 - 78.4		12/27/2019	15:52
Phenol-d5		50.7	41.2 - 77.1		12/27/2019	15:52
Terphenyl-d14		53.4	39.8 - 97.5		12/27/2019	15:52
Method Referen Preparation Dat Data File:	EPA 3546					
Data File.	D43390.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-04 1-3' 196242-02 Soil			Date Sampled: Date Received:	12/17/2019 12/19/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 171	ug/Kg		12/30/2019 14:03
1,1,2,2-Tetrachloroeth	ane	< 171	ug/Kg		12/30/2019 14:03
1,1,2-Trichloroethane		< 171	ug/Kg		12/30/2019 14:03
1,1-Dichloroethane		< 171	ug/Kg		12/30/2019 14:03
1,1-Dichloroethene		< 171	ug/Kg		12/30/2019 14:03
1,2,3-Trichlorobenzen	2	< 428	ug/Kg		12/30/2019 14:03
1,2,4-Trichlorobenzen	e	< 428	ug/Kg		12/30/2019 14:03
1,2,4-Trimethylbenzen	e	< 171	ug/Kg		12/30/2019 14:03
1,2-Dibromo-3-Chloro	propane	< 857	ug/Kg		12/30/2019 14:03
1,2-Dibromoethane		< 171	ug/Kg		12/30/2019 14:03
1,2-Dichlorobenzene		< 171	ug/Kg		12/30/2019 14:03
1,2-Dichloroethane		< 171	ug/Kg		12/30/2019 14:03
1,2-Dichloropropane		< 171	ug/Kg		12/30/2019 14:03
1,3,5-Trimethylbenzen	e	< 171	ug/Kg		12/30/2019 14:03
1,3-Dichlorobenzene		< 171	ug/Kg		12/30/2019 14:03
1,4-Dichlorobenzene		< 171	ug/Kg		12/30/2019 14:03
1,4-Dioxane		< 1710	ug/Kg		12/30/2019 14:03
2-Butanone		< 857	ug/Kg		12/30/2019 14:03
2-Hexanone		< 428	ug/Kg		12/30/2019 14:03
4-Methyl-2-pentanone		< 428	ug/Kg		12/30/2019 14:03
Acetone		< 857	ug/Kg		12/30/2019 14:03
Benzene		< 171	ug/Kg		12/30/2019 14:03
Bromochloromethane		< 428	ug/Kg		12/30/2019 14:03



Lab Project ID: 196242

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	BH-04 1-3'					
Lab Sample ID:	196242-02			Date Sampled:	12/17/2019)
Matrix:	Soil			Date Received:	12/19/2019)
Bromodichloromethan	9	< 171	ug/Kg		12/30/2019	14:03
Bromoform		< 428	ug/Kg		12/30/2019	14:03
Bromomethane		< 171	ug/Kg		12/30/2019	14:03
Carbon disulfide		< 171	ug/Kg		12/30/2019	14:03
Carbon Tetrachloride		< 171	ug/Kg		12/30/2019	14:03
Chlorobenzene		< 171	ug/Kg		12/30/2019	14:03
Chloroethane		< 171	ug/Kg		12/30/2019	14:03
Chloroform		< 171	ug/Kg		12/30/2019	14:03
Chloromethane		< 171	ug/Kg		12/30/2019	14:03
cis-1,2-Dichloroethene		8390	ug/Kg		12/30/2019	14:03
cis-1,3-Dichloropropen	e	< 171	ug/Kg		12/30/2019	14:03
Cyclohexane		< 857	ug/Kg		12/30/2019	14:03
Dibromochloromethan	e	< 171	ug/Kg		12/30/2019	14:03
Dichlorodifluorometha	ne	< 171	ug/Kg		12/30/2019	14:03
Ethylbenzene		< 171	ug/Kg		12/30/2019	14:03
Freon 113		< 171	ug/Kg		12/30/2019	14:03
Isopropylbenzene		< 171	ug/Kg		12/30/2019	14:03
m,p-Xylene		< 171	ug/Kg		12/30/2019	14:03
Methyl acetate		< 171	ug/Kg		12/30/2019	14:03
Methyl tert-butyl Ether		< 171	ug/Kg		12/30/2019	14:03
Methylcyclohexane		< 171	ug/Kg		12/30/2019	14:03
Methylene chloride		< 428	ug/Kg		12/30/2019	14:03
Naphthalene		< 428	ug/Kg		12/30/2019	14:03
n-Butylbenzene		< 171	ug/Kg		12/30/2019	14:03
n-Propylbenzene		< 171	ug/Kg		12/30/2019	14:03



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	a					
Sample Identifier:	BH-04 1-3'						
Lab Sample ID:	196242-02			Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
o-Xylene		< 171	ug/Kg			12/30/2019	14:03
p-Isopropyltoluene		< 171	ug/Kg			12/30/2019	14:03
sec-Butylbenzene		< 171	ug/Kg			12/30/2019	14:03
Styrene		< 428	ug/Kg			12/30/2019	14:03
tert-Butylbenzene		< 171	ug/Kg			12/30/2019	14:03
Tetrachloroethene		< 171	ug/Kg			12/30/2019	14:03
Toluene		< 171	ug/Kg			12/30/2019	14:03
trans-1,2-Dichloroeth	ene	153	ug/Kg		J	12/30/2019	14:03
trans-1,3-Dichloropro	pene	< 171	ug/Kg			12/30/2019	14:03
Trichloroethene		1360	ug/Kg			12/30/2019	14:03
Trichlorofluorometha	ne	< 171	ug/Kg			12/30/2019	14:03
Vinyl chloride		3550	ug/Kg			12/30/2019	14:03
Surrogate		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d	4		118	67.9 - 146		12/30/2019	14:03
4-Bromofluorobenzer	ie		79.2	64.6 - 127		12/30/2019	14:03
Pentafluorobenzene			94.2	85.5 - 113		12/30/2019	14:03
Toluene-D8			90.4	83.9 • 114		12/30/2019	14:03
Method Referen	nce(s): EPA 826 EPA 503						

Data File:

EPA 5035A - L x67531.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-04 1-3'		
Lab Sample ID:	196242-02	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

<u>Total Cyanide</u>

<u>Analyte</u>	Result	<u>Units</u>	Qua	lifier Date Analyzed
Cyanide, Total	188	mg/Kg		12/27/2019
Method Reference(s):	EPA 9014			
Preparation Date:	EPA 9010C 12/27/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier:	BH-04 1-3'				
Lab Sample ID:	196242-02			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Dioxane</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 36.5	ug/Kg		12/31/2019 11:48
Method Referen	nce(s): EPA 82	270D SIM			
Preparation Da Data File:	EPA 35 te: 12/20, B4344	/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawa	anda			
Sample Identifier:	BH-08 1-3	3'			
Lab Sample ID:	196242-0)3		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Metals</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		16.8	mg/Kg		12/26/2019 19:21
Barium		89.6	mg/Kg		12/26/2019 19:21
Beryllium		0.718	mg/Kg		12/26/2019 19:21
Cadmium		1.76	mg/Kg		12/26/2019 19:21
Chromium		29.9	mg/Kg		12/26/2019 19:21
Copper		129	mg/Kg		12/26/2019 19:21
Lead		152	mg/Kg		12/26/2019 19:21
Manganese		578	mg/Kg		12/26/2019 19:21
Nickel		17.8	mg/Kg		12/26/2019 19:21
Selenium		1.49	mg/Kg		12/26/2019 19:21
Silver		0.796	mg/Kg		12/26/2019 19:21
Zinc		1350	mg/Kg		1/2/2020 10:02
Method Refere Preparation D Data File:	EPA ate: 12/	A 6010C A 3050B /23/2019 L226C			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-08 1-3'				
Lab Sample ID:	196242-03			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.128	mg/Kg		12/23/2019 10:29

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/20/2019

 Data File:
 Hg191223A



Client:	<u>BE3</u>						
Project Reference:	57 Tonawan	da					
Sample Identifier:	BH-08 1-3'						
Lab Sample ID:	196242-03			Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		<u>Qualifier</u>	Date Analy	yzed
PCB-1016		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1221		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1232		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1242		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1248		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1254		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1260		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1262		< 0.0432	mg/Kg			12/20/2019	17:35
PCB-1268		< 0.0432	mg/Kg			12/20/2019	17:35
<u>Surrogate</u>		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	1		27.4	18.3 - 89.6		12/20/2019	17:35
Method Referer	nce(s): EPA 8 EPA 3						
Preparation Da	te: 12/20	/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-08 1-3'		
Lab Sample ID:	196242-03	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Chlorinated Pesticides

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD	7.21	ug/Kg	Р	12/20/2019 19:57
4,4-DDE	< 4.32	ug/Kg		12/20/2019 19:57
4,4-DDT	9.06	ug/Kg		12/20/2019 19:57
Aldrin	< 4.32	ug/Kg		12/20/2019 19:57
alpha-BHC	< 4.32	ug/Kg		12/20/2019 19:57
beta-BHC	< 4.32	ug/Kg		12/20/2019 19:57
cis-Chlordane	< 4.32	ug/Kg		12/20/2019 19:57
delta-BHC	< 4.32	ug/Kg		12/20/2019 19:57
Dieldrin	< 4.32	ug/Kg		12/20/2019 19:57
Endosulfan I	< 4.32	ug/Kg		12/20/2019 19:57
Endosulfan II	< 4.32	ug/Kg		12/20/2019 19:57
Endosulfan Sulfate	10.8	ug/Kg		12/20/2019 19:57
Endrin	3.68	ug/Kg	JP	12/20/2019 19:57
Endrin Aldehyde	< 4.32	ug/Kg		12/20/2019 19:57
Endrin Ketone	6.30	ug/Kg	Р	12/20/2019 19:57
gamma-BHC (Lindane)	2.90	ug/Kg	JP	12/20/2019 19:57
Heptachlor	< 4.32	ug/Kg		12/20/2019 19:57
Heptachlor Epoxide	< 4.32	ug/Kg		12/20/2019 19:57
Methoxychlor	15.8	ug/Kg	Р	12/20/2019 19:57
Toxaphene	< 43.2	ug/Kg		12/20/2019 19:57
trans-Chlordane	< 4.32	ug/Kg		12/20/2019 19:57



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-08 1-3'					
Lab Sample ID:	196242-03		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Dat	e Received:	12/19/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	32.2	30.7 - 111		12/20/2019	19:57
Tetrachloro-m-xylene	(1)	27.0	34.7 - 87.3	*	12/20/2019	19:57
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-08 1-3'		
Lab Sample ID:	196242-03	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 801	ug/Kg		12/27/2019 16:22
1,2,4,5-Tetrachlorobenzene	< 801	ug/Kg		12/27/2019 16:22
1,2,4-Trichlorobenzene	< 801	ug/Kg		12/27/2019 16:22
1,2-Dichlorobenzene	< 801	ug/Kg		12/27/2019 16:22
1,3-Dichlorobenzene	< 801	ug/Kg		12/27/2019 16:22
1,4-Dichlorobenzene	< 801	ug/Kg		12/27/2019 16:22
2,2-0xybis (1-chloropropane)	< 801	ug/Kg		12/27/2019 16:22
2,3,4,6-Tetrachlorophenol	< 801	ug/Kg		12/27/2019 16:22
2,4,5-Trichlorophenol	< 801	ug/Kg		12/27/2019 16:22
2,4,6-Trichlorophenol	< 801	ug/Kg		12/27/2019 16:22
2,4-Dichlorophenol	< 801	ug/Kg		12/27/2019 16:22
2,4-Dimethylphenol	< 801	ug/Kg		12/27/2019 16:22
2,4-Dinitrophenol	< 3200	ug/Kg		12/27/2019 16:22
2,4-Dinitrotoluene	< 801	ug/Kg		12/27/2019 16:22
2,6-Dinitrotoluene	< 801	ug/Kg		12/27/2019 16:22
2-Chloronaphthalene	< 801	ug/Kg		12/27/2019 16:22
2-Chlorophenol	< 801	ug/Kg		12/27/2019 16:22
2-Methylnapthalene	< 801	ug/Kg		12/27/2019 16:22
2-Methylphenol	< 801	ug/Kg		12/27/2019 16:22
2-Nitroaniline	< 801	ug/Kg		12/27/2019 16:22
2-Nitrophenol	< 801	ug/Kg		12/27/2019 16:22
3&4-Methylphenol	< 801	ug/Kg		12/27/2019 16:22
3,3'-Dichlorobenzidine	< 801	ug/Kg		12/27/2019 16:22



Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	BH-08 1-3'				
Lab Sample ID:	196242-03			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
3-Nitroaniline		< 801	ug/Kg		12/27/2019 16:22
4,6-Dinitro-2-methylp	henol	< 1600	ug/Kg		12/27/2019 16:22
4-Bromophenyl pheny	l ether	< 801	ug/Kg		12/27/2019 16:22
4-Chloro-3-methylphe	nol	< 801	ug/Kg		12/27/2019 16:22
4-Chloroaniline		< 801	ug/Kg		12/27/2019 16:22
4-Chlorophenyl pheny	l ether	< 801	ug/Kg		12/27/2019 16:22
4-Nitroaniline		< 801	ug/Kg		12/27/2019 16:22
4-Nitrophenol		< 801	ug/Kg		12/27/2019 16:22
Acenaphthene		525	ug/Kg	J	12/27/2019 16:22
Acenaphthylene		833	ug/Kg		12/27/2019 16:22
Acetophenone		< 801	ug/Kg		12/27/2019 16:22
Anthracene		2280	ug/Kg		12/27/2019 16:22
Atrazine		< 801	ug/Kg		12/27/2019 16:22
Benzaldehyde		< 801	ug/Kg		12/27/2019 16:22
Benzo (a) anthracene		6090	ug/Kg		12/27/2019 16:22
Benzo (a) pyrene		4710	ug/Kg		12/27/2019 16:22
Benzo (b) fluoranthen	e	5740	ug/Kg		12/27/2019 16:22
Benzo (g,h,i) perylene		2890	ug/Kg		12/27/2019 16:22
Benzo (k) fluoranthene	e	3290	ug/Kg		12/27/2019 16:22
Bis (2-chloroethoxy) n	nethane	< 801	ug/Kg		12/27/2019 16:22
Bis (2-chloroethyl) eth	ner	< 801	ug/Kg		12/27/2019 16:22
Bis (2-ethylhexyl) phtl	halate	< 801	ug/Kg		12/27/2019 16:22
Butylbenzylphthalate		< 801	ug/Kg		12/27/2019 16:22
Caprolactam		< 801	ug/Kg		12/27/2019 16:22
Carbazole		1380	ug/Kg		12/27/2019 16:22



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	la			
Sample Identifier:	BH-08 1-3'				
Lab Sample ID:	196242-03			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Chrysene		5740	ug/Kg		12/27/2019 16:22
Dibenz (a,h) anthrace	ene	704	ug/Kg	J	12/27/2019 16:22
Dibenzofuran		803	ug/Kg		12/27/2019 16:22
Diethyl phthalate		< 801	ug/Kg		12/27/2019 16:22
Dimethyl phthalate		< 801	ug/Kg		12/27/2019 16:22
Di-n-butyl phthalate		< 801	ug/Kg		12/27/2019 16:22
Di-n-octylphthalate		< 801	ug/Kg		12/27/2019 16:22
Fluoranthene		16600	ug/Kg		12/27/2019 16:22
Fluorene		1080	ug/Kg		12/27/2019 16:22
Hexachlorobenzene		< 801	ug/Kg		12/27/2019 16:22
Hexachlorobutadiene	2	< 801	ug/Kg		12/27/2019 16:22
Hexachlorocyclopent	adiene	< 3200	ug/Kg		12/27/2019 16:22
Hexachloroethane		< 801	ug/Kg		12/27/2019 16:22
Indeno (1,2,3-cd) pyr	ene	3350	ug/Kg		12/27/2019 16:22
Isophorone		< 801	ug/Kg		12/27/2019 16:22
Naphthalene		828	ug/Kg		12/27/2019 16:22
Nitrobenzene		< 801	ug/Kg		12/27/2019 16:22
N-Nitroso-di-n-propy	lamine	< 801	ug/Kg		12/27/2019 16:22
N-Nitrosodiphenylan	nine	< 801	ug/Kg		12/27/2019 16:22
Pentachlorophenol		< 1600	ug/Kg		12/27/2019 16:22
Phenanthrene		9850	ug/Kg		12/27/2019 16:22
Phenol		< 801	ug/Kg		12/27/2019 16:22
Pyrene		12100	ug/Kg		12/27/2019 16:22



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-08 1-3'					
Lab Sample ID:	196242-03		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Date	e Received:	12/19/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		51.3	35.1 - 89.5		12/27/2019	16:22
2-Fluorobiphenyl		53.3	37.7 - 81.4		12/27/2019	16:22
2-Fluorophenol		52.3	40.2 - 77		12/27/2019	16:22
Nitrobenzene-d5		40.1	36.2 - 78.4		12/27/2019	16:22
Phenol-d5		51.7	41.2 - 77.1		12/27/2019	16:22
Terphenyl-d14		52.9	39.8 - 97.5		12/27/2019	16:22
Method Referen Preparation Dat	EPA 3546 te: 12/20/2019					
Data File:	B43391.D					



Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-08 1-3' 196242-03 Soil			Date Sampled: Date Received:	12/17/2019 12/19/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 5.35	ug/Kg		12/26/2019 21:42
1,1,2,2-Tetrachloroeth	ane	< 5.35	ug/Kg		12/26/2019 21:42
1,1,2-Trichloroethane		< 5.35	ug/Kg		12/26/2019 21:42
1,1-Dichloroethane		< 5.35	ug/Kg		12/26/2019 21:42
1,1-Dichloroethene		< 5.35	ug/Kg		12/26/2019 21:42
1,2,3-Trichlorobenzen	9	< 13.4	ug/Kg		12/26/2019 21:42
1,2,4-Trichlorobenzen	9	< 13.4	ug/Kg		12/26/2019 21:42
1,2,4-Trimethylbenzen	e	< 5.35	ug/Kg		12/26/2019 21:42
1,2-Dibromo-3-Chloro	propane	< 26.7	ug/Kg		12/26/2019 21:42
1,2-Dibromoethane		< 5.35	ug/Kg		12/26/2019 21:42
1,2-Dichlorobenzene		< 5.35	ug/Kg		12/26/2019 21:42
1,2-Dichloroethane		< 5.35	ug/Kg		12/26/2019 21:42
1,2-Dichloropropane		< 5.35	ug/Kg		12/26/2019 21:42
1,3,5-Trimethylbenzen	e	< 5.35	ug/Kg		12/26/2019 21:42
1,3-Dichlorobenzene		< 5.35	ug/Kg		12/26/2019 21:42
1,4-Dichlorobenzene		< 5.35	ug/Kg		12/26/2019 21:42
1,4-Dioxane		< 53.5	ug/Kg		12/26/2019 21:42
2-Butanone		< 26.7	ug/Kg		12/26/2019 21:42
2-Hexanone		< 13.4	ug/Kg		12/26/2019 21:42
4-Methyl-2-pentanone		< 13.4	ug/Kg		12/26/2019 21:42
Acetone		15.8	ug/Kg	J	12/26/2019 21:42
Benzene		< 5.35	ug/Kg		12/26/2019 21:42
Bromochloromethane		< 13.4	ug/Kg		12/26/2019 21:42



Lab Project ID: 196242

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	BH-08 1-3'					
Lab Sample ID:	196242-03			Date Sampled:	12/17/2019	
Matrix:	Soil			Date Received:	12/19/2019	
Bromodichloromethan	е	< 5.35	ug/Kg		12/26/2019 21:	:42
Bromoform		< 13.4	ug/Kg		12/26/2019 21:	:42
Bromomethane		< 5.35	ug/Kg		12/26/2019 21:	:42
Carbon disulfide		< 5.35	ug/Kg		12/26/2019 21:	:42
Carbon Tetrachloride		< 5.35	ug/Kg		12/26/2019 21:	:42
Chlorobenzene		< 5.35	ug/Kg		12/26/2019 21:	:42
Chloroethane		< 5.35	ug/Kg		12/26/2019 21:	:42
Chloroform		< 5.35	ug/Kg		12/26/2019 21:	:42
Chloromethane		< 5.35	ug/Kg		12/26/2019 21:	:42
cis-1,2-Dichloroethene		< 5.35	ug/Kg		12/26/2019 21:	:42
cis-1,3-Dichloropropen	e	< 5.35	ug/Kg		12/26/2019 21:	:42
Cyclohexane		< 26.7	ug/Kg		12/26/2019 21:	:42
Dibromochloromethan	е	< 5.35	ug/Kg		12/26/2019 21:	:42
Dichlorodifluorometha	ne	< 5.35	ug/Kg		12/26/2019 21:	:42
Ethylbenzene		< 5.35	ug/Kg		12/26/2019 21:	:42
Freon 113		< 5.35	ug/Kg		12/26/2019 21:	:42
Isopropylbenzene		< 5.35	ug/Kg		12/26/2019 21:	:42
m,p-Xylene		< 5.35	ug/Kg		12/26/2019 21:	:42
Methyl acetate		< 5.35	ug/Kg		12/26/2019 21:	:42
Methyl tert-butyl Ether		< 5.35	ug/Kg		12/26/2019 21:	:42
Methylcyclohexane		< 5.35	ug/Kg		12/26/2019 21:	:42
Methylene chloride		< 13.4	ug/Kg		12/26/2019 21:	:42
Naphthalene		< 13.4	ug/Kg		12/26/2019 21:	:42
n-Butylbenzene		< 5.35	ug/Kg		12/26/2019 21:	:42
n-Propylbenzene		< 5.35	ug/Kg		12/26/2019 21:	:42



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	la					
Sample Identifier:	BH-08 1-3'						
Lab Sample ID:	196242-03			Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
o-Xylene		< 5.35	ug/Kg			12/26/2019	21:42
p-Isopropyltoluene		< 5.35	ug/Kg			12/26/2019	21:42
sec-Butylbenzene		< 5.35	ug/Kg			12/26/2019	21:42
Styrene		< 13.4	ug/Kg			12/26/2019	21:42
tert-Butylbenzene		< 5.35	ug/Kg			12/26/2019	21:42
Tetrachloroethene		< 5.35	ug/Kg			12/26/2019	21:42
Toluene		< 5.35	ug/Kg			12/26/2019	21:42
trans-1,2-Dichloroeth	ene	15.0	ug/Kg			12/26/2019	21:42
trans-1,3-Dichloropro	opene	< 5.35	ug/Kg			12/26/2019	21:42
Trichloroethene		< 5.35	ug/Kg			12/26/2019	21:42
Trichlorofluorometha	ine	< 5.35	ug/Kg			12/26/2019	21:42
Vinyl chloride		< 5.35	ug/Kg			12/26/2019	21:42
Surrogate		Pe	rcent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d	4		128	67.9 - 146		12/26/2019	21:42
4-Bromofluorobenzer	ne		73.4	64.6 - 127		12/26/2019	21:42
Pentafluorobenzene			92.4	85.5 - 113		12/26/2019	21:42
Toluene-D8			86.6	83.9 - 114		12/26/2019	21:42
Method Referen	nce(s): EPA 826 EPA 503						

Data File:

EPA 5035A - L x67492.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-08 1-3'		
Lab Sample ID:	196242-03	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

<u>Total Cyanide</u>

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	26.1	mg/Kg		12/27/2019
Method Reference(s):	EPA 9014			
	EPA 9010C			
Preparation Date:	12/27/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-08 1-3'				
Lab Sample ID:	196242-03			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		65.4	%		12/20/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Reference	e: 57 To	nawanda			
Sample Identifi	er: BH-C	08 1-3'			
Lab Sample ID:	1962	242-03		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Dioxane</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 40.2	ug/Kg		12/31/2019 11:59
Method	Reference(s):	EPA 8270D SIM			
Prepara Data Filo	tion Date: e:	EPA 3546 12/20/2019 B43446.D			



Client:	<u>BE3</u>				
Project Reference:	57 To	nawanda			
Sample Identifier:	BH-0	8 Duplicate			
Lab Sample ID:	1962	42-04		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		15.1	mg/Kg		1/2/2020 10:06
Barium		134	mg/Kg		1/2/2020 10:06
Beryllium		0.372	mg/Kg		1/2/2020 10:06
Cadmium		0.661	mg/Kg		1/2/2020 10:06
Chromium		34.5	mg/Kg		1/2/2020 10:06
Copper		86.7	mg/Kg		1/2/2020 10:06
Lead		176	mg/Kg		1/2/2020 10:06
Manganese		834	mg/Kg		12/26/2020 19:26
Nickel		10.6	mg/Kg		1/2/2020 10:06
Selenium		2.08	mg/Kg		1/2/2020 10:06
Silver		< 0.616	mg/Kg		1/2/2020 10:06
Zinc		1170	mg/Kg		12/26/2020 19:26
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	te:	EPA 3050B 12/23/2019 200102A			



Data File:

Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tona	wanda			
Sample Identifier:	BH-08	Duplicate			
Lab Sample ID:	196242	2-04		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.248	mg/Kg		12/23/2019 10:31
Method Refe Preparation		EPA 7471B 12/20/2019			

Hg191223A



Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda	a					
Sample Identifier:	BH-08 Duplic	cate					
Lab Sample ID:	196242-04			Date	e Sampled:	12/17/2019	9
Matrix:	Soil			Date	e Received:	12/19/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1221		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1232		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1242		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1248		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1254		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1260		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1262		< 0.0342	mg/Kg			12/23/2019	16:02
PCB-1268		< 0.0342	mg/Kg			12/23/2019	16:02
<u>Surrogate</u>		Perc	cent Recovery	Limits	Outliers	Date Analy	zed
Tetrachloro-m-xylene			27.9	18.3 - 89.6		12/23/2019	16:02
Method Referen	EPA 808 EPA 354						
Preparation Dat							



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-08 Duplic	cate			
Lab Sample ID:	196242-04			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Chlorinated Pestic	<u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 6.85	ug/Kg		12/24/2019 18:34
4,4-DDE		12.0	ug/Kg	Р	12/24/2019 18:34
4,4-DDT		25.1	ug/Kg	Р	12/24/2019 18:34
Aldrin		36.3	ug/Kg	Р	12/24/2019 18:34
alpha-BHC		4.50	ug/Kg	JP	12/24/2019 18:34
beta-BHC		< 6.85	ug/Kg		12/24/2019 18:34
cis-Chlordane		45.1	ug/Kg	Р	12/24/2019 18:34
delta-BHC		< 6.85	ug/Kg		12/24/2019 18:34
Dieldrin		< 6.85	ug/Kg		12/24/2019 18:34
Endosulfan I		< 6.85	ug/Kg		12/24/2019 18:34
Endosulfan II		< 6.85	ug/Kg		12/24/2019 18:34
Endosulfan Sulfate		110	ug/Kg		12/24/2019 18:34
Endrin		21.6	ug/Kg	Р	12/24/2019 18:34
Endrin Aldehyde		57.0	ug/Kg	Р	12/24/2019 18:34
Endrin Ketone		108	ug/Kg	Р	12/24/2019 18:34
gamma-BHC (Lindane))	6.01	ug/Kg	JP	12/24/2019 18:34
Heptachlor		< 6.85	ug/Kg		12/24/2019 18:34
Heptachlor Epoxide		< 6.85	ug/Kg		12/24/2019 18:34
Methoxychlor		121	ug/Kg	Р	12/24/2019 18:34
Toxaphene		< 68.5	ug/Kg		12/24/2019 18:34
trans-Chlordane		< 6.85	ug/Kg		12/24/2019 18:34



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-08 Duplicate					
Lab Sample ID:	196242-04		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Date	e Received:	12/19/2019	9
<u>Surrogate</u>		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	L)	1740	30.7 - 111	*	12/24/2019	18:34
Tetrachloro-m-xylene	(1)	110	34.7 - 87.3	*	12/24/2019	18:34
Method Referen Preparation Dat	EPA 3546					
i reputation Dat	12/20/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-08 Duplicate		
Lab Sample ID:	196242-04	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 35600	ug/Kg		12/27/2019 16:50
1,2,4,5-Tetrachlorobenzene	< 35600	ug/Kg		12/27/2019 16:50
1,2,4-Trichlorobenzene	< 35600	ug/Kg		12/27/2019 16:50
1,2-Dichlorobenzene	< 35600	ug/Kg		12/27/2019 16:50
1,3-Dichlorobenzene	< 35600	ug/Kg		12/27/2019 16:50
1,4-Dichlorobenzene	< 35600	ug/Kg		12/27/2019 16:50
2,2-Oxybis (1-chloropropane)	< 35600	ug/Kg		12/27/2019 16:50
2,3,4,6-Tetrachlorophenol	< 35600	ug/Kg		12/27/2019 16:50
2,4,5-Trichlorophenol	< 35600	ug/Kg		12/27/2019 16:50
2,4,6-Trichlorophenol	< 35600	ug/Kg		12/27/2019 16:50
2,4-Dichlorophenol	< 35600	ug/Kg		12/27/2019 16:50
2,4-Dimethylphenol	< 35600	ug/Kg		12/27/2019 16:50
2,4-Dinitrophenol	< 142000	ug/Kg		12/27/2019 16:50
2,4-Dinitrotoluene	< 35600	ug/Kg		12/27/2019 16:50
2,6-Dinitrotoluene	< 35600	ug/Kg		12/27/2019 16:50
2-Chloronaphthalene	< 35600	ug/Kg		12/27/2019 16:50
2-Chlorophenol	< 35600	ug/Kg		12/27/2019 16:50
2-Methylnapthalene	< 35600	ug/Kg		12/27/2019 16:50
2-Methylphenol	< 35600	ug/Kg		12/27/2019 16:50
2-Nitroaniline	< 35600	ug/Kg		12/27/2019 16:50
2-Nitrophenol	< 35600	ug/Kg		12/27/2019 16:50
3&4-Methylphenol	< 35600	ug/Kg		12/27/2019 16:50
3,3'-Dichlorobenzidine	< 35600	ug/Kg		12/27/2019 16:50



Client:	<u>BE3</u>				
Project Reference:	57 Tonawar	nda			
Sample Identifier:	BH-08 Dup	olicate			
Lab Sample ID:	196242-04	ł		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
3-Nitroaniline		< 35600	ug/Kg		12/27/2019 16:50
4,6-Dinitro-2-methylp	ohenol	< 71100	ug/Kg		12/27/2019 16:50
4-Bromophenyl pheny	yl ether	< 35600	ug/Kg		12/27/2019 16:50
4-Chloro-3-methylpho	enol	< 35600	ug/Kg		12/27/2019 16:50
4-Chloroaniline		< 35600	ug/Kg		12/27/2019 16:50
4-Chlorophenyl pheny	/l ether	< 35600	ug/Kg		12/27/2019 16:50
4-Nitroaniline		< 35600	ug/Kg		12/27/2019 16:50
4-Nitrophenol		< 35600	ug/Kg		12/27/2019 16:50
Acenaphthene		33200	ug/Kg	J	12/27/2019 16:50
Acenaphthylene		59300	ug/Kg		12/27/2019 16:50
Acetophenone		< 35600	ug/Kg		12/27/2019 16:50
Anthracene		144000	ug/Kg		12/27/2019 16:50
Atrazine		< 35600	ug/Kg		12/27/2019 16:50
Benzaldehyde		< 35600	ug/Kg		12/27/2019 16:50
Benzo (a) anthracene		273000	ug/Kg		12/27/2019 16:50
Benzo (a) pyrene		205000	ug/Kg		12/27/2019 16:50
Benzo (b) fluoranther	ie	145000	ug/Kg		12/27/2019 16:50
Benzo (g,h,i) perylene	!	105000	ug/Kg		12/27/2019 16:50
Benzo (k) fluoranthen	ie	161000	ug/Kg		12/27/2019 16:50
Bis (2-chloroethoxy)	methane	< 35600	ug/Kg		12/27/2019 16:50
Bis (2-chloroethyl) et	her	< 35600	ug/Kg		12/27/2019 16:50
Bis (2-ethylhexyl) pht	halate	< 35600	ug/Kg		12/27/2019 16:50
Butylbenzylphthalate		< 35600	ug/Kg		12/27/2019 16:50
Caprolactam		< 35600	ug/Kg		12/27/2019 16:50
Carbazole		40400	ug/Kg		12/27/2019 16:50



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	BH-08 Dupli	cate			
Lab Sample ID:	196242-04			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Chrysene		215000	ug/Kg		12/27/2019 16:50
Dibenz (a,h) anthracer	ne	25000	ug/Kg	J	12/27/2019 16:50
Dibenzofuran		49500	ug/Kg		12/27/2019 16:50
Diethyl phthalate		< 35600	ug/Kg		12/27/2019 16:50
Dimethyl phthalate		< 35600	ug/Kg		12/27/2019 16:50
Di-n-butyl phthalate		< 35600	ug/Kg		12/27/2019 16:50
Di-n-octylphthalate		< 35600	ug/Kg		12/27/2019 16:50
Fluoranthene		643000	ug/Kg		12/27/2019 16:50
Fluorene		86900	ug/Kg		12/27/2019 16:50
Hexachlorobenzene		< 35600	ug/Kg		12/27/2019 16:50
Hexachlorobutadiene		< 35600	ug/Kg		12/27/2019 16:50
Hexachlorocyclopenta	diene	< 142000	ug/Kg		12/27/2019 16:50
Hexachloroethane		< 35600	ug/Kg		12/27/2019 16:50
Indeno (1,2,3-cd) pyre	ene	113000	ug/Kg		12/27/2019 16:50
Isophorone		< 35600	ug/Kg		12/27/2019 16:50
Naphthalene		23300	ug/Kg	J	12/27/2019 16:50
Nitrobenzene		< 35600	ug/Kg		12/27/2019 16:50
N-Nitroso-di-n-propyl	amine	< 35600	ug/Kg		12/27/2019 16:50
N-Nitrosodiphenylami	ine	< 35600	ug/Kg		12/27/2019 16:50
Pentachlorophenol		< 71100	ug/Kg		12/27/2019 16:50
Phenanthrene		652000	ug/Kg		12/27/2019 16:50
Phenol		< 35600	ug/Kg		12/27/2019 16:50
Pyrene		471000	ug/Kg		12/27/2019 16:50



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-08 Duplicate					
Lab Sample ID:	196242-04		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Date	e Received:	12/19/2019	Ð
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		NC	35.1 - 89.5		12/27/2019	16:50
2-Fluorobiphenyl		NC	37.7 - 81.4		12/27/2019	16:50
2-Fluorophenol		NC	40.2 - 77		12/27/2019	16:50
Nitrobenzene-d5		NC	36.2 - 78.4		12/27/2019	16:50
Phenol-d5		NC	41.2 - 77.1		12/27/2019	16:50
Terphenyl-d14		NC	39.8 - 97.5		12/27/2019	16:50
Method Reference						
Preparation Dat Data File:	EPA 3546 e: 12/20/2019 B43392.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-08 Dupli 196242-04 Soil	cate		Date Sampled: Date Received:	12/17/2019 12/19/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 5.02	ug/Kg		12/26/2019 22:05
1,1,2,2-Tetrachloroetha	ane	< 5.02	ug/Kg		12/26/2019 22:05
1,1,2-Trichloroethane		< 5.02	ug/Kg		12/26/2019 22:05
1,1-Dichloroethane		< 5.02	ug/Kg		12/26/2019 22:05
1,1-Dichloroethene		< 5.02	ug/Kg		12/26/2019 22:05
1,2,3-Trichlorobenzene	<u>þ</u>	< 12.6	ug/Kg		12/26/2019 22:05
1,2,4-Trichlorobenzene	9	< 12.6	ug/Kg		12/26/2019 22:05
1,2,4-Trimethylbenzen	e	< 5.02	ug/Kg		12/26/2019 22:05
1,2-Dibromo-3-Chlorop	propane	< 25.1	ug/Kg		12/26/2019 22:05
1,2-Dibromoethane		< 5.02	ug/Kg		12/26/2019 22:05
1,2-Dichlorobenzene		< 5.02	ug/Kg		12/26/2019 22:05
1,2-Dichloroethane		< 5.02	ug/Kg		12/26/2019 22:05
1,2-Dichloropropane		< 5.02	ug/Kg		12/26/2019 22:05
1,3,5-Trimethylbenzen	e	< 5.02	ug/Kg		12/26/2019 22:05
1,3-Dichlorobenzene		< 5.02	ug/Kg		12/26/2019 22:05
1,4-Dichlorobenzene		< 5.02	ug/Kg		12/26/2019 22:05
1,4-Dioxane		< 50.2	ug/Kg		12/26/2019 22:05
2-Butanone		< 25.1	ug/Kg		12/26/2019 22:05
2-Hexanone		< 12.6	ug/Kg		12/26/2019 22:05
4-Methyl-2-pentanone		< 12.6	ug/Kg		12/26/2019 22:05
Acetone		46.6	ug/Kg		12/26/2019 22:05
Benzene		< 5.02	ug/Kg		12/26/2019 22:05
Bromochloromethane		< 12.6	ug/Kg		12/26/2019 22:05



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	BH-08 Duplicate				
Lab Sample ID:	196242-04		Date Sampled:	12/17/2019	
Matrix:	Soil		Date Received:	12/19/2019	
Bromodichloromethar	ne < 5.0	2 ug/Kg		12/26/2019	22:05
Bromoform	< 12.	6 ug/Kg		12/26/2019	22:05
Bromomethane	< 5.0	2 ug/Kg		12/26/2019	22:05
Carbon disulfide	< 5.0	2 ug/Kg		12/26/2019	22:05
Carbon Tetrachloride	< 5.0	2 ug/Kg		12/26/2019	22:05
Chlorobenzene	< 5.0	2 ug/Kg		12/26/2019	22:05
Chloroethane	< 5.0	2 ug/Kg		12/26/2019	22:05
Chloroform	< 5.0	2 ug/Kg		12/26/2019	22:05
Chloromethane	< 5.0	2 ug/Kg		12/26/2019	22:05
cis-1,2-Dichloroethene	e < 5.0	2 ug/Kg		12/26/2019	22:05
cis-1,3-Dichloroproper	ne < 5.0	2 ug/Kg		12/26/2019	22:05
Cyclohexane	< 25.	l ug/Kg		12/26/2019	22:05
Dibromochloromethar	ne < 5.0	2 ug/Kg		12/26/2019	22:05
Dichlorodifluorometha	ane < 5.0	2 ug/Kg		12/26/2019	22:05
Ethylbenzene	< 5.0	2 ug/Kg		12/26/2019	22:05
Freon 113	< 5.0	2 ug/Kg		12/26/2019	22:05
Isopropylbenzene	< 5.0	2 ug/Kg		12/26/2019	22:05
m,p-Xylene	< 5.0	2 ug/Kg		12/26/2019	22:05
Methyl acetate	< 5.0	2 ug/Kg		12/26/2019	22:05
Methyl tert-butyl Ethe	r < 5.0	2 ug/Kg		12/26/2019	22:05
Methylcyclohexane	< 5.0	2 ug/Kg		12/26/2019	22:05
Methylene chloride	< 12.	6 ug/Kg		12/26/2019	22:05
Naphthalene	< 12.	6 ug/Kg		12/26/2019	22:05
n-Butylbenzene	< 5.0	2 ug/Kg		12/26/2019	22:05
n-Propylbenzene	< 5.0	2 ug/Kg		12/26/2019	22:05



Project Reference: 57 Tonawanda		
Sample Identifian DIL 00 Dunligate		
Sample Identifier: BH-08 Duplicate		
Lab Sample ID: 196242-04 Date Sampled: 12/17/	2019)
Matrix:SoilDate Received:12/19/	2019)
o-Xylene < 5.02 ug/Kg 12/26/	019	22:05
p-Isopropyltoluene < 5.02 ug/Kg 12/26/	019	22:05
sec-Butylbenzene < 5.02 ug/Kg 12/26/	019	22:05
Styrene < 12.6 ug/Kg 12/26/	019	22:05
tert-Butylbenzene < 5.02 ug/Kg 12/26/	019	22:05
Tetrachloroethene < 5.02 ug/Kg 12/26/	019	22:05
Toluene < 5.02 ug/Kg 12/26/	019	22:05
trans-1,2-Dichloroethene 8.00 ug/Kg 12/26/	019	22:05
trans-1,3-Dichloropropene < 5.02 ug/Kg 12/26/	019	22:05
Trichloroethene < 5.02 ug/Kg 12/26/	019	22:05
Trichlorofluoromethane < 5.02 ug/Kg 12/26/	019	22:05
Vinyl chloride 22.2 ug/Kg 12/26/	019	22:05
Surrogate Percent Recovery Limits Outliers Date	naly	zed
1,2-Dichloroethane-d4 122 67.9 - 146 12/26/2)19	22:05
4-Bromofluorobenzene 56.4 64.6 - 127 * 12/26/2)19	22:05
Pentafluorobenzene 93.6 85.5 - 113 12/26/2)19	22:05
Toluene-D8 82.9 83.9 - 114 * 12/26/2)19	22:05

Internal standard outliers indicate probable matrix interference
Method Reference(s): EPA 8260C
EPA 5035A - L

Data File:

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x67493.D
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This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-08 Duplicate		
Lab Sample ID:	196242-04	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

<u>Total Cyanide</u>

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	30.4	mg/Kg		12/27/2019
Method Reference(s):	EPA 9014 EPA 9010C			
Preparation Date:	12/27/2019			



Client:		BE3			
Project Ref	ference:	57 Tonawanda			
Sample I	dentifier:	BH-08 Duplicate			
Lab Samp	ole ID:	196242-04		Date Sampled:	12/17/2019
Matrix:		Soil		Date Received:	12/19/2019
Dioxa	ne				
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dio	xane	< 178	ug/Kg		12/31/2019 12:10
	Reporting limit elev	vated due to sample matrix			
	Method Reference				
	Preparation Date:	EPA 3546 : 12/20/2019			
	Data File:	B43447.D			



Client:	<u>BE3</u>				
Project Reference:	57 To	nawanda			
Sample Identifier:	BH-0	1 1-4'			
Lab Sample ID:	1962	42-05		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Metals</u>					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		11.6	mg/Kg		12/26/2019 18:33
Barium		188	mg/Kg		12/26/2019 18:33
Beryllium		2.14	mg/Kg		12/26/2019 18:33
Cadmium		4.49	mg/Kg		12/26/2019 18:33
Chromium		82.1	mg/Kg		12/26/2019 18:33
Copper		86.9	mg/Kg		12/26/2019 18:33
Lead		97.2	mg/Kg		12/26/2019 18:33
Manganese		15000	mg/Kg		12/26/2019 19:30
Nickel		44.1	mg/Kg		12/26/2019 18:33
Selenium		3.51	mg/Kg		12/26/2020 20:16
Silver		4.75	mg/Kg		12/26/2019 18:33
Zinc		287	mg/Kg		12/26/2019 18:33
Method Refe	rence(s):	EPA 6010C			
Preparation Data File:	Date:	EPA 3050B 12/23/2019 191226C			



Data File:

Lab Project ID: 196242

Client:	<u>BE3</u>				
Project Reference:	57 Tona	wanda			
Sample Identifier:	BH-01	1-4'			
Lab Sample ID:	196242	2-05		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Mercury</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.0377	mg/Kg		12/23/2019 10:33
Method Refer Preparation		EPA 7471B 12/20/2019			
Preparation	Date:	12/20/2019			

Hg191223A



Client:	<u>BE3</u>						
Project Reference:	57 Tonawa	nda					
Sample Identifier:	BH-01 1-4	ı					
Lab Sample ID:	196242-05	5		Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1221		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1232		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1242		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1248		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1254		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1260		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1262		< 0.0301	mg/Kg			12/20/2019	18:25
PCB-1268		< 0.0301	mg/Kg			12/20/2019	18:25
Surrogate		Perc	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	2		59.2	18.3 - 89.6		12/20/2019	18:25
Method Referer Preparation Da	EPA	8082A 3546 0/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-01 1-4'		
Lab Sample ID:	196242-05	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Chlorinated Pesticides

Analyte	<u>Result</u>	<u>Units</u>	Qualifier D	ate Analyzed	
4,4-DDD	< 3.01	ug/Kg	12/	20/2019 20:35	
4,4-DDE	< 3.01	ug/Kg	12/	20/2019 20:35	
4,4-DDT	< 3.01	ug/Kg	12/	20/2019 20:35	
Aldrin	< 3.01	ug/Kg	12/	20/2019 20:35	
alpha-BHC	< 3.01	ug/Kg	12/	20/2019 20:35	
beta-BHC	< 3.01	ug/Kg	12/	20/2019 20:35	
cis-Chlordane	< 3.01	ug/Kg	12/	20/2019 20:35	
delta-BHC	< 3.01	ug/Kg	12/	20/2019 20:35	
Dieldrin	< 3.01	ug/Kg	12/	20/2019 20:35	
Endosulfan I	< 3.01	ug/Kg	12/	20/2019 20:35	
Endosulfan II	< 3.01	ug/Kg	12/	20/2019 20:35	
Endosulfan Sulfate	< 3.01	ug/Kg	12/	20/2019 20:35	
Endrin	< 3.01	ug/Kg	12/	20/2019 20:35	
Endrin Aldehyde	< 3.01	ug/Kg	12/	20/2019 20:35	
Endrin Ketone	< 3.01	ug/Kg	12/	20/2019 20:35	
gamma-BHC (Lindane)	< 3.01	ug/Kg	12/	20/2019 20:35	
Heptachlor	< 3.01	ug/Kg	12/	20/2019 20:35	
Heptachlor Epoxide	< 3.01	ug/Kg	12/	20/2019 20:35	
Methoxychlor	< 3.01	ug/Kg	12/	20/2019 20:35	
Toxaphene	< 30.1	ug/Kg	12/	20/2019 20:35	
trans-Chlordane	< 3.01	ug/Kg	12/	20/2019 20:35	



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-01 1-4'					
Lab Sample ID:	196242-05		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Date	e Received:	12/19/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1)	56.8	30.7 - 111		12/20/2019	20:35
Tetrachloro-m-xylene	(1)	53.8	34.7 - 87.3		12/20/2019	20:35
Method Reference Preparation Date	EPA 3546					
Preparation Date	e. 12/20/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-01 1-4'		
Lab Sample ID:	196242-05	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analyzed
1,1-Biphenyl	< 301	ug/Kg		12/27/2019 17:19
1,2,4,5-Tetrachlorobenzene	< 301	ug/Kg		12/27/2019 17:19
1,2,4-Trichlorobenzene	< 301	ug/Kg		12/27/2019 17:19
1,2-Dichlorobenzene	< 301	ug/Kg		12/27/2019 17:19
1,3-Dichlorobenzene	< 301	ug/Kg		12/27/2019 17:19
1,4-Dichlorobenzene	< 301	ug/Kg		12/27/2019 17:19
2,2-0xybis (1-chloropropane)	< 301	ug/Kg		12/27/2019 17:19
2,3,4,6-Tetrachlorophenol	< 301	ug/Kg		12/27/2019 17:19
2,4,5-Trichlorophenol	< 301	ug/Kg		12/27/2019 17:19
2,4,6-Trichlorophenol	< 301	ug/Kg		12/27/2019 17:19
2,4-Dichlorophenol	< 301	ug/Kg		12/27/2019 17:19
2,4-Dimethylphenol	< 301	ug/Kg		12/27/2019 17:19
2,4-Dinitrophenol	< 1200	ug/Kg		12/27/2019 17:19
2,4-Dinitrotoluene	< 301	ug/Kg		12/27/2019 17:19
2,6-Dinitrotoluene	< 301	ug/Kg		12/27/2019 17:19
2-Chloronaphthalene	< 301	ug/Kg		12/27/2019 17:19
2-Chlorophenol	< 301	ug/Kg		12/27/2019 17:19
2-Methylnapthalene	< 301	ug/Kg		12/27/2019 17:19
2-Methylphenol	< 301	ug/Kg		12/27/2019 17:19
2-Nitroaniline	< 301	ug/Kg		12/27/2019 17:19
2-Nitrophenol	< 301	ug/Kg		12/27/2019 17:19
3&4-Methylphenol	< 301	ug/Kg		12/27/2019 17:19
3,3'-Dichlorobenzidine	< 301	ug/Kg		12/27/2019 17:19



Lab Project ID: 196242

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	BH-01 1-4'					
Lab Sample ID:	196242-05			Date Sampled:	12/17/2019	
Matrix:	Soil			Date Received:	12/19/2019	
3-Nitroaniline		< 301	ug/Kg		12/27/2019 1	7:19
4,6-Dinitro-2-methylpl	henol	< 602	ug/Kg		12/27/2019 1	7:19
4-Bromophenyl pheny	l ether	< 301	ug/Kg		12/27/2019 1	7:19
4-Chloro-3-methylphe	nol	< 301	ug/Kg		12/27/2019 1	7:19
4-Chloroaniline		< 301	ug/Kg		12/27/2019 1	7:19
4-Chlorophenyl pheny	l ether	< 301	ug/Kg		12/27/2019 1	7:19
4-Nitroaniline		< 301	ug/Kg		12/27/2019 1	7:19
4-Nitrophenol		< 301	ug/Kg		12/27/2019 1	7:19
Acenaphthene		< 301	ug/Kg		12/27/2019 1	7:19
Acenaphthylene		< 301	ug/Kg		12/27/2019 1	7:19
Acetophenone		< 301	ug/Kg		12/27/2019 1	7:19
Anthracene		< 301	ug/Kg		12/27/2019 1	7:19
Atrazine		< 301	ug/Kg		12/27/2019 1	7:19
Benzaldehyde		< 301	ug/Kg		12/27/2019 1	7:19
Benzo (a) anthracene		152	ug/Kg	J	12/27/2019 1	7:19
Benzo (a) pyrene		< 301	ug/Kg		12/27/2019 1	7:19
Benzo (b) fluoranthene	9	< 301	ug/Kg		12/27/2019 1	7:19
Benzo (g,h,i) perylene		< 301	ug/Kg		12/27/2019 1	7:19
Benzo (k) fluoranthene	9	< 301	ug/Kg		12/27/2019 1	7:19
Bis (2-chloroethoxy) m	nethane	< 301	ug/Kg		12/27/2019 1	7:19
Bis (2-chloroethyl) eth	er	< 301	ug/Kg		12/27/2019 1	7:19
Bis (2-ethylhexyl) phth	nalate	< 301	ug/Kg		12/27/2019 1	7:19
Butylbenzylphthalate		< 301	ug/Kg		12/27/2019 1	7:19
Caprolactam		< 301	ug/Kg		12/27/2019 1	7:19
Carbazole		< 301	ug/Kg		12/27/2019 1	7:19



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier: Lab Sample ID:	BH-01 1-4' 196242-05			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Chrysene		< 301	ug/Kg		12/27/2019 17:19
Dibenz (a,h) anthrace	ene	< 301	ug/Kg		12/27/2019 17:19
Dibenzofuran		< 301	ug/Kg		12/27/2019 17:19
Diethyl phthalate		< 301	ug/Kg		12/27/2019 17:19
Dimethyl phthalate		< 301	ug/Kg		12/27/2019 17:19
Di-n-butyl phthalate		< 301	ug/Kg		12/27/2019 17:19
Di-n-octylphthalate		< 301	ug/Kg		12/27/2019 17:19
Fluoranthene		367	ug/Kg		12/27/2019 17:19
Fluorene		< 301	ug/Kg		12/27/2019 17:19
Hexachlorobenzene		< 301	ug/Kg		12/27/2019 17:19
Hexachlorobutadiene	2	< 301	ug/Kg		12/27/2019 17:19
Hexachlorocyclopent	adiene	< 1200	ug/Kg		12/27/2019 17:19
Hexachloroethane		< 301	ug/Kg		12/27/2019 17:19
Indeno (1,2,3-cd) pyr	ene	< 301	ug/Kg		12/27/2019 17:19
Isophorone		< 301	ug/Kg		12/27/2019 17:19
Naphthalene		< 301	ug/Kg		12/27/2019 17:19
Nitrobenzene		< 301	ug/Kg		12/27/2019 17:19
N-Nitroso-di-n-propy	/lamine	< 301	ug/Kg		12/27/2019 17:19
N-Nitrosodiphenylan	nine	< 301	ug/Kg		12/27/2019 17:19
Pentachlorophenol		< 602	ug/Kg		12/27/2019 17:19
Phenanthrene		358	ug/Kg		12/27/2019 17:19
Phenol		< 301	ug/Kg		12/27/2019 17:19
Pyrene		234	ug/Kg	J	12/27/2019 17:19



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-01 1-4'					
Lab Sample ID:	196242-05		Date	e Sampled:	12/17/2019	9
Matrix:	Soil		Date	e Received:	12/19/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		55.3	35.1 - 89.5		12/27/2019	17:19
2-Fluorobiphenyl		57.0	37.7 - 81.4		12/27/2019	17:19
2-Fluorophenol		55.4	40.2 - 77		12/27/2019	17:19
Nitrobenzene-d5		28.6	36.2 - 78.4	*	12/27/2019	17:19
Phenol-d5		54.7	41.2 - 77.1		12/27/2019	17:19
Terphenyl-d14		55.4	39.8 - 97.5		12/27/2019	17:19
Method Referen	ce(s): EPA 8270D EPA 3546					
Preparation Dat Data File:	re: 12/20/2019 B43393.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-01 1-4' 196242-05 Soil			Date Sampled: Date Received:	12/17/2019 12/19/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 3.96	ug/Kg		12/26/2019 22:28
1,1,2,2-Tetrachloroeth	ane	< 3.96	ug/Kg		12/26/2019 22:28
1,1,2-Trichloroethane		< 3.96	ug/Kg		12/26/2019 22:28
1,1-Dichloroethane		< 3.96	ug/Kg		12/26/2019 22:28
1,1-Dichloroethene		< 3.96	ug/Kg		12/26/2019 22:28
1,2,3-Trichlorobenzen	е	< 9.90	ug/Kg		12/26/2019 22:28
1,2,4-Trichlorobenzen	e	< 9.90	ug/Kg		12/26/2019 22:28
1,2,4-Trimethylbenzen	e	< 3.96	ug/Kg		12/26/2019 22:28
1,2-Dibromo-3-Chloro	propane	< 19.8	ug/Kg		12/26/2019 22:28
1,2-Dibromoethane		< 3.96	ug/Kg		12/26/2019 22:28
1,2-Dichlorobenzene		< 3.96	ug/Kg		12/26/2019 22:28
1,2-Dichloroethane		< 3.96	ug/Kg		12/26/2019 22:28
1,2-Dichloropropane		< 3.96	ug/Kg		12/26/2019 22:28
1,3,5-Trimethylbenzen	e	< 3.96	ug/Kg		12/26/2019 22:28
1,3-Dichlorobenzene		< 3.96	ug/Kg		12/26/2019 22:28
1,4-Dichlorobenzene		< 3.96	ug/Kg		12/26/2019 22:28
1,4-Dioxane		< 39.6	ug/Kg		12/26/2019 22:28
2-Butanone		< 19.8	ug/Kg		12/26/2019 22:28
2-Hexanone		< 9.90	ug/Kg		12/26/2019 22:28
4-Methyl-2-pentanone		< 9.90	ug/Kg		12/26/2019 22:28
Acetone		< 19.8	ug/Kg		12/26/2019 22:28
Benzene		< 3.96	ug/Kg		12/26/2019 22:28
Bromochloromethane		< 9.90	ug/Kg		12/26/2019 22:28



Lab Project ID: 196242

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	BH-01 1-4'					
Lab Sample ID:	196242-05			Date Sampled:	12/17/2019	9
Matrix:	Soil			Date Received:	12/19/2019	9
Bromodichloromethane	e	< 3.96	ug/Kg		12/26/2019	22:28
Bromoform		< 9.90	ug/Kg		12/26/2019	22:28
Bromomethane		< 3.96	ug/Kg		12/26/2019	22:28
Carbon disulfide		< 3.96	ug/Kg		12/26/2019	22:28
Carbon Tetrachloride		< 3.96	ug/Kg		12/26/2019	22:28
Chlorobenzene		< 3.96	ug/Kg		12/26/2019	22:28
Chloroethane		< 3.96	ug/Kg		12/26/2019	22:28
Chloroform		< 3.96	ug/Kg		12/26/2019	22:28
Chloromethane		< 3.96	ug/Kg		12/26/2019	22:28
cis-1,2-Dichloroethene		< 3.96	ug/Kg		12/26/2019	22:28
cis-1,3-Dichloropropen	e	< 3.96	ug/Kg		12/26/2019	22:28
Cyclohexane		< 19.8	ug/Kg		12/26/2019	22:28
Dibromochloromethan	e	< 3.96	ug/Kg		12/26/2019	22:28
Dichlorodifluorometha	ne	< 3.96	ug/Kg		12/26/2019	22:28
Ethylbenzene		< 3.96	ug/Kg		12/26/2019	22:28
Freon 113		< 3.96	ug/Kg		12/26/2019	22:28
Isopropylbenzene		< 3.96	ug/Kg		12/26/2019	22:28
m,p-Xylene		< 3.96	ug/Kg		12/26/2019	22:28
Methyl acetate		< 3.96	ug/Kg		12/26/2019	22:28
Methyl tert-butyl Ether		< 3.96	ug/Kg		12/26/2019	22:28
Methylcyclohexane		< 3.96	ug/Kg		12/26/2019	22:28
Methylene chloride		< 9.90	ug/Kg		12/26/2019	22:28
Naphthalene		< 9.90	ug/Kg		12/26/2019	22:28
n-Butylbenzene		< 3.96	ug/Kg		12/26/2019	22:28
n-Propylbenzene		< 3.96	ug/Kg		12/26/2019	22:28



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	BH-01 1-4'						
Lab Sample ID:	196242-05			Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
o-Xylene		< 3.96	ug/Kg			12/26/2019	22:28
p-Isopropyltoluene		< 3.96	ug/Kg			12/26/2019	22:28
sec-Butylbenzene		< 3.96	ug/Kg			12/26/2019	22:28
Styrene		< 9.90	ug/Kg			12/26/2019	22:28
tert-Butylbenzene		< 3.96	ug/Kg			12/26/2019	22:28
Tetrachloroethene		< 3.96	ug/Kg			12/26/2019	22:28
Toluene		< 3.96	ug/Kg			12/26/2019	22:28
trans-1,2-Dichloroethe	ene	83.5	ug/Kg			12/26/2019	22:28
trans-1,3-Dichloropro	pene	< 3.96	ug/Kg			12/26/2019	22:28
Trichloroethene		10.0	ug/Kg			12/26/2019	22:28
Trichlorofluorometha	ne	< 3.96	ug/Kg			12/26/2019	22:28
Vinyl chloride		< 3.96	ug/Kg			12/26/2019	22:28
<u>Surrogate</u>		Pe	rcent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4	ŀ		129	67.9 - 146		12/26/2019	22:28
4-Bromofluorobenzen	e		62.8	64.6 - 127	*	12/26/2019	22:28
Pentafluorobenzene			90.4	85.5 - 113		12/26/2019	22:28
Toluene-D8			83.0	83.9 - 114	*	12/26/2019	22:28

Internal standard outliers indicate probable matrix interference
Method Reference(s): EPA 8260C
EPA 5035A - L

Data File:

x67494.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-01 1-4'		
Lab Sample ID:	196242-05	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

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<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	< 0.532	mg/Kg		12/27/2019
Method Reference(s):	EPA 9014			
	EPA 9010C			
Preparation Date:	12/27/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-01 1-4'				
Lab Sample ID:	196242-05			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		93.9	%		12/20/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Reference:	57 Toi	nawanda			
Sample Identifier	: BH-0	1 1-4'			
Lab Sample ID:	1962	42-05		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Dioxane</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 30.1	ug/Kg		1/2/2020 12:09
Method Rei	ference(s):	EPA 8270D SIM			
Preparatio Data File:	n Date:	EPA 3546 12/20/2019 B43479.D			



Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	BH-8	10-12'			
Lab Sample ID:	19624	12-06		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		1.28	mg/Kg		1/2/2020 10:11
Barium		156	mg/Kg		1/2/2020 10:11
Beryllium		1.17	mg/Kg		1/2/2020 10:11
Cadmium		1.33	mg/Kg		1/2/2020 10:11
Chromium		32.4	mg/Kg		1/2/2020 10:11
Copper		16.9	mg/Kg		1/2/2020 10:11
Lead		9.76	mg/Kg		1/2/2020 10:11
Manganese		1010	mg/Kg		12/26/2020 19:34
Nickel		32.0	mg/Kg		1/2/2020 10:11
Selenium		2.93	mg/Kg		1/2/2020 10:11
Silver		< 0.619	mg/Kg		1/2/2020 10:11
Zinc		72.0	mg/Kg		1/2/2020 10:11
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 12/23/2019 200102A			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-8 10-12'				
Lab Sample ID:	196242-06			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Mercury</u>					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.0212	mg/Kg		12/23/2019 10:39
Mathad Defense		1.0			

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/20/2019

 Data File:
 Hg191223A



Client:	<u>BE3</u>						
Project Reference:	57 Tonawan	da					
Sample Identifier:	BH-8 10-12	2'					
Lab Sample ID:	196242-06			Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		<u>Qualifier</u>	Date Analy	<u>yzed</u>
PCB-1016		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1221		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1232		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1242		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1248		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1254		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1260		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1262		< 0.0362	mg/Kg			12/20/2019	19:39
PCB-1268		< 0.0362	mg/Kg			12/20/2019	19:39
<u>Surrogate</u>		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	1		59.3	18.3 - 89.6		12/20/2019	19:39
Method Referen Preparation Da	EPA 3						



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-8 10-12'		
Lab Sample ID:	196242-06	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Chlorinated Pesticides

Analyte	<u>Result</u>	<u>Units</u>	Qualifier Date Analyzed
4,4-DDD	< 3.62	ug/Kg	12/20/2019 20:53
4,4-DDE	< 3.62	ug/Kg	12/20/2019 20:53
4,4-DDT	< 3.62	ug/Kg	12/20/2019 20:53
Aldrin	< 3.62	ug/Kg	12/20/2019 20:53
alpha-BHC	< 3.62	ug/Kg	12/20/2019 20:53
beta-BHC	< 3.62	ug/Kg	12/20/2019 20:53
cis-Chlordane	< 3.62	ug/Kg	12/20/2019 20:53
delta-BHC	< 3.62	ug/Kg	12/20/2019 20:53
Dieldrin	< 3.62	ug/Kg	12/20/2019 20:53
Endosulfan I	< 3.62	ug/Kg	12/20/2019 20:53
Endosulfan II	< 3.62	ug/Kg	12/20/2019 20:53
Endosulfan Sulfate	< 3.62	ug/Kg	12/20/2019 20:53
Endrin	< 3.62	ug/Kg	12/20/2019 20:53
Endrin Aldehyde	< 3.62	ug/Kg	12/20/2019 20:53
Endrin Ketone	< 3.62	ug/Kg	12/20/2019 20:53
gamma-BHC (Lindane)	< 3.62	ug/Kg	12/20/2019 20:53
Heptachlor	< 3.62	ug/Kg	12/20/2019 20:53
Heptachlor Epoxide	< 3.62	ug/Kg	12/20/2019 20:53
Methoxychlor	< 3.62	ug/Kg	12/20/2019 20:53
Toxaphene	< 36.2	ug/Kg	12/20/2019 20:53
trans-Chlordane	< 3.62	ug/Kg	12/20/2019 20:53



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-8 10-12'					
Lab Sample ID:	196242-06		Dat	e Sampled:	12/17/2019	9
Matrix:	Soil		Dat	e Received:	12/19/2019	9
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	33.7	30.7 - 111		12/20/2019	20:53
Tetrachloro-m-xylene	(1)	47.4	34.7 - 87.3		12/20/2019	20:53
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-8 10-12'		
Lab Sample ID:	196242-06	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 348	ug/Kg		12/30/2019 23:05
1,2,4,5-Tetrachlorobenzene	< 348	ug/Kg		12/30/2019 23:05
1,2,4-Trichlorobenzene	< 348	ug/Kg		12/30/2019 23:05
1,2-Dichlorobenzene	< 348	ug/Kg		12/30/2019 23:05
1,3-Dichlorobenzene	< 348	ug/Kg		12/30/2019 23:05
1,4-Dichlorobenzene	< 348	ug/Kg		12/30/2019 23:05
2,2-0xybis (1-chloropropane)	< 348	ug/Kg		12/30/2019 23:05
2,3,4,6-Tetrachlorophenol	< 348	ug/Kg		12/30/2019 23:05
2,4,5-Trichlorophenol	< 348	ug/Kg		12/30/2019 23:05
2,4,6-Trichlorophenol	< 348	ug/Kg		12/30/2019 23:05
2,4-Dichlorophenol	< 348	ug/Kg		12/30/2019 23:05
2,4-Dimethylphenol	< 348	ug/Kg		12/30/2019 23:05
2,4-Dinitrophenol	< 1390	ug/Kg		12/30/2019 23:05
2,4-Dinitrotoluene	< 348	ug/Kg		12/30/2019 23:05
2,6-Dinitrotoluene	< 348	ug/Kg		12/30/2019 23:05
2-Chloronaphthalene	< 348	ug/Kg		12/30/2019 23:05
2-Chlorophenol	< 348	ug/Kg		12/30/2019 23:05
2-Methylnapthalene	< 348	ug/Kg		12/30/2019 23:05
2-Methylphenol	< 348	ug/Kg		12/30/2019 23:05
2-Nitroaniline	< 348	ug/Kg		12/30/2019 23:05
2-Nitrophenol	< 348	ug/Kg		12/30/2019 23:05
3&4-Methylphenol	< 348	ug/Kg		12/30/2019 23:05
3,3'-Dichlorobenzidine	< 348	ug/Kg		12/30/2019 23:05



Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	la				
Sample Identifier:	BH-8 10-12'					
Lab Sample ID:	196242-06			Date Sampled:	12/17/2019	9
Matrix:	Soil			Date Received:	12/19/2019	9
3-Nitroaniline		< 348	ug/Kg		12/30/2019	23:05
4,6-Dinitro-2-methylp	henol	< 697	ug/Kg		12/30/2019	23:05
4-Bromophenyl pheny	vl ether	< 348	ug/Kg		12/30/2019	23:05
4-Chloro-3-methylphe	enol	< 348	ug/Kg		12/30/2019	23:05
4-Chloroaniline		< 348	ug/Kg		12/30/2019	23:05
4-Chlorophenyl pheny	vl ether	< 348	ug/Kg		12/30/2019	23:05
4-Nitroaniline		< 348	ug/Kg		12/30/2019	23:05
4-Nitrophenol		< 348	ug/Kg		12/30/2019	23:05
Acenaphthene		< 348	ug/Kg		12/30/2019	23:05
Acenaphthylene		< 348	ug/Kg		12/30/2019	23:05
Acetophenone		< 348	ug/Kg		12/30/2019	23:05
Anthracene		< 348	ug/Kg		12/30/2019	23:05
Atrazine		< 348	ug/Kg		12/30/2019	23:05
Benzaldehyde		< 348	ug/Kg		12/30/2019	23:05
Benzo (a) anthracene		< 348	ug/Kg		12/30/2019	23:05
Benzo (a) pyrene		< 348	ug/Kg		12/30/2019	23:05
Benzo (b) fluoranthen	e	< 348	ug/Kg		12/30/2019	23:05
Benzo (g,h,i) perylene		< 348	ug/Kg		12/30/2019	23:05
Benzo (k) fluoranthen	e	< 348	ug/Kg		12/30/2019	23:05
Bis (2-chloroethoxy) n	nethane	< 348	ug/Kg		12/30/2019	23:05
Bis (2-chloroethyl) eth	ner	< 348	ug/Kg		12/30/2019	23:05
Bis (2-ethylhexyl) pht	halate	< 348	ug/Kg		12/30/2019	23:05
Butylbenzylphthalate		< 348	ug/Kg		12/30/2019	23:05
Caprolactam		< 348	ug/Kg		12/30/2019	23:05
Carbazole		< 348	ug/Kg		12/30/2019	23:05



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	da			
Sample Identifier: Lab Sample ID:	BH-8 10-12 196242-06	1		Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
Chrysene		< 348	ug/Kg		12/30/2019 23:05
Dibenz (a,h) anthrace	ene	< 348	ug/Kg		12/30/2019 23:05
Dibenzofuran		< 348	ug/Kg		12/30/2019 23:05
Diethyl phthalate		< 348	ug/Kg		12/30/2019 23:05
Dimethyl phthalate		< 348	ug/Kg		12/30/2019 23:05
Di-n-butyl phthalate		< 348	ug/Kg		12/30/2019 23:05
Di-n-octylphthalate		< 348	ug/Kg		12/30/2019 23:05
Fluoranthene		< 348	ug/Kg		12/30/2019 23:05
Fluorene		< 348	ug/Kg		12/30/2019 23:05
Hexachlorobenzene		< 348	ug/Kg		12/30/2019 23:05
Hexachlorobutadiene	!	< 348	ug/Kg		12/30/2019 23:05
Hexachlorocyclopent	adiene	< 1390	ug/Kg		12/30/2019 23:05
Hexachloroethane		< 348	ug/Kg		12/30/2019 23:05
Indeno (1,2,3-cd) pyr	ene	< 348	ug/Kg		12/30/2019 23:05
Isophorone		< 348	ug/Kg		12/30/2019 23:05
Naphthalene		< 348	ug/Kg		12/30/2019 23:05
Nitrobenzene		< 348	ug/Kg		12/30/2019 23:05
N-Nitroso-di-n-propy	lamine	< 348	ug/Kg		12/30/2019 23:05
N-Nitrosodiphenylam	nine	< 348	ug/Kg		12/30/2019 23:05
Pentachlorophenol		< 697	ug/Kg		12/30/2019 23:05
Phenanthrene		< 348	ug/Kg		12/30/2019 23:05
Phenol		< 348	ug/Kg		12/30/2019 23:05
Pyrene		< 348	ug/Kg		12/30/2019 23:05



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-8 10-12'					
Lab Sample ID:	196242-06		Date	e Sampled:	12/17/2019	Э
Matrix:	Soil		Date	e Received:	12/19/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		56.5	35.1 - 89.5		12/30/2019	23:05
2-Fluorobiphenyl		62.9	37.7 - 81.4		12/30/2019	23:05
2-Fluorophenol		61.2	40.2 - 77		12/30/2019	23:05
Nitrobenzene-d5		52.1	36.2 - 78.4		12/30/2019	23:05
Phenol-d5		60.0	41.2 - 77.1		12/30/2019	23:05
Terphenyl-d14		63.1	39.8 - 97.5		12/30/2019	23:05
Method Referen Preparation Dat Data File:	EPA 3546					
Data File:	B43423A.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID: Matrix:	BH-8 10-12' 196242-06 Soil			Date Sampled: Date Received:	12/17/2019 12/19/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 5.31	ug/Kg		12/26/2019 22:50
1,1,2,2-Tetrachloroetha	ane	< 5.31	ug/Kg		12/26/2019 22:50
1,1,2-Trichloroethane		< 5.31	ug/Kg		12/26/2019 22:50
1,1-Dichloroethane		< 5.31	ug/Kg		12/26/2019 22:50
1,1-Dichloroethene		< 5.31	ug/Kg		12/26/2019 22:50
1,2,3-Trichlorobenzene	<u>)</u>	< 13.3	ug/Kg		12/26/2019 22:50
1,2,4-Trichlorobenzene		< 13.3	ug/Kg		12/26/2019 22:50
1,2,4-Trimethylbenzen	e	< 5.31	ug/Kg		12/26/2019 22:50
1,2-Dibromo-3-Chlorop	propane	< 26.6	ug/Kg		12/26/2019 22:50
1,2-Dibromoethane		< 5.31	ug/Kg		12/26/2019 22:50
1,2-Dichlorobenzene		< 5.31	ug/Kg		12/26/2019 22:50
1,2-Dichloroethane		< 5.31	ug/Kg		12/26/2019 22:50
1,2-Dichloropropane		< 5.31	ug/Kg		12/26/2019 22:50
1,3,5-Trimethylbenzen	е	< 5.31	ug/Kg		12/26/2019 22:50
1,3-Dichlorobenzene		< 5.31	ug/Kg		12/26/2019 22:50
1,4-Dichlorobenzene		< 5.31	ug/Kg		12/26/2019 22:50
1,4-Dioxane		< 53.1	ug/Kg		12/26/2019 22:50
2-Butanone		< 26.6	ug/Kg		12/26/2019 22:50
2-Hexanone		< 13.3	ug/Kg		12/26/2019 22:50
4-Methyl-2-pentanone		< 13.3	ug/Kg		12/26/2019 22:50
Acetone		33.5	ug/Kg		12/26/2019 22:50
Benzene		< 5.31	ug/Kg		12/26/2019 22:50
Bromochloromethane		< 13.3	ug/Kg		12/26/2019 22:50



Lab Project ID: 196242

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	BH-8 10-12'					
Lab Sample ID:	196242-06			Date Sampled:	12/17/2019	
Matrix:	Soil			Date Received:	12/19/2019	
Bromodichloromethane	9	< 5.31	ug/Kg		12/26/2019 22:	:50
Bromoform		< 13.3	ug/Kg		12/26/2019 22:	:50
Bromomethane		< 5.31	ug/Kg		12/26/2019 22:	:50
Carbon disulfide		2.97	ug/Kg	J	12/26/2019 22:	:50
Carbon Tetrachloride		< 5.31	ug/Kg		12/26/2019 22:	:50
Chlorobenzene		< 5.31	ug/Kg		12/26/2019 22:	:50
Chloroethane		< 5.31	ug/Kg		12/26/2019 22:	:50
Chloroform		< 5.31	ug/Kg		12/26/2019 22:	:50
Chloromethane		< 5.31	ug/Kg		12/26/2019 22:	:50
cis-1,2-Dichloroethene		< 5.31	ug/Kg		12/26/2019 22:	:50
cis-1,3-Dichloropropen	e	< 5.31	ug/Kg		12/26/2019 22:	:50
Cyclohexane		< 26.6	ug/Kg		12/26/2019 22:	:50
Dibromochloromethan	е	< 5.31	ug/Kg		12/26/2019 22:	:50
Dichlorodifluorometha	ne	< 5.31	ug/Kg		12/26/2019 22:	:50
Ethylbenzene		< 5.31	ug/Kg		12/26/2019 22:	:50
Freon 113		< 5.31	ug/Kg		12/26/2019 22:	:50
Isopropylbenzene		< 5.31	ug/Kg		12/26/2019 22:	:50
m,p-Xylene		< 5.31	ug/Kg		12/26/2019 22:	:50
Methyl acetate		< 5.31	ug/Kg		12/26/2019 22:	:50
Methyl tert-butyl Ether		< 5.31	ug/Kg		12/26/2019 22:	:50
Methylcyclohexane		< 5.31	ug/Kg		12/26/2019 22:	:50
Methylene chloride		< 13.3	ug/Kg		12/26/2019 22:	:50
Naphthalene		< 13.3	ug/Kg		12/26/2019 22:	:50
n-Butylbenzene		< 5.31	ug/Kg		12/26/2019 22:	:50
n-Propylbenzene		< 5.31	ug/Kg		12/26/2019 22:	:50



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	BH-8 10-12'						
Lab Sample ID:	196242-06			Dat	e Sampled:	12/17/2019	9
Matrix:	Soil			Dat	e Received:	12/19/2019	9
o-Xylene		< 5.31	ug/Kg			12/26/2019	22:50
p-Isopropyltoluene		< 5.31	ug/Kg			12/26/2019	22:50
sec-Butylbenzene		< 5.31	ug/Kg			12/26/2019	22:50
Styrene		< 13.3	ug/Kg			12/26/2019	22:50
tert-Butylbenzene		< 5.31	ug/Kg			12/26/2019	22:50
Tetrachloroethene		< 5.31	ug/Kg			12/26/2019	22:50
Toluene		< 5.31	ug/Kg			12/26/2019	22:50
trans-1,2-Dichloroeth	ene	9.04	ug/Kg			12/26/2019	22:50
trans-1,3-Dichloropro	opene	< 5.31	ug/Kg			12/26/2019	22:50
Trichloroethene		< 5.31	ug/Kg			12/26/2019	22:50
Trichlorofluorometha	ine	< 5.31	ug/Kg			12/26/2019	22:50
Vinyl chloride		< 5.31	ug/Kg			12/26/2019	22:50
Surrogate		Pe	rcent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d	4		128	67.9 - 146		12/26/2019	22:50
4-Bromofluorobenzer	ne		71.0	64.6 - 127		12/26/2019	22:50
Pentafluorobenzene			91.2	85.5 - 113		12/26/2019	22:50
Toluene-D8			87.6	83.9 - 114		12/26/2019	22:50
Method Referen	nce(s): EPA 826 EPA 503						

Data File:

EPA 5035A x67495.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-8 10-12'		
Lab Sample ID:	196242-06	Date Sampled:	12/17/2019
Matrix:	Soil	Date Received:	12/19/2019

Total Cyanide

<u>Analyte</u>	Result	<u>Units</u>	Q	ualifier	Date Analyzed
Cyanide, Total	< 0.631	mg/Kg			12/27/2019
Method Reference(s):	EPA 9014				
	EPA 9010C				
Preparation Date:	12/27/2019				



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier:	BH-8 10-12	ı			
Lab Sample ID:	196242-06			Date Sampled:	12/17/2019
Matrix:	Soil			Date Received:	12/19/2019
<u>Dioxane</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 34.8	ug/Kg		12/31/2019 12:32
Method Refere	nce(s): EPA 82	270D SIM			
Preparation Data File:	EPA 35 ate: 12/20, B4344	/2019			



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
	Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs
T :: t - t :	may incur additional fees. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-
Limitations of Liability.	perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients
	or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.



ANALYTICAL REPORT

L1960662
Paradigm Environmental Services
179 Lake Avenue
Rochester, NY 14608
Jane Daloia
(585) 647-2530
57 TONAWANDA
57 TONAWANDA
01/23/20

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial_No:01232019:04

Lab Number: Report Date:

L1960662 01/23/20

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1960662-01	BH-01 6-8'	SOIL	Not Specified	12/17/19 10:00	12/18/19
L1960662-02	BH-04 1-3'	SOIL	Not Specified	12/17/19 11:00	12/18/19
L1960662-03	BH-08 1-3'	SOIL	Not Specified	12/17/19 14:30	12/18/19
L1960662-04	BH-08 DUPLICATE	SOIL	Not Specified	12/17/19 14:30	12/18/19
L1960662-05	BH-01 1-4'	SOIL	Not Specified	12/17/19 13:00	12/18/19
L1960662-06	BH-8 10-12'	SOIL	Not Specified	12/17/19 00:00	12/18/19

Project Name: 57 TONAWANDA Project Number: 57 TONAWANDA

Lab Number: L1960662 Report Date: 01/23/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L1960662

 Report Date:
 01/23/20

Case Narrative (continued)

Report Submission

January 23, 2020: This final report includes the results of all requested analyses. December 26, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Hexavalent Chromium

The WG1323083-4 MS recovery (50%), performed on L1960662-06, is outside the acceptance criteria. This has been attributed to matrix interference. A post-spike was performed with a recovery of 105%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Standow Kelly Stenstrom

Authorized Signature:

Title: Technical Director/Representative

Date: 01/23/20



ORGANICS



SEMIVOLATILES



			Serial_No	0:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-01		Date Collected:	12/17/19 10:00
Client ID:	BH-01 6-8'		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	1: ALPHA 23528
Analytical Method:	134,LCMSMS-ID		Extraction Date:	12/27/19 11:22
Analytical Date:	01/23/20 00:52			
Analyst:	JW			
Percent Solids:	81%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Diluti	on - Mansfiel	d Lab				
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.12	0.026	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.12	0.052	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.12	0.044	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.12	0.059	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.12	0.051	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.12	0.068	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.12	0.047	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.12	0.202	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.12	0.153	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.12	0.084	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.12	0.146	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.12	0.075	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.12	0.323	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.12	0.226	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.12	0.053	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.12	0.172	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.12	0.110	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.12	0.095	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.12	0.079	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.12	0.230	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.12	0.061	1
PFOA/PFOS, Total	ND		ug/kg	1.12	0.047	1



		Serial_No:01232019:04						
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1960662	
Project Number:	57 TONAWANDA				Report	Date:	01/23/20	
		SAMP	LE RESULTS	6				
Lab ID:	L1960662-01				Date Col	lected:	12/17/19 10:00	
Client ID:	BH-01 6-8'				Date Ree	ceived:	12/18/19	
Sample Location:	Not Specified				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab								

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	75	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	78	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	77	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	73	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	78	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	81	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	107	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	47	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	51	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	62	26-160



			Serial_No	:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-03		Date Collected:	12/17/19 14:30
Client ID:	BH-08 1-3'		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	: ALPHA 23528
Analytical Method:	134,LCMSMS-ID		Extraction Date:	12/27/19 11:22
Analytical Date:	01/23/20 01:09			
Analyst:	JW			
Percent Solids:	90%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution	on - Mansfiel	d Lab				
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.02	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.02	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.02	0.040	1
Perfluorohexanoic Acid (PFHxA)	0.054	J	ug/kg	1.02	0.054	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.02	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.02	0.062	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.02	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.02	0.183	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.02	0.139	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.02	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.02	0.132	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.02	0.068	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.02	0.292	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.02	0.205	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.02	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.02	0.156	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.02	0.100	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.02	0.086	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.02	0.071	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.02	0.208	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.02	0.055	1
PFOA/PFOS, Total	ND		ug/kg	1.02	0.043	1



		Serial_No:01232019:04						
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1960662	
Project Number:	57 TONAWANDA				Report	Date:	01/23/20	
		SAMP	LE RESULTS	6				
Lab ID:	L1960662-03				Date Col	llected:	12/17/19 14:30	
Client ID:	BH-08 1-3'				Date Re	ceived:	12/18/19	
Sample Location:	Not Specified				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab								

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	90	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	99	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	101	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	99	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	117	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	65	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	67	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	90	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	80	26-160



			Serial_No	p:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L1960662-05 BH-01 1-4' Not Specified		Date Collected: Date Received: Field Prep:	12/17/19 13:00 12/18/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/23/20 01:26 JW 90%		Extraction Method Extraction Date:	1: ALPHA 23528 12/27/19 11:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution	on - Mansfield	d Lab				
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.01	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.01	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.01	0.039	1
Perfluorohexanoic Acid (PFHxA)	0.061	J	ug/kg	1.01	0.053	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.01	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.01	0.061	1
Perfluorooctanoic Acid (PFOA)	0.085	J	ug/kg	1.01	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.01	0.182	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.01	0.138	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.01	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.01	0.131	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.01	0.068	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.01	0.290	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid	ND		ug/kg	1.01	0.204	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.01	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.01	0.155	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.01	0.099	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.01	0.085	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.01	0.071	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.01	0.207	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.01	0.055	1
PFOA/PFOS, Total	0.085	J	ug/kg	1.01	0.042	1



				Serial_No:01232019:04				
Project Name:	57 TONAWANDA				Lab Nu	umber:	L1960662	
Project Number:	57 TONAWANDA				Repor	t Date:	01/23/20	
		SAMPL	E RESULTS	5				
Lab ID:	L1960662-05				Date Co	llected:	12/17/19 13:00	
Client ID:	BH-01 1-4'				Date Re	ceived:	12/18/19	
Sample Location:	Not Specified				Field Pro	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab								

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	92	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91	62-152
H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	98	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94	65-150
H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	114	25-186
J-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	48	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	57	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	56	26-160



Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		Mothod Blank Analysis		

Method Blank Analysis Batch Quality Control

Analytical Method:	134,LCMSMS-ID
Analytical Date:	01/17/20 09:23
Analyst:	JW

Extraction Method: ALPHA 23528 Extraction Date: 12/27/19 11:22

arameter	Result	Qualifier	Units	RL	MDL	
erfluorinated Alkyl Acids by Isotope /G1325203-1	e Dilution -	Mansfield	Lab for sa	mple(s):	01,03,05 Batch:	
Perfluorobutanoic Acid (PFBA)	0.040	J	ug/kg	1.00	0.023	
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046	
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039	
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053	
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045	
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061	
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180	
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136	
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075	
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130	
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067	
1H,1H,2H,2H-Perfluorodecanesulfonic Acia (8:2FTS)	d ND		ug/kg	1.00	0.287	
N-Methyl Perfluorooctanesulfonamidoaceti Acid (NMeFOSAA)	ic ND		ug/kg	1.00	0.202	
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047	
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153	
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098	
N-Ethyl Perfluorooctanesulfonamidoacetic (NEtFOSAA)	Acid0.256	J	ug/kg	1.00	0.085	
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070	
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204	
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054	



Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		Method Blank Analysis Batch Quality Control		
Analytical Method: Analytical Date: Analyst:	134,LCMSMS-ID 01/17/20 09:23 JW		Extraction Method Extraction Date:	: ALPHA 23528 12/27/19 11:22

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	110		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	129		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	102		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	101		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	129		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3- NMeFOSAA)	96		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	23		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	100		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		26-160





Lab Control Sample Analysis

Project Number: 57 TONAWANDA	Project Name:
57 TONAWANDA	57 TONAWANDA
	Batch Quality Control
Report Date:	Lab Number:
01/23/20	L1960662

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01,03,05	- Mansfield Lab	Associated sa	ample(s): 01,0	03,05 Batch:	WG1325203-2	WG1325203-2 WG1325203-3		
Perfluorobutanoic Acid (PFBA)	106		103		71-135	ω		30
Perfluoropentanoic Acid (PFPeA)	112		108		69-132	4		30
Perfluorobutanesulfonic Acid (PFBS)	110		106		72-128	4		30
Perfluorohexanoic Acid (PFHxA)	110		105		70-132	СЛ		30
Perfluoroheptanoic Acid (PFHpA)	103		102		71-131	د		30
Perfluorohexanesulfonic Acid (PFHxS)	106		100		67-130	6		30
Perfluorooctanoic Acid (PFOA)	113		109		69-133	4		30
1H,1H,2H,2H-Perfluorooctanesulfonic	117		126		64-140	7		30
Perfluoroheptanesulfonic Acid (PFHpS)	104		113		70-132	8		30
Perfluorononanoic Acid (PFNA)	108		107		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	106		108		68-136	2		30
Perfluorodecanoic Acid (PFDA)	106		104		69-133	2		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	116		132		65-137	13		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	115		111		63-144	4		30
Perfluoroundecanoic Acid (PFUnA)	115		104		64-136	10		30
Perfluorodecanesulfonic Acid (PFDS)	107		116		59-134	8		30
Perfluorooctanesulfonamide (FOSA)	106		122		67-137	14		30
N-Ethyl Perfluorooctanesulfonamidoacetic	108		103		61-139	თ		30
Perfluorododecanoic Acid (PFDoA)	109		108		69-135	_		30
Perfluorotridecanoic Acid (PFTrDA)	118		108		66-139	9		30
Perfluorotetradecanoic Acid (PFTA)	110		107		69-133	ယ		30

Ацяна

Lab Control Sample Analysis Batch Quality Control

Project Number: 57 TONAWANDA	Project Name: 5
7 TONAWANDA	57 TONAWANDA
	Batch Quality Control
Report Date:	Lab Number:
01/23/20	L1960662

Parameter

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01,03,05 Batch: WG1325203-2 WG1325203-3

LCS %Recovery

Qual

LCSD %Recovery

Qual

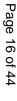
%Recovery Limits

RPD

Qual

RPD Limits

	LCS		LCSD		Acceptance
Surrogate (Extracted Internal Standard)	%Recovery	Qual	%Recovery	Qual	Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	68		06		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102		103		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		93		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79		83		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		90		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		66		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	06		94		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	117		109		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		96		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	66		95		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		91		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	127		119		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	93		87		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95		101		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	21		17		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	89		91		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	06		94		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79		82		26-160



Ацрна

PESTICIDES



			Serial_No	0:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-01		Date Collected:	12/17/19 10:00
Client ID:	BH-01 6-8'		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/21/19 08:21
Analytical Date:	12/24/19 10:04			
Analyst:	JMC			
Percent Solids:	81%			
Methylation Date:	12/22/19 18:01			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - West	borough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	204	5.42	1	A
Surrogate			% Recovery	Qualifier	Accept Crite		olumn
DCAA			93		30-	150	А
DCAA			85		30-	150	В



			Serial_No	0:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-02		Date Collected:	12/17/19 11:00
Client ID:	BH-04 1-3'		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	d: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/21/19 08:21
Analytical Date:	12/24/19 10:23			
Analyst:	JMC			
Percent Solids:	85%			
Methylation Date:	12/22/19 18:01			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fact	or Column
Chlorinated Herbicides by GC - Wes	tborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	194	5.15	1	A
Surrogate			% Recovery	Qualifier	Accep Crit		Column
DCAA			98		30)-150	А
DCAA			93		30)-150	В



			Serial_No	0:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-03		Date Collected:	12/17/19 14:30
Client ID:	BH-08 1-3'		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	d: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/21/19 08:21
Analytical Date:	12/24/19 10:41			
Analyst:	JMC			
Percent Solids:	90%			
Methylation Date:	12/22/19 18:01			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fa	actor Colum
Chlorinated Herbicides by GC - We	estborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	185	4.92	1	A
Surrogate			% Recovery	Qualifier		otance teria	Column
DCAA			70		30)-150	А
DCAA			73		30	0-150	В



			Serial_No	0:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-04		Date Collected:	12/17/19 14:30
Client ID:	BH-08 DUPLICATE		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/21/19 08:58
Analytical Date:	12/24/19 10:59			
Analyst:	JMC			
Percent Solids:	84%			
Methylation Date:	12/22/19 18:01			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	or Column
Chlorinated Herbicides by GC - We	stborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	197	5.24	1	А
Surrogate			% Recovery	Qualifier	Accept Crite		Column
DCAA			89		30-	150	A
DCAA			86		30-	150	В



			Serial_No	0:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-05		Date Collected:	12/17/19 13:00
Client ID:	BH-01 1-4'		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/21/19 08:21
Analytical Date:	12/24/19 11:18			
Analyst:	JMC			
Percent Solids:	90%			
Methylation Date:	12/22/19 18:01			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fact	or Column
Chlorinated Herbicides by GC - Westl	oorough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	185	4.91	1	A
Surrogate			% Recovery	Qualifier	Accep Crit		Column
DCAA			104		30	-150	А
DCAA			91		30	-150	В



			Serial_No	p:01232019:04
Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		SAMPLE RESULTS		
Lab ID:	L1960662-06		Date Collected:	12/17/19 00:00
Client ID:	BH-8 10-12'		Date Received:	12/18/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	d: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/21/19 08:21
Analytical Date:	12/24/19 11:36			
Analyst:	JMC			
Percent Solids:	81%			
Methylation Date:	12/22/19 18:01			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Facto	or Column
Chlorinated Herbicides by GC - Westbo	brough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	204	5.42	1	A
Surrogate			% Recovery	Qualifier	Accep Crite		Column
DCAA			88		30	-150	А
DCAA			77		30	-150	В



Project Name:	57 TONAWANDA		Lab Number:	L1960662
Project Number:	57 TONAWANDA		Report Date:	01/23/20
		Method Blank Analysis Batch Quality Control		
Analytical Method: Analytical Date: Analyst:	1,8151A 12/23/19 15:57 JMC		Extraction Method: Extraction Date:	EPA 8151A 12/21/19 08:21
Methylation Date:	12/22/19 18:01			

Parameter	Result	Qualifier	Units		RL	MDL	Column
Chlorinated Herbicides by GC -	Westborough I	_ab for sam	ole(s):	01-06	Batch:	WG1323556-	1
2,4,5-TP (Silvex)	ND		ug/kg		163	4.33	А

		Acceptane	ce
Surrogate	%Recovery Qualifi	er Criteria	Column
DCAA	94	30-150	А
DCAA	91	30-150	В



Lab Control Sample Analysis Batch Quality Control

Project Number:	Project Name:
Project Number: 57 TONAWANDA	57 TONAWANDA
	Batch Quality Control
Report Date:	Lab Number:
01/23/20	L1960662

2,4,5-TP (Silvex)	Chlorinated Herbicides by GC - \
101	Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG1323556-2
97	nple(s): 01-06 Batch: WC
30-150	31323556-2 WG1323556-3
4	
30 A	

Parameter

LCS %Recovery

Qual

LCSD %Recovery

Qual

%Recovery Limits

RPD

Qual

RPD Limits

Column

DCAA	DCAA	Surrogate
96	86	LCS %Recovery
93	68	LCSD Qual %Recovery Qual
30-150	30-150	Acceptance Criteria
ω	A	Column



INORGANICS & MISCELLANEOUS



Lab Number: L1960662 Report Date: 01/23/20

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

SAMPLE RESULTS

Lab ID: Client ID: Sample Location	L1960662-01 BH-01 6-8' : Not Specified							eceived:	12/17/19 10:00 12/18/19 Not Specified	
Sample Depth: Matrix:	Soil									
Parameter		alifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab									
Solids, Total	81.4		%	0.100	NA	1	-	12/19/19 14:1	9 121,2540G	RI
Chromium, Hexavalent	ND	r	mg/kg	0.983	0.196	1	12/20/19 04:22	12/23/19 04:3	0 1,7196A	KF



1,7196A

KF

Lab Number: L1960662 Report Date: 01/23/20

12/20/19 04:22 12/23/19 04:30

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

ND

SAMPLE RESULTS

Lab ID: Client ID: Sample Location:	L1960662-02 BH-04 1-3' Not Specified							Received: 1	2/17/19 11:00 2/18/19 Not Specified	
Sample Depth: Matrix:	Soil									
Parameter	Result Q	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab									
Solids, Total	84.7		%	0.100	NA	1	-	12/20/19 08:24	121,2540G	RI

0.189

1

0.944

mg/kg



Chromium, Hexavalent

1,7196A

KF

Lab Number: L1960662 Report Date: 01/23/20

12/20/19 04:22 12/23/19 04:30

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

ND

SAMPLE RESULTS

Lab ID: Client ID: Sample Location:	L1960662-03 BH-08 1-3' Not Specified							Received:	12/17/19 14:30 12/18/19 Not Specified	
Sample Depth: Matrix:	Soil									
Parameter	Result (Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab									
Solids, Total	89.6		%	0.100	NA	1	-	12/19/19 14:19) 121,2540G	RI

0.178

1

0.893

mg/kg



Chromium, Hexavalent

Serial No:01232019:04

Lab Number: L1960662 Report Date: 01/23/20

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

SAMPLE RESULTS

Lab ID: Client ID: Sample Location	L1960662-04 BH-08 DUPLICA : Not Specified	TE				2010 0	Received:	12/17/19 14:30 12/18/19 Not Specified)
Sample Depth: Matrix:	Soil								
Parameter		lifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab								
Solids, Total	83.8	%	0.100	NA	1	-	12/20/19 08:24	4 121,2540G	RI
Chromium, Hexavalent	ND	mg/kg	0.955	0.191	1	12/20/19 04:22	12/23/19 04:3	0 1,7196A	KF



Lab Number: L1960662 Report Date: 01/23/20

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

SAMPLE RESULTS

Lab ID: Client ID: Sample Location	L1960662-0 BH-01 1-4' : Not Specifie	-						Received: 1	2/17/19 13:00 2/18/19 lot Specified)
Sample Depth: Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lat)								
Solids, Total	89.9		%	0.100	NA	1	-	12/19/19 14:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.890	0.178	1	12/20/19 04:22	12/23/19 04:30	1,7196A	KF



1,7196A

KF

Lab Number: L1960662 Report Date: 01/23/20

12/20/19 04:22 12/23/19 04:30

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

ND

SAMPLE RESULTS

Lab ID: Client ID: Sample Location:	L1960662-06 BH-8 10-12' Not Specified						Received:	12/17/19 00:00 12/18/19 Not Specified	
Sample Depth: Matrix:	Soil								
Parameter	Result Qu	alifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab								
Solids, Total	81.3	%	0.100	NA	1	-	12/21/19 10:58	3 121,2540G	RI

0.197

1

0.984

mg/kg



Chromium, Hexavalent

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L1960662

 Report Date:
 01/23/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	estborough Lab for sar	nple(s): 01	-06 Ba	tch: WC	G1323083-1	l			
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/20/19 04:22	12/23/19 04:30	1,7196A	KF



Lab Control Sample Analysis Batch Quality Control

Project Name:	57 TONAWANDA					g	Lab N	Lab Number:	L1960662
Project Number: 57 TONAWANDA	57 TONAWANDA						Repor	Report Date:	01/23/20
Parameter		LCS %Recovery Qual	Qual	LCSD %Recovery Qual	Qual	%Recovery Limits	RPD	Qual	Qual RPD Limits
General Chemistry - V	General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1323083-2	sociated sample(s)	: 01-06	Batch: WG1323	083-2				

Chromium, Hexavalent

86

,

80-120

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20

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Ацяна

Matrix Spike Analysis Batch Quality Control

Project Name:	57 TONAWANDA	Lab Number:	L1960662
Project Number:	: 57 TONAWANDA	Report Date:	01/23/20

Chromium, Hexavalent	General Chemistry -	Parameter
ND	General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1323083-4	Native Sample
984	ciated sample(s	MS Added F
490	s): 01-06 (MS %I
50	QC Batch ID	MS MS MSD Found %Recovery Qual Found
Q): WG1323	Qual Fo
	4	
	QC Sample: L1960662-06 Client ID: BH-8 10-12'	MSD Recovery RPD %Recovery Qual Limits RPD Qual Limits
75-125	1960662-06	Reco Qual Lim
- 125	Client ID	very lits RPC
	: BH-8 10) Qual L
20	-12'	RPD Limits

Ацяна

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA

Lab Duplicate Analysis Batch Quality Control Lab

Report Date:	Lab Number:
01/23/20	L1960662

Parameter	Nativ	Native Sample	Duplicate Sample	le Units	RPD	Qual RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03,05 QC Batch ID: WG1322817-1 QC Sample: L1960569-02 Client ID: DUP Sample	Associated sample(s): (01,03,05	QC Batch ID: WG132281	7-1 QC Sampl	e: L1960569-	02 Client ID: DUP Sa
Solids, Total		87.3	85.2	%	N	20
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1323083-6 QC Sample: L1960662-06 Client ID: BH-8 10-12	Associated sample(s): (01-06 Q	C Batch ID: WG1323083-6	QC Sample:	L1960662-06	Client ID: BH-8 10-1
Chromium, Hexavalent		ND	ND	mg/kg	NC	20
General Chemistry - Westborough Lab Associated sample(s): 02,04 QC Batch ID: WG132318	Associated sample(s): (02,04 Q	C Batch ID: WG1323182-1	QC Sample:	L1960394-01	2-1 QC Sample: L1960394-01 Client ID: DUP Sample
Solids, Total		94.6	94.8	%	0	20
General Chemistry - Westborough Lab Associated sample(s): 06	Associated sample(s): (06 QC E	QC Batch ID: WG1323574-1 (QC Sample: L19	61260-03 CI	QC Sample: L1961260-03 Client ID: DUP Sample
Solids, Total		89.4	90.7	%	<u>د</u>	20

Дирна



Project Number: 57 TONAWANDA 57 TONAWANDA

Project Name:

Report Date: 01/23/20 Lab Number: L1960662 Serial_No:01232019:04

Sample Receipt and Container Information

YES

Cooler Information

Were project specific reporting limits specified?

L1960662-06A	L1960662-05C	L1960662-05B	L1960662-05A	L1960662-04A	L1960662-03C	L1960662-03B	L1960662-03A	L1960662-02A	L1960662-01C	L1960662-01B	L1960662-01A	Container Information Container ID Contai	A	Cooler
Glass 120ml/4oz unpreserved	Plastic 8oz unpreserved	Glass 120ml/4oz unpreserved	Plastic 2oz unpreserved for TS	Glass 120ml/4oz unpreserved	Plastic 8oz unpreserved	Glass 120ml/4oz unpreserved	Plastic 2oz unpreserved for TS	Glass 120ml/4oz unpreserved	Plastic 8oz unpreserved	Glass 120ml/4oz unpreserved	Plastic 2oz unpreserved for TS	ormation Container Type	Absent	Custody Seal
A	A	A	A	A	A	A	A	A	A	A	A	Cooler		
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	nitial pH		
												Final pH		
3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	Temp deg C		
×	×	×	×	×	×	×	×	×	×	×	\prec			
Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Pres Seal		
												Frozen Date/Time		
HERB-APA(14),TS(7),HEXCR-7196(30)	A2-NY-537-ISOTOPE(28)	HERB-APA(14),HEXCR-7196(30)	TS(7)	HERB-APA(14),TS(7),HEXCR-7196(30)	A2-NY-537-ISOTOPE(28)	HERB-APA(14),HEXCR-7196(30)	TS(7)	HERB-APA(14),TS(7),HEXCR-7196(30)	A2-NY-537-ISOTOPE(28)	HERB-APA(14),HEXCR-7196(30)	TS(7)	Analysis(*)		



Project Number: 57 TONAWANDA

Serial_No:01232019:04 Lab Number: L1960662 Report Date: 01/23/20

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
,		
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		10050 10 0
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1



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GLOSSARY

Acronyms

,,,,	
DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.
Footnotes	

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- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NJ-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- ${f P}$ The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

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 L1960662

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 01/23/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- **S** Analytical results are from modified screening analysis.

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Report Date:	01/23/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW:</u> Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: <u>NPW:</u> PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. **EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene. **Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

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Page 44 of 44

Rush 1 day Rush 3 day Date Needed Rush 2 day 10 day Standard 5 day DATE COLLECTED P the indicate date needed: 5 C Z 611511E **Turnaround Time** ig E 2112 4 4 PROJECT REFERENCE 12 Availability contingent upon lab approval; additional fees may apply. 10 PARADIGM ē anawanda TIME 1430 1100 1000 1000 430 Ø X Other Category B None Required Category A Batch QC ase indicate package needed K. 8 X X 8 R ພ > ກ ດ (Partie **Report Supplements** ATTN: Matrix Codes: CLIENT: ADDRESS: HONE: σ RH-64 BH-グエ GH 3H-04 H - 01 R. AQ - Aqueous Liquid NQ - Non-Aqueous Liquid l - 02 0 270 BA 2 NYSDEC EDD None Required Other EDD Basic EDD Other EDD SAMPLE IDENTIFIER conton 308 8220 6-8 REPORT TO: 21-01 1-3 molicate Vigene 1. W 179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311 2 Ø 21P 1423 CHAIN OF CUSTODY By signing this form, client agrees to Paradigm Terms and Conditions (reverse). Sampled By Received @ Lab By Received By Relinquished By WA - Water WG - Groundwater 50 50 50 50 8 メー ス ー > M の m 口 O O 50 ATTN: CLIENT: 5 4 PHONE: CITY: ADDRESS: CP 10/19/19 CAL N BU 6 чΟ nmmmcz 1 W in IZOC X × 315 Voc X × X. × 315 SVOC × × < × X. **DW** - Drinking Water WW - Wastewater 7 375 Metai x κ × 7 x Pt. < PC8 × × 14 2 × X 375 2 × X INVOICE TO: Pes ficieles x × 8 STATE: X × × X × TILM × Q Date/Time Date/Time r. × x Date/Time Date/Time x xx Silver × és 19 X × x Cr6 X × SO - Soil SL - Sludge A × FAS 3 S 2 3 × R 90 Solids ZIP: 0 20 Serle sunt durat x × × × × × 1,4 Diotane L'acidad 91.60 per sample lobels + JH . 6P 12/19/19 ILLIST. 2 R Email: SD - Solid PT - Paint Quotation #: (202) 035 REMARKS 2 18/19 P.I.F. LAB PROJECT ID Two custon Total Cost: to sur WP - Wipe CK - Caulk et e 627 1 the interven sells PARADIGM LAB SAMPLE NUMBER OL - Oil AR - Air So 80 0 04 30 0 σ

See additional page for sample conditions.



Chain of Custody Supplement

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196242	Date: $\frac{12}{}$	/19/19
Sample Conc Per NELAC/ELA	<i>lition Requirements</i> AP 210/241/242/243/244	
NELAC compliance with the san Yes	nple condition requirements upon No	receipt N/A
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Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	BH-10), 1-2 Ft			
Lab Sample ID:	19629	93-01		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		6.98	mg/Kg		12/27/2019 14:19
Barium		114	mg/Kg		12/27/2019 14:19
Beryllium		1.05	mg/Kg		12/27/2019 14:19
Cadmium		1.71	mg/Kg		12/27/2019 14:19
Chromium		37.0	mg/Kg		12/27/2019 14:19
Copper		190	mg/Kg		12/27/2019 14:19
Lead		185	mg/Kg		12/27/2019 14:19
Manganese		6360	mg/Kg		12/30/2020 17:14
Nickel		14.2	mg/Kg		12/27/2019 14:19
Selenium		1.05	mg/Kg		12/30/2020 17:18
Silver		1.41	mg/Kg		12/27/2019 14:19
Zinc		956	mg/Kg		12/30/2020 17:14
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 12/26/2019 191227C			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	1			
Sample Identifier:	BH-10, 1-2 Ft	:			
Lab Sample ID:	196293-01			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.856	mg/Kg		12/26/2019 12:30

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/24/2019

 Data File:
 Hg191226B



Client:	<u>BE3</u>						
Project Reference:	57 Tonawan	da					
Sample Identifier:	BH-10, 1-2	Ft					
Lab Sample ID:	196293-01			Dat	e Sampled:	12/18/2019)
Matrix:	Soil			Dat	e Received:	12/20/2019)
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1221		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1232		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1242		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1248		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1254		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1260		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1262		< 0.0277	mg/Kg			12/23/2019	19:50
PCB-1268		< 0.0277	mg/Kg			12/23/2019	19:50
Surrogate		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	2		36.6	18.3 - 89.6		12/23/2019	19:50
Method Referen	nce(s): EPA 8 EPA 3						
Preparation Da		340 3/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	BH-10, 1-2 Ft				
Lab Sample ID:	196293-01			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chlorinated Pesti	<u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD	<	2.77	ug/Kg		12/26/2019 14:36
4,4-DDE	<	2.77	ug/Kg		12/26/2019 14:36
4,4-DDT	<	2.77	ug/Kg		12/26/2019 14:36
Aldrin	<	2.77	ug/Kg		12/26/2019 14:36
alpha-BHC	<	2.77	ug/Kg		12/26/2019 14:36
beta-BHC	<	2.77	ug/Kg		12/26/2019 14:36
cis-Chlordane	<	2.77	ug/Kg		12/26/2019 14:36
delta-BHC	<	2.77	ug/Kg		12/26/2019 14:36
Dieldrin	<	2.77	ug/Kg		12/26/2019 14:36
Endosulfan I	<	2.77	ug/Kg		12/26/2019 14:36
Endosulfan II	<	2.77	ug/Kg		12/26/2019 14:36
Endosulfan Sulfate	1.	46	ug/Kg	JP	12/26/2019 14:36
Endrin	<	2.77	ug/Kg		12/26/2019 14:36
Endrin Aldehyde	<	2.77	ug/Kg		12/26/2019 14:36
Endrin Ketone	<	2.77	ug/Kg		12/26/2019 14:36
gamma-BHC (Lindane	e) <	2.77	ug/Kg		12/26/2019 14:36
Heptachlor	<	2.77	ug/Kg		12/26/2019 14:36
Heptachlor Epoxide	<	2.77	ug/Kg		12/26/2019 14:36
Methoxychlor	<	2.77	ug/Kg		12/26/2019 14:36
Toxaphene	<	27.7	ug/Kg		12/26/2019 14:36
trans-Chlordane	<	2.77	ug/Kg		12/26/2019 14:36



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-10, 1-2 Ft					
Lab Sample ID:	196293-01		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil		Dat	e Received:	12/20/2019	9
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	52.6	30.7 - 111		12/26/2019	14:36
Tetrachloro-m-xylene	(1)	36.6	34.7 - 87.3		12/26/2019	14:36
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-10, 1-2 Ft		
Lab Sample ID:	196293-01	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 306	ug/Kg		12/24/2019 23:06
1,2,4,5-Tetrachlorobenzene	< 306	ug/Kg		12/24/2019 23:06
1,2,4-Trichlorobenzene	< 306	ug/Kg		12/24/2019 23:06
1,2-Dichlorobenzene	< 306	ug/Kg		12/24/2019 23:06
1,3-Dichlorobenzene	< 306	ug/Kg		12/24/2019 23:06
1,4-Dichlorobenzene	< 306	ug/Kg		12/24/2019 23:06
2,2-Oxybis (1-chloropropane)	< 306	ug/Kg		12/24/2019 23:06
2,3,4,6-Tetrachlorophenol	< 306	ug/Kg		12/24/2019 23:06
2,4,5-Trichlorophenol	< 306	ug/Kg		12/24/2019 23:06
2,4,6-Trichlorophenol	< 306	ug/Kg		12/24/2019 23:06
2,4-Dichlorophenol	< 306	ug/Kg		12/24/2019 23:06
2,4-Dimethylphenol	< 306	ug/Kg		12/24/2019 23:06
2,4-Dinitrophenol	< 1220	ug/Kg	DM	12/24/2019 23:06
2,4-Dinitrotoluene	< 306	ug/Kg		12/24/2019 23:06
2,6-Dinitrotoluene	< 306	ug/Kg		12/24/2019 23:06
2-Chloronaphthalene	< 306	ug/Kg		12/24/2019 23:06
2-Chlorophenol	< 306	ug/Kg		12/24/2019 23:06
2-Methylnapthalene	1040	ug/Kg		12/24/2019 23:06
2-Methylphenol	< 306	ug/Kg		12/24/2019 23:06
2-Nitroaniline	< 306	ug/Kg		12/24/2019 23:06
2-Nitrophenol	< 306	ug/Kg		12/24/2019 23:06
3&4-Methylphenol	< 306	ug/Kg		12/24/2019 23:06
3,3'-Dichlorobenzidine	< 306	ug/Kg		12/24/2019 23:06



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	BH-10, 1-2 F	t			
Lab Sample ID:	196293-01			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 306	ug/Kg		12/24/2019 23:06
4,6-Dinitro-2-methylp	henol	< 612	ug/Kg	М	12/24/2019 23:06
4-Bromophenyl pheny	l ether	< 306	ug/Kg		12/24/2019 23:06
4-Chloro-3-methylphe	nol	< 306	ug/Kg		12/24/2019 23:06
4-Chloroaniline		< 306	ug/Kg		12/24/2019 23:06
4-Chlorophenyl pheny	l ether	< 306	ug/Kg		12/24/2019 23:06
4-Nitroaniline		< 306	ug/Kg		12/24/2019 23:06
4-Nitrophenol		< 306	ug/Kg		12/24/2019 23:06
Acenaphthene		< 306	ug/Kg	DM	12/24/2019 23:06
Acenaphthylene		< 306	ug/Kg		12/24/2019 23:06
Acetophenone		< 306	ug/Kg		12/24/2019 23:06
Anthracene		322	ug/Kg		12/24/2019 23:06
Atrazine		< 306	ug/Kg		12/24/2019 23:06
Benzaldehyde		< 306	ug/Kg		12/24/2019 23:06
Benzo (a) anthracene		1680	ug/Kg		12/24/2019 23:06
Benzo (a) pyrene		1190	ug/Kg		12/24/2019 23:06
Benzo (b) fluoranthen	e	1420	ug/Kg		12/24/2019 23:06
Benzo (g,h,i) perylene		713	ug/Kg		12/24/2019 23:06
Benzo (k) fluoranthene	e	917	ug/Kg		12/24/2019 23:06
Bis (2-chloroethoxy) n	nethane	< 306	ug/Kg		12/24/2019 23:06
Bis (2-chloroethyl) eth	ner	< 306	ug/Kg		12/24/2019 23:06
Bis (2-ethylhexyl) phtl	halate	< 306	ug/Kg		12/24/2019 23:06
Butylbenzylphthalate		< 306	ug/Kg		12/24/2019 23:06
Caprolactam		< 306	ug/Kg		12/24/2019 23:06
Carbazole		< 306	ug/Kg		12/24/2019 23:06



Client:	<u>BE3</u>							
Project Reference:	57 Tonawan	57 Tonawanda						
Sample Identifier:	BH-10, 1-2	Ft						
Lab Sample ID:	196293-01			Date Sampled:	12/18/2019			
Matrix:	Soil			Date Received:	12/20/2019			
Chrysene		1530	ug/Kg		12/24/2019 23:06			
Dibenz (a,h) anthrace	ene	238	ug/Kg	J	12/24/2019 23:06			
Dibenzofuran		275	ug/Kg	J	12/24/2019 23:06			
Diethyl phthalate		< 306	ug/Kg		12/24/2019 23:06			
Dimethyl phthalate		< 306	ug/Kg		12/24/2019 23:06			
Di-n-butyl phthalate		< 306	ug/Kg		12/24/2019 23:06			
Di-n-octylphthalate		< 306	ug/Kg		12/24/2019 23:06			
Fluoranthene		2730	ug/Kg		12/24/2019 23:06			
Fluorene		< 306	ug/Kg		12/24/2019 23:06			
Hexachlorobenzene		< 306	ug/Kg		12/24/2019 23:06			
Hexachlorobutadiene	9	< 306	ug/Kg		12/24/2019 23:06			
Hexachlorocyclopent	tadiene	< 1220	ug/Kg		12/24/2019 23:06			
Hexachloroethane		< 306	ug/Kg		12/24/2019 23:06			
Indeno (1,2,3-cd) pyr	rene	886	ug/Kg		12/24/2019 23:06			
Isophorone		< 306	ug/Kg		12/24/2019 23:06			
Naphthalene		788	ug/Kg		12/24/2019 23:06			
Nitrobenzene		< 306	ug/Kg		12/24/2019 23:06			
N-Nitroso-di-n-propy	ylamine	< 306	ug/Kg		12/24/2019 23:06			
N-Nitrosodiphenylan	nine	< 306	ug/Kg		12/24/2019 23:06			
Pentachlorophenol		< 612	ug/Kg		12/24/2019 23:06			
Phenanthrene		1680	ug/Kg		12/24/2019 23:06			
Phenol		< 306	ug/Kg		12/24/2019 23:06			
Pyrene		2150	ug/Kg	DM	12/24/2019 23:06			



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-10, 1-2 Ft					
Lab Sample ID:	196293-01		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	Ð
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		61.4	35.1 - 89.5		12/24/2019	23:06
2-Fluorobiphenyl		60.2	37.7 - 81.4		12/24/2019	23:06
2-Fluorophenol		56.7	40.2 - 77		12/24/2019	23:06
Nitrobenzene-d5		56.8	36.2 - 78.4		12/24/2019	23:06
Phenol-d5		56.5	41.2 - 77.1		12/24/2019	23:06
Terphenyl-d14		59.6	39.8 - 97.5		12/24/2019	23:06
Method Reference Preparation Date Data File:	EPA 3546					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	à			
Sample Identifier: Lab Sample ID: Matrix:	BH-10, 1-2 Ft 196293-01 Soil	;		Date Sampled: Date Received:	12/18/2019 12/20/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 874	ug/Kg		12/30/2019 15:34
1,1,2,2-Tetrachloroeth	ane	< 874	ug/Kg		12/30/2019 15:34
1,1,2-Trichloroethane		< 874	ug/Kg		12/30/2019 15:34
1,1-Dichloroethane		< 874	ug/Kg		12/30/2019 15:34
1,1-Dichloroethene		< 874	ug/Kg		12/30/2019 15:34
1,2,3-Trichlorobenzen	9	< 2190	ug/Kg		12/30/2019 15:34
1,2,4-Trichlorobenzen	9	< 2190	ug/Kg		12/30/2019 15:34
1,2,4-Trimethylbenzen	e	< 874	ug/Kg		12/30/2019 15:34
1,2-Dibromo-3-Chloro	propane	< 4370	ug/Kg		12/30/2019 15:34
1,2-Dibromoethane		< 874	ug/Kg		12/30/2019 15:34
1,2-Dichlorobenzene		< 874	ug/Kg		12/30/2019 15:34
1,2-Dichloroethane		< 874	ug/Kg		12/30/2019 15:34
1,2-Dichloropropane		< 874	ug/Kg		12/30/2019 15:34
1,3,5-Trimethylbenzen	e	< 874	ug/Kg		12/30/2019 15:34
1,3-Dichlorobenzene		< 874	ug/Kg		12/30/2019 15:34
1,4-Dichlorobenzene		< 874	ug/Kg		12/30/2019 15:34
1,4-Dioxane		< 8740	ug/Kg		12/30/2019 15:34
2-Butanone		< 4370	ug/Kg		12/30/2019 15:34
2-Hexanone		< 2190	ug/Kg		12/30/2019 15:34
4-Methyl-2-pentanone		< 2190	ug/Kg		12/30/2019 15:34
Acetone		< 4370	ug/Kg		12/30/2019 15:34
Benzene		< 874	ug/Kg		12/30/2019 15:34
Bromochloromethane		< 2190	ug/Kg		12/30/2019 15:34



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-10, 1-2 Ft 196293-01 Soil	t		Date Sampled: Date Received:	12/18/2019 12/20/2019
Bromodichloromethan	e	< 874	ug/Kg		12/30/2019 15:34
Bromoform		< 2190	ug/Kg		12/30/2019 15:34
Bromomethane		< 874	ug/Kg		12/30/2019 15:34
Carbon disulfide		< 874	ug/Kg		12/30/2019 15:34
Carbon Tetrachloride		< 874	ug/Kg		12/30/2019 15:34
Chlorobenzene		< 874	ug/Kg		12/30/2019 15:34
Chloroethane		< 874	ug/Kg		12/30/2019 15:34
Chloroform		< 874	ug/Kg		12/30/2019 15:34
Chloromethane		< 874	ug/Kg		12/30/2019 15:34
cis-1,2-Dichloroethene		4590	ug/Kg		12/30/2019 15:34
cis-1,3-Dichloropropen	e	< 874	ug/Kg		12/30/2019 15:34
Cyclohexane		< 4370	ug/Kg		12/30/2019 15:34
Dibromochloromethan	e	< 874	ug/Kg		12/30/2019 15:34
Dichlorodifluorometha	ne	< 874	ug/Kg		12/30/2019 15:34
Ethylbenzene		< 874	ug/Kg		12/30/2019 15:34
Freon 113		< 874	ug/Kg		12/30/2019 15:34
Isopropylbenzene		< 874	ug/Kg		12/30/2019 15:34
m,p-Xylene		745	ug/Kg	J	12/30/2019 15:34
Methyl acetate		< 874	ug/Kg		12/30/2019 15:34
Methyl tert-butyl Ether		< 874	ug/Kg		12/30/2019 15:34
Methylcyclohexane		1780	ug/Kg		12/30/2019 15:34
Methylene chloride		< 2190	ug/Kg		12/30/2019 15:34
Naphthalene		< 2190	ug/Kg		12/30/2019 15:34
n-Butylbenzene		< 874	ug/Kg		12/30/2019 15:34
n-Propylbenzene		< 874	ug/Kg		12/30/2019 15:34



Client:	<u>BE3</u>						
Project Reference:	57 Tonawano	da					
Sample Identifier:	BH-10, 1-2 I	Ft					
Lab Sample ID:	196293-01			Dat	e Sampled:	12/18/201	9
Matrix:	Soil			Dat	e Received:	12/20/201	9
o-Xylene		< 874	ug/Kg			12/30/2019	15:34
p-Isopropyltoluene		< 874	ug/Kg			12/30/2019	15:34
sec-Butylbenzene		< 874	ug/Kg			12/30/2019	15:34
Styrene		< 2190	ug/Kg			12/30/2019	15:34
tert-Butylbenzene		< 874	ug/Kg			12/30/2019	15:34
Tetrachloroethene		< 874	ug/Kg			12/30/2019	15:34
Toluene		< 874	ug/Kg			12/30/2019	15:34
trans-1,2-Dichloroethe	ene	443	ug/Kg		J	12/30/2019	15:34
trans-1,3-Dichloroprop	pene	< 874	ug/Kg			12/30/2019	15:34
Trichloroethene		8120	ug/Kg			12/30/2019	15:34
Trichlorofluorometha	ne	< 874	ug/Kg			12/30/2019	15:34
Vinyl chloride		< 874	ug/Kg			12/30/2019	15:34
<u>Surrogate</u>		Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4	ŀ		118	67.9 - 146		12/30/2019	15:34
4-Bromofluorobenzen	e		89.1	64.6 - 127		12/30/2019	15:34
Pentafluorobenzene			90.1	85.5 - 113		12/30/2019	15:34
Toluene-D8			100	83.9 - 114		12/30/2019	15:34
Method Referen	••	260C 135A H					

Data File:

EPA 5035A -- H x67535.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-10, 1-2 Ft		
Lab Sample ID:	196293-01	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Total Cyanide</u>

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	19.2	mg/Kg		12/30/2019
Method Reference(s):	EPA 9014			
Preparation Date:	EPA 9010C 12/27/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-10, 1-2 Ft				
Lab Sample ID:	196293-01			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		90.8	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Data File:

B43483.D

Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	BH-10, 1-2 Ft				
Lab Sample ID:	196293-01			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Dioxane</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 30.6	ug/Kg		1/2/2020 12:54
Method Referen					
Preparation Da	EPA 3546 te: 12/23/20				



Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	BH-03	3, 1-4 Ft			
Lab Sample ID:	19629	93-02		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		3.22	mg/Kg		12/27/2019 14:23
Barium		30.0	mg/Kg		12/27/2019 14:23
Beryllium		0.268	mg/Kg	J	12/27/2019 14:23
Cadmium		1.21	mg/Kg		12/27/2019 14:23
Chromium		12.2	mg/Kg		12/27/2019 14:23
Copper		92.7	mg/Kg		12/27/2019 14:23
Lead		1390	mg/Kg		12/27/2019 14:23
Manganese		483	mg/Kg		12/27/2019 14:23
Nickel		11.6	mg/Kg		12/27/2019 14:23
Selenium		< 1.14	mg/Kg		12/27/2019 14:23
Silver		10.0	mg/Kg		12/27/2019 14:23
Zinc		157	mg/Kg		12/30/2020 17:22
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 12/26/2019 191227C			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-03, 1-4 Ft	:			
Lab Sample ID:	196293-02			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.0656	mg/Kg		12/26/2019 11:49

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/24/2019

 Data File:
 Hg191226B



Client:	<u>BE3</u>						
Project Reference:	57 Tonawai	nda					
Sample Identifier:	BH-03, 1-4	Ft					
Lab Sample ID:	196293-02	2		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0329	mg/Kg			12/23/2019	20:15
PCB-1221		< 0.0329	mg/Kg			12/23/2019	20:15
PCB-1232		< 0.0329	mg/Kg			12/23/2019	20:15
PCB-1242		< 0.0329	mg/Kg			12/23/2019	20:15
PCB-1248		< 0.0329	mg/Kg			12/23/2019	20:15
PCB-1254		< 0.0329	mg/Kg			12/23/2019	20:15
PCB-1260		0.0308	mg/Kg		J	12/23/2019	20:15
PCB-1262		< 0.0329	mg/Kg			12/23/2019	20:15
PCB-1268		< 0.0329	mg/Kg			12/23/2019	20:15
<u>Surrogate</u>		Perc	ent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
Tetrachloro-m-xylene			44.8	18.3 - 89.6		12/23/2019	20:15
Method Referen	• •	3082A					
Preparation Da	EPA : te: 12/2	3546 3/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID:	BH-03, 1-4 F 196293-02	t		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chlorinated Pest					
	<u>iciues</u>	Docult	Unite	Qualifiar	Data Analyzad
Analyte		Result	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 3.29	ug/Kg		12/26/2019 14:55
4,4-DDE		< 3.29	ug/Kg	P	12/26/2019 14:55
4,4-DDT		5.67	ug/Kg	Р	12/26/2019 14:55
Aldrin		< 3.29	ug/Kg		12/26/2019 14:55
alpha-BHC		< 3.29	ug/Kg		12/26/2019 14:55
beta-BHC		< 3.29	ug/Kg		12/26/2019 14:55
cis-Chlordane		< 3.29	ug/Kg		12/26/2019 14:55
delta-BHC		< 3.29	ug/Kg		12/26/2019 14:55
Dieldrin		< 3.29	ug/Kg		12/26/2019 14:55
Endosulfan I		< 3.29	ug/Kg		12/26/2019 14:55
Endosulfan II		< 3.29	ug/Kg		12/26/2019 14:55
Endosulfan Sulfate		3.23	ug/Kg	JP	12/26/2019 14:55
Endrin		1.67	ug/Kg	JP	12/26/2019 14:55
Endrin Aldehyde		< 3.29	ug/Kg		12/26/2019 14:55
Endrin Ketone		4.15	ug/Kg	Р	12/26/2019 14:55
gamma-BHC (Lindane	e)	< 3.29	ug/Kg		12/26/2019 14:55
Heptachlor		< 3.29	ug/Kg		12/26/2019 14:55
Heptachlor Epoxide		12.4	ug/Kg		12/26/2019 14:55
Methoxychlor		4.30	ug/Kg	Р	12/26/2019 14:55
Toxaphene		< 32.9	ug/Kg		12/26/2019 14:55
trans-Chlordane		< 3.29	ug/Kg		12/26/2019 14:55



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-03, 1-4 Ft					
Lab Sample ID:	196293-02		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	58.3	30.7 - 111		12/26/2019	14:55
Tetrachloro-m-xylene	(1)	86.9	34.7 - 87.3		12/26/2019	14:55
Method Referen	ce(s): EPA 8081B EPA 3546					
Preparation Dat	te: 12/23/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-03, 1-4 Ft		
Lab Sample ID:	196293-02	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 311	ug/Kg		12/25/2019 00:32
1,2,4,5-Tetrachlorobenzene	< 311	ug/Kg		12/25/2019 00:32
1,2,4-Trichlorobenzene	< 311	ug/Kg		12/25/2019 00:32
1,2-Dichlorobenzene	< 311	ug/Kg		12/25/2019 00:32
1,3-Dichlorobenzene	< 311	ug/Kg		12/25/2019 00:32
1,4-Dichlorobenzene	< 311	ug/Kg		12/25/2019 00:32
2,2-0xybis (1-chloropropane)	< 311	ug/Kg		12/25/2019 00:32
2,3,4,6-Tetrachlorophenol	< 311	ug/Kg		12/25/2019 00:32
2,4,5-Trichlorophenol	< 311	ug/Kg		12/25/2019 00:32
2,4,6-Trichlorophenol	< 311	ug/Kg		12/25/2019 00:32
2,4-Dichlorophenol	< 311	ug/Kg		12/25/2019 00:32
2,4-Dimethylphenol	< 311	ug/Kg		12/25/2019 00:32
2,4-Dinitrophenol	< 1250	ug/Kg		12/25/2019 00:32
2,4-Dinitrotoluene	< 311	ug/Kg		12/25/2019 00:32
2,6-Dinitrotoluene	< 311	ug/Kg		12/25/2019 00:32
2-Chloronaphthalene	< 311	ug/Kg		12/25/2019 00:32
2-Chlorophenol	< 311	ug/Kg		12/25/2019 00:32
2-Methylnapthalene	312	ug/Kg		12/25/2019 00:32
2-Methylphenol	< 311	ug/Kg		12/25/2019 00:32
2-Nitroaniline	< 311	ug/Kg		12/25/2019 00:32
2-Nitrophenol	< 311	ug/Kg		12/25/2019 00:32
3&4-Methylphenol	< 311	ug/Kg		12/25/2019 00:32
3,3'-Dichlorobenzidine	< 311	ug/Kg		12/25/2019 00:32



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	a				
Sample Identifier:	BH-03, 1-4 F	t				
Lab Sample ID:	196293-02			Date Sampled:	12/18/2019	9
Matrix:	Soil			Date Received:	12/20/2019	9
3-Nitroaniline		< 311	ug/Kg		12/25/2019	00:32
4,6-Dinitro-2-methylph	ienol	< 623	ug/Kg		12/25/2019	00:32
4-Bromophenyl phenyl	ether	< 311	ug/Kg		12/25/2019	00:32
4-Chloro-3-methylpher	nol	< 311	ug/Kg		12/25/2019	00:32
4-Chloroaniline		< 311	ug/Kg		12/25/2019	00:32
4-Chlorophenyl phenyl	ether	< 311	ug/Kg		12/25/2019	00:32
4-Nitroaniline		< 311	ug/Kg		12/25/2019	00:32
4-Nitrophenol		< 311	ug/Kg		12/25/2019	00:32
Acenaphthene		183	ug/Kg	J	12/25/2019	00:32
Acenaphthylene		< 311	ug/Kg		12/25/2019	00:32
Acetophenone		< 311	ug/Kg		12/25/2019	00:32
Anthracene		756	ug/Kg		12/25/2019	00:32
Atrazine		< 311	ug/Kg		12/25/2019	00:32
Benzaldehyde		< 311	ug/Kg		12/25/2019	00:32
Benzo (a) anthracene		2580	ug/Kg		12/25/2019	00:32
Benzo (a) pyrene		2250	ug/Kg		12/25/2019	00:32
Benzo (b) fluoranthene	9	2440	ug/Kg		12/25/2019	00:32
Benzo (g,h,i) perylene		1320	ug/Kg		12/25/2019	00:32
Benzo (k) fluoranthene	2	1430	ug/Kg		12/25/2019	00:32
Bis (2-chloroethoxy) m	ethane	< 311	ug/Kg		12/25/2019	00:32
Bis (2-chloroethyl) ethe	er	< 311	ug/Kg		12/25/2019	00:32
Bis (2-ethylhexyl) phth	alate	< 311	ug/Kg		12/25/2019	00:32
Butylbenzylphthalate		< 311	ug/Kg		12/25/2019	00:32
Caprolactam		< 311	ug/Kg		12/25/2019	00:32
Carbazole		308	ug/Kg	J	12/25/2019	00:32



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Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-03, 1-4 Ft					
Lab Sample ID:	196293-02		Date	Sampled:	12/18/2019	9
Matrix:	Soil		Date	Received:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		54.7	35.1 - 89.5		12/25/2019	00:32
2-Fluorobiphenyl		57.0	37.7 - 81.4		12/25/2019	00:32
2-Fluorophenol		56.4	40.2 - 77		12/25/2019	00:32
Nitrobenzene-d5		55.1	36.2 - 78.4		12/25/2019	00:32
Phenol-d5		54.9	41.2 - 77.1		12/25/2019	00:32
Terphenyl-d14		53.3	39.8 - 97.5		12/25/2019	00:32
Method Reference Preparation Date Data File:	EPA 3546					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier: Lab Sample ID: Matrix:	BH-03, 1-4 Ft 196293-02 Soil			Date Sampled: Date Received:	12/18/2019 12/20/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 42.3	ug/Kg		12/31/2019 14:40
1,1,2,2-Tetrachloroeth	ane	< 42.3	ug/Kg		12/31/2019 14:40
1,1,2-Trichloroethane		< 42.3	ug/Kg		12/31/2019 14:40
1,1-Dichloroethane		< 42.3	ug/Kg		12/31/2019 14:40
1,1-Dichloroethene		< 42.3	ug/Kg		12/31/2019 14:40
1,2,3-Trichlorobenzen	e	< 106	ug/Kg		12/31/2019 14:40
1,2,4-Trichlorobenzen	e	< 106	ug/Kg		12/31/2019 14:40
1,2,4-Trimethylbenzen	e	< 42.3	ug/Kg		12/31/2019 14:40
1,2-Dibromo-3-Chloro	propane	< 212	ug/Kg		12/31/2019 14:40
1,2-Dibromoethane		< 42.3	ug/Kg		12/31/2019 14:40
1,2-Dichlorobenzene		< 42.3	ug/Kg		12/31/2019 14:40
1,2-Dichloroethane		< 42.3	ug/Kg		12/31/2019 14:40
1,2-Dichloropropane		< 42.3	ug/Kg		12/31/2019 14:40
1,3,5-Trimethylbenzen	e	< 42.3	ug/Kg		12/31/2019 14:40
1,3-Dichlorobenzene		< 42.3	ug/Kg		12/31/2019 14:40
1,4-Dichlorobenzene		< 42.3	ug/Kg		12/31/2019 14:40
1,4-Dioxane		< 423	ug/Kg		12/31/2019 14:40
2-Butanone		< 212	ug/Kg		12/31/2019 14:40
2-Hexanone		< 106	ug/Kg		12/31/2019 14:40
4-Methyl-2-pentanone		< 106	ug/Kg		12/31/2019 14:40
Acetone		< 212	ug/Kg		12/31/2019 14:40
Benzene		< 42.3	ug/Kg		12/31/2019 14:40
Bromochloromethane		< 106	ug/Kg		12/31/2019 14:40



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-03, 1-4 Ft	;			
Lab Sample ID:	196293-02			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Bromodichloromethane	e	< 42.3	ug/Kg		12/31/2019 14:40
Bromoform		< 106	ug/Kg		12/31/2019 14:40
Bromomethane		< 42.3	ug/Kg		12/31/2019 14:40
Carbon disulfide		< 42.3	ug/Kg		12/31/2019 14:40
Carbon Tetrachloride		< 42.3	ug/Kg		12/31/2019 14:40
Chlorobenzene		< 42.3	ug/Kg		12/31/2019 14:40
Chloroethane		< 42.3	ug/Kg		12/31/2019 14:40
Chloroform		< 42.3	ug/Kg		12/31/2019 14:40
Chloromethane		< 42.3	ug/Kg		12/31/2019 14:40
cis-1,2-Dichloroethene		37.9	ug/Kg	J	12/31/2019 14:40
cis-1,3-Dichloropropen	e	< 42.3	ug/Kg		12/31/2019 14:40
Cyclohexane		< 212	ug/Kg		12/31/2019 14:40
Dibromochloromethane	е	< 42.3	ug/Kg		12/31/2019 14:40
Dichlorodifluorometha	ne	< 42.3	ug/Kg		12/31/2019 14:40
Ethylbenzene		< 42.3	ug/Kg		12/31/2019 14:40
Freon 113		< 42.3	ug/Kg		12/31/2019 14:40
Isopropylbenzene		< 42.3	ug/Kg		12/31/2019 14:40
m,p-Xylene		< 42.3	ug/Kg		12/31/2019 14:40
Methyl acetate		< 42.3	ug/Kg		12/31/2019 14:40
Methyl tert-butyl Ether		< 42.3	ug/Kg		12/31/2019 14:40
Methylcyclohexane		< 42.3	ug/Kg		12/31/2019 14:40
Methylene chloride		< 106	ug/Kg		12/31/2019 14:40
Naphthalene		< 106	ug/Kg		12/31/2019 14:40
n-Butylbenzene		< 42.3	ug/Kg		12/31/2019 14:40
n-Propylbenzene		< 42.3	ug/Kg		12/31/2019 14:40



Client:	<u>BE3</u>						
Project Reference:	57 Tonawa	nda					
Sample Identifier:	BH-03, 1-4	l Ft					
Lab Sample ID:	196293-02	2		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
o-Xylene		< 42.3	ug/Kg			12/31/2019	14:40
p-Isopropyltoluene		< 42.3	ug/Kg			12/31/2019	14:40
sec-Butylbenzene		< 42.3	ug/Kg			12/31/2019	14:40
Styrene		< 106	ug/Kg			12/31/2019	14:40
tert-Butylbenzene		< 42.3	ug/Kg			12/31/2019	14:40
Tetrachloroethene		< 42.3	ug/Kg			12/31/2019	14:40
Toluene		< 42.3	ug/Kg			12/31/2019	14:40
trans-1,2-Dichloroeth	iene	43.0	ug/Kg			12/31/2019	14:40
trans-1,3-Dichloropro	opene	< 42.3	ug/Kg			12/31/2019	14:40
Trichloroethene		77.0	ug/Kg			12/31/2019	14:40
Trichlorofluorometha	ane	< 42.3	ug/Kg			12/31/2019	14:40
Vinyl chloride		< 42.3	ug/Kg			12/31/2019	14:40
Surrogate		Per	cent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d	4		114	67.9 - 146		12/31/2019	14:40
4-Bromofluorobenzer	ne		67.7	64.6 - 127		12/31/2019	14:40
Pentafluorobenzene			95.7	85.5 - 113		12/31/2019	14:40
Toluene-D8			90.4	83.9 - 114		12/31/2019	14:40
Method Refere		8260C 5035A - L					

Data File:

EPA 5035A x67555.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-03, 1-4 Ft		
Lab Sample ID:	196293-02	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Total Cyanide</u>

<u>Analyte</u>	Result	<u>Units</u>	<u>(</u>	Qualifier	Date Analyzed
Cyanide, Total	4.30	mg/Kg			12/30/2019
Method Reference(s):	EPA 9014				
Preparation Date:	EPA 9010C 12/27/2019				



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-03, 1-4 Ft				
Lab Sample ID:	196293-02			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Percent Solids</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		85.9	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Reference:	57 Tona	wanda			
Sample Identifier:	BH-03	, 1-4 Ft			
Lab Sample ID:	19629	3-02		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Dioxane</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 31.1	ug/Kg		1/2/2020 13:04
Method Refe	rence(s):	EPA 8270D SIM			
Preparation Data File:	Date:	EPA 3546 12/23/2019 B43484.D			



Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	BH-02	2, 1-2 Ft			
Lab Sample ID:	19629	93-03		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		6.18	mg/Kg		12/27/2019 14:27
Barium		57.7	mg/Kg		12/27/2019 14:27
Beryllium		0.769	mg/Kg		12/27/2019 14:27
Cadmium		0.762	mg/Kg		12/27/2019 14:27
Chromium		25.9	mg/Kg		12/27/2019 14:27
Copper		55.4	mg/Kg		12/27/2019 14:27
Lead		71.3	mg/Kg		12/27/2019 14:27
Manganese		1430	mg/Kg		12/30/2020 17:26
Nickel		13.5	mg/Kg		12/27/2019 14:27
Selenium		1.00	mg/Kg	J	12/27/2019 14:27
Silver		0.391	mg/Kg	J	12/27/2019 14:27
Zinc		270	mg/Kg		12/30/2020 17:26
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 12/26/2019 191227C			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-02, 1-2 Ft	t			
Lab Sample ID:	196293-03			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.282	mg/Kg		12/26/2019 11:51

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/24/2019

 Data File:
 Hg191226B



Client:	<u>BE3</u>						
Project Reference:	57 Tonav	vanda					
Sample Identifier:	BH-02,	1-2 Ft					
Lab Sample ID:	196293	-03		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1221		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1232		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1242		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1248		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1254		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1260		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1262		< 0.0344	mg/Kg			12/23/2019	20:40
PCB-1268		< 0.0344	mg/Kg			12/23/2019	20:40
Surrogate		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	1		41.9	18.3 - 89.6		12/23/2019	20:40
Method Referen		PA 8082A					
Preparation Da		PA 3546 2/23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	BH-02, 1-2 Ft				
Lab Sample ID:	196293-03			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chlorinated Pesti	<u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD	<	3.44	ug/Kg		12/26/2019 15:14
4,4-DDE	<	3.44	ug/Kg	D	12/26/2019 15:14
4,4-DDT	<	3.44	ug/Kg	М	12/26/2019 15:14
Aldrin	<	3.44	ug/Kg	MD	12/26/2019 15:14
alpha-BHC	<	3.44	ug/Kg	MD	12/26/2019 15:14
beta-BHC	<	3.44	ug/Kg	М	12/26/2019 15:14
cis-Chlordane	<	3.44	ug/Kg	М	12/26/2019 15:14
delta-BHC	<	3.44	ug/Kg	М	12/26/2019 15:14
Dieldrin	<	3.44	ug/Kg	MD	12/26/2019 15:14
Endosulfan I	<	3.44	ug/Kg	MD	12/26/2019 15:14
Endosulfan II	2.	.75	ug/Kg	JPMD	12/26/2019 15:14
Endosulfan Sulfate	3.	.71	ug/Kg	PM	12/26/2019 15:14
Endrin	<	3.44	ug/Kg	М	12/26/2019 15:14
Endrin Aldehyde	<	3.44	ug/Kg		12/26/2019 15:14
Endrin Ketone	7.	.96	ug/Kg	РМ	12/26/2019 15:14
gamma-BHC (Lindane) <	3.44	ug/Kg	М	12/26/2019 15:14
Heptachlor	<	3.44	ug/Kg	MD	12/26/2019 15:14
Heptachlor Epoxide	1.	.76	ug/Kg	JPMD	12/26/2019 15:14
Methoxychlor	20	0.2	ug/Kg	РМ	12/26/2019 15:14
Toxaphene	<	34.4	ug/Kg		12/26/2019 15:14
trans-Chlordane	4.	.64	ug/Kg	РМ	12/26/2019 15:14



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-02, 1-2 Ft					
Lab Sample ID:	196293-03		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	99.1	30.7 - 111		12/26/2019	15:14
Tetrachloro-m-xylene	(1)	49.8	34.7 - 87.3		12/26/2019	15:14
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-02, 1-2 Ft		
Lab Sample ID:	196293-03	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 352	ug/Kg		12/25/2019 01:01
1,2,4,5-Tetrachlorobenzene	< 352	ug/Kg		12/25/2019 01:01
1,2,4-Trichlorobenzene	< 352	ug/Kg		12/25/2019 01:01
1,2-Dichlorobenzene	< 352	ug/Kg		12/25/2019 01:01
1,3-Dichlorobenzene	< 352	ug/Kg		12/25/2019 01:01
1,4-Dichlorobenzene	< 352	ug/Kg		12/25/2019 01:01
2,2-0xybis (1-chloropropane)	< 352	ug/Kg		12/25/2019 01:01
2,3,4,6-Tetrachlorophenol	< 352	ug/Kg		12/25/2019 01:01
2,4,5-Trichlorophenol	< 352	ug/Kg		12/25/2019 01:01
2,4,6-Trichlorophenol	< 352	ug/Kg		12/25/2019 01:01
2,4-Dichlorophenol	< 352	ug/Kg		12/25/2019 01:01
2,4-Dimethylphenol	< 352	ug/Kg		12/25/2019 01:01
2,4-Dinitrophenol	< 1410	ug/Kg		12/25/2019 01:01
2,4-Dinitrotoluene	< 352	ug/Kg		12/25/2019 01:01
2,6-Dinitrotoluene	< 352	ug/Kg		12/25/2019 01:01
2-Chloronaphthalene	< 352	ug/Kg		12/25/2019 01:01
2-Chlorophenol	< 352	ug/Kg		12/25/2019 01:01
2-Methylnapthalene	1130	ug/Kg		12/25/2019 01:01
2-Methylphenol	< 352	ug/Kg		12/25/2019 01:01
2-Nitroaniline	< 352	ug/Kg		12/25/2019 01:01
2-Nitrophenol	< 352	ug/Kg		12/25/2019 01:01
3&4-Methylphenol	< 352	ug/Kg		12/25/2019 01:01
3,3'-Dichlorobenzidine	< 352	ug/Kg		12/25/2019 01:01



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	BH-02, 1-2 F	t				
Lab Sample ID:	196293-03			Date Sampled:	12/18/2019)
Matrix:	Soil			Date Received:	12/20/2019)
3-Nitroaniline		< 352	ug/Kg		12/25/2019	01:01
4,6-Dinitro-2-methylpl	nenol	< 703	ug/Kg		12/25/2019	01:01
4-Bromophenyl pheny	l ether	< 352	ug/Kg		12/25/2019	01:01
4-Chloro-3-methylphe	nol	< 352	ug/Kg		12/25/2019	01:01
4-Chloroaniline		< 352	ug/Kg		12/25/2019	01:01
4-Chlorophenyl phenyl	lether	< 352	ug/Kg		12/25/2019	01:01
4-Nitroaniline		< 352	ug/Kg		12/25/2019	01:01
4-Nitrophenol		< 352	ug/Kg		12/25/2019	01:01
Acenaphthene		< 352	ug/Kg		12/25/2019	01:01
Acenaphthylene		482	ug/Kg		12/25/2019	01:01
Acetophenone		< 352	ug/Kg		12/25/2019	01:01
Anthracene		688	ug/Kg		12/25/2019	01:01
Atrazine		< 352	ug/Kg		12/25/2019	01:01
Benzaldehyde		< 352	ug/Kg		12/25/2019	01:01
Benzo (a) anthracene		2650	ug/Kg		12/25/2019	01:01
Benzo (a) pyrene		2110	ug/Kg		12/25/2019	01:01
Benzo (b) fluoranthene	9	2450	ug/Kg		12/25/2019	01:01
Benzo (g,h,i) perylene		1270	ug/Kg		12/25/2019	01:01
Benzo (k) fluoranthene	9	1460	ug/Kg		12/25/2019	01:01
Bis (2-chloroethoxy) m	nethane	< 352	ug/Kg		12/25/2019	01:01
Bis (2-chloroethyl) eth	er	< 352	ug/Kg		12/25/2019	01:01
Bis (2-ethylhexyl) phth	alate	< 352	ug/Kg		12/25/2019	01:01
Butylbenzylphthalate		< 352	ug/Kg		12/25/2019	01:01
Caprolactam		< 352	ug/Kg		12/25/2019	01:01
Carbazole		407	ug/Kg		12/25/2019	01:01



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	la			
Sample Identifier: Lab Sample ID: Matrixy	BH-02, 1-2 F 196293-03	řt		Date Sampled:	12/18/2019
Matrix:	Soil	2600	/17	Date Received:	12/20/2019
Chrysene		2600	ug/Kg		12/25/2019 01:01
Dibenz (a,h) anthrace	ene	586	ug/Kg		12/25/2019 01:01
Dibenzofuran		493	ug/Kg		12/25/2019 01:01
Diethyl phthalate		< 352	ug/Kg		12/25/2019 01:01
Dimethyl phthalate		< 352	ug/Kg		12/25/2019 01:01
Di-n-butyl phthalate		< 352	ug/Kg		12/25/2019 01:01
Di-n-octylphthalate		< 352	ug/Kg		12/25/2019 01:01
Fluoranthene		6460	ug/Kg		12/25/2019 01:01
Fluorene		243	ug/Kg	J	12/25/2019 01:01
Hexachlorobenzene		< 352	ug/Kg		12/25/2019 01:01
Hexachlorobutadiene	2	< 352	ug/Kg		12/25/2019 01:01
Hexachlorocyclopent	adiene	< 1410	ug/Kg		12/25/2019 01:01
Hexachloroethane		< 352	ug/Kg		12/25/2019 01:01
Indeno (1,2,3-cd) pyr	ene	1960	ug/Kg		12/25/2019 01:01
Isophorone		< 352	ug/Kg		12/25/2019 01:01
Naphthalene		729	ug/Kg		12/25/2019 01:01
Nitrobenzene		< 352	ug/Kg		12/25/2019 01:01
N-Nitroso-di-n-propy	vlamine	< 352	ug/Kg		12/25/2019 01:01
N-Nitrosodiphenylan	nine	< 352	ug/Kg		12/25/2019 01:01
Pentachlorophenol		< 703	ug/Kg		12/25/2019 01:01
Phenanthrene		5050	ug/Kg		12/25/2019 01:01
Phenol		< 352	ug/Kg		12/25/2019 01:01
Pyrene		4270	ug/Kg		12/25/2019 01:01
-					



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-02, 1-2 Ft					
Lab Sample ID:	196293-03		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
2,4,6-Tribromophenol		53.4	35.1 - 89.5		12/25/2019	01:01
2-Fluorobiphenyl		53.8	37.7 - 81.4		12/25/2019	01:01
2-Fluorophenol		53.1	40.2 - 77		12/25/2019	01:01
Nitrobenzene-d5		47.8	36.2 - 78.4		12/25/2019	01:01
Phenol-d5		52.2	41.2 - 77.1		12/25/2019	01:01
Terphenyl-d14		52.3	39.8 - 97.5		12/25/2019	01:01
Method Referen Preparation Dat Data File:	EPA 3546					
Data File:	D43327.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID: Matrix:	BH-02, 1-2 F 196293-03 Soil	t		Date Sampled: Date Received:	12/18/2019 12/20/2019
Volatile Organics					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 3490	ug/Kg		12/31/2019 19:36
1,1,2,2-Tetrachloroetha	ane	< 3490	ug/Kg		12/31/2019 19:36
1,1,2-Trichloroethane		< 3490	ug/Kg		12/31/2019 19:36
1,1-Dichloroethane		< 3490	ug/Kg		12/31/2019 19:36
1,1-Dichloroethene		< 3490	ug/Kg		12/31/2019 19:36
1,2,3-Trichlorobenzene	<u>þ</u>	< 8720	ug/Kg		12/31/2019 19:36
1,2,4-Trichlorobenzene	<u>j</u>	< 8720	ug/Kg		12/31/2019 19:36
1,2,4-Trimethylbenzen	e	< 3490	ug/Kg		12/31/2019 19:36
1,2-Dibromo-3-Chlorop	propane	< 17400	ug/Kg		12/31/2019 19:36
1,2-Dibromoethane		< 3490	ug/Kg		12/31/2019 19:36
1,2-Dichlorobenzene		< 3490	ug/Kg		12/31/2019 19:36
1,2-Dichloroethane		< 3490	ug/Kg		12/31/2019 19:36
1,2-Dichloropropane		< 3490	ug/Kg		12/31/2019 19:36
1,3,5-Trimethylbenzen	e	< 3490	ug/Kg		12/31/2019 19:36
1,3-Dichlorobenzene		< 3490	ug/Kg		12/31/2019 19:36
1,4-Dichlorobenzene		< 3490	ug/Kg		12/31/2019 19:36
1,4-Dioxane		< 34900	ug/Kg		12/31/2019 19:36
2-Butanone		< 17400	ug/Kg		12/31/2019 19:36
2-Hexanone		< 8720	ug/Kg		12/31/2019 19:36
4-Methyl-2-pentanone		< 8720	ug/Kg		12/31/2019 19:36
Acetone		< 17400	ug/Kg		12/31/2019 19:36
Benzene		< 3490	ug/Kg		12/31/2019 19:36
Bromochloromethane		< 8720	ug/Kg		12/31/2019 19:36



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-02, 1-2 Ft	-			
Lab Sample ID:	196293-03			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Bromodichloromethan	е	< 3490	ug/Kg		12/31/2019 19:36
Bromoform		< 8720	ug/Kg		12/31/2019 19:36
Bromomethane		< 3490	ug/Kg		12/31/2019 19:36
Carbon disulfide		< 3490	ug/Kg		12/31/2019 19:36
Carbon Tetrachloride		< 3490	ug/Kg		12/31/2019 19:36
Chlorobenzene		< 3490	ug/Kg		12/31/2019 19:36
Chloroethane		< 3490	ug/Kg		12/31/2019 19:36
Chloroform		< 3490	ug/Kg		12/31/2019 19:36
Chloromethane		< 3490	ug/Kg		12/31/2019 19:36
cis-1,2-Dichloroethene		66100	ug/Kg		12/31/2019 19:36
cis-1,3-Dichloropropen	e	< 3490	ug/Kg		12/31/2019 19:36
Cyclohexane		< 17400	ug/Kg		12/31/2019 19:36
Dibromochloromethan	e	< 3490	ug/Kg		12/31/2019 19:36
Dichlorodifluorometha	ne	< 3490	ug/Kg		12/31/2019 19:36
Ethylbenzene		< 3490	ug/Kg		12/31/2019 19:36
Freon 113		< 3490	ug/Kg		12/31/2019 19:36
Isopropylbenzene		< 3490	ug/Kg		12/31/2019 19:36
m,p-Xylene		< 3490	ug/Kg		12/31/2019 19:36
Methyl acetate		< 3490	ug/Kg		12/31/2019 19:36
Methyl tert-butyl Ether		< 3490	ug/Kg		12/31/2019 19:36
Methylcyclohexane		2400	ug/Kg	J	12/31/2019 19:36
Methylene chloride		< 8720	ug/Kg		12/31/2019 19:36
Naphthalene		< 8720	ug/Kg		12/31/2019 19:36
n-Butylbenzene		< 3490	ug/Kg		12/31/2019 19:36
n-Propylbenzene		< 3490	ug/Kg		12/31/2019 19:36



Client:	<u>BE3</u>						
Project Reference: 57 Tonawanda							
Sample Identifier:	BH-02, 1-2 F	t					
Lab Sample ID:	196293-03			Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/201	9
o-Xylene		< 3490	ug/Kg			12/31/2019	19:36
p-Isopropyltoluene		< 3490	ug/Kg			12/31/2019	19:36
sec-Butylbenzene		< 3490	ug/Kg			12/31/2019	19:36
Styrene		< 8720	ug/Kg			12/31/2019	19:36
tert-Butylbenzene		< 3490	ug/Kg			12/31/2019	19:36
Tetrachloroethene		< 3490	ug/Kg			12/31/2019	19:36
Toluene		< 3490	ug/Kg			12/31/2019	19:36
trans-1,2-Dichloroethe	ne	< 3490	ug/Kg			12/31/2019	19:36
trans-1,3-Dichloroprop	ene	< 3490	ug/Kg			12/31/2019	19:36
Trichloroethene		189000	ug/Kg			12/31/2019	19:36
Trichlorofluoromethan	e	< 3490	ug/Kg			12/31/2019	19:36
Vinyl chloride		2120	ug/Kg		J	12/31/2019	19:36
Surrogate		Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			123	67.9 - 146		12/31/2019	19:36
4-Bromofluorobenzene			81.4	64.6 - 127		12/31/2019	19:36
Pentafluorobenzene			100	85.5 - 113		12/31/2019	19:36
Toluene-D8			95.3	83.9 - 114		12/31/2019	19:36
Method Reference	e(s): EPA 826 EPA 503						

Data File:

EPA 5035A -- H x67568.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-02, 1-2 Ft		
Lab Sample ID:	196293-03	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Total Cyanide</u>

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	101	mg/Kg		12/30/2019
Method Reference(s):	EPA 9014 EPA 9010C			
Preparation Date:	12/27/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	1			
Sample Identifier:	BH-02, 1-2 Ft				
Lab Sample ID:	196293-03			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		80.8	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Reference:	57 Tona	awanda			
Sample Identifier:	BH-02	, 1-2 Ft			
Lab Sample ID:	19629	3-03		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Dioxane</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 35.2	ug/Kg		1/2/2020 13:15
Method Refe	rence(s):	EPA 8270D SIM			
Preparation Data File:	Date:	EPA 3546 12/23/2019 B43485.D			



Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	BH-13	3, 1-2 Ft			
Lab Sample ID:	1962	93-04		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		3.45	mg/Kg		12/27/2019 14:32
Barium		17.9	mg/Kg		12/27/2019 14:32
Beryllium		0.173	mg/Kg	J	12/27/2019 14:32
Cadmium		0.698	mg/Kg		12/27/2019 14:32
Chromium		10.4	mg/Kg		12/27/2019 14:32
Copper		345	mg/Kg		12/27/2019 14:32
Lead		165	mg/Kg		12/27/2019 14:32
Manganese		187	mg/Kg		12/27/2019 14:32
Nickel		11.6	mg/Kg		12/27/2019 14:32
Selenium		< 1.06	mg/Kg		12/27/2019 14:32
Silver		< 0.530	mg/Kg		12/27/2019 14:32
Zinc		862	mg/Kg		12/30/2020 17:40
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 12/26/2019 191227C			



<u>BE3</u>			
57 Tonawanda			
BH-13, 1-2 Ft			
196293-04		Date Sampled:	12/18/2019
Soil		Date Received:	12/20/2019
Result	<u>Units</u>	Qualifier	Date Analyzed
0.0229	mg/Kg		12/26/2019 11:53
	57 Tonawanda BH-13, 1-2 Ft 196293-04 Soil Result	57 Tonawanda BH-13, 1-2 Ft 196293-04 Soil Result Units	57 TonawandaBH-13, 1-2 Ft196293-04SoilDate Sampled: Date Received:BuiltResultUnitsQualifier

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/24/2019

 Data File:
 Hg191226B



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	anda					
Sample Identifier:	BH-13, 1-	-2 Ft					
Lab Sample ID:	196293-0	04		Dat	e Sampled:	12/18/2019)
Matrix:	Soil			Dat	e Received:	12/20/2019)
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1221		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1232		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1242		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1248		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1254		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1260		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1262		< 0.0320	mg/Kg			12/23/2019	21:06
PCB-1268		< 0.0320	mg/Kg			12/23/2019	21:06
Surrogate		Perc	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	9		38.4	18.3 - 89.6		12/23/2019	21:06
Method Referen	EP.	A 8082A A 3546					
Preparation Da	ate: 12	/23/2019					



12/26/2019 16:10

12/26/2019 16:10

12/26/2019 16:10

12/26/2019 16:10

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-13, 1-2 F	t			
Lab Sample ID:	196293-04			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chlorinated Pest	icides				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 3.20	ug/Kg		12/26/2019 16:10
4,4-DDE		< 3.20	ug/Kg		12/26/2019 16:10
4,4-DDT		< 3.20	ug/Kg		12/26/2019 16:10
Aldrin		< 3.20	ug/Kg		12/26/2019 16:10
alpha-BHC		< 3.20	ug/Kg		12/26/2019 16:10
beta-BHC		< 3.20	ug/Kg		12/26/2019 16:10
cis-Chlordane		< 3.20	ug/Kg		12/26/2019 16:10
delta-BHC		< 3.20	ug/Kg		12/26/2019 16:10
Dieldrin		< 3.20	ug/Kg		12/26/2019 16:10
Endosulfan I		< 3.20	ug/Kg		12/26/2019 16:10
Endosulfan II		< 3.20	ug/Kg		12/26/2019 16:10
Endosulfan Sulfate		2.24	ug/Kg	J	12/26/2019 16:10
Endrin		< 3.20	ug/Kg		12/26/2019 16:10
Endrin Aldehyde		< 3.20	ug/Kg		12/26/2019 16:10
Endrin Ketone		< 3.20	ug/Kg		12/26/2019 16:10
gamma-BHC (Lindane	2)	< 3.20	ug/Kg		12/26/2019 16:10
Heptachlor		< 3.20	ug/Kg		12/26/2019 16:10

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

ug/Kg

ug/Kg

ug/Kg

ug/Kg

< 3.20

< 3.20

< 32.0

< 3.20

Heptachlor Epoxide

Methoxychlor

trans-Chlordane

Toxaphene



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-13, 1-2 Ft					
Lab Sample ID:	196293-04		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	.)	21.7	30.7 - 111	*	12/26/2019	16:10
Tetrachloro-m-xylene	(1)	32.1	34.7 - 87.3	*	12/26/2019	16:10
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-13, 1-2 Ft		
Lab Sample ID:	196293-04	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 3130	ug/Kg		12/30/2019 17:15
1,2,4,5-Tetrachlorobenzene	< 3130	ug/Kg		12/30/2019 17:15
1,2,4-Trichlorobenzene	< 3130	ug/Kg		12/30/2019 17:15
1,2-Dichlorobenzene	< 3130	ug/Kg		12/30/2019 17:15
1,3-Dichlorobenzene	< 3130	ug/Kg		12/30/2019 17:15
1,4-Dichlorobenzene	< 3130	ug/Kg		12/30/2019 17:15
2,2-Oxybis (1-chloropropane)	< 3130	ug/Kg		12/30/2019 17:15
2,3,4,6-Tetrachlorophenol	< 3130	ug/Kg		12/30/2019 17:15
2,4,5-Trichlorophenol	< 3130	ug/Kg		12/30/2019 17:15
2,4,6-Trichlorophenol	< 3130	ug/Kg		12/30/2019 17:15
2,4-Dichlorophenol	< 3130	ug/Kg		12/30/2019 17:15
2,4-Dimethylphenol	< 3130	ug/Kg		12/30/2019 17:15
2,4-Dinitrophenol	< 12500	ug/Kg		12/30/2019 17:15
2,4-Dinitrotoluene	< 3130	ug/Kg		12/30/2019 17:15
2,6-Dinitrotoluene	< 3130	ug/Kg		12/30/2019 17:15
2-Chloronaphthalene	< 3130	ug/Kg		12/30/2019 17:15
2-Chlorophenol	< 3130	ug/Kg		12/30/2019 17:15
2-Methylnapthalene	< 3130	ug/Kg		12/30/2019 17:15
2-Methylphenol	< 3130	ug/Kg		12/30/2019 17:15
2-Nitroaniline	< 3130	ug/Kg		12/30/2019 17:15
2-Nitrophenol	< 3130	ug/Kg		12/30/2019 17:15
3&4-Methylphenol	< 3130	ug/Kg		12/30/2019 17:15
3,3'-Dichlorobenzidine	< 3130	ug/Kg		12/30/2019 17:15



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	BH-13, 1-2 F	t			
Lab Sample ID:	196293-04			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 3130	ug/Kg		12/30/2019 17:15
4,6-Dinitro-2-methylp	henol	< 6250	ug/Kg		12/30/2019 17:15
4-Bromophenyl pheny	'l ether	< 3130	ug/Kg		12/30/2019 17:15
4-Chloro-3-methylphe	nol	< 3130	ug/Kg		12/30/2019 17:15
4-Chloroaniline		< 3130	ug/Kg		12/30/2019 17:15
4-Chlorophenyl pheny	l ether	< 3130	ug/Kg		12/30/2019 17:15
4-Nitroaniline		< 3130	ug/Kg		12/30/2019 17:15
4-Nitrophenol		< 3130	ug/Kg		12/30/2019 17:15
Acenaphthene		< 3130	ug/Kg		12/30/2019 17:15
Acenaphthylene		< 3130	ug/Kg		12/30/2019 17:15
Acetophenone		< 3130	ug/Kg		12/30/2019 17:15
Anthracene		< 3130	ug/Kg		12/30/2019 17:15
Atrazine		< 3130	ug/Kg		12/30/2019 17:15
Benzaldehyde		< 3130	ug/Kg		12/30/2019 17:15
Benzo (a) anthracene		2460	ug/Kg	J	12/30/2019 17:15
Benzo (a) pyrene		2480	ug/Kg	J	12/30/2019 17:15
Benzo (b) fluoranthen	e	3260	ug/Kg		12/30/2019 17:15
Benzo (g,h,i) perylene		< 3130	ug/Kg		12/30/2019 17:15
Benzo (k) fluoranthen	e	< 3130	ug/Kg		12/30/2019 17:15
Bis (2-chloroethoxy) n	nethane	< 3130	ug/Kg		12/30/2019 17:15
Bis (2-chloroethyl) eth	ier	< 3130	ug/Kg		12/30/2019 17:15
Bis (2-ethylhexyl) phtl	halate	< 3130	ug/Kg		12/30/2019 17:15
Butylbenzylphthalate		< 3130	ug/Kg		12/30/2019 17:15
Caprolactam		< 3130	ug/Kg		12/30/2019 17:15
Carbazole		< 3130	ug/Kg		12/30/2019 17:15



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier: Lab Sample ID:	BH-13, 1-2 196293-04			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		2670	ug/Kg	J	12/30/2019 17:15
Dibenz (a,h) anthrace	ene	< 3130	ug/Kg		12/30/2019 17:15
Dibenzofuran		< 3130	ug/Kg		12/30/2019 17:15
Diethyl phthalate		< 3130	ug/Kg		12/30/2019 17:15
Dimethyl phthalate		< 3130	ug/Kg		12/30/2019 17:15
Di-n-butyl phthalate		< 3130	ug/Kg		12/30/2019 17:15
Di-n-octylphthalate		< 3130	ug/Kg		12/30/2019 17:15
Fluoranthene		5530	ug/Kg		12/30/2019 17:15
Fluorene		< 3130	ug/Kg		12/30/2019 17:15
Hexachlorobenzene		< 3130	ug/Kg		12/30/2019 17:15
Hexachlorobutadiene	9	< 3130	ug/Kg		12/30/2019 17:15
Hexachlorocyclopent	adiene	< 12500	ug/Kg		12/30/2019 17:15
Hexachloroethane		< 3130	ug/Kg		12/30/2019 17:15
Indeno (1,2,3-cd) pyr	ene	< 3130	ug/Kg		12/30/2019 17:15
Isophorone		< 3130	ug/Kg		12/30/2019 17:15
Naphthalene		< 3130	ug/Kg		12/30/2019 17:15
Nitrobenzene		< 3130	ug/Kg		12/30/2019 17:15
N-Nitroso-di-n-propy	lamine	< 3130	ug/Kg		12/30/2019 17:15
N-Nitrosodiphenylan	nine	< 3130	ug/Kg		12/30/2019 17:15
Pentachlorophenol		< 6250	ug/Kg		12/30/2019 17:15
Phenanthrene		2570	ug/Kg	J	12/30/2019 17:15
Phenol		< 3130	ug/Kg		12/30/2019 17:15
Pyrene		4020	ug/Kg		12/30/2019 17:15



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-13, 1-2 Ft					
Lab Sample ID:	196293-04		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		NC	35.1 - 89.5		12/30/2019	17:15
2-Fluorobiphenyl		NC	37.7 - 81.4		12/30/2019	17:15
2-Fluorophenol		NC	40.2 - 77		12/30/2019	17:15
Nitrobenzene-d5		NC	36.2 - 78.4		12/30/2019	17:15
Phenol-d5		NC	41.2 - 77.1		12/30/2019	17:15
Terphenyl-d14		NC	39.8 - 97.5		12/30/2019	17:15
Method Referen	cce(s): EPA 8270D EPA 3546					
Preparation Dat Data File:						



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	l			
Sample Identifier: Lab Sample ID: Matrix:	BH-13, 1-2 Ft 196293-04 Soil			Date Sampled: Date Received:	12/18/2019 12/20/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 7.84	ug/Kg		12/31/2019 15:49
1,1,2,2-Tetrachloroeth	ane	< 7.84	ug/Kg		12/31/2019 15:49
1,1,2-Trichloroethane		< 7.84	ug/Kg		12/31/2019 15:49
1,1-Dichloroethane		< 7.84	ug/Kg		12/31/2019 15:49
1,1-Dichloroethene		< 7.84	ug/Kg		12/31/2019 15:49
1,2,3-Trichlorobenzen	e	< 19.6	ug/Kg		12/31/2019 15:49
1,2,4-Trichlorobenzen	e	< 19.6	ug/Kg		12/31/2019 15:49
1,2,4-Trimethylbenzen	e	< 7.84	ug/Kg		12/31/2019 15:49
1,2-Dibromo-3-Chloro	propane	< 39.2	ug/Kg		12/31/2019 15:49
1,2-Dibromoethane		< 7.84	ug/Kg		12/31/2019 15:49
1,2-Dichlorobenzene		< 7.84	ug/Kg		12/31/2019 15:49
1,2-Dichloroethane		< 7.84	ug/Kg		12/31/2019 15:49
1,2-Dichloropropane		< 7.84	ug/Kg		12/31/2019 15:49
1,3,5-Trimethylbenzen	ie	< 7.84	ug/Kg		12/31/2019 15:49
1,3-Dichlorobenzene		< 7.84	ug/Kg		12/31/2019 15:49
1,4-Dichlorobenzene		< 7.84	ug/Kg		12/31/2019 15:49
1,4-Dioxane		< 78.4	ug/Kg		12/31/2019 15:49
2-Butanone		< 39.2	ug/Kg		12/31/2019 15:49
2-Hexanone		< 19.6	ug/Kg		12/31/2019 15:49
4-Methyl-2-pentanone		< 19.6	ug/Kg		12/31/2019 15:49
Acetone		22.4	ug/Kg	J	12/31/2019 15:49
Benzene		< 7.84	ug/Kg		12/31/2019 15:49
Bromochloromethane		< 19.6	ug/Kg		12/31/2019 15:49



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	1				
Sample Identifier:	BH-13, 1-2 Ft					
Lab Sample ID:	196293-04			Date Sampled:	12/18/2019	
Matrix:	Soil			Date Received:	12/20/2019	
Bromodichloromethane	е	< 7.84	ug/Kg		12/31/2019 1	15:49
Bromoform		< 19.6	ug/Kg		12/31/2019 1	15:49
Bromomethane		< 7.84	ug/Kg		12/31/2019 1	15:49
Carbon disulfide		< 7.84	ug/Kg		12/31/2019 1	15:49
Carbon Tetrachloride		< 7.84	ug/Kg		12/31/2019 1	15:49
Chlorobenzene		< 7.84	ug/Kg		12/31/2019 1	15:49
Chloroethane		< 7.84	ug/Kg		12/31/2019 1	15:49
Chloroform		< 7.84	ug/Kg		12/31/2019 1	15:49
Chloromethane		< 7.84	ug/Kg		12/31/2019 1	15:49
cis-1,2-Dichloroethene		4.48	ug/Kg	J	12/31/2019 1	15:49
cis-1,3-Dichloropropen	e	< 7.84	ug/Kg		12/31/2019 1	15:49
Cyclohexane		< 39.2	ug/Kg		12/31/2019 1	15:49
Dibromochloromethan	е	< 7.84	ug/Kg		12/31/2019 1	15:49
Dichlorodifluorometha	ne	< 7.84	ug/Kg		12/31/2019 1	15:49
Ethylbenzene		< 7.84	ug/Kg		12/31/2019 1	15:49
Freon 113		< 7.84	ug/Kg		12/31/2019 1	15:49
Isopropylbenzene		< 7.84	ug/Kg		12/31/2019 1	15:49
m,p-Xylene		< 7.84	ug/Kg		12/31/2019 1	15:49
Methyl acetate		< 7.84	ug/Kg		12/31/2019 1	15:49
Methyl tert-butyl Ether		< 7.84	ug/Kg		12/31/2019 1	15:49
Methylcyclohexane		< 7.84	ug/Kg		12/31/2019	15:49
Methylene chloride		< 19.6	ug/Kg		12/31/2019	15:49
Naphthalene		< 19.6	ug/Kg		12/31/2019	15:49
n-Butylbenzene		< 7.84	ug/Kg		12/31/2019 1	15:49
n-Propylbenzene		< 7.84	ug/Kg		12/31/2019 1	15:49



Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda	a					
Sample Identifier:	BH-13, 1-2 F	t					
Lab Sample ID:	196293-04			Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
o-Xylene		< 7.84	ug/Kg			12/31/2019	15:49
p-Isopropyltoluene		< 7.84	ug/Kg			12/31/2019	15:49
sec-Butylbenzene		< 7.84	ug/Kg			12/31/2019	15:49
Styrene		< 19.6	ug/Kg			12/31/2019	15:49
tert-Butylbenzene		< 7.84	ug/Kg			12/31/2019	15:49
Tetrachloroethene		< 7.84	ug/Kg			12/31/2019	15:49
Toluene		< 7.84	ug/Kg			12/31/2019	15:49
trans-1,2-Dichloroethe	ene	10.1	ug/Kg			12/31/2019	15:49
trans-1,3-Dichloroprop	oene	< 7.84	ug/Kg			12/31/2019	15:49
Trichloroethene		13.9	ug/Kg			12/31/2019	15:49
Trichlorofluoromethar	ie	< 7.84	ug/Kg			12/31/2019	15:49
Vinyl chloride		< 7.84	ug/Kg			12/31/2019	15:49
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			115	67.9 - 146		12/31/2019	15:49
4-Bromofluorobenzene	e		65.5	64.6 - 127		12/31/2019	15:49
Pentafluorobenzene			90.4	85.5 - 113		12/31/2019	15:49
Toluene-D8			90.4	83.9 - 114		12/31/2019	15:49

Internal standard outliers indicate probable matrix interference
Method Reference(s): EPA 8260C
EPA 5035A - L

Data File:

x67558.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	BE3		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-13, 1-2 Ft		
Lab Sample ID:	196293-04	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Total Cyanide</u>

<u>Analyte</u>	Result	<u>Units</u>	Qua	lifier Date Analyz	<u>ed</u>
Cyanide, Total	< 0.515	mg/Kg		12/30/2019	
Method Reference(s):	EPA 9014				
	EPA 9010C				
Preparation Date:	12/27/2019				



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-13, 1-2 Ft				
Lab Sample ID:	196293-04			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		87.4	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:		<u>BE3</u>				
Project Re	ference:	57 Tonawanda				
Sample I	dentifier:	BH-13, 1-2 Ft				
Lab Samp	ole ID:	196293-04			Date Sampled:	12/18/2019
Matrix:		Soil			Date Received:	12/20/2019
Dioxa	ne					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dio	xane	<	156	ug/Kg		1/2/2020 12:20
	Reporting limit elev	ated due to sample matrix	¢			
	Method Reference		SIM			
	Preparation Date:	EPA 3546 12/23/2019	1			
	Data File:	B43480.D				



Client:	<u>BE3</u>				
Project Reference:	57 Tona	awanda			
Sample Identifier:	BH-05	, 1-4 Ft			
Lab Sample ID:	19629	3-05		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		9.25	mg/Kg		12/27/2019 14:36
Barium		65.0	mg/Kg		12/27/2019 14:36
Beryllium		0.413	mg/Kg		12/27/2019 14:36
Cadmium		2.14	mg/Kg		12/27/2019 14:36
Chromium		35.7	mg/Kg		12/27/2019 14:36
Copper		1090	mg/Kg		12/30/2020 17:44
Lead		273	mg/Kg		12/27/2019 14:36
Manganese		2150	mg/Kg		12/30/2020 17:44
Nickel		27.4	mg/Kg		12/27/2019 14:36
Selenium		0.925	mg/Kg	J	12/27/2019 14:36
Silver		1.20	mg/Kg		12/27/2019 14:36
Zinc		394	mg/Kg		12/30/2020 17:44
Method Referen	nce(s):	EPA 6010C EPA 3050B			
Preparation Da Data File:	te:	12/26/2019 191227C			



57 Tonawanda				
BH-05, 1-4 Ft				
196293-05			Date Sampled:	12/18/2019
Soil			Date Received:	12/20/2019
	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
0	.220	mg/Kg		12/26/2019 11:54
	196293-05 Soil	196293-05 Soil	196293-05 Soil <u>Result Units</u>	196293-05 SoilDate Sampled: Date Received:SoilDate Sampled: Date Received:ResultUnitsQualifier

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/24/2019

 Data File:
 Hg191226B



Client:	<u>BE3</u>						
Project Reference:	57 Tona	wanda					
Sample Identifier:	BH-05,	1-4 Ft					
Lab Sample ID:	196293	8-05		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1221		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1232		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1242		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1248		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1254		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1260		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1262		< 0.0316	mg/Kg			12/23/2019	21:30
PCB-1268		< 0.0316	mg/Kg			12/23/2019	21:30
Surrogate		Pere	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	•		44.0	18.3 - 89.6		12/23/2019	21:30
Method Referen		EPA 8082A					
Preparation Da		EPA 3546 12/23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-05, 1-4 Ft	-			
Lab Sample ID:	196293-05			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chlorinated Pesti	<u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		11.0	ug/Kg		12/26/2019 16:29
4,4-DDE		1.81	ug/Kg	JP	12/26/2019 16:29
4,4-DDT		10.5	ug/Kg	Р	12/26/2019 16:29
Aldrin		< 3.16	ug/Kg		12/26/2019 16:29
alpha-BHC		< 3.16	ug/Kg		12/26/2019 16:29
beta-BHC		1.81	ug/Kg	ЈР	12/26/2019 16:29
cis-Chlordane		3.48	ug/Kg		12/26/2019 16:29
delta-BHC		< 3.16	ug/Kg		12/26/2019 16:29
Dieldrin		< 3.16	ug/Kg		12/26/2019 16:29
Endosulfan I		< 3.16	ug/Kg		12/26/2019 16:29
Endosulfan II		1.72	ug/Kg	JP	12/26/2019 16:29
Endosulfan Sulfate		14.2	ug/Kg	Р	12/26/2019 16:29
Endrin		3.00	ug/Kg	JP	12/26/2019 16:29
Endrin Aldehyde		17.3	ug/Kg		12/26/2019 16:29
Endrin Ketone		12.2	ug/Kg	Р	12/26/2019 16:29
gamma-BHC (Lindane)	< 3.16	ug/Kg		12/26/2019 16:29
Heptachlor		2.46	ug/Kg	JP	12/26/2019 16:29
Heptachlor Epoxide		< 3.16	ug/Kg		12/26/2019 16:29
Methoxychlor		24.9	ug/Kg	Р	12/26/2019 16:29
Toxaphene		< 31.6	ug/Kg		12/26/2019 16:29
trans-Chlordane		4.46	ug/Kg	Р	12/26/2019 16:29



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-05, 1-4 Ft					
Lab Sample ID:	196293-05		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	.)	223	30.7 - 111	*	12/26/2019	16:29
Tetrachloro-m-xylene	(1)	52.2	34.7 - 87.3		12/26/2019	16:29
Method Referen	ce(s): EPA 8081B EPA 3546					
Preparation Dat	e: 12/23/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-05, 1-4 Ft		
Lab Sample ID:	196293-05	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 1690	ug/Kg		12/30/2019 17:45
1,2,4,5-Tetrachlorobenzene	< 1690	ug/Kg		12/30/2019 17:45
1,2,4-Trichlorobenzene	< 1690	ug/Kg		12/30/2019 17:45
1,2-Dichlorobenzene	< 1690	ug/Kg		12/30/2019 17:45
1,3-Dichlorobenzene	< 1690	ug/Kg		12/30/2019 17:45
1,4-Dichlorobenzene	< 1690	ug/Kg		12/30/2019 17:45
2,2-0xybis (1-chloropropane)	< 1690	ug/Kg		12/30/2019 17:45
2,3,4,6-Tetrachlorophenol	< 1690	ug/Kg		12/30/2019 17:45
2,4,5-Trichlorophenol	< 1690	ug/Kg		12/30/2019 17:45
2,4,6-Trichlorophenol	< 1690	ug/Kg		12/30/2019 17:45
2,4-Dichlorophenol	< 1690	ug/Kg		12/30/2019 17:45
2,4-Dimethylphenol	< 1690	ug/Kg		12/30/2019 17:45
2,4-Dinitrophenol	< 6770	ug/Kg		12/30/2019 17:45
2,4-Dinitrotoluene	< 1690	ug/Kg		12/30/2019 17:45
2,6-Dinitrotoluene	< 1690	ug/Kg		12/30/2019 17:45
2-Chloronaphthalene	< 1690	ug/Kg		12/30/2019 17:45
2-Chlorophenol	< 1690	ug/Kg		12/30/2019 17:45
2-Methylnapthalene	1140	ug/Kg	J	12/30/2019 17:45
2-Methylphenol	< 1690	ug/Kg		12/30/2019 17:45
2-Nitroaniline	< 1690	ug/Kg		12/30/2019 17:45
2-Nitrophenol	< 1690	ug/Kg		12/30/2019 17:45
3&4-Methylphenol	< 1690	ug/Kg		12/30/2019 17:45
3,3'-Dichlorobenzidine	< 1690	ug/Kg		12/30/2019 17:45



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	BH-05, 1-4 F	t			
Lab Sample ID:	196293-05			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 1690	ug/Kg		12/30/2019 17:45
4,6-Dinitro-2-methylp	henol	< 3390	ug/Kg		12/30/2019 17:45
4-Bromophenyl pheny	d ether	< 1690	ug/Kg		12/30/2019 17:45
4-Chloro-3-methylphe	nol	< 1690	ug/Kg		12/30/2019 17:45
4-Chloroaniline		< 1690	ug/Kg		12/30/2019 17:45
4-Chlorophenyl pheny	l ether	< 1690	ug/Kg		12/30/2019 17:45
4-Nitroaniline		< 1690	ug/Kg		12/30/2019 17:45
4-Nitrophenol		< 1690	ug/Kg		12/30/2019 17:45
Acenaphthene		3610	ug/Kg		12/30/2019 17:45
Acenaphthylene		< 1690	ug/Kg		12/30/2019 17:45
Acetophenone		< 1690	ug/Kg		12/30/2019 17:45
Anthracene		8900	ug/Kg		12/30/2019 17:45
Atrazine		< 1690	ug/Kg		12/30/2019 17:45
Benzaldehyde		< 1690	ug/Kg		12/30/2019 17:45
Benzo (a) anthracene		16600	ug/Kg		12/30/2019 17:45
Benzo (a) pyrene		12500	ug/Kg		12/30/2019 17:45
Benzo (b) fluoranthen	e	10900	ug/Kg		12/30/2019 17:45
Benzo (g,h,i) perylene		6230	ug/Kg		12/30/2019 17:45
Benzo (k) fluoranthen	e	10100	ug/Kg		12/30/2019 17:45
Bis (2-chloroethoxy) n	nethane	< 1690	ug/Kg		12/30/2019 17:45
Bis (2-chloroethyl) eth	ner	< 1690	ug/Kg		12/30/2019 17:45
Bis (2-ethylhexyl) phtl	halate	< 1690	ug/Kg		12/30/2019 17:45
Butylbenzylphthalate		< 1690	ug/Kg		12/30/2019 17:45
Caprolactam		< 1690	ug/Kg		12/30/2019 17:45
Carbazole		5010	ug/Kg		12/30/2019 17:45



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier: Lab Sample ID:	BH-05, 1-4 196293-05	Ft		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		13900	ug/Kg		12/30/2019 17:45
Dibenz (a,h) anthrace	ene	1850	ug/Kg		12/30/2019 17:45
Dibenzofuran		3050	ug/Kg		12/30/2019 17:45
Diethyl phthalate		< 1690	ug/Kg		12/30/2019 17:45
Dimethyl phthalate		< 1690	ug/Kg		12/30/2019 17:45
Di-n-butyl phthalate		< 1690	ug/Kg		12/30/2019 17:45
Di-n-octylphthalate		< 1690	ug/Kg		12/30/2019 17:45
Fluoranthene		37000	ug/Kg		12/30/2019 17:45
Fluorene		4020	ug/Kg		12/30/2019 17:45
Hexachlorobenzene		< 1690	ug/Kg		12/30/2019 17:45
Hexachlorobutadiene	e	< 1690	ug/Kg		12/30/2019 17:45
Hexachlorocyclopent	tadiene	< 6770	ug/Kg		12/30/2019 17:45
Hexachloroethane		< 1690	ug/Kg		12/30/2019 17:45
Indeno (1,2,3-cd) pyr	rene	7710	ug/Kg		12/30/2019 17:45
Isophorone		< 1690	ug/Kg		12/30/2019 17:45
Naphthalene		1710	ug/Kg		12/30/2019 17:45
Nitrobenzene		< 1690	ug/Kg		12/30/2019 17:45
N-Nitroso-di-n-propy	ylamine	< 1690	ug/Kg		12/30/2019 17:45
N-Nitrosodiphenylan	nine	< 1690	ug/Kg		12/30/2019 17:45
Pentachlorophenol		< 3390	ug/Kg		12/30/2019 17:45
Phenanthrene		36200	ug/Kg		12/30/2019 17:45
Phenol		< 1690	ug/Kg		12/30/2019 17:45
Pyrene		25100	ug/Kg		12/30/2019 17:45



<u>BE3</u>					
57 Tonawanda					
BH-05, 1-4 Ft					
196293-05		Date	e Sampled:	12/18/2019	9
Soil		Date	e Received:	12/20/2019	9
	Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
	58.0	35.1 - 89.5		12/30/2019	17:45
	63.1	37.7 - 81.4		12/30/2019	17:45
	61.3	40.2 - 77		12/30/2019	17:45
	59.7	36.2 - 78.4		12/30/2019	17:45
	61.7	41.2 - 77.1		12/30/2019	17:45
	64.7	39.8 - 97.5		12/30/2019	17:45
ce(s): EPA 8270D EPA 3546 e: 12/23/2019 B43413 D					
	57 Tonawanda BH-05, 1-4 Ft 196293-05 Soil	57 Tonawanda BH-05, 1-4 Ft 196293-05 Soil Percent Recovery 58.0 63.1 61.3 59.7 61.7 64.7 ce(s): EPA 8270D EPA 3546 a: 12/23/2019	57 Tonawanda BH-05, 1-4 Ft 196293-05 Date Soil Date Percent Recovery Limits 58.0 35.1 - 89.5 63.1 37.7 - 81.4 61.3 40.2 - 77 59.7 36.2 - 78.4 61.7 41.2 - 77.1 64.7 39.8 - 97.5 xe(s): EPA 8270D EPA 3546 EPA 3546 e: 12/23/2019	57 Tonawanda BH-05, 1-4 Ft 196293-05 Date Sampled: Soil Date Received: Soil Datiers Percent Recovery Limits Outliers 58.0 35.1 - 89.5 63.1 61.3 40.2 - 77 59.7 59.7 36.2 - 78.4 61.7 61.7 41.2 - 77.1 64.7 64.7 39.8 - 97.5 59.7 set (S): EPA 8270D: EPA 3546 e: 12/23/2019 50.2	57 Tonawanda BH-05, 1-4 Ft 196293-05 Date Sampled: 12/18/2019 Soil Date Received: 12/20/2019 Soil Date Sampled: 12/30/2019 63.1 35.1 - 89.5 12/30/2019 61.3 40.2 - 77 12/30/2019 61.7 41.2 - 77.1 12/30/2019 64.7 39.8 - 97.5 12/30/2019 e: 12/30/2019



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-05, 1-4 Ft 196293-05 Soil	t		Date Sampled: Date Received:	12/18/2019 12/20/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 82.2	ug/Kg		12/31/2019 15:03
1,1,2,2-Tetrachloroeth	ane	< 82.2	ug/Kg		12/31/2019 15:03
1,1,2-Trichloroethane		< 82.2	ug/Kg		12/31/2019 15:03
1,1-Dichloroethane		< 82.2	ug/Kg		12/31/2019 15:03
1,1-Dichloroethene		< 82.2	ug/Kg		12/31/2019 15:03
1,2,3-Trichlorobenzen	e	< 206	ug/Kg		12/31/2019 15:03
1,2,4-Trichlorobenzen	e	< 206	ug/Kg		12/31/2019 15:03
1,2,4-Trimethylbenzer	ne	< 82.2	ug/Kg		12/31/2019 15:03
1,2-Dibromo-3-Chloro	propane	< 411	ug/Kg		12/31/2019 15:03
1,2-Dibromoethane		< 82.2	ug/Kg		12/31/2019 15:03
1,2-Dichlorobenzene		< 82.2	ug/Kg		12/31/2019 15:03
1,2-Dichloroethane		< 82.2	ug/Kg		12/31/2019 15:03
1,2-Dichloropropane		< 82.2	ug/Kg		12/31/2019 15:03
1,3,5-Trimethylbenzer	ne	< 82.2	ug/Kg		12/31/2019 15:03
1,3-Dichlorobenzene		< 82.2	ug/Kg		12/31/2019 15:03
1,4-Dichlorobenzene		< 82.2	ug/Kg		12/31/2019 15:03
1,4-Dioxane		< 822	ug/Kg		12/31/2019 15:03
2-Butanone		< 411	ug/Kg		12/31/2019 15:03
2-Hexanone		< 206	ug/Kg		12/31/2019 15:03
4-Methyl-2-pentanone	2	< 206	ug/Kg		12/31/2019 15:03
Acetone		< 411	ug/Kg		12/31/2019 15:03
Benzene		< 82.2	ug/Kg		12/31/2019 15:03
Bromochloromethane		< 206	ug/Kg		12/31/2019 15:03



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-05, 1-4 Ft					
Lab Sample ID:	196293-05			Date Sampled:	12/18/2019	
Matrix:	Soil			Date Received:	12/20/2019	
Bromodichloromethane	e	< 82.2	ug/Kg		12/31/2019 1	5:03
Bromoform		< 206	ug/Kg		12/31/2019 1	5:03
Bromomethane		< 82.2	ug/Kg		12/31/2019 1	5:03
Carbon disulfide		< 82.2	ug/Kg		12/31/2019 1	5:03
Carbon Tetrachloride		< 82.2	ug/Kg		12/31/2019 1	5:03
Chlorobenzene		< 82.2	ug/Kg		12/31/2019 1	5:03
Chloroethane		< 82.2	ug/Kg		12/31/2019 1	5:03
Chloroform		< 82.2	ug/Kg		12/31/2019 1	5:03
Chloromethane		< 82.2	ug/Kg		12/31/2019 1	5:03
cis-1,2-Dichloroethene		< 82.2	ug/Kg		12/31/2019 1	5:03
cis-1,3-Dichloropropen	e	< 82.2	ug/Kg		12/31/2019 1	5:03
Cyclohexane		< 411	ug/Kg		12/31/2019 1	5:03
Dibromochloromethan	е	< 82.2	ug/Kg		12/31/2019 1	5:03
Dichlorodifluorometha	ne	< 82.2	ug/Kg		12/31/2019 1	5:03
Ethylbenzene		< 82.2	ug/Kg		12/31/2019 1	5:03
Freon 113		< 82.2	ug/Kg		12/31/2019 1	5:03
Isopropylbenzene		< 82.2	ug/Kg		12/31/2019 1	5:03
m,p-Xylene		< 82.2	ug/Kg		12/31/2019 1	5:03
Methyl acetate		< 82.2	ug/Kg		12/31/2019 1	5:03
Methyl tert-butyl Ether		< 82.2	ug/Kg		12/31/2019 1	5:03
Methylcyclohexane		< 82.2	ug/Kg		12/31/2019 1	5:03
Methylene chloride		< 206	ug/Kg		12/31/2019 1	5:03
Naphthalene		< 206	ug/Kg		12/31/2019 1	5:03
n-Butylbenzene		< 82.2	ug/Kg		12/31/2019 1	5:03
n-Propylbenzene		< 82.2	ug/Kg		12/31/2019 1	5:03



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	BH-05, 1-4 F	t					
Lab Sample ID:	196293-05			Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/201	9
o-Xylene		< 82.2	ug/Kg			12/31/2019	15:03
p-Isopropyltoluene		< 82.2	ug/Kg			12/31/2019	15:03
sec-Butylbenzene		< 82.2	ug/Kg			12/31/2019	15:03
Styrene		< 206	ug/Kg			12/31/2019	15:03
tert-Butylbenzene		< 82.2	ug/Kg			12/31/2019	15:03
Tetrachloroethene		< 82.2	ug/Kg			12/31/2019	15:03
Toluene		< 82.2	ug/Kg			12/31/2019	15:03
trans-1,2-Dichloroethe	ene	42.9	ug/Kg		J	12/31/2019	15:03
trans-1,3-Dichloropro	pene	< 82.2	ug/Kg			12/31/2019	15:03
Trichloroethene		89.1	ug/Kg			12/31/2019	15:03
Trichlorofluorometha	ne	< 82.2	ug/Kg			12/31/2019	15:03
Vinyl chloride		< 82.2	ug/Kg			12/31/2019	15:03
Surrogate		Pe	rcent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d4	ŀ		115	67.9 - 146		12/31/2019	15:03
4-Bromofluorobenzen	e		72.6	64.6 - 127		12/31/2019	15:03
Pentafluorobenzene			93.9	85.5 - 113		12/31/2019	15:03
Toluene-D8			91.6	83.9 - 114		12/31/2019	15:03
Method Referen	ce(s): EPA 826 EPA 503						

Data File:

EPA 5035A - L x67556.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-05, 1-4 Ft		
Lab Sample ID:	196293-05	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Total Cyanide</u>

<u>Analyte</u>	Result	<u>Units</u>	Qu	<u>alifier</u>	Date Analyzed
Cyanide, Total	< 0.595	mg/Kg			12/30/2019
Method Reference(s):	EPA 9014				
	EPA 9010C				
Preparation Date:	12/27/2019				



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-05, 1-4 Ft	t			
Lab Sample ID:	196293-05			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		81.6	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Reference:	57 Tonav	vanda			
Sample Identifier:	BH-05, 2	1-4 Ft			
Lab Sample ID:	196293	-05		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Dioxane</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 33.9	ug/Kg		1/2/2020 13:26
Method Refer	rence(s): E	PA 8270D SIM			
Preparation Data File:	Date: 1	PA 3546 2/23/2019 43486.D			



Client:	<u>BE3</u>				
Project Reference:	57 Toi	nawanda			
Sample Identifier:	BH-0	6, 1-4 Ft			
Lab Sample ID:	1962	93-06		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		4.78	mg/Kg		12/27/2019 14:40
Barium		59.4	mg/Kg		12/27/2019 14:40
Beryllium		0.380	mg/Kg		12/27/2019 14:40
Cadmium		1.03	mg/Kg		12/27/2019 14:40
Chromium		14.6	mg/Kg		12/27/2019 14:40
Copper		151	mg/Kg		12/27/2019 14:40
Lead		161	mg/Kg		12/27/2019 14:40
Manganese		661	mg/Kg		12/30/2020 17:49
Nickel		11.1	mg/Kg		12/27/2019 14:40
Selenium		< 1.01	mg/Kg		12/27/2019 14:40
Silver		0.483	mg/Kg	J	12/27/2019 14:40
Zinc		218	mg/Kg		12/30/2020 17:49
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 12/26/2019 191227C			



Preparation Date:

Data File:

12/24/2019

Hg191226B

Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	BH-06, 1-4 Ft				
Lab Sample ID:	196293-06			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.0489	mg/Kg		12/26/2019 12:00
Method Referen	ce(s): EPA 74711	В			



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	anda					
Sample Identifier:	BH-06, 1	-4 Ft					
Lab Sample ID:	196293-	06		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0303	mg/Kg			12/27/2019	12:30
PCB-1221		< 0.0303	mg/Kg			12/27/2019	12:30
PCB-1232		< 0.0303	mg/Kg			12/27/2019	12:30
PCB-1242		< 0.0303	mg/Kg			12/27/2019	12:30
PCB-1248		< 0.0303	mg/Kg			12/27/2019	12:30
PCB-1254		0.0341	mg/Kg			12/27/2019	12:30
PCB-1260		< 0.0303	mg/Kg			12/27/2019	12:30
PCB-1262		< 0.0303	mg/Kg			12/27/2019	12:30
PCB-1268		< 0.0303	mg/Kg			12/27/2019	12:30
Surrogate	Per		cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analyzed	
Tetrachloro-m-xylene	1		41.0	18.3 - 89.6		12/27/2019	12:30
Method Referen		PA 8082A					
Preparation Da		PA 3546 2/23/2019					



Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda	a					
Sample Identifier:	BH-06, 1-4 Ft						
Lab Sample ID:	196293-06			Date Sampled:	12/18/2019		
Matrix:	Soil			Date Received:	12/20/2019		
Chlorinated Pesti	<u>cides</u>						
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed		
4,4-DDD		< 3.03	ug/Kg		12/26/2019 16:48		
4,4-DDE		< 3.03	ug/Kg		12/26/2019 16:48		
4,4-DDT		6.55	ug/Kg		12/26/2019 16:48		
Aldrin		< 3.03	ug/Kg		12/26/2019 16:48		
alpha-BHC		< 3.03	ug/Kg		12/26/2019 16:48		
beta-BHC		< 3.03	ug/Kg		12/26/2019 16:48		
cis-Chlordane		< 3.03	ug/Kg		12/26/2019 16:48		
delta-BHC		< 3.03	ug/Kg		12/26/2019 16:48		
Dieldrin		< 3.03	ug/Kg		12/26/2019 16:48		
Endosulfan I		< 3.03	ug/Kg		12/26/2019 16:48		
Endosulfan II		< 3.03	ug/Kg		12/26/2019 16:48		
Endosulfan Sulfate		2.42	ug/Kg	JP	12/26/2019 16:48		
Endrin		< 3.03	ug/Kg		12/26/2019 16:48		
Endrin Aldehyde		5.15	ug/Kg		12/26/2019 16:48		
Endrin Ketone		1.96	ug/Kg	J	12/26/2019 16:48		
gamma-BHC (Lindane)	< 3.03	ug/Kg		12/26/2019 16:48		
Heptachlor		< 3.03	ug/Kg		12/26/2019 16:48		
Heptachlor Epoxide		< 3.03	ug/Kg		12/26/2019 16:48		
Methoxychlor		2.66	ug/Kg	JP	12/26/2019 16:48		
Toxaphene		< 30.3	ug/Kg		12/26/2019 16:48		
trans-Chlordane		3.14	ug/Kg	Р	12/26/2019 16:48		



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-06, 1-4 Ft					
Lab Sample ID:	196293-06		Date Sampled:		12/18/2019	
Matrix:	Soil		Date Received:		12/20/2019	
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analyzed	
Decachlorobiphenyl (2	1)	28.3	30.7 - 111	*	12/26/2019 16:48	
Tetrachloro-m-xylene	Tetrachloro-m-xylene (1)		34.7 - 87.3		12/26/2019	16:48
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-06, 1-4 Ft		
Lab Sample ID:	196293-06	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 295	ug/Kg		12/25/2019 02:27
1,2,4,5-Tetrachlorobenzene	< 295	ug/Kg		12/25/2019 02:27
1,2,4-Trichlorobenzene	< 295	ug/Kg		12/25/2019 02:27
1,2-Dichlorobenzene	< 295	ug/Kg		12/25/2019 02:27
1,3-Dichlorobenzene	< 295	ug/Kg		12/25/2019 02:27
1,4-Dichlorobenzene	< 295	ug/Kg		12/25/2019 02:27
2,2-Oxybis (1-chloropropane)	< 295	ug/Kg		12/25/2019 02:27
2,3,4,6-Tetrachlorophenol	< 295	ug/Kg		12/25/2019 02:27
2,4,5-Trichlorophenol	< 295	ug/Kg		12/25/2019 02:27
2,4,6-Trichlorophenol	< 295	ug/Kg		12/25/2019 02:27
2,4-Dichlorophenol	< 295	ug/Kg		12/25/2019 02:27
2,4-Dimethylphenol	< 295	ug/Kg		12/25/2019 02:27
2,4-Dinitrophenol	< 1180	ug/Kg		12/25/2019 02:27
2,4-Dinitrotoluene	< 295	ug/Kg		12/25/2019 02:27
2,6-Dinitrotoluene	< 295	ug/Kg		12/25/2019 02:27
2-Chloronaphthalene	< 295	ug/Kg		12/25/2019 02:27
2-Chlorophenol	< 295	ug/Kg		12/25/2019 02:27
2-Methylnapthalene	200	ug/Kg	J	12/25/2019 02:27
2-Methylphenol	< 295	ug/Kg		12/25/2019 02:27
2-Nitroaniline	< 295	ug/Kg		12/25/2019 02:27
2-Nitrophenol	< 295	ug/Kg		12/25/2019 02:27
3&4-Methylphenol	< 295	ug/Kg		12/25/2019 02:27
3,3'-Dichlorobenzidine	< 295	ug/Kg		12/25/2019 02:27



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	BH-06, 1-4 F	t				
Lab Sample ID:	196293-06			Date Sampled:	12/18/2019	
Matrix:	Soil			Date Received:	12/20/2019	
3-Nitroaniline		< 295	ug/Kg		12/25/2019	02:27
4,6-Dinitro-2-methylpl	henol	< 590	ug/Kg		12/25/2019	02:27
4-Bromophenyl pheny	l ether	< 295	ug/Kg		12/25/2019	02:27
4-Chloro-3-methylphe	nol	< 295	ug/Kg		12/25/2019	02:27
4-Chloroaniline		< 295	ug/Kg		12/25/2019	02:27
4-Chlorophenyl pheny	l ether	< 295	ug/Kg		12/25/2019	02:27
4-Nitroaniline		< 295	ug/Kg		12/25/2019	02:27
4-Nitrophenol		< 295	ug/Kg		12/25/2019	02:27
Acenaphthene		< 295	ug/Kg		12/25/2019	02:27
Acenaphthylene		< 295	ug/Kg		12/25/2019	02:27
Acetophenone		< 295	ug/Kg		12/25/2019	02:27
Anthracene		308	ug/Kg		12/25/2019	02:27
Atrazine		< 295	ug/Kg		12/25/2019	02:27
Benzaldehyde		< 295	ug/Kg		12/25/2019	02:27
Benzo (a) anthracene		1050	ug/Kg		12/25/2019	02:27
Benzo (a) pyrene		968	ug/Kg		12/25/2019	02:27
Benzo (b) fluoranthene	е	1080	ug/Kg		12/25/2019	02:27
Benzo (g,h,i) perylene		706	ug/Kg		12/25/2019	02:27
Benzo (k) fluoranthene	е	599	ug/Kg		12/25/2019	02:27
Bis (2-chloroethoxy) n	nethane	< 295	ug/Kg		12/25/2019	02:27
Bis (2-chloroethyl) eth	ier	< 295	ug/Kg		12/25/2019	02:27
Bis (2-ethylhexyl) phth	nalate	< 295	ug/Kg		12/25/2019	02:27
Butylbenzylphthalate		< 295	ug/Kg		12/25/2019	02:27
Caprolactam		< 295	ug/Kg		12/25/2019	02:27
Carbazole		239	ug/Kg	J	12/25/2019	02:27



Client:	<u>BE3</u>				
Project Reference:	57 Tonawa	nda			
Sample Identifier: Lab Sample ID:	BH-06, 1-4 196293-0			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		1050	ug/Kg		12/25/2019 02:27
Dibenz (a,h) anthrace	ene	268	ug/Kg	J	12/25/2019 02:27
Dibenzofuran		< 295	ug/Kg		12/25/2019 02:27
Diethyl phthalate		< 295	ug/Kg		12/25/2019 02:27
Dimethyl phthalate		< 295	ug/Kg		12/25/2019 02:27
Di-n-butyl phthalate		< 295	ug/Kg		12/25/2019 02:27
Di-n-octylphthalate		< 295	ug/Kg		12/25/2019 02:27
Fluoranthene		2380	ug/Kg		12/25/2019 02:27
Fluorene		< 295	ug/Kg		12/25/2019 02:27
Hexachlorobenzene		< 295	ug/Kg		12/25/2019 02:27
Hexachlorobutadiene	2	< 295	ug/Kg		12/25/2019 02:27
Hexachlorocyclopent	adiene	< 1180	ug/Kg		12/25/2019 02:27
Hexachloroethane		< 295	ug/Kg		12/25/2019 02:27
Indeno (1,2,3-cd) pyr	ene	714	ug/Kg		12/25/2019 02:27
Isophorone		< 295	ug/Kg		12/25/2019 02:27
Naphthalene		< 295	ug/Kg		12/25/2019 02:27
Nitrobenzene		< 295	ug/Kg		12/25/2019 02:27
N-Nitroso-di-n-propy	vlamine	< 295	ug/Kg		12/25/2019 02:27
N-Nitrosodiphenylam	nine	< 295	ug/Kg		12/25/2019 02:27
Pentachlorophenol		< 590	ug/Kg		12/25/2019 02:27
Phenanthrene		1440	ug/Kg		12/25/2019 02:27
Phenol		< 295	ug/Kg		12/25/2019 02:27
Pyrene		1550	ug/Kg		12/25/2019 02:27



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-06, 1-4 Ft					
Lab Sample ID:	196293-06		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
2,4,6-Tribromophenol		39.7	35.1 - 89.5		12/25/2019	02:27
2-Fluorobiphenyl		42.6	37.7 - 81.4		12/25/2019	02:27
2-Fluorophenol		42.8	40.2 - 77		12/25/2019	02:27
Nitrobenzene-d5		39.8	36.2 - 78.4		12/25/2019	02:27
Phenol-d5		41.5	41.2 - 77.1		12/25/2019	02:27
Terphenyl-d14		41.2	39.8 - 97.5		12/25/2019	02:27
Method Referen Preparation Dat Data File:	EPA 3546					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	à			
Sample Identifier: Lab Sample ID: Matrix:	BH-06, 1-4 Ft 196293-06 Soil	;		Date Sampled: Date Received:	12/18/2019 12/20/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 6.10	ug/Kg		12/31/2019 17:42
1,1,2,2-Tetrachloroeth	ane	< 6.10	ug/Kg		12/31/2019 17:42
1,1,2-Trichloroethane		< 6.10	ug/Kg		12/31/2019 17:42
1,1-Dichloroethane		< 6.10	ug/Kg		12/31/2019 17:42
1,1-Dichloroethene		< 6.10	ug/Kg		12/31/2019 17:42
1,2,3-Trichlorobenzen	e	< 15.2	ug/Kg		12/31/2019 17:42
1,2,4-Trichlorobenzen	e	< 15.2	ug/Kg		12/31/2019 17:42
1,2,4-Trimethylbenzen	ie	< 6.10	ug/Kg		12/31/2019 17:42
1,2-Dibromo-3-Chloro	propane	< 30.5	ug/Kg		12/31/2019 17:42
1,2-Dibromoethane		< 6.10	ug/Kg		12/31/2019 17:42
1,2-Dichlorobenzene		< 6.10	ug/Kg		12/31/2019 17:42
1,2-Dichloroethane		< 6.10	ug/Kg		12/31/2019 17:42
1,2-Dichloropropane		< 6.10	ug/Kg		12/31/2019 17:42
1,3,5-Trimethylbenzen	ie	< 6.10	ug/Kg		12/31/2019 17:42
1,3-Dichlorobenzene		< 6.10	ug/Kg		12/31/2019 17:42
1,4-Dichlorobenzene		< 6.10	ug/Kg		12/31/2019 17:42
1,4-Dioxane		< 61.0	ug/Kg		12/31/2019 17:42
2-Butanone		< 30.5	ug/Kg		12/31/2019 17:42
2-Hexanone		< 15.2	ug/Kg		12/31/2019 17:42
4-Methyl-2-pentanone		< 15.2	ug/Kg		12/31/2019 17:42
Acetone		< 30.5	ug/Kg		12/31/2019 17:42
Benzene		< 6.10	ug/Kg		12/31/2019 17:42
Bromochloromethane		< 15.2	ug/Kg		12/31/2019 17:42



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-06, 1-4 Ft					
Lab Sample ID:	196293-06			Date Sampled:	12/18/2019)
Matrix:	Soil			Date Received:	12/20/2019)
Bromodichloromethane	9	< 6.10	ug/Kg		12/31/2019	17:42
Bromoform		< 15.2	ug/Kg		12/31/2019	17:42
Bromomethane		< 6.10	ug/Kg		12/31/2019	17:42
Carbon disulfide		< 6.10	ug/Kg		12/31/2019	17:42
Carbon Tetrachloride		< 6.10	ug/Kg		12/31/2019	17:42
Chlorobenzene		< 6.10	ug/Kg		12/31/2019	17:42
Chloroethane		< 6.10	ug/Kg		12/31/2019	17:42
Chloroform		< 6.10	ug/Kg		12/31/2019	17:42
Chloromethane		< 6.10	ug/Kg		12/31/2019	17:42
cis-1,2-Dichloroethene		< 6.10	ug/Kg		12/31/2019	17:42
cis-1,3-Dichloropropen	e	< 6.10	ug/Kg		12/31/2019	17:42
Cyclohexane		< 30.5	ug/Kg		12/31/2019	17:42
Dibromochloromethan	e	< 6.10	ug/Kg		12/31/2019	17:42
Dichlorodifluorometha	ne	< 6.10	ug/Kg		12/31/2019	17:42
Ethylbenzene		< 6.10	ug/Kg		12/31/2019	17:42
Freon 113		< 6.10	ug/Kg		12/31/2019	17:42
Isopropylbenzene		< 6.10	ug/Kg		12/31/2019	17:42
m,p-Xylene		< 6.10	ug/Kg		12/31/2019	17:42
Methyl acetate		< 6.10	ug/Kg		12/31/2019	17:42
Methyl tert-butyl Ether		< 6.10	ug/Kg		12/31/2019	17:42
Methylcyclohexane		< 6.10	ug/Kg		12/31/2019	17:42
Methylene chloride		< 15.2	ug/Kg		12/31/2019	17:42
Naphthalene		< 15.2	ug/Kg		12/31/2019	17:42
n-Butylbenzene		< 6.10	ug/Kg		12/31/2019	17:42
n-Propylbenzene		< 6.10	ug/Kg		12/31/2019	17:42



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	BH-06, 1-4 F	t					
Lab Sample ID:	196293-06			Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/201	9
o-Xylene		< 6.10	ug/Kg			12/31/2019	17:42
p-Isopropyltoluene		< 6.10	ug/Kg			12/31/2019	17:42
sec-Butylbenzene		< 6.10	ug/Kg			12/31/2019	17:42
Styrene		< 15.2	ug/Kg			12/31/2019	17:42
tert-Butylbenzene		< 6.10	ug/Kg			12/31/2019	17:42
Tetrachloroethene		< 6.10	ug/Kg			12/31/2019	17:42
Toluene		< 6.10	ug/Kg			12/31/2019	17:42
trans-1,2-Dichloroeth	ene	6.76	ug/Kg			12/31/2019	17:42
trans-1,3-Dichloropro	opene	< 6.10	ug/Kg			12/31/2019	17:42
Trichloroethene		3.82	ug/Kg		J	12/31/2019	17:42
Trichlorofluorometha	ine	< 6.10	ug/Kg			12/31/2019	17:42
Vinyl chloride		< 6.10	ug/Kg			12/31/2019	17:42
Surrogate		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d	4		118	67.9 - 146		12/31/2019	17:42
4-Bromofluorobenzer	ne		73.4	64.6 - 127		12/31/2019	17:42
Pentafluorobenzene			91.2	85.5 - 113		12/31/2019	17:42
Toluene-D8			88.3	83.9 - 114		12/31/2019	17:42
Method Referen	nce(s): EPA 826 EPA 503						

Data File:

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

EPA 5035A - L x67563.D



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-06, 1-4 Ft		
Lab Sample ID:	196293-06	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	< 0.517	mg/Kg		12/30/2019
Method Reference(s):	EPA 9014			
	EPA 9010C			
Preparation Date:	12/27/2019			



<u>BE3</u>				
57 Tonawanda	a			
BH-06, 1-4 Ft	:			
196293-06			Date Sampled:	12/18/2019
Soil			Date Received:	12/20/2019
	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
	92.2	%		12/24/2019
	57 Tonawanda BH-06, 1-4 Ft 196293-06	57 Tonawanda BH-06, 1-4 Ft 196293-06 Soil Result	57 Tonawanda BH-06, 1-4 Ft 196293-06 Soil Result Units	57 Tonawanda BH-06, 1-4 Ft 196293-06 Soil Date Sampled: Date Received: Result Units Qualifier

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:		<u>BE3</u>				
Project Re	ference:	57 Tonawanda				
Sample I	dentifier:	BH-06, 1-4 Ft				
Lab Samp	ple ID:	196293-06			Date Sampled:	12/18/2019
Matrix:		Soil			Date Received:	12/20/2019
Dioxa	ne					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dio	xane	<	147	ug/Kg		1/2/2020 13:37
Reporting limit elevated due to sample matrix						
	Method Reference		SIM			
	Preparation Date:	EPA 3546 12/23/2019				
	Data File:	B43487.D				



Client:	<u>BE3</u>				
Project Reference:	57 Tona	wanda			
Sample Identifier:	SS-01				
Lab Sample ID:	196293	3-07		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		10.0	mg/Kg		12/27/2019 14:45
Barium		140	mg/Kg		12/27/2019 14:45
Beryllium		0.647	mg/Kg		12/27/2019 14:45
Cadmium		1.99	mg/Kg		12/27/2019 14:45
Chromium		22.5	mg/Kg		12/27/2019 14:45
Copper		73.3	mg/Kg		12/27/2019 14:45
Lead		353	mg/Kg		12/27/2019 14:45
Manganese		337	mg/Kg		12/27/2019 14:45
Nickel		22.7	mg/Kg		12/27/2019 14:45
Selenium		0.727	mg/Kg	J	12/27/2019 14:45
Silver		0.472	mg/Kg	J	12/27/2019 14:45
Zinc		322	mg/Kg		12/30/2020 17:53
Method Refere		EPA 6010C EPA 3050B			
Preparation D Data File:	ate:	12/26/2019 191227C			



Client:	<u>BE3</u>				
Project Reference	:e: 57 Tor	nawanda			
Sample Identif	ier: SS-01	L			
Lab Sample ID:	1962	93-07		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.206	mg/Kg		12/26/2019 12:02
Method	Reference(s):	EPA 7471B			
Prepara Data Fil	ation Date: le:	12/24/2019 Hg191226B			



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	anda					
Sample Identifier:	SS-01						
Lab Sample ID:	196293-	07		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1221		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1232		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1242		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1248		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1254		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1260		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1262		< 0.0323	mg/Kg			12/27/2019	12:53
PCB-1268		< 0.0323	mg/Kg			12/27/2019	12:53
Surrogate		Perc	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	e		42.2	18.3 - 89.6		12/27/2019	12:53
Method Referent Preparation Da	EP	A 8082A A 3546 /23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	SS-01 196293-07 Soil			Date Sampled: Date Received:	12/18/2019 12/20/2019
Chlorinated Pesti	<u>cides</u>				
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		2.01	ug/Kg	J	12/26/2019 17:07
4,4-DDE		5.25	ug/Kg		12/26/2019 17:07
4,4-DDT		7.22	ug/Kg		12/26/2019 17:07
Aldrin		< 3.23	ug/Kg		12/26/2019 17:07
alpha-BHC		< 3.23	ug/Kg		12/26/2019 17:07
beta-BHC		< 3.23	ug/Kg		12/26/2019 17:07
cis-Chlordane		2.99	ug/Kg	JP	12/26/2019 17:07
delta-BHC		< 3.23	ug/Kg		12/26/2019 17:07
Dieldrin		2.07	ug/Kg	J	12/26/2019 17:07
Endosulfan I		< 3.23	ug/Kg		12/26/2019 17:07
Endosulfan II		< 3.23	ug/Kg		12/26/2019 17:07
Endosulfan Sulfate		< 3.23	ug/Kg		12/26/2019 17:07
Endrin		< 3.23	ug/Kg		12/26/2019 17:07
Endrin Aldehyde		< 3.23	ug/Kg		12/26/2019 17:07
Endrin Ketone		< 3.23	ug/Kg		12/26/2019 17:07
gamma-BHC (Lindane)	1.71	ug/Kg	J	12/26/2019 17:07
Heptachlor		< 3.23	ug/Kg		12/26/2019 17:07
Heptachlor Epoxide		< 3.23	ug/Kg		12/26/2019 17:07
Methoxychlor		< 3.23	ug/Kg		12/26/2019 17:07
Toxaphene		< 32.3	ug/Kg		12/26/2019 17:07
trans-Chlordane		1.80	ug/Kg	J	12/26/2019 17:07



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-01					
Lab Sample ID:	196293-07		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	27.7	30.7 - 111	*	12/26/2019	17:07
Tetrachloro-m-xylene	(1)	57.2	34.7 - 87.3		12/26/2019	17:07
Method Reference	ce(s): EPA 8081B EPA 3546					
Preparation Date	te: 12/23/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	SS-01		
Lab Sample ID:	196293-07	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 309	ug/Kg		12/25/2019 02:56
1,2,4,5-Tetrachlorobenzene	< 309	ug/Kg		12/25/2019 02:56
1,2,4-Trichlorobenzene	< 309	ug/Kg		12/25/2019 02:56
1,2-Dichlorobenzene	< 309	ug/Kg		12/25/2019 02:56
1,3-Dichlorobenzene	< 309	ug/Kg		12/25/2019 02:56
1,4-Dichlorobenzene	< 309	ug/Kg		12/25/2019 02:56
2,2-Oxybis (1-chloropropane)	< 309	ug/Kg		12/25/2019 02:56
2,3,4,6-Tetrachlorophenol	< 309	ug/Kg		12/25/2019 02:56
2,4,5-Trichlorophenol	< 309	ug/Kg		12/25/2019 02:56
2,4,6-Trichlorophenol	< 309	ug/Kg		12/25/2019 02:56
2,4-Dichlorophenol	< 309	ug/Kg		12/25/2019 02:56
2,4-Dimethylphenol	< 309	ug/Kg		12/25/2019 02:56
2,4-Dinitrophenol	< 1240	ug/Kg		12/25/2019 02:56
2,4-Dinitrotoluene	< 309	ug/Kg		12/25/2019 02:56
2,6-Dinitrotoluene	< 309	ug/Kg		12/25/2019 02:56
2-Chloronaphthalene	< 309	ug/Kg		12/25/2019 02:56
2-Chlorophenol	< 309	ug/Kg		12/25/2019 02:56
2-Methylnapthalene	< 309	ug/Kg		12/25/2019 02:56
2-Methylphenol	< 309	ug/Kg		12/25/2019 02:56
2-Nitroaniline	< 309	ug/Kg		12/25/2019 02:56
2-Nitrophenol	< 309	ug/Kg		12/25/2019 02:56
3&4-Methylphenol	< 309	ug/Kg		12/25/2019 02:56
3,3'-Dichlorobenzidine	< 309	ug/Kg		12/25/2019 02:56



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier: Lab Sample ID: Matrix:	SS-01 196293-07 Soil			Date Sampled: Date Received:	12/18/2019 12/20/2019
3-Nitroaniline		< 309	ug/Kg		12/25/2019 02:56
4,6-Dinitro-2-methyl	phenol	< 619	ug/Kg		12/25/2019 02:56
4-Bromophenyl phen	yl ether	< 309	ug/Kg		12/25/2019 02:56
4-Chloro-3-methylph	enol	< 309	ug/Kg		12/25/2019 02:56
4-Chloroaniline		< 309	ug/Kg		12/25/2019 02:56
4-Chlorophenyl phen	yl ether	< 309	ug/Kg		12/25/2019 02:56
4-Nitroaniline		< 309	ug/Kg		12/25/2019 02:56
4-Nitrophenol		< 309	ug/Kg		12/25/2019 02:56
Acenaphthene		< 309	ug/Kg		12/25/2019 02:56
Acenaphthylene		< 309	ug/Kg		12/25/2019 02:56
Acetophenone		< 309	ug/Kg		12/25/2019 02:56
Anthracene		< 309	ug/Kg		12/25/2019 02:56
Atrazine		< 309	ug/Kg		12/25/2019 02:56
Benzaldehyde		< 309	ug/Kg		12/25/2019 02:56
Benzo (a) anthracene	!	328	ug/Kg		12/25/2019 02:56
Benzo (a) pyrene		308	ug/Kg	J	12/25/2019 02:56
Benzo (b) fluoranthe	ne	367	ug/Kg		12/25/2019 02:56
Benzo (g,h,i) perylene	9	< 309	ug/Kg		12/25/2019 02:56
Benzo (k) fluoranthei	ne	< 309	ug/Kg		12/25/2019 02:56
Bis (2-chloroethoxy)	methane	< 309	ug/Kg		12/25/2019 02:56
Bis (2-chloroethyl) et	her	< 309	ug/Kg		12/25/2019 02:56
Bis (2-ethylhexyl) ph	thalate	< 309	ug/Kg		12/25/2019 02:56
Butylbenzylphthalate	2	< 309	ug/Kg		12/25/2019 02:56
Caprolactam		< 309	ug/Kg		12/25/2019 02:56
Carbazole		< 309	ug/Kg		12/25/2019 02:56



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier: Lab Sample ID:	SS-01 196293-07			Date Sampled:	12/18/2019
Matrix:	Soil	010	177	Date Received:	12/20/2019
Chrysene		319	ug/Kg		12/25/2019 02:56
Dibenz (a,h) anthrace	ene	< 309	ug/Kg		12/25/2019 02:56
Dibenzofuran		< 309	ug/Kg		12/25/2019 02:56
Diethyl phthalate		< 309	ug/Kg		12/25/2019 02:56
Dimethyl phthalate		< 309	ug/Kg		12/25/2019 02:56
Di-n-butyl phthalate		< 309	ug/Kg		12/25/2019 02:56
Di-n-octylphthalate		< 309	ug/Kg		12/25/2019 02:56
Fluoranthene		627	ug/Kg		12/25/2019 02:56
Fluorene		< 309	ug/Kg		12/25/2019 02:56
Hexachlorobenzene		< 309	ug/Kg		12/25/2019 02:56
Hexachlorobutadiene	2	< 309	ug/Kg		12/25/2019 02:56
Hexachlorocyclopent	adiene	< 1240	ug/Kg		12/25/2019 02:56
Hexachloroethane		< 309	ug/Kg		12/25/2019 02:56
Indeno (1,2,3-cd) pyr	rene	< 309	ug/Kg		12/25/2019 02:56
Isophorone		< 309	ug/Kg		12/25/2019 02:56
Naphthalene		< 309	ug/Kg		12/25/2019 02:56
Nitrobenzene		< 309	ug/Kg		12/25/2019 02:56
N-Nitroso-di-n-propy	lamine	< 309	ug/Kg		12/25/2019 02:56
N-Nitrosodiphenylan	nine	< 309	ug/Kg		12/25/2019 02:56
Pentachlorophenol		< 619	ug/Kg		12/25/2019 02:56
Phenanthrene		321	ug/Kg		12/25/2019 02:56
Phenol		< 309	ug/Kg		12/25/2019 02:56
Pyrene		392	ug/Kg		12/25/2019 02:56
5			0, 0		, ,



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-01					
Lab Sample ID:	196293-07		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		70.6	35.1 - 89.5		12/25/2019	02:56
2-Fluorobiphenyl		69.5	37.7 - 81.4		12/25/2019	02:56
2-Fluorophenol		67.8	40.2 - 77		12/25/2019	02:56
Nitrobenzene-d5		63.0	36.2 - 78.4		12/25/2019	02:56
Phenol-d5		65.8	41.2 - 77.1		12/25/2019	02:56
Terphenyl-d14		66.3	39.8 - 97.5		12/25/2019	02:56
Method Reference Preparation Date Data File:	EPA 3546					



Preparation Date:

Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	SS-01				
Lab Sample ID:	196293-07			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Total Cyanide</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total		< 0.555	mg/Kg		12/30/2019
Method Referen	nce(s): EPA 901	4			

EPA 9010C 12/27/2019



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier:	SS-01				
Lab Sample ID:	196293-07			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		84.2	%		12/24/2019

Method Reference(s):Par%MELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Refer	ence: 57 T	onawanda			
Sample Iden	itifier: SS-	01			
Lab Sample	ID: 190	6293-07		Date Sampled:	12/18/2019
Matrix:	Soi	1		Date Received:	12/20/2019
<u>Dioxane</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxan	e	< 30.9	ug/Kg		1/2/2020 13:48
Me	thod Reference(s):	EPA 8270D SIM EPA 3546			
	paration Date: ta File:	12/23/2019 B43488.D			



Client:	<u>BE3</u>				
Project Reference:	57 Tor	nawanda			
Sample Identifier:	SS-02	2			
Lab Sample ID:	1962	93-08		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		2.61	mg/Kg		12/30/2020 17:57
Barium		33.5	mg/Kg		12/27/2019 14:49
Beryllium		< 0.319	mg/Kg		12/27/2019 14:49
Cadmium		0.830	mg/Kg		12/27/2019 14:49
Chromium		16.1	mg/Kg		12/27/2019 14:49
Copper		41.4	mg/Kg		12/27/2019 14:49
Lead		50.5	mg/Kg		12/27/2019 14:49
Manganese		551	mg/Kg		12/27/2019 14:49
Nickel		15.5	mg/Kg		12/27/2019 14:49
Selenium		< 1.28	mg/Kg		12/27/2019 14:49
Silver		0.387	mg/Kg	J	12/27/2019 14:49
Zinc		469	mg/Kg		12/30/2020 17:57
Method Refere	nce(s):	EPA 6010C			
Preparation Data File:	ate:	EPA 3050B 12/26/2019 191230C			



Client:		<u>BE3</u>				
Project Ref	ference:	57 Tona	awanda			
Sample I	dentifier:	SS-02				
Lab Samp	ple ID:	19629	3-08		Date Sampled:	12/18/2019
Matrix:		Soil			Date Received:	12/20/2019
Mercu	<u>ıry</u>					
<u>Analyte</u>			Result	<u>Units</u>	Qualifier	Date Analyzed
Mercur	У		0.0222	mg/Kg		12/26/2019 12:04
	Method Referenc Preparation Date Data File:		EPA 7471B 12/24/2019 Hg191226B			



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	vanda					
Sample Identifier:	SS-02						
Lab Sample ID:	196293-	08		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		<u>Qualifier</u>	Date Analy	yzed
PCB-1016		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1221		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1232		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1242		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1248		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1254		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1260		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1262		< 0.0365	mg/Kg			12/27/2019	14:03
PCB-1268		< 0.0365	mg/Kg			12/27/2019	14:03
<u>Surrogate</u>		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	2		36.9	18.3 - 89.6		12/27/2019	14:03
Method Referer Preparation Da	EF	PA 8082A PA 3546 2/23/2019					
i reparation Da	12	125/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	SS-02 196293-08 Soil			Date Sampled: Date Received:	12/18/2019 12/20/2019
Chlorinated Pesti	<u>cides</u>				
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		1.99	ug/Kg	JP	12/26/2019 17:26
4,4-DDE		< 3.65	ug/Kg		12/26/2019 17:26
4,4-DDT		2.89	ug/Kg	J	12/26/2019 17:26
Aldrin		< 3.65	ug/Kg		12/26/2019 17:26
alpha-BHC		< 3.65	ug/Kg		12/26/2019 17:26
beta-BHC		< 3.65	ug/Kg		12/26/2019 17:26
cis-Chlordane		< 3.65	ug/Kg		12/26/2019 17:26
delta-BHC		2.10	ug/Kg	J	12/26/2019 17:26
Dieldrin		< 3.65	ug/Kg		12/26/2019 17:26
Endosulfan I		< 3.65	ug/Kg		12/26/2019 17:26
Endosulfan II		< 3.65	ug/Kg		12/26/2019 17:26
Endosulfan Sulfate		4.52	ug/Kg		12/26/2019 17:26
Endrin		< 3.65	ug/Kg		12/26/2019 17:26
Endrin Aldehyde		5.08	ug/Kg		12/26/2019 17:26
Endrin Ketone		2.46	ug/Kg	JP	12/26/2019 17:26
gamma-BHC (Lindane))	1.83	ug/Kg	JP	12/26/2019 17:26
Heptachlor		< 3.65	ug/Kg		12/26/2019 17:26
Heptachlor Epoxide		< 3.65	ug/Kg		12/26/2019 17:26
Methoxychlor		7.73	ug/Kg		12/26/2019 17:26
Toxaphene		< 36.5	ug/Kg		12/26/2019 17:26
trans-Chlordane		2.50	ug/Kg	J	12/26/2019 17:26



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-02					
Lab Sample ID:	196293-08		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	73.0	30.7 - 111		12/26/2019	17:26
Tetrachloro-m-xylene	(1)	33.2	34.7 - 87.3	*	12/26/2019	17:26
Method Reference	ce(s): EPA 8081B EPA 3546					
Preparation Date	te: 12/23/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	SS-02		
Lab Sample ID:	196293-08	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 718	ug/Kg		12/30/2019 18:14
1,2,4,5-Tetrachlorobenzene	< 718	ug/Kg		12/30/2019 18:14
1,2,4-Trichlorobenzene	< 718	ug/Kg		12/30/2019 18:14
1,2-Dichlorobenzene	< 718	ug/Kg		12/30/2019 18:14
1,3-Dichlorobenzene	< 718	ug/Kg		12/30/2019 18:14
1,4-Dichlorobenzene	< 718	ug/Kg		12/30/2019 18:14
2,2-Oxybis (1-chloropropane)	< 718	ug/Kg		12/30/2019 18:14
2,3,4,6-Tetrachlorophenol	< 718	ug/Kg		12/30/2019 18:14
2,4,5-Trichlorophenol	< 718	ug/Kg		12/30/2019 18:14
2,4,6-Trichlorophenol	< 718	ug/Kg		12/30/2019 18:14
2,4-Dichlorophenol	< 718	ug/Kg		12/30/2019 18:14
2,4-Dimethylphenol	< 718	ug/Kg		12/30/2019 18:14
2,4-Dinitrophenol	< 2870	ug/Kg		12/30/2019 18:14
2,4-Dinitrotoluene	< 718	ug/Kg		12/30/2019 18:14
2,6-Dinitrotoluene	< 718	ug/Kg		12/30/2019 18:14
2-Chloronaphthalene	< 718	ug/Kg		12/30/2019 18:14
2-Chlorophenol	< 718	ug/Kg		12/30/2019 18:14
2-Methylnapthalene	< 718	ug/Kg		12/30/2019 18:14
2-Methylphenol	< 718	ug/Kg		12/30/2019 18:14
2-Nitroaniline	< 718	ug/Kg		12/30/2019 18:14
2-Nitrophenol	< 718	ug/Kg		12/30/2019 18:14
3&4-Methylphenol	< 718	ug/Kg		12/30/2019 18:14
3,3'-Dichlorobenzidine	< 718	ug/Kg		12/30/2019 18:14



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID: Matrix:	SS-02 196293-08 Soil			Date Sampled: Date Received:	12/18/2019 12/20/2019
3-Nitroaniline		< 718	ug/Kg		12/30/2019 18:14
4,6-Dinitro-2-methylp	henol	< 1440	ug/Kg		12/30/2019 18:14
4-Bromophenyl pheny	l ether	< 718	ug/Kg		12/30/2019 18:14
4-Chloro-3-methylphe	nol	< 718	ug/Kg		12/30/2019 18:14
4-Chloroaniline		< 718	ug/Kg		12/30/2019 18:14
4-Chlorophenyl pheny	l ether	< 718	ug/Kg		12/30/2019 18:14
4-Nitroaniline		< 718	ug/Kg		12/30/2019 18:14
4-Nitrophenol		< 718	ug/Kg		12/30/2019 18:14
Acenaphthene		< 718	ug/Kg		12/30/2019 18:14
Acenaphthylene		< 718	ug/Kg		12/30/2019 18:14
Acetophenone		< 718	ug/Kg		12/30/2019 18:14
Anthracene		1270	ug/Kg		12/30/2019 18:14
Atrazine		< 718	ug/Kg		12/30/2019 18:14
Benzaldehyde		< 718	ug/Kg		12/30/2019 18:14
Benzo (a) anthracene		6710	ug/Kg		12/30/2019 18:14
Benzo (a) pyrene		8350	ug/Kg		12/30/2019 18:14
Benzo (b) fluoranthene	e	9970	ug/Kg		12/30/2019 18:14
Benzo (g,h,i) perylene		6520	ug/Kg		12/30/2019 18:14
Benzo (k) fluoranthene	e	4240	ug/Kg		12/30/2019 18:14
Bis (2-chloroethoxy) n	nethane	< 718	ug/Kg		12/30/2019 18:14
Bis (2-chloroethyl) eth	er	< 718	ug/Kg		12/30/2019 18:14
Bis (2-ethylhexyl) phth	nalate	< 718	ug/Kg		12/30/2019 18:14
Butylbenzylphthalate		< 718	ug/Kg		12/30/2019 18:14
Caprolactam		< 718	ug/Kg		12/30/2019 18:14
Carbazole		1950	ug/Kg		12/30/2019 18:14



Client:	<u>BE3</u>				
Project Reference:	57 Tonawa	nda			
Sample Identifier: Lab Sample ID:	SS-02 196293-08	8		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		7310	ug/Kg		12/30/2019 18:14
Dibenz (a,h) anthrac	ene	1990	ug/Kg		12/30/2019 18:14
Dibenzofuran		< 718	ug/Kg		12/30/2019 18:14
Diethyl phthalate		< 718	ug/Kg		12/30/2019 18:14
Dimethyl phthalate		< 718	ug/Kg		12/30/2019 18:14
Di-n-butyl phthalate		< 718	ug/Kg		12/30/2019 18:14
Di-n-octylphthalate		< 718	ug/Kg		12/30/2019 18:14
Fluoranthene		15600	ug/Kg		12/30/2019 18:14
Fluorene		< 718	ug/Kg		12/30/2019 18:14
Hexachlorobenzene		< 718	ug/Kg		12/30/2019 18:14
Hexachlorobutadien	e	< 718	ug/Kg		12/30/2019 18:14
Hexachlorocyclopen	tadiene	< 2870	ug/Kg		12/30/2019 18:14
Hexachloroethane		< 718	ug/Kg		12/30/2019 18:14
Indeno (1,2,3-cd) py	rene	7980	ug/Kg		12/30/2019 18:14
Isophorone		< 718	ug/Kg		12/30/2019 18:14
Naphthalene		< 718	ug/Kg		12/30/2019 18:14
Nitrobenzene		< 718	ug/Kg		12/30/2019 18:14
N-Nitroso-di-n-prop	ylamine	< 718	ug/Kg		12/30/2019 18:14
N-Nitrosodiphenylar	nine	< 718	ug/Kg		12/30/2019 18:14
Pentachlorophenol		< 1440	ug/Kg		12/30/2019 18:14
Phenanthrene		6350	ug/Kg		12/30/2019 18:14
Phenol		< 718	ug/Kg		12/30/2019 18:14
Pyrene		10700	ug/Kg		12/30/2019 18:14



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-02					
Lab Sample ID:	196293-08		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date Received:		12/20/2019	
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		32.9	35.1 - 89.5	*	12/30/2019	18:14
2-Fluorobiphenyl		34.3	37.7 - 81.4	*	12/30/2019	18:14
2-Fluorophenol		34.2	40.2 - 77	*	12/30/2019	18:14
Nitrobenzene-d5		33.0	36.2 - 78.4	*	12/30/2019	18:14
Phenol-d5		34.0	41.2 - 77.1	*	12/30/2019	18:14
Terphenyl-d14		33.6	39.8 - 97.5	*	12/30/2019	18:14
Method Referen Preparation Dat	EPA 3546					
Data File:	B43414.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	SS-02				
Lab Sample ID:	196293-08			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Total Cyanide</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total		< 0.582	mg/Kg		12/30/2019
Method Refere	nce(s): EPA 901	4			

EPA 9010C Preparation Date: 12/27/2019



Client:	BE3					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-02					
Lab Sample ID:	196293-08		Date Sampled:	12/18/2019		
Matrix:	Soil			Date Received:	12/20/2019	
<u>Percent Solids</u>						
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed	
Percent Solids		75.3	%		12/24/2019	

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Refere	nce: 57 Ton	awanda			
Sample Ident	t ifier: SS-02				
Lab Sample I	ample ID: 196293-08			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Dioxane</u>					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 179	ug/Kg		1/2/2020 13:59
Repo	rting limit elevated due to	o sample matrix			
Meth	od Reference(s):	EPA 8270D SIM EPA 3546			
•	aration Date: File:	12/23/2019 B43489.D			



Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	SS-03				
Lab Sample ID:	19629	93-09		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
Analyte		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		5.02	mg/Kg		1/2/2020 09:36
Barium		157	mg/Kg		12/27/2019 14:53
Beryllium		< 0.585	mg/Kg		12/27/2019 14:53
Cadmium		5.26	mg/Kg		12/27/2019 14:53
Chromium		68.3	mg/Kg		12/27/2019 14:53
Copper		243	mg/Kg		12/27/2019 14:53
Lead		442	mg/Kg		12/27/2019 14:53
Manganese		808	mg/Kg		12/27/2019 14:53
Nickel		61.9	mg/Kg		12/27/2019 14:53
Selenium		6.10	mg/Kg		1/2/2020 09:36
Silver		2.27	mg/Kg		12/27/2019 14:53
Zinc		1100	mg/Kg		1/2/2020 09:36
Method Refere	nce(s):	EPA 6010C			
Preparation Data File:	ate:	EPA 3050B 12/26/2019 200102A			



Client:	<u>BE3</u>				
Project Referenc	e: 57 Tor	nawanda			
Sample Identifi	er: SS-03	}			
Lab Sample ID:	1962	93-09		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.104	mg/Kg		12/26/2019 12:06
Method	Reference(s):	EPA 7471B			
Prepara Data Fil	ition Date: e:	12/24/2019 Hg191226B			



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	anda					
Sample Identifier:	SS-03						
Lab Sample ID:	196293-	09		Dat	e Sampled:	12/18/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1221		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1232		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1242		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1248		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1254		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1260		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1262		< 0.0674	mg/Kg			12/26/2019	18:15
PCB-1268		< 0.0674	mg/Kg			12/26/2019	18:15
Surrogate		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	2		17.4	18.3 - 89.6	*	12/26/2019	18:15
Method Referen		A 8082A					
Preparation Da		PA 3546 /23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier: Lab Sample ID: Matrix:	SS-03 196293-09 Soil			Date Sampled: Date Received:	12/18/2019 12/20/2019
Chlorinated Pest	icides				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 6.74	ug/Kg		12/26/2019 17:44
4,4-DDE		< 6.74	ug/Kg		12/26/2019 17:44
4,4-DDT		< 6.74	ug/Kg		12/26/2019 17:44
Aldrin		< 6.74	ug/Kg		12/26/2019 17:44
alpha-BHC		< 6.74	ug/Kg		12/26/2019 17:44
beta-BHC		3.66	ug/Kg	JP	12/26/2019 17:44
cis-Chlordane		3.74	ug/Kg	JP	12/26/2019 17:44
delta-BHC		< 6.74	ug/Kg		12/26/2019 17:44
Dieldrin		< 6.74	ug/Kg		12/26/2019 17:44
Endosulfan I		< 6.74	ug/Kg		12/26/2019 17:44
Endosulfan II		< 6.74	ug/Kg		12/26/2019 17:44
Endosulfan Sulfate		6.47	ug/Kg	J	12/26/2019 17:44
Endrin		< 6.74	ug/Kg		12/26/2019 17:44
Endrin Aldehyde		8.42	ug/Kg		12/26/2019 17:44
Endrin Ketone		8.12	ug/Kg	Р	12/26/2019 17:44
gamma-BHC (Lindane	e)	8.99	ug/Kg		12/26/2019 17:44
Heptachlor		< 6.74	ug/Kg		12/26/2019 17:44
Heptachlor Epoxide		< 6.74	ug/Kg		12/26/2019 17:44
Methoxychlor		10.6	ug/Kg		12/26/2019 17:44
Toxaphene		< 67.4	ug/Kg		12/26/2019 17:44
trans-Chlordane		< 6.74	ug/Kg		12/26/2019 17:44



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-03					
Lab Sample ID:	196293-09		Date	e Sampled:	12/18/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	l)	22.3	30.7 - 111	*	12/26/2019	17:44
Tetrachloro-m-xylene	(1)	112	34.7 - 87.3	*	12/26/2019	17:44
Method Reference	ce(s): EPA 8081B EPA 3546					
Preparation Date						



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	SS-03		
Lab Sample ID:	196293-09	Date Sampled:	12/18/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analy	vzed
1,1-Biphenyl	< 1290	ug/Kg		12/30/2019	18:43
1,2,4,5-Tetrachlorobenzene	< 1290	ug/Kg		12/30/2019	18:43
1,2,4-Trichlorobenzene	< 1290	ug/Kg		12/30/2019	18:43
1,2-Dichlorobenzene	< 1290	ug/Kg		12/30/2019	18:43
1,3-Dichlorobenzene	< 1290	ug/Kg		12/30/2019	18:43
1,4-Dichlorobenzene	< 1290	ug/Kg		12/30/2019	18:43
2,2-Oxybis (1-chloropropane)	< 1290	ug/Kg		12/30/2019	18:43
2,3,4,6-Tetrachlorophenol	< 1290	ug/Kg		12/30/2019	18:43
2,4,5-Trichlorophenol	< 1290	ug/Kg		12/30/2019	18:43
2,4,6-Trichlorophenol	< 1290	ug/Kg		12/30/2019	18:43
2,4-Dichlorophenol	< 1290	ug/Kg		12/30/2019	18:43
2,4-Dimethylphenol	< 1290	ug/Kg		12/30/2019	18:43
2,4-Dinitrophenol	< 5160	ug/Kg		12/30/2019	18:43
2,4-Dinitrotoluene	< 1290	ug/Kg		12/30/2019	18:43
2,6-Dinitrotoluene	< 1290	ug/Kg		12/30/2019	18:43
2-Chloronaphthalene	< 1290	ug/Kg		12/30/2019	18:43
2-Chlorophenol	< 1290	ug/Kg		12/30/2019	18:43
2-Methylnapthalene	< 1290	ug/Kg		12/30/2019	18:43
2-Methylphenol	< 1290	ug/Kg		12/30/2019	18:43
2-Nitroaniline	< 1290	ug/Kg		12/30/2019	18:43
2-Nitrophenol	< 1290	ug/Kg		12/30/2019	18:43
3&4-Methylphenol	< 1290	ug/Kg		12/30/2019	18:43
3,3'-Dichlorobenzidine	< 1290	ug/Kg		12/30/2019	18:43



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	SS-03				
Lab Sample ID:	196293-09			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 1290	ug/Kg		12/30/2019 18:43
4,6-Dinitro-2-methylpl	nenol	< 2580	ug/Kg		12/30/2019 18:43
4-Bromophenyl pheny	l ether	< 1290	ug/Kg		12/30/2019 18:43
4-Chloro-3-methylphe	nol	< 1290	ug/Kg		12/30/2019 18:43
4-Chloroaniline		< 1290	ug/Kg		12/30/2019 18:43
4-Chlorophenyl phenyl	lether	< 1290	ug/Kg		12/30/2019 18:43
4-Nitroaniline		< 1290	ug/Kg		12/30/2019 18:43
4-Nitrophenol		< 1290	ug/Kg		12/30/2019 18:43
Acenaphthene		< 1290	ug/Kg		12/30/2019 18:43
Acenaphthylene		< 1290	ug/Kg		12/30/2019 18:43
Acetophenone		4920	ug/Kg		12/30/2019 18:43
Anthracene		2070	ug/Kg		12/30/2019 18:43
Atrazine		< 1290	ug/Kg		12/30/2019 18:43
Benzaldehyde		2680	ug/Kg		1/3/2020 12:57
Benzo (a) anthracene		14800	ug/Kg		12/30/2019 18:43
Benzo (a) pyrene		16800	ug/Kg		12/30/2019 18:43
Benzo (b) fluoranthene	9	21300	ug/Kg		12/30/2019 18:43
Benzo (g,h,i) perylene		13600	ug/Kg		12/30/2019 18:43
Benzo (k) fluoranthene	9	11300	ug/Kg		12/30/2019 18:43
Bis (2-chloroethoxy) m	nethane	< 1290	ug/Kg		12/30/2019 18:43
Bis (2-chloroethyl) eth	er	< 1290	ug/Kg		12/30/2019 18:43
Bis (2-ethylhexyl) phth	nalate	< 1290	ug/Kg		12/30/2019 18:43
Butylbenzylphthalate		< 1290	ug/Kg		12/30/2019 18:43
Caprolactam		< 1290	ug/Kg		12/30/2019 18:43
Carbazole		4030	ug/Kg		12/30/2019 18:43



Client:	<u>BE3</u>				
Project Reference:	57 Tonawai	nda			
Sample Identifier: Lab Sample ID:	SS-03 196293-09)		Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		17600	ug/Kg		12/30/2019 18:43
Dibenz (a,h) anthrac	ene	4320	ug/Kg		12/30/2019 18:43
Dibenzofuran		< 1290	ug/Kg		12/30/2019 18:43
Diethyl phthalate		< 1290	ug/Kg		12/30/2019 18:43
Dimethyl phthalate		< 1290	ug/Kg		12/30/2019 18:43
Di-n-butyl phthalate		< 1290	ug/Kg		12/30/2019 18:43
Di-n-octylphthalate		< 1290	ug/Kg		12/30/2019 18:43
Fluoranthene		36300	ug/Kg		12/30/2019 18:43
Fluorene		< 1290	ug/Kg		12/30/2019 18:43
Hexachlorobenzene		< 1290	ug/Kg		12/30/2019 18:43
Hexachlorobutadien	e	< 1290	ug/Kg		12/30/2019 18:43
Hexachlorocyclopen	tadiene	< 5160	ug/Kg		12/30/2019 18:43
Hexachloroethane		< 1290	ug/Kg		12/30/2019 18:43
Indeno (1,2,3-cd) py	rene	14300	ug/Kg		12/30/2019 18:43
Isophorone		< 1290	ug/Kg		12/30/2019 18:43
Naphthalene		< 1290	ug/Kg		12/30/2019 18:43
Nitrobenzene		< 1290	ug/Kg		12/30/2019 18:43
N-Nitroso-di-n-prop	ylamine	< 1290	ug/Kg		12/30/2019 18:43
N-Nitrosodiphenylar	nine	< 1290	ug/Kg		12/30/2019 18:43
Pentachlorophenol		< 2580	ug/Kg		12/30/2019 18:43
Phenanthrene		11900	ug/Kg		12/30/2019 18:43
Phenol		776	ug/Kg	J	12/30/2019 18:43
Pyrene		24800	ug/Kg		12/30/2019 18:43



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-03					
Lab Sample ID:	196293-09		Date	e Sampled:	12/18/2019	Э
Matrix:	Soil		Date	e Received:	12/20/2019	Э
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		27.1	35.1 - 89.5	*	12/30/2019	18:43
2-Fluorobiphenyl		27.1	37.7 - 81.4	*	12/30/2019	18:43
2-Fluorophenol		26.9	40.2 - 77	*	12/30/2019	18:43
Nitrobenzene-d5		26.3	36.2 - 78.4	*	12/30/2019	18:43
Phenol-d5		27.2	41.2 - 77.1	*	12/30/2019	18:43
Terphenyl-d14		27.6	39.8 - 97.5	*	12/30/2019	18:43
Method Referen	EPA 3546					
Preparation Dat Data File:	te: 12/23/2019 B43514.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier:	SS-03				
Lab Sample ID:	196293-09			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Total Cyanide</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total		0.952	mg/Kg	J	12/30/2019

 Method Reference(s):
 EPA 9014

 EPA 9010C

 Preparation Date:
 12/27/2019



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	SS-03				
Lab Sample ID:	196293-09			Date Sampled:	12/18/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Percent Solids</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		41.9	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:		<u>BE3</u>						
Project Ref	erence:	57 Tona	awanda					
Sample Id	lentifier:	SS-03						
Lab Samp	le ID:	19629	3-09			Dat	te Sampled:	12/18/2019
Matrix:		Soil				Dat	te Received:	12/20/2019
Dioxan	<u>1e</u>							
<u>Analyte</u>			Resu	lt	<u>Units</u>		Qualifier	Date Analyzed
1,4-Diox	ane		< 64.5		ug/Kg			1/2/2020 14:10
	Method Reference	e(s):	EPA 8270D SIM EPA 3546					
	Preparation Date: Data File:		12/23/2019 B43490.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tona	awanda			
Sample Identifier:	SS-04				
Lab Sample ID:	19629	3-10		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		6.21	mg/Kg		12/27/2019 15:07
Barium		69.0	mg/Kg		12/27/2019 15:07
Beryllium		0.463	mg/Kg		12/27/2019 15:07
Cadmium		1.76	mg/Kg		12/27/2019 15:07
Chromium		32.6	mg/Kg		12/27/2019 15:07
Copper		343	mg/Kg		12/27/2019 15:07
Lead		244	mg/Kg		12/27/2019 15:07
Manganese		464	mg/Kg		12/27/2019 15:07
Nickel		17.2	mg/Kg		12/27/2019 15:07
Selenium		0.683	mg/Kg	J	12/30/2020 18:06
Silver		0.798	mg/Kg		12/27/2019 15:07
Zinc		473	mg/Kg		12/30/2020 18:06
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ate:	EPA 3050B 12/26/2019 191227C			



Client:		<u>BE3</u>				
Project Refe	erence:	57 Tonawa	anda			
Sample Id	entifier:	SS-04				
Lab Samp	le ID:	196293-2	10		Date Sampled:	12/19/2019
Matrix:		Soil			Date Received:	12/20/2019
Mercu	<u>ry</u>					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury			0.178	mg/Kg		12/26/2019 12:08
	Method Referenc	e(s): EPA	A 7471B			
	Preparation Date Data File:	,	/24/2019 191226B			



Client:	<u>BE3</u>						
Project Reference:	57 Tonav	vanda					
Sample Identifier:	SS-04						
Lab Sample ID:	196293	-10		Dat	e Sampled:	12/19/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1221		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1232		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1242		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1248		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1254		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1260		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1262		< 0.0349	mg/Kg			12/27/2019	14:26
PCB-1268		< 0.0349	mg/Kg			12/27/2019	14:26
<u>Surrogate</u>		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	e		39.1	18.3 - 89.6		12/27/2019	14:26
Method Refere	E	PA 8082A PA 3546 2/23/2019					
Preparation Da	ate: 1	2/23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	SS-04 196293-10 Soil			Date Sampled: Date Received:	12/19/2019 12/20/2019
<u>Chlorinated Pestic</u>					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		6.55	ug/Kg		12/26/2019 18:03
4,4-DDE		< 3.49	ug/Kg		12/26/2019 18:03
4,4-DDT		3.93	ug/Kg	Р	12/26/2019 18:03
Aldrin		< 3.49	ug/Kg		12/26/2019 18:03
alpha-BHC		< 3.49	ug/Kg		12/26/2019 18:03
beta-BHC		3.18	ug/Kg	JP	12/26/2019 18:03
cis-Chlordane		5.16	ug/Kg	Р	12/26/2019 18:03
delta-BHC		4.28	ug/Kg	Р	12/26/2019 18:03
Dieldrin		< 3.49	ug/Kg		12/26/2019 18:03
Endosulfan I		< 3.49	ug/Kg		12/26/2019 18:03
Endosulfan II		< 3.49	ug/Kg		12/26/2019 18:03
Endosulfan Sulfate		12.4	ug/Kg		12/26/2019 18:03
Endrin		3.19	ug/Kg	JP	12/26/2019 18:03
Endrin Aldehyde		< 3.49	ug/Kg		12/26/2019 18:03
Endrin Ketone		10.6	ug/Kg	Р	12/26/2019 18:03
gamma-BHC (Lindane))	2.27	ug/Kg	JP	12/26/2019 18:03
Heptachlor		5.36	ug/Kg		12/26/2019 18:03
Heptachlor Epoxide		< 3.49	ug/Kg		12/26/2019 18:03
Methoxychlor		24.4	ug/Kg		12/26/2019 18:03
Toxaphene		< 34.9	ug/Kg		12/26/2019 18:03
trans-Chlordane		5.16	ug/Kg	Р	12/26/2019 18:03



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-04					
Lab Sample ID:	196293-10		Date Sa	mpled:	12/19/2019	9
Matrix:	Soil		Date Re	ceived:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u> Ou	<u>itliers</u>	Date Analy	zed
Decachlorobiphenyl (1	.)	69.5	30.7 - 111		12/26/2019	18:03
Tetrachloro-m-xylene	(1)	65.8	34.7 - 87.3		12/26/2019	18:03
Method Reference	ce(s): EPA 8081B EPA 3546					
Preparation Date	e: 12/23/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	SS-04		
Lab Sample ID:	196293-10	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 1680	ug/Kg		12/30/2019 19:12
1,2,4,5-Tetrachlorobenzene	< 1680	ug/Kg		12/30/2019 19:12
1,2,4-Trichlorobenzene	< 1680	ug/Kg		12/30/2019 19:12
1,2-Dichlorobenzene	< 1680	ug/Kg		12/30/2019 19:12
1,3-Dichlorobenzene	< 1680	ug/Kg		12/30/2019 19:12
1,4-Dichlorobenzene	< 1680	ug/Kg		12/30/2019 19:12
2,2-0xybis (1-chloropropane)	< 1680	ug/Kg		12/30/2019 19:12
2,3,4,6-Tetrachlorophenol	< 1680	ug/Kg		12/30/2019 19:12
2,4,5-Trichlorophenol	< 1680	ug/Kg		12/30/2019 19:12
2,4,6-Trichlorophenol	< 1680	ug/Kg		12/30/2019 19:12
2,4-Dichlorophenol	< 1680	ug/Kg		12/30/2019 19:12
2,4-Dimethylphenol	< 1680	ug/Kg		12/30/2019 19:12
2,4-Dinitrophenol	< 6710	ug/Kg		12/30/2019 19:12
2,4-Dinitrotoluene	< 1680	ug/Kg		12/30/2019 19:12
2,6-Dinitrotoluene	< 1680	ug/Kg		12/30/2019 19:12
2-Chloronaphthalene	< 1680	ug/Kg		12/30/2019 19:12
2-Chlorophenol	< 1680	ug/Kg		12/30/2019 19:12
2-Methylnapthalene	< 1680	ug/Kg		12/30/2019 19:12
2-Methylphenol	< 1680	ug/Kg		12/30/2019 19:12
2-Nitroaniline	< 1680	ug/Kg		12/30/2019 19:12
2-Nitrophenol	< 1680	ug/Kg		12/30/2019 19:12
3&4-Methylphenol	< 1680	ug/Kg		12/30/2019 19:12
3,3'-Dichlorobenzidine	< 1680	ug/Kg		12/30/2019 19:12



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	SS-04				
Lab Sample ID:	196293-10			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 1680	ug/Kg		12/30/2019 19:12
4,6-Dinitro-2-methylp	henol	< 3360	ug/Kg		12/30/2019 19:12
4-Bromophenyl pheny	d ether	< 1680	ug/Kg		12/30/2019 19:12
4-Chloro-3-methylphe	enol	< 1680	ug/Kg		12/30/2019 19:12
4-Chloroaniline		< 1680	ug/Kg		12/30/2019 19:12
4-Chlorophenyl pheny	l ether	< 1680	ug/Kg		12/30/2019 19:12
4-Nitroaniline		< 1680	ug/Kg		12/30/2019 19:12
4-Nitrophenol		< 1680	ug/Kg		12/30/2019 19:12
Acenaphthene		< 1680	ug/Kg		12/30/2019 19:12
Acenaphthylene		< 1680	ug/Kg		12/30/2019 19:12
Acetophenone		< 1680	ug/Kg		12/30/2019 19:12
Anthracene		1740	ug/Kg		12/30/2019 19:12
Atrazine		< 1680	ug/Kg		12/30/2019 19:12
Benzaldehyde		< 1680	ug/Kg		12/30/2019 19:12
Benzo (a) anthracene		9560	ug/Kg		12/30/2019 19:12
Benzo (a) pyrene		10900	ug/Kg		12/30/2019 19:12
Benzo (b) fluoranthen	e	12500	ug/Kg		12/30/2019 19:12
Benzo (g,h,i) perylene		9220	ug/Kg		12/30/2019 19:12
Benzo (k) fluoranthen	e	7490	ug/Kg		12/30/2019 19:12
Bis (2-chloroethoxy) n	nethane	< 1680	ug/Kg		12/30/2019 19:12
Bis (2-chloroethyl) eth	ier	< 1680	ug/Kg		12/30/2019 19:12
Bis (2-ethylhexyl) pht	halate	< 1680	ug/Kg		12/30/2019 19:12
Butylbenzylphthalate		< 1680	ug/Kg		12/30/2019 19:12
Caprolactam		< 1680	ug/Kg		12/30/2019 19:12
Carbazole		1860	ug/Kg		12/30/2019 19:12



Client:	<u>BE3</u>				
Project Reference:	57 Tonawar	ıda			
Sample Identifier: Lab Sample ID:	SS-04 196293-10)		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		10400	ug/Kg		12/30/2019 19:12
Dibenz (a,h) anthrac	ene	2610	ug/Kg		12/30/2019 19:12
Dibenzofuran		< 1680	ug/Kg		12/30/2019 19:12
Diethyl phthalate		< 1680	ug/Kg		12/30/2019 19:12
Dimethyl phthalate		< 1680	ug/Kg		12/30/2019 19:12
Di-n-butyl phthalate		< 1680	ug/Kg		12/30/2019 19:12
Di-n-octylphthalate		< 1680	ug/Kg		12/30/2019 19:12
Fluoranthene		21200	ug/Kg		12/30/2019 19:12
Fluorene		< 1680	ug/Kg		12/30/2019 19:12
Hexachlorobenzene		< 1680	ug/Kg		12/30/2019 19:12
Hexachlorobutadien	e	< 1680	ug/Kg		12/30/2019 19:12
Hexachlorocyclopen	tadiene	< 6710	ug/Kg		12/30/2019 19:12
Hexachloroethane		< 1680	ug/Kg		12/30/2019 19:12
Indeno (1,2,3-cd) py	rene	11300	ug/Kg		12/30/2019 19:12
Isophorone		< 1680	ug/Kg		12/30/2019 19:12
Naphthalene		< 1680	ug/Kg		12/30/2019 19:12
Nitrobenzene		< 1680	ug/Kg		12/30/2019 19:12
N-Nitroso-di-n-prop	ylamine	< 1680	ug/Kg		12/30/2019 19:12
N-Nitrosodiphenylar	nine	< 1680	ug/Kg		12/30/2019 19:12
Pentachlorophenol		< 3360	ug/Kg		12/30/2019 19:12
Phenanthrene		7700	ug/Kg		12/30/2019 19:12
Phenol		< 1680	ug/Kg		12/30/2019 19:12
Pyrene		14700	ug/Kg		12/30/2019 19:12



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-04					
Lab Sample ID:	196293-10		Date	e Sampled:	12/19/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		43.8	35.1 - 89.5		12/30/2019	19:12
2-Fluorobiphenyl		46.6	37.7 - 81.4		12/30/2019	19:12
2-Fluorophenol		46.0	40.2 - 77		12/30/2019	19:12
Nitrobenzene-d5		45.2	36.2 - 78.4		12/30/2019	19:12
Phenol-d5		46.6	41.2 - 77.1		12/30/2019	19:12
Terphenyl-d14		46.1	39.8 - 97.5		12/30/2019	19:12
Method Referen Preparation Dat Data File:	EPA 3546					



Preparation Date:

Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	SS-04				
Lab Sample ID:	196293-10			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Total Cyanide</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total		< 0.608	mg/Kg		12/30/2019
Method Referen	ce(s): EPA 901	4			

EPA 9010C

12/27/2019



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	SS-04				
Lab Sample ID:	196293-10			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		81.4	%		12/24/2019

Method Reference(s):Par%MELAP does not offer this test for approval as part of their laboratory certification program.



Client:		<u>BE3</u>				
Project Ref	erence:	57 Tona	awanda			
Sample Id	lentifier:	SS-04				
Lab Samp	le ID:	19629	3-10		Date Sampled:	12/19/2019
Matrix:		Soil			Date Received:	12/20/2019
Dioxar	<u>ne</u>					
<u>Analyte</u>			Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Diox	ane		< 33.6	ug/Kg		1/2/2020 14:21
	Method Reference	e(s):	EPA 8270D SIM EPA 3546			
	Preparation Date: Data File:		12/23/2019 B43491.D			



Client:	<u>BE3</u>				
Project Reference:	57 Tonaw	anda			
Sample Identifier:	SS-05				
Lab Sample ID:	196293-2	11		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		5.81	mg/Kg		12/27/2019 15:11
Barium		112	mg/Kg		12/27/2019 15:11
Beryllium		0.758	mg/Kg		12/27/2019 15:11
Cadmium		2.22	mg/Kg		12/27/2019 15:11
Chromium		22.9	mg/Kg		12/27/2019 15:11
Copper		105	mg/Kg		12/27/2019 15:11
Lead		350	mg/Kg		12/27/2019 15:11
Manganese		786	mg/Kg		1/2/2020 09:40
Nickel		23.9	mg/Kg		12/27/2019 15:11
Selenium		0.984	mg/Kg	J	12/27/2019 15:11
Silver		1.40	mg/Kg		12/27/2019 15:11
Zinc		342	mg/Kg		1/2/2020 09:40
Method Refere		A 6010C A 3050B			
Preparation Da Data File:	ate: 12	/26/2019 1227C			



Client:	BE	<u>E3</u>				
Project Refer	ence: 57	' Tonawanda				
Sample Ider	n tifier: S	S-05				
Lab Sample	ID: 1	96293-11			Date Sampled:	12/19/2019
Matrix:	S	oil			Date Received:	12/20/2019
Mercury						
Analyte			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		().142	mg/Kg		12/26/2019 12:10
Ме	thod Reference(s):	EPA 7471B				
	eparation Date: ta File:	12/24/201 Hg191226F				



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	vanda					
Sample Identifier:	SS-05						
Lab Sample ID:	196293-	11		Dat	e Sampled:	12/19/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		<u>Qualifier</u>	Date Analy	yzed
PCB-1016		< 0.0358	mg/Kg			12/26/2019	19:01
PCB-1221		< 0.0358	mg/Kg			12/26/2019	19:01
PCB-1232		< 0.0358	mg/Kg			12/26/2019	19:01
PCB-1242		< 0.0358	mg/Kg			12/26/2019	19:01
PCB-1248		< 0.0358	mg/Kg			12/26/2019	19:01
PCB-1254		< 0.0358	mg/Kg			12/26/2019	19:01
PCB-1260		0.0381	mg/Kg			12/26/2019	19:01
PCB-1262		< 0.0358	mg/Kg			12/26/2019	19:01
PCB-1268		< 0.0358	mg/Kg			12/26/2019	19:01
<u>Surrogate</u>		Perc	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			42.7	18.3 - 89.6		12/26/2019	19:01
Method Referen	••	PA 8082A					
Preparation Dat		PA 3546 2/23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier: Lab Sample ID: Matrix:	SS-05 196293-11 Soil			Date Sampled: Date Received:	12/19/2019 12/20/2019
Chlorinated Pesti	<u>cides</u>				
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		2.96	ug/Kg	J	12/26/2019 18:22
4,4-DDE		5.26	ug/Kg		12/26/2019 18:22
4,4-DDT		7.83	ug/Kg	Р	12/26/2019 18:22
Aldrin		< 3.58	ug/Kg		12/26/2019 18:22
alpha-BHC		< 3.58	ug/Kg		12/26/2019 18:22
beta-BHC		< 3.58	ug/Kg		12/26/2019 18:22
cis-Chlordane		< 3.58	ug/Kg		12/26/2019 18:22
delta-BHC		< 3.58	ug/Kg		12/26/2019 18:22
Dieldrin		< 3.58	ug/Kg		12/26/2019 18:22
Endosulfan I		< 3.58	ug/Kg		12/26/2019 18:22
Endosulfan II		< 3.58	ug/Kg		12/26/2019 18:22
Endosulfan Sulfate		< 3.58	ug/Kg		12/26/2019 18:22
Endrin		< 3.58	ug/Kg		12/26/2019 18:22
Endrin Aldehyde		4.39	ug/Kg		12/26/2019 18:22
Endrin Ketone		4.94	ug/Kg	Р	12/26/2019 18:22
gamma-BHC (Lindane)	2.80	ug/Kg	JP	12/26/2019 18:22
Heptachlor		2.78	ug/Kg	J	12/26/2019 18:22
Heptachlor Epoxide		< 3.58	ug/Kg		12/26/2019 18:22
Methoxychlor		3.58	ug/Kg	Р	12/26/2019 18:22
Toxaphene		< 35.8	ug/Kg		12/26/2019 18:22
trans-Chlordane		< 3.58	ug/Kg		12/26/2019 18:22



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	SS-05					
Lab Sample ID:	196293-11		Date	Sampled:	12/19/2019	9
Matrix:	Soil		Date	Received :	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
Decachlorobiphenyl (1	.)	37.5	30.7 - 111		12/26/2019	18:22
Tetrachloro-m-xylene	(1)	55.9	34.7 - 87.3		12/26/2019	18:22
Method Reference	ce(s): EPA 8081B EPA 3546					
Preparation Date	e: 12/23/2019					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	SS-05		
Lab Sample ID:	196293-11	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 353	ug/Kg		12/25/2019 04:52
1,2,4,5-Tetrachlorobenzene	< 353	ug/Kg		12/25/2019 04:52
1,2,4-Trichlorobenzene	< 353	ug/Kg		12/25/2019 04:52
1,2-Dichlorobenzene	< 353	ug/Kg		12/25/2019 04:52
1,3-Dichlorobenzene	< 353	ug/Kg		12/25/2019 04:52
1,4-Dichlorobenzene	< 353	ug/Kg		12/25/2019 04:52
2,2-Oxybis (1-chloropropane)	< 353	ug/Kg		12/25/2019 04:52
2,3,4,6-Tetrachlorophenol	< 353	ug/Kg		12/25/2019 04:52
2,4,5-Trichlorophenol	< 353	ug/Kg		12/25/2019 04:52
2,4,6-Trichlorophenol	< 353	ug/Kg		12/25/2019 04:52
2,4-Dichlorophenol	< 353	ug/Kg		12/25/2019 04:52
2,4-Dimethylphenol	< 353	ug/Kg		12/25/2019 04:52
2,4-Dinitrophenol	< 1410	ug/Kg		12/25/2019 04:52
2,4-Dinitrotoluene	< 353	ug/Kg		12/25/2019 04:52
2,6-Dinitrotoluene	< 353	ug/Kg		12/25/2019 04:52
2-Chloronaphthalene	< 353	ug/Kg		12/25/2019 04:52
2-Chlorophenol	< 353	ug/Kg		12/25/2019 04:52
2-Methylnapthalene	230	ug/Kg	J	12/25/2019 04:52
2-Methylphenol	< 353	ug/Kg		12/25/2019 04:52
2-Nitroaniline	< 353	ug/Kg		12/25/2019 04:52
2-Nitrophenol	< 353	ug/Kg		12/25/2019 04:52
3&4-Methylphenol	< 353	ug/Kg		12/25/2019 04:52
3,3'-Dichlorobenzidine	< 353	ug/Kg		12/25/2019 04:52



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	la			
Sample Identifier:	SS-05				
Lab Sample ID:	196293-11			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 353	ug/Kg		12/25/2019 04:52
4,6-Dinitro-2-methylp	henol	< 705	ug/Kg		12/25/2019 04:52
4-Bromophenyl pheny	vl ether	< 353	ug/Kg		12/25/2019 04:52
4-Chloro-3-methylphe	enol	< 353	ug/Kg		12/25/2019 04:52
4-Chloroaniline		< 353	ug/Kg		12/25/2019 04:52
4-Chlorophenyl pheny	d ether	< 353	ug/Kg		12/25/2019 04:52
4-Nitroaniline		< 353	ug/Kg		12/25/2019 04:52
4-Nitrophenol		< 353	ug/Kg		12/25/2019 04:52
Acenaphthene		< 353	ug/Kg		12/25/2019 04:52
Acenaphthylene		266	ug/Kg	J	12/25/2019 04:52
Acetophenone		< 353	ug/Kg		12/25/2019 04:52
Anthracene		1870	ug/Kg		12/25/2019 04:52
Atrazine		< 353	ug/Kg		12/25/2019 04:52
Benzaldehyde		< 353	ug/Kg		12/25/2019 04:52
Benzo (a) anthracene		1790	ug/Kg		12/25/2019 04:52
Benzo (a) pyrene		1690	ug/Kg		12/25/2019 04:52
Benzo (b) fluoranthen	e	1750	ug/Kg		12/25/2019 04:52
Benzo (g,h,i) perylene		1060	ug/Kg		12/25/2019 04:52
Benzo (k) fluoranthen	e	997	ug/Kg		12/25/2019 04:52
Bis (2-chloroethoxy) n	nethane	< 353	ug/Kg		12/25/2019 04:52
Bis (2-chloroethyl) eth	ier	< 353	ug/Kg		12/25/2019 04:52
Bis (2-ethylhexyl) pht	halate	< 353	ug/Kg		12/25/2019 04:52
Butylbenzylphthalate		< 353	ug/Kg		12/25/2019 04:52
Caprolactam		< 353	ug/Kg		12/25/2019 04:52
Carbazole		337	ug/Kg	J	12/25/2019 04:52



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier:	SS-05				
Lab Sample ID:	196293-11			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		1600	ug/Kg		12/25/2019 04:52
Dibenz (a,h) anthrace	ene	362	ug/Kg		12/25/2019 04:52
Dibenzofuran		< 353	ug/Kg		12/25/2019 04:52
Diethyl phthalate		< 353	ug/Kg		12/25/2019 04:52
Dimethyl phthalate		< 353	ug/Kg		12/25/2019 04:52
Di-n-butyl phthalate		< 353	ug/Kg		12/25/2019 04:52
Di-n-octylphthalate		< 353	ug/Kg		12/25/2019 04:52
Fluoranthene		3510	ug/Kg		12/25/2019 04:52
Fluorene		< 353	ug/Kg		12/25/2019 04:52
Hexachlorobenzene		< 353	ug/Kg		12/25/2019 04:52
Hexachlorobutadiene	9	< 353	ug/Kg		12/25/2019 04:52
Hexachlorocyclopent	adiene	< 1410	ug/Kg		12/25/2019 04:52
Hexachloroethane		< 353	ug/Kg		12/25/2019 04:52
Indeno (1,2,3-cd) pyr	rene	1450	ug/Kg		12/25/2019 04:52
Isophorone		< 353	ug/Kg		12/25/2019 04:52
Naphthalene		297	ug/Kg	J	12/25/2019 04:52
Nitrobenzene		< 353	ug/Kg		12/25/2019 04:52
N-Nitroso-di-n-propy	ylamine	< 353	ug/Kg		12/25/2019 04:52
N-Nitrosodiphenylan	nine	< 353	ug/Kg		12/25/2019 04:52
Pentachlorophenol		< 705	ug/Kg		12/25/2019 04:52
Phenanthrene		1940	ug/Kg		12/25/2019 04:52
Phenol		< 353	ug/Kg		12/25/2019 04:52
Pyrene		2380	ug/Kg		12/25/2019 04:52



Lab Project ID: 196293

<u>BE3</u>					
57 Tonawanda					
SS-05					
196293-11		Date	e Sampled:	12/19/2019	9
Soil		Date	e Received:	12/20/2019	9
	Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
	67.4	35.1 - 89.5		12/25/2019	04:52
	67.8	37.7 - 81.4		12/25/2019	04:52
	66.0	40.2 - 77		12/25/2019	04:52
	60.3	36.2 - 78.4		12/25/2019	04:52
	62.3	41.2 - 77.1		12/25/2019	04:52
	64.1	39.8 - 97.5		12/25/2019	04:52
ce(s): EPA 8270D EPA 3546 e: 12/23/2019 B43335.D					
	57 Tonawanda SS-05 196293-11 Soil EPA 8270D EPA 3546 e: 12/23/2019	57 Tonawanda SS-05 196293-11 Soil Percent Recovery 67.4 67.8 66.0 60.3 66.3 62.3 64.1 EPA 8270D EPA 3546 e: 12/23/2019	57 Tonawanda SS-05 196293-11 Soil Percent Recovery 67.4 35.1 - 89.5 67.8 37.7 - 81.4 66.0 40.2 - 77 60.3 36.2 - 78.4 62.3 41.2 - 77.1 64.1 39.8 - 97.5	57 Tonawanda SS-05 196293-11 Soil Date Sampled: Date Received: Soil Percent Recovery 67.4 35.1 - 89.5 67.8 37.7 - 81.4 66.0 40.2 - 77 60.3 36.2 - 78.4 62.3 41.2 - 77.1 64.1 39.8 - 97.5	57 Tonawanda SS-05 196293-11 Date Sampled: 12/19/2019 Soil Date Received: 12/20/2019 Soil Date Received: 12/25/2019 67.4 35.1 - 89.5 12/25/2019 67.8 37.7 - 81.4 12/25/2019 66.0 40.2 - 77 12/25/2019 66.3 36.2 - 78.4 12/25/2019 62.3 41.2 - 77.1 12/25/2019 64.1 39.8 - 97.5 12/25/2019 e: 12/25/2019 12/25/2019



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier:	SS-05				
Lab Sample ID:	196293-11			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Total Cyanide</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total		< 0.599	mg/Kg		12/30/2019

 Method Reference(s):
 EPA 9014

 EPA 9010C
 EPA 9010C

 Preparation Date:
 12/27/2019



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier:	SS-05				
Lab Sample ID:	196293-11			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		78.8	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE</u>	3				
Project Reference:		Tonawanda				
Sample Ide	ntifier: SS	S-05				
Lab Sample	ID: 19	96293-11			Date Sampled:	12/19/2019
Matrix:	So	oil			Date Received:	12/20/2019
Dioxane						
<u>Analyte</u>		R	esult	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxar	ie	< 3	5.3	ug/Kg		1/2/2020 14:32
Method Reference(s):		EPA 8270D SIN EPA 3546	И			
	eparation Date: Ita File:	12/23/2019 B43492.D				



Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda						
Sample Identifier:	BH-1	1, 1-4 Ft					
Lab Sample ID:	1962	93-12		Date Sampled:	12/19/2019		
Matrix:	Soil			Date Received:	12/20/2019		
<u>Metals</u>							
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed		
Arsenic		4.10	mg/Kg		12/27/2019 15:15		
Barium		248	mg/Kg		12/27/2019 15:15		
Beryllium		0.246	mg/Kg	J	12/27/2019 15:15		
Cadmium		2.07	mg/Kg		12/27/2019 15:15		
Chromium		27.5	mg/Kg		12/27/2019 15:15		
Copper		84.4	mg/Kg		12/27/2019 15:15		
Lead		825	mg/Kg		12/27/2019 15:15		
Manganese		832	mg/Kg		1/2/2020 09:44		
Nickel		18.1	mg/Kg		12/27/2019 15:15		
Selenium		0.646	mg/Kg	J	12/27/2019 15:15		
Silver		1.22	mg/Kg		12/27/2019 15:15		
Zinc		1660	mg/Kg		1/2/2020 09:44		
Method Referen	ice(s):	EPA 6010C					
Preparation Da Data File:	te:	EPA 3050B 12/26/2019 191227C					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	l			
Sample Identifier:	BH-11, 1-4 Ft				
Lab Sample ID:	196293-12			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.217	mg/Kg		12/26/2019 12:12
Mathad Dafara		D			

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/24/2019

 Data File:
 Hg191226B



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	anda					
Sample Identifier:	BH-11, 1	-4 Ft					
Lab Sample ID:	196293-	12		Dat	e Sampled:	12/19/2019)
Matrix:	Soil			Dat	e Received:	12/20/2019)
<u>PCBs</u>							
Analyte		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	vzed
PCB-1016		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1221		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1232		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1242		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1248		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1254		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1260		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1262		< 0.0317	mg/Kg			12/26/2019	19:24
PCB-1268		< 0.0317	mg/Kg			12/26/2019	19:24
Surrogate		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene	<u>è</u>		78.5	18.3 - 89.6		12/26/2019	19:24
Method Referer		A 8082A					
Preparation Da		A 3546 /23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	BH-11, 1-4 Ft				
Lab Sample ID:	196293-12			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Chlorinated Pesti	<u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 3.17	ug/Kg		12/26/2019 18:40
4,4-DDE		2.68	ug/Kg	J	12/26/2019 18:40
4,4-DDT		< 3.17	ug/Kg		12/26/2019 18:40
Aldrin		< 3.17	ug/Kg		12/26/2019 18:40
alpha-BHC		2.98	ug/Kg	JP	12/26/2019 18:40
beta-BHC		< 3.17	ug/Kg		12/26/2019 18:40
cis-Chlordane		2.47	ug/Kg	JP	12/26/2019 18:40
delta-BHC		< 3.17	ug/Kg		12/26/2019 18:40
Dieldrin		< 3.17	ug/Kg		12/26/2019 18:40
Endosulfan I		2.38	ug/Kg	JP	12/26/2019 18:40
Endosulfan II		< 3.17	ug/Kg		12/26/2019 18:40
Endosulfan Sulfate		< 3.17	ug/Kg		12/26/2019 18:40
Endrin		< 3.17	ug/Kg		12/26/2019 18:40
Endrin Aldehyde		< 3.17	ug/Kg		12/26/2019 18:40
Endrin Ketone		< 3.17	ug/Kg		12/26/2019 18:40
gamma-BHC (Lindane	.)	5.36	ug/Kg		12/26/2019 18:40
Heptachlor		< 3.17	ug/Kg		12/26/2019 18:40
Heptachlor Epoxide		< 3.17	ug/Kg		12/26/2019 18:40
Methoxychlor		3.29	ug/Kg	Р	12/26/2019 18:40
Toxaphene		< 31.7	ug/Kg		12/26/2019 18:40
trans-Chlordane		< 3.17	ug/Kg		12/26/2019 18:40



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-11, 1-4 Ft					
Lab Sample ID:	196293-12		Date	e Sampled:	12/19/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	l)	51.2	30.7 - 111		12/26/2019	18:40
Tetrachloro-m-xylene	(1)	87.1	34.7 - 87.3		12/26/2019	18:40
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-11, 1-4 Ft		
Lab Sample ID:	196293-12	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analyzed
1,1-Biphenyl	< 2920	ug/Kg		12/30/2019 19:41
1,2,4,5-Tetrachlorobenzene	< 2920	ug/Kg		12/30/2019 19:41
1,2,4-Trichlorobenzene	< 2920	ug/Kg		12/30/2019 19:41
1,2-Dichlorobenzene	< 2920	ug/Kg		12/30/2019 19:41
1,3-Dichlorobenzene	< 2920	ug/Kg		12/30/2019 19:41
1,4-Dichlorobenzene	< 2920	ug/Kg		12/30/2019 19:41
2,2-0xybis (1-chloropropane)	< 2920	ug/Kg		12/30/2019 19:41
2,3,4,6-Tetrachlorophenol	< 2920	ug/Kg		12/30/2019 19:41
2,4,5-Trichlorophenol	< 2920	ug/Kg		12/30/2019 19:41
2,4,6-Trichlorophenol	< 2920	ug/Kg		12/30/2019 19:41
2,4-Dichlorophenol	< 2920	ug/Kg		12/30/2019 19:41
2,4-Dimethylphenol	< 2920	ug/Kg		12/30/2019 19:41
2,4-Dinitrophenol	< 11700	ug/Kg		12/30/2019 19:41
2,4-Dinitrotoluene	< 2920	ug/Kg		12/30/2019 19:41
2,6-Dinitrotoluene	< 2920	ug/Kg		12/30/2019 19:41
2-Chloronaphthalene	< 2920	ug/Kg		12/30/2019 19:41
2-Chlorophenol	< 2920	ug/Kg		12/30/2019 19:41
2-Methylnapthalene	< 2920	ug/Kg		12/30/2019 19:41
2-Methylphenol	< 2920	ug/Kg		12/30/2019 19:41
2-Nitroaniline	< 2920	ug/Kg		12/30/2019 19:41
2-Nitrophenol	< 2920	ug/Kg		12/30/2019 19:41
3&4-Methylphenol	< 2920	ug/Kg		12/30/2019 19:41
3,3'-Dichlorobenzidine	< 2920	ug/Kg		12/30/2019 19:41



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	la			
Sample Identifier:	BH-11, 1-4 F	't			
Lab Sample ID:	196293-12			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 2920	ug/Kg		12/30/2019 19:41
4,6-Dinitro-2-methylp	henol	< 5840	ug/Kg		12/30/2019 19:41
4-Bromophenyl pheny	vl ether	< 2920	ug/Kg		12/30/2019 19:41
4-Chloro-3-methylphe	enol	< 2920	ug/Kg		12/30/2019 19:41
4-Chloroaniline		< 2920	ug/Kg		12/30/2019 19:41
4-Chlorophenyl pheny	rl ether	< 2920	ug/Kg		12/30/2019 19:41
4-Nitroaniline		< 2920	ug/Kg		12/30/2019 19:41
4-Nitrophenol		< 2920	ug/Kg		12/30/2019 19:41
Acenaphthene		1920	ug/Kg	J	12/30/2019 19:41
Acenaphthylene		< 2920	ug/Kg		12/30/2019 19:41
Acetophenone		< 2920	ug/Kg		12/30/2019 19:41
Anthracene		8250	ug/Kg		12/30/2019 19:41
Atrazine		< 2920	ug/Kg		12/30/2019 19:41
Benzaldehyde		< 2920	ug/Kg		12/30/2019 19:41
Benzo (a) anthracene		27900	ug/Kg		12/30/2019 19:41
Benzo (a) pyrene		23300	ug/Kg		12/30/2019 19:41
Benzo (b) fluoranthen	e	25700	ug/Kg		12/30/2019 19:41
Benzo (g,h,i) perylene		13400	ug/Kg		12/30/2019 19:41
Benzo (k) fluoranthen	e	13400	ug/Kg		12/30/2019 19:41
Bis (2-chloroethoxy) n	nethane	< 2920	ug/Kg		12/30/2019 19:41
Bis (2-chloroethyl) eth	ner	< 2920	ug/Kg		12/30/2019 19:41
Bis (2-ethylhexyl) phtl	halate	< 2920	ug/Kg		12/30/2019 19:41
Butylbenzylphthalate		< 2920	ug/Kg		12/30/2019 19:41
Caprolactam		< 2920	ug/Kg		12/30/2019 19:41
Carbazole		4050	ug/Kg		12/30/2019 19:41



Client:	<u>BE3</u>				
Project Reference:	57 Tonawan	da			
Sample Identifier:	BH-11, 1-4	Ft			
Lab Sample ID:	196293-12			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		23300	ug/Kg		12/30/2019 19:41
Dibenz (a,h) anthrace	ene	4600	ug/Kg		12/30/2019 19:41
Dibenzofuran		< 2920	ug/Kg		12/30/2019 19:41
Diethyl phthalate		< 2920	ug/Kg		12/30/2019 19:41
Dimethyl phthalate		< 2920	ug/Kg		12/30/2019 19:41
Di-n-butyl phthalate		< 2920	ug/Kg		12/30/2019 19:41
Di-n-octylphthalate		< 2920	ug/Kg		12/30/2019 19:41
Fluoranthene		58400	ug/Kg		12/30/2019 19:41
Fluorene		2210	ug/Kg	J	12/30/2019 19:41
Hexachlorobenzene		< 2920	ug/Kg		12/30/2019 19:41
Hexachlorobutadiene	9	< 2920	ug/Kg		12/30/2019 19:41
Hexachlorocyclopent	adiene	< 11700	ug/Kg		12/30/2019 19:41
Hexachloroethane		< 2920	ug/Kg		12/30/2019 19:41
Indeno (1,2,3-cd) pyr	rene	16700	ug/Kg		12/30/2019 19:41
Isophorone		< 2920	ug/Kg		12/30/2019 19:41
Naphthalene		< 2920	ug/Kg		12/30/2019 19:41
Nitrobenzene		< 2920	ug/Kg		12/30/2019 19:41
N-Nitroso-di-n-propy	ylamine	< 2920	ug/Kg		12/30/2019 19:41
N-Nitrosodiphenylan	nine	< 2920	ug/Kg		12/30/2019 19:41
Pentachlorophenol		< 5840	ug/Kg		12/30/2019 19:41
Phenanthrene		29600	ug/Kg		12/30/2019 19:41
Phenol		< 2920	ug/Kg		12/30/2019 19:41
Pyrene		41500	ug/Kg		12/30/2019 19:41



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-11, 1-4 Ft					
Lab Sample ID:	196293-12		Date	e Sampled:	12/19/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol	l	NC	35.1 - 89.5		12/30/2019	19:41
2-Fluorobiphenyl		NC	37.7 - 81.4		12/30/2019	19:41
2-Fluorophenol		NC	40.2 - 77		12/30/2019	19:41
Nitrobenzene-d5		NC	36.2 - 78.4		12/30/2019	19:41
Phenol-d5		NC	41.2 - 77.1		12/30/2019	19:41
Terphenyl-d14		NC	39.8 - 97.5		12/30/2019	19:41
Method Referen	EPA 3546					
Preparation Dat Data File:	te: 12/23/2019 B43417.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-11, 1-4 F 196293-12 Soil	t		Date Sampled: Date Received:	12/19/2019 12/20/2019
<u>Volatile Organics</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 4.27	ug/Kg		12/31/2019 16:34
1,1,2,2-Tetrachloroeth	ane	< 4.27	ug/Kg		12/31/2019 16:34
1,1,2-Trichloroethane		< 4.27	ug/Kg		12/31/2019 16:34
1,1-Dichloroethane		< 4.27	ug/Kg		12/31/2019 16:34
1,1-Dichloroethene		< 4.27	ug/Kg		12/31/2019 16:34
1,2,3-Trichlorobenzene	е	< 10.7	ug/Kg		12/31/2019 16:34
1,2,4-Trichlorobenzene	е	< 10.7	ug/Kg		12/31/2019 16:34
1,2,4-Trimethylbenzen	e	3.07	ug/Kg	J	12/31/2019 16:34
1,2-Dibromo-3-Chloro	propane	< 21.4	ug/Kg		12/31/2019 16:34
1,2-Dibromoethane		< 4.27	ug/Kg		12/31/2019 16:34
1,2-Dichlorobenzene		< 4.27	ug/Kg		12/31/2019 16:34
1,2-Dichloroethane		< 4.27	ug/Kg		12/31/2019 16:34
1,2-Dichloropropane		< 4.27	ug/Kg		12/31/2019 16:34
1,3,5-Trimethylbenzen	e	< 4.27	ug/Kg		12/31/2019 16:34
1,3-Dichlorobenzene		< 4.27	ug/Kg		12/31/2019 16:34
1,4-Dichlorobenzene		< 4.27	ug/Kg		12/31/2019 16:34
1,4-Dioxane		< 42.7	ug/Kg		12/31/2019 16:34
2-Butanone		< 21.4	ug/Kg		12/31/2019 16:34
2-Hexanone		< 10.7	ug/Kg		12/31/2019 16:34
4-Methyl-2-pentanone		< 10.7	ug/Kg		12/31/2019 16:34
Acetone		15.1	ug/Kg	J	12/31/2019 16:34
Benzene		< 4.27	ug/Kg		12/31/2019 16:34
Bromochloromethane		< 10.7	ug/Kg		12/31/2019 16:34



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-11, 1-4 Ft	-			
Lab Sample ID:	196293-12			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Bromodichloromethan	9	< 4.27	ug/Kg		12/31/2019 16:34
Bromoform		< 10.7	ug/Kg		12/31/2019 16:34
Bromomethane		< 4.27	ug/Kg		12/31/2019 16:34
Carbon disulfide		2.32	ug/Kg	J	12/31/2019 16:34
Carbon Tetrachloride		< 4.27	ug/Kg		12/31/2019 16:34
Chlorobenzene		< 4.27	ug/Kg		12/31/2019 16:34
Chloroethane		< 4.27	ug/Kg		12/31/2019 16:34
Chloroform		< 4.27	ug/Kg		12/31/2019 16:34
Chloromethane		< 4.27	ug/Kg		12/31/2019 16:34
cis-1,2-Dichloroethene		< 4.27	ug/Kg		12/31/2019 16:34
cis-1,3-Dichloropropen	e	< 4.27	ug/Kg		12/31/2019 16:34
Cyclohexane		< 21.4	ug/Kg		12/31/2019 16:34
Dibromochloromethan	е	< 4.27	ug/Kg		12/31/2019 16:34
Dichlorodifluorometha	ne	< 4.27	ug/Kg		12/31/2019 16:34
Ethylbenzene		< 4.27	ug/Kg		12/31/2019 16:34
Freon 113		< 4.27	ug/Kg		12/31/2019 16:34
Isopropylbenzene		< 4.27	ug/Kg		12/31/2019 16:34
m,p-Xylene		3.18	ug/Kg	J	12/31/2019 16:34
Methyl acetate		< 4.27	ug/Kg		12/31/2019 16:34
Methyl tert-butyl Ether		< 4.27	ug/Kg		12/31/2019 16:34
Methylcyclohexane		10.7	ug/Kg		12/31/2019 16:34
Methylene chloride		< 10.7	ug/Kg		12/31/2019 16:34
Naphthalene		< 10.7	ug/Kg		12/31/2019 16:34
n-Butylbenzene		< 4.27	ug/Kg		12/31/2019 16:34
n-Propylbenzene		< 4.27	ug/Kg		12/31/2019 16:34



57 Tonawanda	a					
BH-11, 1-4 F	t					
196293-12			Dat	te Sampled:	12/19/2019	9
Soil			Dat	te Received:	12/20/2019	Ð
	< 4.27	ug/Kg			12/31/2019	16:34
	< 4.27	ug/Kg			12/31/2019	16:34
	< 4.27	ug/Kg			12/31/2019	16:34
	< 10.7	ug/Kg			12/31/2019	16:34
	< 4.27	ug/Kg			12/31/2019	16:34
	< 4.27	ug/Kg			12/31/2019	16:34
	< 4.27	ug/Kg			12/31/2019	16:34
ie	5.39	ug/Kg			12/31/2019	16:34
ene	< 4.27	ug/Kg			12/31/2019	16:34
	< 4.27	ug/Kg			12/31/2019	16:34
<u>)</u>	< 4.27	ug/Kg			12/31/2019	16:34
	< 4.27	ug/Kg			12/31/2019	16:34
	Pe	rcent Recovery	Limits	Outliers	Date Analy	zed
		114	67.9 - 146		12/31/2019	16:34
		80.6	64.6 • 127		12/31/2019	16:34
		92.0	85.5 · 113		12/31/2019	16:34
		100	83.9 - 114		12/31/2019	16:34
	BH-11, 1-4 F 196293-12 Soil	Soil < 4.27 < 4.27	BH-11, 1-4 Ft 196293-12 Soil < 4.27	BH-11, 1-4 Ft Date 196293-12 Date Soil Date Soil Date < 4.27	BH-11, 1-4 Ft Date Sampled: 196293-12 Date Received: Soil Var(Kg) <4.27	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

ata Filo.

EPA 5035A - L

Data File:

x67560.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-11, 1-4 Ft		
Lab Sample ID:	196293-12	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

Total Cyanide

<u>Analyte</u>	Result	<u>Units</u>	Qua	alifier	Date Analyzed
Cyanide, Total	< 0.524	mg/Kg		1	2/30/2019
Method Reference(s):	EPA 9014				
	EPA 9010C				
Preparation Date:	12/27/2019				



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	1			
Sample Identifier:	BH-11, 1-4 Ft	;			
Lab Sample ID:	196293-12			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		90.0	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:		<u>BE3</u>				
Project Re	ference:	57 Tonawanda				
Sample I	dentifier:	BH-11, 1-4 Ft				
Lab Samp	ple ID:	196293-12			Date Sampled:	12/19/2019
Matrix:		Soil			Date Received:	12/20/2019
Dioxa	ne					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dio	xane	<	146	ug/Kg		1/2/2020 14:49
	Reporting limit elev	ated due to sample matrix	ĸ			
	Method Reference		SIM			
	Preparation Date:	EPA 3546 12/23/2019	1			
	Data File:	B43493.D	•			



Client:	<u>BE3</u>				
Project Reference:	57 Tor	nawanda			
Sample Identifier:	BH-1	1 Native, 6-8 Ft			
Lab Sample ID:	1962	93-13		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		5.15	mg/Kg		12/27/2019 15:19
Barium		132	mg/Kg		12/27/2019 15:19
Beryllium		0.972	mg/Kg		12/27/2019 15:19
Cadmium		1.60	mg/Kg		12/27/2019 15:19
Chromium		26.9	mg/Kg		12/27/2019 15:19
Copper		21.6	mg/Kg		12/27/2019 15:19
Lead		9.70	mg/Kg		12/27/2019 15:19
Manganese		555	mg/Kg		12/27/2019 15:19
Nickel		31.5	mg/Kg		12/27/2019 15:19
Selenium		0.994	mg/Kg	J	12/27/2019 15:19
Silver		0.727	mg/Kg		12/27/2019 15:19
Zinc		83.6	mg/Kg		1/2/2020 09:49
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 12/26/2019 191227C			



Data File:

Hg191226B

Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tona	awanda			
Sample Identifier:	BH-11	Native, 6-8 Ft			
Lab Sample ID:	19629	3-13		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.0178	mg/Kg		12/26/2019 12:14
Method Refere Preparation D		EPA 7471B 12/24/2019			



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	vanda					
Sample Identifier:	BH-11 N	ative, 6-8 Ft					
Lab Sample ID:	196293-	13		Dat	e Sampled:	12/19/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1221		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1232		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1242		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1248		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1254		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1260		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1262		< 0.0277	mg/Kg			12/26/2019	19:47
PCB-1268		< 0.0277	mg/Kg			12/26/2019	19:47
Surrogate		Perc	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			65.9	18.3 - 89.6		12/26/2019	19:47
Method Referen		PA 8082A					
Preparation Da		PA 3546 2/23/2019					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier: Lab Sample ID: Matrix:	BH-11 Native, 196293-13 Soil	6-8 Ft		Date Sampled: Date Received:	12/19/2019 12/20/2019
Chlorinated Pesti	<u>cides</u>				
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD	<	< 2.77	ug/Kg		12/26/2019 18:59
4,4-DDE	~	< 2.77	ug/Kg		12/26/2019 18:59
4,4-DDT	•	< 2.77	ug/Kg		12/26/2019 18:59
Aldrin	< 1	< 2.77	ug/Kg		12/26/2019 18:59
alpha-BHC	c	< 2.77	ug/Kg		12/26/2019 18:59
beta-BHC	< 1	< 2.77	ug/Kg		12/26/2019 18:59
cis-Chlordane	<	< 2.77	ug/Kg		12/26/2019 18:59
delta-BHC	~	< 2.77	ug/Kg		12/26/2019 18:59
Dieldrin	~	< 2.77	ug/Kg		12/26/2019 18:59
Endosulfan I	~	< 2.77	ug/Kg		12/26/2019 18:59
Endosulfan II	~	< 2.77	ug/Kg		12/26/2019 18:59
Endosulfan Sulfate	~	< 2.77	ug/Kg		12/26/2019 18:59
Endrin	~	< 2.77	ug/Kg		12/26/2019 18:59
Endrin Aldehyde	<	< 2.77	ug/Kg		12/26/2019 18:59
Endrin Ketone	<	< 2.77	ug/Kg		12/26/2019 18:59
gamma-BHC (Lindane) <	< 2.77	ug/Kg		12/26/2019 18:59
Heptachlor	<	< 2.77	ug/Kg		12/26/2019 18:59
Heptachlor Epoxide	~	< 2.77	ug/Kg		12/26/2019 18:59
Methoxychlor	~	< 2.77	ug/Kg		12/26/2019 18:59
Toxaphene	~	< 27.7	ug/Kg		12/26/2019 18:59
trans-Chlordane	~	< 2.77	ug/Kg		12/26/2019 18:59



Client:	<u>BE3</u>						
Project Reference:	57 Tonawano	da					
Sample Identifier:	BH-11 Nativ	7e, 6-8 Ft					
Lab Sample ID:	196293-13			Date	e Sampled:	12/19/2019	9
Matrix:	Soil			Date	e Received:	12/20/2019	9
<u>Surrogate</u>		Per	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)		28.8	30.7 - 111	*	12/26/2019	18:59
Tetrachloro-m-xylene	(1)		66.1	34.7 - 87.3		12/26/2019	18:59
Method Referen	EPA 35	46					
Preparation Dat	ie: 12/23/	2019					



Client:	BE3		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-11 Native, 6-8 Ft		
Lab Sample ID:	196293-13	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 337	ug/Kg		12/25/2019 05:50
1,2,4,5-Tetrachlorobenzene	< 337	ug/Kg		12/25/2019 05:50
1,2,4-Trichlorobenzene	< 337	ug/Kg		12/25/2019 05:50
1,2-Dichlorobenzene	< 337	ug/Kg		12/25/2019 05:50
1,3-Dichlorobenzene	< 337	ug/Kg		12/25/2019 05:50
1,4-Dichlorobenzene	< 337	ug/Kg		12/25/2019 05:50
2,2-Oxybis (1-chloropropane)	< 337	ug/Kg		12/25/2019 05:50
2,3,4,6-Tetrachlorophenol	< 337	ug/Kg		12/25/2019 05:50
2,4,5-Trichlorophenol	< 337	ug/Kg		12/25/2019 05:50
2,4,6-Trichlorophenol	< 337	ug/Kg		12/25/2019 05:50
2,4-Dichlorophenol	< 337	ug/Kg		12/25/2019 05:50
2,4-Dimethylphenol	< 337	ug/Kg		12/25/2019 05:50
2,4-Dinitrophenol	< 1350	ug/Kg		12/25/2019 05:50
2,4-Dinitrotoluene	< 337	ug/Kg		12/25/2019 05:50
2,6-Dinitrotoluene	< 337	ug/Kg		12/25/2019 05:50
2-Chloronaphthalene	< 337	ug/Kg		12/25/2019 05:50
2-Chlorophenol	< 337	ug/Kg		12/25/2019 05:50
2-Methylnapthalene	< 337	ug/Kg		12/25/2019 05:50
2-Methylphenol	< 337	ug/Kg		12/25/2019 05:50
2-Nitroaniline	< 337	ug/Kg		12/25/2019 05:50
2-Nitrophenol	< 337	ug/Kg		12/25/2019 05:50
3&4-Methylphenol	< 337	ug/Kg		12/25/2019 05:50
3,3'-Dichlorobenzidine	< 337	ug/Kg		12/25/2019 05:50



Client:	<u>BE3</u>				
Project Reference:	57 Tonawa	anda			
Sample Identifier:	BH-11 Na	ative, 6-8 Ft			
Lab Sample ID:	196293-2	13		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
3-Nitroaniline		< 337	ug/Kg		12/25/2019 05:50
4,6-Dinitro-2-methylp	ohenol	< 675	ug/Kg		12/25/2019 05:50
4-Bromophenyl pheny	yl ether	< 337	ug/Kg		12/25/2019 05:50
4-Chloro-3-methylph	enol	< 337	ug/Kg		12/25/2019 05:50
4-Chloroaniline		< 337	ug/Kg		12/25/2019 05:50
4-Chlorophenyl pheny	yl ether	< 337	ug/Kg		12/25/2019 05:50
4-Nitroaniline		< 337	ug/Kg		12/25/2019 05:50
4-Nitrophenol		< 337	ug/Kg		12/25/2019 05:50
Acenaphthene		< 337	ug/Kg		12/25/2019 05:50
Acenaphthylene		< 337	ug/Kg		12/25/2019 05:50
Acetophenone		< 337	ug/Kg		12/25/2019 05:50
Anthracene		718	ug/Kg		12/25/2019 05:50
Atrazine		< 337	ug/Kg		12/25/2019 05:50
Benzaldehyde		< 337	ug/Kg		12/25/2019 05:50
Benzo (a) anthracene		3340	ug/Kg		12/25/2019 05:50
Benzo (a) pyrene		2840	ug/Kg		12/25/2019 05:50
Benzo (b) fluoranther	ie	2940	ug/Kg		12/25/2019 05:50
Benzo (g,h,i) perylene	2	1980	ug/Kg		12/25/2019 05:50
Benzo (k) fluoranther	ie	1830	ug/Kg		12/25/2019 05:50
Bis (2-chloroethoxy)	methane	< 337	ug/Kg		12/25/2019 05:50
Bis (2-chloroethyl) et	her	< 337	ug/Kg		12/25/2019 05:50
Bis (2-ethylhexyl) pht	halate	483	ug/Kg		12/25/2019 05:50
Butylbenzylphthalate		< 337	ug/Kg		12/25/2019 05:50
Caprolactam		< 337	ug/Kg		12/25/2019 05:50
Carbazole		215	ug/Kg	J	12/25/2019 05:50
				-	



Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	BH-11 Native	e, 6-8 Ft				
Lab Sample ID:	196293-13			Date Sampled:	12/19/2019)
Matrix:	Soil			Date Received:	12/20/2019	}
Chrysene		2700	ug/Kg		12/25/2019	05:50
Dibenz (a,h) anthracer	ıe	609	ug/Kg		12/25/2019	05:50
Dibenzofuran		< 337	ug/Kg		12/25/2019	05:50
Diethyl phthalate		< 337	ug/Kg		12/25/2019	05:50
Dimethyl phthalate		< 337	ug/Kg		12/25/2019	05:50
Di-n-butyl phthalate		< 337	ug/Kg		12/25/2019	05:50
Di-n-octylphthalate		< 337	ug/Kg		12/25/2019	05:50
Fluoranthene		7170	ug/Kg		12/25/2019	05:50
Fluorene		< 337	ug/Kg		12/25/2019	05:50
Hexachlorobenzene		< 337	ug/Kg		12/25/2019	05:50
Hexachlorobutadiene		< 337	ug/Kg		12/25/2019	05:50
Hexachlorocyclopenta	diene	< 1350	ug/Kg		12/25/2019	05:50
Hexachloroethane		< 337	ug/Kg		12/25/2019	05:50
Indeno (1,2,3-cd) pyre	ene	2640	ug/Kg		12/25/2019	05:50
Isophorone		< 337	ug/Kg		12/25/2019	05:50
Naphthalene		< 337	ug/Kg		12/25/2019	05:50
Nitrobenzene		< 337	ug/Kg		12/25/2019	05:50
N-Nitroso-di-n-propyl	amine	< 337	ug/Kg		12/25/2019	05:50
N-Nitrosodiphenylami	ine	< 337	ug/Kg		12/25/2019	05:50
Pentachlorophenol		< 675	ug/Kg		12/25/2019	05:50
Phenanthrene		3240	ug/Kg		12/25/2019	05:50
Phenol		< 337	ug/Kg		12/25/2019	05:50
Pyrene		4810	ug/Kg		12/25/2019	05:50



Client:	<u>BE3</u>						
Project Reference:	57 To	nawanda					
Sample Identifier:	BH-1	1 Native, 6-8	3 Ft				
Lab Sample ID:	1962	293-13		Dat	e Sampled:	12/19/201	9
Matrix:	Soil			Dat	e Received:	12/20/201	9
<u>Surrogate</u>			Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromopheno	1		68.7	35.1 - 89.5		12/25/2019	05:50
2-Fluorobiphenyl			68.0	37.7 - 81.4		12/25/2019	05:50
2-Fluorophenol			67.0	40.2 - 77		12/25/2019	05:50
Nitrobenzene-d5			63.0	36.2 - 78.4		12/25/2019	05:50
Phenol-d5			63.6	41.2 - 77.1		12/25/2019	05:50
Terphenyl-d14			66.2	39.8 - 97.5		12/25/2019	05:50
Method Referen	nce(s):	EPA 8270D EPA 3546					
Preparation Da Data File:	ite:	12/23/2019 B43337.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID: Matrix:	BH-11 Nativo 196293-13 Soil	e, 6-8 Ft		Date Sampled: Date Received:	12/19/2019 12/20/2019
Volatile Organics					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 4.85	ug/Kg		12/31/2019 16:57
1,1,2,2-Tetrachloroeth	ane	< 4.85	ug/Kg		12/31/2019 16:57
1,1,2-Trichloroethane		< 4.85	ug/Kg		12/31/2019 16:57
1,1-Dichloroethane		< 4.85	ug/Kg		12/31/2019 16:57
1,1-Dichloroethene		< 4.85	ug/Kg		12/31/2019 16:57
1,2,3-Trichlorobenzen	e	< 12.1	ug/Kg		12/31/2019 16:57
1,2,4-Trichlorobenzen	e	< 12.1	ug/Kg		12/31/2019 16:57
1,2,4-Trimethylbenzen	ie	< 4.85	ug/Kg		12/31/2019 16:57
1,2-Dibromo-3-Chloro	propane	< 24.3	ug/Kg		12/31/2019 16:57
1,2-Dibromoethane		< 4.85	ug/Kg		12/31/2019 16:57
1,2-Dichlorobenzene		< 4.85	ug/Kg		12/31/2019 16:57
1,2-Dichloroethane		< 4.85	ug/Kg		12/31/2019 16:57
1,2-Dichloropropane		< 4.85	ug/Kg		12/31/2019 16:57
1,3,5-Trimethylbenzen	ie	< 4.85	ug/Kg		12/31/2019 16:57
1,3-Dichlorobenzene		< 4.85	ug/Kg		12/31/2019 16:57
1,4-Dichlorobenzene		< 4.85	ug/Kg		12/31/2019 16:57
1,4-Dioxane		< 48.5	ug/Kg		12/31/2019 16:57
2-Butanone		< 24.3	ug/Kg		12/31/2019 16:57
2-Hexanone		< 12.1	ug/Kg		12/31/2019 16:57
4-Methyl-2-pentanone	!	< 12.1	ug/Kg		12/31/2019 16:57
Acetone		< 24.3	ug/Kg		12/31/2019 16:57
Benzene		< 4.85	ug/Kg		12/31/2019 16:57
Bromochloromethane		< 12.1	ug/Kg		12/31/2019 16:57



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	1			
Sample Identifier:	BH-11 Native	e, 6-8 Ft			
Lab Sample ID:	196293-13			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Bromodichloromethar	ıe	< 4.85	ug/Kg		12/31/2019 16:57
Bromoform		< 12.1	ug/Kg		12/31/2019 16:57
Bromomethane		< 4.85	ug/Kg		12/31/2019 16:57
Carbon disulfide		< 4.85	ug/Kg		12/31/2019 16:57
Carbon Tetrachloride		< 4.85	ug/Kg		12/31/2019 16:57
Chlorobenzene		< 4.85	ug/Kg		12/31/2019 16:57
Chloroethane		< 4.85	ug/Kg		12/31/2019 16:57
Chloroform		< 4.85	ug/Kg		12/31/2019 16:57
Chloromethane		< 4.85	ug/Kg		12/31/2019 16:57
cis-1,2-Dichloroethene	9	< 4.85	ug/Kg		12/31/2019 16:57
cis-1,3-Dichloroprope	ne	< 4.85	ug/Kg		12/31/2019 16:57
Cyclohexane		< 24.3	ug/Kg		12/31/2019 16:57
Dibromochloromethar	ne	< 4.85	ug/Kg		12/31/2019 16:57
Dichlorodifluorometha	ane	< 4.85	ug/Kg		12/31/2019 16:57
Ethylbenzene		< 4.85	ug/Kg		12/31/2019 16:57
Freon 113		< 4.85	ug/Kg		12/31/2019 16:57
Isopropylbenzene		< 4.85	ug/Kg		12/31/2019 16:57
m,p-Xylene		< 4.85	ug/Kg		12/31/2019 16:57
Methyl acetate		< 4.85	ug/Kg		12/31/2019 16:57
Methyl tert-butyl Ethe	r	< 4.85	ug/Kg		12/31/2019 16:57
Methylcyclohexane		< 4.85	ug/Kg		12/31/2019 16:57
Methylene chloride		< 12.1	ug/Kg		12/31/2019 16:57
Naphthalene		< 12.1	ug/Kg		12/31/2019 16:57
n-Butylbenzene		< 4.85	ug/Kg		12/31/2019 16:57
n-Propylbenzene		< 4.85	ug/Kg		12/31/2019 16:57



Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	vanda					
Sample Identifier:	BH-11 N	ative, 6-8 Ft					
Lab Sample ID:	196293-	13		Dat	e Sampled:	12/19/201	9
Matrix:	Soil			Dat	e Received:	12/20/201	9
o-Xylene		< 4.85	ug/Kg			12/31/2019	16:57
p-Isopropyltoluene		< 4.85	ug/Kg			12/31/2019	16:57
sec-Butylbenzene		< 4.85	ug/Kg			12/31/2019	16:57
Styrene		< 12.1	ug/Kg			12/31/2019	16:57
tert-Butylbenzene		< 4.85	ug/Kg			12/31/2019	16:57
Tetrachloroethene		< 4.85	ug/Kg			12/31/2019	16:57
Toluene		< 4.85	ug/Kg			12/31/2019	16:57
trans-1,2-Dichloroeth	iene	< 4.85	ug/Kg			12/31/2019	16:57
trans-1,3-Dichloropro	opene	< 4.85	ug/Kg			12/31/2019	16:57
Trichloroethene		< 4.85	ug/Kg			12/31/2019	16:57
Trichlorofluorometha	ane	< 4.85	ug/Kg			12/31/2019	16:57
Vinyl chloride		< 4.85	ug/Kg			12/31/2019	16:57
Surrogate		Per	<u>cent Recovery</u>	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d	4		120	67.9 - 146		12/31/2019	16:57
4-Bromofluorobenzer	ne		76.6	64.6 - 127		12/31/2019	16:57
Pentafluorobenzene			93.5	85.5 - 113		12/31/2019	16:57
Toluene-D8			88.8	83.9 - 114		12/31/2019	16:57
Method Referen		PA 8260C PA 5035A - L					

Data File:

EPA 5035A x67561.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-11 Native, 6-8 Ft		
Lab Sample ID:	196293-13	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qu	alifier	Date Analyzed
Cyanide, Total	< 0.581	mg/Kg			12/30/2019
Method Reference(s):	EPA 9014				
	EPA 9010C				
Preparation Date:	12/27/2019				



<u>BE3</u>			
57 Tonawanda			
BH-11 Native, 6-8 Ft			
196293-13		Date Sampled:	12/19/2019
Soil		Date Received:	12/20/2019
Result	<u>Units</u>	Qualifier	Date Analyzed
82.8	%		12/24/2019
	57 Tonawanda BH-11 Native, 6-8 Ft 196293-13 Soil Result	57 Tonawanda BH-11 Native, 6-8 Ft 196293-13 Soil <u>Result Units</u>	57 Tonawanda BH-11 Native, 6-8 Ft 196293-13 Date Sampled: Soil Date Received: Network Contemporation of the second

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	<u>BE3</u>				
Project Reference:	57 Tona	wanda			
Sample Identifier:	BH-11	Native, 6-8 Ft			
Lab Sample ID:	196293	3-13		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Dioxane</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxane		< 33.7	ug/Kg		1/2/2020 15:00
Method Refe	rence(s):	EPA 8270D SIM			
Preparation Data File:	Date:	EPA 3546 12/23/2019 B43494.D			



Client:	BE3				
Project Reference:	57 Tona	wanda			
Sample Identifier:	BH-12,	1-2 Ft			
Lab Sample ID:	196293	3-14		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Metals</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		5.17	mg/Kg		12/27/2019 15:23
Barium		130	mg/Kg		12/27/2019 15:23
Beryllium		1.61	mg/Kg		12/27/2019 15:23
Cadmium		3.01	mg/Kg		12/27/2019 15:23
Chromium		63.0	mg/Kg		12/27/2019 15:23
Copper		179	mg/Kg		12/27/2019 15:23
Lead		863	mg/Kg		12/27/2019 15:23
Manganese		8640	mg/Kg		1/2/2020 09:53
Nickel		12.0	mg/Kg		12/27/2019 15:23
Selenium		< 1.06	mg/Kg		12/27/2019 15:23
Silver		3.22	mg/Kg		12/27/2019 15:23
Zinc		4240	mg/Kg		1/2/2020 09:53
Method Refere		EPA 6010C EPA 3050B			
Preparation Da Data File:	ite:	12/26/2019 191227C			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-12, 1-2 Ft				
Lab Sample ID:	196293-14			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
<u>Mercury</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury		0.239	mg/Kg	М	12/26/2019 12:16

 Method Reference(s):
 EPA 7471B

 Preparation Date:
 12/24/2019

 Data File:
 Hg191226B



Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda						
Sample Identifier:	BH-12, 1-2 Ft						
Lab Sample ID:	196293-14			Dat	e Sampled:	12/19/2019	9
Matrix:	Soil			Dat	e Received:	12/20/2019	9
<u>PCBs</u>							
<u>Analyte</u>	J	<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016	< ().0281	mg/Kg			12/27/2019	14:49
PCB-1221	< ().0281	mg/Kg			12/27/2019	14:49
PCB-1232	< ().0281	mg/Kg			12/27/2019	14:49
PCB-1242	< ().0281	mg/Kg			12/27/2019	14:49
PCB-1248	< ().0281	mg/Kg			12/27/2019	14:49
PCB-1254	0.0	0486	mg/Kg			12/27/2019	14:49
PCB-1260	< ().0281	mg/Kg			12/27/2019	14:49
PCB-1262	< ().0281	mg/Kg			12/27/2019	14:49
PCB-1268	< ().0281	mg/Kg			12/27/2019	14:49
<u>Surrogate</u>		Pero	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			46.5	18.3 - 89.6		12/27/2019	14:49
Method Reference Preparation Date	EPA 3546						



12/26/2019 19:18

12/26/2019 19:18

12/26/2019 19:18

12/26/2019 19:18

JP

Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID:	BH-12, 1-2 F 196293-14	t		Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Chlorinated Pest	<u>icides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 2.81	ug/Kg		12/26/2019 19:18
4,4-DDE		1.50	ug/Kg	JP	12/26/2019 19:18
4,4-DDT		7.01	ug/Kg		12/26/2019 19:18
Aldrin		< 2.81	ug/Kg		12/26/2019 19:18
alpha-BHC		< 2.81	ug/Kg		12/26/2019 19:18
beta-BHC		< 2.81	ug/Kg		12/26/2019 19:18
cis-Chlordane		< 2.81	ug/Kg		12/26/2019 19:18
delta-BHC		< 2.81	ug/Kg		12/26/2019 19:18
Dieldrin		< 2.81	ug/Kg		12/26/2019 19:18
Endosulfan I		1.60	ug/Kg	JP	12/26/2019 19:18
Endosulfan II		2.61	ug/Kg	JP	12/26/2019 19:18
Endosulfan Sulfate		< 2.81	ug/Kg		12/26/2019 19:18
Endrin		< 2.81	ug/Kg		12/26/2019 19:18
Endrin Aldehyde		< 2.81	ug/Kg		12/26/2019 19:18
Endrin Ketone		3.12	ug/Kg	Р	12/26/2019 19:18
gamma-BHC (Lindand	e)	< 2.81	ug/Kg		12/26/2019 19:18
Heptachlor		< 2.81	ug/Kg		12/26/2019 19:18

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

ug/Kg

ug/Kg

ug/Kg

ug/Kg

< 2.81

5.73

< 28.1

1.88

Heptachlor Epoxide

Methoxychlor

trans-Chlordane

Toxaphene



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-12, 1-2 Ft					
Lab Sample ID: 196293-14			Date	e Sampled:	12/19/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
<u>Surrogate</u>		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1)		27.2	30.7 - 111	*	12/26/2019	19:18
Tetrachloro-m-xylene (1)		42.4	34.7 - 87.3		12/26/2019	19:18
Method Referen Preparation Dat	EPA 3546					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-12, 1-2 Ft		
Lab Sample ID:	196293-14	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analy	zed
1,1-Biphenyl	< 283	ug/Kg		12/25/2019	06:19
1,2,4,5-Tetrachlorobenzene	< 283	ug/Kg		12/25/2019	06:19
1,2,4-Trichlorobenzene	< 283	ug/Kg		12/25/2019	06:19
1,2-Dichlorobenzene	< 283	ug/Kg		12/25/2019	06:19
1,3-Dichlorobenzene	< 283	ug/Kg		12/25/2019	06:19
1,4-Dichlorobenzene	< 283	ug/Kg		12/25/2019	06:19
2,2-0xybis (1-chloropropane)	< 283	ug/Kg		12/25/2019	06:19
2,3,4,6-Tetrachlorophenol	< 283	ug/Kg		12/25/2019	06:19
2,4,5-Trichlorophenol	< 283	ug/Kg		12/25/2019	06:19
2,4,6-Trichlorophenol	< 283	ug/Kg		12/25/2019	06:19
2,4-Dichlorophenol	< 283	ug/Kg		12/25/2019	06:19
2,4-Dimethylphenol	< 283	ug/Kg		12/25/2019	06:19
2,4-Dinitrophenol	< 1130	ug/Kg		12/25/2019	06:19
2,4-Dinitrotoluene	< 283	ug/Kg		12/25/2019	06:19
2,6-Dinitrotoluene	< 283	ug/Kg		12/25/2019	06:19
2-Chloronaphthalene	< 283	ug/Kg		12/25/2019	06:19
2-Chlorophenol	< 283	ug/Kg		12/25/2019	06:19
2-Methylnapthalene	< 283	ug/Kg		12/25/2019	06:19
2-Methylphenol	< 283	ug/Kg		12/25/2019	06:19
2-Nitroaniline	< 283	ug/Kg		12/25/2019	06:19
2-Nitrophenol	< 283	ug/Kg		12/25/2019	06:19
3&4-Methylphenol	< 283	ug/Kg		12/25/2019	06:19
3,3'-Dichlorobenzidine	< 283	ug/Kg		12/25/2019	06:19



Lab Project ID: 196293

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	BH-12, 1-2 F	t				
Lab Sample ID:	196293-14			Date Sampled:	12/19/2019)
Matrix:	Soil			Date Received:	12/20/2019)
3-Nitroaniline		< 283	ug/Kg		12/25/2019	06:19
4,6-Dinitro-2-methylpl	henol	< 567	ug/Kg		12/25/2019	06:19
4-Bromophenyl pheny	l ether	< 283	ug/Kg		12/25/2019	06:19
4-Chloro-3-methylphe	nol	< 283	ug/Kg		12/25/2019	06:19
4-Chloroaniline		< 283	ug/Kg		12/25/2019	06:19
4-Chlorophenyl phenyl	l ether	< 283	ug/Kg		12/25/2019	06:19
4-Nitroaniline		< 283	ug/Kg		12/25/2019	06:19
4-Nitrophenol		< 283	ug/Kg		12/25/2019	06:19
Acenaphthene		< 283	ug/Kg		12/25/2019	06:19
Acenaphthylene		< 283	ug/Kg		12/25/2019	06:19
Acetophenone		< 283	ug/Kg		12/25/2019	06:19
Anthracene		550	ug/Kg		12/25/2019	06:19
Atrazine		< 283	ug/Kg		12/25/2019	06:19
Benzaldehyde		< 283	ug/Kg		12/25/2019	06:19
Benzo (a) anthracene		2670	ug/Kg		12/25/2019	06:19
Benzo (a) pyrene		2420	ug/Kg		12/25/2019	06:19
Benzo (b) fluoranthene	9	2590	ug/Kg		12/25/2019	06:19
Benzo (g,h,i) perylene		1610	ug/Kg		12/25/2019	06:19
Benzo (k) fluoranthene	e	1480	ug/Kg		12/25/2019	06:19
Bis (2-chloroethoxy) m	nethane	< 283	ug/Kg		12/25/2019	06:19
Bis (2-chloroethyl) eth	er	< 283	ug/Kg		12/25/2019	06:19
Bis (2-ethylhexyl) phth	nalate	378	ug/Kg		12/25/2019	06:19
Butylbenzylphthalate		< 283	ug/Kg		12/25/2019	06:19
Caprolactam		< 283	ug/Kg		12/25/2019	06:19
Carbazole		188	ug/Kg	J	12/25/2019	06:19



Client:	<u>BE3</u>				
Project Reference:	57 Tonawar	ıda			
Sample Identifier: Lab Sample ID:	BH-12, 1-2 196293-14			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Chrysene		2220	ug/Kg		12/25/2019 06:19
Dibenz (a,h) anthrace	ene	428	ug/Kg		12/25/2019 06:19
Dibenzofuran		< 283	ug/Kg		12/25/2019 06:19
Diethyl phthalate		< 283	ug/Kg		12/25/2019 06:19
Dimethyl phthalate		< 283	ug/Kg		12/25/2019 06:19
Di-n-butyl phthalate		< 283	ug/Kg		12/25/2019 06:19
Di-n-octylphthalate		< 283	ug/Kg		12/25/2019 06:19
Fluoranthene		5560	ug/Kg		12/25/2019 06:19
Fluorene		< 283	ug/Kg		12/25/2019 06:19
Hexachlorobenzene		< 283	ug/Kg		12/25/2019 06:19
Hexachlorobutadiene	2	< 283	ug/Kg		12/25/2019 06:19
Hexachlorocyclopent	adiene	< 1130	ug/Kg		12/25/2019 06:19
Hexachloroethane		< 283	ug/Kg		12/25/2019 06:19
Indeno (1,2,3-cd) pyr	rene	2140	ug/Kg		12/25/2019 06:19
Isophorone		< 283	ug/Kg		12/25/2019 06:19
Naphthalene		< 283	ug/Kg		12/25/2019 06:19
Nitrobenzene		< 283	ug/Kg		12/25/2019 06:19
N-Nitroso-di-n-propy	ylamine	< 283	ug/Kg		12/25/2019 06:19
N-Nitrosodiphenylan	nine	< 283	ug/Kg		12/25/2019 06:19
Pentachlorophenol		< 567	ug/Kg		12/25/2019 06:19
Phenanthrene		2390	ug/Kg		12/25/2019 06:19
Phenol		< 283	ug/Kg		12/25/2019 06:19
Pyrene		3750	ug/Kg		12/25/2019 06:19



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	BH-12, 1-2 Ft					
Lab Sample ID:	196293-14		Date	e Sampled:	12/19/2019	9
Matrix:	Soil		Date	e Received:	12/20/2019	9
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		62.9	35.1 - 89.5		12/25/2019	06:19
2-Fluorobiphenyl		63.8	37.7 - 81.4		12/25/2019	06:19
2-Fluorophenol		63.1	40.2 - 77		12/25/2019	06:19
Nitrobenzene-d5		57.2	36.2 - 78.4		12/25/2019	06:19
Phenol-d5		58.8	41.2 - 77.1		12/25/2019	06:19
Terphenyl-d14		61.2	39.8 - 97.5		12/25/2019	06:19
Method Referen Preparation Dat Data File:	EPA 3546					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier: Lab Sample ID: Matrix:	BH-12, 1-2 F 196293-14 Soil	't		Date Sampled: Date Received:	12/19/2019 12/20/2019
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 92.6	ug/Kg		12/31/2019 15:26
1,1,2,2-Tetrachloroetha	ane	< 92.6	ug/Kg		12/31/2019 15:26
1,1,2-Trichloroethane		< 92.6	ug/Kg		12/31/2019 15:26
1,1-Dichloroethane		< 92.6	ug/Kg		12/31/2019 15:26
1,1-Dichloroethene		< 92.6	ug/Kg		12/31/2019 15:26
1,2,3-Trichlorobenzene	e	< 231	ug/Kg		12/31/2019 15:26
1,2,4-Trichlorobenzene	e	< 231	ug/Kg		12/31/2019 15:26
1,2,4-Trimethylbenzen	e	125	ug/Kg		12/31/2019 15:26
1,2-Dibromo-3-Chlorop	propane	< 463	ug/Kg		12/31/2019 15:26
1,2-Dibromoethane		< 92.6	ug/Kg		12/31/2019 15:26
1,2-Dichlorobenzene		< 92.6	ug/Kg		12/31/2019 15:26
1,2-Dichloroethane		< 92.6	ug/Kg		12/31/2019 15:26
1,2-Dichloropropane		< 92.6	ug/Kg		12/31/2019 15:26
1,3,5-Trimethylbenzen	e	< 92.6	ug/Kg		12/31/2019 15:26
1,3-Dichlorobenzene		< 92.6	ug/Kg		12/31/2019 15:26
1,4-Dichlorobenzene		< 92.6	ug/Kg		12/31/2019 15:26
1,4-Dioxane		< 926	ug/Kg		12/31/2019 15:26
2-Butanone		< 463	ug/Kg		12/31/2019 15:26
2-Hexanone		< 231	ug/Kg		12/31/2019 15:26
4-Methyl-2-pentanone		< 231	ug/Kg		12/31/2019 15:26
Acetone		< 463	ug/Kg		12/31/2019 15:26
Benzene		< 92.6	ug/Kg		12/31/2019 15:26
Bromochloromethane		< 231	ug/Kg		12/31/2019 15:26



Lab Project ID: 196293

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	3			
Sample Identifier:	BH-12, 1-2 Ft	;			
Lab Sample ID:	196293-14			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Bromodichloromethan	е	< 92.6	ug/Kg		12/31/2019 15:26
Bromoform		< 231	ug/Kg		12/31/2019 15:26
Bromomethane		< 92.6	ug/Kg		12/31/2019 15:26
Carbon disulfide		< 92.6	ug/Kg		12/31/2019 15:26
Carbon Tetrachloride		< 92.6	ug/Kg		12/31/2019 15:26
Chlorobenzene		< 92.6	ug/Kg		12/31/2019 15:26
Chloroethane		< 92.6	ug/Kg		12/31/2019 15:26
Chloroform		< 92.6	ug/Kg		12/31/2019 15:26
Chloromethane		< 92.6	ug/Kg		12/31/2019 15:26
cis-1,2-Dichloroethene		< 92.6	ug/Kg		12/31/2019 15:26
cis-1,3-Dichloropropen	e	< 92.6	ug/Kg		12/31/2019 15:26
Cyclohexane		< 463	ug/Kg		12/31/2019 15:26
Dibromochloromethan	е	< 92.6	ug/Kg		12/31/2019 15:26
Dichlorodifluorometha	ne	< 92.6	ug/Kg		12/31/2019 15:26
Ethylbenzene		582	ug/Kg		12/31/2019 15:26
Freon 113		< 92.6	ug/Kg		12/31/2019 15:26
Isopropylbenzene		428	ug/Kg		12/31/2019 15:26
m,p-Xylene		112	ug/Kg		12/31/2019 15:26
Methyl acetate		< 92.6	ug/Kg		12/31/2019 15:26
Methyl tert-butyl Ether		< 92.6	ug/Kg		12/31/2019 15:26
Methylcyclohexane		405	ug/Kg		12/31/2019 15:26
Methylene chloride		< 231	ug/Kg		12/31/2019 15:26
Naphthalene		< 231	ug/Kg		12/31/2019 15:26
n-Butylbenzene		281	ug/Kg		12/31/2019 15:26
n-Propylbenzene		270	ug/Kg		12/31/2019 15:26



Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda	a					
Sample Identifier:	BH-12, 1-2 F	t					
Lab Sample ID:	196293-14			Da	te Sampled:	12/19/2019	9
Matrix:	Soil			Da	te Received:	12/20/2019	9
o-Xylene		< 92.6	ug/Kg			12/31/2019	15:26
p-Isopropyltoluene		108	ug/Kg			12/31/2019	15:26
sec-Butylbenzene		553	ug/Kg			12/31/2019	15:26
Styrene		< 231	ug/Kg			12/31/2019	15:26
tert-Butylbenzene		< 92.6	ug/Kg			12/31/2019	15:26
Tetrachloroethene		< 92.6	ug/Kg			12/31/2019	15:26
Toluene		< 92.6	ug/Kg			12/31/2019	15:26
trans-1,2-Dichloroethen	e	< 92.6	ug/Kg			12/31/2019	15:26
trans-1,3-Dichloroprope	ene	< 92.6	ug/Kg			12/31/2019	15:26
Trichloroethene		< 92.6	ug/Kg			12/31/2019	15:26
Trichlorofluoromethane	2	< 92.6	ug/Kg			12/31/2019	15:26
Vinyl chloride		< 92.6	ug/Kg			12/31/2019	15:26
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d4			110	67.9 - 146		12/31/2019	15:26
4-Bromofluorobenzene			93.1	64.6 • 127		12/31/2019	15:26
Pentafluorobenzene			91.6	85.5 - 113		12/31/2019	15:26
Toluene-D8			128	83.9 • 114	*	12/31/2019	15:26
Method Reference	(s): EPA 826	0C					

EPA 5035A - L

Data File:

x67557.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	BH-12, 1-2 Ft		
Lab Sample ID:	196293-14	Date Sampled:	12/19/2019
Matrix:	Soil	Date Received:	12/20/2019

<u>Total Cyanide</u>

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	10.3	mg/Kg		12/30/2019
Method Reference(s):	EPA 9014			
Preparation Date:	EPA 9010C 12/27/2019			



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier:	BH-12, 1-2 Ft	;			
Lab Sample ID:	196293-14			Date Sampled:	12/19/2019
Matrix:	Soil			Date Received:	12/20/2019
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		87.8	%		12/24/2019

Method Reference(s): Par%M

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:		<u>BE3</u>						
Project Ref	ference:	57 Ton	awanda					
Sample Io	dentifier:	BH-12	2, 1-2 Ft					
Lab Samp	ole ID:	19629	93-14			Da	te Sampled:	12/19/2019
Matrix:		Soil				Da	te Received:	12/20/2019
Dioxa	ne							
<u>Analyte</u>			Re	<u>sult</u>	<u>Units</u>		Qualifier	Date Analyzed
1,4-Dio	xane		< 28.	3	ug/Kg			1/2/2020 15:11
	Method Reference	e(s):	EPA 8270D SIM EPA 3546					
	Preparation Date Data File:	:	12/23/2019 B43495.D					



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
	Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs
T :: t - t :	may incur additional fees. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-
Limitations of Liability.	perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients
	or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.



ANALYTICAL REPORT

Lab Number:	L1961123
Client:	Paradigm Environmental Services 179 Lake Avenue Rochester, NY 14608
ATTN: Phone:	Jane Daloia (585) 647-2530
Project Name:	57 TONAWANDA
Project Number:	57 TONAWANDA
Report Date:	01/22/20

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com





Lab Number: Report Date:

L1961123 01/22/20

Project Name:	57 TONAWANDA
Project Number:	57 TONAWANDA

Alpha Sample ID			Sample	Collection	Receive Date
L1961123-01	BH-10	SOIL	Not Specified	12/18/19 00:00	12/20/19
L1961123-02	BH-03	SOIL	Not Specified	12/18/19 00:00	12/20/19
L1961123-03	BH-02	SOIL	Not Specified	12/18/19 00:00	12/20/19
L1961123-04	BH-13	SOIL	Not Specified	12/18/19 00:00	12/20/19
L1961123-05	BH-05	SOIL	Not Specified	12/18/19 00:00	12/20/19
L1961123-06	BH-06	SOIL	Not Specified	12/18/19 00:00	12/20/19
L1961123-07	SS-01	SOIL	Not Specified	12/18/19 13:50	12/20/19
L1961123-08	SS-02	SOIL	Not Specified	12/18/19 14:14	12/20/19
L1961123-09	SS-03	SOIL	Not Specified	12/18/19 14:36	12/20/19
L1961123-10	SS-04	SOIL	Not Specified	12/19/19 10:00	12/20/19
L1961123-11	SS-05	SOIL	Not Specified	12/19/19 11:10	12/20/19
L1961123-12	BH-4 1-4'	SOIL	Not Specified	12/19/19 00:00	12/20/19
L1961123-13	BH-11 NATIVE	SOIL	Not Specified	12/19/19 00:00	12/20/19

L1961123-14

BH-12

SOIL

Not Specified

12/19/19 00:00

12/20/19

Project Name: 57 TONAWANDA Project Number: 57 TONAWANDA

Lab Number: L1961123 Report Date: 01/22/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L1961123

 Report Date:
 01/22/20

Case Narrative (continued)

Report Submission

January 22, 2020: This final report includes the results of all requested analyses. December 30, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1961123-07 through -10: The collection times were obtained from the container labels.

L1961123-11: The collection date and time on the chain of custody was 18-DEC-19 00:00; however, the collection date and time on the container label was 19-DEC-19 11:10. At the client's request, the collection date and time is reported as 19-DEC-19 11:10.

L1961123-12, -13, and -14: The collection date was changed at the client's request.

Perfluorinated Alkyl Acids by Isotope Dilution

L1961123-02: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

The WG1326024-2/3 LCS/LCSD RPD, associated with L1961123-01 through -14, are above the acceptance criteria for perfluorooctanesulfonamide (fosa) (64%).

The WG1326024-3 LCSD recovery, associated with L1961123-01 through -14, is below the acceptance criteria for perfluorooctanesulfonamide (fosa) (55%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

The WG1326024-4 MS recovery, performed on L1961123-01, is outside the acceptance criteria for 1h,1h,2h,2h-perfluorodecanesulfonic acid (8:2fts) (143%).

WG1326024-5: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.



Project Name: 57 TONAWANDA Project Number: 57 TONAWANDA

 Lab Number:
 L1961123

 Report Date:
 01/22/20

Case Narrative (continued)

Hexavalent Chromium

The WG1323927-5 Soluble MS recovery (47%), performed on L1961123-04, was outside the acceptance criteria. This has been attributed to matrix interference. A post-spike was performed with a recovery of 96%. The WG1323930-5 Soluble MS recovery (67%), performed on L1961123-11, was outside the acceptance criteria. This has been attributed to matrix interference. A post-spike was performed with a recovery of 98%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Jufani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative

Date: 01/22/20



ORGANICS



SEMIVOLATILES



					Serial_	No:01222020:08
Project Name:	57 TONAWANDA				Lab Number:	L1961123
Project Number:	57 TONAWANDA				Report Date:	01/22/20
		SAMPI	LE RESULTS	5		
Lab ID: Client ID: Sample Location:	L1961123-01 BH-10 Not Specified				Date Collected: Date Received: Field Prep:	
Sample Depth:						
Matrix:	Soil					od: ALPHA 23528
Analytical Method: Analytical Date: Analyst: Percent Solids:	134,LCMSMS-ID 01/22/20 06:19 JW 92%				Extraction Date	: 12/31/19 12:55
Parameter Perfluorinated Alky	Acids by Isotope Dilutic	Result	Qualifier	Units	RL MDI	Dilution Factor

Perfluorinated Alkyl Acids by Isotope Dilution	on - Mansfield	Lab					
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.00	0.023	1	
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046	1	
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039	1	
Perfluorohexanoic Acid (PFHxA)	0.062	J	ug/kg	1.00	0.053	1	
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045	1	
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061	1	
Perfluorooctanoic Acid (PFOA)	0.125	J	ug/kg	1.00	0.042	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.137	1	
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075	1	
Perfluorooctanesulfonic Acid (PFOS)	0.512	J	ug/kg	1.00	0.130	1	
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.288	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202	1	
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047	1	
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153	1	
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085	1	
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070	1	
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.205	1	
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054	1	
PFOA/PFOS, Total	0.637	J	ug/kg	1.00	0.042	1	



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Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123	
Project Number:	57 TONAWANDA					Date:	01/22/20	
		SAMP	LE RESULTS	6				
Lab ID:	L1961123-01				Date Col	llected:	12/18/19 00:00	
Client ID:	BH-10				Date Red	ceived:	12/20/19	
Sample Location:	Not Specified				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	I Acids by Isotope Dilutio	n - Mansfiel	d Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	92	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	93	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	96	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	61	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	37	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	87	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72	26-160



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L1961123-02 BH-03 Not Specified		Date Collected: Date Received: Field Prep:	12/18/19 00:00 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 06:52 JW 91%		Extraction Method Extraction Date:	I: ALPHA 23528 12/31/19 12:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution	on - Mansfield	d Lab				
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.01	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.01	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.01	0.039	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.01	0.053	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.01	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.01	0.061	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.01	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.01	0.182	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.01	0.138	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.01	0.076	1
Perfluorooctanesulfonic Acid (PFOS)	0.310	J	ug/kg	1.01	0.132	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.01	0.068	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.01	0.290	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.01	0.204	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.01	0.047	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.01	0.155	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.01	0.099	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.136	J	ug/kg	1.01	0.086	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.01	0.071	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.01	0.207	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.01	0.055	1
PFOA/PFOS, Total	0.310	J	ug/kg	1.01	0.042	1



	I Asida hu lastana Dibitia						
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Prep	D:	Not Specified
Client ID:	BH-03				Date Rec		12/20/19
Lab ID:	L1961123-02				Date Colle	ected:	12/18/19 00:00
		SAMP		6			
Project Number:	57 TONAWANDA				Report I	Date:	01/22/20
Project Name:	57 TONAWANDA				Lab Nur	nber:	L1961123
						erial_No	0:01222020:08

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab	

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	72		60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	74		65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	82		70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	68		61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	70		62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	88		63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	72		62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	73		61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	74		65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	86		25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	39	Q	45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	80		64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	37	Q	42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	68		56-148	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	49		26-160	



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-03		Date Collected:	12/18/19 00:00
Client ID:	BH-02		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	: ALPHA 23528
Analytical Method:	134,LCMSMS-ID		Extraction Date:	12/31/19 12:55
Analytical Date:	01/22/20 07:25			
Analyst:	JW			
Percent Solids:	81%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution	on - Mansfield	d Lab				
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.14	0.026	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.14	0.052	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.14	0.044	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.14	0.060	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.14	0.051	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.14	0.069	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.14	0.048	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.14	0.204	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.14	0.155	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.14	0.085	1
Perfluorooctanesulfonic Acid (PFOS)	0.242	J	ug/kg	1.14	0.148	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.14	0.076	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.14	0.326	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.14	0.229	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.14	0.053	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.14	0.174	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.14	0.111	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.14	0.096	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.14	0.079	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.14	0.232	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.14	0.061	1
PFOA/PFOS, Total	0.242	J	ug/kg	1.14	0.048	1



					:	Serial_No	0:01222020:08	
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123	
Project Number:	57 TONAWANDA					Date:	01/22/20	
		SAMP	LE RESULTS	6				
Lab ID:	L1961123-03				Date Col	llected:	12/18/19 00:00	
Client ID:	BH-02				Date Ree	ceived:	12/20/19	
Sample Location:	Not Specified				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	I Acids by Isotope Dilutio	n - Mansfiel	d Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	90	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	117	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	48	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	12	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	54	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	81	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	53	26-160



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-04		Date Collected:	12/18/19 00:00
Client ID:	BH-13		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	: ALPHA 23528
Analytical Method:	134,LCMSMS-ID		Extraction Date:	12/31/19 12:55
Analytical Date:	01/22/20 07:42			
Analyst:	JW			
Percent Solids:	97%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab								
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.914	0.021	1		
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.914	0.042	1		
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.914	0.036	1		
Perfluorohexanoic Acid (PFHxA)	0.049	J	ug/kg	0.914	0.048	1		
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.914	0.041	1		
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.914	0.055	1		
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.914	0.038	1		
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.914	0.164	1		
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.914	0.125	1		
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.914	0.069	1		
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.914	0.119	1		
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.914	0.061	1		
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.914	0.262	1		
N-Methyl Perfluorooctanesulfonamidoacetic Acid	ND		ug/kg	0.914	0.184	1		
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.914	0.043	1		
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.914	0.140	1		
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.914	0.090	1		
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.914	0.077	1		
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.914	0.064	1		
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.914	0.187	1		
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.914	0.049	1		
PFOA/PFOS, Total	ND		ug/kg	0.914	0.038	1		



Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Prep	:	Not Specified
Client ID:	BH-13				Date Rece		12/20/19
Lab ID:	L1961123-04				Date Colle	ected:	12/18/19 00:00
		SAMP		6			
Project Number:	57 TONAWANDA				Report D	Date:	01/22/20
Project Name:	57 TONAWANDA				Lab Nun	nber:	L1961123
					S	erial_No	0:01222020:08

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	91	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	92	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	102	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	100	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	100	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	105	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	123	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	62	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	79	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	89	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	81	26-160



					S	Serial_No	:01222020:08
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
		SAMP		S			
Lab ID:	L1961123-05				Date Coll	lected:	12/18/19 00:00
Client ID:	BH-05				Date Rec	eived:	12/20/19
Sample Location:	Not Specified				Field Pre	p:	Not Specified
Sample Depth:							
Matrix:	Soil				Extraction	n Method	: ALPHA 23528
Analytical Method:	134,LCMSMS-ID				Extraction	n Date:	12/31/19 12:55
Analytical Date:	01/22/20 07:58						
Analyst:	JW						
Percent Solids:	87%						
ercent Solius.	0170						
	0170	Pocult	Qualifier	Units	PI	МП	Dilution Factor
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Parameter	I Acids by Isotope Dilut			Units	RL	MDL	Dilution Factor
Parameter Perfluorinated Alkyl	Acids by Isotope Dilut			Units ug/kg	RL 1.09	MDL 0.025	Dilution Factor
Parameter	I Acids by Isotope Dilut	tion - Mansfiel	d Lab				
Parameter Perfluorinated Alkyl Perfluorobutanoic Acid (Pl	I Acids by Isotope Dilut FBA) PFPeA)	tion - Mansfiel 0.026	d Lab	ug/kg	1.09	0.025	1
Parameter Perfluorinated Alkyl Perfluorobutanoic Acid (Pl Perfluoropentanoic Acid (F	I Acids by Isotope Dilut FBA) PFPeA) cid (PFBS)	tion - Mansfiel 0.026 ND	d Lab	ug/kg ug/kg	1.09 1.09	0.025 0.050	1 1
Parameter Perfluorinated Alkyl Perfluorobutanoic Acid (Pl Perfluoropentanoic Acid (F Perfluorobutanesulfonic A	I Acids by Isotope Dilut FBA) PFPeA) cid (PFBS) FHxA)	tion - Mansfiel 0.026 ND ND	d Lab J	ug/kg ug/kg ug/kg	1.09 1.09 1.09	0.025 0.050 0.042	1 1 1
Parameter Perfluorinated Alkyl Perfluorobutanoic Acid (Pl Perfluoropentanoic Acid (F Perfluorobutanesulfonic A Perfluorohexanoic Acid (P	I Acids by Isotope Dilut FBA) PFPeA) cid (PFBS) FHxA) PFHpA)	tion - Mansfiel 0.026 ND ND 0.074	d Lab J	ug/kg ug/kg ug/kg ug/kg	1.09 1.09 1.09 1.09	0.025 0.050 0.042 0.057	1 1 1 1
Parameter Perfluorinated Alkyl Perfluorobutanoic Acid (Pl Perfluoropentanoic Acid (F Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (F	I Acids by Isotope Dilut FBA) PFPeA) cid (PFBS) PFHpA) Acid (PFHxS)	tion - Mansfiel 0.026 ND ND 0.074 ND	d Lab J	ug/kg ug/kg ug/kg ug/kg ug/kg	1.09 1.09 1.09 1.09 1.09 1.09	0.025 0.050 0.042 0.057 0.049	1 1 1 1 1 1
Parameter Perfluorinated Alkyl Perfluorobutanoic Acid (Pl Perfluoropentanoic Acid (F Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluorohexanesulfonic A Perfluorohexanesulfonic A	I Acids by Isotope Dilut FBA) PFPeA) cid (PFBS) PFHpA) Acid (PFHxS)	tion - Mansfiel 0.026 ND ND 0.074 ND ND	d Lab J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.09 1.09 1.09 1.09 1.09 1.09	0.025 0.050 0.042 0.057 0.049 0.066	1 1 1 1 1 1 1 1

Perfluorooctanoic Acid (PFOA)	0.090	J	ug/kg	1.09	0.046	1	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.09	0.195	1	
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.09	0.148	1	
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.09	0.082	1	
Perfluorooctanesulfonic Acid (PFOS)	1.08	J	ug/kg	1.09	0.141	1	
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.09	0.073	1	
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.09	0.312	1	
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.09	0.219	1	
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.09	0.051	1	
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.09	0.166	1	
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.09	0.106	1	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.09	0.092	1	
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.09	0.076	1	
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.09	0.222	1	
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.09	0.059	1	
PFOA/PFOS, Total	1.17	J	ug/kg	1.09	0.046	1	



					:	Serial_No	0:01222020:08	
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123	
Project Number:	57 TONAWANDA				Report	Date:	01/22/20	
		SAMP	LE RESULTS	6				
Lab ID:	L1961123-05				Date Col	llected:	12/18/19 00:00	
Client ID:	BH-05				Date Ree	ceived:	12/20/19	
Sample Location:	Not Specified				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	I Acids by Isotope Dilutio	n - Mansfiel	d Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	119	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	59	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	26	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	67	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	72	26-160



					ç	Serial_No	:01222020:08
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
•		SAMPI		5	•		•=.=•
Lab ID: Client ID: Sample Location:	L1961123-06 BH-06 Not Specified				Date Col Date Rec Field Pre	ceived:	12/18/19 00:00 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 08:15 JW 93%				Extractio Extractio		I: ALPHA 23528 12/31/19 12:55
Parameter Perfluorinated Alky	Acids by Isotope Dilutio	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorobutanoic Acid (P		0.042	J	ug/kg	0.961	0.022	1
Perfluoropentanoic Acid (ND		ug/kg	0.961	0.044	1
Perfluorobutanesulfonic A		ND		ug/kg	0.961	0.038	1
Perfluorohexanoic Acid (F		0.063	J	ug/kg	0.961	0.051	1
Perfluoroheptanoic Acid (ND		ug/kg	0.961	0.043	1
Perfluorohexanesulfonic	Acid (PFHxS)	ND		ug/kg	0.961	0.058	1
Perfluorooctanoic Acid (P		0.084	J	ug/kg	0.961	0.040	1
·	tanesulfonic Acid (6:2FTS)	ND		ug/kg	0.961	0.172	1
Perfluoroheptanesulfonic		ND		ug/kg	0.961	0.131	1
Perfluorononanoic Acid (I	· · · ·	ND		ug/kg	0.961	0.072	1
Perfluorooctanesulfonic A	cid (PFOS)	0.656	J	ug/kg	0.961	0.125	1
Perfluorodecanoic Acid (F	PFDA)	ND		ug/kg	0.961	0.064	1
1H,1H,2H,2H-Perfluorode	ecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.961	0.276	1
N-Methyl Perfluorooctane (NMeFOSAA)	sulfonamidoacetic Acid	ND		ug/kg	0.961	0.194	1
Perfluoroundecanoic Acio	I (PFUnA)	ND		ug/kg	0.961	0.045	1
Perfluorodecanesulfonic	Acid (PFDS)	ND		ug/kg	0.961	0.147	1
Perfluorooctanesulfonam	ide (FOSA)	ND		ug/kg	0.961	0.094	1
N-Ethyl Perfluorooctanes (NEtFOSAA)	ulfonamidoacetic Acid	ND		ug/kg	0.961	0.081	1
Perfluorododecanoic Acid		ND		ug/kg	0.961	0.067	1

ND

ND

0.740

ug/kg

ug/kg

ug/kg

J



1

1

1

0.196

0.052

0.040

0.961

0.961

0.961

Perfluorotridecanoic Acid (PFTrDA)

Perfluorotetradecanoic Acid (PFTA)

PFOA/PFOS, Total

					:	Serial_No	0:01222020:08	
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123	
Project Number:	57 TONAWANDA				Report	Date:	01/22/20	
		SAMP	LE RESULTS	6				
Lab ID:	L1961123-06				Date Col	llected:	12/18/19 00:00	
Client ID:	BH-06				Date Re	ceived:	12/20/19	
Sample Location:	Not Specified				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	I Acids by Isotope Dilutio	n - Mansfiel	d Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	86	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	82	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	89	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	85	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	94	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	106	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	58	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	3	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	66	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	81	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	73	26-160



					ç	Serial_No:	01222020:08
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
•		SAMPL	E RESULT	S	•		01/22/20
Lab ID: Client ID: Sample Location:	L1961123-07 SS-01 Not Specified				Date Col Date Rec Field Pre	eived:	12/18/19 13:50 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 08:48 JW 85%				Extractio Extractio		ALPHA 23528 12/31/19 12:55
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alky	/I Acids by Isotope Dilut	ion - Mansfield	Lab				
Perfluorobutanoic Acid (F	PFBA)	0.175	J	ug/kg	1.10	0.025	1
		0.175 0.454	J	ug/kg ug/kg	1.10 1.10	0.025	1
Perfluorobutanoic Acid (F	(PFPeA)						
Perfluorobutanoic Acid (F Perfluoropentanoic Acid ((PFPeA) Acid (PFBS)	0.454		ug/kg	1.10	0.051	1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A	(PFPeA) Acid (PFBS) PFHxA)	0.454 ND	J	ug/kg ug/kg	1.10 1.10	0.051 0.043	1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorobexanoic Acid (I	(PFPeA) Acid (PFBS) PFHxA) (PFHpA)	0.454 ND 0.327	J	ug/kg ug/kg ug/kg	1.10 1.10 1.10	0.051 0.043 0.058	1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorobexanoic Acid (I Perfluoroheptanoic Acid ((PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS)	0.454 ND 0.327 0.194	J	ug/kg ug/kg ug/kg ug/kg	1.10 1.10 1.10 1.10	0.051 0.043 0.058 0.050	1 1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorohexanoic Acid (Perfluoroheptanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS)	0.454 ND 0.327 0.194 ND	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10 1.10 1.10 1.10 1.10	0.051 0.043 0.058 0.050 0.066	1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorohexanoic Acid (Perfluoroheptanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) ctanesulfonic Acid (6:2FTS)	0.454 ND 0.327 0.194 ND 0.569	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10 1.10 1.10 1.10 1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046	1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorohexanoic Acid (Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) ctanesulfonic Acid (6:2FTS) Acid (PFHpS)	0.454 ND 0.327 0.194 ND 0.569 ND	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197	1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluoroheptanesulfonic	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) ctanesulfonic Acid (6:2FTS) : Acid (PFHpS) PFNA)	0.454 ND 0.327 0.194 ND 0.569 ND ND	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150	1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluorobutanesulfonic A Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorohexanesulfonic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluoroheptanesulfonic Perfluorononanoic Acid (F	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS)	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082	1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluorobutanesulfonic A Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluoroheptanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluoroneptanesulfonic Perfluorononanoic Acid (I Perfluorooctanesulfonic A Perfluorodecanoic Acid (I	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS)	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24	J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluorobutanoic Acid (F Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (I Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorodecanoic Acid (I 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctanes (NMeFOSAA)	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24 0.321 ND ND ND	J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143 0.074 0.315 0.221	1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (Perfluorooctanesulfonic A Perfluorooctanesulfonic A N-Methyl Perfluorooctanesulfonic A Perfluoroundecanoic Acid	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA)	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24 0.321 ND ND ND ND ND 0.132	J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143 0.074 0.315 0.221 0.051	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluorobutanesulfonic A Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (I Perfluorooctanesulfonic A Perfluorodecanoic Acid (I 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctane (NMeFOSAA) Perfluoroundecanoic Acid Perfluorodecanesulfonic A	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) ctanesulfonic Acid (6:2FTS) eFNA) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA) Acid (PFDS)	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24 0.321 ND ND ND ND 0.132 ND	J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143 0.074 0.315 0.221 0.051 0.168	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (Perfluorooctanesulfonic A Perfluorodecanoic Acid (1H,1H,2H,2H-Perfluorooctane (NMeFOSAA) Perfluoroundecanoic Acid Perfluorodecanoic Acid Perfluorodecanoic Acid Perfluorooctanesulfonic A	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) ctanesulfonic Acid (6:2FTS) excid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA) Acid (PFDS) ide (FOSA)	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24 0.321 ND ND ND 0.132 ND ND ND ND	J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143 0.074 0.315 0.221 0.051 0.051 0.168 0.108	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluorobutanesulfonic A Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (I Perfluorooctanesulfonic A Perfluorodecanoic Acid (I 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctane (NMeFOSAA) Perfluoroundecanoic Acid Perfluorodecanesulfonic A	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) ctanesulfonic Acid (6:2FTS) excid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA) Acid (PFDS) ide (FOSA)	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24 0.321 ND ND ND ND 0.132 ND	J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143 0.074 0.315 0.221 0.051 0.168	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluoropentanoic Acid (Perfluorobutanesulfonic A Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Acid (PFHxS) PFOA) PFNA) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA) Acid (PFDS) esulfonamidoacetic Acid	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24 0.321 ND ND ND 0.132 ND ND ND ND	J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143 0.074 0.315 0.221 0.051 0.051 0.168 0.108	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (F Perfluorobutanesulfonic A Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (I Perfluorononanoic Acid (I Perfluorooctanesulfonic A Perfluorodecanoic Acid (I 1H,1H,2H,2H-Perfluorooctanes (NMeFOSAA) Perfluorodecanesulfonic A Perfluorodecanesulfonic A Perfluorodecanesulfonic A Perfluorodecanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonam N-Ethyl Perfluorooctanes (NEtFOSAA)	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Acid (PFHxS) PFOA) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA) Acid (PFDS) ide (FOSA) sulfonamidoacetic Acid	0.454 ND 0.327 0.194 ND 0.569 ND ND 0.194 2.24 0.321 ND ND 0.132 ND 0.132 ND ND 0.132 ND 0.132	J J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.10 1.10	0.051 0.043 0.058 0.050 0.066 0.046 0.197 0.150 0.082 0.143 0.074 0.315 0.221 0.051 0.051 0.168 0.108 0.108	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

ug/kg

J

2.81

1.10

0.046



1

PFOA/PFOS, Total

		NA (* 1					
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Prep):	Not Specified
Client ID:	SS-01				Date Rece		12/20/19
Lab ID:	L1961123-07				Date Colle	ected:	12/18/19 13:50
		SAMP	LE RESULTS	6			
Project Number:	57 TONAWANDA				Report I	Date:	01/22/20
Project Name:	57 TONAWANDA				Lab Nun	nber:	L1961123
					S	erial_No	0:01222020:08

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	89	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	82	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	89	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	94	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	53	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	97	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	60	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	54	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	79	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	55	26-160



					5	Serial_No:	01222020:08
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
•		SAMPI		5	•		0
Lab ID: Client ID: Sample Location:	L1961123-08 SS-02 Not Specified				Date Coll Date Rec Field Pre	ceived:	12/18/19 14:14 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 09:05 JW 89%				Extraction Extraction		ALPHA 23528 12/31/19 12:55
			Qualifian	Units	RL	MDL	Dilution Factor
Parameter		Result	Qualifier	Units		me -	
	Acids by Isotope Dilut			Units		mee	
Perfluorinated Alky					0.996	0.023	1
	FBA)	ion - Mansfield	d Lab	ug/kg			
Perfluorinated Alky Perfluorobutanoic Acid (P	FBA) PFPeA)	ion - Mansfield	d Lab	ug/kg ug/kg	0.996	0.023	1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I	FBA) PFPeA) cid (PFBS)	ion - Mansfield 0.049 ND	d Lab	ug/kg	0.996 0.996	0.023 0.046	1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A	FBA) PFPeA) cid (PFBS) FHxA)	ion - Mansfield 0.049 ND ND	d Lab J	ug/kg ug/kg ug/kg	0.996 0.996 0.996	0.023 0.046 0.039	1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (P	FBA) PFPeA) cid (PFBS) FHxA) PFHpA)	ion - Mansfield 0.049 ND ND 0.075	d Lab J	ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052	1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (I	FBA) PFPeA) cid (PFBS) FHxA) PFHpA) Acid (PFHxS)	ion - Mansfield 0.049 ND ND 0.075 ND	d Lab J	ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045	1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (Pl	FBA) PFPeA) cid (PFBS) FHxA) PFHpA) Acid (PFHxS)	ion - Mansfield 0.049 ND ND 0.075 ND ND	d Lab J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060	1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (Pl	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS)	ion - Mansfield 0.049 ND ND 0.075 ND ND ND 0.096	d Lab J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060 0.042	1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (Pl 1H,1H,2H,2H-Perfluorooc Perfluoroheptanesulfonic A	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS)	ion - Mansfield 0.049 ND ND 0.075 ND ND 0.096 ND	d Lab J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060 0.042 0.179	1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (PI 1H,1H,2H,2H-Perfluorooc	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA)	ion - Mansfield 0.049 ND ND 0.075 ND ND 0.096 ND ND ND	d Lab J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060 0.042 0.179 0.136	1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (I Perfluorohexanesulfonic A Perfluorooctanoic Acid (PI 1H,1H,2H,2H-Perfluorooc Perfluoroheptanesulfonic A	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS)	ion - Mansfield 0.049 ND ND 0.075 ND 0.096 ND ND ND ND ND	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060 0.042 0.179 0.136 0.075	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (P Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (P Perfluoroheptanoic Acid (P 1H,1H,2H,2H-Perfluorooc Perfluoroneptanesulfonic A Perfluorononanoic Acid (P Perfluorononanoic Acid (P Perfluorononanoic Acid (P	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS)	ion - Mansfield 0.049 ND ND 0.075 ND ND 0.096 ND ND ND ND ND 0.173	J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.045 0.060 0.042 0.179 0.136 0.075 0.130	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (P Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluoroheptanoic Acid (P Perfluoroheptanoic Acid (P 1H,1H,2H,2H-Perfluorooc Perfluoroneptanesulfonic A Perfluorononanoic Acid (P Perfluorononanoic Acid (P Perfluorononanoic Acid (P	FBA) PFPeA) cid (PFBS) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS) FDA) canesulfonic Acid (8:2FTS)	ion - Mansfield 0.049 ND ND 0.075 ND 0.096 ND ND ND ND 0.173 0.089	J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060 0.042 0.179 0.136 0.075 0.130 0.067	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (Pl 1H,1H,2H,2H-Perfluorooc Perfluorooctanesulfonic A Perfluorodecanoic Acid (P 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctanes	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS) PFDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid	ion - Mansfield 0.049 ND ND 0.075 ND 0.096 ND 0.096 ND ND 0.173 0.089 ND	J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.045 0.060 0.042 0.179 0.136 0.075 0.130 0.067 0.286	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (P Perfluorobutanesulfonic A Perfluorohexanoic Acid (P Perfluorohexanosulfonic A Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluoroneptanesulfonic A Perfluorononanoic Acid (P Perfluorononanoic Acid (P Perfluorononanoic Acid (P Perfluoroneptanesulfonic A Perfluoroneptanesulfonic A Perfluorodecanoic Acid (P 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctanes (NMeFOSAA)	FBA) PFPeA) cid (PFBS) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS) PFDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid (PFUnA)	ion - Mansfield 0.049 ND ND ND 0.075 ND 0.096 ND ND ND 0.173 0.089 ND ND 0.173	J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060 0.042 0.179 0.136 0.075 0.130 0.067 0.286 0.201	1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (Pl 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (F Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorodecanoic Acid (P 1H,1H,2H,2H-Perfluoroode N-Methyl Perfluorooctanes (NMeFOSAA) Perfluoroundecanoic Acid	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS) PFDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid (PFUnA) Acid (PFDS)	ion - Mansfield 0.049 ND ND ND 0.075 ND 0.096 ND ND 0.173 0.089 ND ND 0.173 0.089	J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.045 0.045 0.042 0.179 0.136 0.075 0.130 0.067 0.286 0.201 0.047	1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (Pl 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (F Perfluorooctanesulfonic A Perfluorodecanoic Acid (P 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctanes (NMeFOSAA) Perfluorodecanoic Acid Perfluorodecanoic Acid Perfluorodecanoic Acid Perfluorodecanoic Acid Perfluorodecanoic Acid Perfluorodecanoic Acid Perfluorodecanesulfonic A	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS) PFDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid (PFUnA) Acid (PFDS) de (FOSA)	ion - Mansfield 0.049 ND ND 0.075 ND 0.096 ND 0.096 ND 0.173 0.089 ND 0.173 0.089 ND 0.173 0.089	J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.060 0.042 0.179 0.136 0.075 0.130 0.067 0.286 0.201 0.201 0.047 0.152	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorinated Alky Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluorohexanesulfonic A Perfluorooctanoic Acid (Pl 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (F Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorodecanoic Acid (P 1H,1H,2H,2H-Perfluorooctanes (NMeFOSAA) Perfluoroundecanoic Acid Perfluorooctanesulfonic A	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS) PFDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid (PFUnA) Acid (PFDS) de (FOSA) alfonamidoacetic Acid	ion - Mansfield 0.049 ND ND ND 0.075 ND 0.096 ND ND 0.173 0.089 ND 0.173 0.089 ND ND ND ND ND ND ND ND ND ND ND ND ND	J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.045 0.045 0.042 0.179 0.136 0.075 0.130 0.067 0.286 0.201 0.047 0.152 0.098	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluorobutanoic Acid (P Perfluorobutanoic Acid (P Perfluoropentanoic Acid (I Perfluorobutanesulfonic A Perfluorohexanoic Acid (I Perfluorohexanoic Acid (I Perfluorohexanesulfonic A Perfluoroctanoic Acid (Pl 1H,1H,2H,2H-Perfluorooc Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorodecanoic Acid (P 1H,1H,2H,2H-Perfluorooctanesulfonic A Perfluorodecanoic Acid (P 1H,1H,2H,2H-Perfluorooctanesulfonic A Perfluoroundecanoic Acid Perfluoroundecanoic Acid Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A Perfluorooctanesulfonic A	FBA) PFPeA) cid (PFBS) PFHxA) PFHpA) Acid (PFHxS) FOA) tanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) cid (PFOS) PFNA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid (PFUnA) Acid (PFDS) de (FOSA) alfonamidoacetic Acid (PFDoA)	ion - Mansfield 0.049 ND ND 0.075 ND 0.096 ND 0.096 ND 0.096 ND 0.173 0.089 ND 0.173 0.089 ND 0.173 0.089 ND ND ND ND ND ND ND ND ND ND	J J J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996 0.996	0.023 0.046 0.039 0.052 0.045 0.045 0.045 0.042 0.179 0.136 0.075 0.130 0.067 0.286 0.201 0.286 0.201 0.047 0.152 0.098 0.084	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

0.269

J

ug/kg

0.996

0.042



1

PFOA/PFOS, Total

Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Prep	D:	Not Specified
Client ID:	SS-02				Date Reco	eived:	12/20/19
Lab ID:	L1961123-08				Date Colle	ected:	12/18/19 14:14
		SAMP	LE RESULT	6			
Project Number:	57 TONAWANDA				Report I	Date:	01/22/20
Project Name:	57 TONAWANDA				Lab Nur	nber:	L1961123
					S	erial_No	0:01222020:08

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	90	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	89	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	118	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	40	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	76	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	89	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77	26-160



						Serial_No	:01222020:08
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
-		SAMPI		S	•		
Lab ID: Client ID: Sample Location:	L1961123-09 SS-03 Not Specified				Date Col Date Rec Field Pre	ceived:	12/18/19 14:36 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 09:21 JW 43%				Extractio Extractio		l: ALPHA 23528 12/31/19 12:55
Parameter Perfluorinated Alky	Acids by Isotope Dilut	Result ion - Mansfield	Qualifier d Lab	Units	RL	MDL	Dilution Factor
Perfluorobutanoic Acid (P	FBA)	0.258	J	ug/kg	2.24	0.051	1
Perfluoropentanoic Acid (I	PFPeA)	0.159	J	ug/kg	2.24	0.103	1
Perfluorobutanesulfonic A	cid (PFBS)	ND		ug/kg	2.24	0.087	1
Perfluorohexanoic Acid (P	'FHxA)	0.164	J	ug/kg	2.24	0.118	1
Perfluoroheptanoic Acid (I	PFHpA)	0.104	J	ug/kg	2.24	0.101	1
Perfluorohexanesulfonic A	Acid (PFHxS)	ND		ug/kg	2.24	0.136	1
Perfluorooctanoic Acid (P	FOA)	0.257	J	ug/kg	2.24	0.094	1
1H,1H,2H,2H-Perfluorooc	tanesulfonic Acid (6:2FTS)	ND		ug/kg	2.24	0.402	1
Perfluoroheptanesulfonic	Acid (PEHpS)	ND		ug/kg	2.24	0.306	1
Perfluorononanoic Acid (F							
		0.246	J	ug/kg	2.24	0.168	1
Perfluorooctanesulfonic A	PFNA)		J	ug/kg ug/kg	2.24 2.24	0.168 0.291	1
Perfluorooctanesulfonic A Perfluorodecanoic Acid (F	PFNA) cid (PFOS)	0.246					
Perfluorodecanoic Acid (P	PFNA) cid (PFOS)	0.246 0.866	J	ug/kg	2.24	0.291	1
Perfluorodecanoic Acid (F 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctane	PFNA) cid (PFOS) FDA) canesulfonic Acid (8:2FTS)	0.246 0.866 0.358	J	ug/kg ug/kg	2.24 2.24	0.291 0.150	1
Perfluorodecanoic Acid (F 1H,1H,2H,2H-Perfluorode	PFNA) cid (PFOS) PFDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid	0.246 0.866 0.358 ND	J	ug/kg ug/kg ug/kg	2.24 2.24 2.24	0.291 0.150 0.643	1 1 1
Perfluorodecanoic Acid (F 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctane (NMeFOSAA)	PFNA) cid (PFOS) PFDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid (PFUnA)	0.246 0.866 0.358 ND ND	J	ug/kg ug/kg ug/kg ug/kg	2.24 2.24 2.24 2.24 2.24	0.291 0.150 0.643 0.452	1 1 1 1
Perfluorodecanoic Acid (F 1H,1H,2H,2H-Perfluorode N-Methyl Perfluorooctane (NMeFOSAA) Perfluoroundecanoic Acid	PFNA) cid (PFOS) FDA) canesulfonic Acid (8:2FTS) sulfonamidoacetic Acid (PFUnA) Acid (PFDS)	0.246 0.866 0.358 ND ND 0.362	J	ug/kg ug/kg ug/kg ug/kg ug/kg	2.24 2.24 2.24 2.24 2.24 2.24	0.291 0.150 0.643 0.452 0.105	1 1 1 1 1 1

ND

0.330

ND

0.211

1.12

ug/kg

ug/kg

ug/kg

ug/kg

ug/kg

J

J

J



1

1

1

1

1

0.189

0.157

0.458

0.121

0.094

2.24

2.24

2.24

2.24

2.24

N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA) Perfluorododecanoic Acid (PFDoA)

Perfluorotridecanoic Acid (PFTrDA)

Perfluorotetradecanoic Acid (PFTA)

PFOA/PFOS, Total

Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Pre	p:	Not Specified
Client ID:	SS-03				Date Rec	eived:	12/20/19
Lab ID:	L1961123-09				Date Coll	ected:	12/18/19 14:36
		SAMP	LE RESULTS	6			
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
					5	Serial_No	0:01222020:08

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	81	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	84	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	77	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	81	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	79	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	95	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	81	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	101	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	56	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	16	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	63	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	74	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	63	26-160



					ç	Serial_No	:01222020:08
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
•		SAMPL	E RESULT	S	•		•
Lab ID: Client ID: Sample Location:	L1961123-10 SS-04 Not Specified				Date Col Date Rec Field Pre	ceived:	12/19/19 10:00 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 09:38 JW 84%				Extractio Extractio		: ALPHA 23528 12/31/19 12:55
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alky	I Acids by Isotope Diluti	on - Mansfield	Lab				
Perfluorobutanoic Acid (P	PERA)	0.054	J	ug/kg	1.06	0.024	1
Perfluoropentanoic Acid (0.051	J	ug/kg	1.06	0.024	1
Perfluorobutanesulfonic A		ND	J J	ug/kg	1.06	0.041	1
Perfluorohexanoic Acid (F		0.073	J	ug/kg	1.06	0.056	1
Perfluoroheptanoic Acid (ND		ug/kg	1.06	0.048	1
Perfluorohexanesulfonic		ND		ug/kg	1.06	0.064	1
Perfluorooctanoic Acid (P		0.057	J	ug/kg	1.06	0.045	1
1H,1H,2H,2H-Perfluorood	ctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.06	0.191	1
Perfluoroheptanesulfonic	Acid (PFHpS)	ND		ug/kg	1.06	0.145	1
Perfluorononanoic Acid (F	PFNA)	ND		ug/kg	1.06	0.080	1
Perfluorooctanesulfonic A	Acid (PFOS)	0.448	J	ug/kg	1.06	0.138	1
Perfluorodecanoic Acid (F	PFDA)	0.133	J	ug/kg	1.06	0.071	1
1H,1H,2H,2H-Perfluorode	ecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.06	0.305	1
N-Methyl Perfluorooctane (NMeFOSAA)	esulfonamidoacetic Acid	ND		ug/kg	1.06	0.214	1
(NMEFOSAA) Perfluoroundecanoic Acio	d (PFUnA)	0.161	J	ug/kg	1.06	0.050	1
Perfluorodecanesulfonic	Acid (PFDS)	0.170	J	ug/kg	1.06	0.163	1
Perfluorooctanesulfonam	ide (FOSA)	ND		ug/kg	1.06	0.104	1
N-Ethyl Perfluorooctanes	14 · · · · · · · · · · · · · · · · · · ·	ND		ug/kg	1.06	0.090	1
(NEtEOSAA)	ulfonamidoacetic Acid	ND		ug/kg			
(NEtFOSAA) Perfluorododecanoic Acio		0.199	J	ug/kg	1.06	0.074	1

J

J

ug/kg

ug/kg

0.096

0.505



1

1

0.057

0.045

1.06

1.06

Perfluorotetradecanoic Acid (PFTA)

PFOA/PFOS, Total

Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Prep):	Not Specified
Client ID:	SS-04				Date Rece		12/20/19
Lab ID:	L1961123-10				Date Colle	ected:	12/19/19 10:00
		SAMP	LE RESULT	6			
Project Number:	57 TONAWANDA				Report I	Date:	01/22/20
Project Name:	57 TONAWANDA				Lab Nun	nber:	L1961123
					S	erial_No	0:01222020:08

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	86	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	87	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	93	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	94	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	101	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	61	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	64	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	85	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	71	26-160



					9	Serial_No	:01222020:08
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
•		SAMPI		S	•		• .,, _ •
Lab ID: Client ID: Sample Location:	L1961123-11 SS-05 Not Specified				Date Col Date Rec Field Pre	ceived:	12/19/19 11:10 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 10:14 JW 81%				Extractio Extractio		: ALPHA 23528 12/31/19 12:55
Parameter	/I Acids by Isotope Dilution	Result	Qualifier	Units	RL	MDL	Dilution Factor
r ennuonnaleu Aiky	Acius by isolope Diluli						
Perfluorobutanoic Acid (F	PFBA)	0.151	J	ug/kg	1.07	0.024	1
Perfluoropentanoic Acid	(PFPeA)	0.119		ug/kg ug/kg	1.07	0.049	1
Perfluoropentanoic Acid	(PFPeA) Acid (PFBS)	0.119 ND	J		1.07 1.07		
Perfluoropentanoic Acid	(PFPeA) Acid (PFBS)	0.119	J	ug/kg	1.07	0.049	1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluoroheptanoic Acid	(PFPeA) Acid (PFBS) PFHxA) (PFHpA)	0.119 ND	J	ug/kg ug/kg	1.07 1.07 1.07 1.07	0.049 0.042	1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (I	(PFPeA) Acid (PFBS) PFHxA) (PFHpA)	0.119 ND 0.139	J J	ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056	1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluoroheptanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA)	0.119 ND 0.139 0.090	J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048	1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluoroheptanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS)	0.119 ND 0.139 0.090 ND	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065	1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluoroheptanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS)	0.119 ND 0.139 0.090 ND 0.410	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045	1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluoroheptanoic Acid Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) ctanesulfonic Acid (6:2FTS) Acid (PFHpS)	0.119 ND 0.139 0.090 ND 0.410 ND	J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192	1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluoroheptanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluoroheptanesulfonic	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA)	0.119 ND 0.139 0.090 ND 0.410 ND ND	J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192 0.146	1 1 1 1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluoroheptanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluoroheptanesulfonic Perfluorononanoic Acid ((PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS)	0.119 ND 0.139 0.090 ND 0.410 ND ND ND 0.221	J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192 0.146 0.081	1 1 1 1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (P 1H,1H,2H,2H-Perfluorooc Perfluoroheptanesulfonic Perfluorononanoic Acid (Perfluorooctanesulfonic / Perfluorodecanoic Acid ((PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS)	0.119 ND 0.139 0.090 ND 0.410 ND ND 0.221 2.08	J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192 0.146 0.081 0.139	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (Perfluorooctanesulfonic / Perfluorooctanesulfonic / Perfluorodecanoic Acid (1H,1H,2H,2H-Perfluorooctanesulfonic / Perfluorodecanoic Acid (1H,1H,2H,2H-Perfluorooctanesulfonic /	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS)	0.119 ND 0.139 0.090 ND 0.410 ND ND 0.221 2.08 0.123	J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192 0.146 0.081 0.139 0.072	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (Perfluorooctanesulfonic / Perfluorooctanesulfonic / Perfluorodecanoic Acid (1H,1H,2H,2H-Perfluorode	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid	0.119 ND 0.139 0.090 ND 0.410 ND 0.221 2.08 0.123 ND	J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192 0.146 0.081 0.139 0.072 0.308	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (Perfluorooctanesulfonic Perfluorooctanesulfonic A Perfluorodecanoic Acid (1H,1H,2H,2H-Perfluorooctane (NMeFOSAA)	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA)	0.119 ND 0.139 0.090 ND 0.410 ND 0.221 2.08 0.123 ND ND	J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192 0.146 0.081 0.139 0.072 0.308 0.216	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic Perfluorooctanoic Acid (F 1H,1H,2H,2H-Perfluorooc Perfluorononanoic Acid (Perfluorooctanesulfonic / Perfluorooctanesulfonic / Perfluorooctanesulfonic / Perfluorooctanesulfonic / Perfluorooctanesulfonic / Perfluorooctanesulfonic / Perfluorooctanesulfonic / N-Methyl Perfluorooctane (NMeFOSAA) Perfluoroundecanoic Acid	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA) Acid (PFDS)	0.119 ND 0.139 0.090 ND 0.410 ND 0.221 2.08 0.123 ND ND ND ND	J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.192 0.146 0.081 0.139 0.072 0.308 0.216 0.050	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Perfluoropentanoic Acid Perfluorobutanesulfonic / Perfluorohexanoic Acid (Perfluorohexanoic Acid (Perfluorohexanesulfonic Perfluorohexanesulfonic Perfluoroheptanesulfonic Perfluoroheptanesulfonic Perfluorononanoic Acid (Perfluorooctanesulfonic A Perfluorodecanoic Acid (1H,1H,2H,2H-Perfluorod N-Methyl Perfluorooctane (NMeFOSAA) Perfluorodecanoic Acid Perfluorodecanoic Acid	(PFPeA) Acid (PFBS) PFHxA) (PFHpA) Acid (PFHxS) PFOA) Ctanesulfonic Acid (6:2FTS) Acid (PFHpS) PFNA) Acid (PFOS) PFDA) ecanesulfonic Acid (8:2FTS) esulfonamidoacetic Acid d (PFUnA) Acid (PFDS) ide (FOSA)	0.119 ND 0.139 0.090 ND 0.410 ND 0.221 2.08 0.123 ND ND ND ND ND ND ND	J J J J J J	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1.07 1.07 1.07 1.07 1.07 1.07 1.07 1.07	0.049 0.042 0.056 0.048 0.065 0.045 0.192 0.146 0.081 0.139 0.072 0.308 0.216 0.050 0.164	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

ND

ND

2.49



1

1

1

1.07

1.07

1.07

ug/kg

ug/kg

ug/kg

J

0.219

0.058

0.045

Perfluorotridecanoic Acid (PFTrDA)

Perfluorotetradecanoic Acid (PFTA)

PFOA/PFOS, Total

Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Pre	D:	Not Specified
Client ID:	SS-05				Date Rec	eived:	12/20/19
Lab ID:	L1961123-11				Date Coll	ected:	12/19/19 11:10
		SAMP	LE RESULTS	6			
Project Number:	57 TONAWANDA				Report	Date:	01/22/20
Project Name:	57 TONAWANDA				Lab Nu	nber:	L1961123
					9	erial_No	0:01222020:08

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	81	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	82	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	81	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	84	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	48	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	50	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	74	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	49	26-160



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-12		Date Collected:	12/19/19 00:00
Client ID:	BH-4 1-4'		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	: ALPHA 23528
Analytical Method:	134,LCMSMS-ID		Extraction Date:	12/31/19 12:55
Analytical Date:	01/22/20 10:31			
Analyst:	JW			
Percent Solids:	86%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor			
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab									
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.12	0.025	1			
Perfluoropentanoic Acid (PFPeA)	ND			1.12	0.023	1			
			ug/kg			-			
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.12	0.044	1			
Perfluorohexanoic Acid (PFHxA)	0.061	J	ug/kg	1.12	0.059	1			
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.12	0.050	1			
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.12	0.068	1			
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.12	0.047	1			
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.12	0.201	1			
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.12	0.152	1			
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.12	0.084	1			
Perfluorooctanesulfonic Acid (PFOS)	0.156	J	ug/kg	1.12	0.145	1			
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.12	0.075	1			
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.12	0.321	1			
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.12	0.225	1			
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.12	0.052	1			
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.12	0.171	1			
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.12	0.110	1			
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.12	0.095	1			
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.12	0.078	1			
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.12	0.229	1			
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.12	0.060	1			
PFOA/PFOS, Total	0.156	J	ug/kg	1.12	0.047	1			



	Serial_No:01222020:08						
Project Name:	57 TONAWANDA				Lab Nu	umber:	L1961123
Project Number:	57 TONAWANDA				Repor	t Date:	01/22/20
		SAMPL	E RESULTS	6			
Lab ID:	L1961123-12				Date Co	llected:	12/19/19 00:00
Client ID:	BH-4 1-4'				Date Re	ceived:	12/20/19
Sample Location:	Not Specified				Field Pre	ep:	Not Specified
Sample Depth:							
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alky	I Acids by Isotope Dilutio	n - Mansfield	Lab				

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	96	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	97	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93	70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	96	62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	103	63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	98	62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	94	32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	103	61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	101	65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	102	65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95	25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	63	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	106	64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	48	1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	74	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94	56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	83	26-160



			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-13		Date Collected:	12/19/19 00:00
Client ID:	BH-11 NATIVE		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	I: ALPHA 23528
Analytical Method:	134,LCMSMS-ID		Extraction Date:	12/31/19 12:55
Analytical Date:	01/22/20 10:47			
Analyst:	JW			
Percent Solids:	76%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab										
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.21	0.028	1				
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.21	0.056	1				
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.21	0.047	1				
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.21	0.064	1				
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.21	0.055	1				
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.21	0.074	1				
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.21	0.051	1				
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.21	0.218	1				
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.21	0.166	1				
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.21	0.091	1				
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.21	0.158	1				
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.21	0.081	1				
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.21	0.349	1				
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.21	0.245	1				
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.21	0.057	1				
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.21	0.186	1				
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.21	0.119	1				
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.21	0.103	1				
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.21	0.085	1				
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.21	0.248	1				
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.21	0.066	1				
PFOA/PFOS, Total	ND		ug/kg	1.21	0.051	1				



		Serial_No:01222020:08						
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123	
Project Number:	57 TONAWANDA				Report	Date:	01/22/20	
		SAMP	LE RESULTS	5				
Lab ID:	L1961123-13				Date Coll	lected:	12/19/19 00:00	
Client ID:	BH-11 NATIVE				Date Rec	eived:	12/20/19	
Sample Location:	Not Specified				Field Pre	p:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	/I Acids by Isotope Dilutio	n - Mansfield	d Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	83		65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	78		70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	79		61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	81		63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	79		32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	98		25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	52		45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	59		42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78		56-148	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	59		26-160	



					Serial_N	o:01222020:08
Project Name:	57 TONAWANDA				Lab Number:	L1961123
Project Number:	57 TONAWANDA				Report Date:	01/22/20
		SAMPL	E RESULTS	5		
Lab ID: Client ID: Sample Location:	L1961123-14 BH-12 Not Specified				Date Collected: Date Received: Field Prep:	12/19/19 00:00 12/20/19 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids:	Soil 134,LCMSMS-ID 01/22/20 11:04 JW 93%				Extraction Methor Extraction Date:	d: ALPHA 23528 12/31/19 12:55
Parameter		Result	Qualifier	Units	RL MDL	Dilution Factor

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution	on - Mansfiel	d Lab				
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.983	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.983	0.045	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.983	0.038	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	0.983	0.052	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.983	0.044	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.983	0.060	1
Perfluorooctanoic Acid (PFOA)	0.046	J	ug/kg	0.983	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.983	0.176	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.983	0.134	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.983	0.074	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.983	0.128	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.983	0.066	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.983	0.282	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.983	0.198	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.983	0.046	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.983	0.150	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.983	0.096	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.983	0.083	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.983	0.069	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.983	0.201	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.983	0.053	1
PFOA/PFOS, Total	0.046	J	ug/kg	0.983	0.041	1



					:	Serial_No	0:01222020:08	
Project Name:	57 TONAWANDA				Lab Nu	mber:	L1961123	
Project Number:	57 TONAWANDA				Report	Date:	01/22/20	
		SAMP	LE RESULTS	6				
Lab ID:	L1961123-14				Date Col	llected:	12/19/19 00:00	
Client ID:	BH-12				Date Ree	ceived:	12/20/19	
Sample Location:	Not Specified				Field Pre	ep:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	I Acids by Isotope Dilutio	n - Mansfiel	d Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	85		70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83		61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90		62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	93		63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	86		32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	93		25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	48		45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	53		42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	79		56-148	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	55		26-160	



Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		Mathad Blank Analysia		

Method Blank Analysis Batch Quality Control

Analytical Method:	134,LCMSMS-ID
Analytical Date:	01/21/20 14:18
Analyst:	JW

Extraction Method: ALPHA 23528 Extraction Date: 12/31/19 12:55

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope VG1326024-1	Dilution -	Mansfield	Lab for sar	nple(s): 01-14	Batch:
Perfluorobutanoic Acid (PFBA)	0.048	J	ug/kg	1.00	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039
Perfluorohexanoic Acid (PFHxA)	0.055	J	ug/kg	1.00	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic A (NEtFOSAA)	cid ND		ug/kg	1.00	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042



Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		Method Blank Analysis Batch Quality Control		
Analytical Method:	134.LCMSMS-ID		Extraction Method:	ALPHA 23528

Analytical Method:	13
Analytical Date:	01
Analyst:	JV

134,LCMSMS-ID 01/21/20 14:18 JW Extraction Method: ALPHA 23528 Extraction Date: 12/31/19 12:55

Parameter	Result	Qualifier	Units	RL		MDL
Perfluorinated Alkyl Acids by Isoto	pe Dilution	- Mansfield I	_ab for sa	mple(s): 0)1-14	Batch:
WG1326024-1				,		

			cceptance
Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	92		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	82		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	87		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3- NMeFOSAA)	56		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	95		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	52		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	81		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	60		26-160





Lab Control Sample Analysis Batch Quality Control

roject Name:	57 TONAWANDA
roject Number:	57 TONAWANDA

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Report Date: Lab Number: 01/22/20 L1961123

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-14	- Mansfield Lab	Associated sa	mple(s): 01-14	Batch:	WG1326024-2	WG1326024-3		
Perfluorobutanoic Acid (PFBA)	111		112		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	115		117		69-132	N		30
Perfluorobutanesulfonic Acid (PFBS)	106		103		72-128	ω		30
Perfluorohexanoic Acid (PFHxA)	111		111		70-132	0		30
Perfluoroheptanoic Acid (PFHpA)	110		113		71-131	З		30
Perfluorohexanesulfonic Acid (PFHxS)	109		107		67-130	2		30
Perfluorooctanoic Acid (PFOA)	116		118		69-133	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	131		126		64-140	4		30
Perfluoroheptanesulfonic Acid (PFHpS)	123		120		70-132	2		30
Perfluorononanoic Acid (PFNA)	111		114		72-129	З		30
Perfluorooctanesulfonic Acid (PFOS)	107		105		68-136	2		30
Perfluorodecanoic Acid (PFDA)	110		111		69-133			30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	122		131		65-137	7		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	119		136		63-144	13		30
Perfluoroundecanoic Acid (PFUnA)	112		109		64-136	ω		30
Perfluorodecanesulfonic Acid (PFDS)	102		112		59-134	9		30
Perfluorooctanesulfonamide (FOSA)	107		55	Q	67-137	64	Q	30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	108		108		61-139	0		30
Perfluorododecanoic Acid (PFDoA)	111		120		69-135	œ		30
Perfluorotridecanoic Acid (PFTrDA)	117		121		66-139	ω		30
Perfluorotetradecanoic Acid (PFTA)	116		118		69-133	2		30

Lab Control Sample Analysis Batch Quality Control

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA
	Batch Quality Control
Report Date:	Lab Number:
01/22/20	L1961123

Parameter

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-14 Batch: WG1326024-2 WG1326024-3

LCS %Recovery

Qual

LCSD %Recovery

Qual

%Recovery Limits

RPD

Qual

RPD Limits

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	82		70		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	88		78		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	83		90		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		76		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	88		84		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86		92		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		85		62-152
1H, 1H, 2H, 2H-Perfluoro[1, 2-13C2]Octanesulfonic Acid (M2-6:2FTS)	85		92		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	93		90		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		93		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	87		86		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	90		97		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	55		51		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		92		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		ω		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	57		55		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	79		76		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	60		ca		3R-1R0



Аценіа



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Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual Fo	MSD Found	MSD %Recovery Qual	Recovery al Limits	RPD Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab	otope Dilutio	n - Mansfield		Associated sample(s): 01-14		Batch ID	QC Batch ID: WG1326024-4	QC Sample: L1961123-01	L1961123-01	Client ID: BH-
Perfluorobutanoic Acid (PFBA)	ND	4.96	5.47	110		•		71-135		30
Perfluoropentanoic Acid (PFPeA)	ND	4.96	5.73	115		•		69-132		30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.4	5.17	118		•		72-128		30
Perfluorohexanoic Acid (PFHxA)	0.062J	4.96	5.56	112		•		70-132		30
Perfluoroheptanoic Acid (PFHpA)	ND	4.96	5.38	108		•		71-131		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	4.53	4.97	110		•	•	67-130		30
Perfluorooctanoic Acid (PFOA)	0.125J	4.96	6.00	121		•	•	69-133		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	4.72	6.29	133		'	ı	64-140		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	4.72	5.64	120				70-132		30
Perfluorononanoic Acid (PFNA)	ND	4.96	5.80	117		'	ı	72-129	I	30
Perfluorooctanesulfonic Acid (PFOS)	0.512J	4.6	5.63	122		•		68-136		30
Perfluorodecanoic Acid (PFDA)	ND	4.96	5.25	106		•	•	69-133		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	4.76	6.83	143	Q			65-137		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	4.96	6.50	131			ı	63-144		30
Perfluoroundecanoic Acid (PFUnA)	ND	4.96	5.40	109		•		64-136	ı	30
Perfluorodecanesulfonic Acid (PFDS)	ND	4.8	5.74	120		•		59-134		30
Perfluorooctanesulfonamide (FOSA)	ND	4.96	5.83	117		•		67-137		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	4.96	5.40	109		ı		61-139	•	30
Perfluorododecanoic Acid (PFDoA)	ND	4.96	5.57	112		•		69-135	ı	30
	ND	4.96	6.14	124		•	•	66-139	•	30
Perfluorotridecanoic Acid (PFTrDA)	i									

Matrix Spike Analysis Batch Quality Control

Project Name: Project Number:

57 TONAWANDA 57 TONAWANDA

 Lab Number:
 L1961123

 Report Date:
 01/22/20

Matrix Spike Analysis Batch Quality Control

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA
Report Date:	Lab Number:
01/22/20	L1961123

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-14 QC Batch ID: WG1326024-4 QC Sample: L1961123-01 Client ID: BH-

Parameter

Native Sample

MS Added

MS Found

MS %Recovery Qual

MSD MSD Recovery RPD Found %Recovery Qual Limits RPD Qual Limits

Surrogate (Extracted Internal Standard)	MS % Recovery Qualifier	MSD % Recovery Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110		25-186
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	105		32-182
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		42-136
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	62		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	103		64-158
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	66		65-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	95		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		63-166
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	68		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76		26-160
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	95		65-182
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	13		1-125
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		65-151
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		62-152
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97		61-154
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		70-151



Project Name:

57 TONAWANDA

Lab Duplicate Analysis Batch Quality Control

Lab Number:

L1961123

Droiget Number: 57 TONIAMANDA					Penort Date:	01/22/20
						RPD
Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual I	Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-14 QC B ID: BH-03	Mansfield Lab Associated s	ample(s): 01-14 QC Ba	atch ID: WG1326024-5		C Sample: L1	QC Sample: L1961123-02 Client
Perfluorobutanoic Acid (PFBA)	ND	ND	ug/kg	NC		30
Perfluoropentanoic Acid (PFPeA)	ND	ND	ug/kg	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ug/kg	NC		30
Perfluorohexanoic Acid (PFHxA)	ND	0.053J	ug/kg	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ug/kg	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ug/kg	NC		30
Perfluorooctanoic Acid (PFOA)	ND	ND	ug/kg	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	ND	ND	ug/kg	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ug/kg	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ug/kg	NC		30
Perfluorooctanesulfonic Acid (PFOS)	0.310J	0.495J	ug/kg	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ug/kg	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	ND	ND	ug/kg	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid	ND	ND	ug/kg	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	D	ug/kg	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ug/kg	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	D	ug/kg	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	0.136J	ND	ug/kg	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ug/kg	NC		30



Perfluorotridecanoic Acid (PFTrDA)

ND ND

ND ND

ug/kg ug/kg

NC NC

30 30



Serial_No:01222020:08

	Acceptance Criteria	Qualifier	%Recovery Qualifier %Recovery Qualifier	Qualifier	%Recovery	ndard)	Surrogate (Extracted Internal Standard)	Surrogate (E
0	30	NC	ug/kg	č	0.495J	0.310J		PFOA/PFOS, Total
U	30	NC	ug/kg		ND	D	d (PFTA)	Perfluorotetradecanoic Acid (PFTA)
23-02 Client	Batch ID: WG1326024-5 QC Sample: L1961123-02 Client	26024-5	ch ID: WG132		ed sample(s): 01-14	Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-14 QC ID: BH-03	Is by Isotope Dilution -	Perfluorinated Alkyl Acic ID: BH-03
5	RPD Qual Limits	RPD	Units	Sample	Duplicate Sample	Native Sample		Parameter
L1961123 01/22/20	Lab Number: Report Date:		Analysis Control	\frown	Lab Duplicate Batch Quality		57 TONAWANDA 57 TONAWANDA	Project Name: Project Number:

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery Qualifier %Recovery Qualifier Criteria	Qualifier	Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	72		71		60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	74		72		65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	82		83		70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	68		66		61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	70		72		62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	88		91		63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	72		72		62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		83		32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	73		75		61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	85		87		65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	74		70		65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	86		06		25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	39	Q	36	Q	45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	80		74		64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		14		1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	37	Q	39	Q	42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	68		64		56-148	

Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)

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26-160

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PESTICIDES



			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-01		Date Collected:	12/18/19 00:00
Client ID:	BH-10		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 17:09			
Analyst:	JMC			
Percent Solids:	92%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fac	tor Column
Chlorinated Herbicides by GC - W	estborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	180	4.79	1	А
Surrogate			% Recovery	Qualifier	Accep Crit		Column
DCAA			57		30	-150	A
DCAA			53		30	-150	В

			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-02		Date Collected:	12/18/19 00:00
Client ID:	BH-03		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 17:28			
Analyst:	JMC			
Percent Solids:	91%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Facto	r Columr
Chlorinated Herbicides by GC - West	borough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	178	4.72	1	A
Surrogate			% Recovery	Qualifier	Accepta Crite		Column
DCAA			33		30-	150	A
DCAA			32		30-	150	В



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-03		Date Collected:	12/18/19 00:00
Client ID:	BH-02		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 18:04			
Analyst:	JMC			
Percent Solids:	81%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fac	ctor Column
Chlorinated Herbicides by GC -	Westborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	204	5.42	1	A
Surrogate			% Recovery	Qualifier	Accep Crite		Column
DCAA			78		30	-150	A
DCAA			75		30	-150	В

			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-04		Date Collected:	12/18/19 00:00
Client ID:	BH-13		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 18:23			
Analyst:	JMC			
Percent Solids:	97%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	r Column
Chlorinated Herbicides by GC - V	Vestborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	169	4.51	1	A
Surrogate			% Recovery	Qualifier	Accep Crite		olumn
DCAA			30		30	-150	А
DCAA			28	Q	30	-150	В



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-05		Date Collected:	12/18/19 00:00
Client ID:	BH-05		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	I: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 18:41			
Analyst:	JMC			
Percent Solids:	87%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fact	tor Column
Chlorinated Herbicides by GC - We	estborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	187	4.98	1	A
Surrogate			% Recovery	Qualifier	Accept Crite		Column
DCAA			76		30	-150	A
DCAA			75		30	-150	В

			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-06		Date Collected:	12/18/19 00:00
Client ID:	BH-06		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	d: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 18:59			
Analyst:	JMC			
Percent Solids:	93%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL D	ilution Factor	Column
Chlorinated Herbicides by GC - We	stborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	176	4.69	1	В
Surrogate			% Recovery	Qualifier	Acceptar Criteri		olumn
DCAA			24	Q	30-15	50	A
DCAA			32		30-15	50	В



			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-07		Date Collected:	12/18/19 13:50
Client ID:	SS-01		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	d: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 19:17			
Analyst:	JMC			
Percent Solids:	85%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL C	Dilution Facto	r Column
Chlorinated Herbicides by GC -	Westborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	192	5.10	1	А
Surrogate			% Recovery	Qualifier	Accepta Criter		olumn
DCAA			82		30-1	50	A
DCAA			76		30-1	50	В



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-08		Date Collected:	12/18/19 14:14
Client ID:	SS-02		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 19:36			
Analyst:	JMC			
Percent Solids:	89%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fact	or Column
Chlorinated Herbicides by GC - Wes	stborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	182	4.85	1	A
Surrogate			% Recovery	Qualifier	Accep Crit		Column
DCAA			36		30)-150	А
DCAA			36		30)-150	В



			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-09		Date Collected:	12/18/19 14:36
Client ID:	SS-03		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	d: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/27/19 16:11			
Analyst:	JMC			
Percent Solids:	43%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL C	Dilution Factor	Column
Chlorinated Herbicides by GC - W	Vestborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	378	10.0	1	В
Surrogate			% Recovery	Qualifier	Accepta Criter		olumn
DCAA			28	Q	30-1	50	A
DCAA			30		30-1	50	В

			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-10		Date Collected:	12/19/19 10:00
Client ID:	SS-04		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 20:12			
Analyst:	JMC			
Percent Solids:	84%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fact	or Column
Chlorinated Herbicides by GC -	Westborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	194	5.17	1	В
Surrogate			% Recovery	Qualifier	Accep Crite		Column
DCAA			29	Q	30	-150	А
DCAA			33		30	-150	В

			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-11		Date Collected:	12/19/19 11:10
Client ID:	SS-05		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 20:31			
Analyst:	JMC			
Percent Solids:	81%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fac	tor Column
Chlorinated Herbicides by GC -	Westborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	204	5.42	1	A
Surrogate			% Recovery	Qualifier	Accept Crite		Column
DCAA			77		30-	-150	A
DCAA			77		30-	-150	В

			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-12		Date Collected:	12/19/19 00:00
Client ID:	BH-4 1-4'		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	I: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 08:53
Analytical Date:	12/26/19 20:49			
Analyst:	JMC			
Percent Solids:	86%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution F	actor	Column
Chlorinated Herbicides by GC -	Westborough Lab							
2,4,5-TP (Silvex)	ND		ug/kg	192	5.11	1		Α
Surrogate			% Recovery	Qualifier		otance teria	Colu	imn
DCAA			80		3	0-150	A	\ \
DCAA			74		3	0-150	E	3

			Serial_No	0:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-13		Date Collected:	12/19/19 00:00
Client ID:	BH-11 NATIVE		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	d: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 12:49
Analytical Date:	12/26/19 21:26			
Analyst:	JMC			
Percent Solids:	76%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL I	Dilution Factor	Column
Chlorinated Herbicides by GC - Wes	tborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	211	5.62	1	A
Surrogate			% Recovery	Qualifier	Accepta Criter		lumn
DCAA			80		30-1	50	A
DCAA			79		30-1	50	В



			Serial_No	:01222020:08
Project Name:	57 TONAWANDA		Lab Number:	L1961123
Project Number:	57 TONAWANDA		Report Date:	01/22/20
		SAMPLE RESULTS		
Lab ID:	L1961123-14		Date Collected:	12/19/19 00:00
Client ID:	BH-12		Date Received:	12/20/19
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Soil		Extraction Method	: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	12/23/19 12:49
Analytical Date:	12/26/19 21:44			
Analyst:	JMC			
Percent Solids:	93%			
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fac	tor Column
Chlorinated Herbicides by GC - We	estborough Lab						
2,4,5-TP (Silvex)	ND		ug/kg	178	4.72	1	A
Surrogate			% Recovery	Qualifier	Accep Crit		Column
DCAA			81		30	-150	A
DCAA			75		30	-150	В



Project Name: Project Number:	57 TONAWANDA 57 TONAWANDA		Lab Number: Report Date:	L1961123 01/22/20
		Method Blank Analysis Batch Quality Control		
Analytical Method: Analytical Date: Analyst:	1,8151A 12/26/19 14:42 JMC		Extraction Method: Extraction Date:	EPA 8151A 12/23/19 08:53
Methylation Date:	12/24/19 15:00			

Parameter	Result	Qualifier	Units		RL	MDL	Column
Chlorinated Herbicides by GC -	Westborough	Lab for sam	ole(s):	01-14	Batch:	WG1323936-	1
2,4,5-TP (Silvex)	ND		ug/kg		163	4.33	А

		Accept	ance
Surrogate	%Recovery (Qualifier Crite	ria Column
DCAA	78	30-15	0 A
DCAA	83	30-15	0 В



Lab Control Sample Analysis Batch Quality Control

Project Number: 57 TONAWANDA	Project Name:
57 TONAWANDA	57 TONAWANDA
	Batch Quality Control
Report Date:	Lab Number:
01/22/20	L1961123

	LCS		LCSD	D	%	%Recovery			RPD	
Parameter	%Recovery Qual	Qual	%Recovery	very	Qual	Limits	RPD	Qual	Limits Columr	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-14 Batch: WG1323936-2	n Lab Associated	sample(s):	01-14 B	atch:	WG1323936-2	WG1323936-3				
2,4,5-TP (Silvex)	83		87			30-150	сл		30	A

LCS LCSD %Recovery Qual %Recovery Qual 78 84 86 89	DCAA	Surrogate
CS LCSD Svery Qual %Recovery 84 84 89		
CS LCSD Svery Qual %Recovery 84 84 89		
ry Qual %Recovery 84 89	78	LCS %Recove
		ry Q
	84 89	
	30-150 30-150	Acceptance Criteria
Acceptance Criteria 30-150 30-150	ΒÞ	Column



INORGANICS & MISCELLANEOUS



Serial No:01222020:08

Lab Number: L1961123 Report Date: 01/22/20

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

SAMPLE RESULTS

Lab ID: Client ID: Sample Location	L1961123-0 BH-10 : Not Specifie							Received: 1	2/18/19 00:00 2/20/19 lot Specified)
Sample Depth: Matrix:	Soil	-				Dilution	Date	Date	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Analyst
General Chemistry - W	estborough Lal	C								
Solids, Total	92.2		%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.868	0.174	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Serial No:01222020:08

Lab Number: L1961123 Report Date: 01/22/20

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

SAMPLE RESULTS

Lab ID: Client ID:	L1961123-0 BH-03						Date R	eceived: 1	2/18/19 00:00 2/20/19)
Sample Location	: Not Specifie	d					Field P	Prep: N	lot Specified	
Sample Depth: Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lat	C								
Solids, Total	90.9		%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.880	0.176	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID:	L1961123-0 BH-02	-					Date R	eceived: 1	2/18/19 00:00 2/20/19 lot Specified)
Sample Location	: Not Specifie	a					Field P	rep: N	lot Specified	
Sample Depth: Matrix:	Soil									
Mallix.	301					Dilution	Data	Dete	A	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lal	C								
Solids, Total	81.2		%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.985	0.197	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID: Sample Location	L1961123-0 BH-13 : Not Specifie	-						Received: 1	2/18/19 00:00 2/20/19 ot Specified)
Sample Depth: Matrix:	Soil							юр.		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lal	b								
Solids, Total	97.3		%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.822	0.164	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID:	L1961123-05 BH-05						leceived:	12/18/19 00:00 12/20/19	
Sample Location	: Not Specified					Field P	rep:	Not Specified	
Sample Depth: Matrix:	Soil								
Parameter	Result Qual	ifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab								
Solids, Total	86.6	%	0.100	NA	1	-	12/21/19 13:19	9 121,2540G	RI
Chromium, Hexavalent	ND	mg/kg	0.924	0.185	1	12/23/19 10:20	12/23/19 20:30	0 1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID:	L1961123-0	6					Date C	ollected: 1	2/18/19 00:00)
Client ID:	BH-06						Date R	eceived:	2/20/19	
Sample Location:	Not Specifie	d					Field P	rep: N	Not Specified	
Sample Depth:										
Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	estborough Lat	C								
Solids, Total	93.1		%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.859	0.172	4	12/23/19 10:20	12/23/19 20:30	1.7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID: Sample Location	L1961123-07 SS-01 : Not Specified						eceived:	2/18/19 13:50 2/20/19 Not Specified)
Sample Depth: Matrix:	Soil								
Parameter	Result Qu	ualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab								
Solids, Total	84.9	%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND	mg/kg	0.942	0.188	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID: Sample Location	L1961123-0 SS-02 : Not Specifie	-						Received: 1	2/18/19 14:14 2/20/19 lot Specified	ļ
Sample Depth: Matrix:	Soil	u								
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lal)								
Solids, Total	89.0		%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.899	0.180	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID: Sample Location	L1961123-0 SS-03 n: Not Specifie							Received:	12/18/19 14:36 12/20/19 Not Specified	5
Sample Depth: Matrix:	Soil					Dilution	Date	Date	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Analyst
General Chemistry - W	estborough Lal	C								
Solids, Total	42.8		%	0.100	NA	1	-	12/21/19 13:1	9 121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	1.87	0.374	1	12/23/19 10:20	12/23/19 20:3	0 1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID:	L1961123-1 SS-04	-					Date R	Received: 1	2/19/19 10:00 2/20/19)
Sample Location	: Not Specifie	d					Field F	rep: N	lot Specified	
Sample Depth: Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lal	C								
Solids, Total	84.0		%	0.100	NA	1	-	12/21/19 13:19	121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.952	0.190	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID: Sample Location	L1961123-1 SS-05 n: Not Specifie							Received:	12/19/19 11:10 12/20/19 Not Specified)
Sample Depth: Matrix:	Soil					Dilution	Date	Date	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Analyst
General Chemistry - W	/estborough Lat	C								
Solids, Total	81.4		%	0.100	NA	1	-	12/21/19 13:1	9 121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.983	0.196	1	12/23/19 10:20	12/23/19 20:3	0 1,7196A	DR



Serial No:01222020:08

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID: Sample Location	L1961123-12 BH-4 1-4' : Not Specified						eceived:	12/19/19 00:00 12/20/19 Not Specified)
Sample Depth: Matrix:	Soil								
Parameter		alifier Un	its RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab								
Solids, Total	85.6	%	6 0.100	NA	1	-	12/21/19 13:1	9 121,2540G	RI
Chromium, Hexavalent	ND	mg	/kg 0.934	0.187	1	12/23/19 10:20	12/23/19 20:3	0 1,7196A	DR



Serial No:01222020:08

1,7196A

DR

 Lab Number:
 L1961123

 Report Date:
 01/22/20

12/23/19 10:20 12/23/19 20:30

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

ND

SAMPLE RESULTS

Lab ID: Client ID: Sample Location:	L1961123-13 BH-11 NATIVE Not Specified						Received:	12/19/19 00:00 12/20/19 Not Specified)
Sample Depth: Matrix:	Soil								
Parameter	Result Qua	lifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab								
Solids, Total	76.4	%	0.100	NA	1	-	12/21/19 13:19	9 121,2540G	RI

0.209

1

1.05

mg/kg



Chromium, Hexavalent

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Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab ID: Client ID: Sample Location:	L1961123-14 BH-12 Not Specified							leceived:	12/19/19 00:00 12/20/19 Not Specified	
Sample Depth: Matrix:	Soil							iop.		
Parameter		Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab									
Solids, Total	92.7		%	0.100	NA	1	-	12/21/19 13:19	9 121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.863	0.172	1	12/23/19 10:20	12/23/19 20:30	0 1,7196A	DR



Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L1961123

 Report Date:
 01/22/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab for sam	nple(s): 01	-10 Ba	tch: WO	G1323927-1	1			
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR
General Chemistry - W	estborough Lab for sam	nple(s): 11	-14 Ba	tch: WO	G1323930-′	1			
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	12/23/19 10:20	12/23/19 20:30	1,7196A	DR



Lab Control Sample Analysis Batch Quality Control

Project Name:	57 TONAWANDA					<u> </u>	Lab Ni	Lab Number:	L1961123
Project Number:	Project Number: 57 TONAWANDA						Repor	Report Date:	01/22/20
Parameter		LCS %Recovery Qual	Qual	LCSD %Recovery Qual	Qual	%Recovery Limits	RPD	Qual	RPD Qual RPD Limits
General Chemistry -	General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG1323927-2	ciated sample(s): 01-10	Batch: WG1323	927-2				
Chromium, Hexavalent		105		ı		80-120			20

General Chemistry - Westborough Lab Associated sample(s): 11-14 Batch: WG1323930-2

Chromium, Hexavalent 105 , 80-120 ï 20



Matrix Spike Analysis Batch Quality Control

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA

 Lab Number:
 L1961123

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Chromium, Hexavalent	General Chemistry - Westborough Lab Associated sample(s): 11-14 QC Batch ID: WG1323930-4	Chromium, Hexavalent	General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1323927-4	Parameter
ND	orough Lab Assoc	ND	orough Lab Assoc	Native Sample
995	iated sample	885	iated sample	MS Added
870	e(s): 11-14	767	e(s): 01-10;	MS Found
87	QC Batch II	87	QC Batch II	MS %Recovery
	D: WG1323930-4		D: WG1323927-4	MS MS MSD Found %Recovery Qual Found
	QC Sample: L1961123-11 Client ID: SS-05		QC Sample: L1961123-04 Client ID: BH-13	MSD Recovery RPD %Recovery Qual Limits RPD Qual Limits
75-125	61123-11 Clier	75-125	61123-04 Clier	Recovery lal Limits
	nt ID: SS-05		nt ID: BH-13	RPD Qual L
20		20		RPD Limits

Ацена

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA

Lab Duplicate Analysis Batch Quality Control Lab Number:

 Lab Number:
 L1961123

 Report Date:
 01/22/20

Parameter Native	Native Sample	Duplicate Sample	Units	RPD	Qual RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-14 QC Batch ID: WG1323592-1 QC Sample: L1961123-01 Client ID: BH-10	1-14 QC E	Batch ID: WG1323592-1	QC Sample:	L1961123-01	Client ID: BH-10
Solids, Total	92.2	89.1	%	ω	20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG1323927	1-10 QC E	Batch ID: WG1323927-6	QC Sample:	L1961123-04	-6 QC Sample: L1961123-04 Client ID: BH-13
Chromium, Hexavalent	ND	ND	mg/kg	NC	20
General Chemistry - Westborough Lab Associated sample(s): 11-14 QC Batch ID: WG1323930-6 QC Sample: L1961123-11 Client ID: SS-05	1-14 QC E	Batch ID: WG1323930-6	QC Sample:	L1961123-11	Client ID: SS-05
Chromium, Hexavalent	ND	ND	mg/kg	NC	20

Дирна

HERB-APA(14),HEXCR-7196(30)		Absent	\prec	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-08B
TS(7)		Absent	×	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-08A
A2-NY-537-ISOTOPE(28)		Absent	×	3.4		NA	A	Plastic 8oz unpreserved	L1961123-07C
HERB-APA(14),HEXCR-7196(30)		Absent	×	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-07B
TS(7)		Absent	×	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-07A
A2-NY-537-ISOTOPE(28)		Absent	×	3.4		NA	A	Plastic 8oz unpreserved	L1961123-06C
HERB-APA(14),HEXCR-7196(30)		Absent	×	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-06B
TS(7)		Absent	\prec	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-06A
A2-NY-537-ISOTOPE(28)		Absent	×	3.4		NA	A	Plastic 8oz unpreserved	L1961123-05C
HERB-APA(14),HEXCR-7196(30)		Absent	\prec	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-05B
TS(7)		Absent	×	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-05A
A2-NY-537-ISOTOPE(28)		Absent	×	3.4		NA	A	Plastic 8oz unpreserved	L1961123-04C
HERB-APA(14),HEXCR-7196(30)		Absent	×	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-04B
TS(7)		Absent	×	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-04A
A2-NY-537-ISOTOPE(28)		Absent	×	3.4		NA	A	Plastic 8oz unpreserved	L1961123-03C
HERB-APA(14),HEXCR-7196(30)		Absent	\prec	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-03B
TS(7)		Absent	×	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-03A
A2-NY-537-ISOTOPE(28)		Absent	×	3.4		NA	A	Plastic 8oz unpreserved	L1961123-02C
HERB-APA(14),HEXCR-7196(30)		Absent	×	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-02B
TS(7)		Absent	×	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-02A
A2-NY-537-ISOTOPE(28)		Absent	×	3.4		NA	A	Plastic 8oz unpreserved	L1961123-01C
HERB-APA(14),HEXCR-7196(30)		Absent	×	3.4		NA	A	Glass 120ml/4oz unpreserved	L1961123-01B
TS(7)		Absent	×	3.4		NA	A	Plastic 2oz unpreserved for TS	L1961123-01A
Analysis(*)	Date/Time	Seal	Pres		рH	pН	Cooler	ID Container Type	Container ID
	Frozen			Temp	Final	Initial		Information	Container Information
								Absent	Cooler A
									Cooler Information
						S	YES	Were project specific reporting limits specified?	Were project
	n	Sample Receipt and Container Information	ainer I	nd Conta	ceipt ar	mple Re	Sa		
Lab Number: L1961123 Report Date: 01/22/20								me: 57 TONAWANDA mber: 57 TONAWANDA	Project Name: Project Number:

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*Values in parentheses indicate holding time in days



L1961123-14C

Plastic 8oz unpreserved

⊳

NA

3.4

~

Absent

A2-NY-537-ISOTOPE(28)

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Container Information	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН		deg C	Pres	Seal	Date/Time	Analysis(*)
L1961123-08C	Plastic 8oz unpreserved	A	NA		3.4	\prec	Absent		A2-NY-537-ISOTOPE(28)
L1961123-09A	Plastic 2oz unpreserved for TS	Þ	NA		3.4	\prec	Absent		TS(7)
L1961123-09B	Glass 120ml/4oz unpreserved	A	NA		3.4	\prec	Absent		HERB-APA(14),HEXCR-7196(30)
L1961123-09C	Plastic 8oz unpreserved	Þ	NA		3.4	\prec	Absent		A2-NY-537-ISOTOPE(28)
L1961123-10A	Plastic 2oz unpreserved for TS	A	NA		3.4	×	Absent		TS(7)
L1961123-10B	Glass 120ml/4oz unpreserved	A	NA		3.4	\prec	Absent		HERB-APA(14),HEXCR-7196(30)
L1961123-10C	Plastic 8oz unpreserved	A	NA		3.4	\prec	Absent		A2-NY-537-ISOTOPE(28)
L1961123-11A	Plastic 2oz unpreserved for TS	A	NA		3.4	×	Absent		TS(7)
L1961123-11B	Glass 120ml/4oz unpreserved	A	NA		3.4	×	Absent		HERB-APA(14),HEXCR-7196(30)
L1961123-11C	Plastic 8oz unpreserved	A	NA		3.4	×	Absent		A2-NY-537-ISOTOPE(28)
L1961123-12A	Plastic 2oz unpreserved for TS	A	NA		3.4	×	Absent		TS(7)
L1961123-12B	Glass 120ml/4oz unpreserved	A	NA		3.4	×	Absent		HERB-APA(14),HEXCR-7196(30)
L1961123-12C	Plastic 8oz unpreserved	A	NA		3.4	×	Absent		A2-NY-537-ISOTOPE(28)
L1961123-13A	Plastic 2oz unpreserved for TS	A	NA		3.4	×	Absent		TS(7)
L1961123-13B	Glass 120ml/4oz unpreserved	А	NA		3.4	×	Absent		HERB-APA(14),HEXCR-7196(30)
L1961123-13C	Plastic 8oz unpreserved	A	NA		3.4	×	Absent		A2-NY-537-ISOTOPE(28)
L1961123-14A	Plastic 2oz unpreserved for TS	A	NA		3.4	×	Absent		TS(7)
L1961123-14B	Glass 120ml/4oz unpreserved	A	NA		3.4	×	Absent		HERB-APA(14),HEXCR-7196(30)

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PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
,		
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		10050 10 0
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1



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GLOSSARY

Acronyms

,,,,	
DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.
Footnotes	

Report Format: DU Report with 'J' Qualifiers



Project Number: 57 TONAWANDA

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- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NJ-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- **P** The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers



Project Number: 57 TONAWANDA

 Lab Number:
 L1961123

 Report Date:
 01/22/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- **S** Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Lab Number:	L1961123
Report Date:	01/22/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW:</u> Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: <u>NPW:</u> PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. **EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene. **Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:01222020:08

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

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179 Lake Avenue, Rochester, NY 14608 Office (585) 547-2530 Fax (585) 547-3311

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Client:	BEJ	Completed by:	holylail	-
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	Sample Condit Per NELAC/ELAP	tion Requirements 210/241/242/243/244		
Condition	NELAC compliance with the sampl Yes	le condition requirements upon r No	receipt N/A]
Container Type	ŢX	5035		
Comments				
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5



Client:	<u>BE3</u>				
Project Reference:	57 Toi	nawanda			
Sample Identifier:	TP Lo	ocation 14 - 8-9 Fee	et		
Lab Sample ID:	2001	34-01		Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		2.97	mg/Kg		1/15/2020 16:31
Barium		33.8	mg/Kg		1/15/2020 16:31
Beryllium		< 0.283	mg/Kg		1/15/2020 16:31
Cadmium		0.467	mg/Kg		1/15/2020 16:31
Chromium		5.82	mg/Kg		1/15/2020 16:31
Copper		297	mg/Kg		1/15/2020 16:31
Lead		52.5	mg/Kg		1/15/2020 16:31
Manganese		133	mg/Kg		1/15/2020 16:31
Nickel		7.02	mg/Kg		1/15/2020 16:31
Selenium		1.94	mg/Kg		1/15/2020 16:31
Silver		< 0.566	mg/Kg		1/15/2020 16:31
Zinc		92.4	mg/Kg		1/15/2020 16:31
Method Refere	nce(s):	EPA 6010C			
Preparation Da Data File:	ite:	EPA 3050B 1/14/2020 200115C			





Preparation Date:

Data File:

1/10/2020

Hg200113A

Lab Project ID: 200134

Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	TP Location 14 - 8-9 Fee	t		
Lab Sample ID:	200134-01		Date Sampled:	1/8/2020
Matrix:	Soil		Date Received:	1/9/2020
<u>Mercury</u>				
<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury	0.0638	mg/Kg		1/13/2020 10:43
Method Referen	cce(s): EPA 7471B			





Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda						
Sample Identifier:	TP Location 14	4 - 8-9 Fe	eet				
Lab Sample ID:	200134-01			Dat	e Sampled:	1/8/2020	
Matrix:	Soil			Dat	e Received:	1/9/2020	
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	zed
PCB-1016		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1221		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1232		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1242		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1248		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1254		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1260		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1262		< 0.0325	mg/Kg			1/10/2020	16:02
PCB-1268		< 0.0325	mg/Kg			1/10/2020	16:02
<u>Surrogate</u>		Perc	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			40.1	18.3 - 89.6		1/10/2020	16:02
Method Referen	Ice(s): EPA 8082A EPA 3546	A					
Preparation Da		0					





Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	TP Location 2 200134-01 Soil	14 - 8-9 Feet	t	Date Sampled: Date Received:	1/8/2020 1/9/2020
Chlorinated Pesti	<u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 3.25	ug/Kg		1/10/2020 17:30
4,4-DDE		< 3.25	ug/Kg		1/10/2020 17:30
4,4-DDT		4.18	ug/Kg	М	1/10/2020 17:30
Aldrin		< 3.25	ug/Kg		1/10/2020 17:30
alpha-BHC		< 3.25	ug/Kg		1/10/2020 17:30
beta-BHC		< 3.25	ug/Kg	М	1/10/2020 17:30
cis-Chlordane		< 3.25	ug/Kg	М	1/10/2020 17:30
delta-BHC		< 3.25	ug/Kg	М	1/10/2020 17:30
Dieldrin		< 3.25	ug/Kg	М	1/10/2020 17:30
Endosulfan I		< 3.25	ug/Kg	М	1/10/2020 17:30
Endosulfan II		< 3.25	ug/Kg	М	1/10/2020 17:30
Endosulfan Sulfate		2.73	ug/Kg	JM	1/10/2020 17:30
Endrin		< 3.25	ug/Kg	М	1/10/2020 17:30
Endrin Aldehyde		< 3.25	ug/Kg	М	1/10/2020 17:30
Endrin Ketone		< 3.25	ug/Kg	М	1/10/2020 17:30
gamma-BHC (Lindane)	4.84	ug/Kg	М	1/10/2020 17:30
Heptachlor		< 3.25	ug/Kg	М	1/10/2020 17:30
Heptachlor Epoxide		< 3.25	ug/Kg	MD	1/10/2020 17:30
Methoxychlor		< 3.25	ug/Kg	М	1/10/2020 17:30
Toxaphene		< 32.5	ug/Kg		1/10/2020 17:30
trans-Chlordane		< 3.25	ug/Kg	М	1/10/2020 17:30





Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	TP Location 14 -	8-9 Feet				
Lab Sample ID:	200134-01		Date	e Sampled:	1/8/2020	
Matrix:	Soil		Date	e Received:	1/9/2020	
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	/zed
Decachlorobiphenyl (1	1)	13.8	30.7 - 111	*	1/10/2020	17:30
Tetrachloro-m-xylene	(1)	56.9	34.7 - 87.3		1/10/2020	17:30
Method Referen Preparation Dat	EPA 3546					





Client:	BE3		
Project Reference:	57 Tonawanda		
Sample Identifier:	TP Location 14 - 8-9 Feet		
Lab Sample ID:	200134-01	Date Sampled:	1/8/2020
Matrix:	Soil	Date Received:	1/9/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 303	ug/Kg		1/15/2020 01:38
1,2,4,5-Tetrachlorobenzene	< 303	ug/Kg		1/15/2020 01:38
1,2,4-Trichlorobenzene	< 303	ug/Kg		1/15/2020 01:38
1,2-Dichlorobenzene	< 303	ug/Kg		1/15/2020 01:38
1,3-Dichlorobenzene	< 303	ug/Kg		1/15/2020 01:38
1,4-Dichlorobenzene	< 303	ug/Kg		1/15/2020 01:38
2,2-0xybis (1-chloropropane)	< 303	ug/Kg		1/15/2020 01:38
2,3,4,6-Tetrachlorophenol	< 303	ug/Kg		1/15/2020 01:38
2,4,5-Trichlorophenol	< 303	ug/Kg		1/15/2020 01:38
2,4,6-Trichlorophenol	< 303	ug/Kg		1/15/2020 01:38
2,4-Dichlorophenol	< 303	ug/Kg		1/15/2020 01:38
2,4-Dimethylphenol	< 303	ug/Kg		1/15/2020 01:38
2,4-Dinitrophenol	< 1210	ug/Kg		1/15/2020 01:38
2,4-Dinitrotoluene	< 303	ug/Kg		1/15/2020 01:38
2,6-Dinitrotoluene	< 303	ug/Kg		1/15/2020 01:38
2-Chloronaphthalene	< 303	ug/Kg		1/15/2020 01:38
2-Chlorophenol	< 303	ug/Kg		1/15/2020 01:38
2-Methylnapthalene	< 303	ug/Kg		1/15/2020 01:38
2-Methylphenol	< 303	ug/Kg		1/15/2020 01:38
2-Nitroaniline	< 303	ug/Kg		1/15/2020 01:38
2-Nitrophenol	< 303	ug/Kg		1/15/2020 01:38
3&4-Methylphenol	< 303	ug/Kg		1/15/2020 01:38
3,3'-Dichlorobenzidine	< 303	ug/Kg		1/15/2020 01:38

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Partial



Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	la				
Sample Identifier:	TP Location	14 - 8-9 Feet				
Lab Sample ID:	200134-01			Date Sampled:	1/8/2020	
Matrix:	Soil			Date Received:	1/9/2020	
3-Nitroaniline		< 303	ug/Kg		1/15/2020	01:38
4,6-Dinitro-2-methylp	ohenol	< 605	ug/Kg		1/15/2020	01:38
4-Bromophenyl pheny	yl ether	< 303	ug/Kg		1/15/2020	01:38
4-Chloro-3-methylphe	enol	< 303	ug/Kg		1/15/2020	01:38
4-Chloroaniline		< 303	ug/Kg		1/15/2020	01:38
4-Chlorophenyl pheny	/l ether	< 303	ug/Kg		1/15/2020	01:38
4-Nitroaniline		< 303	ug/Kg		1/15/2020	01:38
4-Nitrophenol		< 303	ug/Kg		1/15/2020	01:38
Acenaphthene		< 303	ug/Kg		1/15/2020	01:38
Acenaphthylene		232	ug/Kg	J	1/15/2020	01:38
Acetophenone		< 303	ug/Kg		1/15/2020	01:38
Anthracene		309	ug/Kg		1/15/2020	01:38
Atrazine		< 303	ug/Kg		1/15/2020	01:38
Benzaldehyde		< 303	ug/Kg		1/15/2020	01:38
Benzo (a) anthracene		705	ug/Kg		1/15/2020	01:38
Benzo (a) pyrene		936	ug/Kg		1/15/2020	01:38
Benzo (b) fluoranthen	ie	871	ug/Kg		1/15/2020	01:38
Benzo (g,h,i) perylene	!	731	ug/Kg		1/15/2020	01:38
Benzo (k) fluoranthen	ie	700	ug/Kg		1/15/2020	01:38
Bis (2-chloroethoxy) I	methane	< 303	ug/Kg		1/15/2020	01:38
Bis (2-chloroethyl) et	her	< 303	ug/Kg		1/15/2020	01:38
Bis (2-ethylhexyl) pht	halate	< 303	ug/Kg		1/15/2020	01:38
Butylbenzylphthalate		< 303	ug/Kg		1/15/2020	01:38
Caprolactam		< 303	ug/Kg		1/15/2020	01:38
Carbazole		< 303	ug/Kg		1/15/2020	01:38





Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier: Lab Sample ID: Matrix:	TP Location 2 200134-01 Soil	14 - 8-9 Fee	et	Date Sampled: Date Received:	1/8/2020 1/9/2020	
Chrysene	5011	773	ug/Kg	Date Acceived.	1/15/2020	01.38
Dibenz (a,h) anthracer	1e	220	ug/Kg	I	1/15/2020	
Dibenzofuran		< 303	ug/Kg)	1/15/2020	
Diethyl phthalate		< 303	ug/Kg		1/15/2020	
Dimethyl phthalate		< 303	ug/Kg		1/15/2020	
Di-n-butyl phthalate		< 303	ug/Kg		1/15/2020	
Di-n-octylphthalate		< 303	ug/Kg		1/15/2020	
Fluoranthene		1400	ug/Kg		1/15/2020	
Fluorene		< 303	ug/Kg		1/15/2020	01:38
Hexachlorobenzene		< 303	ug/Kg		1/15/2020	01:38
Hexachlorobutadiene		< 303	ug/Kg		1/15/2020	01:38
Hexachlorocyclopenta	diene	< 1210	ug/Kg		1/15/2020	01:38
Hexachloroethane		< 303	ug/Kg		1/15/2020	01:38
Indeno (1,2,3-cd) pyre	ne	592	ug/Kg		1/15/2020	01:38
Isophorone		< 303	ug/Kg		1/15/2020	01:38
Naphthalene		< 303	ug/Kg		1/15/2020	01:38
Nitrobenzene		< 303	ug/Kg		1/15/2020	01:38
N-Nitroso-di-n-propyla	amine	< 303	ug/Kg		1/15/2020	01:38
N-Nitrosodiphenylami	ne	< 303	ug/Kg		1/15/2020	01:38
Pentachlorophenol		< 605	ug/Kg		1/15/2020	01:38
Phenanthrene		651	ug/Kg		1/15/2020	01:38
Phenol		< 303	ug/Kg		1/15/2020	01:38
Pyrene		1110	ug/Kg		1/15/2020	01:38





Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	TP Location 14	- 8-9 Feet				
Lab Sample ID:	200134-01		Dat	e Sampled:	1/8/2020	
Matrix:	Soil		Dat	e Received:	1/9/2020	
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	yzed
2,4,6-Tribromophenol		34.1	35.1 - 89.5	*	1/15/2020	01:38
2-Fluorobiphenyl		35.0	37.7 - 81.4	*	1/15/2020	01:38
2-Fluorophenol		34.8	40.2 - 77	*	1/15/2020	01:38
Nitrobenzene-d5		34.7	36.2 - 78.4	*	1/15/2020	01:38
Phenol-d5		35.8	41.2 - 77.1	*	1/15/2020	01:38
Terphenyl-d14		35.5	39.8 - 97.5	*	1/15/2020	01:38
Method Referen Preparation Dat Data File:	EPA 3546					
Data rile:	D43/95.D					





Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	а			
Sample Identifier: Lab Sample ID: Matrix:	TP Location 200134-01 Soil	14 - 8-9 Feet		Date Sampled: Date Received:	1/8/2020 1/9/2020
Volatile Organics	ŝ				
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	2	< 4.93	ug/Kg		1/10/2020 16:35
1,1,2,2-Tetrachloroet	hane	< 4.93	ug/Kg		1/10/2020 16:35
1,1,2-Trichloroethane	2	< 4.93	ug/Kg		1/10/2020 16:35
1,1-Dichloroethane		< 4.93	ug/Kg		1/10/2020 16:35
1,1-Dichloroethene		< 4.93	ug/Kg		1/10/2020 16:35
1,2,3-Trichlorobenzei	ne	< 12.3	ug/Kg		1/10/2020 16:35
1,2,4-Trichlorobenzei	ne	< 12.3	ug/Kg		1/10/2020 16:35
1,2,4-Trimethylbenze	ne	< 4.93	ug/Kg		1/10/2020 16:35
1,2-Dibromo-3-Chlore	opropane	< 24.7	ug/Kg		1/10/2020 16:35
1,2-Dibromoethane		< 4.93	ug/Kg		1/10/2020 16:35
1,2-Dichlorobenzene		< 4.93	ug/Kg		1/10/2020 16:35
1,2-Dichloroethane		< 4.93	ug/Kg		1/10/2020 16:35
1,2-Dichloropropane		< 4.93	ug/Kg		1/10/2020 16:35
1,3,5-Trimethylbenze	ne	< 4.93	ug/Kg		1/10/2020 16:35
1,3-Dichlorobenzene		< 4.93	ug/Kg		1/10/2020 16:35
1,4-Dichlorobenzene		< 4.93	ug/Kg		1/10/2020 16:35
1,4-Dioxane		< 49.3	ug/Kg		1/10/2020 16:35
2-Butanone		< 24.7	ug/Kg		1/10/2020 16:35
2-Hexanone		< 12.3	ug/Kg		1/10/2020 16:35
4-Methyl-2-pentanon	e	< 12.3	ug/Kg		1/10/2020 16:35
Acetone		< 24.7	ug/Kg		1/10/2020 16:35
Benzene		< 4.93	ug/Kg		1/10/2020 16:35
Bromochloromethane	9	< 12.3	ug/Kg		1/10/2020 16:35





Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	TP Location 2	14 - 8-9 Feet				
Lab Sample ID:	200134-01			Date Sampled:	1/8/2020	
Matrix:	Soil			Date Received:	1/9/2020	
Bromodichloromethan	е	< 4.93	ug/Kg		1/10/2020	16:35
Bromoform		< 12.3	ug/Kg		1/10/2020	16:35
Bromomethane		< 4.93	ug/Kg		1/10/2020	16:35
Carbon disulfide		< 4.93	ug/Kg		1/10/2020	16:35
Carbon Tetrachloride		< 4.93	ug/Kg		1/10/2020	16:35
Chlorobenzene		< 4.93	ug/Kg		1/10/2020	16:35
Chloroethane		< 4.93	ug/Kg		1/10/2020	16:35
Chloroform		< 4.93	ug/Kg		1/10/2020	16:35
Chloromethane		< 4.93	ug/Kg		1/10/2020	16:35
cis-1,2-Dichloroethene		< 4.93	ug/Kg		1/10/2020	16:35
cis-1,3-Dichloropropen	e	< 4.93	ug/Kg		1/10/2020	16:35
Cyclohexane		< 24.7	ug/Kg		1/10/2020	16:35
Dibromochloromethan	е	< 4.93	ug/Kg		1/10/2020	16:35
Dichlorodifluorometha	ne	< 4.93	ug/Kg		1/10/2020	16:35
Ethylbenzene		< 4.93	ug/Kg		1/10/2020	16:35
Freon 113		< 4.93	ug/Kg		1/10/2020	16:35
Isopropylbenzene		< 4.93	ug/Kg		1/10/2020	16:35
m,p-Xylene		< 4.93	ug/Kg		1/10/2020	16:35
Methyl acetate		< 4.93	ug/Kg		1/10/2020	16:35
Methyl tert-butyl Ether		< 4.93	ug/Kg		1/10/2020	16:35
Methylcyclohexane		< 4.93	ug/Kg		1/10/2020	16:35
Methylene chloride		< 12.3	ug/Kg		1/10/2020	16:35
Naphthalene		< 12.3	ug/Kg		1/10/2020	16:35
n-Butylbenzene		< 4.93	ug/Kg		1/10/2020	16:35
n-Propylbenzene		< 4.93	ug/Kg		1/10/2020	16:35



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	TP Location	14 - 8-9 Fe	et				
Lab Sample ID:	200134-01			Dat	e Sampled:	1/8/2020	
Matrix:	Soil			Dat	e Received:	1/9/2020	
o-Xylene		< 4.93	ug/Kg			1/10/2020	16:35
p-Isopropyltoluene		< 4.93	ug/Kg			1/10/2020	16:35
sec-Butylbenzene		< 4.93	ug/Kg			1/10/2020	16:35
Styrene		< 12.3	ug/Kg			1/10/2020	16:35
tert-Butylbenzene		< 4.93	ug/Kg			1/10/2020	16:35
Tetrachloroethene		< 4.93	ug/Kg			1/10/2020	16:35
Toluene		< 4.93	ug/Kg			1/10/2020	16:35
trans-1,2-Dichloroethe	ene	3.22	ug/Kg		J	1/10/2020	16:35
trans-1,3-Dichloropro	pene	< 4.93	ug/Kg			1/10/2020	16:35
Trichloroethene		< 4.93	ug/Kg			1/10/2020	16:35
Trichlorofluorometha	ne	< 4.93	ug/Kg			1/10/2020	16:35
Vinyl chloride		< 4.93	ug/Kg			1/10/2020	16:35
<u>Surrogate</u>		Perc	<u>ent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			120	67.9 - 146		1/10/2020	16:35
4-Bromofluorobenzen	е		61.7	64.6 - 127	*	1/10/2020	16:35
Pentafluorobenzene			100	85.5 - 113		1/10/2020	16:35
Toluene-D8			79.3	83.9 • 114	*	1/10/2020	16:35

Internal standard outliers indicate probable matrix interference
Method Reference(s): EPA 8260C
EPA 5035A - L

Data File:

x67778.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	TP Location 14 - 8-9 Feet			
Lab Sample ID:	200134-01		Date Sampled:	1/8/2020
Matrix:	Soil		Date Received:	1/9/2020
<u>Total Cyanide</u>				
Analyte	Rocult	Unite	Qualifier	Date Analyzed

Analyte	Result	<u>Units</u>	<u>Qualifier</u> <u>Date Analyzed</u>
Cyanide, Total	< 0.550	mg/Kg	1/15/2020
Method Reference(s):	EPA 9014		
	EPA 9010C		
Preparation Date:	1/10/2020		





Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	TP Location 14 -	8-9 Feet			
Lab Sample ID:	200134-01			Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
<u>Percent Solids</u>					
<u>Analyte</u>	J	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids	87	.4	%		1/10/2020
Mothod Doforo					

Method Reference(s):Par%MELAP does not offer this test for approval as part of their laboratory certification program.





Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	TP Lo	cation 16 - 1-3 Fee	t		
Lab Sample ID:	20013	34-02		Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		2.55	mg/Kg		1/15/2020 16:36
Barium		44.4	mg/Kg		1/15/2020 16:36
Beryllium		0.181	mg/Kg	J	1/15/2020 16:36
Cadmium		0.248	mg/Kg	J	1/15/2020 16:36
Chromium		7.95	mg/Kg		1/15/2020 16:36
Copper		21.8	mg/Kg		1/15/2020 16:36
Lead		74.5	mg/Kg		1/15/2020 16:36
Manganese		175	mg/Kg		1/15/2020 16:36
Nickel		8.43	mg/Kg		1/15/2020 16:36
Selenium		1.08	mg/Kg		1/16/2020 09:21
Silver		< 0.522	mg/Kg		1/15/2020 16:36
Zinc		129	mg/Kg		1/15/2020 16:36
Method Referen	nce(s):	EPA 6010C			
Preparation Da Data File:	te:	EPA 3050B 1/14/2020 200115C			





Lab Project ID: 200134

Client:		<u>BE3</u>						
Project Refe	erence:	57 Ton	awanda					
Sample Ide	entifier:	TP Lo	cation 16 ·	- 1-3 Fee	et			
Lab Sampl	e ID:	20013	34-02			Γ	Date Sampled:	1/8/2020
Matrix:		Soil				Γ	Date Received:	1/9/2020
Mercur	Y							
<u>Analyte</u>				<u>Result</u>	<u>Units</u>		Qualifier	Date Analyzed
Mercury			0.	0332	mg/Kg			1/13/2020 10:45
	Method Reference		EPA 7471B					
	Preparation Date Data File:	e:	1/10/2020 Hg200113A					





Client:	<u>BE3</u>						
Project Reference:	57 Tonawan	da					
Sample Identifier:	TP Location	n 16 - 1-3 Fe	eet				
Lab Sample ID:	200134-02			Dat	e Sampled:	1/8/2020	
Matrix:	Soil			Dat	e Received:	1/9/2020	
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		<u>Qualifier</u>	Date Analy	<u>zed</u>
PCB-1016		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1221		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1232		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1242		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1248		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1254		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1260		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1262		< 0.0277	mg/Kg			1/10/2020	16:25
PCB-1268		< 0.0277	mg/Kg			1/10/2020	16:25
Surrogate		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analyz	zed
Tetrachloro-m-xylene			26.8	18.3 - 89.6		1/10/2020	16:25
Method Referen							
Preparation Dat	EPA 35 te: 1/10/2						





Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	3			
Sample Identifier: Lab Sample ID: Matrix:	TP Location 1 200134-02 Soil	l6 - 1-3 Feet		Date Sampled: Date Received:	1/8/2020 1/9/2020
Chlorinated Pestic	<u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		2.80	ug/Kg	Р	1/10/2020 18:26
4,4-DDE		< 2.77	ug/Kg		1/10/2020 18:26
4,4-DDT		4.09	ug/Kg	Р	1/10/2020 18:26
Aldrin		< 2.77	ug/Kg		1/10/2020 18:26
alpha-BHC		< 2.77	ug/Kg		1/10/2020 18:26
beta-BHC		< 2.77	ug/Kg		1/10/2020 18:26
cis-Chlordane		1.91	ug/Kg	J	1/10/2020 18:26
delta-BHC		< 2.77	ug/Kg		1/10/2020 18:26
Dieldrin		< 2.77	ug/Kg		1/10/2020 18:26
Endosulfan I		< 2.77	ug/Kg		1/10/2020 18:26
Endosulfan II		< 2.77	ug/Kg		1/10/2020 18:26
Endosulfan Sulfate		3.50	ug/Kg		1/10/2020 18:26
Endrin		< 2.77	ug/Kg		1/10/2020 18:26
Endrin Aldehyde		< 2.77	ug/Kg		1/10/2020 18:26
Endrin Ketone		2.60	ug/Kg	JP	1/10/2020 18:26
gamma-BHC (Lindane))	< 2.77	ug/Kg		1/10/2020 18:26
Heptachlor		< 2.77	ug/Kg		1/10/2020 18:26
Heptachlor Epoxide		< 2.77	ug/Kg		1/10/2020 18:26
Methoxychlor		7.18	ug/Kg	Р	1/10/2020 18:26
Toxaphene		< 27.7	ug/Kg		1/10/2020 18:26
trans-Chlordane		2.11	ug/Kg	J	1/10/2020 18:26



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	TP Location 16 -	1-3 Feet				
Lab Sample ID:	200134-02		Date	e Sampled:	1/8/2020	
Matrix:	Soil		Date	e Received:	1/9/2020	
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	48.4	30.7 - 111		1/10/2020	18:26
Tetrachloro-m-xylene	(1)	43.6	34.7 - 87.3		1/10/2020	18:26
Method Referen	cce(s): EPA 8081B EPA 3546					
Preparation Dat	te: 1/10/2020					





Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	TP Location 16 - 1-3 Feet		
Lab Sample ID:	200134-02	Date Sampled:	1/8/2020
Matrix:	Soil	Date Received:	1/9/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 286	ug/Kg		1/15/2020 02:07
1,2,4,5-Tetrachlorobenzene	< 286	ug/Kg		1/15/2020 02:07
1,2,4-Trichlorobenzene	< 286	ug/Kg		1/15/2020 02:07
1,2-Dichlorobenzene	< 286	ug/Kg		1/15/2020 02:07
1,3-Dichlorobenzene	< 286	ug/Kg		1/15/2020 02:07
1,4-Dichlorobenzene	< 286	ug/Kg		1/15/2020 02:07
2,2-0xybis (1-chloropropane)	< 286	ug/Kg		1/15/2020 02:07
2,3,4,6-Tetrachlorophenol	< 286	ug/Kg		1/15/2020 02:07
2,4,5-Trichlorophenol	< 286	ug/Kg		1/15/2020 02:07
2,4,6-Trichlorophenol	< 286	ug/Kg		1/15/2020 02:07
2,4-Dichlorophenol	< 286	ug/Kg		1/15/2020 02:07
2,4-Dimethylphenol	< 286	ug/Kg		1/15/2020 02:07
2,4-Dinitrophenol	< 1140	ug/Kg		1/15/2020 02:07
2,4-Dinitrotoluene	< 286	ug/Kg		1/15/2020 02:07
2,6-Dinitrotoluene	< 286	ug/Kg		1/15/2020 02:07
2-Chloronaphthalene	< 286	ug/Kg		1/15/2020 02:07
2-Chlorophenol	< 286	ug/Kg		1/15/2020 02:07
2-Methylnapthalene	< 286	ug/Kg		1/15/2020 02:07
2-Methylphenol	< 286	ug/Kg		1/15/2020 02:07
2-Nitroaniline	< 286	ug/Kg		1/15/2020 02:07
2-Nitrophenol	< 286	ug/Kg		1/15/2020 02:07
3&4-Methylphenol	< 286	ug/Kg		1/15/2020 02:07
3,3'-Dichlorobenzidine	< 286	ug/Kg		1/15/2020 02:07

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Partial



Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	a				
Sample Identifier:	TP Location	16 - 1-3 Feet				
Lab Sample ID:	200134-02			Date Sampled:	1/8/2020	
Matrix:	Soil			Date Received:	1/9/2020	
3-Nitroaniline		< 286	ug/Kg		1/15/2020	02:07
4,6-Dinitro-2-methylp	henol	< 572	ug/Kg		1/15/2020	02:07
4-Bromophenyl pheny	vl ether	< 286	ug/Kg		1/15/2020	02:07
4-Chloro-3-methylphe	enol	< 286	ug/Kg		1/15/2020	02:07
4-Chloroaniline		< 286	ug/Kg		1/15/2020	02:07
4-Chlorophenyl pheny	l ether	< 286	ug/Kg		1/15/2020	02:07
4-Nitroaniline		< 286	ug/Kg		1/15/2020	02:07
4-Nitrophenol		< 286	ug/Kg		1/15/2020	02:07
Acenaphthene		< 286	ug/Kg		1/15/2020	02:07
Acenaphthylene		500	ug/Kg		1/15/2020	02:07
Acetophenone		< 286	ug/Kg		1/15/2020	02:07
Anthracene		955	ug/Kg		1/15/2020	02:07
Atrazine		< 286	ug/Kg		1/15/2020	02:07
Benzaldehyde		< 286	ug/Kg		1/15/2020	02:07
Benzo (a) anthracene		1950	ug/Kg		1/15/2020	02:07
Benzo (a) pyrene		1570	ug/Kg		1/15/2020	02:07
Benzo (b) fluoranthen	e	1630	ug/Kg		1/15/2020	02:07
Benzo (g,h,i) perylene		1050	ug/Kg		1/15/2020	02:07
Benzo (k) fluoranthen	e	1280	ug/Kg		1/15/2020	02:07
Bis (2-chloroethoxy) r	nethane	< 286	ug/Kg		1/15/2020	02:07
Bis (2-chloroethyl) eth	ier	< 286	ug/Kg		1/15/2020	02:07
Bis (2-ethylhexyl) pht	halate	< 286	ug/Kg		1/15/2020	02:07
Butylbenzylphthalate		< 286	ug/Kg		1/15/2020	02:07
Caprolactam		< 286	ug/Kg		1/15/2020	02:07
Carbazole		422	ug/Kg		1/15/2020	02:07



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	TP Location	16 - 1-3 Feet				
Lab Sample ID:	200134-02			Date Sampled:	1/8/2020	
Matrix:	Soil			Date Received:	1/9/2020	
Chrysene		1780	ug/Kg		1/15/2020	02:07
Dibenz (a,h) anthracer	ne	362	ug/Kg		1/15/2020	02:07
Dibenzofuran		< 286	ug/Kg		1/15/2020	02:07
Diethyl phthalate		< 286	ug/Kg		1/15/2020	02:07
Dimethyl phthalate		< 286	ug/Kg		1/15/2020	02:07
Di-n-butyl phthalate		< 286	ug/Kg		1/15/2020	02:07
Di-n-octylphthalate		< 286	ug/Kg		1/15/2020	02:07
Fluoranthene		4550	ug/Kg		1/15/2020	02:07
Fluorene		274	ug/Kg	J	1/15/2020	02:07
Hexachlorobenzene		< 286	ug/Kg		1/15/2020	02:07
Hexachlorobutadiene		< 286	ug/Kg		1/15/2020	02:07
Hexachlorocyclopenta	diene	< 1140	ug/Kg		1/15/2020	02:07
Hexachloroethane		< 286	ug/Kg		1/15/2020	02:07
Indeno (1,2,3-cd) pyre	ene	901	ug/Kg		1/15/2020	02:07
Isophorone		< 286	ug/Kg		1/15/2020	02:07
Naphthalene		< 286	ug/Kg		1/15/2020	02:07
Nitrobenzene		< 286	ug/Kg		1/15/2020	02:07
N-Nitroso-di-n-propyl	amine	< 286	ug/Kg		1/15/2020	02:07
N-Nitrosodiphenylami	ine	< 286	ug/Kg		1/15/2020	02:07
Pentachlorophenol		< 572	ug/Kg		1/15/2020	02:07
Phenanthrene		2940	ug/Kg		1/15/2020	02:07
Phenol		< 286	ug/Kg		1/15/2020	02:07
Pyrene		3120	ug/Kg		1/15/2020	02:07





Client:	<u>BE3</u>					
Project Reference:	57 Tonawan	da				
Sample Identifier:	TP Location	n 16 - 1-3 Feet				
Lab Sample ID:	200134-02		Dat	e Sampled:	1/8/2020	
Matrix:	Soil		Dat	e Received:	1/9/2020	
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	Outliers	Date Analy	yzed
2,4,6-Tribromopheno	1	30.9	35.1 - 89.5	*	1/15/2020	02:07
2-Fluorobiphenyl		32.8	37.7 - 81.4	*	1/15/2020	02:07
2-Fluorophenol		32.1	40.2 - 77	*	1/15/2020	02:07
Nitrobenzene-d5		31.3	36.2 - 78.4	*	1/15/2020	02:07
Phenol-d5		32.5	41.2 - 77.1	*	1/15/2020	02:07
Terphenyl-d14		31.9	39.8 - 97.5	*	1/15/2020	02:07
Method Referer	EPA 3	546				
Preparation Da Data File:	te: 1/10/ B4379					





Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	1			
Sample Identifier: Lab Sample ID: Matrix:	TP Location 2 200134-02 Soil	l6 - 1-3 Feet		Date Sampled: Date Received:	1/8/2020 1/9/2020
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 4.29	ug/Kg		1/10/2020 16:58
1,1,2,2-Tetrachloroeth	ane	< 4.29	ug/Kg		1/10/2020 16:58
1,1,2-Trichloroethane		< 4.29	ug/Kg		1/10/2020 16:58
1,1-Dichloroethane		< 4.29	ug/Kg		1/10/2020 16:58
1,1-Dichloroethene		< 4.29	ug/Kg		1/10/2020 16:58
1,2,3-Trichlorobenzen	e	< 10.7	ug/Kg		1/10/2020 16:58
1,2,4-Trichlorobenzen	e	< 10.7	ug/Kg		1/10/2020 16:58
1,2,4-Trimethylbenzen	e	< 4.29	ug/Kg		1/10/2020 16:58
1,2-Dibromo-3-Chloro	propane	< 21.5	ug/Kg		1/10/2020 16:58
1,2-Dibromoethane		< 4.29	ug/Kg		1/10/2020 16:58
1,2-Dichlorobenzene		< 4.29	ug/Kg		1/10/2020 16:58
1,2-Dichloroethane		< 4.29	ug/Kg		1/10/2020 16:58
1,2-Dichloropropane		< 4.29	ug/Kg		1/10/2020 16:58
1,3,5-Trimethylbenzen	e	< 4.29	ug/Kg		1/10/2020 16:58
1,3-Dichlorobenzene		< 4.29	ug/Kg		1/10/2020 16:58
1,4-Dichlorobenzene		< 4.29	ug/Kg		1/10/2020 16:58
1,4-Dioxane		< 42.9	ug/Kg		1/10/2020 16:58
2-Butanone		< 21.5	ug/Kg		1/10/2020 16:58
2-Hexanone		< 10.7	ug/Kg		1/10/2020 16:58
4-Methyl-2-pentanone		< 10.7	ug/Kg		1/10/2020 16:58
Acetone		< 21.5	ug/Kg		1/10/2020 16:58
Benzene		< 4.29	ug/Kg		1/10/2020 16:58
Bromochloromethane		< 10.7	ug/Kg		1/10/2020 16:58





Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	TP Location 2	16 - 1-3 Feet				
Lab Sample ID:	200134-02			Date Sampled:	1/8/2020	
Matrix:	Soil			Date Received:	1/9/2020	
Bromodichloromethan	e	< 4.29	ug/Kg		1/10/2020	16:58
Bromoform		< 10.7	ug/Kg		1/10/2020	16:58
Bromomethane		< 4.29	ug/Kg		1/10/2020	16:58
Carbon disulfide		< 4.29	ug/Kg		1/10/2020	16:58
Carbon Tetrachloride		< 4.29	ug/Kg		1/10/2020	16:58
Chlorobenzene		< 4.29	ug/Kg		1/10/2020	16:58
Chloroethane		< 4.29	ug/Kg		1/10/2020	16:58
Chloroform		< 4.29	ug/Kg		1/10/2020	16:58
Chloromethane		< 4.29	ug/Kg		1/10/2020	16:58
cis-1,2-Dichloroethene	:	< 4.29	ug/Kg		1/10/2020	16:58
cis-1,3-Dichloroproper	ie	< 4.29	ug/Kg		1/10/2020	16:58
Cyclohexane		< 21.5	ug/Kg		1/10/2020	16:58
Dibromochloromethan	e	< 4.29	ug/Kg		1/10/2020	16:58
Dichlorodifluorometha	ine	< 4.29	ug/Kg		1/10/2020	16:58
Ethylbenzene		< 4.29	ug/Kg		1/10/2020	16:58
Freon 113		< 4.29	ug/Kg		1/10/2020	16:58
Isopropylbenzene		< 4.29	ug/Kg		1/10/2020	16:58
m,p-Xylene		< 4.29	ug/Kg		1/10/2020	16:58
Methyl acetate		< 4.29	ug/Kg		1/10/2020	16:58
Methyl tert-butyl Ether	r	< 4.29	ug/Kg		1/10/2020	16:58
Methylcyclohexane		< 4.29	ug/Kg		1/10/2020	16:58
Methylene chloride		< 10.7	ug/Kg		1/10/2020	16:58
Naphthalene		< 10.7	ug/Kg		1/10/2020	16:58
n-Butylbenzene		< 4.29	ug/Kg		1/10/2020	16:58
n-Propylbenzene		< 4.29	ug/Kg		1/10/2020	16:58



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	TP Location	16 - 1-3 Fe	et				
Lab Sample ID:	200134-02			Dat	e Sampled:	1/8/2020	
Matrix:	Soil			Dat	e Received:	1/9/2020	
o-Xylene		< 4.29	ug/Kg			1/10/2020	16:58
p-Isopropyltoluene		< 4.29	ug/Kg			1/10/2020	16:58
sec-Butylbenzene		< 4.29	ug/Kg			1/10/2020	16:58
Styrene		< 10.7	ug/Kg			1/10/2020	16:58
tert-Butylbenzene		< 4.29	ug/Kg			1/10/2020	16:58
Tetrachloroethene		< 4.29	ug/Kg			1/10/2020	16:58
Toluene		< 4.29	ug/Kg			1/10/2020	16:58
trans-1,2-Dichloroethe	ene	2.85	ug/Kg		J	1/10/2020	16:58
trans-1,3-Dichloroprop	pene	< 4.29	ug/Kg			1/10/2020	16:58
Trichloroethene		< 4.29	ug/Kg			1/10/2020	16:58
Trichlorofluoromethar	ie	< 4.29	ug/Kg			1/10/2020	16:58
Vinyl chloride		< 4.29	ug/Kg			1/10/2020	16:58
Surrogate		Perc	ent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			117	67.9 - 146		1/10/2020	16:58
4-Bromofluorobenzen	е		59.6	64.6 - 127	*	1/10/2020	16:58
Pentafluorobenzene			110	85.5 - 113		1/10/2020	16:58
Toluene-D8			89.4	83.9 - 114		1/10/2020	16:58

Internal standard outliers indicate probable matrix interference
Method Reference(s): EPA 8260C
EPA 5035A - L

Data File:

x67779.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	TP Location 16 - 1-3 Feet			
Lab Sample ID:	200134-02		Date Sampled:	1/8/2020
Matrix:	Soil		Date Received:	1/9/2020
<u>Total Cyanide</u>				
<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed

Analyte	Kesun	<u>UIIIts</u>	<u>Quaimer</u> D	<u>late Allalyzeu</u>
Cyanide, Total	< 0.502	mg/Kg	1/	15/2020
Method Reference(s):	EPA 9014			
	EPA 9010C			
Preparation Date:	1/10/2020			





Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	l			
Sample Identifier:	TP Location 1	.6 - 1-3 Feet			
Lab Sample ID:	200134-02			Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		93.9	%		1/10/2020
Mathad Defense					

Method Reference(s):Par%MELAP does not offer this test for approval as part of their laboratory certification program.





Client:	<u>BE3</u>				
Project Reference:	57 Tona	wanda			
Sample Identifier:	TP Loc	ation 17 - 3-4 Fee	t, Native		
Lab Sample ID:	200134	4-03		Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
<u>Metals</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		3.55	mg/Kg		1/15/2020 16:40
Barium		171	mg/Kg		1/15/2020 16:40
Beryllium		0.897	mg/Kg		1/15/2020 16:40
Cadmium		0.523	mg/Kg		1/15/2020 16:40
Chromium		25.1	mg/Kg		1/15/2020 16:40
Copper		23.3	mg/Kg		1/15/2020 16:40
Lead		11.7	mg/Kg		1/15/2020 16:40
Manganese		520	mg/Kg		1/15/2020 16:40
Nickel		28.8	mg/Kg		1/15/2020 16:40
Selenium		0.673	mg/Kg	J	1/15/2020 16:40
Silver		< 1.15	mg/Kg		1/16/2020 09:26
Zinc		64.5	mg/Kg		1/15/2020 16:40
Method Referen	nce(s):	EPA 6010C			
Preparation Da Data File:		EPA 3050B 1/14/2020 200115C			





Client:		<u>BE3</u>				
Project Ref	erence:	57 Tona	wanda			
Sample Id	entifier:	TP Loc	ation 17 - 3-4 Fe	et, Native		
Lab Samp	le ID:	20013	4-03		Date Sampled:	1/8/2020
Matrix:		Soil			Date Received:	1/9/2020
Mercu	ry					
<u>Analyte</u>			Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury			0.0145	mg/Kg		1/13/2020 10:47
	Method Referenc	e(s):	EPA 7471B			
	Preparation Date Data File:	2:	1/10/2020 Hg200113A			





Client:	<u>BE3</u>						
Project Reference:	57 Tonawanda						
Sample Identifier:	TP Location 1	7 - 3-4 Fe	eet, Native				
Lab Sample ID:	200134-03			Date	e Sampled:	1/8/2020	
Matrix:	Soil			Dat	e Received:	1/9/2020	
<u>PCBs</u>							
Analyte		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	yzed
PCB-1016		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1221		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1232		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1242		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1248		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1254		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1260		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1262		< 0.0322	mg/Kg			1/10/2020	16:48
PCB-1268		< 0.0322	mg/Kg			1/10/2020	16:48
Surrogate		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			42.5	18.3 - 89.6		1/10/2020	16:48
Method Referen	ce(s): EPA 8082 EPA 3546						
Preparation Dat							





Client:	<u>BE3</u>				
Project Reference:	57 Tonawand	a			
Sample Identifier: Lab Sample ID: Matrix:	TP Location 200134-03 Soil	17 - 3-4 Fee	t, Native	Date Sampled: Date Received:	1/8/2020 1/9/2020
Chlorinated Pesti	i <u>cides</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		< 3.22	ug/Kg		1/10/2020 18:45
4,4-DDE		< 3.22	ug/Kg		1/10/2020 18:45
4,4-DDT		< 3.22	ug/Kg		1/10/2020 18:45
Aldrin		< 3.22	ug/Kg		1/10/2020 18:45
alpha-BHC		< 3.22	ug/Kg		1/10/2020 18:45
beta-BHC		< 3.22	ug/Kg		1/10/2020 18:45
cis-Chlordane		< 3.22	ug/Kg		1/10/2020 18:45
delta-BHC		< 3.22	ug/Kg		1/10/2020 18:45
Dieldrin		< 3.22	ug/Kg		1/10/2020 18:45
Endosulfan I		< 3.22	ug/Kg		1/10/2020 18:45
Endosulfan II		< 3.22	ug/Kg		1/10/2020 18:45
Endosulfan Sulfate		< 3.22	ug/Kg		1/10/2020 18:45
Endrin		< 3.22	ug/Kg		1/10/2020 18:45
Endrin Aldehyde		< 3.22	ug/Kg		1/10/2020 18:45
Endrin Ketone		< 3.22	ug/Kg		1/10/2020 18:45
gamma-BHC (Lindane	2)	< 3.22	ug/Kg		1/10/2020 18:45
Heptachlor		< 3.22	ug/Kg		1/10/2020 18:45
Heptachlor Epoxide		< 3.22	ug/Kg		1/10/2020 18:45
Methoxychlor		< 3.22	ug/Kg		1/10/2020 18:45
Toxaphene		< 32.2	ug/Kg		1/10/2020 18:45
trans-Chlordane		< 3.22	ug/Kg		1/10/2020 18:45



Client:	<u>BE3</u>							
Project Reference:	57 Tonawanda							
Sample Identifier:	TP Location 17 -	TP Location 17 - 3-4 Feet, Native						
Lab Sample ID:	200134-03		Date	e Sampled:	1/8/2020			
Matrix:	Soil		Date	e Received:	1/9/2020			
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed		
Decachlorobiphenyl (1	1)	9.76	30.7 - 111	*	1/10/2020	18:45		
Tetrachloro-m-xylene	(1)	66.0	34.7 - 87.3		1/10/2020	18:45		
Method Referen Preparation Dat	EPA 3546							
Preparation Dat	1/10/2020							





Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	TP Location 17 - 3-4 Feet, Native		
Lab Sample ID:	200134-03	Date Sampled:	1/8/2020
Matrix:	Soil	Date Received:	1/9/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 347	ug/Kg		1/15/2020 02:36
1,2,4,5-Tetrachlorobenzene	< 347	ug/Kg		1/15/2020 02:36
1,2,4-Trichlorobenzene	< 347	ug/Kg		1/15/2020 02:36
1,2-Dichlorobenzene	< 347	ug/Kg		1/15/2020 02:36
1,3-Dichlorobenzene	< 347	ug/Kg		1/15/2020 02:36
1,4-Dichlorobenzene	< 347	ug/Kg		1/15/2020 02:36
2,2-Oxybis (1-chloropropane)	< 347	ug/Kg		1/15/2020 02:36
2,3,4,6-Tetrachlorophenol	< 347	ug/Kg		1/15/2020 02:36
2,4,5-Trichlorophenol	< 347	ug/Kg		1/15/2020 02:36
2,4,6-Trichlorophenol	< 347	ug/Kg		1/15/2020 02:36
2,4-Dichlorophenol	< 347	ug/Kg		1/15/2020 02:36
2,4-Dimethylphenol	< 347	ug/Kg		1/15/2020 02:36
2,4-Dinitrophenol	< 1390	ug/Kg		1/15/2020 02:36
2,4-Dinitrotoluene	< 347	ug/Kg		1/15/2020 02:36
2,6-Dinitrotoluene	< 347	ug/Kg		1/15/2020 02:36
2-Chloronaphthalene	< 347	ug/Kg		1/15/2020 02:36
2-Chlorophenol	< 347	ug/Kg		1/15/2020 02:36
2-Methylnapthalene	< 347	ug/Kg		1/15/2020 02:36
2-Methylphenol	< 347	ug/Kg		1/15/2020 02:36
2-Nitroaniline	< 347	ug/Kg		1/15/2020 02:36
2-Nitrophenol	< 347	ug/Kg		1/15/2020 02:36
3&4-Methylphenol	< 347	ug/Kg		1/15/2020 02:36
3,3'-Dichlorobenzidine	< 347	ug/Kg		1/15/2020 02:36

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Partial



Client:	<u>BE3</u>				
Project Reference:	57 Tonawa	anda			
Sample Identifier:	TP Locati	on 17 - 3-4 Fe	et, Native		
Lab Sample ID:	200134-0)3		Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
3-Nitroaniline		< 347	ug/Kg		1/15/2020 02:36
4,6-Dinitro-2-methyl	ohenol	< 694	ug/Kg		1/15/2020 02:36
4-Bromophenyl phen	yl ether	< 347	ug/Kg		1/15/2020 02:36
4-Chloro-3-methylph	enol	< 347	ug/Kg		1/15/2020 02:36
4-Chloroaniline		< 347	ug/Kg		1/15/2020 02:36
4-Chlorophenyl phen	yl ether	< 347	ug/Kg		1/15/2020 02:36
4-Nitroaniline		< 347	ug/Kg		1/15/2020 02:36
4-Nitrophenol		< 347	ug/Kg		1/15/2020 02:36
Acenaphthene		< 347	ug/Kg		1/15/2020 02:36
Acenaphthylene		< 347	ug/Kg		1/15/2020 02:36
Acetophenone		< 347	ug/Kg		1/15/2020 02:36
Anthracene		< 347	ug/Kg		1/15/2020 02:36
Atrazine		< 347	ug/Kg		1/15/2020 02:36
Benzaldehyde		< 347	ug/Kg		1/15/2020 02:36
Benzo (a) anthracene		< 347	ug/Kg		1/15/2020 02:36
Benzo (a) pyrene		< 347	ug/Kg		1/15/2020 02:36
Benzo (b) fluoranther	ne	< 347	ug/Kg		1/15/2020 02:36
Benzo (g,h,i) perylene	<u>)</u>	< 347	ug/Kg		1/15/2020 02:36
Benzo (k) fluoranther	ie	< 347	ug/Kg		1/15/2020 02:36
Bis (2-chloroethoxy)	methane	< 347	ug/Kg		1/15/2020 02:36
Bis (2-chloroethyl) et	her	< 347	ug/Kg		1/15/2020 02:36
Bis (2-ethylhexyl) ph	thalate	< 347	ug/Kg		1/15/2020 02:36
Butylbenzylphthalate		< 347	ug/Kg		1/15/2020 02:36
Caprolactam		< 347	ug/Kg		1/15/2020 02:36
Carbazole		< 347	ug/Kg		1/15/2020 02:36





Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	la				
Sample Identifier:	TP Location	17 - 3-4 Fee	et, Native			
Lab Sample ID:	200134-03			Date Sampled:	1/8/2020	
Matrix:	Soil			Date Received:	1/9/2020	
Chrysene		< 347	ug/Kg		1/15/2020	02:36
Dibenz (a,h) anthrace	ne	< 347	ug/Kg		1/15/2020	02:36
Dibenzofuran		< 347	ug/Kg		1/15/2020	02:36
Diethyl phthalate		< 347	ug/Kg		1/15/2020	02:36
Dimethyl phthalate		< 347	ug/Kg		1/15/2020	02:36
Di-n-butyl phthalate		< 347	ug/Kg		1/15/2020	02:36
Di-n-octylphthalate		< 347	ug/Kg		1/15/2020	02:36
Fluoranthene		< 347	ug/Kg		1/15/2020	02:36
Fluorene		< 347	ug/Kg		1/15/2020	02:36
Hexachlorobenzene		< 347	ug/Kg		1/15/2020	02:36
Hexachlorobutadiene		< 347	ug/Kg		1/15/2020	02:36
Hexachlorocyclopenta	diene	< 1390	ug/Kg		1/15/2020	02:36
Hexachloroethane		< 347	ug/Kg		1/15/2020	02:36
Indeno (1,2,3-cd) pyre	ene	< 347	ug/Kg		1/15/2020	02:36
Isophorone		< 347	ug/Kg		1/15/2020	02:36
Naphthalene		< 347	ug/Kg		1/15/2020	02:36
Nitrobenzene		< 347	ug/Kg		1/15/2020	02:36
N-Nitroso-di-n-propyl	amine	< 347	ug/Kg		1/15/2020	02:36
N-Nitrosodiphenylam	ine	< 347	ug/Kg		1/15/2020	02:36
Pentachlorophenol		< 694	ug/Kg		1/15/2020	02:36
Phenanthrene		< 347	ug/Kg		1/15/2020	02:36
Phenol		< 347	ug/Kg		1/15/2020	02:36
Pyrene		< 347	ug/Kg		1/15/2020	02:36



<u>BE3</u>					
57 Tonawanda					
TP Location 17 -	3-4 Feet, Native				
200134-03		Dat	e Sampled:	1/8/2020	
Soil	Soil Date Received: 1/9/2				
	Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	yzed
	44.8	35.1 - 89.5		1/15/2020	02:36
	58.6	37.7 - 81.4		1/15/2020	02:36
	57.5	40.2 - 77		1/15/2020	02:36
	55.2	36.2 - 78.4		1/15/2020	02:36
	58.4	41.2 - 77.1		1/15/2020	02:36
	62.2	39.8 - 97.5		1/15/2020	02:36
ce(s): EPA 8270D EPA 3546 EPA 3546 e: 1/10/2020 B43797.D EPA 3797.D					
	57 Tonawanda TP Location 17 - 200134-03 Soil Soil EPA 8270D EPA 3546 e: 1/10/2020	57 Tonawanda TP Location 17 - 3-4 Feet, Native 200134-03 Soil Percent Recovery 44.8 58.6 57.5 55.2 55.2 58.4 62.2 et (s): EPA 8270D EPA 3546 et: 1/10/2020	57 Tonawanda TP Location 17 - 3-4 Feet, Native 200134-03 Dat Soil Dat Soil Dat 44.8 35.1 - 89.5 58.6 37.7 - 81.4 57.5 40.2 - 77 55.2 36.2 - 78.4 58.4 41.2 - 77.1 62.2 39.8 - 97.5 EPA 3546 1/10/2020	57 Tonawanda TP Location 17 - 3-4 Feet, Native 200134-03 Date Sampled: Soil Date Sampled: Soil Percent Recovery 44.8 35.1 - 89.5 58.6 37.7 - 81.4 57.5 40.2 - 77 55.2 36.2 - 78.4 58.4 41.2 - 77.1 62.2 39.8 - 97.5 EPA 8270D EPA 3546 e: 1/10/2020	57 Tonawanda TP Location 17 - 3-4 Feet, Native 200134-03 Date Samples: Soil 1/8/2020 Percent Recovery 44.8 35.1 - 89.5 1/15/2020 58.6 37.7 - 81.4 1/15/2020 57.5 40.2 - 77 1/15/2020 55.2 36.2 - 78.4 1/15/2020 58.4 41.2 - 77.1 1/15/2020 62.2 39.8 - 97.5 1/15/2020 e: 1/10/2020 1/15/2020



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	TP Location 2 200134-03 Soil	17 - 3-4 Feet	r, Native	Date Sampled: Date Received:	1/8/2020 1/9/2020
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 4.76	ug/Kg		1/10/2020 17:20
1,1,2,2-Tetrachloroeth	ane	< 4.76	ug/Kg		1/10/2020 17:20
1,1,2-Trichloroethane		< 4.76	ug/Kg		1/10/2020 17:20
1,1-Dichloroethane		< 4.76	ug/Kg		1/10/2020 17:20
1,1-Dichloroethene		< 4.76	ug/Kg		1/10/2020 17:20
1,2,3-Trichlorobenzene	е	< 11.9	ug/Kg		1/10/2020 17:20
1,2,4-Trichlorobenzene	e	< 11.9	ug/Kg		1/10/2020 17:20
1,2,4-Trimethylbenzen	e	< 4.76	ug/Kg		1/10/2020 17:20
1,2-Dibromo-3-Chloroj	propane	< 23.8	ug/Kg		1/10/2020 17:20
1,2-Dibromoethane		< 4.76	ug/Kg		1/10/2020 17:20
1,2-Dichlorobenzene		< 4.76	ug/Kg		1/10/2020 17:20
1,2-Dichloroethane		< 4.76	ug/Kg		1/10/2020 17:20
1,2-Dichloropropane		< 4.76	ug/Kg		1/10/2020 17:20
1,3,5-Trimethylbenzen	e	< 4.76	ug/Kg		1/10/2020 17:20
1,3-Dichlorobenzene		< 4.76	ug/Kg		1/10/2020 17:20
1,4-Dichlorobenzene		< 4.76	ug/Kg		1/10/2020 17:20
1,4-Dioxane		< 47.6	ug/Kg		1/10/2020 17:20
2-Butanone		< 23.8	ug/Kg		1/10/2020 17:20
2-Hexanone		< 11.9	ug/Kg		1/10/2020 17:20
4-Methyl-2-pentanone		< 11.9	ug/Kg		1/10/2020 17:20
Acetone		< 23.8	ug/Kg		1/10/2020 17:20
Benzene		< 4.76	ug/Kg		1/10/2020 17:20
Bromochloromethane		< 11.9	ug/Kg		1/10/2020 17:20





Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	l				
Sample Identifier:	TP Location 1	.7 - 3-4 Feet, N	Native			
Lab Sample ID:	200134-03			Date Sampled:	1/8/2020	
Matrix:	Soil			Date Received:	1/9/2020	
Bromodichloromethan	e	< 4.76	ug/Kg		1/10/2020	17:20
Bromoform		< 11.9	ug/Kg		1/10/2020	17:20
Bromomethane		< 4.76	ug/Kg		1/10/2020	17:20
Carbon disulfide		< 4.76	ug/Kg		1/10/2020	17:20
Carbon Tetrachloride		< 4.76	ug/Kg		1/10/2020	17:20
Chlorobenzene		< 4.76	ug/Kg		1/10/2020	17:20
Chloroethane		< 4.76	ug/Kg		1/10/2020	17:20
Chloroform		< 4.76	ug/Kg		1/10/2020	17:20
Chloromethane		< 4.76	ug/Kg		1/10/2020	17:20
cis-1,2-Dichloroethene		< 4.76	ug/Kg		1/10/2020	17:20
cis-1,3-Dichloroproper	ie	< 4.76	ug/Kg		1/10/2020	17:20
Cyclohexane		< 23.8	ug/Kg		1/10/2020	17:20
Dibromochloromethan	e	< 4.76	ug/Kg		1/10/2020	17:20
Dichlorodifluorometha	ine	< 4.76	ug/Kg		1/10/2020	17:20
Ethylbenzene		< 4.76	ug/Kg		1/10/2020	17:20
Freon 113		< 4.76	ug/Kg		1/10/2020	17:20
Isopropylbenzene		< 4.76	ug/Kg		1/10/2020	17:20
m,p-Xylene		< 4.76	ug/Kg		1/10/2020	17:20
Methyl acetate		< 4.76	ug/Kg		1/10/2020	17:20
Methyl tert-butyl Ether	r	< 4.76	ug/Kg		1/10/2020	17:20
Methylcyclohexane		< 4.76	ug/Kg		1/10/2020	17:20
Methylene chloride		< 11.9	ug/Kg		1/10/2020	17:20
Naphthalene		< 11.9	ug/Kg		1/10/2020	17:20
n-Butylbenzene		< 4.76	ug/Kg		1/10/2020	17:20
n-Propylbenzene		< 4.76	ug/Kg		1/10/2020	17:20



Client:	<u>BE3</u>						
Project Reference:	57 Tonav	wanda					
Sample Identifier:	TP Loca	ation 17 - 3-4 F	eet, Native				
Lab Sample ID:	200134	-03		Dat	e Sampled:	1/8/2020	
Matrix:	Soil			Dat	e Received:	1/9/2020	
o-Xylene		< 4.76	ug/Kg			1/10/2020	17:20
p-Isopropyltoluene		< 4.76	ug/Kg			1/10/2020	17:20
sec-Butylbenzene		< 4.76	ug/Kg			1/10/2020	17:20
Styrene		< 11.9	ug/Kg			1/10/2020	17:20
tert-Butylbenzene		< 4.76	ug/Kg			1/10/2020	17:20
Tetrachloroethene		< 4.76	ug/Kg			1/10/2020	17:20
Toluene		< 4.76	ug/Kg			1/10/2020	17:20
trans-1,2-Dichloroeth	iene	< 4.76	ug/Kg			1/10/2020	17:20
trans-1,3-Dichloropro	opene	< 4.76	ug/Kg			1/10/2020	17:20
Trichloroethene		38.3	ug/Kg			1/10/2020	17:20
Trichlorofluorometha	ane	< 4.76	ug/Kg			1/10/2020	17:20
Vinyl chloride		< 4.76	ug/Kg			1/10/2020	17:20
Surrogate		Per	cent Recovery	<u>Limits</u>	Outliers	Date Analyzed	
1,2-Dichloroethane-d	4		122	67.9 - 146		1/10/2020	17:20
4-Bromofluorobenzer	ne		68.2	64.6 - 127		1/10/2020	17:20
Pentafluorobenzene			98.4	85.5 - 113		1/10/2020	17:20
Toluene-D8			84.1	83.9 - 114		1/10/2020	17:20
Method Refere		EPA 8260C EPA 5035A - L					

Data File:

x67780.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	TP Location 17	- 3-4 Feet,	Native		
Lab Sample ID:	200134-03			Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
<u>Total Cyanide</u>					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	<	0.615	mg/Kg		1/15/2020

 Method Reference(s):
 EPA 9014

 EPA 9010C
 1/10/2020





Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	l			
Sample Identifier:	TP Location 1	.7 - 3-4 Feet,	, Native		
Lab Sample ID:	200134-03			Date Sampled:	1/8/2020
Matrix:	Soil			Date Received:	1/9/2020
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Percent Solids		80.5	%		1/10/2020
Method Referen	ce(s): Par%M				

ELAP does not offer this test for approval as part of their laboratory certification program.





ANALYTICAL REPORT

Lab Number:	L2000901
Client:	Paradigm Environmental Services 179 Lake Avenue Rochester, NY 14608
ATTN:	Jane Daloia
Phone: Project Name:	(585) 647-2530 57 TONAWANDA
Project Number:	57 TONAWANDA
Report Date:	01/16/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Lab Number: Report Date:	Serial_N
L2000901 01/16/20	Serial_No:01162014:10

Project Name: Project Number:

57 TONAWANDA 57 TONAWANDA

L2000901-03	L2000901-02	L2000901-01	Alpha Sample ID
TP LOCATION 17 (3-4 FT)	TP LOCATION 16 (1-3 FT)	TP LOCATION 14 (8-9 FT)	Client ID
SOIL	SOIL	SOIL	Matrix
Not Specified	Not Specified	Not Specified	Sample Location
01/08/20 11:00	01/08/20 10:10	01/08/20 08:50	Collection Date/Time

01/09/20 01/09/20 01/09/20

Receive Date

Διγια

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab Number: L2000901 Report Date: 01/16/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L2000901

 Report Date:
 01/16/20

Case Narrative (continued)

Report Submission

January 16, 2020: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Hexavalent Chromium

The WG1329515-4 Insoluble MS recovery for hexavalent chromium (55%), performed on L2000901-01, is outside the acceptance criteria. The Soluble MS recovery for hexavalent chromium (65%) was also outside criteria. This has been attributed to matrix interference. A post-spike was performed with a recovery of 87%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Jupanie Morrissey - Tiffani Morrissey

Authorized Signature:

Title: Technical Director/Representative

Date: 01/16/20

ORGANICS





PESTICIDES



		Serial_No	:01162014:10
Project Name:	57 TONAWANDA	Lab Number:	L2000901
Project Number:	57 TONAWANDA	Report Date:	01/16/20
	SAMPLE RESULTS		
Lab ID:	L2000901-01	Date Collected:	01/08/20 08:50
Client ID:	TP LOCATION 14 (8-9 FT)	Date Received:	01/09/20
Sample Location:	Not Specified	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	: EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	01/11/20 12:47
Analytical Date:	01/14/20 16:57		
Analyst:	JMC		
Percent Solids:	88%		
Methylation Date:	01/13/20 20:08		
÷			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC	- Westborough Lab		4 2 , 10, 11, 11, 11	1000	1	e fridera i j	
2,4,5-TP (Silvex)	ND		ug/kg	190	5.06	1	А
Surrogate			% Recovery	Qualifier		eptance riteria Co	lumn
DCAA			79		:	30-150	A
DCAA			70		;	30-150	в



.

		Serial_No	:01162014:10
Project Name:	57 TONAWANDA	Lab Number:	L2000901
Project Number:	57 TONAWANDA	Report Date:	01/16/20
	SAMPLE RESULTS		
Lab ID:	L2000901-02	Date Collected:	01/08/20 10:10
Client ID:	TP LOCATION 16 (1-3 FT)	Date Received:	01/09/20
Sample Location:	Not Specified	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	: EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	01/11/20 12:47
Analytical Date:	01/14/20 17:55		
Analyst:	JMC		
Percent Solids:	77%		
Methylation Date:	01/13/20 20:08		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Facto	r Column
Chlorinated Herbicides by GC - We	stborough Lab			, en 19	<u>~1</u> ~	188	12110
2,4,5-TP (Silvex)	ND		ug/kg	2.13	0.057	1	Α
Surrogate			% Recovery	Qualifier		ptance iteria C	olumn
DCAA			102		3	0-150	А
DCAA			91		3	0-150	в



		Serial_No	0:01162014:10
Project Name:	57 TONAWANDA	Lab Number:	L2000901
Project Number:	57 TONAWANDA	Report Date:	01/16/20
	SAMPLE RESULTS		
Lab ID:	L2000901-03	Date Collected:	01/08/20 11:00
Client ID:	TP LOCATION 17 (3-4 FT)	Date Received:	01/09/20
Sample Location:	Not Specified	Field Prep:	Not Specified
Sample Depth:			4
Matrix:	Soil	Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	01/11/20 12:47
Analytical Date:	01/14/20 18:13		
Analyst:	JMC		
Percent Solids:	80%		
Methylation Date:	01/13/20 20:08		

×.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC -	Westborough Lab	1.515	1.00	6 S.S.	7.68	- Mathing	aley die
2,4,5-TP (Silvex)	ND ND		ug/kg	206	5.49	1	Α
Surrogate			% Recovery	Qualifier		eptance riteria Ca	olumn
DCAA			89		3	30-150	A
DCAA			81		3	30-150	В



Serial_No:01162014:10

Project Name:	57 TONAWANDA		Lab Number:	L2000901
Project Number:	57 TONAWANDA		Report Date:	01/16/20
		Method Blank Analysis Batch Quality Control		
Analytical Method: Analytical Date:	1,8151A 01/12/20 19:26		Extraction Method: Extraction Date:	EPA 8151A 01/11/20 12:47

Parameter	Result	Qualifier	Units		RL	MDL	Column
Chlorinated Herbicides by C	GC - Westborough	Lab for sam	ple(s):	01-03	Batch:	WG1329180-	1
2,4,5-TP (Silvex)	ND		ug/kg		164	4.35	Α

			Acceptanc	
Surrogate	%Recovery	Qualifier	Criteria	Column
DCAA	76		30-150	А
DCAA	66		30-150	В

Analyst:

Methylation Date:

JMC

01/11/20 15:26

Serial_No:01162014:10

Lab Control Sample Analysis Batch Quality Control

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L2000901

 Report Date:
 01/16/20

RPD	Qual
- L.	

DCAA 72	LCS
DCAA 67	Surrogate %Recovery
55	LCSD
60	Qual %Recovery
	V Qual
30-150	Acceptance
30-150	Criteria
₽⋗	Column

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INORGANICS & MISCELLANEOUS



	Serial_No:01162014:10
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Project Name:	57 TONAWANDA		Lab Number:	L2000901
Project Number:	57 TONAWANDA		Report Date:	01/16/20
		SAMPLE RESULTS		Ϋ́.

Lab ID:	L2000901-0	1					Date C	collected:	01/08/20 08:50)
Client ID:	TP LOCATIO	ON 14 (8-	9 FT)				Date R	leceived:	01/09/20	
Sample Location:	Not Specifie	d					Field F	rep:	Not Specified	
Sample Depth: Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab)								
Solids, Total	87.6		%	0.100	NA	1	-	01/10/20 14:1	4 121,2540G	RI
Chromium, Hexavalent	ND		mg/kg	0.913	0.183	1	01/13/20 13:15	01/14/20 05:2	5 1,7196A	DR



Serial	No:01	16201	14:10

Analyst

Parameter	Result Qualifier Units	RL MD	Dilution L Factor	Date Prepared	Date Analyzed	Analytical Method	
Sample Depth: Matrix:	Soil						
Lab ID: Client ID: Sample Location:	L2000901-02 TP LOCATION 16 (1-3 FT) Not Specified				Collected: Received: Prep:	01/08/20 10:10 01/09/20 Not Specified)
		SAMPLE RES	ULTS				
Project Name: Project Number:	57 TONAWANDA 57 TONAWANDA		umber: t Date:	L2000901 01/16/20			

General Chemistry - W	estborough Lab								
Solids, Total	77.0	%	0.100	NA	1	-	01/10/20 14:14	121,2540G	RI
Chromium, Hexavalent	ND	mg/kg	1.04	0.208	1	01/13/20 13:15	01/14/20 05:25	1,7196A	DR

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Partial

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Serial_No:01162014:10

Project Name: 57 TONAWANDA Lab Number: L2000901 Project Number: 57 TONAWANDA Report Date: 01/16/20

SAMPLE RESULTS

Lab ID: Client ID: Sample Location:	L2000901-03 TP LOCATION Not Specified	17 (3-4 FT)					Received:	01/08/20 11:00 01/09/20 Not Specified)
Sample Depth: Matrix:	Soil								
Parameter	Result Qu	ualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab	10 10 1 U			1				
Solids, Total	79.8	%	0.100	NA	1		01/10/20 14:14	4 121,2540G	RI
Chromium, Hexavalent	ND	mg/kg	1.00	0.200	1	01/13/20 13:15	01/14/20 05:2	5 1,7196A	DR



Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L2000901

 Report Date:
 01/16/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MÐL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab for sar	nple(s): 01	I-03 Ba	tch: WC	G1329515-1				
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	01/13/20 13:15	01/14/20 05:25	1,7196A	DR



Serial_No:01162014:10

Partial

Lab Control Sample Analysis Batch Quality Control

Project Number: Project Name: 57 TONAWANDA 57 TONAWANDA Report Date: Lab Number: 01/16/20 L2000901

	LCS		%Recovery			
Parameter	%Recovery Qual	al %Recovery QL	Jal Limits	RPD	Qua	RPD Limits
General Chemistry - Westborough Lab A	ssociated sample(s): 01	Westborough Lab Associated sample(s): 01-03 Batch: WG1329515-2				1. S. C. D. S.
Chromium, Hexavalent	96		80-120	•		20

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Serial	
No:0110	
62014:10	

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

 Lab Number:
 L2000901

 Report Date:
 01/16/20

Partial

Chromium, Hexavalent	General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1329515-4 (8-9 FT)	Parameter
ND	ough Lab Asso	Native Sample
946	ciated sampl	MS Added
522	le(s): 01-03	MS Found
55	QC Batch I	MS %Recovery
Q ,	D: WG1329515-4	MS MS MSD Found %Recovery Qual Found
Ŋ	QC Sample: L	MSD %Recovery Qual
75-125	2000901-01 CI	Recov Limit
÷	ient 1D:	RPD
20	QC Sample: L2000901-01 Client ID: TP LOCATION 14	ery RPD s RPD Qual Limits

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Дирна

Partial

Serial_No:01162014:10

Project Name:57 TONAWANDAProject Number:57 TONAWANDA

Lab Duplicate Analysis Batch Quality Control

 Lab Number:
 L2000901

 Report Date:
 01/16/20

20	NC	mg/kg	ND		ND	Chromium, Hexavalent
QC Sample: L2000901-01 Client ID: TP LOCATION 14	L2000901-01	QC Sample:	ID: WG1329515-6	QC Batch	Associated sample(s): 01-03	General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1329515-6 (8-9 FT)
20	сл	%	83.5		87.6	Solids, Total
QC Sample: L2000901-01 Client ID: TP LOCATION 14	L2000901-01	QC Sample:	ID: WG1328917-1	QC Batch	Associated sample(s): 01-03	General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1328917-1 (8-9 FT)
Qual RPD Limits	RPD	e Units	Duplicate Sample	nple	Native Sample	Parameter

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Дцяна

Project Name: 57 TONAWANDA Project Number: 57 TONAWANDA

Serial_No:01162014:10 Lab Number: L2000901 Report Date: 01/16/20

Partial

Sample Receipt and Container Information

YES

Were project specific reporting limits specified?

Container ID Container Type Co	L2000901-01A Plastic 2oz unpreserved for TS A	L2000901-01B Glass 120ml/4oz unpreserved A	L2000901-01C Plastic 8oz unpreserved A	L2000901-02A Plastic 2oz unpreserved for TS A	L2000901-02B Glass 120ml/4oz unpreserved A	L2000901-02C Plastic 8oz unpreserved A	L2000901-03A Plastic 2oz unpreserved for TS A	L2000901-03B Glass 120ml/4oz unpreserved A	L2000901-03C Plastic 8oz unpreserved A
Cooler									
рH	NA	NA	NA	NA	NA	NA	NA	NA	NA
рп									
deg C	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Pres Seal	×	×	×	×	×	×	×	×	~
Seal	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Date/Time							â		
Analysis(*)	TS(7) °	HERB-APA(14),HEXCR-7196(30)	A2-NY-537-ISOTOPE(28)	TS(7)	HERB-APA(14),HEXCR-7196(30)	A2-NY-537-ISOTOPE(28)	TS(7)	HERB-APA(14),HEXCR-7196(30)	A2-NY-537-ISOTOPE(28)

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*Values in parentheses indicate holding time in days

Дцена

Project Name: 57 TONAWANDA

Project Number: 57 TONAWANDA

Lab Number:	L2000901
Report Date:	01/16/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration,
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.
Footnotes	

Report Format: DU Report with 'J' Qualifiers



L2000901

01/16/20

Lab Number:

Report Date:

Project Name: 57 TONAWANDA

Project Number: 57 TONAWANDA

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- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method,

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the

Difference: with respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracenes, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A -Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers



Project Name:57 TONAWANDAProject Number:57 TONAWANDA

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Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- **R** Analytical results arc from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Lab Number: L2000901 Report Date: 01/16/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS EPA 8082A: <u>NPW</u>: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene, Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. EPA 245.1 Hg. SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally acce analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, expre implied.	
Scope and LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Un	
Compensation. parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically describuse LAB default method for all tests unless specified otherwise on the Work Order.	
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. will be added to invoice prices when required.	nt of
Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. To court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial scree may incur additional fees.	estimony,
Limitations of Liability.In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be t perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deeme unless made in writing and received by LAB within ninety (90) days following completion of services.	
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such result or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachn other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from ar any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actior proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disburse any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.	s by clients nent, or d against s, sements) of co, resulting or
Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written di the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample contain hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in a with applicable laws.	ing any
 Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to succept remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no even have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as final report. Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analymodified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal samples. LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke accept sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the present 	will LAB s. not in such on th LAB may sis unless sal of these ance of any risk in
sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the con sample date make the sample unsuitable for analysis.	ndition or
Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent s any legal responsibility hereunder, whether in contract or tort including negligence.	hall have
Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose any assignee (subcontractor) by ELAP ID # on the submitted final report.	to Client
Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in with part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, he limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accide civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.	out not nts, wars,
Law.This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.	

Serial	
No:011	
62014:10	

179 Lake Avenuo, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM		REPORT TO:		INVOICE TO:		
and the second second		CLIENT: Paradigm Environmental	A CENEWS		LAB PROJECT ID	0
		ADDRESS: 179 Lake Avenue	ADD	ADDRESS.	12000901	
(CITY: Rochester STATE: *	NY ZIP 14608 CITY:	r: STATE ZP:	Results by 3 PM	Ň
		PHONE 685-547-2530	PHONE	NR .	Email:	
PROJECT REFERENCE	m	ATTN: reporting@paradigmenv.com	ATTN: ATTN:	accpay@paradigmenv com		
57 Tonawanda		Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid	WA - Water WG - Groundwater	DW - Drinking Water SO - Soll WW - Wastewater SL - Skudge	li SD - Sovid WP - Wipe dge PT - Paint CK - Caulk	AR - Air
				REQUESTED ANALYSIS		
DATE COLLECTED COLLECTED C	व क र छ	SAMPLE IDENTIPER	× - 3 - 4 と 5 G 0 0 0 0 0 マロ 3 m m m m m m m m m m m m m m m m m m	Silvex Hex Chrome PFAS	RENARKS	PARATRON LAB SANPLE NUMBER
1/8/20 8:50	×	TP Location 14 (8-9 ft)	E OS			
1/8/20 10:10	×	TP Location 16 (1-3 ft)	SO 3	3 X X X		
1/8/20 11:00	×	TP Location 17 (3-4 ft)	SO 3	3 X X X		
	-					
	F		-			
	1					(



Rush 1 day Rush 2 day 10 day Standard 5 day please indicate date needed: Date Needed Rush 3 day DATE COLLECTED 01.0C-8-**Turnaround Time** 57 TONAWANSA PROJECT REFERENCE Availability contingent upon lab approval; additional fees may apply. PARADIGM TIME 850 010 301 X Other Category A None Required please indicate package needed Category B Batch QC - 0 0 7 <u>3</u> 0 0 × × ພັກນິດ 5 Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid **Report Supplements** CITY: ATTN: CLIENT: ADDRESS: TP LOCATION HONE TP LOCATON 6 SOFALO X 240 LOCATEN 716-308-8220 20 NYSDEC EDD None Required Basic EDD please Indicate EDD needed : Other EDD SAMPLE IDENTIFIER Capter REPORT TO: STATE: X IRGKIN A 179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311 - 01 SO 17-X - 8-4 Feer 5 3-4/Het -3 Fer CHAIN OF CUSTODY ZIP By signing this form, client agrees to Paradigm Terms and Conditions (reverse). 4.C iced Received @ Lab By Received By Relinquighed B Sampled By WA - Water WG - Groundwater 3 S 50 [X ATTN: CLIENT: CITY: ADDRESS: HONE пΟ Z C Z œ zoc 9/2020 3 3 **DW** - Drinking Water WW - Wastewater EQUESTED ANAL ALXON XXXXX 3 Mo à メメ 3 INVOICE TO: X STATE: 0 30:5 1-8-2020 X Date/Time Date/Time Date/Time XXX 51 0202-3-18 2020 - 8-2020 CHADA KS X R HE SO - Soil SL - Sludge DKA 5 90 SOLINS Noanterly seals ZIP See additional page for sample conditions. m ilglauso Sub-and duedy 49 UATTUC Quotation #: SD - Solid PT - Paint Email: 310 89-1 REMARKS P.I.F. 100 Total Cost: LAB PROJECT ID WP - Wipe CK - Caulk 30 OL - Oil AR - Air PARADIGM LAB SAMPLE NUMBER 202 0 4 0 ر P

arti

PARADIGM	X	Chain of Custody Supp	<u>lement</u>	
Client: Lab Project ID:	<u>BE3</u> 200134 Sample (Per NELA)	Completed by: Date: Condition Requirements C/ELAP 210/241/242/243/244	Noly/ail 19/2020	
Condition		e sample condition requirements upo		
Container Type Comments	Yes	No 5035	N/A	ar the
Transferred to method- compliant container Headspace (<1 mL)				
Comments				
Comments				
Chlorine Absent (<0.10 ppm per test strip) Comments				
Holding Time Comments	- X	-		
Temperature Comments	y°ciul	×	met	
Compliant Sample Quantity/T Comments		m, PFAS sent direc	the to sub lat	

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 = ELAP ID# 10958



Lab Project ID: 200240

Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW-04 (12-13')		
Lab Sample ID:	200240-01	Date Sampled:	1/14/2020
Matrix:	Soil	Date Received:	1/15/2020

Volatile Organics

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2080	ug/Kg		1/17/2020 13:34
1,1,2,2-Tetrachloroethane	< 2080	ug/Kg		1/17/2020 13:34
1,1,2-Trichloroethane	< 2080	ug/Kg		1/17/2020 13:34
1,1-Dichloroethane	< 2080	ug/Kg		1/17/2020 13:34
1,1-Dichloroethene	< 2080	ug/Kg		1/17/2020 13:34
1,2,3-Trichlorobenzene	< 5190	ug/Kg		1/17/2020 13:34
1,2,4-Trichlorobenzene	< 5190	ug/Kg		1/17/2020 13:34
1,2-Dibromo-3-Chloropropane	< 10400	ug/Kg		1/17/2020 13:34
1,2-Dibromoethane	< 2080	ug/Kg		1/17/2020 13:34
1,2-Dichlorobenzene	< 2080	ug/Kg		1/17/2020 13:34
1,2-Dichloroethane	< 2080	ug/Kg		1/17/2020 13:34
1,2-Dichloropropane	< 2080	ug/Kg		1/17/2020 13:34
1,3-Dichlorobenzene	< 2080	ug/Kg		1/17/2020 13:34
1,4-Dichlorobenzene	< 2080	ug/Kg		1/17/2020 13:34
1,4-Dioxane	< 20800	ug/Kg		1/17/2020 13:34
2-Butanone	< 10400	ug/Kg		1/17/2020 13:34
2-Hexanone	< 5190	ug/Kg		1/17/2020 13:34
4-Methyl-2-pentanone	< 5190	ug/Kg		1/17/2020 13:34
Acetone	< 10400	ug/Kg		1/17/2020 13:34
Benzene	< 2080	ug/Kg		1/17/2020 13:34
Bromochloromethane	< 5190	ug/Kg		1/17/2020 13:34
Bromodichloromethane	< 2080	ug/Kg		1/17/2020 13:34
Bromoform	< 5190	ug/Kg		1/17/2020 13:34



Lab Project ID: 200240

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	a				
Sample Identifier:	MW-04 (12-2	13')				
Lab Sample ID:	200240-01			Date Sampled:	1/14/2020	
Matrix:	Soil			Date Received:	1/15/2020	
Bromomethane		< 2080	ug/Kg		1/17/2020	13:34
Carbon disulfide		< 2080	ug/Kg		1/17/2020	13:34
Carbon Tetrachloride		< 2080	ug/Kg		1/17/2020	13:34
Chlorobenzene		< 2080	ug/Kg		1/17/2020	13:34
Chloroethane		< 2080	ug/Kg		1/17/2020	13:34
Chloroform		< 2080	ug/Kg		1/17/2020	13:34
Chloromethane		< 2080	ug/Kg		1/17/2020	13:34
cis-1,2-Dichloroethene	9	< 2080	ug/Kg		1/17/2020	13:34
cis-1,3-Dichloroproper	ne	< 2080	ug/Kg		1/17/2020	13:34
Cyclohexane		< 10400	ug/Kg		1/17/2020	13:34
Dibromochloromethar	ie	< 2080	ug/Kg		1/17/2020	13:34
Dichlorodifluorometha	ane	< 2080	ug/Kg		1/17/2020	13:34
Ethylbenzene		< 2080	ug/Kg		1/17/2020	13:34
Freon 113		< 2080	ug/Kg		1/17/2020	13:34
Isopropylbenzene		< 2080	ug/Kg		1/17/2020	13:34
m,p-Xylene		< 2080	ug/Kg		1/17/2020	13:34
Methyl acetate		< 2080	ug/Kg		1/17/2020	13:34
Methyl tert-butyl Ethe	r	< 2080	ug/Kg		1/17/2020	13:34
Methylcyclohexane		< 2080	ug/Kg		1/17/2020	13:34
Methylene chloride		< 5190	ug/Kg		1/17/2020	13:34
o-Xylene		< 2080	ug/Kg		1/17/2020	13:34
Styrene		< 5190	ug/Kg		1/17/2020	13:34
Tetrachloroethene		< 2080	ug/Kg		1/17/2020	13:34
Toluene		< 2080	ug/Kg		1/17/2020	13:34
trans-1,2-Dichloroethe	ene	< 2080	ug/Kg		1/17/2020	13:34



Lab Project ID: 200240

Client:	<u>BE3</u>						
Project Reference:	57 Tonawan	da					
Sample Identifier:	MW-04 (12	-13')					
Lab Sample ID:	200240-01			Dat	e Sampled:	1/14/2020	
Matrix:	Soil			Dat	e Received:	1/15/2020	
trans-1,3-Dichloropro	pene	< 2080	ug/Kg			1/17/2020	13:34
Trichloroethene		36100	ug/Kg			1/17/2020	13:34
Trichlorofluorometha	ne	< 2080	ug/Kg			1/17/2020	13:34
Vinyl chloride		< 2080	ug/Kg			1/17/2020	13:34
<u>Surrogate</u>		Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-de	4		111	67.9 - 146		1/17/2020	13:34
4-Bromofluorobenzer	ie		73.8	64.6 - 127		1/17/2020	13:34
Pentafluorobenzene			108	85.5 - 113		1/17/2020	13:34
Toluene-D8			93.6	83.9 - 114		1/17/2020	13:34
Method Referen		035A H					

Data File:

x67937.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
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T :: t - t :	may incur additional fees. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-
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	or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

litions.	<mark>ns and Conditions (reverse)</mark> . See additional page for sample conditions.	العديم المعامين المعا مراجع المعامين المعام مراجع المعامين المعام	3 مر الدويا (م) By signing this form م، (معلمام كور	ge needed: please indicate EDD needed :	Other please indicate package needed:	eeded:	Date Needed
		DaterTime	aceived @ Lab By]	2		Rush 1 day
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		-	1-	Report Supplements		Turnaround Time	Turnaro
0		×	1 05 1	MW-04 (12-13	(1)	Otter J	1-141-20
PARADIGM LAB SAMPLE NUMBER	REMARKS	TCL Volatile	× - ⊼ - ▷ ≤	SAMPLE IDENTIFIER	רוס בער ס מ – ⊢ m מוכי ≺ מו	DCOLLECTED	DATE COLLECTED
AR - Air	SD - Solid WP - Wipe PT - Paint CK - Caulk	DW - Drinking Water SO - Soil WW - Wastewater SL - Sludge	WA - Water WG - Groundwater		anda	phawarc	Ł
			OT ATTN:	Matrix Codes:		PROJECT REFERENCE	PRO
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		INVOICE TO:		HEPORT TO:		PARADIGM	PA
	(f 2		CHAIN OF CUSTODY				
		Dffice (585) 647-2530 Fax (585) 647-3311	179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530	179 Lake Ave			



Chain of Custody Supplement

Client: Lab Project ID:	BE3 200240		Glenn Pezzulo 1/15/2020
Lab I I Oject ID.	Sample Cond	Date:	1 1 1 3 12020
Condition	NELAC compliance with the san Yes	nple condition requirements up No	pon receipt N/A
Container Type Comments		X 5035	
Transferred to method- compliant container			
Headspace (<1 mL) Comments			
Preservation Comments			[¥]
Chlorine Absent (< 0.10 ppm per test strip) Comments			
Holding Time Comments	- X		
F emperature Comments	3°C iced		
Compliant Sample Quantity/T Comments	ype		



Client:	<u>BE3</u>				
Project Reference:	57 Ton	awanda			
Sample Identifier:	MW-1				
Lab Sample ID:	20037	75-01		Date Sampled:	1/22/2020
Matrix:	Groun	idwater		Date Received:	1/23/2020
Part 375 Metals	<u>(ICP)</u>				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic		< 0.0100	mg/L		1/30/2020 16:46
Barium		0.0665	mg/L	J	1/30/2020 16:46
Beryllium		< 0.00500	mg/L		1/28/2020 18:17
Cadmium		< 0.00500	mg/L		1/29/2020 20:29
Chromium		< 0.0100	mg/L		1/28/2020 18:17
Copper		< 0.0400	mg/L		1/28/2020 18:17
Lead		0.00700	mg/L	J	1/30/2020 11:56
Manganese		0.0316	mg/L		1/28/2020 18:17
Nickel		< 0.0400	mg/L		1/28/2020 18:17
Selenium		< 0.0200	mg/L		1/31/2020 14:35
Silver		< 0.0100	mg/L		1/28/2020 18:17
Zinc		0.256	mg/L		1/28/2020 18:17
Method Refere	nce(s):	EPA 6010C EPA 3005A			
Preparation Da	ite:	1/27/2020			

Preparation Date: Data File:

200130B



Client:	I	<u>BE3</u>				
Project Refer	ence: 5	57 Tonawanda				
Sample Ide	ntifier:	MW-1				
Lab Sample	ID:	200375-01			Date Sampled:	1/22/2020
Matrix:		Groundwater			Date Received:	1/23/2020
Mercury	2					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury			< 0.000200	mg/L		1/28/2020 13:22
Me	ethod Reference((s): EPA 7470.	A			
	eparation Date: ata File:	1/27/202 Hg200128				



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	MW-1						
Lab Sample ID:	200375-01			Date	e Sampled:	1/22/2020	
Matrix:	Groundwate	r		Date	e Received:	1/23/2020	
<u>PCBs</u>							
Analyte		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	<u>zed</u>
PCB-1016		< 1.04	ug/L			1/27/2020	17:25
PCB-1221		< 1.04	ug/L			1/27/2020	17:25
PCB-1232		< 1.04	ug/L			1/27/2020	17:25
PCB-1242		< 1.04	ug/L			1/27/2020	17:25
PCB-1248		< 1.04	ug/L			1/27/2020	17:25
PCB-1254		< 1.04	ug/L			1/27/2020	17:25
PCB-1260		< 1.04	ug/L			1/27/2020	17:25
PCB-1262		< 1.04	ug/L			1/27/2020	17:25
PCB-1268		< 1.04	ug/L			1/27/2020	17:25
<u>Surrogate</u>		Perc	cent Recovery	Limits	<u>Outliers</u>	Date Analyz	<u>ed</u>
Tetrachloro-m-xylene			64.7	17.5 - 93.9		1/27/2020	17:25
Method Reference	ce(s): EPA 808 EPA 351						
Preparation Dat							



<u>BE3</u>			
57 Tonawanda			
MW-1			
200375-01		Date Sampled:	1/22/2020
Groundwater		Date Received:	1/23/2020
<u>cides</u>			
<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
< 2.07	ug/L		1/27/2020 18:08
< 0.207	ug/L		1/27/2020 18:08
	57 Tonawanda MW-1 200375-01 Groundwater 5 5 5 5 5 5 5 5 5 5 5 5 5	57 Tonawanda MW-1 200375-01 Groundwater States States	57 Tonawanda MW-1 200375-01 Groundwater bate Scampled: bate Received: bate Received: bate Received: bate Received: cload cload



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW-1					
Lab Sample ID:	200375-01		Date	e Sampled:	1/22/2020	
Matrix:	Groundwater		Date	e Received:	1/23/2020	
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1)	21.1	18.1 - 158		1/27/2020	18:08
Tetrachloro-m-xylene	(1)	75.6	33.4 - 94.3		1/27/2020	18:08
Method Reference Preparation Date	EPA 3510C					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW-1		
Lab Sample ID:	200375-01	Date Sampled:	1/22/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 10.1	ug/L		1/24/2020 16:46
1,2,4,5-Tetrachlorobenzene	< 10.1	ug/L		1/24/2020 16:46
1,2,4-Trichlorobenzene	< 10.1	ug/L		1/24/2020 16:46
1,2-Dichlorobenzene	< 10.1	ug/L		1/24/2020 16:46
1,3-Dichlorobenzene	< 10.1	ug/L		1/24/2020 16:46
1,4-Dichlorobenzene	< 10.1	ug/L		1/24/2020 16:46
2,2-Oxybis (1-chloropropane)	< 10.1	ug/L		1/24/2020 16:46
2,3,4,6-Tetrachlorophenol	< 10.1	ug/L		1/24/2020 16:46
2,4,5-Trichlorophenol	< 20.3	ug/L		1/24/2020 16:46
2,4,6-Trichlorophenol	< 10.1	ug/L		1/24/2020 16:46
2,4-Dichlorophenol	< 10.1	ug/L		1/24/2020 16:46
2,4-Dimethylphenol	< 20.3	ug/L		1/24/2020 16:46
2,4-Dinitrophenol	< 20.3	ug/L		1/24/2020 16:46
2,4-Dinitrotoluene	< 10.1	ug/L		1/24/2020 16:46
2,6-Dinitrotoluene	< 10.1	ug/L		1/24/2020 16:46
2-Chloronaphthalene	< 10.1	ug/L		1/24/2020 16:46
2-Chlorophenol	< 10.1	ug/L		1/24/2020 16:46
2-Methylnapthalene	< 10.1	ug/L		1/24/2020 16:46
2-Methylphenol	< 10.1	ug/L		1/24/2020 16:46
2-Nitroaniline	< 20.3	ug/L		1/24/2020 16:46
2-Nitrophenol	< 10.1	ug/L		1/24/2020 16:46
3&4-Methylphenol	< 10.1	ug/L		1/24/2020 16:46
3,3'-Dichlorobenzidine	< 10.1	ug/L		1/24/2020 16:46



Lab Project ID: 200375

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	MW-1					
Lab Sample ID:	200375-01			Date Sampled:	1/22/2020	
Matrix:	Groundwater			Date Received:	1/23/2020	
3-Nitroaniline		< 20.3	ug/L		1/24/2020	16:46
4,6-Dinitro-2-methylph	enol	< 20.3	ug/L		1/24/2020	16:46
4-Bromophenyl phenyl	ether	< 10.1	ug/L		1/24/2020	16:46
4-Chloro-3-methylphen	ıol	< 10.1	ug/L		1/24/2020	16:46
4-Chloroaniline		< 10.1	ug/L		1/24/2020	16:46
4-Chlorophenyl phenyl	ether	< 10.1	ug/L		1/24/2020	16:46
4-Nitroaniline		< 20.3	ug/L		1/24/2020	16:46
4-Nitrophenol		< 20.3	ug/L		1/24/2020	16:46
Acenaphthene		< 10.1	ug/L		1/24/2020	16:46
Acenaphthylene		< 10.1	ug/L		1/24/2020	16:46
Acetophenone		< 10.1	ug/L		1/24/2020	16:46
Anthracene		< 10.1	ug/L		1/24/2020	16:46
Atrazine		< 10.1	ug/L		1/24/2020	16:46
Benzaldehyde		< 10.1	ug/L		1/24/2020	16:46
Benzo (a) anthracene		< 10.1	ug/L		1/24/2020	16:46
Benzo (a) pyrene		< 10.1	ug/L		1/24/2020	16:46
Benzo (b) fluoranthene		< 10.1	ug/L		1/24/2020	16:46
Benzo (g,h,i) perylene		< 10.1	ug/L		1/24/2020	16:46
Benzo (k) fluoranthene		< 10.1	ug/L		1/24/2020	16:46
Bis (2-chloroethoxy) me	ethane	< 10.1	ug/L		1/24/2020	16:46
Bis (2-chloroethyl) ethe	er	< 10.1	ug/L		1/24/2020	16:46
Bis (2-ethylhexyl) phtha	alate	< 10.1	ug/L		1/24/2020	16:46
Butylbenzylphthalate		< 10.1	ug/L		1/24/2020	16:46
Caprolactam		< 10.1	ug/L		1/24/2020	16:46
Carbazole		< 10.1	ug/L		1/24/2020	16:46



Lab Project ID: 200375

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	l				
Sample Identifier: Lab Sample ID: Matrix:	MW-1 200375-01 Groundwater			Date Sampled: Date Received:	1/22/2020 1/23/2020	
Chrysene	urounawater	< 10.1	ug/L	Date Received.	1/24/2020	16.46
Dibenz (a,h) anthracen	e	< 10.1	ug/L		1/24/2020	
Dibenzofuran	0	< 10.1	ug/L		1/24/2020	
Diethyl phthalate		< 10.1	ug/L		1/24/2020	
Dimethyl phthalate		< 20.3	ug/L		1/24/2020	
Di-n-butyl phthalate		< 10.1	ug/L		1/24/2020	
Di-n-octylphthalate		< 10.1	ug/L		1/24/2020	
Fluoranthene		< 10.1	ug/L		1/24/2020	16:46
Fluorene		< 10.1	ug/L		1/24/2020	16:46
Hexachlorobenzene		< 10.1	ug/L		1/24/2020	16:46
Hexachlorobutadiene		< 10.1	ug/L		1/24/2020	16:46
Hexachlorocyclopentac	liene	< 10.1	ug/L		1/24/2020	16:46
Hexachloroethane		< 10.1	ug/L		1/24/2020	16:46
Indeno (1,2,3-cd) pyrer	ne	< 10.1	ug/L		1/24/2020	16:46
Isophorone		< 10.1	ug/L		1/24/2020	16:46
Naphthalene		< 10.1	ug/L		1/24/2020	16:46
Nitrobenzene		< 10.1	ug/L		1/24/2020	16:46
N-Nitroso-di-n-propyla	imine	< 10.1	ug/L		1/24/2020	16:46
N-Nitrosodiphenylamii	ne	< 10.1	ug/L		1/24/2020	16:46
Pentachlorophenol		< 20.3	ug/L		1/24/2020	16:46
Phenanthrene		< 10.1	ug/L		1/24/2020	16:46
Phenol		< 10.1	ug/L		1/24/2020	16:46
Pyrene		< 10.1	ug/L		1/24/2020	16:46



Client:	<u>BE3</u>						
Project Reference:	57 To	nawanda					
Sample Identifier:	MW-	1					
Lab Sample ID:	2003	75-01		Dat	e Sampled:	1/22/2020	
Matrix:	Grou	ndwater		Dat	e Received:	1/23/2020	
<u>Surrogate</u>			Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	yzed
2,4,6-Tribromophenol			81.7	59.6 - 114		1/24/2020	16:46
2-Fluorobiphenyl			57.1	36.2 - 99.1		1/24/2020	16:46
2-Fluorophenol			39.9	14.9 - 105		1/24/2020	16:46
Nitrobenzene-d5			69.9	53.7 - 102		1/24/2020	16:46
Phenol-d5			26.7	10 - 106		1/24/2020	16:46
Terphenyl-d14			77.4	58.7 - 116		1/24/2020	16:46
Method Referen	ce(s):	EPA 8270D EPA 3510C					
Preparation Dat Data File:	æ:	1/24/2020 B44088.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier: Lab Sample ID: Matrix:	MW-1 200375-01 Groundwater			Date Sampled: Date Received:	1/22/2020 1/23/2020
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		1.00	ug/L	J	1/24/2020 14:17
1,1,2,2-Tetrachloroeth	ane	< 2.00	ug/L		1/24/2020 14:17
1,1,2-Trichloroethane		< 2.00	ug/L		1/24/2020 14:17
1,1-Dichloroethane		< 2.00	ug/L		1/24/2020 14:17
1,1-Dichloroethene		< 2.00	ug/L		1/24/2020 14:17
1,2,3-Trichlorobenzen	e	< 5.00	ug/L		1/24/2020 14:17
1,2,4-Trichlorobenzen	e	< 5.00	ug/L		1/24/2020 14:17
1,2,4-Trimethylbenzen	ie	< 2.00	ug/L		1/24/2020 14:17
1,2-Dibromo-3-Chloro	propane	< 10.0	ug/L		1/24/2020 14:17
1,2-Dibromoethane		< 2.00	ug/L		1/24/2020 14:17
1,2-Dichlorobenzene		< 2.00	ug/L		1/24/2020 14:17
1,2-Dichloroethane		< 2.00	ug/L		1/24/2020 14:17
1,2-Dichloropropane		< 2.00	ug/L		1/24/2020 14:17
1,3,5-Trimethylbenzen	ie	< 2.00	ug/L		1/24/2020 14:17
1,3-Dichlorobenzene		< 2.00	ug/L		1/24/2020 14:17
1,4-Dichlorobenzene		< 2.00	ug/L		1/24/2020 14:17
1,4-Dioxane		< 20.0	ug/L		1/24/2020 14:17
2-Butanone		< 10.0	ug/L		1/24/2020 14:17
2-Hexanone		< 5.00	ug/L		1/24/2020 14:17
4-Methyl-2-pentanone		< 5.00	ug/L		1/24/2020 14:17
Acetone		17.4	ug/L		1/24/2020 14:17
Benzene		< 1.00	ug/L		1/24/2020 14:17
Bromochloromethane		< 5.00	ug/L		1/24/2020 14:17



Lab Project ID: 200375

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW-1					
Lab Sample ID:	200375-01			Date Sampled:	1/22/2020	
Matrix:	Groundwater			Date Received:	1/23/2020	
Bromodichloromethane	e	< 2.00	ug/L		1/24/2020	14:17
Bromoform		< 5.00	ug/L		1/24/2020	14:17
Bromomethane		< 2.00	ug/L		1/24/2020	14:17
Carbon disulfide		< 2.00	ug/L		1/24/2020	14:17
Carbon Tetrachloride		< 2.00	ug/L		1/24/2020	14:17
Chlorobenzene		< 2.00	ug/L		1/24/2020	14:17
Chloroethane		< 2.00	ug/L		1/24/2020	14:17
Chloroform		< 2.00	ug/L		1/24/2020	14:17
Chloromethane		< 2.00	ug/L		1/24/2020	14:17
cis-1,2-Dichloroethene		2.58	ug/L		1/24/2020	14:17
cis-1,3-Dichloropropen	e	< 2.00	ug/L		1/24/2020	14:17
Cyclohexane		< 10.0	ug/L		1/24/2020	14:17
Dibromochloromethan	e	< 2.00	ug/L		1/24/2020	14:17
Dichlorodifluorometha	ne	< 2.00	ug/L		1/24/2020	14:17
Ethylbenzene		< 2.00	ug/L		1/24/2020	14:17
Freon 113		< 2.00	ug/L		1/24/2020	14:17
Isopropylbenzene		< 2.00	ug/L		1/24/2020	14:17
m,p-Xylene		< 2.00	ug/L		1/24/2020	14:17
Methyl acetate		< 2.00	ug/L		1/24/2020	14:17
Methyl tert-butyl Ether		< 2.00	ug/L		1/24/2020	14:17
Methylcyclohexane		< 2.00	ug/L		1/24/2020	14:17
Methylene chloride		< 5.00	ug/L		1/24/2020	14:17
Naphthalene		< 5.00	ug/L		1/24/2020	14:17
n-Butylbenzene		< 2.00	ug/L		1/24/2020	14:17
n-Propylbenzene		< 2.00	ug/L		1/24/2020	14:17



Lab Project ID: 200375

Client:	<u>BE3</u>						
Project Reference:	57 Tonawa	inda					
Sample Identifier:	MW-1						
Lab Sample ID:	200375-0	1		Dat	e Sampled:	1/22/2020	
Matrix:	Groundwa	ater		Dat	e Received:	1/23/2020	
o-Xylene		< 2.00	ug/L			1/24/2020	14:17
p-Isopropyltoluene		< 2.00	ug/L			1/24/2020	14:17
sec-Butylbenzene		< 2.00	ug/L			1/24/2020	14:17
Styrene		< 5.00	ug/L			1/24/2020	14:17
tert-Butylbenzene		< 2.00	ug/L			1/24/2020	14:17
Tetrachloroethene		< 2.00	ug/L			1/24/2020	14:17
Toluene		< 2.00	ug/L			1/24/2020	14:17
trans-1,2-Dichloroethe	ne	< 2.00	ug/L			1/24/2020	14:17
trans-1,3-Dichloroprop	oene	< 2.00	ug/L			1/24/2020	14:17
Trichloroethene		13.0	ug/L			1/24/2020	14:17
Trichlorofluoromethar	ie	< 2.00	ug/L			1/24/2020	14:17
Vinyl chloride		< 2.00	ug/L			1/24/2020	14:17
<u>Surrogate</u>		Per	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			115	74.3 - 138		1/24/2020	14:17
4-Bromofluorobenzene	è		78.6	66.3 - 125		1/24/2020	14:17
Pentafluorobenzene			102	87.4 - 111		1/24/2020	14:17
Toluene-D8			93.6	85.8 - 113		1/24/2020	14:17
Method Reference	ce(s): EPA	8260C					
Data File:		. 5030C 096.D					



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW-1			
Lab Sample ID:	200375-01		Date Sampled:	1/22/2020
Matrix:	Groundwater		Date Received:	1/23/2020
<u>Total Cyanide</u>				
<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		1/27/2020
Method Referen	ace(s): SM 4500 CN E - 2011			
Preparation Da	SM 4500 CN C - 2011 te: 1/24/2020			



Client:]	<u>BE3</u>				
Project Refe	erence:	57 Tonav	wanda			
Sample Id	entifier:	MW-1				
Lab Sampl	le ID:	200375	-01		Date Sampled:	1/22/2020
Matrix:		Ground	water		Date Received:	1/23/2020
Dioxan	<u>e</u>					
<u>Analyte</u>			Result	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxa	ane		0.149	ug/L	J	1/27/2020 10:57
I	Method Reference(EPA 8270D SIM EPA 3510C			
	Preparation Date: Data File:		1/24/2020 344121.D			



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW-3		
Lab Sample ID:	200375-02	Date Sampled:	1/22/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Part 375 Metals (ICP)

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic	< 0.0100	mg/L		1/30/2020 16:51
Barium	0.175	mg/L		1/30/2020 16:51
Beryllium	< 0.00500	mg/L		1/28/2020 18:22
Cadmium	< 0.00500	mg/L		1/29/2020 20:33
Chromium	< 0.0100	mg/L		1/28/2020 18:22
Copper	< 0.0400	mg/L		1/28/2020 18:22
Lead	0.0427	mg/L		1/30/2020 12:01
Manganese	2.69	mg/L		1/28/2020 18:22
Nickel	< 0.0400	mg/L		1/28/2020 18:22
Selenium	0.0183	mg/L	J	1/31/2020 14:40
Silver	< 0.0100	mg/L		1/28/2020 18:22
Zinc	< 0.0600	mg/L		1/28/2020 18:22
Method Reference(s):	EPA 6010C EPA 3005A			
Preparation Date:	1/27/2020			

Preparation Date: Data File:

200130B



Client:		<u>BE3</u>				
Project Refe	rence:	57 Tonawanda	a			
Sample Ide	entifier:	MW-3				
Lab Sampl	e ID:	200375-02			Date Sampled:	1/22/2020
Matrix:		Groundwater	r		Date Received:	1/23/2020
Mercur	Y					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury			< 0.000200	mg/L		1/28/2020 13:24
Ν	lethod Reference	e(s): EPA 747	0A			
	Preparation Date Data File:	: 1/27/20 Hg20012				



Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	MW-3					
Lab Sample ID:	200375-02			Date	e Sampled:	1/22/2020
Matrix:	Groundwate	r		Date	e Received:	1/23/2020
<u>PCBs</u>						
Analyte		<u>Result</u>	<u>Units</u>		Qualifier	Date Analyzed
PCB-1016		< 1.00	ug/L			1/27/2020 17:48
PCB-1221		< 1.00	ug/L			1/27/2020 17:48
PCB-1232		< 1.00	ug/L			1/27/2020 17:48
PCB-1242		< 1.00	ug/L			1/27/2020 17:48
PCB-1248		< 1.00	ug/L			1/27/2020 17:48
PCB-1254		< 1.00	ug/L			1/27/2020 17:48
PCB-1260		< 1.00	ug/L			1/27/2020 17:48
PCB-1262		< 1.00	ug/L			1/27/2020 17:48
PCB-1268		< 1.00	ug/L			1/27/2020 17:48
<u>Surrogate</u>		Perc	cent Recovery	Limits	Outliers	Date Analyzed
Tetrachloro-m-xylene			66.1	17.5 - 93.9		1/27/2020 17:48
Method Referen						
Preparation Dat	EPA 351 e: 1/27/20					



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier: Lab Sample ID: Matrix:	MW-3 200375-02 Groundwater			Date Sampled: Date Received:	1/22/2020 1/23/2020	
Chlorinated Pesti	<u>cides</u>					
<u>Analyte</u>	Res	sult	<u>Units</u>	Qualifier	Date Analy	zed
4,4-DDD	< 0.20	00	ug/L		1/27/2020	18:26
4,4-DDE	< 0.20	00	ug/L		1/27/2020	18:26
4,4-DDT	< 0.20	00	ug/L		1/27/2020	18:26
Aldrin	< 0.20	00	ug/L		1/27/2020	18:26
alpha-BHC	< 0.20	00	ug/L		1/27/2020	18:26
beta-BHC	< 0.20	00	ug/L		1/27/2020	18:26
cis-Chlordane	< 0.20	00	ug/L		1/27/2020	18:26
delta-BHC	< 0.20	00	ug/L		1/27/2020	18:26
Dieldrin	< 0.20	00	ug/L		1/27/2020	18:26
Endosulfan I	< 0.20	00	ug/L		1/27/2020	18:26
Endosulfan II	< 0.20	00	ug/L		1/27/2020	18:26
Endosulfan Sulfate	< 0.20	00	ug/L		1/27/2020	18:26
Endrin	< 0.20	00	ug/L		1/27/2020	18:26
Endrin Aldehyde	< 0.20	00	ug/L		1/27/2020	18:26
Endrin Ketone	< 0.20	00	ug/L		1/27/2020	18:26
gamma-BHC (Lindane) < 0.20	00	ug/L		1/27/2020	18:26
Heptachlor	< 0.20	00	ug/L		1/27/2020	18:26
Heptachlor Epoxide	< 0.20	00	ug/L		1/27/2020	18:26
Methoxychlor	< 0.20	00	ug/L		1/27/2020	18:26
Toxaphene	< 2.00)	ug/L		1/27/2020	18:26
trans-Chlordane	< 0.20	00	ug/L		1/27/2020	18:26



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW-3					
Lab Sample ID:	200375-02		Dat	e Sampled:	1/22/2020	
Matrix:	Groundwater		Dat	e Received:	1/23/2020	
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	9.69	18.1 - 158	*	1/27/2020	18:26
Tetrachloro-m-xylene	(1)	83.3	33.4 - 94.3		1/27/2020	18:26
Method Referen Preparation Dat	EPA 3510C					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW-3		
Lab Sample ID:	200375-02	Date Sampled:	1/22/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 10.0	ug/L		1/27/2020 14:55
1,2,4,5-Tetrachlorobenzene	< 10.0	ug/L		1/27/2020 14:55
1,2,4-Trichlorobenzene	< 10.0	ug/L		1/27/2020 14:55
1,2-Dichlorobenzene	< 10.0	ug/L		1/27/2020 14:55
1,3-Dichlorobenzene	< 10.0	ug/L		1/27/2020 14:55
1,4-Dichlorobenzene	< 10.0	ug/L		1/27/2020 14:55
2,2-Oxybis (1-chloropropane)	< 10.0	ug/L		1/27/2020 14:55
2,3,4,6-Tetrachlorophenol	< 10.0	ug/L		1/27/2020 14:55
2,4,5-Trichlorophenol	< 20.0	ug/L		1/27/2020 14:55
2,4,6-Trichlorophenol	< 10.0	ug/L		1/27/2020 14:55
2,4-Dichlorophenol	< 10.0	ug/L		1/27/2020 14:55
2,4-Dimethylphenol	< 20.0	ug/L		1/27/2020 14:55
2,4-Dinitrophenol	< 20.0	ug/L		1/27/2020 14:55
2,4-Dinitrotoluene	< 10.0	ug/L		1/27/2020 14:55
2,6-Dinitrotoluene	< 10.0	ug/L		1/27/2020 14:55
2-Chloronaphthalene	< 10.0	ug/L		1/27/2020 14:55
2-Chlorophenol	< 10.0	ug/L		1/27/2020 14:55
2-Methylnapthalene	< 10.0	ug/L		1/27/2020 14:55
2-Methylphenol	< 10.0	ug/L		1/27/2020 14:55
2-Nitroaniline	< 20.0	ug/L		1/27/2020 14:55
2-Nitrophenol	< 10.0	ug/L		1/27/2020 14:55
3&4-Methylphenol	< 10.0	ug/L		1/27/2020 14:55
3,3'-Dichlorobenzidine	< 10.0	ug/L		1/27/2020 14:55



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda	a				
Sample Identifier:	MW-3					
Lab Sample ID:	200375-02			Date Sampled:	1/22/2020	
Matrix:	Groundwater	ſ		Date Received:	1/23/2020	
3-Nitroaniline		< 20.0	ug/L		1/27/2020	14:55
4,6-Dinitro-2-methylph	ienol	< 20.0	ug/L		1/27/2020	14:55
4-Bromophenyl phenyl	ether	< 10.0	ug/L		1/27/2020	14:55
4-Chloro-3-methylpher	nol	< 10.0	ug/L		1/27/2020	14:55
4-Chloroaniline		< 10.0	ug/L		1/27/2020	14:55
4-Chlorophenyl phenyl	ether	< 10.0	ug/L		1/27/2020	14:55
4-Nitroaniline		< 20.0	ug/L		1/27/2020	14:55
4-Nitrophenol		< 20.0	ug/L		1/27/2020	14:55
Acenaphthene		< 10.0	ug/L		1/27/2020	14:55
Acenaphthylene		< 10.0	ug/L		1/27/2020	14:55
Acetophenone		< 10.0	ug/L		1/27/2020	14:55
Anthracene		< 10.0	ug/L		1/27/2020	14:55
Atrazine		< 10.0	ug/L		1/27/2020	14:55
Benzaldehyde		< 10.0	ug/L		1/27/2020	14:55
Benzo (a) anthracene		< 10.0	ug/L		1/27/2020	14:55
Benzo (a) pyrene		< 10.0	ug/L		1/27/2020	14:55
Benzo (b) fluoranthene	2	< 10.0	ug/L		1/27/2020	14:55
Benzo (g,h,i) perylene		< 10.0	ug/L		1/27/2020	14:55
Benzo (k) fluoranthene	2	< 10.0	ug/L		1/27/2020	14:55
Bis (2-chloroethoxy) m	ethane	< 10.0	ug/L		1/27/2020	14:55
Bis (2-chloroethyl) ethe	er	< 10.0	ug/L		1/27/2020	14:55
Bis (2-ethylhexyl) phth	alate	< 10.0	ug/L		1/27/2020	14:55
Butylbenzylphthalate		< 10.0	ug/L		1/27/2020	14:55
Caprolactam		< 10.0	ug/L		1/27/2020	14:55
Carbazole		< 10.0	ug/L		1/27/2020	14:55



Lab Project ID: 200375

Client:	<u>BE3</u>				
Project Reference:	57 Tonawar	ıda			
Sample Identifier: Lab Sample ID:	MW-3 200375-02			Date Sampled:	1/22/2020
Matrix:	Groundwa	ter		Date Received:	1/23/2020
Chrysene		< 10.0	ug/L		1/27/2020 14:55
Dibenz (a,h) anthrace	ne	< 10.0	ug/L		1/27/2020 14:55
Dibenzofuran		< 10.0	ug/L		1/27/2020 14:55
Diethyl phthalate		< 10.0	ug/L		1/27/2020 14:55
Dimethyl phthalate		< 20.0	ug/L		1/27/2020 14:55
Di-n-butyl phthalate		< 10.0	ug/L		1/27/2020 14:55
Di-n-octylphthalate		< 10.0	ug/L		1/27/2020 14:55
Fluoranthene		< 10.0	ug/L		1/27/2020 14:55
Fluorene		< 10.0	ug/L		1/27/2020 14:55
Hexachlorobenzene		< 10.0	ug/L		1/27/2020 14:55
Hexachlorobutadiene		< 10.0	ug/L		1/27/2020 14:55
Hexachlorocyclopenta	adiene	< 10.0	ug/L		1/27/2020 14:55
Hexachloroethane		< 10.0	ug/L		1/27/2020 14:55
Indeno (1,2,3-cd) pyro	ene	< 10.0	ug/L		1/27/2020 14:55
Isophorone		< 10.0	ug/L		1/27/2020 14:55
Naphthalene		< 10.0	ug/L		1/27/2020 14:55
Nitrobenzene		< 10.0	ug/L		1/27/2020 14:55
N-Nitroso-di-n-propy	lamine	< 10.0	ug/L		1/27/2020 14:55
N-Nitrosodiphenylam	ine	< 10.0	ug/L		1/27/2020 14:55
Pentachlorophenol		< 20.0	ug/L		1/27/2020 14:55
Phenanthrene		< 10.0	ug/L		1/27/2020 14:55
Phenol		< 10.0	ug/L		1/27/2020 14:55
Pyrene		< 10.0	ug/L		1/27/2020 14:55



Client:	<u>BE3</u>						
Project Reference:	57 Ton	awanda					
Sample Identifier:	MW-3	3					
Lab Sample ID:	20037	75-02		Dat	e Sampled:	1/22/2020	
Matrix:	Grour	ndwater		Dat	e Received:	1/23/2020	
Surrogate			Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	yzed
2,4,6-Tribromophenol			52.0	59.6 - 114	*	1/27/2020	14:55
2-Fluorobiphenyl			37.9	36.2 - 99.1		1/27/2020	14:55
2-Fluorophenol			25.1	14.9 - 105		1/27/2020	14:55
Nitrobenzene-d5			44.5	53.7 - 102	*	1/27/2020	14:55
Phenol-d5			17.3	10 - 106		1/27/2020	14:55
Terphenyl-d14			54.1	58.7 - 116	*	1/27/2020	14:55
Method Referen	ce(s):	EPA 8270D EPA 3510C					
Preparation Dat Data File:	te:	1/24/2020 B44089.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	MW-3 200375-02 Groundwater	ſ		Date Sampled: Date Received:	1/22/2020 1/23/2020
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 2.00	ug/L		1/24/2020 14:39
1,1,2,2-Tetrachloroeth	nane	< 2.00	ug/L		1/24/2020 14:39
1,1,2-Trichloroethane		< 2.00	ug/L		1/24/2020 14:39
1,1-Dichloroethane		< 2.00	ug/L		1/24/2020 14:39
1,1-Dichloroethene		< 2.00	ug/L		1/24/2020 14:39
1,2,3-Trichlorobenzer	ie	< 5.00	ug/L		1/24/2020 14:39
1,2,4-Trichlorobenzer	ie	< 5.00	ug/L		1/24/2020 14:39
1,2,4-Trimethylbenze	ne	< 2.00	ug/L		1/24/2020 14:39
1,2-Dibromo-3-Chloro	opropane	< 10.0	ug/L		1/24/2020 14:39
1,2-Dibromoethane		< 2.00	ug/L		1/24/2020 14:39
1,2-Dichlorobenzene		< 2.00	ug/L		1/24/2020 14:39
1,2-Dichloroethane		< 2.00	ug/L		1/24/2020 14:39
1,2-Dichloropropane		< 2.00	ug/L		1/24/2020 14:39
1,3,5-Trimethylbenze	ne	< 2.00	ug/L		1/24/2020 14:39
1,3-Dichlorobenzene		< 2.00	ug/L		1/24/2020 14:39
1,4-Dichlorobenzene		< 2.00	ug/L		1/24/2020 14:39
1,4-Dioxane		< 20.0	ug/L		1/24/2020 14:39
2-Butanone		< 10.0	ug/L		1/24/2020 14:39
2-Hexanone		< 5.00	ug/L		1/24/2020 14:39
4-Methyl-2-pentanone	e	< 5.00	ug/L		1/24/2020 14:39
Acetone		157	ug/L		1/24/2020 14:39
Benzene		< 1.00	ug/L		1/24/2020 14:39
Bromochloromethane	9	< 5.00	ug/L		1/24/2020 14:39



Lab Project ID: 200375

Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW-3			
Lab Sample ID:	200375-02		Date Sampled:	1/22/2020
Matrix:	Groundwater		Date Received:	1/23/2020
Bromodichloromethane	e < 2.00	ug/L		1/24/2020 14:39
Bromoform	< 5.00	ug/L		1/24/2020 14:39
Bromomethane	< 2.00	ug/L		1/24/2020 14:39
Carbon disulfide	< 2.00	ug/L		1/24/2020 14:39
Carbon Tetrachloride	< 2.00	ug/L		1/24/2020 14:39
Chlorobenzene	< 2.00	ug/L		1/24/2020 14:39
Chloroethane	< 2.00	ug/L		1/24/2020 14:39
Chloroform	< 2.00	ug/L		1/24/2020 14:39
Chloromethane	< 2.00	ug/L		1/24/2020 14:39
cis-1,2-Dichloroethene	< 2.00	ug/L		1/24/2020 14:39
cis-1,3-Dichloropropen	e < 2.00	ug/L		1/24/2020 14:39
Cyclohexane	< 10.0	ug/L		1/24/2020 14:39
Dibromochloromethan	e < 2.00	ug/L		1/24/2020 14:39
Dichlorodifluorometha	ne < 2.00	ug/L		1/24/2020 14:39
Ethylbenzene	< 2.00	ug/L		1/24/2020 14:39
Freon 113	< 2.00	ug/L		1/24/2020 14:39
Isopropylbenzene	< 2.00	ug/L		1/24/2020 14:39
m,p-Xylene	< 2.00	ug/L		1/24/2020 14:39
Methyl acetate	< 2.00	ug/L		1/24/2020 14:39
Methyl tert-butyl Ether	< 2.00	ug/L		1/24/2020 14:39
Methylcyclohexane	< 2.00	ug/L		1/24/2020 14:39
Methylene chloride	< 5.00	ug/L		1/24/2020 14:39
Naphthalene	< 5.00	ug/L		1/24/2020 14:39
n-Butylbenzene	< 2.00	ug/L		1/24/2020 14:39
n-Propylbenzene	< 2.00	ug/L		1/24/2020 14:39



Client:	<u>BE3</u>						
Project Reference:	57 Tona	wanda					
Sample Identifier:	MW-3						
Lab Sample ID:	200375	5-02		Dat	e Sampled:	1/22/2020	
Matrix:	Ground	lwater		Dat	e Received:	1/23/2020	
o-Xylene		< 2.00	ug/L			1/24/2020	14:39
p-Isopropyltoluene		< 2.00	ug/L			1/24/2020	14:39
sec-Butylbenzene		< 2.00	ug/L			1/24/2020	14:39
Styrene		< 5.00	ug/L			1/24/2020	14:39
tert-Butylbenzene		< 2.00	ug/L			1/24/2020	14:39
Tetrachloroethene		< 2.00	ug/L			1/24/2020	14:39
Toluene		< 2.00	ug/L			1/24/2020	14:39
trans-1,2-Dichloroethe	ene	< 2.00	ug/L			1/24/2020	14:39
trans-1,3-Dichloroprop	pene	< 2.00	ug/L			1/24/2020	14:39
Trichloroethene		1.27	ug/L		J	1/24/2020	14:39
Trichlorofluoromethar	ne	< 2.00	ug/L			1/24/2020	14:39
Vinyl chloride		< 2.00	ug/L			1/24/2020	14:39
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4	•		118	74.3 - 138		1/24/2020	14:39
4-Bromofluorobenzene	e		77.7	66.3 - 125		1/24/2020	14:39
Pentafluorobenzene			100	87.4 - 111		1/24/2020	14:39
Toluene-D8			91.5	85.8 - 113		1/24/2020	14:39
Method Reference	ce(s):	EPA 8260C					
Data File:		EPA 5030C x68097.D					



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW-3			
Lab Sample ID:	200375-02		Date Sampled:	1/22/2020
Matrix:	Groundwater		Date Received:	1/23/2020
<u>Total Cyanide</u>				
<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	0.00650	mg/L	J	1/27/2020
Method Referen				
Preparation Da	SM 4500 CN C - 2011 te: 1/24/2020			



Data File:

B44122.D

Lab Project ID: 200375

Client:		<u>BE3</u>				
Project Refe	rence:	57 Tonawanda				
Sample Ide	entifier:	MW-3				
Lab Sample	e ID:	200375-02			Date Sampled:	1/22/2020
Matrix:		Groundwater			Date Received:	1/23/2020
Dioxane	2					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dioxa	ne		1.36	ug/L		1/27/2020 11:08
Si	urrogate and inter	rnal standard outliers in	dicate probable	e matrix interference		
Μ	lethod Reference	e(s): EPA 82701	D SIM			
		EPA 3510	2			
Р	reparation Date	: 1/24/202	0			



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW-2		
Lab Sample ID:	200375-03	Date Sampled:	1/22/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Part 375 Metals (ICP)

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic	< 0.0100	mg/L		1/30/2020 16:55
Barium	0.144	mg/L		1/30/2020 16:55
Beryllium	< 0.00500	mg/L		1/28/2020 18:26
Cadmium	< 0.00500	mg/L		1/29/2020 20:37
Chromium	< 0.0100	mg/L		1/28/2020 18:26
Copper	< 0.0400	mg/L		1/28/2020 18:26
Lead	< 0.0100	mg/L		1/30/2020 12:05
Manganese	0.694	mg/L		1/28/2020 18:26
Nickel	< 0.0400	mg/L		1/28/2020 18:26
Selenium	0.0154	mg/L	J	1/31/2020 14:44
Silver	< 0.0100	mg/L		1/28/2020 18:26
Zinc	< 0.0600	mg/L		1/28/2020 18:26
Method Reference(s):	EPA 6010C			
Preparation Date:	EPA 3005A 1/27/2020			

Preparation Date: Data File:

200130B



Client:		<u>BE3</u>				
Project Refe	erence:	57 Tonawanda	a			
Sample Id	entifier:	MW-2				
Lab Sampl	le ID:	200375-03			Date Sampled:	1/22/2020
Matrix:		Groundwater	•		Date Received:	1/23/2020
Mercur	У					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury			< 0.000200	mg/L		1/28/2020 13:26
I	Method Referenc	e(s): EPA 747	0A			
	Preparation Date Data File:	e: 1/27/20 Hg20012				



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	la					
Sample Identifier:	MW-2						
Lab Sample ID:	200375-03			Dat	e Sampled:	1/22/2020	
Matrix:	Groundwate	r		Dat	e Received:	1/23/2020	
<u>PCBs</u>							
Analyte		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	vzed
PCB-1016		< 1.05	ug/L			1/27/2020	18:11
PCB-1221		< 1.05	ug/L			1/27/2020	18:11
PCB-1232		< 1.05	ug/L			1/27/2020	18:11
PCB-1242		< 1.05	ug/L			1/27/2020	18:11
PCB-1248		< 1.05	ug/L			1/27/2020	18:11
PCB-1254		< 1.05	ug/L			1/27/2020	18:11
PCB-1260		< 1.05	ug/L			1/27/2020	18:11
PCB-1262		< 1.05	ug/L			1/27/2020	18:11
PCB-1268		< 1.05	ug/L			1/27/2020	18:11
<u>Surrogate</u>		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			61.3	17.5 - 93.9		1/27/2020	18:11
Method Referen							
Preparation Dat	EPA 351 re: 1/27/20						



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier: Lab Sample ID: Matrix:	MW-2 200375-03 Groundwater		Date Sampled: Date Received:	1/22/2020 1/23/2020
Chlorinated Pesti	<u>cides</u>			
<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD	< 0.211	ug/L		1/27/2020 18:45
4,4-DDE	< 0.211	ug/L		1/27/2020 18:45
4,4-DDT	< 0.211	ug/L		1/27/2020 18:45
Aldrin	< 0.211	ug/L		1/27/2020 18:45
alpha-BHC	< 0.211	ug/L		1/27/2020 18:45
beta-BHC	< 0.211	ug/L		1/27/2020 18:45
cis-Chlordane	< 0.211	ug/L		1/27/2020 18:45
delta-BHC	< 0.211	ug/L		1/27/2020 18:45
Dieldrin	< 0.211	ug/L		1/27/2020 18:45
Endosulfan I	< 0.211	ug/L		1/27/2020 18:45
Endosulfan II	< 0.211	ug/L		1/27/2020 18:45
Endosulfan Sulfate	< 0.211	ug/L		1/27/2020 18:45
Endrin	< 0.211	ug/L		1/27/2020 18:45
Endrin Aldehyde	< 0.211	ug/L		1/27/2020 18:45
Endrin Ketone	< 0.211	ug/L		1/27/2020 18:45
gamma-BHC (Lindane) < 0.211	ug/L		1/27/2020 18:45
Heptachlor	< 0.211	ug/L		1/27/2020 18:45
Heptachlor Epoxide	< 0.211	ug/L		1/27/2020 18:45
Methoxychlor	< 0.211	ug/L		1/27/2020 18:45
Toxaphene	< 2.11	ug/L		1/27/2020 18:45
trans-Chlordane	< 0.211	ug/L		1/27/2020 18:45



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier: MW-2						
Lab Sample ID: 200375-03			Date	e Sampled:	1/22/2020	
Matrix:	ix: Groundwater		Date	e Received:	1/23/2020	
Surrogate		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1)		18.2	18.1 - 158		1/27/2020	18:45
Tetrachloro-m-xylene (1)		195	33.4 - 94.3	*	1/27/2020	18:45
Method Referen	EPA 3510C					
Preparation Date: 1/27/2020						



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW-2		
Lab Sample ID:	200375-03	Date Sampled:	1/22/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier Date Analyzed	
1,1-Biphenyl	< 10.0	ug/L	1/24/2020 17:52	
1,2,4,5-Tetrachlorobenzene	< 10.0	ug/L	1/24/2020 17:52	
1,2,4-Trichlorobenzene	< 10.0	ug/L	1/24/2020 17:52	
1,2-Dichlorobenzene	< 10.0	ug/L	1/24/2020 17:52	
1,3-Dichlorobenzene	< 10.0	ug/L	1/24/2020 17:52	
1,4-Dichlorobenzene	< 10.0	ug/L	1/24/2020 17:52	
2,2-Oxybis (1-chloropropane)	< 10.0	ug/L	1/24/2020 17:52	
2,3,4,6-Tetrachlorophenol	< 10.0	ug/L	1/24/2020 17:52	
2,4,5-Trichlorophenol	< 20.0	ug/L	1/24/2020 17:52	
2,4,6-Trichlorophenol	< 10.0	ug/L	1/24/2020 17:52	
2,4-Dichlorophenol	< 10.0	ug/L	1/24/2020 17:52	
2,4-Dimethylphenol	< 20.0	ug/L	1/24/2020 17:52	
2,4-Dinitrophenol	< 20.0	ug/L	1/24/2020 17:52	
2,4-Dinitrotoluene	< 10.0	ug/L	1/24/2020 17:52	
2,6-Dinitrotoluene	< 10.0	ug/L	1/24/2020 17:52	
2-Chloronaphthalene	< 10.0	ug/L	1/24/2020 17:52	
2-Chlorophenol	< 10.0	ug/L	1/24/2020 17:52	
2-Methylnapthalene	< 10.0	ug/L	1/24/2020 17:52	
2-Methylphenol	< 10.0	ug/L	1/24/2020 17:52	
2-Nitroaniline	< 20.0	ug/L	1/24/2020 17:52	
2-Nitrophenol	< 10.0	ug/L	1/24/2020 17:52	
3&4-Methylphenol	< 10.0	ug/L	1/24/2020 17:52	
3,3'-Dichlorobenzidine	< 10.0	ug/L	1/24/2020 17:52	



Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	MW-2					
Lab Sample ID:	200375-03			Date Sampled:	1/22/2020	
Matrix:	Groundwate	r		Date Received:	1/23/2020	
3-Nitroaniline		< 20.0	ug/L		1/24/2020	17:52
4,6-Dinitro-2-methylph	ienol	< 20.0	ug/L		1/24/2020	17:52
4-Bromophenyl phenyl	ether	< 10.0	ug/L		1/24/2020	17:52
4-Chloro-3-methylpher	ıol	< 10.0	ug/L		1/24/2020	17:52
4-Chloroaniline		< 10.0	ug/L		1/24/2020	17:52
4-Chlorophenyl phenyl	ether	< 10.0	ug/L		1/24/2020	17:52
4-Nitroaniline		< 20.0	ug/L		1/24/2020	17:52
4-Nitrophenol		< 20.0	ug/L		1/24/2020	17:52
Acenaphthene		< 10.0	ug/L		1/24/2020	17:52
Acenaphthylene		< 10.0	ug/L		1/24/2020	17:52
Acetophenone		< 10.0	ug/L		1/24/2020	17:52
Anthracene		< 10.0	ug/L		1/24/2020	17:52
Atrazine		< 10.0	ug/L		1/24/2020	17:52
Benzaldehyde		< 10.0	ug/L		1/24/2020	17:52
Benzo (a) anthracene		< 10.0	ug/L		1/24/2020	17:52
Benzo (a) pyrene		< 10.0	ug/L		1/24/2020	17:52
Benzo (b) fluoranthene	1	< 10.0	ug/L		1/24/2020	17:52
Benzo (g,h,i) perylene		< 10.0	ug/L		1/24/2020	17:52
Benzo (k) fluoranthene	!	< 10.0	ug/L		1/24/2020	17:52
Bis (2-chloroethoxy) m	ethane	< 10.0	ug/L		1/24/2020	17:52
Bis (2-chloroethyl) ethe	er	< 10.0	ug/L		1/24/2020	17:52
Bis (2-ethylhexyl) phth	alate	< 10.0	ug/L		1/24/2020	17:52
Butylbenzylphthalate		< 10.0	ug/L		1/24/2020	17:52
Caprolactam		< 10.0	ug/L		1/24/2020	17:52
Carbazole		< 10.0	ug/L		1/24/2020	17:52



Lab Project ID: 200375

Client:	<u>BE3</u>					
Project Reference:	57 Tonawa	inda				
Sample Identifier: Lab Sample ID:	MW-2 200375-0	13		Date Sampled:	1/22/2020	
Matrix:	Groundwa	ater		Date Received:	1/23/2020	
Chrysene		< 10.0	ug/L		1/24/2020	17:52
Dibenz (a,h) anthrace	ne	< 10.0	ug/L		1/24/2020	17:52
Dibenzofuran		< 10.0	ug/L		1/24/2020	17:52
Diethyl phthalate		< 10.0	ug/L		1/24/2020	17:52
Dimethyl phthalate		< 20.0	ug/L		1/24/2020	17:52
Di-n-butyl phthalate		< 10.0	ug/L		1/24/2020	17:52
Di-n-octylphthalate		< 10.0	ug/L		1/24/2020	17:52
Fluoranthene		< 10.0	ug/L		1/24/2020	17:52
Fluorene		< 10.0	ug/L		1/24/2020	17:52
Hexachlorobenzene		< 10.0	ug/L		1/24/2020	17:52
Hexachlorobutadiene		< 10.0	ug/L		1/24/2020	17:52
Hexachlorocyclopent	adiene	< 10.0	ug/L		1/24/2020	17:52
Hexachloroethane		< 10.0	ug/L		1/24/2020	17:52
Indeno (1,2,3-cd) pyr	ene	< 10.0	ug/L		1/24/2020	17:52
Isophorone		< 10.0	ug/L		1/24/2020	17:52
Naphthalene		< 10.0	ug/L		1/24/2020	17:52
Nitrobenzene		< 10.0	ug/L		1/24/2020	17:52
N-Nitroso-di-n-propy	lamine	< 10.0	ug/L		1/24/2020	17:52
N-Nitrosodiphenylam	ine	< 10.0	ug/L		1/24/2020	17:52
Pentachlorophenol		< 20.0	ug/L		1/24/2020	17:52
Phenanthrene		< 10.0	ug/L		1/24/2020	17:52
Phenol		< 10.0	ug/L		1/24/2020	17:52
Pyrene		< 10.0	ug/L		1/24/2020	17:52



Client:	<u>BE3</u>						
Project Reference:	57 To	nawanda					
Sample Identifier:	MW	-2					
Lab Sample ID:	2003	375-03		Dat	e Sampled:	1/22/2020	
Matrix:	Grou	ındwater		Dat	e Received:	1/23/2020	
<u>Surrogate</u>			Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	vzed
2,4,6-Tribromophenol			95.1	59.6 - 114		1/24/2020	17:52
2-Fluorobiphenyl			64.3	36.2 - 99.1		1/24/2020	17:52
2-Fluorophenol			43.1	14.9 - 105		1/24/2020	17:52
Nitrobenzene-d5			80.0	53.7 - 102		1/24/2020	17:52
Phenol-d5			28.9	10 - 106		1/24/2020	17:52
Terphenyl-d14			89.2	58.7 - 116		1/24/2020	17:52
Method Referen	ce(s):	EPA 8270D EPA 3510C					
Preparation Dat Data File:	te:	1/24/2020 B44090.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier: Lab Sample ID: Matrix:	MW-2 200375-03 Groundwater			Date Sampled: Date Received:	1/22/2020 1/23/2020
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		14.7	ug/L		1/27/2020 15:12
1,1,2,2-Tetrachloroeth	ane	< 10.0	ug/L		1/27/2020 15:12
1,1,2-Trichloroethane		< 10.0	ug/L		1/27/2020 15:12
1,1-Dichloroethane		57.0	ug/L		1/27/2020 15:12
1,1-Dichloroethene		< 10.0	ug/L		1/27/2020 15:12
1,2,3-Trichlorobenzen	e	< 25.0	ug/L		1/27/2020 15:12
1,2,4-Trichlorobenzen	e	< 25.0	ug/L		1/27/2020 15:12
1,2,4-Trimethylbenzen	e	< 10.0	ug/L		1/27/2020 15:12
1,2-Dibromo-3-Chloro	propane	< 50.0	ug/L		1/27/2020 15:12
1,2-Dibromoethane		< 10.0	ug/L		1/27/2020 15:12
1,2-Dichlorobenzene		< 10.0	ug/L		1/27/2020 15:12
1,2-Dichloroethane		< 10.0	ug/L		1/27/2020 15:12
1,2-Dichloropropane		< 10.0	ug/L		1/27/2020 15:12
1,3,5-Trimethylbenzen	e	< 10.0	ug/L		1/27/2020 15:12
1,3-Dichlorobenzene		< 10.0	ug/L		1/27/2020 15:12
1,4-Dichlorobenzene		< 10.0	ug/L		1/27/2020 15:12
1,4-Dioxane		< 100	ug/L		1/27/2020 15:12
2-Butanone		< 50.0	ug/L		1/27/2020 15:12
2-Hexanone		< 25.0	ug/L		1/27/2020 15:12
4-Methyl-2-pentanone		< 25.0	ug/L		1/27/2020 15:12
Acetone		408	ug/L		1/27/2020 15:12
Benzene		< 5.00	ug/L		1/27/2020 15:12
Bromochloromethane		< 25.0	ug/L		1/27/2020 15:12



Lab Project ID: 200375

Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW-2					
Lab Sample ID:	200375-03			Date Sampled:	1/22/2020	
Matrix:	Groundwater			Date Received:	1/23/2020	
Bromodichloromethan	e	< 10.0	ug/L		1/27/2020	15:12
Bromoform		< 25.0	ug/L		1/27/2020	15:12
Bromomethane		< 10.0	ug/L		1/27/2020	15:12
Carbon disulfide		< 10.0	ug/L		1/27/2020	15:12
Carbon Tetrachloride		< 10.0	ug/L		1/27/2020	15:12
Chlorobenzene		< 10.0	ug/L		1/27/2020	15:12
Chloroethane		< 10.0	ug/L		1/27/2020	15:12
Chloroform		< 10.0	ug/L		1/27/2020	15:12
Chloromethane		< 10.0	ug/L		1/27/2020	15:12
cis-1,2-Dichloroethene		55.4	ug/L		1/27/2020	15:12
cis-1,3-Dichloropropen	e	< 10.0	ug/L		1/27/2020	15:12
Cyclohexane		< 50.0	ug/L		1/27/2020	15:12
Dibromochloromethan	e	< 10.0	ug/L		1/27/2020	15:12
Dichlorodifluorometha	ne	< 10.0	ug/L		1/27/2020	15:12
Ethylbenzene		< 10.0	ug/L		1/27/2020	15:12
Freon 113		< 10.0	ug/L		1/27/2020	15:12
Isopropylbenzene		< 10.0	ug/L		1/27/2020	15:12
m,p-Xylene		< 10.0	ug/L		1/27/2020	15:12
Methyl acetate		< 10.0	ug/L		1/27/2020	15:12
Methyl tert-butyl Ether		< 10.0	ug/L		1/27/2020	15:12
Methylcyclohexane		< 10.0	ug/L		1/27/2020	15:12
Methylene chloride		< 25.0	ug/L		1/27/2020	15:12
Naphthalene		< 25.0	ug/L		1/27/2020	15:12
n-Butylbenzene		< 10.0	ug/L		1/27/2020	15:12
n-Propylbenzene		< 10.0	ug/L		1/27/2020	15:12



Client:	<u>BE3</u>						
Project Reference:	57 Tonawan	da					
Sample Identifier:	MW-2						
Lab Sample ID:	200375-03			Dat	e Sampled:	1/22/2020	
Matrix:	Groundwat	er		Dat	e Received:	1/23/2020	
o-Xylene		< 10.0	ug/L			1/27/2020	15:12
p-Isopropyltoluene		< 10.0	ug/L			1/27/2020	15:12
sec-Butylbenzene		< 10.0	ug/L			1/27/2020	15:12
Styrene		< 25.0	ug/L			1/27/2020	15:12
tert-Butylbenzene		< 10.0	ug/L			1/27/2020	15:12
Tetrachloroethene		< 10.0	ug/L			1/27/2020	15:12
Toluene		< 10.0	ug/L			1/27/2020	15:12
trans-1,2-Dichloroethe	ene	< 10.0	ug/L			1/27/2020	15:12
trans-1,3-Dichloropro	pene	< 10.0	ug/L			1/27/2020	15:12
Trichloroethene		22.5	ug/L			1/27/2020	15:12
Trichlorofluorometha	ne	< 10.0	ug/L			1/27/2020	15:12
Vinyl chloride		35.3	ug/L			1/27/2020	15:12
Surrogate		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4	ŀ		103	74.3 - 138		1/27/2020	15:12
4-Bromofluorobenzen	e		97.0	66.3 - 125		1/27/2020	15:12
Pentafluorobenzene			101	87.4 - 111		1/27/2020	15:12
Toluene-D8			103	85.8 - 113		1/27/2020	15:12
Method Referen	ce(s): EPA 8	260C					
Data File:	EPA 5 x6813						



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW-2			
Lab Sample ID:	200375-03		Date Sampled:	1/22/2020
Matrix:	Groundwater		Date Received:	1/23/2020
<u>Total Cyanide</u>				
<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		1/27/2020
Method Referer	Ace(s): SM 4500 CN E - 2011 SM 4500 CN C - 2011			

Preparation Date:

1/24/2020



Client:		<u>BE3</u>				
Project Ref	erence:	57 Tonav	vanda			
Sample Id	lentifier:	MW-2				
Lab Samp	ole ID:	200375	-03		Date Sampled:	1/22/2020
Matrix:		Ground	water		Date Received:	1/23/2020
Dioxa	ne					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Diox	xane		52.1	ug/L		1/28/2020 10:53
	Method Reference		PA 8270D SIM PA 3510C			
	Preparation Date: Data File:		/28/2020 44142.D			



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
	Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs
T :: t - t :	may incur additional fees. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-
Limitations of Liability.	perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients
	or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.



ANALYTICAL REPORT

L2003085
Paradigm Environmental Services
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Jane Daloia
(585) 647-2530
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57 TONAWANDA
02/13/20

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Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA STREET

Lab Number: Report Date:

L2003085 02/13/20 Serial_No:02132016:35

L2003085-03 MV	L2003085-02 MV	L2003085-01 MV	Alpha Sample ID Cli	
MW-3	MW-2	MW-1	Client ID	
WATER	WATER	WATER	Matrix	
Not Specified	Not Specified	Not Specified	Sample Location	
01/22/20 12:20	01/22/20 14:20	01/22/20 10:30	Collection Date/Time	
01/22/20	01/22/20	01/22/20	Receive Date	

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Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

Lab Number: L2003085 Report Date: 02/13/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003085

 Report Date:
 02/13/20

Case Narrative (continued)

Report Revision

February 13, 2020: Sample -02 and -03 - the collection times have been swapped, per client instruction.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by Isotope Dilution

L2003085-01, -02, and -03: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1333454-4: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Jusen E Diled Susan O' Neil

Title: Technical Director/Representative

Date: 02/13/20



ORGANICS



SEMIVOLATILES



		Serial_No:02132016:35
Project Name:	57 TONAWANDA STREET	Lab Number: L2003085
Project Number:	57 TONAWANDA	Report Date: 02/13/20
	SAMPLE RESULTS	
Lab ID:	L2003085-01	Date Collected: 01/22/20 10:30
Client ID:	MW-1	Date Received: 01/22/20
Sample Location:	Not Specified	Field Prep: Not Specified
Sample Depth:		
Matrix:	Water	Extraction Method: ALPHA 23528
Analytical Method:	134,LCMSMS-ID	Extraction Date: 01/24/20 09:45
Analytical Date:	02/08/20 07:44	
Analyst:	JW	
-		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab										
Perfluorobutanoic Acid (PFBA)	4.58		ng/l	1.75	0.357	1				
Perfluoropentanoic Acid (PFPeA)	3.20		ng/l	1.75	0.346	1				
Perfluorobutanesulfonic Acid (PFBS)	2.49		ng/l	1.75	0.208	1				
Perfluorohexanoic Acid (PFHxA)	2.50		ng/l	1.75	0.287	1				
Perfluoroheptanoic Acid (PFHpA)	1.75		ng/l	1.75	0.197	1				
Perfluorohexanesulfonic Acid (PFHxS)	1.12	J	ng/l	1.75	0.329	1				
Perfluorooctanoic Acid (PFOA)	4.60		ng/l	1.75	0.206	1				
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.75	1.16	1				
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.75	0.601	1				
Perfluorononanoic Acid (PFNA)	0.465	J	ng/l	1.75	0.273	1				
Perfluorooctanesulfonic Acid (PFOS)	4.41		ng/l	1.75	0.440	1				
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.75	0.266	1				
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.75	1.06	1				
N-Methyl Perfluorooctanesulfonamidoacetic Acid	1.03	J	ng/l	1.75	0.566	1				
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.75	0.227	1				
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.75	0.857	1				
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.75	0.507	1				
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.794	J	ng/l	1.75	0.703	1				
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.75	0.325	1				
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.75	0.286	1				
Perfluorotetradecanoic Acid (PFTA)	0.238	J	ng/l	1.75	0.217	1				
PFOA/PFOS, Total	9.01		ng/l	1.75	0.206	1				



		NA (* 1					
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Pre	p:	Not Specified
Client ID:	MW-1				Date Rec		01/22/20
Lab ID:	L2003085-01				Date Coll	ected:	01/22/20 10:30
		SAMP	LE RESULTS	3			
Project Number:	57 TONAWANDA				Report	Date:	02/13/20
Project Name:	57 TONAWANDA STRE	ET			Lab Nu	mber:	L2003085
					5	Serial_No	0:02132016:35

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	77		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	65		16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	67		31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	47		21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	57		30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	81		47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	64		36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	221		1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	74		34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	78		42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	58		38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	212	Q	7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	54		1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	58		40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	19		1-87	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	56		23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	46		24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	47		33-143	



		Serial_No:02132016:35	
Project Name:	57 TONAWANDA STREET	Lab Number: L2003085	
Project Number:	57 TONAWANDA	Report Date: 02/13/20	
	SAMPLE RESULTS	;	
Lab ID:	L2003085-02	Date Collected: 01/22/20 14:20	0
Client ID:	MW-2	Date Received: 01/22/20	
Sample Location:	Not Specified	Field Prep: Not Specified	
Sample Depth:			
Matrix:	Water	Extraction Method: ALPHA 23528	,
Analytical Method:	134,LCMSMS-ID	Extraction Date: 01/24/20 09:45	5
Analytical Date:	02/08/20 08:00		
Analyst:	JW		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab										
Perfluorobutanoic Acid (PFBA)	10.7		ng/l	1.79	0.366	1				
Perfluoropentanoic Acid (PFPeA)	2.17		ng/l	1.79	0.355	1				
Perfluorobutanesulfonic Acid (PFBS)	2.38		ng/l	1.79	0.213	1				
Perfluorohexanoic Acid (PFHxA)	2.18		ng/l	1.79	0.294	1				
Perfluoroheptanoic Acid (PFHpA)	1.06	J	ng/l	1.79	0.202	1				
Perfluorohexanesulfonic Acid (PFHxS)	2.25		ng/l	1.79	0.337	1				
Perfluorooctanoic Acid (PFOA)	3.84		ng/l	1.79	0.211	1				
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.79	1.19	1				
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.79	0.616	1				
Perfluorononanoic Acid (PFNA)	0.308	J	ng/l	1.79	0.280	1				
Perfluorooctanesulfonic Acid (PFOS)	0.713	J	ng/l	1.79	0.452	1				
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.79	0.272	1				
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.79	1.09	1				
N-Methyl Perfluorooctanesulfonamidoacetic Acid	ND		ng/l	1.79	0.581	1				
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.79	0.233	1				
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.79	0.878	1				
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.79	0.520	1				
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.842	J	ng/l	1.79	0.720	1				
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.79	0.333	1				
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.79	0.293	1				
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.79	0.222	1				
PFOA/PFOS, Total	4.55	J	ng/l	1.79	0.211	1				



				Serial_No:02132016:35				
Project Name:	57 TONAWANDA STREE	T			Lab Nu	mber:	L2003085	
Project Number:	57 TONAWANDA				Report	Date:	02/13/20	
		SAMPL	E RESULTS					
Lab ID:	L2003085-02				Date Coll	ected:	01/22/20 14:20	
Client ID:	MW-2				Date Rec	eived:	01/22/20	
Sample Location:	Not Specified				Field Pre	p:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	Acids by Isotope Dilution -	Mansfield	Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	101		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	85		31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	59		21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	70		30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	98		47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	80		36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	259	Q	1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	85		34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	68		38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	190	Q	7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	63		1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	65		40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	18		1-87	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	66		23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	56		24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	58		33-143	



			Serial_No	0:02132016:35
Project Name:	57 TONAWANDA STREET		Lab Number:	L2003085
Project Number:	57 TONAWANDA		Report Date:	02/13/20
		SAMPLE RESULTS		
Lab ID:	L2003085-03		Date Collected:	01/22/20 12:20
Client ID:	MW-3		Date Received:	01/22/20
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water		Extraction Method	1: ALPHA 23528
Analytical Method:	134,LCMSMS-ID		Extraction Date:	01/24/20 09:45
Analytical Date:	02/08/20 08:17			
Analyst:	JW			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab										
Perfluorobutanoic Acid (PFBA)	10.3		ng/l	1.79	0.366	1				
Perfluoropentanoic Acid (PFPeA)	4.79		•	1.79	0.355	1				
			ng/l			-				
Perfluorobutanesulfonic Acid (PFBS)	1.11	J	ng/l	1.79	0.213	1				
Perfluorohexanoic Acid (PFHxA)	3.79		ng/l	1.79	0.294	1				
Perfluoroheptanoic Acid (PFHpA)	1.43	J	ng/l	1.79	0.202	1				
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.79	0.337	1				
Perfluorooctanoic Acid (PFOA)	3.56		ng/l	1.79	0.211	1				
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.79	1.19	1				
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.79	0.616	1				
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.79	0.280	1				
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.79	0.452	1				
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.79	0.272	1				
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.79	1.09	1				
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.79	0.581	1				
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.79	0.233	1				
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.79	0.878	1				
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.79	0.520	1				
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.79	0.720	1				
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.79	0.333	1				
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.79	0.293	1				
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.79	0.222	1				
PFOA/PFOS, Total	3.56		ng/l	1.79	0.211	1				



		NA (* 1					
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Sample Depth:							
Sample Location:	Not Specified				Field Pre	p:	Not Specified
Client ID:	MW-3				Date Rec		01/22/20
Lab ID:	L2003085-03				Date Coll	ected:	01/22/20 12:20
		SAMP	LE RESULTS	3			
Project Number:	57 TONAWANDA				Report	Date:	02/13/20
Project Name:	57 TONAWANDA STRE	ET			Lab Nu	mber:	L2003085
					5	Serial_No	0:02132016:35

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	106		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	78		16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	72		31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	57		21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	72		30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	276	Q	1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	101		34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	79		38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	277	Q	7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	88		1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	85		40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	28		1-87	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	85		23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	63		33-143	



Project Name:	57 TONAWANDA STREET	Lab Nu
Project Number:	57 TONAWANDA	Report

 Lab Number:
 L2003085

 Report Date:
 02/13/20

Method Blank Analysis Batch Quality Control

Analytical Method:	134,LCMSMS-ID
Analytical Date:	02/08/20 00:50
Analyst:	JW

Extraction Method:ALPHA 23528Extraction Date:01/24/20 09:45

Parameter	Result	Qualifier	Units	RL	MDL	
Perfluorinated Alkyl Acids by Isotope WG1333454-1	Dilution - I	Mansfield	Lab for sa	mple(s): 01-03	Batch:	
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408	
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396	
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238	
Perfluorohexanoic Acid (PFHxA)	0.380	J	ng/l	2.00	0.328	
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225	
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376	
Perfluorooctanoic Acid (PFOA)	0.272	J	ng/l	2.00	0.236	
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33	
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688	
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312	
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504	
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304	
1H,1H,2H,2H-Perfluorodecanesulfonic Acia (8:2FTS)	d ND		ng/l	2.00	1.21	
N-Methyl Perfluorooctanesulfonamidoaceti Acid (NMeFOSAA)	c ND		ng/l	2.00	0.648	
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260	
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980	
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580	
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804	
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372	
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327	
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248	
PFOA/PFOS, Total	0.272	J	ng/l	2.00	0.236	



Project Name:	57 TONAWANDA STREET	Lab Number:	L2003085
Project Number:	57 TONAWANDA	Report Date:	02/13/20
	Method Blank Analysis		

Method Blank Analysis Batch Quality Control

Analytical Method:	134,LCMSMS-ID	Extraction Method:	ALPHA 23528
Analytical Date:	02/08/20 00:50	Extraction Date:	01/24/20 09:45
Analyst:	JW		

Parameter	Result	Qualifier	Units	RL		MDL
Perfluorinated Alkyl Acids by Isoto	ope Dilution -	- Mansfield I	_ab for s	ample(s): 0)1-03	Batch:
WG1333454-1				,		

Surrogate (Extracted Internal Standard)	%Recovery	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	80	2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	92	16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	82	31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	76	21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	82	30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89	47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82	36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88	1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86	34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	84	42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84	38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	95	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3- NMeFOSAA)	66	1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91	40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36	1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	65	23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	81	24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	71	33-143





Lab Control Sample Analysis Batch Quality Control

Project Number: 57 TONAWANDA	Project Name: 57 TONAWANDA STREET

Lab Number: Report Date:

L2003085 02/13/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual %	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03	- Mansfield Lab	Associated sa	Imple(s): 01-03	Batch: WG1	333454-2	G1333454-2 WG1333454-3		
Perfluorobutanoic Acid (PFBA)	104		101		67-148	ω		30
Perfluoropentanoic Acid (PFPeA)	111		109		63-161	N		30
Perfluorobutanesulfonic Acid (PFBS)	108		107		65-157	_		30
Perfluorohexanoic Acid (PFHxA)	105		104		69-168	_		30
Perfluoroheptanoic Acid (PFHpA)	102		101		58-159	_		30
Perfluorohexanesulfonic Acid (PFHxS)	105		93		69-177	12		30
Perfluorooctanoic Acid (PFOA)	111		107		63-159	4		30
1H, 1H, 2H, 2H-Perfluorooctanesulfonic Acid (6:2FTS)	118		129		49-187	9		30
Perfluoroheptanesulfonic Acid (PFHpS)	104		111		61-179	7		30
Perfluorononanoic Acid (PFNA)	108		107		68-171	-		30
Perfluorooctanesulfonic Acid (PFOS)	94		95		52-151	_		30
Perfluorodecanoic Acid (PFDA)	104		104		63-171	0		30
1H, 1H, 2H, 2H-Perfluorodecanesulfonic Acid (8:2FTS)	130		136		56-173	ъ		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid	118		114		60-166	ယ		30
(NMeFOSAA) Perfluoroundecanoic Acid (PFUnA)	108		102		60-153	6		30
Perfluorodecanesulfonic Acid (PFDS)	100		96		38-156	4		30
Perfluorooctanesulfonamide (FOSA)	114		103		46-170	10		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	108		106		45-170	2		30
Perfluorododecanoic Acid (PFDoA)	109		106		67-153	З		30
Perfluorotridecanoic Acid (PFTrDA)	108		113		48-158	5		30
Perfluorotetradecanoio Acid (PETA)	108		100			>		

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Lab Control Sample Analysis Batch Quality Control

Project Number:	Project Name:
Project Number: 57 TONAWANDA	57 TONAWANDA STREET
	Batch Quality Control
Report Date:	Lab Number:
02/13/20	L2003085

Parameter

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 Batch: WG1333454-2 WG1333454-3

LCS %Recovery

Qual

LCSD %Recovery

Qual

%Recovery Limits

RPD

Qual

RPD Limits

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		82	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	91		92	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	80		81	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78		77	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	85		83	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	88		90	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	83		83	
1H, 1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	102		94	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	68		88	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86		86	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		83	
1H, 1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	103		95	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	66		69	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		91	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	35		40	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		78	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80		82	
Perfluoro[1.2-13C2]Tetradecanoic Acid (M2PETEDA)	2		1	





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Parameter	Native Sample	MS Added	MS Found	MS %Recovery (MSD Qual Found	MSD %Recovery Qual	Recovery al Limits	RPD Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab MW-1	otope Dilutio	ר - Mansfield		Associated sample(s): 01-03	QC Batc	h ID: WG1333454-4	QC Sample:	QC Sample: L2003085-01	Client ID:
Perfluorobutanoic Acid (PFBA)	4.58	36.4	42.2	103			67-148		30
Perfluoropentanoic Acid (PFPeA)	3.20	36.4	42.8	109		•	63-161		30
Perfluorobutanesulfonic Acid (PFBS)	2.49	32.2	36.5	106			65-157		30
Perfluorohexanoic Acid (PFHxA)	2.50	36.4	40.1	103			69-168		30
Perfluoroheptanoic Acid (PFHpA)	1.75	36.4	39.4	108		•	58-159		30
Perfluorohexanesulfonic Acid (PFHxS)	1.12J	33.2	34.9	105		•	69-177		30
Perfluorooctanoic Acid (PFOA)	4.60	36.4	44.0	108		•	63-159		30
1H, 1H, 2H, 2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	34.5	43.5	126		ı	49-187		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	34.5	40.5	117			61-179		30
Perfluorononanoic Acid (PFNA)	0.465J	36.4	40.3	111	ı	ı	68-171	I	30
Perfluorooctanesulfonic Acid (PFOS)	4.41	33.7	41.0	109	·		52-151		30
Perfluorodecanoic Acid (PFDA)	ND	36.4	37.7	104	·		63-171		30
1H, 1H, 2H, 2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	34.9	43.1	123		,	56-173		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	1.03J	36.4	38.8	107	,		60-166	ı	30
Perfluoroundecanoic Acid (PFUnA)	ND	36.4	38.7	106			60-153		30
Perfluorodecanesulfonic Acid (PFDS)	ND	35.1	35.7	102	ı	·	38-156		30
Perfluorooctanesulfonamide (FOSA)	ND	36.4	37.2	102		•	46-170	•	30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.794J	36.4	39.6	109	·		45-170	•	30
Perfluorododecanoic Acid (PFDoA)	ND	36.4	39.4	108			67-153		30
Perfluorotridecanoic Acid (PFTrDA)	ND	36.4	42.2	116		•	48-158		30
		2	1	~ ~			EO 100		30

Matrix Spike Analysis Batch Quality Control

Project Name: Project Number:

57 TONAWANDA

57 TONAWANDA STREET

 Lab Number:
 L2003085

 Report Date:
 02/13/20

Matrix Spike Analysis Batch Quality Control

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA STREET

Report Date: Lab Number: 02/13/20 L2003085

Parameter	Native Sample A	MS I Added Fo	MS Found	MS %Recovery Qual	/ Qual	MSD Found	MSD %Recov	ery Qual	MSD Recovery %Recovery Qual Limits	RPD Qual Limits	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1333454-4 QC Sample: L2003085-01 Client ID: MW-1	otope Dilution -	Mansfield Lab	Associat	ed sample(s): 01-03	QC Batch I	D: WG133	3454-4	QC Sample:	L200308	5-01 (Client ID:
Surrogate (Extracted Internal Standard)	nal Standard)		% Re	MS % Recovery Qualifier	Qualifier	% Rect	MSD ecovery Qualifier	ualifier	Acceptance Criteria	ance ria		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	anesulfonic Acid (M2	2-8:2FTS)		261	Q				7-170	70		
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	inesulfonic Acid (M2	-6:2FTS)		299	Q				1-244	44		
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	onamidoacetic Acid ((d5-NEtFOSAA)		71					23-146	146		
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	Ifonamidoacetic Aci	d (d3-NMeFOSAA))	71					1-181	81		
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	oic Acid (M7-PFUD/	L)		73					40-144	144		
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	.cid (M6PFDA)			73					38-144	144		
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	d (M5PFHxA)			56					21-145	145		
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	l (M4PFHpA)			68					30-139	139		
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	Acid (M3PFHxS)			108					47-153	153		
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	MPFDOA)			63					24-161	161		
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	d (M2PFTEDA)			61					33-143	143		
Perfluoro[13C4]Butanoic Acid (MPFBA)	C)			91					2-156	56		
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	PEA)			80					16-	16-173		
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	8FOSA)			25					1-87	87		



Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)

89 87

34-146 31-159

36-149 42-146

95 79

Perfluoro[13C9]Nonanoic Acid (M9PFNA) Perfluoro[13C8]Octanoic Acid (M8PFOA) Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)



Project Name: 57 TONAWANDA STREET Project Number: 57 TONAWANDA

Sample Receipt and Container Information

Serial_No:02132016:35 Lab Number: L2003085 Report Date: 02/13/20

YES

Cooler Information

Were project specific reporting limits specified?

A2-NY-537-ISOTOPE(14)		Absent	\prec	4.8		NA	A	Plastic 250ml unpreserved	L2003085-03B
A2-NY-537-ISOTOPE(14)		Absent	×	4.8		NA	A	Plastic 250ml unpreserved	L2003085-03A
A2-NY-537-ISOTOPE(14)		Absent	\prec	4.8		NA	A	Plastic 250ml unpreserved	L2003085-02B
A2-NY-537-ISOTOPE(14)		Absent	\prec	4.8		NA	A	Plastic 250ml unpreserved	L2003085-02A
A2-NY-537-ISOTOPE(14)		Absent	\prec	4.8		NA	A	Plastic 250ml unpreserved	L2003085-01B
A2-NY-537-ISOTOPE(14)		Absent	×	4.8		NA	A	Plastic 250ml unpreserved	L2003085-01A
Analysis(*)	rrozen Date/Time	Seal	Pres	deg C Pres Seal	рН	, pH	Cooler	Container Type	Container ID
				4) ; ;	Final			ormation	Container Information
								Absent	A
								Custody Seal	Cooler



Project Number: 57 TONAWANDA

Serial_No:02132016:35 Lab Number: L2003085 Report Date: 02/13/20

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	
	PFDS PFNS	335-77-3
Perfluorononanesulfonic Acid		68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
		12252 12 6
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1



Project Number: 57 TONAWANDA

Lab Number: L2003085

Report Date: 02/13/20

GLOSSARY

Acronyms

Acronyms	
DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.
Footnotes	

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Number: 57 TONAWANDA

Lab Number: L2003085 Report Date: 02/13/20

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- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NJ-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- ${f P}$ The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers



Project Number: 57 TONAWANDA

Lab Number: L2003085 Report Date: 02/13/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- **S** Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003085

 Report Date:
 02/13/20

REFERENCES

134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW:</u> Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: <u>NPW:</u> PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. **EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene. **Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

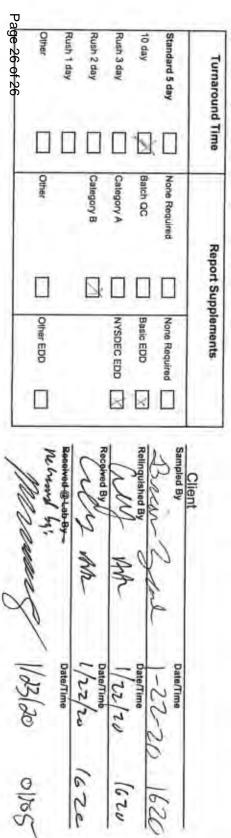
Serial_No:02132016:35

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

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PARADIGM	REPORT TO:	INVO	INVOICE TO:	100000	Ì	11148
	CLIENT: Paradigm Environmental	tal CLIENT:	Same		LAB PROJECT ID	
	ADDRESS: 179 Lake Avenue	ADDRESS:				
(Ro	NY ZIP 14608	STATE	202	Results by 3 PM	S
	PHONE: 585-647-2530	PHONE:			Email:	
PROJECT REFERENCE	ATTN: reporting@paradigmenv.com	DERV.COM	accpay@paradigmenv.com			
57 Tonawanda Street	Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid	WA - Water WG - Groundwater	DW - Drinking Water WW - Wastewaler	SO - Soil SL - Sludge P	SD - Solid WP - Wipe PT - Paint CK - Caulk	AR-AI
			REQUESTED ANALYSIS	S		
DATE COLLECTED TIME P	R A R SAMPLE IDENTIFIER	×-スインド いってつの コの ユーヨミヒス いスポスーン・1200 PFAS			REWARKS	PARADIGM LAB SAMPLE NUMBER
1-22-20 1030	MW-1	WG 2	×			1
	MW-Z	2				1
1-22-20 1420	Mw-3	WG 2)				
						1





ANALYTICAL REPORT

Lab Number:	L2003091
Client:	Paradigm Environmental Services
	179 Lake Avenue Rochester, NY 14608
ATTN:	Jane Daloia
Phone:	(585) 647-2530
Project Name:	57 TONAWANDA STREET
Project Number:	57 TONAWANDA
Report Date:	02/13/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA STREET

Lab Number: Report Date:

L2003091 02/13/20

Serial_No:02132012:14

lpha ample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Dat
ampie in	Client ID	Matrix	Location	Date/Time	
2003091-01	MW-1	WATER	Not Specified	01/22/20 10:30	01/22/20
2003091-02	MW-2	WATER	Not Specified	01/22/20 14:20	01/22/20
2003091-03	MW-3	WATER	Not Specified	01/22/20 12:20	01/22/20

L2003091-03	L2003091-02	L2003091-01	Alpha Sample ID
MW-3	MW-2	MW-1	Client ID
WATER	WATER	WATER	Matrix
Not Specified	Not Specified	Not Specified	Sample Location
01/22/20 12:20	01/22/20 14:20	01/22/20 10:30	Collection Date/Time
01/22/20	01/22/20	01/22/20	Receive Date



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

Lab Number: L2003091 Report Date: 02/13/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003091

 Report Date:
 02/13/20

Case Narrative (continued)

Report Revision

February 13, 2020: The sample collection times for L2003091-02 and -03 have been amended.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Custen Walker Cristin Walker

Title: Technical Director/Representative

Date: 02/13/20



ORGANICS



PESTICIDES



			Serial_No	:02132012:14
Project Name:	57 TONAWANDA STREET		Lab Number:	L2003091
Project Number:	57 TONAWANDA		Report Date:	02/13/20
	S	AMPLE RESULTS		
Lab ID:	L2003091-01		Date Collected:	01/22/20 10:30
Client ID:	MW-1		Date Received:	01/22/20
Sample Location:	Not Specified		Field Prep:	Not Specified
Sample Depth:				
Matrix:	Water		Extraction Method	: EPA 8151A
Analytical Method:	1,8151A		Extraction Date:	01/23/20 10:11
Analytical Date:	01/24/20 17:43			
Analyst:	JMC			
Methylation Date:	01/23/20 20:38			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fa	actor Colun
Chlorinated Herbicides by GC - We	estborough Lab						
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A
Surrogate			% Recovery	Qualifier		otance teria	Column
DCAA			64		3	0-150	А
DCAA			56		3	0-150	В



		S	erial_No:	02132012:14
Project Name:	57 TONAWANDA STREET	Lab Nun	nber:	L2003091
Project Number:	57 TONAWANDA	Report I	Date:	02/13/20
	SAMPL	E RESULTS		
Lab ID:	L2003091-02	Date Colle	ected:	01/22/20 14:20
Client ID:	MW-2	Date Rece	eived:	01/22/20
Sample Location:	Not Specified	Field Prep):	Not Specified
Sample Depth:				
Matrix:	Water	Extraction	Method:	EPA 8151A
Analytical Method:	1,8151A	Extraction	Date:	01/23/20 10:11
Analytical Date:	01/24/20 18:01			
Analyst:	JMC			
Methylation Date:	01/23/20 20:38			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Facto	or Column
Chlorinated Herbicides by GC - We	estborough Lab						
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A
Surrogate			% Recovery	Qualifier	Accepta Criter		Column
DCAA			38		30-1	150	А
DCAA			36		30-1	150	В



		Serial_No:02132012:14
Project Name:	57 TONAWANDA STREET	Lab Number: L2003091
Project Number:	57 TONAWANDA	Report Date: 02/13/20
	SAMPLE RESULTS	6
Lab ID:	L2003091-03	Date Collected: 01/22/20 12:20
Client ID:	MW-3	Date Received: 01/22/20
Sample Location:	Not Specified	Field Prep: Not Specified
Sample Depth:		
Matrix:	Water	Extraction Method: EPA 8151A
Analytical Method:	1,8151A	Extraction Date: 01/23/20 10:11
Analytical Date:	01/29/20 14:05	
Analyst:	JMC	
Methylation Date:	01/23/20 20:38	

arameter	Result	Qualifier	Units	RL	MDL	Dilution Fa	ctor Colum
Chlorinated Herbicides by GC -	Westborough Lab						
,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A
Surrogate			% Recovery	Qualifier		otance teria	Column
DCAA			57		3	0-150	А
DCAA			53		3	0-150	В



Project Name: Project Number:	57 TONAWANDA STREET 57 TONAWANDA	Lab Number: Report Date:	L2003091 02/13/20
	Method Blank Analysis Batch Quality Control		
Analytical Method: Analytical Date: Analyst:	1,8151A 01/24/20 00:19 JMC	Extraction Method: Extraction Date:	EPA 8151A 01/23/20 00:07
Methylation Date:	01/23/20 08:37		

Parameter	Result	Qualifier	Units		RL	MDL	Column
Chlorinated Herbicides by GC -	Westborough I	Lab for sam	ple(s):	01-03	Batch:	WG1332880-	1
2,4,5-TP (Silvex)	ND		ug/l	2	2.00	0.539	А

		l l	Acceptanc	e
Surrogate	%Recovery	Qualifier	Criteria	Column
DCAA	71		30-150	А
DCAA	65		30-150	В



Lab Control Sample Analysis Batch Quality Control

Project Name: Project Number:	Project Name: 57 TONAWANDA STREET Project Number: 57 TONAWANDA	Lab Number: Report Date:
oject Number:	57 TONAWANDA	Report D

	LCS		LCSD	%	%Recovery			RPD	
Parameter	%Recovery Qual		%Recovery	Qual	Limits	RPD	Qual	Limits	Limits Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1332880-2	ough Lab Associated sa	mple(s): 01-0	3 Batch:	WG1332880-2	WG1332880-3				
2,4,5-TP (Silvex)	88	ł	00		30-150	2		25	A
					00 100				

DCAA DCAA	Surrogate
79	LCS
82	%Recovery
79	LCSD
80	Qual %Recovery
30-150	Acceptance
30-150	Qual Criteria
BÞ	Column



INORGANICS & MISCELLANEOUS



Serial No:02132012:14

Project Name: Project Number:	57 TONAWA 57 TONAWA		REET				Lab Nu Report		L2003091 02/13/20	
				SAMPLE	RESULI	ſS				
Lab ID:	L2003091-0	1					Date C	ollected:	01/22/20 10:30	0
Client ID:	MW-1						Date R	eceived:	01/22/20	
Sample Location:	Not Specifie	d					Field P	rep:	Not Specified	
Sample Depth: Matrix:	Water									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
eneral Chemistry - We	stborough Lab)								
hromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/23/20 06:30	01/23/20 07:4	8 1,7196A	JA



Serial No:02132012:14

Project Name: Project Number:	57 TONAWA 57 TONAWA		REET				Lab Nu Report		L2003091 02/13/20	
				SAMPLE	RESULI	S				
Lab ID:	L2003091-0	2					Date C	ollected:	01/22/20 14:20)
Client ID:	MW-2						Date R	eceived:	01/22/20	
Sample Location:	Not Specifie	d					Field P	rep:	Not Specified	
Sample Depth: Matrix:	Water									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
eneral Chemistry - We	stborough Lat)								
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/23/20 06:30	01/23/20 07:4	9 1,7196A	JA



Serial No:02132012:14

Project Name: Project Number:	57 TONAWA 57 TONAWA		REET				Lab Nu Report		L2003091 02/13/20	
				SAMPLE	RESULI	ſS				
Lab ID:	L2003091-0	3					Date C	ollected:	01/22/20 12:20	C
Client ID:	MW-3						Date R	eceived:	01/22/20	
Sample Location:	Not Specifie	d					Field P	rep:	Not Specified	
Sample Depth: Matrix:	Water									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
eneral Chemistry - We	stborough Lat)								
hromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/23/20 06:30	01/23/20 07:5	0 1,7196A	JA



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003091

 Report Date:
 02/13/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	estborough Lab for san	nple(s): 01	I-03 Bat	tch: WG	G1332958-1				
Chromium, Hexavalent	ND	mg/l	0.010	0.003	1	01/23/20 06:30	01/23/20 07:45	1,7196A	JA



Lab Control Sample Analysis Batch Quality Control

			%Recovery	LCS	LCS		
02/13/20	Report Date:	Repo				Project Number: 57 TONAWANDA	Project Number:
L200309	Lab Number:	Lab N	ġ	Batch Qua	REET	57 TONAWANDA STREET	Project Name:

Chromium, Hexavalent

General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1332958-2

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85-115

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Matrix Spike Analysis Batch Quality Control

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA STREET

 Lab Number:
 L2003091

 Report Date:
 02/13/20

Chromium, Hexavalent	General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1332958-	Parameter
ND	ough Lab Asso	Native Sample
0.1	ciated samp	MS Added
0.102	ole(s): 01-03	MS Found
102	QC Batch II	MS %Recovery
	Á	MS MS MSD Found %Recovery Qual Found
	QC Sample: L	MSD %Recovery (
85-115 -	QC Sample: L2003091-01 Client ID: MW-1	MSD Recovery RPD %Recovery Qual Limits RPD Qual Limits
20	_	RPD Limits

Алена

02/13/20	Report Date:			Project Number: 57 TONAWANDA	Project Number:
L2003091	Lab Number:	, SIS	Lab Duplicate Analysis Batch Quality Control	Project Name: 57 TONAWANDA STREET	Project Name:

Parameter Na	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1332958-3): 01-03 Q(QC Sample:	L2003091-01	QC Sample: L2003091-01 Client ID: MW-1	
Chromium, Hexavalent	ND	D	mg/l	NC		20





Project Name: 57 TONAWANDA STREET Project Number: 57 TONAWANDA

Serial_No:02132012:14 Lab Number: L2003091 Report Date: 02/13/20

Sample Receipt and Container Information

YES

Cooler

Custody Seal

Cooler Information

Were project specific reporting limits specified?

A Absent	Container Information Initial Final Te Container ID Container Type Cooler pH pH de	L2003091-01A Plastic 250ml unpreserved A 7 7 4	L2003091-01B Amber 1000ml unpreserved A 7 7 4	L2003091-02A Plastic 250ml unpreserved A 7 7 4	L2003091-02B Amber 1000ml unpreserved A 7 7 4	L2003091-03A Plastic 250ml unpreserved A 7 7 4	L2003091-03B Amber 1000ml unpreserved A 7 7 4
	Temp deg C Pres Seal	4.8	4.8	4.8	4.8	4.8	4.8
	res	~	≺	~	~	~	~
	Seal	Absent	Absent	Absent	Absent	Absent	Absent
	Frozen Date/Time						
	Analysis(*)	HEXCR-7196(1)	HERB-APA(7)	HEXCR-7196(1)	HERB-APA(7)	HEXCR-7196(1)	HERB-APA(7)

Project Name: 57 TONAWANDA STREET

Project Number: 57 TONAWANDA

Lab Number: L2003091

Report Date: 02/13/20

GLOSSARY

Acronyms

Acronyms	
DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.
Footnotes	

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: 57 TONAWANDA STREET

Project Number: 57 TONAWANDA

Lab Number: L2003091 Report Date: 02/13/20

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- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NJ-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- ${f P}$ The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers



Project Name: 57 TONAWANDA STREET

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 Lab Number:
 L2003091

 Report Date:
 02/13/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- **S** Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003091

 Report Date:
 02/13/20

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW:</u> Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: <u>NPW:</u> PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. **EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene. **Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Availabilit Standard 5 day 10 day Rush 3 day Rush 2 day Rush 1 day Date Needed_ please indicale data needed:	Turnaround Time	K	1/22/20 /	DATE COLLECTED	PROJECT	PAR	
	Time	1420	020	TIME	TT JOYCLAN	RADIGM	
t upon lab approval; adu None Required Batch QC Category A Category B Category B Dother please indicate package needed:		77	1	טסצברסט–⊢ ש מב< בם	Orenalized		
	Report Supplements	MW-3 MW-2	Mw-1	SAMPLE IDENTIFIER	Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid	CLEAT: 563 ADDRESS: 1270 Numberrow CITY: 5444 Numberrow CITY: 5444 Numberrow PHONE: 716930 Numberrow	179 Lake Ave
Sampled By Date Time Total Co Received By Date Time P.I.F. Received @ Lab By Date Time Date Date Date Time Date Time Date Time Date Time Date Ti		W(7 12 8/1 1 1/2 1/1	12 2 1 1 1 1 2 1 1 1	X-J->Z WMJOO MO JMWJCZ WALS SUCCS SUCCS PCBS 1-4 DIGXANE SILVEY PFAS CN CR-& METALS	MA - Water MG - Groundwater MG - Groundwater	A SA ADDRESS: JY ^{ZIP} I'4AU CITY: STATE: ZIP: DYPONE:	179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311 CHAIN OF CUSTODY
$\frac{2 \cdot 2620 \text{ Hoo}}{2 \cdot 2620 \text{ Hoo}}_{\text{Total Cost:}}$ $= 2 \cdot 626 \text{ Hoo}$ $= 2 \cdot 626 \text{ Hoo}$ $= 1.16 \text{ P.I.F}$ $= 1406 \text{ P.I.F}$ $= 1406 \text{ Seal in fact, Signed, olared}$ See additional page for sample conditions.	Sup mut duety to self left	03	acodection	REMARKS PARADIGM LAB SAMPLE NUMBER	SD Alid WP-Wipe OL-OI PT-Paint CK-Caulk AR-Air	LAB PROJECT ID A 0 0 3 7 5 Quotation #: Email:	Cp/

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PARADIGM	<u>Ch</u>	<u>ain of Custody Supplement</u>
Client:	BE3	Completed by: MolMail
Lab Project ID:	200375	Date:
	Sample Con	dition Dequirements

2012

Sample Condition Requirements Per NELAC/ELAP 210/241/242/243/244

Condition	C compliance with the sample co. Yes	naition requirements up No	oon receipt N/A
Container Type Comments			
Transferred to method- compliant container			۲¥ــــ
Headspace (<1 mL) Comments	NOA		
reservation Comments	Not met		SUCA Peat PCL
hlorine Absent <0.10 ppm per test strip) Comments			Ľ¥⊐
olding Time Comments			
emperature Comments	y'ciul		cmet
ompliant Sample Quantity/Type Comments	FAS, silver, Crth	unt directly to	sub-lat

Other Rush 1 day 10 day Rush 2 day Rush 3 day Standard 5 day DATE COLLECTED 1-22-20 -22-20 -22-20 **Turnaround Time PROJECT REFERENCE** PARADIGM 57 Tonawanda Street Ron-12-3026 CC peromonial Elization TIME att 1030 1220 1420 Other Batch QC None Required Category B Category A 120 m ⊣ – ∞ O ¬ ≤ O O ພັ້ນເບ **Report Supplements** Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid ATTN: CLIENT: CITY: PHONE: ADDRE88: \Box Π Rochester M~-3 MW-2 MW-) 585-647-2530 Paradigm Environmental 179 Lake Avenue Other EDD NYSDEC EDD **Basic EDD** None Required reporting@paradigmenv.com SAMPLE IDENTIFIER REPORT TO: STATE: \Box 8 Π NY ZIP: CHAIN OF CUSTODY Received @ Lab By Received By U Relinquished By Sampled By Brew WA - Water WG - Groundwater 14608 Client 2 S G र द ٧G x - 7 - 1 > 2 2 0 m c o o ATTN: CLIENT: PHONE: CITY: ADDRE88 5 чο 7 m B S C Z 3 N 00 70 m Z PFAS ADDUDGTED ANAEYOIS DW - Drinking Water WW - Wastewater accpay@paradigmenv.com INVOICE TON STATE: Date/Time Date/Time Date/Time Date/Time Same 1-22 22/20 SO - Soil SL - Sludge ¥ 620 620 SD - Solid PT - Paint Email: REMARK8 **Results by 3 PM** LAB PROJECT ID WP - Wipe CK - Caulk PARADIGM LAB SAMPLE NUMBER OL - Oil AR - Air 11148

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

179 Lake Avenue, Rochester, NY REPORT TO: Paradigm Environmental 179 Lake Avenue Rochester STATE: NY ZIP 14608 585-547-2530 reporting@paradigmenv.com Codles: AQ - Aqueous Liquid WG - Groundwa MG - Non-Aqueous Liquid WG - Groundwa MG - MG - MG - Groundwa	Serial, NY 14608 Office (585) 647-2530 Fax (585) 647-3311 CHAIN OF CUSTODY INVOICE TO: INT TO: INVOICE TO: INT TO: <th colspan<="" th=""></th>	
	NOF CUSTODY NOF CUSTODY INVOICE TO: INVOICE TO: INVOICE TO: INVOICE TO: Invoice Invoice <t< td=""></t<>	



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW4		
Lab Sample ID:	200379-01	Date Sampled:	1/23/2020
Matrix:	Groundwater	Date Received:	1/23/2020
Part 375 Metals	<u>(ICP)</u>		

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
Arsenic	0.0243	mg/L		1/30/2020 16:59
Barium	< 0.100	mg/L		1/30/2020 16:59
Beryllium	< 0.00500	mg/L		1/28/2020 18:40
Cadmium	< 0.00500	mg/L		1/29/2020 20:51
Chromium	< 0.0100	mg/L		1/28/2020 18:40
Copper	< 0.0400	mg/L		1/28/2020 18:40
Lead	< 0.0100	mg/L	М	1/30/2020 12:19
Manganese	0.321	mg/L		1/28/2020 18:40
Nickel	< 0.0400	mg/L		1/28/2020 18:40
Selenium	0.0163	mg/L	J	2/3/2020 09:18
Silver	< 0.0100	mg/L		1/28/2020 18:40
Zinc	< 0.0600	mg/L		1/28/2020 18:40
Method Reference(s):	EPA 6010C EPA 3005A			
Preparation Date:	1/27/2020			

Preparation Date: Data File:

200130B



Client:	<u>BE3</u>				
Project Reference	e: 57 Ton	awanda			
Sample Identifie	er: MW4				
Lab Sample ID:	20037	/9-01		Date Sampled:	1/23/2020
Matrix:	Groun	dwater		Date Received:	1/23/2020
<u>Mercury</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury		< 0.000200	mg/L		1/28/2020 13:28
Method F	Reference(s):	EPA 7470A			
Preparat Data File	ion Date: :	1/27/2020 Hg200128A			



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	la					
Sample Identifier:	MW4						
Lab Sample ID:	200379-01			Date	e Sampled:	1/23/2020	
Matrix:	Groundwate	er		Date	e Received:	1/23/2020	
<u>PCBs</u>							
Analyte		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	vzed
PCB-1016		< 1.01	ug/L			1/27/2020	18:34
PCB-1221		< 1.01	ug/L			1/27/2020	18:34
PCB-1232		< 1.01	ug/L			1/27/2020	18:34
PCB-1242		< 1.01	ug/L			1/27/2020	18:34
PCB-1248		< 1.01	ug/L			1/27/2020	18:34
PCB-1254		< 1.01	ug/L			1/27/2020	18:34
PCB-1260		< 1.01	ug/L			1/27/2020	18:34
PCB-1262		< 1.01	ug/L			1/27/2020	18:34
PCB-1268		< 1.01	ug/L			1/27/2020	18:34
<u>Surrogate</u>		Perc	cent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			64.6	17.5 - 93.9		1/27/2020	18:34
Method Reference							
Preparation Dat	EPA 35 e: 1/27/2						



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW4			
Lab Sample ID:	200379-01		Date Sampled:	1/23/2020
Matrix:	Groundwater		Date Received:	1/23/2020
Chlorinated Pestic	<u>cides</u>			
<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD	< 0.202	ug/L		1/27/2020 16:53
4,4-DDE	< 0.202	ug/L		1/27/2020 16:53
4,4-DDT	< 0.202	ug/L		1/27/2020 16:53
Aldrin	< 0.202	ug/L		1/27/2020 16:53
alpha-BHC	< 0.202	ug/L		1/27/2020 16:53
beta-BHC	< 0.202	ug/L		1/27/2020 16:53
cis-Chlordane	< 0.202	ug/L		1/27/2020 16:53
delta-BHC	< 0.202	ug/L		1/27/2020 16:53
Dieldrin	< 0.202	ug/L		1/27/2020 16:53
Endosulfan I	< 0.202	ug/L		1/27/2020 16:53
Endosulfan II	< 0.202	ug/L		1/27/2020 16:53
Endosulfan Sulfate	< 0.202	ug/L		1/27/2020 16:53
Endrin	< 0.202	ug/L		1/27/2020 16:53
Endrin Aldehyde	< 0.202	ug/L		1/27/2020 16:53
Endrin Ketone	< 0.202	ug/L		1/27/2020 16:53
gamma-BHC (Lindane)) < 0.202	ug/L		1/27/2020 16:53
Heptachlor	< 0.202	ug/L		1/27/2020 16:53
Heptachlor Epoxide	< 0.202	ug/L		1/27/2020 16:53
Methoxychlor	< 0.202	ug/L		1/27/2020 16:53
Toxaphene	< 2.02	ug/L		1/27/2020 16:53
trans-Chlordane	< 0.202	ug/L		1/27/2020 16:53



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW4					
Lab Sample ID:	200379-01		Date	e Sampled:	1/23/2020	
Matrix:	Groundwater		Date	e Received:	1/23/2020	
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	vzed
Decachlorobiphenyl (1	.)	21.7	18.1 - 158		1/27/2020	16:53
Tetrachloro-m-xylene	(1)	79.4	33.4 - 94.3		1/27/2020	16:53
Method Referen	ce(s): EPA 8081B EPA 3510C					
Preparation Dat	e: 1/27/2020					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW4		
Lab Sample ID:	200379-01	Date Sampled:	1/23/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier Date Analyzed
1,1-Biphenyl	< 10.0	ug/L	1/24/2020 18:25
1,2,4,5-Tetrachlorobenzene	< 10.0	ug/L	1/24/2020 18:25
1,2,4-Trichlorobenzene	< 10.0	ug/L	1/24/2020 18:25
1,2-Dichlorobenzene	< 10.0	ug/L	1/24/2020 18:25
1,3-Dichlorobenzene	< 10.0	ug/L	1/24/2020 18:25
1,4-Dichlorobenzene	< 10.0	ug/L	1/24/2020 18:25
2,2-Oxybis (1-chloropropane)	< 10.0	ug/L	1/24/2020 18:25
2,3,4,6-Tetrachlorophenol	< 10.0	ug/L	1/24/2020 18:25
2,4,5-Trichlorophenol	< 20.0	ug/L	1/24/2020 18:25
2,4,6-Trichlorophenol	< 10.0	ug/L	1/24/2020 18:25
2,4-Dichlorophenol	< 10.0	ug/L	1/24/2020 18:25
2,4-Dimethylphenol	< 20.0	ug/L	1/24/2020 18:25
2,4-Dinitrophenol	< 20.0	ug/L	1/24/2020 18:25
2,4-Dinitrotoluene	< 10.0	ug/L	1/24/2020 18:25
2,6-Dinitrotoluene	< 10.0	ug/L	1/24/2020 18:25
2-Chloronaphthalene	< 10.0	ug/L	1/24/2020 18:25
2-Chlorophenol	< 10.0	ug/L	1/24/2020 18:25
2-Methylnapthalene	< 10.0	ug/L	1/24/2020 18:25
2-Methylphenol	< 10.0	ug/L	1/24/2020 18:25
2-Nitroaniline	< 20.0	ug/L	1/24/2020 18:25
2-Nitrophenol	< 10.0	ug/L	1/24/2020 18:25
3&4-Methylphenol	< 10.0	ug/L	1/24/2020 18:25
3,3'-Dichlorobenzidine	< 10.0	ug/L	1/24/2020 18:25



Lab Project ID: 200379

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	MW4					
Lab Sample ID:	200379-01			Date Sampled:	1/23/2020	
Matrix:	Groundwate	r		Date Received:	1/23/2020	
3-Nitroaniline		< 20.0	ug/L		1/24/2020	18:25
4,6-Dinitro-2-methylpl	henol	< 20.0	ug/L		1/24/2020	18:25
4-Bromophenyl pheny	l ether	< 10.0	ug/L		1/24/2020	18:25
4-Chloro-3-methylphe	nol	< 10.0	ug/L		1/24/2020	18:25
4-Chloroaniline		< 10.0	ug/L		1/24/2020	18:25
4-Chlorophenyl pheny	l ether	< 10.0	ug/L		1/24/2020	18:25
4-Nitroaniline		< 20.0	ug/L		1/24/2020	18:25
4-Nitrophenol		< 20.0	ug/L		1/24/2020	18:25
Acenaphthene		< 10.0	ug/L		1/24/2020	18:25
Acenaphthylene		< 10.0	ug/L		1/24/2020	18:25
Acetophenone		< 10.0	ug/L		1/24/2020	18:25
Anthracene		< 10.0	ug/L		1/24/2020	18:25
Atrazine		< 10.0	ug/L		1/24/2020	18:25
Benzaldehyde		< 10.0	ug/L		1/24/2020	18:25
Benzo (a) anthracene		< 10.0	ug/L		1/24/2020	18:25
Benzo (a) pyrene		< 10.0	ug/L		1/24/2020	18:25
Benzo (b) fluoranthene	е	< 10.0	ug/L		1/24/2020	18:25
Benzo (g,h,i) perylene		< 10.0	ug/L		1/24/2020	18:25
Benzo (k) fluoranthene	e	< 10.0	ug/L		1/24/2020	18:25
Bis (2-chloroethoxy) n	nethane	< 10.0	ug/L		1/24/2020	18:25
Bis (2-chloroethyl) eth	er	< 10.0	ug/L		1/24/2020	18:25
Bis (2-ethylhexyl) phth	nalate	< 10.0	ug/L		1/24/2020	18:25
Butylbenzylphthalate		< 10.0	ug/L		1/24/2020	18:25
Caprolactam		< 10.0	ug/L		1/24/2020	18:25
Carbazole		< 10.0	ug/L		1/24/2020	18:25



Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	la				
Sample Identifier: Lab Sample ID: Matrix:	MW4 200379-01 Groundwate	r		Date Sampled: Date Received:	1/23/2020 1/23/2020	
Chrysene		< 10.0	ug/L		1/24/2020	18:25
Dibenz (a,h) anthracer	ne	< 10.0	ug/L		1/24/2020	18:25
Dibenzofuran		< 10.0	ug/L		1/24/2020	18:25
Diethyl phthalate		< 10.0	ug/L		1/24/2020	18:25
Dimethyl phthalate		< 20.0	ug/L		1/24/2020	18:25
Di-n-butyl phthalate		< 10.0	ug/L		1/24/2020	18:25
Di-n-octylphthalate		< 10.0	ug/L		1/24/2020	18:25
Fluoranthene		< 10.0	ug/L		1/24/2020	18:25
Fluorene		< 10.0	ug/L		1/24/2020	18:25
Hexachlorobenzene		< 10.0	ug/L		1/24/2020	18:25
Hexachlorobutadiene		< 10.0	ug/L		1/24/2020	18:25
Hexachlorocyclopenta	diene	< 10.0	ug/L		1/24/2020	18:25
Hexachloroethane		< 10.0	ug/L		1/24/2020	18:25
Indeno (1,2,3-cd) pyre	ene	< 10.0	ug/L		1/24/2020	18:25
Isophorone		< 10.0	ug/L		1/24/2020	18:25
Naphthalene		< 10.0	ug/L		1/24/2020	18:25
Nitrobenzene		< 10.0	ug/L		1/24/2020	18:25
N-Nitroso-di-n-propyl	amine	< 10.0	ug/L		1/24/2020	18:25
N-Nitrosodiphenylam	ine	< 10.0	ug/L		1/24/2020	18:25
Pentachlorophenol		< 20.0	ug/L		1/24/2020	18:25
Phenanthrene		< 10.0	ug/L		1/24/2020	18:25
Phenol		< 10.0	ug/L		1/24/2020	18:25
Pyrene		< 10.0	ug/L		1/24/2020	18:25



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW4					
Lab Sample ID:	200379-01		Date	e Sampled:	1/23/2020	
Matrix:	Groundwater		Date	e Received:	1/23/2020	
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		81.9	59.6 - 114		1/24/2020	18:25
2-Fluorobiphenyl		58.8	36.2 - 99.1		1/24/2020	18:25
2-Fluorophenol		40.9	14.9 - 105		1/24/2020	18:25
Nitrobenzene-d5		74.6	53.7 - 102		1/24/2020	18:25
Phenol-d5		31.3	10 - 106		1/24/2020	18:25
Terphenyl-d14		78.9	58.7 - 116		1/24/2020	18:25
Method Referen	EPA 3510C					
Preparation Dat Data File:	te: 1/24/2020 B44091.D					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	MW4 200379-01 Groundwater	<u>,</u>		Date Sampled: Date Received:	1/23/2020 1/23/2020
Volatile Organics					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 100	ug/L		1/24/2020 18:24
1,1,2,2-Tetrachloroeth	iane	< 100	ug/L		1/24/2020 18:24
1,1,2-Trichloroethane		< 100	ug/L		1/24/2020 18:24
1,1-Dichloroethane		< 100	ug/L		1/24/2020 18:24
1,1-Dichloroethene		< 100	ug/L		1/24/2020 18:24
1,2,3-Trichlorobenzen	e	< 250	ug/L		1/24/2020 18:24
1,2,4-Trichlorobenzen	e	< 250	ug/L		1/24/2020 18:24
1,2,4-Trimethylbenzer	ne	< 100	ug/L		1/24/2020 18:24
1,2-Dibromo-3-Chloro	propane	< 500	ug/L		1/24/2020 18:24
1,2-Dibromoethane		< 100	ug/L		1/24/2020 18:24
1,2-Dichlorobenzene		< 100	ug/L		1/24/2020 18:24
1,2-Dichloroethane		< 100	ug/L		1/24/2020 18:24
1,2-Dichloropropane		< 100	ug/L		1/24/2020 18:24
1,3,5-Trimethylbenzer	ne	< 100	ug/L		1/24/2020 18:24
1,3-Dichlorobenzene		< 100	ug/L		1/24/2020 18:24
1,4-Dichlorobenzene		< 100	ug/L		1/24/2020 18:24
1,4-Dioxane		< 1000	ug/L		1/24/2020 18:24
2-Butanone		< 500	ug/L		1/24/2020 18:24
2-Hexanone		< 250	ug/L		1/24/2020 18:24
4-Methyl-2-pentanone	<u>)</u>	< 250	ug/L		1/24/2020 18:24
Acetone		409	ug/L	J	1/24/2020 18:24
Benzene		< 50.0	ug/L		1/24/2020 18:24
Bromochloromethane		< 250	ug/L		1/24/2020 18:24



Lab Project ID: 200379

Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW4			
Lab Sample ID:	200379-01		Date Sampled:	1/23/2020
Matrix:	Groundwater		Date Received:	1/23/2020
Bromodichloromethane	e < 100	ug/L		1/24/2020 18:24
Bromoform	< 250	ug/L		1/24/2020 18:24
Bromomethane	< 100	ug/L		1/24/2020 18:24
Carbon disulfide	< 100	ug/L		1/24/2020 18:24
Carbon Tetrachloride	< 100	ug/L		1/24/2020 18:24
Chlorobenzene	< 100	ug/L		1/24/2020 18:24
Chloroethane	< 100	ug/L		1/24/2020 18:24
Chloroform	< 100	ug/L		1/24/2020 18:24
Chloromethane	< 100	ug/L		1/24/2020 18:24
cis-1,2-Dichloroethene	< 100	ug/L		1/24/2020 18:24
cis-1,3-Dichloropropen	e < 100	ug/L		1/24/2020 18:24
Cyclohexane	< 500	ug/L		1/24/2020 18:24
Dibromochloromethan	e < 100	ug/L		1/24/2020 18:24
Dichlorodifluorometha	ne < 100	ug/L		1/24/2020 18:24
Ethylbenzene	< 100	ug/L		1/24/2020 18:24
Freon 113	< 100	ug/L		1/24/2020 18:24
Isopropylbenzene	< 100	ug/L		1/24/2020 18:24
m,p-Xylene	< 100	ug/L		1/24/2020 18:24
Methyl acetate	< 100	ug/L		1/24/2020 18:24
Methyl tert-butyl Ether	< 100	ug/L		1/24/2020 18:24
Methylcyclohexane	< 100	ug/L		1/24/2020 18:24
Methylene chloride	< 250	ug/L		1/24/2020 18:24
Naphthalene	< 250	ug/L		1/24/2020 18:24
n-Butylbenzene	< 100	ug/L		1/24/2020 18:24
n-Propylbenzene	< 100	ug/L		1/24/2020 18:24



Client:	<u>BE3</u>						
Project Reference:	57 Tona	wanda					
Sample Identifier:	MW4						
Lab Sample ID:	200379	0-01		Dat	e Sampled:	1/23/2020	
Matrix:	Ground	water		Dat	e Received:	1/23/2020	
o-Xylene		< 100	ug/L			1/24/2020	18:24
p-Isopropyltoluene		< 100	ug/L			1/24/2020	18:24
sec-Butylbenzene		< 100	ug/L			1/24/2020	18:24
Styrene		< 250	ug/L			1/24/2020	18:24
tert-Butylbenzene		< 100	ug/L			1/24/2020	18:24
Tetrachloroethene		< 100	ug/L			1/24/2020	18:24
Toluene		< 100	ug/L			1/24/2020	18:24
trans-1,2-Dichloroethe	ene	< 100	ug/L			1/24/2020	18:24
trans-1,3-Dichloroprop	pene	< 100	ug/L			1/24/2020	18:24
Trichloroethene		7370	ug/L		М	1/24/2020	18:24
Trichlorofluoromethar	ne	< 100	ug/L			1/24/2020	18:24
Vinyl chloride		< 100	ug/L			1/24/2020	18:24
Surrogate		Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	vzed
1,2-Dichloroethane-d4			119	74.3 - 138		1/24/2020	18:24
4-Bromofluorobenzen	e		74.9	66.3 - 125		1/24/2020	18:24
Pentafluorobenzene			102	87.4 - 111		1/24/2020	18:24
Toluene-D8			93.8	85.8 - 113		1/24/2020	18:24
Method Reference	ce(s):	EPA 8260C					
Data File:		EPA 5030C x68107.D					



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW4			
Lab Sample ID:	200379-01		Date Sampled:	1/23/2020
Matrix:	Groundwater		Date Received:	1/23/2020
<u>Total Cyanide</u>				
<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		1/30/2020
Method Referen				
Preparation Da	SM 4500 CN C - 2011 te: 1/29/2020			



Client:]	<u>BE3</u>				
Project Ref	erence:	57 Tona	wanda			
Sample Id	lentifier:	MW4				
Lab Samp	le ID:	20037	9-01		Date Sampled:	1/23/2020
Matrix:		Ground	lwater		Date Received:	1/23/2020
Dioxar	<u>1e</u>					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Diox	ane		0.473	ug/L		1/27/2020 11:29
	Method Reference	. ,	EPA 8270D SIM EPA 3510C			
	Preparation Date: Data File:		1/24/2020 B44124.D			



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW5		
Lab Sample ID:	200379-02	Date Sampled:	1/23/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Part 375 Metals (ICP)

<u>Analyte</u>	Result	<u>Units</u>	Qı	ualifier	Date Analy	yzed
Arsenic	0.0126	mg/L			1/30/2020	17:08
Barium	< 0.100	mg/L			1/30/2020	17:08
Beryllium	< 0.00500	mg/L			1/28/2020	19:02
Cadmium	< 0.00500	mg/L			1/29/2020	21:13
Chromium	< 0.0100	mg/L			1/28/2020	19:02
Copper	< 0.0400	mg/L			1/28/2020	19:02
Lead	< 0.0100	mg/L			1/30/2020	12:33
Manganese	0.365	mg/L			1/28/2020	19:02
Nickel	< 0.0400	mg/L			1/28/2020	19:02
Selenium	< 0.0200	mg/L			2/3/2020	09:26
Silver	< 0.0100	mg/L			1/28/2020	19:02
Zinc	< 0.0600	mg/L			1/28/2020	19:02
Method Reference(s):	EPA 6010C EPA 3005A					
Preparation Date: Data File:	1/27/2020 200130B					



Client:		<u>BE3</u>					
Project Ref	ference:	57 Tona	awanda				
-	dentifier:	MW5	0.02			Data Campled	1/22/2020
Lab Samp Matrix:	pie ID:	20037 Group	9-02 dwater			Date Sampled: Date Received:	1/23/2020
<u>Mercu</u> Analyte	<u>Iry</u>		Result		Units	 Qualifier	Date Analyzed
Mercur	У		0.000144	1	mg/L	J	1/28/2020 13:34
	Method Reference Preparation Date Data File:	. ,	EPA 7470A 1/27/2020 Hg200128A				



Client:	<u>BE3</u>						
Project Reference:	57 Tonawand	а					
Sample Identifier:	MW5						
Lab Sample ID:	200379-02			Date	e Sampled:	1/23/2020	
Matrix:	Groundwate	r		Date	e Received:	1/23/2020	
<u>PCBs</u>							
Analyte		<u>Result</u>	<u>Units</u>		Qualifier	Date Analy	vzed
PCB-1016		< 1.05	ug/L			1/27/2020	19:44
PCB-1221		< 1.05	ug/L			1/27/2020	19:44
PCB-1232		< 1.05	ug/L			1/27/2020	19:44
PCB-1242		< 1.05	ug/L			1/27/2020	19:44
PCB-1248		< 1.05	ug/L			1/27/2020	19:44
PCB-1254		< 1.05	ug/L			1/27/2020	19:44
PCB-1260		< 1.05	ug/L			1/27/2020	19:44
PCB-1262		< 1.05	ug/L			1/27/2020	19:44
PCB-1268		< 1.05	ug/L			1/27/2020	19:44
<u>Surrogate</u>		Pero	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			72.4	17.5 - 93.9		1/27/2020	19:44
Method Reference							
Preparation Dat	EPA 351 e: 1/27/20						



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier: Lab Sample ID: Matrix:	MW5 200379-02 Groundwater			Date Sampled: Date Received:	1/23/2020 1/23/2020
<u>Chlorinated Pest</u>	icides				
Analyte		<u>esult</u>	<u>Units</u>	Qualifier	Date Analyzed
4,4-DDD		210	ug/L	-	1/27/2020 17:49
4,4-DDE	< 0.	210	ug/L		1/27/2020 17:49
4,4-DDT	< 0.	210	ug/L		1/27/2020 17:49
Aldrin	< 0.	210	ug/L		1/27/2020 17:49
alpha-BHC	< 0.	210	ug/L		1/27/2020 17:49
beta-BHC	< 0.	210	ug/L		1/27/2020 17:49
cis-Chlordane	< 0.	210	ug/L		1/27/2020 17:49
delta-BHC	< 0.	210	ug/L		1/27/2020 17:49
Dieldrin	< 0.	210	ug/L		1/27/2020 17:49
Endosulfan I	< 0.	210	ug/L		1/27/2020 17:49
Endosulfan II	< 0.	210	ug/L		1/27/2020 17:49
Endosulfan Sulfate	< 0.	210	ug/L		1/27/2020 17:49
Endrin	< 0.	210	ug/L		1/27/2020 17:49
Endrin Aldehyde	< 0.	210	ug/L		1/27/2020 17:49
Endrin Ketone	< 0.	210	ug/L		1/27/2020 17:49
gamma-BHC (Lindane	e) < 0.	210	ug/L		1/27/2020 17:49
Heptachlor	< 0.	210	ug/L		1/27/2020 17:49
Heptachlor Epoxide	< 0.	210	ug/L		1/27/2020 17:49
Methoxychlor	< 0.	210	ug/L		1/27/2020 17:49
Toxaphene	< 2.	10	ug/L		1/27/2020 17:49
trans-Chlordane	< 0.	210	ug/L		1/27/2020 17:49



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW5					
Lab Sample ID:	200379-02		Dat	e Sampled:	1/23/2020	
Matrix:	Groundwater		Dat	e Received:	1/23/2020	
Surrogate		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	1)	17.3	18.1 - 158	*	1/27/2020	17:49
Tetrachloro-m-xylene	(1)	66.3	33.4 - 94.3		1/27/2020	17:49
Method Referen	EPA 3510C					
Preparation Dat	te: 1/27/2020					



Client:	<u>BE3</u>		
Project Reference:	57 Tonawanda		
Sample Identifier:	MW5		
Lab Sample ID:	200379-02	Date Sampled:	1/23/2020
Matrix:	Groundwater	Date Received:	1/23/2020

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier Date Analyzed
1,1-Biphenyl	< 10.2	ug/L	1/24/2020 20:04
1,2,4,5-Tetrachlorobenzene	< 10.2	ug/L	1/24/2020 20:04
1,2,4-Trichlorobenzene	< 10.2	ug/L	1/24/2020 20:04
1,2-Dichlorobenzene	< 10.2	ug/L	1/24/2020 20:04
1,3-Dichlorobenzene	< 10.2	ug/L	1/24/2020 20:04
1,4-Dichlorobenzene	< 10.2	ug/L	1/24/2020 20:04
2,2-Oxybis (1-chloropropane)	< 10.2	ug/L	1/24/2020 20:04
2,3,4,6-Tetrachlorophenol	< 10.2	ug/L	1/24/2020 20:04
2,4,5-Trichlorophenol	< 20.3	ug/L	1/24/2020 20:04
2,4,6-Trichlorophenol	< 10.2	ug/L	1/24/2020 20:04
2,4-Dichlorophenol	< 10.2	ug/L	1/24/2020 20:04
2,4-Dimethylphenol	< 20.3	ug/L	1/24/2020 20:04
2,4-Dinitrophenol	< 20.3	ug/L	1/24/2020 20:04
2,4-Dinitrotoluene	< 10.2	ug/L	1/24/2020 20:04
2,6-Dinitrotoluene	< 10.2	ug/L	1/24/2020 20:04
2-Chloronaphthalene	< 10.2	ug/L	1/24/2020 20:04
2-Chlorophenol	< 10.2	ug/L	1/24/2020 20:04
2-Methylnapthalene	< 10.2	ug/L	1/24/2020 20:04
2-Methylphenol	< 10.2	ug/L	1/24/2020 20:04
2-Nitroaniline	< 20.3	ug/L	1/24/2020 20:04
2-Nitrophenol	< 10.2	ug/L	1/24/2020 20:04
3&4-Methylphenol	< 10.2	ug/L	1/24/2020 20:04
3,3'-Dichlorobenzidine	< 10.2	ug/L	1/24/2020 20:04



Lab Project ID: 200379

Client:	<u>BE3</u>					
Project Reference:	57 Tonawand	а				
Sample Identifier:	MW5					
Lab Sample ID:	200379-02			Date Sampled:	1/23/2020	
Matrix:	Groundwate	r		Date Received:	1/23/2020	
3-Nitroaniline		< 20.3	ug/L		1/24/2020	20:04
4,6-Dinitro-2-methylpl	henol	< 20.3	ug/L		1/24/2020	20:04
4-Bromophenyl pheny	l ether	< 10.2	ug/L		1/24/2020	20:04
4-Chloro-3-methylphe	nol	< 10.2	ug/L		1/24/2020	20:04
4-Chloroaniline		< 10.2	ug/L		1/24/2020	20:04
4-Chlorophenyl pheny	l ether	< 10.2	ug/L		1/24/2020	20:04
4-Nitroaniline		< 20.3	ug/L		1/24/2020	20:04
4-Nitrophenol		< 20.3	ug/L		1/24/2020	20:04
Acenaphthene		< 10.2	ug/L		1/24/2020	20:04
Acenaphthylene		< 10.2	ug/L		1/24/2020	20:04
Acetophenone		< 10.2	ug/L		1/24/2020	20:04
Anthracene		< 10.2	ug/L		1/24/2020	20:04
Atrazine		< 10.2	ug/L		1/24/2020	20:04
Benzaldehyde		< 10.2	ug/L		1/24/2020	20:04
Benzo (a) anthracene		< 10.2	ug/L		1/24/2020	20:04
Benzo (a) pyrene		< 10.2	ug/L		1/24/2020	20:04
Benzo (b) fluoranthene	e	< 10.2	ug/L		1/24/2020	20:04
Benzo (g,h,i) perylene		< 10.2	ug/L		1/24/2020	20:04
Benzo (k) fluoranthene	e	< 10.2	ug/L		1/24/2020	20:04
Bis (2-chloroethoxy) m	nethane	< 10.2	ug/L		1/24/2020	20:04
Bis (2-chloroethyl) eth	er	< 10.2	ug/L		1/24/2020	20:04
Bis (2-ethylhexyl) phth	nalate	< 10.2	ug/L		1/24/2020	20:04
Butylbenzylphthalate		< 10.2	ug/L		1/24/2020	20:04
Caprolactam		< 10.2	ug/L		1/24/2020	20:04
Carbazole		< 10.2	ug/L		1/24/2020	20:04



Client:	BE3				
Project Reference:	57 Tonawanda				
Sample Identifier:	MW5				
Lab Sample ID:	200379-02		Date Sampled:	1/23/2020	
Matrix:	Groundwater		Date Received:	1/23/2020	
Chrysene	< 10.2	ug/L		1/24/2020	20:04
Dibenz (a,h) anthracene	< 10.2	ug/L		1/24/2020	20:04
Dibenzofuran	< 10.2	ug/L		1/24/2020	20:04
Diethyl phthalate	< 10.2	ug/L		1/24/2020	20:04
Dimethyl phthalate	< 20.3	ug/L		1/24/2020	20:04
Di-n-butyl phthalate	< 10.2	ug/L		1/24/2020	20:04
Di-n-octylphthalate	< 10.2	ug/L		1/24/2020	20:04
Fluoranthene	< 10.2	ug/L		1/24/2020	20:04
Fluorene	< 10.2	ug/L		1/24/2020	20:04
Hexachlorobenzene	< 10.2	ug/L		1/24/2020	20:04
Hexachlorobutadiene	< 10.2	ug/L		1/24/2020	20:04
Hexachlorocyclopentadi	ene < 10.2	ug/L		1/24/2020	20:04
Hexachloroethane	< 10.2	ug/L		1/24/2020	20:04
Indeno (1,2,3-cd) pyrene	e < 10.2	ug/L		1/24/2020	20:04
Isophorone	< 10.2	ug/L		1/24/2020	20:04
Naphthalene	< 10.2	ug/L		1/24/2020	20:04
Nitrobenzene	< 10.2	ug/L		1/24/2020	20:04
N-Nitroso-di-n-propylan	nine < 10.2	ug/L		1/24/2020	20:04
N-Nitrosodiphenylamine	e < 10.2	ug/L		1/24/2020	20:04
Pentachlorophenol	< 20.3	ug/L		1/24/2020	20:04
Phenanthrene	< 10.2	ug/L		1/24/2020	20:04
Phenol	< 10.2	ug/L		1/24/2020	20:04
Pyrene	< 10.2	ug/L		1/24/2020	20:04



Client:	<u>BE3</u>					
Project Reference:	57 Tonawanda					
Sample Identifier:	MW5					
Lab Sample ID:	200379-02		Date	e Sampled:	1/23/2020	
Matrix:	Groundwater		Date	e Received:	1/23/2020	
<u>Surrogate</u>		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	/zed
2,4,6-Tribromophenol		92.6	59.6 - 114		1/24/2020	20:04
2-Fluorobiphenyl		68.6	36.2 - 99.1		1/24/2020	20:04
2-Fluorophenol		40.8	14.9 - 105		1/24/2020	20:04
Nitrobenzene-d5		77.2	53.7 - 102		1/24/2020	20:04
Phenol-d5		28.7	10 - 106		1/24/2020	20:04
Terphenyl-d14		92.4	58.7 - 116		1/24/2020	20:04
Method Referen Preparation Dat Data File:	EPA 3510C					



Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda	a			
Sample Identifier: Lab Sample ID: Matrix:	MW5 200379-02 Groundwater	ſ		Date Sampled: Date Received:	1/23/2020 1/23/2020
Volatile Organics					
Analyte		<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane		< 2.00	ug/L		1/24/2020 18:01
1,1,2,2-Tetrachloroeth	ane	< 2.00	ug/L		1/24/2020 18:01
1,1,2-Trichloroethane		< 2.00	ug/L		1/24/2020 18:01
1,1-Dichloroethane		< 2.00	ug/L		1/24/2020 18:01
1,1-Dichloroethene		< 2.00	ug/L		1/24/2020 18:01
1,2,3-Trichlorobenzen	e	< 5.00	ug/L		1/24/2020 18:01
1,2,4-Trichlorobenzen	e	< 5.00	ug/L		1/24/2020 18:01
1,2,4-Trimethylbenzen	ie	< 2.00	ug/L		1/24/2020 18:01
1,2-Dibromo-3-Chloro	propane	< 10.0	ug/L		1/24/2020 18:01
1,2-Dibromoethane		< 2.00	ug/L		1/24/2020 18:01
1,2-Dichlorobenzene		< 2.00	ug/L		1/24/2020 18:01
1,2-Dichloroethane		< 2.00	ug/L		1/24/2020 18:01
1,2-Dichloropropane		< 2.00	ug/L		1/24/2020 18:01
1,3,5-Trimethylbenzen	ie	< 2.00	ug/L		1/24/2020 18:01
1,3-Dichlorobenzene		< 2.00	ug/L		1/24/2020 18:01
1,4-Dichlorobenzene		< 2.00	ug/L		1/24/2020 18:01
1,4-Dioxane		< 20.0	ug/L		1/24/2020 18:01
2-Butanone		< 10.0	ug/L		1/24/2020 18:01
2-Hexanone		< 5.00	ug/L		1/24/2020 18:01
4-Methyl-2-pentanone		< 5.00	ug/L		1/24/2020 18:01
Acetone		9.73	ug/L	J	1/24/2020 18:01
Benzene		< 1.00	ug/L		1/24/2020 18:01
Bromochloromethane		< 5.00	ug/L		1/24/2020 18:01



Lab Project ID: 200379

Client:	<u>BE3</u>				
Project Reference:	57 Tonawanda				
Sample Identifier:	MW5				
Lab Sample ID:	200379-02		Date Sampled:	1/23/2020	
Matrix:	Groundwater		Date Received:	1/23/2020	
Bromodichloromethane	e < 2.00	ug/L		1/24/2020	18:01
Bromoform	< 5.00	ug/L		1/24/2020	18:01
Bromomethane	< 2.00	ug/L		1/24/2020	18:01
Carbon disulfide	< 2.00	ug/L		1/24/2020	18:01
Carbon Tetrachloride	< 2.00	ug/L		1/24/2020	18:01
Chlorobenzene	< 2.00	ug/L		1/24/2020	18:01
Chloroethane	< 2.00	ug/L		1/24/2020	18:01
Chloroform	< 2.00	ug/L		1/24/2020	18:01
Chloromethane	< 2.00	ug/L		1/24/2020	18:01
cis-1,2-Dichloroethene	< 2.00	ug/L		1/24/2020	18:01
cis-1,3-Dichloropropen	e < 2.00	ug/L		1/24/2020	18:01
Cyclohexane	< 10.0	ug/L		1/24/2020	18:01
Dibromochloromethane	e < 2.00	ug/L		1/24/2020	18:01
Dichlorodifluorometha	ne < 2.00	ug/L		1/24/2020	18:01
Ethylbenzene	< 2.00	ug/L		1/24/2020	18:01
Freon 113	< 2.00	ug/L		1/24/2020	18:01
Isopropylbenzene	< 2.00	ug/L		1/24/2020	18:01
m,p-Xylene	< 2.00	ug/L		1/24/2020	18:01
Methyl acetate	< 2.00	ug/L		1/24/2020	18:01
Methyl tert-butyl Ether	< 2.00	ug/L		1/24/2020	18:01
Methylcyclohexane	< 2.00	ug/L		1/24/2020	18:01
Methylene chloride	< 5.00	ug/L		1/24/2020	18:01
Naphthalene	< 5.00	ug/L		1/24/2020	18:01
n-Butylbenzene	< 2.00	ug/L		1/24/2020	18:01
n-Propylbenzene	< 2.00	ug/L		1/24/2020	18:01



Lab Project ID: 200379

Client:	<u>BE3</u>						
Project Reference:	57 Tonaw	anda					
Sample Identifier:	MW5						
Lab Sample ID:	200379-0	02		Dat	e Sampled:	1/23/2020	
Matrix:	Groundw	vater		Dat	e Received:	1/23/2020	
o-Xylene		< 2.00	ug/L			1/24/2020	18:01
p-Isopropyltoluene		< 2.00	ug/L			1/24/2020	18:01
sec-Butylbenzene		< 2.00	ug/L			1/24/2020	18:01
Styrene		< 5.00	ug/L			1/24/2020	18:01
tert-Butylbenzene		< 2.00	ug/L			1/24/2020	18:01
Tetrachloroethene		< 2.00	ug/L			1/24/2020	18:01
Toluene		< 2.00	ug/L			1/24/2020	18:01
trans-1,2-Dichloroethe	ene	< 2.00	ug/L			1/24/2020	18:01
trans-1,3-Dichloroprop	oene	< 2.00	ug/L			1/24/2020	18:01
Trichloroethene		1.28	ug/L		J	1/24/2020	18:01
Trichlorofluoromethar	ie	< 2.00	ug/L			1/24/2020	18:01
Vinyl chloride		< 2.00	ug/L			1/24/2020	18:01
Surrogate		Per	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			125	74.3 - 138		1/24/2020	18:01
4-Bromofluorobenzene	9		74.7	66.3 - 125		1/24/2020	18:01
Pentafluorobenzene			99.0	87.4 - 111		1/24/2020	18:01
Toluene-D8			89.2	85.8 - 113		1/24/2020	18:01
Method Reference		A 8260C					
Data File:		A 5030C 8106.D					



Client:	<u>BE3</u>			
Project Reference:	57 Tonawanda			
Sample Identifier:	MW5			
Lab Sample ID:	200379-02		Date Sampled:	1/23/2020
Matrix:	Groundwater		Date Received:	1/23/2020
<u>Total Cyanide</u>				
<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		1/30/2020
Method Referen	stee(s): SM 4500 CN E - 2011			
Preparation Da	SM 4500 CN C - 2011 te: 1/29/2020			



Client:		<u>BE3</u>				
Project Ref	ference:	57 Tonav	vanda			
Sample Io	lentifier:	MW5				
Lab Samp	ole ID:	200379	-02		Date Sampled:	1/23/2020
Matrix:		Ground	water		Date Received:	1/23/2020
Dioxa	ne					
<u>Analyte</u>			<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,4-Dio	xane		< 0.203	ug/L		1/27/2020 12:02
	Method Reference		PA 8270D SIM PA 3510C			
	Preparation Date: Data File:		/24/2020 44127.D			



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
	Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs
T :: t - t :	may incur additional fees. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-
Limitations of Liability.	perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients
	or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.



ANALYTICAL REPORT

Lab Number:	L2003312
Client:	Paradigm Environmental Services
	179 Lake Avenue
	Rochester, NY 14608
ATTN:	Jane Daloia
Phone:	(585) 647-2530
Project Name:	57 TONAWANDA STREET
Project Number:	57 TONAWANDA
Report Date:	02/12/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

Six Park Row, Mansfield, MA 02048 508-261-7467 (Fax) -- - - emccarter@mansfieldma.com



Seria
I_No:(
0212
2016
3:58

L2003312-02	L2003312-01	Alpha Sample ID	Project Name: Project Number:
MW5	MW4	Client ID	57 TONAWANDA STREET 57 TONAWANDA
WATER	WATER	Matrix	
Not Specified	Not Specified	Sample Location	
01/23/20 11:20	01/23/20 09:30	Collection Date/Time	Lab Number: Report Date:
01/23/20	01/23/20	Receive Date	L2003312 02/12/20

Ацяна

Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003312

 Report Date:
 02/12/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003312

 Report Date:
 02/12/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Perfluorinated Alkyl Acids by Isotope Dilution

L2003312-02: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Galt Por Elizabeth Porta

Title: Technical Director/Representative

Date: 02/12/20



ORGANICS



SEMIVOLATILES



		Serial_No:02122016:58
Project Name:	57 TONAWANDA STREET	Lab Number: L2003312
Project Number:	57 TONAWANDA	Report Date: 02/12/20
	SAMPLE RESULTS	
Lab ID:	L2003312-01	Date Collected: 01/23/20 09:30
Client ID:	MW4	Date Received: 01/23/20
Sample Location:	Not Specified	Field Prep: Not Specified
Sample Depth:		
Matrix:	Water	Extraction Method: ALPHA 23528
Analytical Method:	134,LCMSMS-ID	Extraction Date: 01/27/20 07:58
Analytical Date:	02/10/20 16:01	
Analyst:	JW	
-		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	5.15		ng/l	1.77	0.362	1
Perfluoropentanoic Acid (PFPeA)	0.770	J	ng/l	1.77	0.351	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.77	0.211	1
Perfluorohexanoic Acid (PFHxA)	0.610	J	ng/l	1.77	0.291	1
Perfluoroheptanoic Acid (PFHpA)	0.206	J	ng/l	1.77	0.200	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.77	0.333	1
Perfluorooctanoic Acid (PFOA)	0.535	J	ng/l	1.77	0.209	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.77	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.77	0.610	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.77	0.276	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.77	0.447	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.77	0.270	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.77	1.07	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.77	0.574	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.77	0.230	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.77	0.869	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.77	0.514	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.77	0.713	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.77	0.330	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.77	0.290	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.77	0.220	1
PFOA/PFOS, Total	0.535	J	ng/l	1.77	0.209	1



					Se	rial_No:	02122016:58
Project Name:	57 TONAWANDA STREE	Т			Lab Num	ber:	L2003312
Project Number:	57 TONAWANDA				Report D	ate:	02/12/20
		SAMPLE	RESULTS				
Lab ID:	L2003312-01				Date Collect	cted:	01/23/20 09:30
Client ID:	MW4				Date Recei	ived:	01/23/20
Sample Location:	Not Specified				Field Prep:		Not Specified
Sample Depth:							
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl	Acids by Isotope Dilution -	Mansfield L	ab				

Surrogate (Extracted Internal Standard)	% Recovery	Acceptance Qualifier Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	104	2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	121	16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95	31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	88	21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	92	30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100	47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	97	36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	130	1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97	34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	93	42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94	38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	109	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	75	1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94	40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	24	1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	75	23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	87	24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	76	33-143



		Serial_No:02122016:58	
Project Name:	57 TONAWANDA STREET	Lab Number: L2003312	
Project Number:	57 TONAWANDA	Report Date: 02/12/20	
	SAMPLE RESULTS	6	
Lab ID:	L2003312-02	Date Collected: 01/23/20 11:20	
Client ID:	MW5	Date Received: 01/23/20	
Sample Location:	Not Specified	Field Prep: Not Specified	
Sample Depth:			
Matrix:	Water	Extraction Method: ALPHA 23528	
Analytical Method:	134,LCMSMS-ID	Extraction Date: 01/27/20 07:58	
Analytical Date:	02/10/20 16:18		
Analyst:	JW		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution	on - Mansfield	d Lab				
Perfluorobutanoic Acid (PFBA)	2.56		ng/l	1.75	0.358	1
Perfluoropentanoic Acid (PFPeA)	2.06		ng/l	1.75	0.347	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.75	0.209	1
Perfluorohexanoic Acid (PFHxA)	2.13		ng/l	1.75	0.288	1
Perfluoroheptanoic Acid (PFHpA)	0.516	J	ng/l	1.75	0.198	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.75	0.330	1
Perfluorooctanoic Acid (PFOA)	3.04		ng/l	1.75	0.207	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.75	1.17	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.75	0.604	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.75	0.274	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.75	0.442	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.75	0.267	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.75	1.06	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid	ND		ng/l	1.75	0.568	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.75	0.228	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.75	0.860	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.75	0.509	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.75	0.705	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.75	0.326	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.75	0.287	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.75	0.218	1
PFOA/PFOS, Total	3.04		ng/l	1.75	0.207	1



					Se	erial_No	:02122016:58	
Project Name:	57 TONAWANDA STREE	T			Lab Nun	nber:	L2003312	
Project Number:	57 TONAWANDA				Report D	ate:	02/12/20	
		SAMPLE	E RESULTS					
Lab ID:	L2003312-02				Date Colle	cted:	01/23/20 11:20	
Client ID:	MW5				Date Rece	eived:	01/23/20	
Sample Location:	Not Specified				Field Prep	:	Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Perfluorinated Alky	Acids by Isotope Dilution -	Mansfield	Lab					

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	128		16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	89		21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	101		47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	286	Q	1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	101		34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	215	Q	7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	73		1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	17		1-87	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	82		23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	74		33-143	



Project Name:	57 TONAWANDA STREET	Lab Number:
Project Number:	57 TONAWANDA	Report Date:

Method Blank Analysis Batch Quality Control

Analytical Method:	134,LCMSMS-ID
Analytical Date:	02/08/20 09:40
Analyst:	JW

Extraction Method: ALPHA 23528 Extraction Date: 01/27/20 07:58

L2003312 02/12/20

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope WG1334086-1	e Dilution - I	Mansfield	Lab for sar	mple(s): 01-02	2 Batch:
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	0.372	J	ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acic (6:2FTS)	I ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Aci (8:2FTS)	d ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoaceti Acid (NMeFOSAA)	c ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236



Project Name:	57 TONAWANDA STREET	Lab Number:	L2003312
Project Number:	57 TONAWANDA	Report Date:	02/12/20
	Method Blank Analysis		

Method Blank Analysis Batch Quality Control

Analytical Method:	134,LCMSMS-ID	Extraction Method:	ALPHA 23528
Analytical Date:	02/08/20 09:40	Extraction Date:	01/27/20 07:58
Analyst:	JW		

Parameter	Result	Qualifier	Units	RL		MDL
Perfluorinated Alkyl Acids by Isot	ope Dilution -	Mansfield I	_ab for s	ample(s):	01-02	Batch:
WG1334086-1						

Surrogate (Extracted Internal Standard)	%Recovery	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92	2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	103	16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91	31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86	21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91	30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99	47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92	36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96	1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91	34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	86	42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85	38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	90	7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3- NMeFOSAA)	68	1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89	40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	40	1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	69	23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80	24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	79	33-143





Lab Control Sample Analysis Batch Quality Control

roject Name:	57 TONAWANDA STREET
roject Number:	57 TONAWANDA

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Report Date:	Lab Number:
02/12/20	L2003312

			,				
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02	- Mansfield Lab	Associated sa	mple(s): 01-02	Batch:	WG1334086-2	'G1334086-2 WG1334086-3	
Perfluorobutanoic Acid (PFBA)	100		101		67-148	_	30
Perfluoropentanoic Acid (PFPeA)	107		110		63-161	ω	30
Perfluorobutanesulfonic Acid (PFBS)	104		107		65-157	ω	30
Perfluorohexanoic Acid (PFHxA)	101		102		69-168	-	30
Perfluoroheptanoic Acid (PFHpA)	100		100		58-159	0	30
Perfluorohexanesulfonic Acid (PFHxS)	97		91		69-177	6	30
Perfluorooctanoic Acid (PFOA)	108		109		63-159	-	30
1H,1H,2H,2H-Perfluorooctanesulfonic	126		118		49-187	7	30
Perfluoroheptanesulfonic Acid (PFHpS)	108		101		61-179	7	30
Perfluorononanoic Acid (PFNA)	105		101		68-171	4	30
Perfluorooctanesulfonic Acid (PFOS)	110		101		52-151	9	30
Perfluorodecanoic Acid (PFDA)	66		86		63-171	1	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	123		122		56-173	-	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid	126		124		60-166	2	30
(NMeFOSAA) Perfluoroundecanoic Acid (PFUnA)	86		86		60-153	0	30
Perfluorodecanesulfonic Acid (PFDS)	114		106		38-156	7	30
Perfluorooctanesulfonamide (FOSA)	101		106		46-170	Сī	30
N-Ethyl Perfluorooctanesulfonamidoacetic	109		104		45-170	IJ	30
Perfluorododecanoic Acid (PFDoA)	101		110		67-153	9	30
Perfluorotridecanoic Acid (PFTrDA)	118		121		48-158	ω	30
Perfluorotetradecanoic Acid (PFTA)	107		109		59-182	N	30

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Lab Control Sample Analysis Batch Quality Control

Project Number:	Project Name:
Project Number: 57 TONAWANDA	57 TONAWANDA STREET
	Batch Quality Control
Report Date:	Lab Number:
02/12/20	L2003312

Parameter

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02 Batch: WG1334086-2 WG1334086-3

LCS %Recovery

Qual

LCSD %Recovery

Qual

%Recovery Limits

RPD

Qual

RPD Limits

	LCS) -	LCSD		Acceptance
Surrogate (Extracted Internal Standard)	%Recovery	Qual	%Recovery	Qual	Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	94		91		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		100		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		89		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	86		84		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	68		88		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		103		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		87		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	103		102		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		90		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	83		06		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		89		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	121		106		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	72		68		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		92		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	42		40		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		72		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	84		78		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	81		81		33-143





Matrix Spike Analysis Batch Quality Control

Project Name: 57 TONAWANDA STREET Project Number: 57 TONAWANDA

 Lab Number:
 L2003312

 Report Date:
 02/12/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual Fou	MSD Found %	MSD %Recovery Qual	Limits	RPD	Qual Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Client ID: MW4	otope Dilutio	n - Mansfield		Associated sample(s): 01-02	01-02 QC Batc	atch ID	: WG133408	h ID: WG1334086-4 WG1334086-5	QC Sa	QC Sample: L2003312-01
Perfluorobutanoic Acid (PFBA)	5.15	35.1	35.3	86	36.	ο, .ω	87	67-148	ω	30
Perfluoropentanoic Acid (PFPeA)	0.770J	35.1	36.9	105	35	35.6	100	63-161	4	30
Perfluorobutanesulfonic Acid (PFBS)	ND	31.1	28.8	93	28	28.1	89	65-157	N	30
Perfluorohexanoic Acid (PFHxA)	0.610J	35.1	35.3	101	35	35.1	86	69-168		30
Perfluoroheptanoic Acid (PFHpA)	0.206J	35.1	35.6	101	32	34.6	97	58-159	ω	30
Perfluorohexanesulfonic Acid (PFHxS)	ND	32	30.0	94	29	29.0	89	69-177	ω	30
Perfluorooctanoic Acid (PFOA)	0.535J	35.1	35.7	102	35	35.5	66	63-159		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	33.3	34.8	104	37	37.4	110	49-187	7	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	33.3	36.7	110	32	34.5	102	61-179	ი	30
Perfluorononanoic Acid (PFNA)	ND	35.1	34.9	100	33	33.8	95	68-171	ω	30
Perfluorooctanesulfonic Acid (PFOS)	ND	32.5	31.5	97	31	31.0	94	52-151	N	30
Perfluorodecanoic Acid (PFDA)	ND	35.1	34.4	86	33	33.9	95	63-171	-	30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	33.7	41.8	124	36	36.7	107	56-173	13	30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	35.1	36.0	103	36	36.7	103	60-166	Ν	30
Perfluoroundecanoic Acid (PFUnA)	ND	35.1	36.6	104	33	33.0	92	60-153	10	30
Perfluorodecanesulfonic Acid (PFDS)	ND	33.9	29.4	87	29	29.7	86	38-156	-	30
Perfluorooctanesulfonamide (FOSA)	ND	35.1	32.4	92	31	31.7	89	46-170	Ν	30
N-Ethyl Perfluorooctanesulfonamidoacetic	ND	35.1	36.1	103	38	35.2	66	45-170	ယ	30
Perfluorododecanoic Acid (PFDoA)	ND	35.1	36.6	104	32	34.6	97	67-153	6	30
Perfluorotridecanoic Acid (PFTrDA)	ND	35.1	40.1	114	38	38.2	107	48-158	J	30
	5	27.4	6 36	103	20	5 30	102	50-182	5	30

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Matrix Spike Analysis Batch Quality Control

Project Name: 57 TONAWANDA STREET
Project Number: 57 TONAWANDA

 Lab Number:
 L2003312

 Report Date:
 02/12/20

Parameter	Native Sample	MS Added F	MS Found	MS MSD %Recovery Qual Found	Qual	MSD Found	MSD Recovery RPD %Recovery Qual Limits RPD Qual Limits	Qual R	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-02 QC Batch Client ID: MW4	Isotope Dilution	- Mansfield Lal	b Associat	ed sample(s): (01-02	QC Batch I	ID: WG1334086-4 WG1334086-5 QC Sample: L2003312-C	6-4 WG	1334086-5	QC Sa	ample: L	.2003312-0

Perfluoro[13C8]Octanoic Acid (M8PFOA) Perfluoro[13C8]Octanesulfonic Acid (M8PFOS) Perfluoro[13C8]Octanesulfonamide (M8FOSA) Perfluoro[13C5]Pentanoic Acid (M5PFPEA) Perfluoro[13C4]Butanoic Acid (MPFBA) Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA) Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA) Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS) Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA) Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA) Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA) Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA) N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA) N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA) 1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS) 1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS) Surrogate (Extracted Internal Standard) % Recovery Qualifier 112 103 108 140 128 102 129 99 $\underline{\omega}$ 151 <u>%</u> 86 97 93 86 78 SW % Recovery Qualifier 101 135 115 103 129 <u>8</u> 103 91 27 79 97 93 85 88 72 72 MSD Acceptance Criteria 36-149 42-146 33-143 24-161 47-153 30-139 21-145 38-144 40-144 23-146 16-173 2-156 1-181 1-244 1-87 7-170



Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)

Perfluoro[13C9]Nonanoic Acid (M9PFNA)

117

102

96

34-146 31-159

99



Sample Receipt and Container Information

Project Number: 57 TONAWANDA

Project Name:

57 TONAWANDA STREET

Were project specific reporting limits specified? YES

L2003312-02A Plastic 250ml unpreserved	L2003312-01B2 Plastic 250ml unpreserved	L2003312-01B Plastic 250ml unpreserved L2003312-01B1 Plastic 250ml unpreserved	L2003312-01A2 Plastic 250ml unpreserved	L2003312-01A1 Plastic 250ml unpreserved	L2003312-01A Plastic 250ml unpreserved	Container Information Container ID Container Type	Cooler Information Cooler Custoc A Absent
served	served	served	served	served	served	õ	Custody Seal Absent
>	A	> >	A	A	A	Cooler	
NA NA	NA	NA NA	NA	NA	NA	Initial pH	
						Final pH	
ч. ч. б	4.5	4.5 4.5	4.5	4.5	4.5	Temp deg C Pres Seal	
< ~	\prec	~ ~	×	×	×	Pres	
Absent	Absent	Absent Absent	Absent	Absent	Absent	Seal	
						Frozen Date/Time	
A2-NY-537-ISOTOPE(14)	A2-NY-537-ISOTOPE(14)	A2-NY-537-ISOTOPE(14) A2-NY-537-ISOTOPE(14)	A2-NY-537-ISOTOPE(14)	A2-NY-537-ISOTOPE(14)	A2-NY-537-ISOTOPE(14)	Analysis(*)	

Serial_No:02122016:58 Lab Number: L2003312 Report Date: 02/12/20

Project Number: 57 TONAWANDA

Serial_No:02122016:58 Lab Number: L2003312 Report Date: 02/12/20

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluorooctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PFPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluorooctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PFPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluorooctanesulfonic Acid	6:2FTS	27619-97-2
	4:2FTS	
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4.2613	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluorooctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluorooctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluorooctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluorooctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluorooctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluorooctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluorooctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1



Project Number: 57 TONAWANDA

Lab Number: L2003312

Report Date: 02/12/20

GLOSSARY

Acronyms

Acronyms	
DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.
Footnotes	

Footnotes



Project Number: 57 TONAWANDA

Lab Number: L2003312 Report Date: 02/12/20

1

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NJ-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- **P** The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration



Project Number: 57 TONAWANDA

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 L2003312

 Report Date:
 02/12/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- **S** Analytical results are from modified screening analysis.



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003312

 Report Date:
 02/12/20

REFERENCES

134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW:</u> Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: <u>NPW</u>: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene. **Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8**: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



ANALYTICAL REPORT

Lab Number:	L2003315
Client:	Paradigm Environmental Services
	179 Lake Avenue
	Rochester, NY 14608
ATTN:	Jane Daloia
Phone:	(585) 647-2530
Project Name:	57 TONAWANDA STREET
Project Number:	57 TONAWANDA
Report Date:	01/30/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial	
I_No:0130201	
1:21	

L2003315 01/30/20

Alpha Sample ID	Project Name: Project Number:
Client ID	57 TONAWANDA STREET 57 TONAWANDA
Matrix	
Sample Location	
Collection Date/Time	Lab Number: Report Date:

L2003315-01 L2003315-02

MW4 MW5

WATER WATER

Not Specified Not Specified

01/23/20 09:30 01/23/20 11:20

01/23/20

01/23/20

Receive Date



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003315

 Report Date:
 01/30/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003315

 Report Date:
 01/30/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Herbicides

L2003315-01: The surrogate recoveries were outside the acceptance criteria for dcaa (13%, 15%); however, the recoveries were confirmed by the QC performed on this sample; therefore, re-extraction was not required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Custen Walker Cristin Walker

Title: Technical Director/Representative

Date: 01/30/20



ORGANICS



PESTICIDES



		Serial_No:01302011:21
Project Name:	57 TONAWANDA STREET	Lab Number: L2003315
Project Number:	57 TONAWANDA	Report Date: 01/30/20
	SAMPLE RESULTS	
Lab ID: Client ID: Sample Location:	L2003315-01 MW4 Not Specified	Date Collected:01/23/20 09:30Date Received:01/23/20Field Prep:Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst:	Water 1,8151A 01/27/20 22:10 JMC	Extraction Method: EPA 8151A Extraction Date: 01/25/20 02:41
Methylation Date:	01/26/20 06:41	

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fact	or Column
Chlorinated Herbicides by GC - We	estborough Lab						
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A
Surrogate			% Recovery	Qualifier	Accept Crite		Column
DCAA			13	Q	30	-150	А
DCAA			15	Q	30	-150	В



		Serial_No:01302011:21
Project Name:	57 TONAWANDA STREET	Lab Number: L2003315
Project Number:	57 TONAWANDA	Report Date: 01/30/20
	SAMPLE RESULTS	
Lab ID: Client ID:	L2003315-02 MW5	Date Collected:01/23/20 11:20Date Received:01/23/20
Sample Location:	Not Specified	Field Prep: Not Specified
Sample Depth:		
Matrix:	Water	Extraction Method: EPA 8151A
Analytical Method:	1,8151A	Extraction Date: 01/25/20 02:41
Analytical Date:	01/27/20 23:04	
Analyst:	JMC	
Methylation Date:	01/26/20 06:41	

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Fac	tor Column
Chlorinated Herbicides by GC -	Westborough Lab						
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	А
Surrogate			% Recovery	Qualifier	Accep Crit	otance eria	Column
DCAA			38		30)-150	А
DCAA			38		30)-150	В



Project Name: Project Number:	57 TONAWANDA STREET 57 TONAWANDA	Lab Number: Report Date:	L2003315 01/30/20
	Method Blank Analysis Batch Quality Control		
Analytical Method: Analytical Date: Analyst:	1,8151A 01/26/20 23:06 DGM	Extraction Method: Extraction Date:	EPA 8151A 01/25/20 02:34
Methylation Date:	01/26/20 06:41		

Parameter	Result	Qualifier	Units		RL	MDL	Column
Chlorinated Herbicides by GC -	Westborough I	_ab for sam	ple(s):	01-02	Batch:	WG1333731-	·1
2,4,5-TP (Silvex)	ND		ug/l		2.00	0.539	А

		Accepta	nce
Surrogate	%Recovery 0	Qualifier Criteri	a Column
DCAA	95	30-150	А
DCAA	83	30-150	В



Lab Control Sample Analysis Batch Quality Control

	LCS		LCSD	%	%Recovery			RPD	
Parameter	%Recovery Qual		%Recovery Qual		Limits	RPD	Qual	Limits Column	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1333731-2	gh Lab Associated sa	ample(s): 01-0;	2 Batch: W	/G1333731-2	WG1333731-3				
2,4,5-TP (Silvex)	80	ł	82		30-150	2		25	A

DCAA DCAA	Surrogate
83 87	LCS %Recovery (
85	LCSD Qual %Recovery Qual
30-150 30-150	Acceptance Criteria
BÞ	Column



Matrix Spike Analysis Batch Quality Control

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA STREET

 Lab Number:
 L2003315

 Report Date:
 01/30/20

MSD Recovery %Recovery Qual Limits RF 3731-4 WG1333731-5 QC Sample: 1	Native MS MS MSD MSD Recovery RPD Parameter Sample Added Found %Recovery Qual Found %Recovery Qual Limits RPD Qual Limits Column Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1333731-4 WG1333731-5 QC Sample: L2003315-01 Client ID: MW4 MW4 MS MS MS MSD MSD MSD Recovery Qual Limits Column	MS	% Recovery Qualitier	
7 Recovery very Qual Limits Rf VG1333731-5 QC Sample: I	D Recovery F very Qual Limits RPD Qual L VG1333731-5 QC Sample: L2003315-01	1.38J 28	1.38J N Recovery	
Limits RF QC Sample: L	lecovery Limits RPD Qual L QC Sample: L2003315-01	Q	Qualifier	Ω Qualifier
	D Qual L 2003315-01	30-150	30-150 4 Acceptance Criteria	30-150 , Acceptanc Criteria 30-150

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INORGANICS & MISCELLANEOUS



Serial No:01302011:21

Project Name: Project Number:	57 TONAWA 57 TONAWA		REET				Lab Nu Report		L2003315 01/30/20	
				SAMPLE	RESULI	ſS				
Lab ID:	L2003315-0	1					Date C	ollected:	01/23/20 09:30	0
Client ID:	MW4						Date R	eceived:	01/23/20	
Sample Location:	Not Specifie	d					Field P	rep:	Not Specified	
Sample Depth: Matrix:	Water									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
eneral Chemistry - We	stborough Lat)								
hromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/24/20 07:00	01/24/20 07:2	2 1,7196A	JA



Project Name: Project Number:	57 TONAWA 57 TONAWA		REET				Lab Nu Report		L2003315 01/30/20	
				SAMPLE	RESULI	S				
Lab ID:	L2003315-0	2					Date C	ollected:	01/23/20 11:20)
Client ID:	MW5						Date R	eceived:	01/23/20	
Sample Location:	Not Specifie	d					Field P	rep:	Not Specified	
Sample Depth: Matrix:	Water									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
eneral Chemistry - We	stborough Lat)								
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	01/24/20 07:00	01/24/20 07:2	5 1,7196A	JA



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003315

 Report Date:
 01/30/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifie	er Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	estborough Lab for s	ample(s): 0'	I-02 Bat	tch: WG	61333411-1				
Chromium, Hexavalent	ND	mg/l	0.010	0.003	1	01/24/20 07:00	01/24/20 07:21	1,7196A	JA



	ab
Batch Quality Control	Control Sample Analysis

	Project Numbe	Project Name:
	Project Number: 57 TONAWANDA	57 TONAWANDA STREET
LCS		
3D %Recoverv		
	Report Date:	Lab Number:
	01/30/20	L2003315

Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG1333411-2	ssociated sample(s)): 01-02	Batch: WG13334	411-2		

103

,

Chromium, Hexavalent

85-115 -

20

Qual RPD Limits



Matrix Spike Analysis Batch Quality Control

Project Number:	Project Name:
57 TONAWANDA	57 TONAWANDA STREET

 Lab Number:
 L2003315

 Report Date:
 01/30/20

Chromium, Hexavalent	General Chemistry - W MW4	Parameter
ND	estborough Lab Assc	Native Sample
0.1	ciated sam	MS Added
0.103	ple(s): 01-02	MS Found
103	2 QC Batch II	MS %Recovery
0.098	D: WG1333411-4	MS MS MSD Found %Recovery Qual Found
86	WG1333411-5	MSD %Recovery
85-115 5	General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1333411-4 WG1333411-5 QC Sample: L2003315-01 Client ID: MW4	MSD Recovery %Recovery Qual Limits RPD Qual
20	Client ID:	RPD Qual Limits



⁹ D Limits	Qual RI	RPD	Units	Duplicate Sample Units RPD Qual RPD Limits	Native Sample		Parameter
L2003315 01/30/20	Lab Number: Report Date:	Lat Rep	Š	Lab Duplicate Analysis Batch Quality Control		57 TONAWANDA STREET 57 TONAWANDA	Project Name: 57 TONAWANDA Project Number: 57 TONAWANDA

General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1333411-3 QC Sample: L2003315-01 Client ID: MW4

ND

ND

mg/l

NC

20

Chromium, Hexavalent

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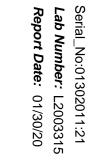
Project Name: 57 TONAWANDA STREET Project Number: 57 TONAWANDA

Sample Receipt and Container Information

YES

Were project specific reporting limits specified?

HEXCR-7196(1)		Absent	×	4.5	7	7	A	Plastic 250ml unpreserved	L2003315-02B
HERB-APA(7)		Absent	×	4.5	7	7	A	Amber 1000ml unpreserved	L2003315-02A
HEXCR-7196(1)		Absent	×	4.5	7	7	A	Plastic 250ml unpreserved	L2003315-01B2
HEXCR-7196(1)		Absent	×	4.5	7	7	A	Plastic 250ml unpreserved	L2003315-01B1
HEXCR-7196(1)		Absent	×	4.5	7	7	A	Plastic 250ml unpreserved	L2003315-01B
HERB-APA(7)		Absent	×	4.5	7	7	A	Amber 1000ml unpreserved	L2003315-01A2
HERB-APA(7)		Absent	×	4.5	7	7	A	Amber 1000ml unpreserved	L2003315-01A1
HERB-APA(7)		Absent	×	4.5	7	7	A	Amber 1000ml unpreserved	L2003315-01A
Analysis(*)	Frozen Date/Time	Seal	Pres	Temp deg C Pres Seal	Final pH	Initial pH	Cooler	Container Information Container ID Container Type	Container Information Container ID Contai
								Absent	A
								ation Custody Seal	Cooler Information Cooler



Project Number: 57 TONAWANDA

Lab Number: L2003315

Report Date: 01/30/20

GLOSSARY

Acronyms

Acronyms	
DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.
Footnotes	

Footnotes



Project Number: 57 TONAWANDA

Lab Number: L2003315 Report Date: 01/30/20

1

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum. Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NJ-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- ${f P}$ The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration



Project Number: 57 TONAWANDA

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Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- **S** Analytical results are from modified screening analysis.



Project Name:57 TONAWANDA STREETProject Number:57 TONAWANDA

 Lab Number:
 L2003315

 Report Date:
 01/30/20

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: <u>NPW:</u> Dimethylnaphthalene,1,4-Diphenylhydrazine; <u>SCM</u>: Dimethylnaphthalene,1,4-Diphenylhydrazine. **SM4500**: <u>NPW</u>: Amenable Cyanide; <u>SCM</u>: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: <u>NPW:</u> PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187. **EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene. **Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

IDP: Email: SO - Soil SD - Soil SD - Soil SD - Soil SL - Sludge PT - Paint SL - Sludge SL - Sludge SL - Sludge PT - Paint SL - Sludge SL - Sludge SL - Sludge SL - Sludge <	2	01:0	1/24/30 01:00	1/2		ł	2	Le	N.	Wender		_	Other EDD			Other		Other
PARADIGM REPORT TO: INVOICE TO: INVOICE TO: Imagine Fradigment Construction Imagine Fradigment Constructio	9	1519	020	Date/Th		AC	14	La la	(10)	Received B				3	œ	Category		Rush 2 day Rush 1 day
PROJECT NO. Involution REPORT TO: Involution Notice To: Image: String String Image: String String Image: String St		IS a	13/20	Date/Th		AA)	10	513	d By			8	Basic ED		Þ	Batch QC Category		lū day Rush 3 day
RADIGM REPORT TO: Invoice To: Invoice To: None Tradigm Environmental Cum Same Invoice To: None Tradigm Environmental Cum Same Invoice To: None Same Invoice To: ECT REFERENCE NNE Issue Invoice Same Invoice To: None Invoice To: Invoice To		2072	THE COT	Date/Ti	1			2º	X	Sampled By			None Re		uired	None Rec	0	Standard 5 day
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179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

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Iaround Time Report Supplements Availability contingent upon lab approval; additional fees may apply. Availability contingent upon lab approval; additional fees may apply. Availability contingent upon lab approval; additional fees may apply. Availability contingent upon lab approval; additional fees may apply. Batch QC Basic EDD Category A Basic EDD Category B Querter EDD Other Other EDD platase indicate package needed: Platase indicate EDD needed	mwy mwy -ms mwy -ms mws mws	CLENT: SES Care ADDRESS: 1270 Without CITY: Suffaulto STAE. PHONE: Suffaulto STAE. Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid
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179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

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Chain of Custody Supplement

Client:	BEZ	Completed by:	milhail						
Lab Project ID:	<u>Sample Condition</u>	Date:	[123/2020						
Sample Condition Requirements Per NELAC/ELAP 210/241/242/243/244									
NELAC compliance with the sample condition requirements upon receiptConditionYesNoN/A									
Container Type Comment	s								
Transferred to method- compliant container			⊂ x						
Headspace (<1 mL) Comment	s		□¥□						
Preservation Comment	s		SVOA Pert pcB						
Chlorine Absent (<0.10 ppm per test strip) Comment	s								
Holding Time Comment	s								
Femperature Comment	sY°Ciad		neit						
Compliant Sample Quantity Comment									
Comment	Hexce, Silver, Pi=AS	FITCN not in a	sub-lat						

Date: *16-Mar-20*

CLIENT:BE3/PanamericanClient Sample ID:SS01Lab Order:C2003030Tag Number:1182,390Project:Fedders LoftCollection Date:3/5/2020Lab ID:C2003030-001AMatrix:AIR

Analyses	Result	DL	Qual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-	15		Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82	ug/m3	1	3/12/2020 7:10:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	3/12/2020 7:10:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	3/12/2020 7:10:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 7:10:00 PM
1,1-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 7:10:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	3/12/2020 7:10:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 7:10:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	3/12/2020 7:10:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 7:10:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 7:10:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	3/12/2020 7:10:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 7:10:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	3/12/2020 7:10:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 7:10:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 7:10:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	3/12/2020 7:10:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	3/12/2020 7:10:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	3/12/2020 7:10:00 PM
Acetone	8.8	7.1	ug/m3	10	3/12/2020 11:49:00 PM
Allyl chloride	< 0.47	0.47	ug/m3	1	3/12/2020 7:10:00 PM
Benzene	0.80	0.48	ug/m3	1	3/12/2020 7:10:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	3/12/2020 7:10:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	3/12/2020 7:10:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	3/12/2020 7:10:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	3/12/2020 7:10:00 PM
Carbon disulfide	< 0.47	0.47	ug/m3	1	3/12/2020 7:10:00 PM
Carbon tetrachloride	< 0.94	0.94	ug/m3	1	3/12/2020 7:10:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	3/12/2020 7:10:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	3/12/2020 7:10:00 PM
Chloroform	< 0.73	0.73	ug/m3	1	3/12/2020 7:10:00 PM
Chloromethane	0.87	0.31	ug/m3	1	3/12/2020 7:10:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 7:10:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	3/12/2020 7:10:00 PM
Cyclohexane	1.5	0.52	ug/m3	1	3/12/2020 7:10:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	3/12/2020 7:10:00 PM
Ethyl acetate	< 0.54	0.54	ug/m3	1	3/12/2020 7:10:00 PM
Ethylbenzene	< 0.65	0.65	ug/m3	1	3/12/2020 7:10:00 PM
Freon 11	1.3	0.84	ug/m3	1	3/12/2020 7:10:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	3/12/2020 7:10:00 PM
Freon 114	< 1.1	1.1	ug/m3	1	3/12/2020 7:10:00 PM

Qualifiers: SC Sub-Contracted

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

DL Detection Limit

.

CLIENT:	BE3/Panamerican	Client Sample ID: SS01
Lab Order:	C2003030	Tag Number: 1182,390
Project:	Fedders Loft	Collection Date: 3/5/2020
Lab ID:	C2003030-001A	Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		то)-15			Analyst: RJP
Freon 12	2.6	0.74		ug/m3	1	3/12/2020 7:10:00 PM
Heptane	2.0	0.61		ug/m3	1	3/12/2020 7:10:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/12/2020 7:10:00 PM
Hexane	2.5	0.53		ug/m3	1	3/12/2020 7:10:00 PM
Isopropyl alcohol	5.1	0.37		ug/m3	1	3/12/2020 7:10:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	3/12/2020 7:10:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	3/12/2020 7:10:00 PM
Methyl Ethyl Ketone	0.65	0.88	J	ug/m3	1	3/12/2020 7:10:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	3/12/2020 7:10:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/12/2020 7:10:00 PM
Methylene chloride	0.90	0.52		ug/m3	1	3/12/2020 7:10:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	3/12/2020 7:10:00 PM
Propylene	< 0.26	0.26		ug/m3	1	3/12/2020 7:10:00 PM
Styrene	< 0.64	0.64		ug/m3	1	3/12/2020 7:10:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	3/12/2020 7:10:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	3/12/2020 7:10:00 PM
Toluene	1.4	0.57		ug/m3	1	3/12/2020 7:10:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/12/2020 7:10:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/12/2020 7:10:00 PM
Trichloroethene	5.7	0.81		ug/m3	1	3/12/2020 7:10:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	3/12/2020 7:10:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/12/2020 7:10:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/12/2020 7:10:00 PM

Qualifiers:	SC	Sub-Contracted		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	I	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D 0 610
	S	Spike Recovery outside accepted recovery limits	DL	Detection Limit	Page 2 of 12

Date: 16-Mar-20

CLIENT: BE3/Panamerican Client Sample ID: SS02 Lab Order: C2003030 Tag Number: 365,391 Collection Date: 3/5/2020 **Project:** Fedders Loft Matrix: AIR C2003030-002A Lab ID:

Analyses	Result	DL	Qual Ur	uits DH	F Date Analyzed
1UG/M3 BY METHOD TO15		TO	-15		Analyst: RJP
1,1,1-Trichloroethane	1.3	0.82	ug/	m3 1	3/12/2020 7:57:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/	m3 1	3/12/2020 7:57:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/	m3 1	3/12/2020 7:57:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/	m3 1	3/12/2020 7:57:00 PM
1,1-Dichloroethene	< 0.59	0.59	ug/	m3 1	3/12/2020 7:57:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/	m3 1	3/12/2020 7:57:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/	m3 1	3/12/2020 7:57:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/	m3 1	3/12/2020 7:57:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/	m3 1	3/12/2020 7:57:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/	m3 1	3/12/2020 7:57:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/	m3 1	3/12/2020 7:57:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/	m3 1	3/12/2020 7:57:00 PM
1,3-butadiene	< 0.33	0.33	ug/	m3 1	3/12/2020 7:57:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	-	m3 1	3/12/2020 7:57:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/	m3 1	3/12/2020 7:57:00 PM
1,4-Dioxane	< 1.1	1.1	-	m3 1	3/12/2020 7:57:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	-	m3 1	3/12/2020 7:57:00 PM
4-ethyltoluene	< 0.74	0.74	-	m3 1	3/12/2020 7:57:00 PM
Acetone	31	7.1	-	m3 10	3/13/2020 12:34:00 AM
Allyl chloride	< 0.47	0.47	-	m3 1	3/12/2020 7:57:00 PM
Benzene	5.8	0.48	-	m3 1	3/12/2020 7:57:00 PM
Benzyl chloride	< 0.86	0.86	ug/		3/12/2020 7:57:00 PM
Bromodichloromethane	< 1.0	1.0	-	m3 1	3/12/2020 7:57:00 PM
Bromoform	< 1.6	1.6	-	m3 1	3/12/2020 7:57:00 PM
Bromomethane	< 0.58	0.58	0	m3 1	3/12/2020 7:57:00 PM
Carbon disulfide	2.1	0.47	-	m3 1	3/12/2020 7:57:00 PM
Carbon tetrachloride	2.8	0.94	-	m3 1	3/12/2020 7:57:00 PM
Chlorobenzene	< 0.69	0.69	ug/		3/12/2020 7:57:00 PM
Chloroethane	< 0.40	0.40	ug/		3/12/2020 7:57:00 PM
Chloroform	0.63	0.73	-	m3 1	3/12/2020 7:57:00 PM
Chloromethane	< 0.31	0.31		m3 1	3/12/2020 7:57:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59	-	m3 1	3/12/2020 7:57:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	-	m3 1	3/12/2020 7:57:00 PM
Cyclohexane	< 0.08 17	5.2	-	m3 10	3/13/2020 12:34:00 AM
Dibromochloromethane	< 1.3	5.2 1.3	ug/ ug/		3/12/2020 7:57:00 PM
Ethyl acetate	< 1.3	0.54	ug/ ug/		3/12/2020 7:57:00 PM
Ethylbenzene	< 0.65	0.54	-	m3 1	3/12/2020 7:57:00 PM
Freon 11	< 0.65	0.65	0		
			0	-	3/12/2020 7:57:00 PM
Freon 113 Freon 114	< 1.1 < 1.0	1.1 1.0	-	m3 1 m3 1	3/12/2020 7:57:00 PM 3/12/2020 7:57:00 PM

Qualifiers: SC Sub-Contracted

> Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Н

Non-routine analyte. Quantitation estimated. JN

Spike Recovery outside accepted recovery limits S

Results reported are not blank corrected

Е Estimated Value above quantitation range

J Analyte detected below quantitation limit

Not Detected at the Limit of Detection ND DL Detection Limit

Date: 16-Mar-20

CLIENT:	BE3/Panamerican	Client Sample ID: SS02
Lab Order:	C2003030	Tag Number: 365,391
Project:	Fedders Loft	Collection Date: 3/5/2020
Lab ID:	C2003030-002A	Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
Freon 12	2.6	0.74		ug/m3	1	3/12/2020 7:57:00 PM
Heptane	16	6.1		ug/m3	10	3/13/2020 12:34:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/12/2020 7:57:00 PM
Hexane	19	5.3		ug/m3	10	3/13/2020 12:34:00 AM
Isopropyl alcohol	5.9	3.7		ug/m3	10	3/13/2020 12:34:00 AM
m&p-Xylene	0.74	1.3	J	ug/m3	1	3/12/2020 7:57:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	3/12/2020 7:57:00 PM
Methyl Ethyl Ketone	2.7	0.88		ug/m3	1	3/12/2020 7:57:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	3/12/2020 7:57:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/12/2020 7:57:00 PM
Methylene chloride	4.7	0.52		ug/m3	1	3/12/2020 7:57:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	3/12/2020 7:57:00 PM
Propylene	< 0.26	0.26		ug/m3	1	3/12/2020 7:57:00 PM
Styrene	< 0.64	0.64		ug/m3	1	3/12/2020 7:57:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	3/12/2020 7:57:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	3/12/2020 7:57:00 PM
Toluene	7.5	0.57		ug/m3	1	3/12/2020 7:57:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/12/2020 7:57:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/12/2020 7:57:00 PM
Trichloroethene	5.2	0.81		ug/m3	1	3/12/2020 7:57:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	3/12/2020 7:57:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/12/2020 7:57:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/12/2020 7:57:00 PM

Qualifiers:	SC	Sub-Contracted		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D 4 6 1 2
	S	Spike Recovery outside accepted recovery limits	DL	Detection Limit	Page 4 of 12

Date: 16-Mar-20

CLIENT:BE3/PanamericanClient Sample ID: SS03Lab Order:C2003030Tag Number: 1318,397Project:Fedders LoftCollection Date: 3/5/2020Lab ID:C2003030-003AMatrix: AIR

Analyses	Result	DL Q	ual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-1	5		Analyst: RJP
1,1,1-Trichloroethane	0.65	0.82	J ug/m3	1	3/12/2020 8:44:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	3/12/2020 8:44:00 PM
1,1,2-Trichloroethane	0.93	0.82	ug/m3	1	3/12/2020 8:44:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 8:44:00 PM
1,1-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 8:44:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	3/12/2020 8:44:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 8:44:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	3/12/2020 8:44:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 8:44:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 8:44:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	3/12/2020 8:44:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 8:44:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	3/12/2020 8:44:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 8:44:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 8:44:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	3/12/2020 8:44:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	3/12/2020 8:44:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	3/12/2020 8:44:00 PM
Acetone	15	7.1	ug/m3	10	3/13/2020 1:19:00 AM
Allyl chloride	< 0.47	0.47	ug/m3	1	3/12/2020 8:44:00 PM
Benzene	1.8	0.48	ug/m3	1	3/12/2020 8:44:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	3/12/2020 8:44:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	3/12/2020 8:44:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	3/12/2020 8:44:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	3/12/2020 8:44:00 PM
Carbon disulfide	1.3	0.47	ug/m3	1	3/12/2020 8:44:00 PM
Carbon tetrachloride	< 0.94	0.94	ug/m3	1	3/12/2020 8:44:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	3/12/2020 8:44:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	3/12/2020 8:44:00 PM
Chloroform	8.0	0.73	ug/m3	1	3/12/2020 8:44:00 PM
Chloromethane	< 0.31	0.31	ug/m3	1	3/12/2020 8:44:00 PM
cis-1,2-Dichloroethene	4.0	0.59	ug/m3	1	3/12/2020 8:44:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	3/12/2020 8:44:00 PM
Cyclohexane	8.3	5.2	ug/m3	10	3/13/2020 1:19:00 AM
Dibromochloromethane	< 1.3	1.3	ug/m3	10	3/12/2020 8:44:00 PM
Ethyl acetate	< 0.54	0.54	ug/m3	1	3/12/2020 8:44:00 PM
Ethylbenzene	< 0.65	0.65	ug/m3	1	3/12/2020 8:44:00 PM
Freon 11	< 0.65	0.85	ug/m3	1	3/12/2020 8:44:00 PM
Freon 113	1.2 < 1.1	0.84 1.1	-		3/12/2020 8:44:00 PM 3/12/2020 8:44:00 PM
Freon 113 Freon 114	< 1.1 < 1.0	1.1	ug/m3 ug/m3	1 1	3/12/2020 8:44:00 PM 3/12/2020 8:44:00 PM

Qualifiers: SC Sub-Contracted

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection DL Detection Limit

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CLIENT:	BE3/Panamerican	Client Sample ID: SS03
Lab Order:	C2003030	Tag Number: 1318,397
Project:	Fedders Loft	Collection Date: 3/5/2020
Lab ID:	C2003030-003A	Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		тс	0-15			Analyst: RJP
Freon 12	2.5	0.74		ug/m3	1	3/12/2020 8:44:00 PM
Heptane	23	6.1		ug/m3	10	3/13/2020 1:19:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/12/2020 8:44:00 PM
Hexane	41	5.3		ug/m3	10	3/13/2020 1:19:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	3/12/2020 8:44:00 PM
m&p-Xylene	0.43	1.3	J	ug/m3	1	3/12/2020 8:44:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	3/12/2020 8:44:00 PM
Methyl Ethyl Ketone	2.4	0.88		ug/m3	1	3/12/2020 8:44:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	3/12/2020 8:44:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/12/2020 8:44:00 PM
Methylene chloride	3.2	0.52		ug/m3	1	3/12/2020 8:44:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	3/12/2020 8:44:00 PM
Propylene	< 0.26	0.26		ug/m3	1	3/12/2020 8:44:00 PM
Styrene	< 0.64	0.64		ug/m3	1	3/12/2020 8:44:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	3/12/2020 8:44:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	3/12/2020 8:44:00 PM
Toluene	2.9	0.57		ug/m3	1	3/12/2020 8:44:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	3/12/2020 8:44:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/12/2020 8:44:00 PM
Trichloroethene	7400	810		ug/m3	972	3/13/2020 1:15:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	3/12/2020 8:44:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/12/2020 8:44:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/12/2020 8:44:00 PM

Qualifiers:	SC	Sub-Contracted		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D ((12
	S	Spike Recovery outside accepted recovery limits	DL	Detection Limit	Page 6 of 12

Date: 16-Mar-20

CLIENT:BE3/PanamericanClient Sample ID: SS04Lab Order:C2003030Tag Number: 422,452Project:Fedders LoftCollection Date: 3/5/2020Lab ID:C2003030-004AMatrix: AIR

Analyses	Result	DL	Qual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		то-	15		Analyst: RJP
1,1,1-Trichloroethane	25	0.82	ug/m3	1	3/12/2020 9:30:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	3/12/2020 9:30:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	3/12/2020 9:30:00 PM
1,1-Dichloroethane	1.3	0.61	ug/m3	1	3/12/2020 9:30:00 PM
1,1-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 9:30:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	3/12/2020 9:30:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 9:30:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	3/12/2020 9:30:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 9:30:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 9:30:00 PM
1,2-Dichloropropane	7.2	0.69	ug/m3	1	3/12/2020 9:30:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 9:30:00 PM
1,3-butadiene	7.1	0.33	ug/m3	1	3/12/2020 9:30:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 9:30:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 9:30:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	3/12/2020 9:30:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	3/12/2020 9:30:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	3/12/2020 9:30:00 PM
Acetone	31	7.1	ug/m3	10	3/13/2020 2:04:00 AM
Allyl chloride	0.53	0.47	ug/m3	1	3/12/2020 9:30:00 PM
Benzene	2.6	0.48	ug/m3	1	3/12/2020 9:30:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	3/12/2020 9:30:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	3/12/2020 9:30:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	3/12/2020 9:30:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	3/12/2020 9:30:00 PM
Carbon disulfide	0.31	0.47	J ug/m3	1	3/12/2020 9:30:00 PM
Carbon tetrachloride	< 0.94	0.94	ug/m3	1	3/12/2020 9:30:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	3/12/2020 9:30:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	3/12/2020 9:30:00 PM
Chloroform	3.7	0.73	ug/m3	1	3/12/2020 9:30:00 PM
Chloromethane	< 0.31	0.31	ug/m3	1	3/12/2020 9:30:00 PM
cis-1,2-Dichloroethene	38	5.9	ug/m3	10	3/13/2020 2:04:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	3/12/2020 9:30:00 PM
Cyclohexane	9.6	5.2	ug/m3	10	3/13/2020 2:04:00 AM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	3/12/2020 9:30:00 PM
Ethyl acetate	0.54	0.54	ug/m3	1	3/12/2020 9:30:00 PM
Ethylbenzene	< 0.65	0.65	ug/m3	1	3/12/2020 9:30:00 PM
Freon 11	1.1	0.84	ug/m3	1	3/12/2020 9:30:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	3/12/2020 9:30:00 PM
Freon 114	< 1.0	1.0	ug/m3	1	3/12/2020 9:30:00 PM

Qualifiers: SC Sub-Contracted

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection DL Detection Limit

Date: 16-Mar-20

CLIENT:BE3/PanamericanClient Sample ID: SS04Lab Order:C2003030Tag Number: 422,452Project:Fedders LoftCollection Date: 3/5/2020Lab ID:C2003030-004AMatrix: AIR

Analyses	Result DL Qual Units			Units	DF	Date Analyzed	
1UG/M3 BY METHOD TO15	TO-15					Analyst: RJP	
Freon 12	2.4	0.74		ug/m3	1	3/12/2020 9:30:00 PM	
Heptane	11	6.1		ug/m3	10	3/13/2020 2:04:00 AM	
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/12/2020 9:30:00 PM	
Hexane	12	5.3		ug/m3	10	3/13/2020 2:04:00 AM	
Isopropyl alcohol	2.6	0.37		ug/m3	1	3/12/2020 9:30:00 PM	
m&p-Xylene	0.61	1.3	J	ug/m3	1	3/12/2020 9:30:00 PM	
Methyl Butyl Ketone	1.4	1.2		ug/m3	1	3/12/2020 9:30:00 PM	
Methyl Ethyl Ketone	3.0	0.88		ug/m3	1	3/12/2020 9:30:00 PM	
Methyl Isobutyl Ketone	1.0	1.2	J	ug/m3	1	3/12/2020 9:30:00 PM	
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/12/2020 9:30:00 PM	
Methylene chloride	2.8	0.52		ug/m3	1	3/12/2020 9:30:00 PM	
o-Xylene	< 0.65	0.65		ug/m3	1	3/12/2020 9:30:00 PM	
Propylene	6.7	0.26		ug/m3	1	3/12/2020 9:30:00 PM	
Styrene	< 0.64	0.64		ug/m3	1	3/12/2020 9:30:00 PM	
Tetrachloroethylene	1.2	1.0		ug/m3	1	3/12/2020 9:30:00 PM	
Tetrahydrofuran	2.5	0.44		ug/m3	1	3/12/2020 9:30:00 PM	
Toluene	4.9	0.57		ug/m3	1	3/12/2020 9:30:00 PM	
trans-1,2-Dichloroethene	4.1	0.59		ug/m3	1	3/12/2020 9:30:00 PM	
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/12/2020 9:30:00 PM	
Trichloroethene	4700	1900		ug/m3	2430	3/13/2020 2:00:00 PM	
Vinyl acetate	1.3	0.53		ug/m3	1	3/12/2020 9:30:00 PM	
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/12/2020 9:30:00 PM	
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/12/2020 9:30:00 PM	

Qualifiers:	SC	Sub-Contracted		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D 0 6 1 0
S		Spike Recovery outside accepted recovery limits	DL	Detection Limit	Page 8 of 12

Date: 16-Mar-20

CLIENT: BE3/Panamerican Client Sample ID: SS05 Lab Order: C2003030 **Tag Number: 569,446** Collection Date: 3/5/2020 **Project:** Fedders Loft Matrix: AIR C2003030-005A Lab ID:

Analyses	Result	DL	Qual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-	15		Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82	ug/m3	1	3/12/2020 10:17:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	3/12/2020 10:17:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	3/12/2020 10:17:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 10:17:00 PM
1,1-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 10:17:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	3/12/2020 10:17:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 10:17:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	3/12/2020 10:17:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 10:17:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 10:17:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	3/12/2020 10:17:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 10:17:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	3/12/2020 10:17:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 10:17:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 10:17:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	3/12/2020 10:17:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	3/12/2020 10:17:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	3/12/2020 10:17:00 PM
Acetone	17	7.1	ug/m3	10	3/13/2020 2:50:00 AM
Allyl chloride	< 0.47	0.47	ug/m3	1	3/12/2020 10:17:00 PM
Benzene	26	4.8	ug/m3	10	3/13/2020 2:50:00 AM
Benzyl chloride	< 0.86	0.86	ug/m3	1	3/12/2020 10:17:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	3/12/2020 10:17:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	3/12/2020 10:17:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	3/12/2020 10:17:00 PM
Carbon disulfide	1.7	0.47	ug/m3	1	3/12/2020 10:17:00 PM
Carbon tetrachloride	< 0.94	0.94	ug/m3	1	3/12/2020 10:17:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	3/12/2020 10:17:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	3/12/2020 10:17:00 PM
Chloroform	14	7.3	ug/m3	10	3/13/2020 2:50:00 AM
Chloromethane	< 0.31	0.31	ug/m3	1	3/12/2020 10:17:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 10:17:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	3/12/2020 10:17:00 PM
Cyclohexane	< 0.52	0.52	ug/m3	1	3/12/2020 10:17:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	3/12/2020 10:17:00 PM
Ethyl acetate	< 0.54	0.54	ug/m3	1	3/12/2020 10:17:00 PM
Ethylbenzene	< 0.54 < 0.65	0.54	ug/m3	1	3/12/2020 10:17:00 PM
Freon 11	< 0.65	0.85	ug/m3	1	3/12/2020 10:17:00 PM
Freon 113	1.1 < 1.1	0.84	0	1	3/12/2020 10:17:00 PM 3/12/2020 10:17:00 PM
Freon 113	< 1.1 < 1.0	1.1	ug/m3 ug/m3	1	3/12/2020 10:17:00 PM 3/12/2020 10:17:00 PM

Qualifiers: SC Sub-Contracted

> Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Н

Non-routine analyte. Quantitation estimated. JN

Spike Recovery outside accepted recovery limits S

Results reported are not blank corrected

Е Estimated Value above quantitation range J

Analyte detected below quantitation limit

Not Detected at the Limit of Detection DL Detection Limit

ND

Page 9 of 12

Date: 16-Mar-20

CLIENT:	BE3/Panamerican	Client Sample ID: SS05
Lab Order:	C2003030	Tag Number: 569,446
Project:	Fedders Loft	Collection Date: 3/5/2020
Lab ID:	C2003030-005A	Matrix: AIR

Analyses	Result	DL Q	ual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-1	5		Analyst: RJP
Freon 12	2.3	0.74	ug/m3	1	3/12/2020 10:17:00 PM
Heptane	420	25	ug/m3	40	3/13/2020 7:03:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6	ug/m3	1	3/12/2020 10:17:00 PM
Hexane	720	21	ug/m3	40	3/13/2020 7:03:00 AM
Isopropyl alcohol	< 0.37	0.37	ug/m3	1	3/12/2020 10:17:00 PM
m&p-Xylene	2.4	1.3	ug/m3	1	3/12/2020 10:17:00 PM
Methyl Butyl Ketone	< 1.2	1.2	ug/m3	1	3/12/2020 10:17:00 PM
Methyl Ethyl Ketone	< 0.88	0.88	ug/m3	1	3/12/2020 10:17:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2	ug/m3	1	3/12/2020 10:17:00 PM
Methyl tert-butyl ether	< 0.54	0.54	ug/m3	1	3/12/2020 10:17:00 PM
Methylene chloride	3.5	0.52	ug/m3	1	3/12/2020 10:17:00 PM
o-Xylene	< 0.65	0.65	ug/m3	1	3/12/2020 10:17:00 PM
Propylene	< 0.26	0.26	ug/m3	1	3/12/2020 10:17:00 PM
Styrene	< 0.64	0.64	ug/m3	1	3/12/2020 10:17:00 PM
Tetrachloroethylene	1.8	1.0	ug/m3	1	3/12/2020 10:17:00 PM
Tetrahydrofuran	< 0.44	0.44	ug/m3	1	3/12/2020 10:17:00 PM
Toluene	18	5.7	ug/m3	10	3/13/2020 2:50:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 10:17:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	3/12/2020 10:17:00 PM
Trichloroethene	19000	1900	ug/m3	2430	3/13/2020 2:46:00 PM
Vinyl acetate	< 0.53	0.53	ug/m3	1	3/12/2020 10:17:00 PM
Vinyl Bromide	< 0.66	0.66	ug/m3	1	3/12/2020 10:17:00 PM
Vinyl chloride	< 0.38	0.38	ug/m3	1	3/12/2020 10:17:00 PM

Qualifiers:	SC	Sub-Contracted		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	I Holding times for preparation or analysis exceeded J Analyte of		Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D 10 610
	S Spike Recovery outside accepted recovery limit		DL	Detection Limit	Page 10 of 12

CLIENT: BE3/Panamerican Client Sample ID: SS06 Lab Order: C2003030 **Tag Number: 87,394** Collection Date: 3/5/2020 **Project:** Fedders Loft Matrix: AIR C2003030-006A Lab ID:

Analyses	Result	DL	Qual Units	Units DF Date A		
1UG/M3 BY METHOD TO15	TO-15				Analyst: RJP	
1,1,1-Trichloroethane	15	0.82	ug/m3	1	3/12/2020 11:04:00 PM	
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	3/12/2020 11:04:00 PM	
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	3/12/2020 11:04:00 PM	
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 11:04:00 PM	
1,1-Dichloroethene	< 0.59	0.59	ug/m3	1	3/12/2020 11:04:00 PM	
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	3/12/2020 11:04:00 PM	
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 11:04:00 PM	
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	3/12/2020 11:04:00 PM	
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 11:04:00 PM	
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	3/12/2020 11:04:00 PM	
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	3/12/2020 11:04:00 PM	
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	3/12/2020 11:04:00 PM	
1,3-butadiene	< 0.33	0.33	ug/m3	1	3/12/2020 11:04:00 PM	
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 11:04:00 PM	
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	3/12/2020 11:04:00 PM	
1,4-Dioxane	2.7	1.1	ug/m3	1	3/12/2020 11:04:00 PM	
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	3/12/2020 11:04:00 PM	
4-ethyltoluene	< 0.74	0.74	ug/m3	1	3/12/2020 11:04:00 PM	
Acetone	110	14	ug/m3	20	3/13/2020 7:48:00 AM	
Allyl chloride	< 0.47	0.47	ug/m3	1	3/12/2020 11:04:00 PM	
Benzene	2.1	0.48	ug/m3	1	3/12/2020 11:04:00 PM	
Benzyl chloride	< 0.86	0.86	ug/m3	1	3/12/2020 11:04:00 PM	
Bromodichloromethane	< 1.0	1.0	ug/m3	1	3/12/2020 11:04:00 PM	
Bromoform	< 1.6	1.6	ug/m3	1	3/12/2020 11:04:00 PM	
Bromomethane	< 0.58	0.58	ug/m3	1	3/12/2020 11:04:00 PM	
Carbon disulfide	17	4.7	ug/m3	10	3/13/2020 3:35:00 AM	
Carbon tetrachloride	< 0.94	0.94	ug/m3	1	3/12/2020 11:04:00 PM	
Chlorobenzene	< 0.69	0.69	ug/m3	1	3/12/2020 11:04:00 PM	
Chloroethane	< 0.40	0.40	ug/m3	1	3/12/2020 11:04:00 PM	
Chloroform	0.93	0.73	ug/m3	1	3/12/2020 11:04:00 PM	
Chloromethane	0.62	0.31	ug/m3	1	3/12/2020 11:04:00 PM	
cis-1,2-Dichloroethene	1.0	0.59	ug/m3	1	3/12/2020 11:04:00 PM	
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	3/12/2020 11:04:00 PM	
Cyclohexane	14	5.2	ug/m3	10	3/13/2020 3:35:00 AM	
Dibromochloromethane	< 1.3	1.3	ug/m3	1	3/12/2020 11:04:00 PM	
Ethyl acetate	< 0.54	0.54	ug/m3	1	3/12/2020 11:04:00 PM	
Ethylbenzene	< 0.65	0.65	ug/m3	1	3/12/2020 11:04:00 PM	
Freon 11	1.2	0.84	ug/m3	1	3/12/2020 11:04:00 PM	
Freon 113	< 1.1	1.1	ug/m3	1	3/12/2020 11:04:00 PM	
Freon 114	< 1.0	1.0	ug/m3	1	3/12/2020 11:04:00 PM	

Qualifiers: \mathbf{SC} Sub-Contracted

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Н

Non-routine analyte. Quantitation estimated. JN

S Spike Recovery outside accepted recovery limits Results reported are not blank corrected

Е Estimated Value above quantitation range J

Analyte detected below quantitation limit

Not Detected at the Limit of Detection ND DL Detection Limit

CLIENT:	BE3/Panamerican	Client Sample ID: SS06
Lab Order:	C2003030	Tag Number: 87,394
Project:	Fedders Loft	Collection Date: 3/5/2020
Lab ID:	C2003030-006A	Matrix: AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15	TO-15					Analyst: RJP
Freon 12	2.5	0.74		ug/m3	1	3/12/2020 11:04:00 PM
Heptane	11	6.1		ug/m3	10	3/13/2020 3:35:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	3/12/2020 11:04:00 PM
Hexane	13	5.3		ug/m3	10	3/13/2020 3:35:00 AM
Isopropyl alcohol	8.4	3.7		ug/m3	10	3/13/2020 3:35:00 AM
m&p-Xylene	0.52	1.3	J	ug/m3	1	3/12/2020 11:04:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	3/12/2020 11:04:00 PM
Methyl Ethyl Ketone	6.0	0.88		ug/m3	1	3/12/2020 11:04:00 PM
Methyl Isobutyl Ketone	1.2	1.2		ug/m3	1	3/12/2020 11:04:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	3/12/2020 11:04:00 PM
Methylene chloride	4.6	0.52		ug/m3	1	3/12/2020 11:04:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	3/12/2020 11:04:00 PM
Propylene	< 0.26	0.26		ug/m3	1	3/12/2020 11:04:00 PM
Styrene	< 0.64	0.64		ug/m3	1	3/12/2020 11:04:00 PM
Tetrachloroethylene	0.68	1.0	J	ug/m3	1	3/12/2020 11:04:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	3/12/2020 11:04:00 PM
Toluene	3.4	0.57		ug/m3	1	3/12/2020 11:04:00 PM
trans-1,2-Dichloroethene	0.91	0.59		ug/m3	1	3/12/2020 11:04:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	3/12/2020 11:04:00 PM
Trichloroethene	93	16		ug/m3	20	3/13/2020 7:48:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	3/12/2020 11:04:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	3/12/2020 11:04:00 PM
Vinyl chloride	< 0.38	0.38		ug/m3	1	3/12/2020 11:04:00 PM

Qualifiers:	SC	Sub-Contracted		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	2
	Н	H Holding times for preparation or analysis exceeded		Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D 10 . C 10
	S	Spike Recovery outside accepted recovery limits	DL	Detection Limit	Page 12 of 12



Client:	<u>BE3</u>		
Project Reference:	57-71 Tonawanda		
Sample Identifier:	SSB-1 0-4 FT		
Lab Sample ID:	201276-01	Date Sampled:	3/18/2020
Matrix:	Soil	Date Received:	3/23/2020

Metals

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic	17.3	mg/Kg		3/26/2020 12:17
Barium	132	mg/Kg		3/26/2020 12:17
Beryllium	< 0.286	mg/Kg		3/26/2020 12:17
Cadmium	2.52	mg/Kg		3/26/2020 12:17
Chromium	20.7	mg/Kg		3/26/2020 12:17
Copper	3390	mg/Kg		3/27/2020 13:43
Lead	2240	mg/Kg		3/26/2020 12:17
Manganese	518	mg/Kg		3/26/2020 12:17
Nickel	36.7	mg/Kg		3/26/2020 12:17
Selenium	2.98	mg/Kg		3/26/2020 12:17
Silver	2.44	mg/Kg		3/26/2020 12:17
Zinc	4940	mg/Kg		3/27/2020 13:43
Method Reference Preparation Date Data File: <u>Mercury</u>	EPA 3050B			
Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
Mercury	0.343	mg/Kg		3/25/2020 11:48
Method Referenc Preparation Date Data File:				
<u>PCBs</u>				
Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
PCB-1016	< 0.0323	mg/Kg		3/24/2020 14:12
PCB-1221	< 0.0323	mg/Kg		3/24/2020 14:12
PCB-1232	< 0.0323	mg/Kg		3/24/2020 14:12
PCB-1242	< 0.0323	mg/Kg		3/24/2020 14:12

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Client:

Lab Project ID: 201276

chent:	<u>BE3</u>						
Project Reference:	57-71 To	onawanda					
Sample Identifier:	SSB-10)-4 FT					
Lab Sample ID:	201276	5-01		Dat	e Sampled:	3/18/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
PCB-1248		< 0.0323	mg/Kg			3/24/2020	14:12
PCB-1254		< 0.0323	mg/Kg			3/24/2020	14:12
PCB-1260		< 0.0323	mg/Kg			3/24/2020	14:12
PCB-1262		< 0.0323	mg/Kg			3/24/2020	14:12
PCB-1268		< 0.0323	mg/Kg			3/24/2020	14:12
Surrogate		Perce	nt Recovery	Limits	Outliers	Date Analy	zed
Tetrachloro-m-xylene			47.2	18.3 - 89.6		3/24/2020	14:12
Method Reference Preparation Date:]	EPA 8082A EPA 3546 3/24/2020					
<u>Chlorinated Pestici</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		Qualifier	Date Anal	<u>yzed</u>
4,4-DDD		< 3.23	ug/Kg		L	3/26/2020	12:37
4,4-DDE		< 3.23	ug/Kg		L	3/26/2020	12:37
4,4-DDT		< 3.23	ug/Kg			3/26/2020	12:37
Aldrin		< 3.23	ug/Kg		L	3/26/2020	12:37
alpha-BHC		< 3.23	ug/Kg			3/26/2020	12:37
beta-BHC		< 3.23	ug/Kg		L	3/26/2020	12:37
cis-Chlordane		< 3.23	ug/Kg		L	3/26/2020	12:37
delta-BHC		< 3.23	ug/Kg			3/26/2020	12:37
Dieldrin		< 3.23	ug/Kg		L	3/26/2020	12:37
Endosulfan I		< 3.23	ug/Kg			3/26/2020	12:37
Endosulfan II		< 3.23	ug/Kg			3/26/2020	12:37
Endosulfan Sulfate		1.87	ug/Kg		JP	3/26/2020	12:37
Endrin		< 3.23	ug/Kg			3/26/2020	12:37
Endrin Aldehyde		< 3.23	ug/Kg			3/26/2020	12:37
Endrin Ketone		< 3.23	ug/Kg		L	3/26/2020	12:37
gamma-BHC (Lindane)		< 3.23	ug/Kg		L	3/26/2020	12:37
Heptachlor		< 3.23	ug/Kg			3/26/2020	12:37
Heptachlor Epoxide		< 3.23	ug/Kg		L	3/26/2020	12:37

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Client:

Lab Project ID: 201276

Project Reference:	57-71 To	onawanda					
Sample Identifier:	SSB-1 0)-4 FT					
Lab Sample ID:	201276	5-01		Dat	e Sampled:	3/18/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
Methoxychlor		< 3.23	ug/Kg			3/26/2020	12:37
Toxaphene		< 32.3	ug/Kg			3/26/2020	12:37
trans-Chlordane		< 3.23	ug/Kg		L	3/26/2020	12:37
<u>Surrogate</u>		Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>zed</u>
Decachlorobiphenyl (2	1)		130	30.7 - 111	*	3/26/2020	12:37
Tetrachloro-m-xylene	(1)		68.6	34.7 - 87.3		3/26/2020	12:37
Method Referen	ice(s):	EPA 8081B					
Preparation Da		EPA 3546 3/24/2020					

Semi-Volatile Organics (Acid/Base Neutrals)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 323	ug/Kg		3/24/2020 22:29
1,2,4,5-Tetrachlorobenzene	< 323	ug/Kg		3/24/2020 22:29
1,2,4-Trichlorobenzene	< 323	ug/Kg		3/24/2020 22:29
1,2-Dichlorobenzene	< 323	ug/Kg		3/24/2020 22:29
1,3-Dichlorobenzene	< 323	ug/Kg		3/24/2020 22:29
1,4-Dichlorobenzene	< 323	ug/Kg		3/24/2020 22:29
2,2-Oxybis (1-chloropropane)	< 323	ug/Kg		3/24/2020 22:29
2,3,4,6-Tetrachlorophenol	< 323	ug/Kg		3/24/2020 22:29
2,4,5-Trichlorophenol	< 323	ug/Kg		3/24/2020 22:29
2,4,6-Trichlorophenol	< 323	ug/Kg		3/24/2020 22:29
2,4-Dichlorophenol	< 323	ug/Kg		3/24/2020 22:29
2,4-Dimethylphenol	< 323	ug/Kg		3/24/2020 22:29
2,4-Dinitrophenol	< 1290	ug/Kg		3/24/2020 22:29
2,4-Dinitrotoluene	< 323	ug/Kg		3/24/2020 22:29
2,6-Dinitrotoluene	< 323	ug/Kg		3/24/2020 22:29
2-Chloronaphthalene	< 323	ug/Kg		3/24/2020 22:29
2-Chlorophenol	< 323	ug/Kg		3/24/2020 22:29
2-Methylnapthalene	300	ug/Kg	J	3/24/2020 22:29
2-Methylphenol	< 323	ug/Kg		3/24/2020 22:29

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Client:

Lab Project ID: 201276

<u>DES</u>				
Project Reference: 57-71	Tonawanda			
Sample Identifier: SSB-2	1 0-4 FT			
Lab Sample ID: 2012	76-01		Date Sampled:	3/18/2020
Matrix: Soil			Date Received:	3/23/2020
2-Nitroaniline	< 323	ug/Kg		3/24/2020 22:29
2-Nitrophenol	< 323	ug/Kg		3/24/2020 22:29
3&4-Methylphenol	< 323	ug/Kg		3/24/2020 22:29
3,3'-Dichlorobenzidine	< 323	ug/Kg		3/24/2020 22:29
3-Nitroaniline	< 323	ug/Kg		3/24/2020 22:29
4,6-Dinitro-2-methylphenol	< 646	ug/Kg		3/24/2020 22:29
4-Bromophenyl phenyl ether	< 323	ug/Kg		3/24/2020 22:29
4-Chloro-3-methylphenol	< 323	ug/Kg		3/24/2020 22:29
4-Chloroaniline	< 323	ug/Kg		3/24/2020 22:29
4-Chlorophenyl phenyl ether	< 323	ug/Kg		3/24/2020 22:29
4-Nitroaniline	< 323	ug/Kg		3/24/2020 22:29
4-Nitrophenol	< 323	ug/Kg		3/24/2020 22:29
Acenaphthene	< 323	ug/Kg		3/24/2020 22:29
Acenaphthylene	< 323	ug/Kg		3/24/2020 22:29
Acetophenone	< 323	ug/Kg		3/24/2020 22:29
Anthracene	268	ug/Kg	J	3/24/2020 22:29
Atrazine	< 323	ug/Kg		3/24/2020 22:29
Benzaldehyde	< 323	ug/Kg		3/24/2020 22:29
Benzo (a) anthracene	830	ug/Kg		3/24/2020 22:29
Benzo (a) pyrene	788	ug/Kg		3/24/2020 22:29
Benzo (b) fluoranthene	734	ug/Kg		3/24/2020 22:29
Benzo (g,h,i) perylene	590	ug/Kg		3/24/2020 22:29
Benzo (k) fluoranthene	653	ug/Kg		3/24/2020 22:29
Bis (2-chloroethoxy) methane	< 323	ug/Kg		3/24/2020 22:29
Bis (2-chloroethyl) ether	< 323	ug/Kg		3/24/2020 22:29
Bis (2-ethylhexyl) phthalate	< 323	ug/Kg		3/24/2020 22:29
Butylbenzylphthalate	< 323	ug/Kg		3/24/2020 22:29
Caprolactam	< 323	ug/Kg		3/24/2020 22:29
Carbazole	206	ug/Kg	J	3/24/2020 22:29
Chrysene	947	ug/Kg		3/24/2020 22:29



Client:

Lab Project ID: 201276

	220					
Project Reference:	57-71 Tonawand	а				
Sample Identifier:	SSB-1 0-4 FT					
Lab Sample ID:	201276-01			Date Sampled:	3/18/2020	
Matrix:	Soil			Date Received:	3/23/2020	
Dibenz (a,h) anthrace	ne <3	323	ug/Kg		3/24/2020	22:29
Dibenzofuran	< 3	323	ug/Kg		3/24/2020	22:29
Diethyl phthalate	< 3	323	ug/Kg		3/24/2020	22:29
Dimethyl phthalate	< 3	323	ug/Kg		3/24/2020	22:29
Di-n-butyl phthalate	< 3	323	ug/Kg		3/24/2020	22:29
Di-n-octylphthalate	< 3	323	ug/Kg		3/24/2020	22:29
Fluoranthene	19	00	ug/Kg		3/24/2020	22:29
Fluorene	< 3	323	ug/Kg		3/24/2020	22:29
Hexachlorobenzene	< 3	323	ug/Kg		3/24/2020	22:29
Hexachlorobutadiene	< 3	323	ug/Kg		3/24/2020	22:29
Hexachlorocyclopenta	idiene < 1	1290	ug/Kg		3/24/2020	22:29
Hexachloroethane	< 3	323	ug/Kg		3/24/2020	22:29
Indeno (1,2,3-cd) pyre	ene 47	' 8	ug/Kg		3/24/2020	22:29
Isophorone	< 3	323	ug/Kg		3/24/2020	22:29
Naphthalene	25	51	ug/Kg	J	3/24/2020	22:29
Nitrobenzene	< 3	323	ug/Kg		3/24/2020	22:29
N-Nitroso-di-n-propyl	amine < 3	323	ug/Kg		3/24/2020	22:29
N-Nitrosodiphenylam	ine < 3	323	ug/Kg		3/24/2020	22:29
Pentachlorophenol	< (646	ug/Kg		3/24/2020	22:29
Phenanthrene	16	60	ug/Kg		3/24/2020	22:29
Phenol	< 3	323	ug/Kg		3/24/2020	22:29
Pyrene	17	/30	ug/Kg		3/24/2020	22:29



Client:	<u>BE3</u>						
Project Reference:	57-71	Гonawanda					
Sample Identifier:	SSB-1	0-4 FT					
Lab Sample ID:	20127	76-01		Dat	e Sampled:	3/18/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	/zed
2,4,6-Tribromophenol			64.9	35.1 - 89.5		3/24/2020	22:29
2-Fluorobiphenyl			69.2	37.7 - 81.4		3/24/2020	22:29
2-Fluorophenol			62.6	40.2 - 77		3/24/2020	22:29
Nitrobenzene-d5			63.0	36.2 - 78.4		3/24/2020	22:29
Phenol-d5			64.9	41.2 - 77.1		3/24/2020	22:29
Terphenyl-d14			74.8	39.8 - 97.5		3/24/2020	22:29
Method Referen Preparation Dat Data File:		EPA 8270D EPA 3546 3/24/2020 B45296.D					
<u>Volatile Organics</u>							
Analyte		Result	t <u>Units</u>		Qualifier	Date Anal	yzed
1,1,1-Trichloroethane		< 68.8	ug/Kg			3/28/2020	15:25
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroeth	ane	< 68.8 < 68.8	ug/Kg ug/Kg			3/28/2020 3/28/2020	
	ane						15:25
1,1,2,2-Tetrachloroeth	ane	< 68.8	ug/Kg			3/28/2020	15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane	ane	< 68.8 < 68.8	ug/Kg ug/Kg			3/28/2020 3/28/2020	15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane		< 68.8 < 68.8 < 68.8	ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	е	< 68.8 < 68.8 < 68.8 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzen	e e	< 68.8 < 68.8 < 68.8 < 68.8 < 172	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzen 1,2,4-Trichlorobenzen	e e ne	< 68.8 < 68.8 < 68.8 < 68.8 < 172 < 172	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzen 1,2,4-Trichlorobenzen 1,2,4-Trimethylbenzen	e e ne	< 68.8 < 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzen 1,2,4-Trichlorobenzen 1,2,4-Trimethylbenzen 1,2-Dibromo-3-Chloro	e e ne	< 68.8 < 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8 < 344	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzen 1,2,4-Trichlorobenzen 1,2,4-Trimethylbenzen 1,2-Dibromo-3-Chloro 1,2-Dibromoethane	e e ne	< 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8 < 344 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzen 1,2,4-Trichlorobenzen 1,2-Dibromo-3-Chloro 1,2-Dibromoethane 1,2-Dichlorobenzene	e e ne	< 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8 < 344 < 68.8 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloro 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane	e e propane	< 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8 < 344 < 68.8 < 68.8 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloro 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloroethane	e e propane	< 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8 < 344 < 68.8 < 68.8 < 68.8 < 68.8 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloro 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3,5-Trimethylbenzen	e e propane	< 68.8 < 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8 < 344 < 68.8 < 68.8 < 68.8 < 68.8 < 68.8 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25
1,1,2,2-Tetrachloroeth 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-Chloro 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloropenane 1,3,5-Trimethylbenzene 1,3-Dichlorobenzene	e e propane	< 68.8 < 68.8 < 68.8 < 172 < 172 < 68.8 < 344 < 68.8 < 68.8 < 68.8 < 68.8 < 68.8 < 68.8 < 68.8	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg			3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020 3/28/2020	15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25 15:25

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Client:

Lab Project ID: 201276

chent.	<u>DES</u>				
Project Reference:	57-71 Tonawanda				
Sample Identifier:	SSB-1 0-4 FT				
Lab Sample ID:	201276-01		Date Sampled:	3/18/2020	
Matrix:	Soil		Date Received:	3/23/2020	
2-Hexanone	< 172	ug/Kg		3/28/2020	15:25
4-Methyl-2-pentanone	< 172	ug/Kg		3/28/2020	15:25
Acetone	< 344	ug/Kg		3/28/2020	15:25
Benzene	< 68.8	ug/Kg		3/28/2020	15:25
Bromochloromethane	< 172	ug/Kg		3/28/2020	15:25
Bromodichloromethane	< 68.8	ug/Kg		3/28/2020	15:25
Bromoform	< 172	ug/Kg		3/28/2020	15:25
Bromomethane	< 68.8	ug/Kg		3/28/2020	15:25
Carbon disulfide	< 68.8	ug/Kg		3/28/2020	15:25
Carbon Tetrachloride	< 68.8	ug/Kg		3/28/2020	15:25
Chlorobenzene	< 68.8	ug/Kg		3/28/2020	15:25
Chloroethane	< 68.8	ug/Kg		3/28/2020	15:25
Chloroform	< 68.8	ug/Kg		3/28/2020	15:25
Chloromethane	< 68.8	ug/Kg		3/28/2020	15:25
cis-1,2-Dichloroethene	< 68.8	ug/Kg		3/28/2020	15:25
cis-1,3-Dichloropropene	< 68.8	ug/Kg		3/28/2020	15:25
Cyclohexane	< 344	ug/Kg		3/28/2020	15:25
Dibromochloromethane	< 68.8	ug/Kg		3/28/2020	15:25
Dichlorodifluoromethan	e < 68.8	ug/Kg		3/28/2020	15:25
Ethylbenzene	< 68.8	ug/Kg		3/28/2020	15:25
Freon 113	< 68.8	ug/Kg		3/28/2020	15:25
Isopropylbenzene	< 68.8	ug/Kg		3/28/2020	15:25
m,p-Xylene	< 68.8	ug/Kg		3/28/2020	15:25
Methyl acetate	< 68.8	ug/Kg		3/28/2020	15:25
Methyl tert-butyl Ether	< 68.8	ug/Kg		3/28/2020	15:25
Methylcyclohexane	< 68.8	ug/Kg		3/28/2020	15:25
Methylene chloride	< 172	ug/Kg		3/28/2020	15:25
Naphthalene	< 172	ug/Kg		3/28/2020	15:25
n-Butylbenzene	< 68.8	ug/Kg		3/28/2020	15:25
n-Propylbenzene	< 68.8	ug/Kg		3/28/2020	15:25



Client:	<u>BE3</u>						
Project Reference:	57-71 Tona	wanda					
Sample Identifier:	SSB-1 0-4	FT					
Lab Sample ID:	201276-02	1		Dat	e Sampled:	3/18/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
o-Xylene		< 68.8	ug/Kg			3/28/2020	15:25
p-Isopropyltoluene		< 68.8	ug/Kg			3/28/2020	
sec-Butylbenzene		< 68.8	ug/Kg			3/28/2020	
Styrene		< 172	ug/Kg			3/28/2020	
tert-Butylbenzene		< 68.8	ug/Kg			3/28/2020	15:25
Tetrachloroethene		< 68.8	ug/Kg			3/28/2020	15:25
Toluene		< 68.8	ug/Kg			3/28/2020	15:25
trans-1,2-Dichloroether	ne	< 68.8	ug/Kg			3/28/2020	15:25
trans-1,3-Dichloroprop	ene	< 68.8	ug/Kg			3/28/2020	15:25
Trichloroethene		1700	ug/Kg			3/28/2020	15:25
Trichlorofluoromethane	е	< 68.8	ug/Kg			3/28/2020	15:25
Vinyl chloride		< 68.8	ug/Kg			3/28/2020	15:25
Surrogate		Per	cent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d4			127	67.9 - 146		3/28/2020	15:25
4-Bromofluorobenzene			101	64.6 - 127		3/28/2020	15:25
Pentafluorobenzene			115	85.5 - 113	*	3/28/2020	15:25
Toluene-D8			101	83.9 - 114		3/28/2020	15:25
Method Reference		8260C 5035A - L					

Data File:

x69306.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

<u>Total Cyanide</u>

Analyte	Result	<u>Units</u>	Q	ualifier	Date Analyzed
Cyanide, Total	< 0.623	mg/Kg			3/27/2020
Method Reference(s):	EPA 9014 EPA 9010C				
Preparation Date:	3/25/2020				

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receip 'artial



Client:	<u>BE3</u>		
Project Reference:	57-71 Tonawanda		
Sample Identifier:	SSB-2 6-8 FT		
Lab Sample ID:	201276-02	Date Sampled:	3/18/2020
Matrix:	Soil	Date Received:	3/23/2020

Volatile Organics

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 83.7	ug/Kg		3/28/2020 13:24
1,1,2,2-Tetrachloroethane	< 83.7	ug/Kg		3/28/2020 13:24
1,1,2-Trichloroethane	< 83.7	ug/Kg		3/28/2020 13:24
1,1-Dichloroethane	< 83.7	ug/Kg		3/28/2020 13:24
1,1-Dichloroethene	< 83.7	ug/Kg		3/28/2020 13:24
1,2,3-Trichlorobenzene	< 209	ug/Kg		3/28/2020 13:24
1,2,4-Trichlorobenzene	< 209	ug/Kg		3/28/2020 13:24
1,2,4-Trimethylbenzene	< 83.7	ug/Kg		3/28/2020 13:24
1,2-Dibromo-3-Chloropropane	< 418	ug/Kg		3/28/2020 13:24
1,2-Dibromoethane	< 83.7	ug/Kg		3/28/2020 13:24
1,2-Dichlorobenzene	< 83.7	ug/Kg		3/28/2020 13:24
1,2-Dichloroethane	< 83.7	ug/Kg		3/28/2020 13:24
1,2-Dichloropropane	< 83.7	ug/Kg		3/28/2020 13:24
1,3,5-Trimethylbenzene	< 83.7	ug/Kg		3/28/2020 13:24
1,3-Dichlorobenzene	< 83.7	ug/Kg		3/28/2020 13:24
1,4-Dichlorobenzene	< 83.7	ug/Kg		3/28/2020 13:24
1,4-Dioxane	< 837	ug/Kg		3/28/2020 13:24
2-Butanone	< 418	ug/Kg		3/28/2020 13:24
2-Hexanone	< 209	ug/Kg		3/28/2020 13:24
4-Methyl-2-pentanone	< 209	ug/Kg		3/28/2020 13:24
Acetone	< 418	ug/Kg		3/28/2020 13:24
Benzene	< 83.7	ug/Kg		3/28/2020 13:24
Bromochloromethane	< 209	ug/Kg		3/28/2020 13:24
Bromodichloromethane	< 83.7	ug/Kg		3/28/2020 13:24
Bromoform	< 209	ug/Kg		3/28/2020 13:24
Bromomethane	< 83.7	ug/Kg		3/28/2020 13:24
Carbon disulfide	< 83.7	ug/Kg		3/28/2020 13:24
Carbon Tetrachloride	< 83.7	ug/Kg		3/28/2020 13:24



Client:

Lab Project ID: 201276

	DES			
Project Reference:	57-71 Tonawanda			
Sample Identifier:	SSB-2 6-8 FT			
Lab Sample ID:	201276-02		Date Sampled:	3/18/2020
Matrix:	Soil		Date Received:	3/23/2020
Chlorobenzene	< 83.7	ug/Kg		3/28/2020 13
Chloroethane	< 83.7	ug/Kg		3/28/2020 13
Chloroform	< 83.7	ug/Kg		3/28/2020 13
Chloromethane	< 83.7	ug/Kg		3/28/2020 13
cis-1,2-Dichloroethene	< 83.7	ug/Kg		3/28/2020 13
cis-1,3-Dichloropropene	< 83.7	ug/Kg		3/28/2020 13
Cyclohexane	< 418	ug/Kg		3/28/2020 13
Dibromochloromethane	< 83.7	ug/Kg		3/28/2020 13
Dichlorodifluoromethan	e < 83.7	ug/Kg		3/28/2020 13
Ethylbenzene	< 83.7	ug/Kg		3/28/2020 13
Freon 113	< 83.7	ug/Kg		3/28/2020 13
Isopropylbenzene	< 83.7	ug/Kg		3/28/2020 13
m,p-Xylene	< 83.7	ug/Kg		3/28/2020 13
Methyl acetate	< 83.7	ug/Kg		3/28/2020 13
Methyl tert-butyl Ether	< 83.7	ug/Kg		3/28/2020 13
Methylcyclohexane	< 83.7	ug/Kg		3/28/2020 13
Methylene chloride	< 209	ug/Kg		3/28/2020 13
Naphthalene	< 209	ug/Kg		3/28/2020 13
n-Butylbenzene	< 83.7	ug/Kg		3/28/2020 13
n-Propylbenzene	< 83.7	ug/Kg		3/28/2020 13
o-Xylene	< 83.7	ug/Kg		3/28/2020 13
p-Isopropyltoluene	< 83.7	ug/Kg		3/28/2020 13
sec-Butylbenzene	< 83.7	ug/Kg		3/28/2020 13
Styrene	< 209	ug/Kg		3/28/2020 13
tert-Butylbenzene	< 83.7	ug/Kg		3/28/2020 13
Tetrachloroethene	< 83.7	ug/Kg		3/28/2020 13
Toluene	< 83.7	ug/Kg		3/28/2020 13
trans-1,2-Dichloroethen	e < 83.7	ug/Kg		3/28/2020 13
trans-1,3-Dichloroprope	ene < 83.7	ug/Kg		3/28/2020 13
Trichloroethene	798	ug/Kg		3/28/2020 13



Client:	<u>BE3</u>						
Project Reference:	57-71 Tonaw	anda					
Sample Identifier:	SSB-2 6-8 F	Г					
Lab Sample ID:	201276-02			Dat	e Sampled:	3/18/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
Trichlorofluorometha	ne	< 83.7	ug/Kg			3/28/2020	13:24
Vinyl chloride		< 83.7	ug/Kg			3/28/2020	13:24
<u>Surrogate</u>		Pe	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>vzed</u>
1,2-Dichloroethane-d4	ł		118	67.9 - 146		3/28/2020	13:24
4-Bromofluorobenzen	e		102	64.6 - 127		3/28/2020	13:24
Pentafluorobenzene			113	85.5 - 113		3/28/2020	13:24
Toluene-D8			104	83.9 - 114		3/28/2020	13:24
Method Referen	ce(s): EPA 82 EPA 50						
Data File:	x69301	.D					
This sample w	as not collected fo	llowing SV	V846 5035A specific	ations. According	gly, any Volatiles	soil results that	t are

less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 50355 guidance document from 11/15/2012.

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Client:	BE3		
Project Reference:	57-71 Tonawanda		
Sample Identifier:	SSB-2 9-11 FT		
Lab Sample ID:	201276-03	Date Sampled:	3/18/2020
Matrix:	Soil	Date Received:	3/23/2020

Volatile Organics

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 140	ug/Kg		3/30/2020 13:00
1,1,2,2-Tetrachloroethane	< 140	ug/Kg		3/30/2020 13:00
1,1,2-Trichloroethane	88.6	ug/Kg	J	3/30/2020 13:00
1,1-Dichloroethane	< 140	ug/Kg		3/30/2020 13:00
1,1-Dichloroethene	< 140	ug/Kg		3/30/2020 13:00
1,2,3-Trichlorobenzene	< 351	ug/Kg		3/30/2020 13:00
1,2,4-Trichlorobenzene	< 351	ug/Kg		3/30/2020 13:00
1,2,4-Trimethylbenzene	< 140	ug/Kg		3/30/2020 13:00
1,2-Dibromo-3-Chloropropane	< 702	ug/Kg		3/30/2020 13:00
1,2-Dibromoethane	< 140	ug/Kg		3/30/2020 13:00
1,2-Dichlorobenzene	< 140	ug/Kg		3/30/2020 13:00
1,2-Dichloroethane	< 140	ug/Kg		3/30/2020 13:00
1,2-Dichloropropane	< 140	ug/Kg		3/30/2020 13:00
1,3,5-Trimethylbenzene	< 140	ug/Kg		3/30/2020 13:00
1,3-Dichlorobenzene	< 140	ug/Kg		3/30/2020 13:00
1,4-Dichlorobenzene	< 140	ug/Kg		3/30/2020 13:00
1,4-Dioxane	< 1400	ug/Kg		3/30/2020 13:00
2-Butanone	< 702	ug/Kg		3/30/2020 13:00
2-Hexanone	< 351	ug/Kg		3/30/2020 13:00
4-Methyl-2-pentanone	< 351	ug/Kg		3/30/2020 13:00
Acetone	< 702	ug/Kg		3/30/2020 13:00
Benzene	< 140	ug/Kg		3/30/2020 13:00
Bromochloromethane	< 351	ug/Kg		3/30/2020 13:00
Bromodichloromethane	< 140	ug/Kg		3/30/2020 13:00
Bromoform	< 351	ug/Kg		3/30/2020 13:00
Bromomethane	< 140	ug/Kg		3/30/2020 13:00
Carbon disulfide	< 140	ug/Kg		3/30/2020 13:00
Carbon Tetrachloride	< 140	ug/Kg		3/30/2020 13:00



Client:

Lab Project ID: 201276

	<u>DE3</u>				
Project Reference: 5	7-71 Tonawanda				
Sample Identifier:	SSB-2 9-11 FT				
Lab Sample ID:	201276-03		Date Sampled:	3/18/2020	
Matrix:	Soil		Date Received:	3/23/2020	
Chlorobenzene	< 140	ug/Kg		3/30/2020	13:00
Chloroethane	< 140	ug/Kg		3/30/2020	13:00
Chloroform	< 140	ug/Kg		3/30/2020	13:00
Chloromethane	< 140	ug/Kg		3/30/2020	13:00
cis-1,2-Dichloroethene	< 140	ug/Kg		3/30/2020	13:00
cis-1,3-Dichloropropene	< 140	ug/Kg		3/30/2020	13:00
Cyclohexane	< 702	ug/Kg		3/30/2020	13:00
Dibromochloromethane	< 140	ug/Kg		3/30/2020	13:00
Dichlorodifluoromethane	< 140	ug/Kg		3/30/2020	13:00
Ethylbenzene	< 140	ug/Kg		3/30/2020	13:00
Freon 113	< 140	ug/Kg		3/30/2020	13:00
Isopropylbenzene	< 140	ug/Kg		3/30/2020	13:00
m,p-Xylene	< 140	ug/Kg		3/30/2020	13:00
Methyl acetate	< 140	ug/Kg		3/30/2020	13:00
Methyl tert-butyl Ether	< 140	ug/Kg		3/30/2020	13:00
Methylcyclohexane	< 140	ug/Kg		3/30/2020	13:00
Methylene chloride	< 351	ug/Kg		3/30/2020	13:00
Naphthalene	< 351	ug/Kg		3/30/2020	13:00
n-Butylbenzene	< 140	ug/Kg		3/30/2020	13:00
n-Propylbenzene	< 140	ug/Kg		3/30/2020	13:00
o-Xylene	< 140	ug/Kg		3/30/2020	13:00
p-Isopropyltoluene	< 140	ug/Kg		3/30/2020	13:00
sec-Butylbenzene	< 140	ug/Kg		3/30/2020	13:00
Styrene	< 351	ug/Kg		3/30/2020	13:00
tert-Butylbenzene	< 140	ug/Kg		3/30/2020	13:00
Tetrachloroethene	< 140	ug/Kg		3/30/2020	13:00
Toluene	< 140	ug/Kg		3/30/2020	13:00
trans-1,2-Dichloroethene	< 140	ug/Kg		3/30/2020	13:00
trans-1,3-Dichloroproper	ne < 140	ug/Kg		3/30/2020	13:00
Trichloroethene	4570	ug/Kg		3/30/2020	13:00



Client:	<u>BE3</u>					
Project Reference:	57-71 Tonawanda					
Sample Identifier:	SSB-2 9-11 FT					
Lab Sample ID:	201276-03		Dat	e Sampled:	3/18/2020	
Matrix:	Soil		Dat	e Received:	3/23/2020	
Trichlorofluoromethan	e < 14	0 ug/Kg			3/30/2020	13:00
Vinyl chloride	< 14	0 ug/Kg			3/30/2020	13:00
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	vzed
1,2-Dichloroethane-d4		109	67.9 - 146		3/30/2020	13:00
4-Bromofluorobenzene	2	94.9	64.6 - 127		3/30/2020	13:00
Pentafluorobenzene		115	85.5 - 113	*	3/30/2020	13:00
Toluene-D8		102	83.9 - 114		3/30/2020	13:00
Method Reference	e(s): EPA 8260C EPA 5035A - L					
Data File:	x69326.D					
This sample wa	ns not collected following	SW846 5035A specifi	cations. According	gly, any Volatiles	s soil results that	t are

less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 50355 guidance document from 11/15/2012.

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Client:	<u>BE3</u>		
Project Reference:	57-71 Tonawanda		
Sample Identifier:	SSB-3 10-11 FT		
Lab Sample ID:	201276-04	Date Sampled:	3/19/2020
Matrix:	Soil	Date Received:	3/23/2020

Volatile Organics

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 103	ug/Kg		3/28/2020 14:12
1,1,2,2-Tetrachloroethane	< 103	ug/Kg		3/28/2020 14:12
1,1,2-Trichloroethane	237	ug/Kg		3/28/2020 14:12
1,1-Dichloroethane	< 103	ug/Kg		3/28/2020 14:12
1,1-Dichloroethene	< 103	ug/Kg		3/28/2020 14:12
1,2,3-Trichlorobenzene	< 259	ug/Kg		3/28/2020 14:12
1,2,4-Trichlorobenzene	< 259	ug/Kg		3/28/2020 14:12
1,2,4-Trimethylbenzene	< 103	ug/Kg		3/28/2020 14:12
1,2-Dibromo-3-Chloropropane	< 517	ug/Kg		3/28/2020 14:12
1,2-Dibromoethane	< 103	ug/Kg		3/28/2020 14:12
1,2-Dichlorobenzene	< 103	ug/Kg		3/28/2020 14:12
1,2-Dichloroethane	< 103	ug/Kg		3/28/2020 14:12
1,2-Dichloropropane	< 103	ug/Kg		3/28/2020 14:12
1,3,5-Trimethylbenzene	< 103	ug/Kg		3/28/2020 14:12
1,3-Dichlorobenzene	< 103	ug/Kg		3/28/2020 14:12
1,4-Dichlorobenzene	< 103	ug/Kg		3/28/2020 14:12
1,4-Dioxane	< 1030	ug/Kg		3/28/2020 14:12
2-Butanone	< 517	ug/Kg		3/28/2020 14:12
2-Hexanone	< 259	ug/Kg		3/28/2020 14:12
4-Methyl-2-pentanone	< 259	ug/Kg		3/28/2020 14:12
Acetone	< 517	ug/Kg		3/28/2020 14:12
Benzene	< 103	ug/Kg		3/28/2020 14:12
Bromochloromethane	< 259	ug/Kg		3/28/2020 14:12
Bromodichloromethane	< 103	ug/Kg		3/28/2020 14:12
Bromoform	< 259	ug/Kg		3/28/2020 14:12
Bromomethane	< 103	ug/Kg		3/28/2020 14:12
Carbon disulfide	< 103	ug/Kg		3/28/2020 14:12
Carbon Tetrachloride	< 103	ug/Kg		3/28/2020 14:12



Client:	<u>BE3</u>			
Project Reference:	57-71 Tonawanda			
Sample Identifier:	SSB-3 10-11 FT			
Lab Sample ID:	201276-04		Date Sampled:	3/19/2020
Matrix:	Soil		Date Received:	3/23/2020
Chlorobenzene	< 103	ug/Kg		3/28/2020 14:12
Chloroethane	< 103	ug/Kg		3/28/2020 14:12
Chloroform	< 103	ug/Kg		3/28/2020 14:12
Chloromethane	< 103	ug/Kg		3/28/2020 14:12
cis-1,2-Dichloroethene	< 103	ug/Kg		3/28/2020 14:12
cis-1,3-Dichloroproper	ne < 103	ug/Kg		3/28/2020 14:12
Cyclohexane	< 517	ug/Kg		3/28/2020 14:12
Dibromochloromethar	ne < 103	ug/Kg		3/28/2020 14:12
Dichlorodifluorometha	ane < 103	ug/Kg		3/28/2020 14:12
Ethylbenzene	< 103	ug/Kg		3/28/2020 14:12
Freon 113	< 103	ug/Kg		3/28/2020 14:12
Isopropylbenzene	< 103	ug/Kg		3/28/2020 14:12
m,p-Xylene	< 103	ug/Kg		3/28/2020 14:12
Methyl acetate	< 103	ug/Kg		3/28/2020 14:12
Methyl tert-butyl Ethe	r < 103	ug/Kg		3/28/2020 14:12
Methylcyclohexane	< 103	ug/Kg		3/28/2020 14:12
Methylene chloride	< 259	ug/Kg		3/28/2020 14:12
Naphthalene	< 259	ug/Kg		3/28/2020 14:12
n-Butylbenzene	< 103	ug/Kg		3/28/2020 14:12
n-Propylbenzene	< 103	ug/Kg		3/28/2020 14:12
o-Xylene	< 103	ug/Kg		3/28/2020 14:12
p-Isopropyltoluene	< 103	ug/Kg		3/28/2020 14:12
sec-Butylbenzene	< 103	ug/Kg		3/28/2020 14:12
Styrene	< 259	ug/Kg		3/28/2020 14:12
tert-Butylbenzene	< 103	ug/Kg		3/28/2020 14:12
Tetrachloroethene	< 103	ug/Kg		3/28/2020 14:12
Toluene	< 103	ug/Kg		3/28/2020 14:12
trans-1,2-Dichloroethe	ene < 103	ug/Kg		3/28/2020 14:12
trans-1,3-Dichloroproj	pene < 103	ug/Kg		3/28/2020 14:12
Trichloroethene	4850	ug/Kg		3/28/2020 14:12

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Client:	<u>BE3</u>						
Project Reference:	57-71 Tonawa	nda					
Sample Identifier:	SSB-3 10-11 F	Τ					
Lab Sample ID:	201276-04			Dat	e Sampled:	3/19/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
Trichlorofluoromethar	ne	< 103	ug/Kg			3/28/2020	14:12
Vinyl chloride		< 103	ug/Kg			3/28/2020	14:12
<u>Surrogate</u>		P	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	yzed
1,2-Dichloroethane-d4			127	67.9 - 146		3/28/2020	14:12
4-Bromofluorobenzene	9		105	64.6 - 127		3/28/2020	14:12
Pentafluorobenzene			116	85.5 - 113	*	3/28/2020	14:12
Toluene-D8			104	83.9 - 114		3/28/2020	14:12
Method Reference	ce(s): EPA 8260 EPA 5035	-					
Data File:	x69303.D						
This sample we	as not collected follo	wing SI	W846 5035A specific	ations. According	gly, any Volatiles	soil results that	t are

less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 50355 guidance document from 11/15/2012.

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Client:	<u>BE3</u>		
Project Reference:	57-71 Tonawanda		
Sample Identifier:	SSB-4 10-12 FT		
Lab Sample ID:	201276-05	Date Sampled:	3/19/2020
Matrix:	Soil	Date Received:	3/23/2020

Volatile Organics

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 35200	ug/Kg		3/31/2020 12:27
1,1,2,2-Tetrachloroethane	< 35200	ug/Kg		3/31/2020 12:27
1,1,2-Trichloroethane	< 35200	ug/Kg		3/31/2020 12:27
1,1-Dichloroethane	< 35200	ug/Kg		3/31/2020 12:27
1,1-Dichloroethene	< 35200	ug/Kg		3/31/2020 12:27
1,2,3-Trichlorobenzene	< 88000	ug/Kg		3/31/2020 12:27
1,2,4-Trichlorobenzene	< 88000	ug/Kg		3/31/2020 12:27
1,2,4-Trimethylbenzene	< 35200	ug/Kg		3/31/2020 12:27
1,2-Dibromo-3-Chloropropane	< 176000	ug/Kg		3/31/2020 12:27
1,2-Dibromoethane	< 35200	ug/Kg		3/31/2020 12:27
1,2-Dichlorobenzene	< 35200	ug/Kg		3/31/2020 12:27
1,2-Dichloroethane	< 35200	ug/Kg		3/31/2020 12:27
1,2-Dichloropropane	< 35200	ug/Kg		3/31/2020 12:27
1,3,5-Trimethylbenzene	< 35200	ug/Kg		3/31/2020 12:27
1,3-Dichlorobenzene	< 35200	ug/Kg		3/31/2020 12:27
1,4-Dichlorobenzene	< 35200	ug/Kg		3/31/2020 12:27
1,4-Dioxane	< 352000	ug/Kg		3/31/2020 12:27
2-Butanone	< 176000	ug/Kg		3/31/2020 12:27
2-Hexanone	< 88000	ug/Kg		3/31/2020 12:27
4-Methyl-2-pentanone	< 88000	ug/Kg		3/31/2020 12:27
Acetone	< 176000	ug/Kg		3/31/2020 12:27
Benzene	< 35200	ug/Kg		3/31/2020 12:27
Bromochloromethane	< 88000	ug/Kg		3/31/2020 12:27
Bromodichloromethane	< 35200	ug/Kg		3/31/2020 12:27
Bromoform	< 88000	ug/Kg		3/31/2020 12:27
Bromomethane	< 35200	ug/Kg		3/31/2020 12:27
Carbon disulfide	< 35200	ug/Kg		3/31/2020 12:27
Carbon Tetrachloride	< 35200	ug/Kg		3/31/2020 12:27



Client:	<u>BE3</u>					
Project Reference:	57-71 Tonawa	anda				
Sample Identifier:	SSB-4 10-12	FT				
Lab Sample ID:	201276-05			Date Sampled:	3/19/2020	
Matrix:	Soil			Date Received:	3/23/2020	
Chlorobenzene		< 35200	ug/Kg		3/31/2020	12:27
Chloroethane		< 35200	ug/Kg		3/31/2020	12:27
Chloroform		< 35200	ug/Kg		3/31/2020	12:27
Chloromethane		< 35200	ug/Kg		3/31/2020	12:27
cis-1,2-Dichloroethene	•	< 35200	ug/Kg		3/31/2020	12:27
cis-1,3-Dichloroproper	ne	< 35200	ug/Kg		3/31/2020	12:27
Cyclohexane		< 176000	ug/Kg		3/31/2020	12:27
Dibromochloromethan	ie	< 35200	ug/Kg		3/31/2020	12:27
Dichlorodifluorometha	ine	< 35200	ug/Kg		3/31/2020	12:27
Ethylbenzene		< 35200	ug/Kg		3/31/2020	12:27
Freon 113		< 35200	ug/Kg		3/31/2020	12:27
Isopropylbenzene		< 35200	ug/Kg		3/31/2020	12:27
m,p-Xylene		< 35200	ug/Kg		3/31/2020	12:27
Methyl acetate		< 35200	ug/Kg		3/31/2020	12:27
Methyl tert-butyl Ethe	r	< 35200	ug/Kg		3/31/2020	12:27
Methylcyclohexane		< 35200	ug/Kg		3/31/2020	12:27
Methylene chloride		< 88000	ug/Kg		3/31/2020	12:27
Naphthalene		< 88000	ug/Kg		3/31/2020	12:27
n-Butylbenzene		< 35200	ug/Kg		3/31/2020	12:27
n-Propylbenzene		< 35200	ug/Kg		3/31/2020	12:27
o-Xylene		< 35200	ug/Kg		3/31/2020	12:27
p-Isopropyltoluene		< 35200	ug/Kg		3/31/2020	12:27
sec-Butylbenzene		< 35200	ug/Kg		3/31/2020	12:27
Styrene		< 88000	ug/Kg		3/31/2020	12:27
tert-Butylbenzene		< 35200	ug/Kg		3/31/2020	12:27
Tetrachloroethene		< 35200	ug/Kg		3/31/2020	12:27
Toluene		< 35200	ug/Kg		3/31/2020	12:27
trans-1,2-Dichloroethe	ene	< 35200	ug/Kg		3/31/2020	12:27
trans-1,3-Dichloroprop	pene	< 35200	ug/Kg		3/31/2020	12:27
Trichloroethene		1980000	ug/Kg		3/31/2020	12:27

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Client:	<u>BE3</u>						
Project Reference:	57-71 Tonaw	anda					
Sample Identifier:	SSB-4 10-12	FT					
Lab Sample ID:	201276-05			Dat	e Sampled:	3/19/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
Trichlorofluoromethan	e	< 35200	ug/Kg			3/31/2020	12:27
Vinyl chloride		< 35200	ug/Kg			3/31/2020	12:27
<u>Surrogate</u>		Perc	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	yzed
1,2-Dichloroethane-d4			119	67.9 - 146		3/31/2020	12:27
4-Bromofluorobenzene	2		91.3	64.6 - 127		3/31/2020	12:27
Pentafluorobenzene			116	85.5 - 113	*	3/31/2020	12:27
Toluene-D8			97.8	83.9 - 114		3/31/2020	12:27
Method Reference		60C 35A H					
Data File:	x69360	.D					
This sample wa	as not collected fo	llowing SW8-	46 5035A specific	ations. According	gly, any Volatiles	soil results that	t are

less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 50355 guidance document from 11/15/2012.

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Client:	<u>BE3</u>		
Project Reference:	57-71 Tonawanda		
Sample Identifier:	SSB-5 6-7 FT		
Lab Sample ID:	201276-06	Date Sampled:	3/19/2020
Matrix:	Soil	Date Received:	3/23/2020

Volatile Organics

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed	
1,1,1-Trichloroethane	< 79.1	ug/Kg		3/28/2020 15:01	
1,1,2,2-Tetrachloroethane	< 79.1	ug/Kg		3/28/2020 15:01	
1,1,2-Trichloroethane	< 79.1	ug/Kg		3/28/2020 15:01	
1,1-Dichloroethane	< 79.1	ug/Kg		3/28/2020 15:01	
1,1-Dichloroethene	< 79.1	ug/Kg		3/28/2020 15:01	
1,2,3-Trichlorobenzene	< 198	ug/Kg		3/28/2020 15:01	
1,2,4-Trichlorobenzene	< 198	ug/Kg		3/28/2020 15:01	
1,2,4-Trimethylbenzene	< 79.1	ug/Kg		3/28/2020 15:01	
1,2-Dibromo-3-Chloropropane	< 396	ug/Kg		3/28/2020 15:01	
1,2-Dibromoethane	< 79.1	ug/Kg		3/28/2020 15:01	
1,2-Dichlorobenzene	< 79.1	ug/Kg		3/28/2020 15:01	
1,2-Dichloroethane	< 79.1	ug/Kg		3/28/2020 15:01	
1,2-Dichloropropane	< 79.1	ug/Kg		3/28/2020 15:01	
1,3,5-Trimethylbenzene	< 79.1	ug/Kg		3/28/2020 15:01	
1,3-Dichlorobenzene	< 79.1	ug/Kg		3/28/2020 15:01	
1,4-Dichlorobenzene	< 79.1	ug/Kg		3/28/2020 15:01	
1,4-Dioxane	< 791	ug/Kg		3/28/2020 15:01	
2-Butanone	< 396	ug/Kg		3/28/2020 15:01	
2-Hexanone	< 198	ug/Kg		3/28/2020 15:01	
4-Methyl-2-pentanone	< 198	ug/Kg		3/28/2020 15:01	
Acetone	< 396	ug/Kg		3/28/2020 15:01	
Benzene	< 79.1	ug/Kg		3/28/2020 15:01	
Bromochloromethane	< 198	ug/Kg		3/28/2020 15:01	
Bromodichloromethane	< 79.1	ug/Kg		3/28/2020 15:01	
Bromoform	< 198	ug/Kg		3/28/2020 15:01	
Bromomethane	< 79.1	ug/Kg		3/28/2020 15:01	
Carbon disulfide	< 79.1	ug/Kg		3/28/2020 15:01	
Carbon Tetrachloride	< 79.1	ug/Kg		3/28/2020 15:01	



Client:	<u>BE3</u>					
Project Reference:	57-71 Tonawa	anda				
Sample Identifier:	SSB-5 6-7 FT	I				
Lab Sample ID:	201276-06			Date Sampled:	3/19/2020	
Matrix:	Soil			Date Received:	3/23/2020	
Chlorobenzene		< 79.1	ug/Kg		3/28/2020	15:01
Chloroethane		< 79.1	ug/Kg		3/28/2020	
Chloroform		< 79.1	ug/Kg		3/28/2020	
Chloromethane		< 79.1	ug/Kg		3/28/2020	
cis-1,2-Dichloroethene	9	43.8	ug/Kg	I	3/28/2020	
cis-1,3-Dichloroprope	ne	< 79.1	ug/Kg		3/28/2020	
Cyclohexane		< 396	ug/Kg		3/28/2020	15:01
Dibromochloromethar	ne	< 79.1	ug/Kg		3/28/2020	15:01
Dichlorodifluorometha	ane	< 79.1	ug/Kg		3/28/2020	15:01
Ethylbenzene		< 79.1	ug/Kg		3/28/2020	15:01
Freon 113		< 79.1	ug/Kg		3/28/2020	15:01
Isopropylbenzene		< 79.1	ug/Kg		3/28/2020	15:01
m,p-Xylene		< 79.1	ug/Kg		3/28/2020	15:01
Methyl acetate		< 79.1	ug/Kg		3/28/2020	15:01
Methyl tert-butyl Ethe	r	< 79.1	ug/Kg		3/28/2020	15:01
Methylcyclohexane		< 79.1	ug/Kg		3/28/2020	15:01
Methylene chloride		< 198	ug/Kg		3/28/2020	15:01
Naphthalene		< 198	ug/Kg		3/28/2020	15:01
n-Butylbenzene		< 79.1	ug/Kg		3/28/2020	15:01
n-Propylbenzene		< 79.1	ug/Kg		3/28/2020	15:01
o-Xylene		< 79.1	ug/Kg		3/28/2020	15:01
p-Isopropyltoluene		< 79.1	ug/Kg		3/28/2020	15:01
sec-Butylbenzene		< 79.1	ug/Kg		3/28/2020	15:01
Styrene		< 198	ug/Kg		3/28/2020	15:01
tert-Butylbenzene		< 79.1	ug/Kg		3/28/2020	15:01
Tetrachloroethene		< 79.1	ug/Kg		3/28/2020	15:01
Toluene		< 79.1	ug/Kg		3/28/2020	15:01
trans-1,2-Dichloroethe	ene	< 79.1	ug/Kg		3/28/2020	15:01
trans-1,3-Dichloropro	pene	< 79.1	ug/Kg		3/28/2020	15:01
Trichloroethene		634	ug/Kg		3/28/2020	15:01

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Client:	<u>BE3</u>						
Project Reference:	57-71 Tonawa	anda					
Sample Identifier:	SSB-5 6-7 FT	I					
Lab Sample ID:	201276-06			Dat	e Sampled:	3/19/2020	
Matrix:	Soil			Dat	e Received:	3/23/2020	
Trichlorofluoromethan	e	< 79.1	ug/Kg			3/28/2020	15:01
Vinyl chloride		< 79.1	ug/Kg			3/28/2020	15:01
<u>Surrogate</u>		P	<u>ercent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	yzed
1,2-Dichloroethane-d4			130	67.9 - 146		3/28/2020	15:01
4-Bromofluorobenzene	9		99.3	64.6 - 127		3/28/2020	15:01
Pentafluorobenzene			118	85.5 - 113	*	3/28/2020	15:01
Toluene-D8			101	83.9 - 114		3/28/2020	15:01
Method Reference	EPA 503	5A - L					
Data File: This sample we	x69305. as not collected fol		W846 5035A specific	ations. According	alv. anv Volatiles	soil results that	t are

less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 50355 guidance document from 11/15/2012.

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Method Blank Report

Client:	<u>BE3</u>
Project Reference:	57-71 Tonawanda
Lab Project ID:	201276
SDG #:	1276-01
Matrix:	Soil

Chlorinated Pesticides

6

Analyte	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analyzed	
4,4-DDD	<2.82	ug/Kg		3/26/2020	10:45
4,4-DDE	<2.82	ug/Kg		3/26/2020	10:45
4,4-DDT	<2.82	ug/Kg		3/26/2020	10:45
Aldrin	<2.82	ug/Kg		3/26/2020	10:45
alpha-BHC	<2.82	ug/Kg		3/26/2020	10:45
beta-BHC	<2.82	ug/Kg		3/26/2020	10:45
cis-Chlordane	<2.82	ug/Kg		3/26/2020	10:45
delta-BHC	<2.82	ug/Kg		3/26/2020	10:45
Dieldrin	<2.82	ug/Kg		3/26/2020	10:45
Endosulfan I	<2.82	ug/Kg		3/26/2020	10:45
Endosulfan II	<2.82	ug/Kg		3/26/2020	10:45
Endosulfan Sulfate	<2.82	ug/Kg		3/26/2020	10:45
Endrin	<2.82	ug/Kg		3/26/2020	10:45
Endrin Aldehyde	<2.82	ug/Kg		3/26/2020	10:45
Endrin Ketone	<2.82	ug/Kg		3/26/2020	10:45
gamma-BHC (Lindane)	<2.82	ug/Kg		3/26/2020	10:45
Heptachlor	<2.82	ug/Kg		3/26/2020	10:45
Heptachlor Epoxide	<2.82	ug/Kg		3/26/2020	10:45
Methoxychlor	<2.82	ug/Kg		3/26/2020	10:45
Toxaphene	<28.2	ug/Kg		3/26/2020	10:45
trans-Chlordane	<2.82	ug/Kg		3/26/2020	10:45

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Method Blank Report

Client:	<u>BE3</u>
Project Reference:	57-71 Tonawanda
Lab Project ID:	201276
SDG #:	1276-01
Matrix:	Soil

Chlorinated Pesticides

<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	Date Analy	zed
Surrogate		Percent Recovery	<u>Limits</u>	Outliers	Date Anal	yzed
Decachlorobiphenyl (1)		88.1	30.7 - 111		3/26/2020	10:45
Tetrachloro-m-xylene (1)		81.1	34.7 - 87.3		3/26/2020	10:45
Method Reference(s):	EPA 8081B					
	EPA 3546					
Preparation Date:	3/24/2020					
QC Batch ID:	QC200324PES	ГS				
QC Number:	1					

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QC Report for Laboratory Control Sample

Matrix: So	SDG #: 12	Lab Project ID: 20	Project Reference: 57	Client: <u>B</u>
Soil	1276-01	201276	57-71 Tonawanda	BE3

Chlorinated Pesticides

ing	mation, includi	litional sample infor	ndy provídes add	Chain of Custo	ts entirety. The	nt and should only be evaluated in universe upon receipt.	This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.
3/26/2020	*	20.7 - 76	78.1	10.6	ug/Kg	13.6	gamma-BHC (Lindane) (1)
3/26/2020	*	20.3 - 106	111	15,0	ug/Kg	13.6	Endrin Ketone (1)
3/26/2020		19.4 - 92.6	82.3	11.2	ug/Kg	13.6	Endrin Aldehyde (1)
3/26/2020		14 - 76.9	76.1	10.3	ug/Kg	13.6	Endrin (1)
3/26/2020		19.1 - 90.8	89.5	12.2	ug/Kg	13.6	Endosulfan Sulfate (1)
3/26/2020		23.4 - 90.9	88.6	12.0	ug/Kg	13.6	Endosulfan II (1)
3/26/2020		21 - 84.6	79.8	10.8	ug/Kg	13.6	Endosulfan I (1)
3/26/2020	*	19.2 - 85	88.7	12.1	ug/Kg	13.6	Dieldrin (1)
3/26/2020		18.3 - 82.2	75.0	10.2	ug/Kg	13.6	delta-BHC (1)
3/26/2020	*	21.7 - 85.9	97.8	13.3	ug/Kg	13.6	cis-Chlordane (1)
3/26/2020	*	23.2 - 79.2	88,7	12.1	ug/Kg	13.6	beta-BHC (1)
3/26/2020		20.2 - 79.2	78.1	10.6	ug/Kg	13.6	alpha-BHC (1)
3/26/2020	*	21 - 81.6	85.1	11.6	ug/Kg	13.6	Aldrin (1)
3/26/2020		16.7 - 93.7	89.1	12.1	ug/Kg	13.6	4,4-DDT (1)
3/26/2020	*	17.8 - 85.6	89.9	12.2	ug/Kg	13.6	4,4-DDE (1)
3/26/2020	*	15.1 - 85.2	87,6	11,9	ug/Kg	13.6	4,4-DDD (1)
<u>Analyzed</u>	<u>Outliers</u>	Limits	<u>Recovery</u>	Result	Units	Added	<u>Analyte</u>
Date	LCS	<u>% Rec</u>	LCS %	LCS	<u>Spike</u>	<u>Spike</u>	

Report Prepared Saturday, March 28, 2020

compliance with the sample condition requirements upon receipt.

Partial



QC Report for Laboratory Control Sample

Client:	<u>BE3</u>
Project Reference:	57-71 Tonawanda
Lab Project ID:	201276
SDG #:	1276-01
Matrix:	Soil

Chlorinated Pesticides

Preparation Date:	Method Reference(s):	trans-Chlordane (1)	Toxaphene (1)	Methoxychlor (1)	Heptachlor Epoxide (1)	rieptachior (1)	Analyte		
EPA 3546 3/24/2020	EPA 8081B								
		13.6	136	13.6	13.6	13.6	Added	<u>Spike</u>	
		ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	Units	<u>Spike</u>	
		11.7	112	11.2	11.9	11.2	<u>Result</u>	LCS	
		85.9	82.5	82.6	87.4	82.6	<u>Recovery</u>	LCS %	
		19.9 - 82	10 - 106	21.3 - 102	22.6 - 86.1	22.2 - 85.8	Limits	<u>% Rec</u>	
		*			*		<u>Outliers</u>	LCS	
		3/26/2020	3/26/2020	3/26/2020	3/26/2020	3/26/2020	Analyzed	Date	

Data File: QC Number: QC Batch ID:

QC200324PESTS

ST033118.D

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Report Prepared Saturday, March 28, 2020

Partial



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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GENERAL TERMS AND CONDITIONS LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order. Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report. Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples. LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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Other Rush 2 day 10 day Rush 1 day Rush 3 day Standard 5 day please indicate date needed: DATE COLLECTED 3-18-20 3-19-20 3-19-20 3-18-20 3-19-20 3-18-20 **Turnaround Time** 57-71 TONACHUSA PROJECT REFERENCE Availability contingent upon lab approval; additional fees may apply. PARADIGM 310 TIME 930 840 310 1000 240 X Other None Required Category B Category A Batch QC ease indicate package needed: m⊣-∽o⊐≤oo X × X X X X ພັກນິບ Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid **Report Supplements** ATTN: CLIENT: PHONE: ADDRESS: 55B-2 558-2 SSA-1 55B-5 55B-4 55B-K 3 WEFFLO STATE: NU ZIP BE3 PETER 270 NIALAHRA 16-308-8220 Basic EDD None Required Other EDD NYSDEC EDD please indicate EDD needed SAMPLE IDENTIFIER O.4 FT REPORT TO: 9-11F 6-9 6-8 FI 11-0 0-12 179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311 C X 1 22 GORTON H CHAIN OF CUSTODY By signing this form, client agrees to Paradigm Terms and Conditions (reverse). WA - Water WG - Groundwater Received @ Lab By Sampled Subsent difectly to sub Kecel Relinquished 12213 REAM P 50 x – ⊼ ⊣ Þ ≤ s m o o o ATTN: CLIENT: PHONE CITY: ADDRESS: XĐ X-X **DW** - Drinking Water **WW** - Wastewater × XX mal die 2) INVOICE TO K 3 106. CP 3/23/2020 X STATE: 23/2020 3-19-dodo Date/Time Date/Time Date/Time X pc. ¥ SO-Soil 3-18-18-20 Silvex ΝP email edf 3/25/2020 See additional page for sample conditions. 19-2020 A for TCLP Vaci 4°Cial 3 Julion No custoly seals 10, 12 Daks SD - Solid PT - Paint Email: Quotation #: SUCY S extract REMARKS Ó 1276 P.I.F 20F 2 **Fotal Cost** LAB PROJECT ID WP - Wipe CK - Caulk 5/23/2020 00 537 W PARADIGM LAB SAMPLE NUMBER AP 0 0 V 00 ŝ s OIA - Air -+r a

PARADIGM	<u>Ch</u>	ain of Custody Suppler	nent
Client:	BE3	Completed by:	len Perrulo
Lab Project ID:	201276	Date: $3/$	23/2020
	Sample Cond Per NELAC/ELA	lition Requirements AP 210/241/242/243/244	
Condition	NELAC compliance with the san Yes	nple condition requirements upon re No	rceipt N/A
Container Type	\square	5035	
Comments		·	
Transferred to method- compliant container			
Headspace (<1 mL) Comments			
Preservation Comments			
3			
Chlorine Absent (<0.10 ppm per test strip) Comments	2.		
Holding Time			
Comments		N.	
Temperature Comments	4°C iced		Metals
Compliant Sample Quantity/" Comments		5 TCLP Herbicides	Seat difectly
	to sub lab.	I TOINGOLD O	