04-Feb-2016

Scott Smith
Water Defense
PO Box 204
Livingston Manor, NY 12758

Tel: (508) 776-2995
Fax:

Re: Flint House #3 Work Order: **1602005**

Dear Scott,

ALS Environmental received 2 samples on 01-Feb-2016 08:02 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 37.

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

Sincerely,

Rob Nieman

Electronically approved by: Chris Gibson

Rob Nieman
Project Manager

ALS Environmental

Date: 04-Feb-16

Client: Water Defense
Project: Flint House #3
Work Order: **1602005**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1602005-01	WaterBug Bathtub 30 minute Exposure	Bulk		1/30/2016 17:15	2/1/2016 08:02	☐
1602005-02	Bathtub Glass Grab Sample	Water		1/30/2016 17:15	2/1/2016 08:02	☐

EPA-R5-2017-008527_0000416

Client: Water Defense
Project: Flint House #3
Work Order: 1602005

Case Narrative

The analytical data provided relates directly to the samples received by ALS Laboratory Group and for only the analyses requested.

Results relate only to the items tested and are not blank corrected unless indicated.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

Batch R125578, Method 8260_VOC_B, Sample 1602005-01A: Surrogate outside QA/QC limits due to matrix.

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3
Sample ID: WaterBug Bathtub 30 minute Exposure
Collection Date: 1/30/2016 05:15 PM

Work Order: 1602005
Lab ID: 1602005-01
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471A**		Prep Date: **2/1/2016**	Analyst: **VAW**
Mercury	ND		0.29	mg/Kg	1	2/1/2016 01:36 PM
METALS BY ICP			**SW6010B**		Prep Date: **2/1/2016**	Analyst: **VAW**
Aluminum	ND		490	mg/Kg	1	2/1/2016 01:37 PM
Arsenic	ND		4.9	mg/Kg	1	2/1/2016 01:37 PM
Barium	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Beryllium	ND		0.49	mg/Kg	1	2/1/2016 01:37 PM
Cadmium	ND		0.99	mg/Kg	1	2/1/2016 01:37 PM
Calcium	ND		8,900	mg/Kg	1	2/1/2016 01:37 PM
Chromium	ND		2.0	mg/Kg	1	2/1/2016 01:37 PM
Cobalt	ND		4.9	mg/Kg	1	2/1/2016 01:37 PM
Copper	ND		4.9	mg/Kg	1	2/1/2016 01:37 PM
Iron	ND		99	mg/Kg	1	2/1/2016 01:37 PM
Lead	ND		4.9	mg/Kg	1	2/1/2016 01:37 PM
Lithium	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Magnesium	ND		640	mg/Kg	1	2/1/2016 01:37 PM
Manganese	ND		4.9	mg/Kg	1	2/1/2016 01:37 PM
Molybdenum	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Nickel	ND		4.9	mg/Kg	1	2/1/2016 01:37 PM
Phosphorus	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Platinum	ND		99	mg/Kg	1	2/1/2016 01:37 PM
Selenium	ND		3.0	mg/Kg	1	2/1/2016 01:37 PM
Silver	ND		0.99	mg/Kg	1	2/1/2016 01:37 PM
Sodium	ND		490	mg/Kg	1	2/1/2016 01:37 PM
Tellurium	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Thallium	ND		3.0	mg/Kg	1	2/1/2016 01:37 PM
Tin	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Titanium	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Tungsten	ND		99	mg/Kg	1	2/1/2016 01:37 PM
Vanadium	ND		4.9	mg/Kg	1	2/1/2016 01:37 PM
Yttrium	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
Zinc	ND		100	mg/Kg	1	2/1/2016 01:37 PM
Zirconium	ND		9.9	mg/Kg	1	2/1/2016 01:37 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**SW8270C**		Prep Date: **2/1/2016**	Analyst: **JCL**
1,2,4,5-Tetrachlorobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
1,2,4-Trichlorobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
1,2-Dichlorobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
1,3-Dichlorobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
1,3-Dinitrobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3
Sample ID: WaterBug Bathtub 30 minute Exposure
Collection Date: 1/30/2016 05:15 PM

Work Order: 1602005
Lab ID: 1602005-01
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dichlorobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
1-Methylnaphthalene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
1-Naphthylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,3,4,6-Tetrachlorophenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,4,5-Trichlorophenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,4,6-Trichlorophenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,4-Dichlorophenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,4-Dimethylphenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,4-Dinitrophenol	ND		9,800	µg/Kg	1	2/2/2016 11:01 AM
2,4-Dinitrotoluene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,6-Dichlorophenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2,6-Dinitrotoluene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Acetylaminofluorene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Chloronaphthalene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Chlorophenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Methylnaphthalene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Methylphenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Naphthylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Nitroaniline	ND		9,800	µg/Kg	1	2/2/2016 11:01 AM
2-Nitrophenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
2-Picoline	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
3&4-Methylphenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
3,3`-Dichlorobenzidine	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
3-Methylcholanthrene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
3-Nitroaniline	ND		9,800	µg/Kg	1	2/2/2016 11:01 AM
4,6-Dinitro-2-methylphenol	ND		9,800	µg/Kg	1	2/2/2016 11:01 AM
4-Aminobiphenyl	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
4-Bromophenyl phenyl ether	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
4-Chloro-3-methylphenol	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
4-Chloroaniline	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
4-Chlorophenyl phenyl ether	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
4-Nitroaniline	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
4-Nitrophenol	ND		9,800	µg/Kg	1	2/2/2016 11:01 AM
4-Nitroquinoline 1-oxide	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
5-Nitro-o-toluidine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
7,12-Dimethylbenz(a)anthracene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Acenaphthene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Acenaphthylene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Acetophenone	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Aniline	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3 **Work Order:** 1602005
Sample ID: WaterBug Bathtub 30 minute Exposure **Lab ID:** 1602005-01
Collection Date: 1/30/2016 05:15 PM **Matrix:** BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Azobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Benzidine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Benzo(a)anthracene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Benzo(a)pyrene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Benzo(b)fluoranthene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Benzo(g,h,i)perylene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Benzo(k)fluoranthene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Benzyl alcohol	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
Bis(2-chloroethoxy)methane	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Bis(2-chloroethyl)ether	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Bis(2-chloroisopropyl)ether	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Bis(2-ethylhexyl)phthalate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Butyl benzyl phthalate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Carbazole	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Chrysene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Dibenzo(a,h)anthracene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Dibenzofuran	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Diethyl phthalate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Dimethyl phthalate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Di-n-butyl phthalate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Di-n-octyl phthalate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Dinoseb	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Diphenylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Ethyl methanesulfonate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Fluoranthene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Fluorene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Hexachlorobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Hexachlorobutadiene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Hexachlorocyclopentadiene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Hexachloroethane	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Indeno(1,2,3-cd)pyrene	ND		890	µg/Kg	1	2/2/2016 11:01 AM
Isophorone	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Isosafrole	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Methapyrilene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Methyl methanesulfonate	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Naphthalene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Nitrobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
N-Nitrosodiethylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
N-Nitrosodimethylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3 **Work Order:** 1602005
Sample ID: WaterBug Bathtub 30 minute Exposure **Lab ID:** 1602005-01
Collection Date: 1/30/2016 05:15 PM **Matrix:** BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
N-Nitroso-di-n-butylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
N-Nitrosodi-n-propylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
N-Nitrosomethylethylamine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
N-Nitrosomorpholine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
N-Nitrosopiperidine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
N-Nitrosopyrrolidine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
o-Toluidine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
p-Dimethylaminoazobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Pentachlorobenzene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Pentachloroethane	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Pentachloronitrobenzene	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
Pentachlorophenol	ND		9,800	µg/Kg	1	2/2/2016 11:01 AM
Phenacetin	ND		3,900	µg/Kg	1	2/2/2016 11:01 AM
Phenanthrene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Phenol	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Pyrene	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Pyridine	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Safrole	ND		2,000	µg/Kg	1	2/2/2016 11:01 AM
Surr: 2,4,6-Tribromophenol	*50.4*		*10.1-79.8*	*%REC*	1	2/2/2016 11:01 AM
Surr: 2-Fluorobiphenyl	*53.0*		*2.13-90.1*	*%REC*	1	2/2/2016 11:01 AM
Surr: 2-Fluorophenol	*12.3*		*0-97.9*	*%REC*	1	2/2/2016 11:01 AM
Surr: 4-Terphenyl-d14	*49.5*		*2.32-87.7*	*%REC*	1	2/2/2016 11:01 AM
Surr: Nitrobenzene-d5	*47.7*		*0.776-85.8*	*%REC*	1	2/2/2016 11:01 AM
Surr: Phenol-d5	*6.35*		*0-126*	*%REC*	1	2/2/2016 11:01 AM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,1,1-Trichloroethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,1,2,2-Tetrachloroethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,1,2-Trichloroethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,1-Dichloroethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,1-Dichloroethene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,1-Dichloropropene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2,3-Trichlorobenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2,3-Trichloropropane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2,4-Trichlorobenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2,4-Trimethylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2-Dibromo-3-chloropropane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2-Dibromoethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2-Dichlorobenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,2-Dichloroethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3
Sample ID: WaterBug Bathtub 30 minute Exposure
Collection Date: 1/30/2016 05:15 PM

Work Order: 1602005
Lab ID: 1602005-01
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloropropane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,3,5-Trimethylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,3-Dichlorobenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,3-Dichloropropane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
1,4-Dichlorobenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
2,2-Dichloropropane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
2-Butanone	ND		25	µg/Kg	5	2/1/2016 06:28 PM
2-Chlorotoluene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
2-Hexanone	ND		25	µg/Kg	5	2/1/2016 06:28 PM
4-Chlorotoluene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
4-Methyl-2-pentanone	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Acetone	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Benzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Bromobenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Bromochloromethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Bromodichloromethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Bromoform	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Bromomethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Carbon disulfide	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Carbon tetrachloride	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Chlorobenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Chloroethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Chloroform	**27**		**25**	**µg/Kg**	5	2/1/2016 06:28 PM
Chloromethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
cis-1,2-Dichloroethene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
cis-1,3-Dichloropropene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Dibromochloromethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Dibromomethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Dichlorodifluoromethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Ethylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Hexachlorobutadiene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Isopropylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
m,p-Xylene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Methyl tert-butyl ether	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Methylene chloride	**150**		**25**	**µg/Kg**	5	2/1/2016 06:28 PM
Naphthalene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
n-Butylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
n-Propylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
o-Xylene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
p-Isopropyltoluene	ND		25	µg/Kg	5	2/1/2016 06:28 PM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3
Sample ID: WaterBug Bathtub 30 minute Exposure
Collection Date: 1/30/2016 05:15 PM

Work Order: 1602005
Lab ID: 1602005-01
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
sec-Butylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Styrene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
tert-Butylbenzene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Tetrachloroethene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Toluene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
trans-1,2-Dichloroethene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
trans-1,3-Dichloropropene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Trichloroethene	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Trichlorofluoromethane	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Vinyl chloride	ND		25	µg/Kg	5	2/1/2016 06:28 PM
Xylenes, Total	ND		50	µg/Kg	5	2/1/2016 06:28 PM
Surr: 4-Bromofluorobenzene	*169*	S	*62.7-159*	*%REC*	5	2/1/2016 06:28 PM
Surr: Dibromofluoromethane	*103*		*67.3-136*	*%REC*	5	2/1/2016 06:28 PM
Surr: Toluene-d8	*88.5*		*83-124*	*%REC*	5	2/1/2016 06:28 PM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3
Sample ID: Bathtub Glass Grab Sample
Collection Date: 1/30/2016 05:15 PM

Work Order: 1602005
Lab ID: 1602005-02
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7470A**		Prep Date: **2/1/2016**	Analyst: **VAW**
Mercury	ND		0.50	µg/L	1	2/1/2016 02:39 PM
METALS BY ICP			**SW6010B**		Prep Date: **2/1/2016**	Analyst: **VAW**
Aluminum	**0.25**		**0.20**	**mg/L**	1	2/1/2016 02:20 PM
Arsenic	ND		0.010	mg/L	1	2/1/2016 02:20 PM
Barium	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Beryllium	ND		0.0040	mg/L	1	2/1/2016 02:20 PM
Cadmium	ND		0.0050	mg/L	1	2/1/2016 02:20 PM
Calcium	**28**		**0.20**	**mg/L**	1	2/1/2016 02:20 PM
Chromium	ND		0.020	mg/L	1	2/1/2016 02:20 PM
Cobalt	ND		0.050	mg/L	1	2/1/2016 02:20 PM
Copper	ND		0.025	mg/L	1	2/1/2016 02:20 PM
Iron	ND		0.20	mg/L	1	2/1/2016 02:20 PM
Lead	ND		0.015	mg/L	1	2/1/2016 02:20 PM
Lithium	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Magnesium	**8.1**		**0.20**	**mg/L**	1	2/1/2016 02:20 PM
Manganese	ND		0.050	mg/L	1	2/1/2016 02:20 PM
Molybdenum	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Nickel	ND		0.040	mg/L	1	2/1/2016 02:20 PM
Phosphorus	**1.2**		**0.10**	**mg/L**	1	2/1/2016 02:20 PM
Platinum	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Selenium	ND		0.030	mg/L	1	2/1/2016 02:20 PM
Silver	ND		0.010	mg/L	1	2/1/2016 02:20 PM
Sodium	**4.8**		**0.20**	**mg/L**	1	2/1/2016 02:20 PM
Tellurium	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Thallium	ND		0.0020	mg/L	1	2/1/2016 02:20 PM
Tin	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Titanium	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Tungsten	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Vanadium	ND		0.050	mg/L	1	2/1/2016 02:20 PM
Yttrium	ND		0.10	mg/L	1	2/1/2016 02:20 PM
Zinc	**0.062**		**0.050**	**mg/L**	1	2/1/2016 02:20 PM
Zirconium	ND		0.10	mg/L	1	2/1/2016 02:20 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,1,1-Trichloroethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,1-Dichloroethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3
Sample ID: Bathtub Glass Grab Sample
Collection Date: 1/30/2016 05:15 PM

Work Order: 1602005
Lab ID: 1602005-02
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,1-Dichloropropene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2,3-Trichlorobenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2,3-Trichloropropane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2,4-Trichlorobenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2,4-Trimethylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2-Dibromo-3-chloropropane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2-Dibromoethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2-Dichlorobenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2-Dichloroethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,2-Dichloropropane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,3,5-Trimethylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,3-Dichlorobenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,3-Dichloropropane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
1,4-Dichlorobenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
2,2-Dichloropropane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
2-Butanone	ND		5.0	µg/L	1	2/1/2016 05:14 PM
2-Chlorotoluene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
2-Hexanone	ND		5.0	µg/L	1	2/1/2016 05:14 PM
4-Chlorotoluene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Acetone	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Benzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Bromobenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Bromochloromethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Bromodichloromethane	**5.2**		**5.0**	**µg/L**	1	2/1/2016 05:14 PM
Bromoform	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Bromomethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Carbon disulfide	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Carbon tetrachloride	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Chlorobenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Chloroethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Chloroform	**11**		**5.0**	**µg/L**	1	2/1/2016 05:14 PM
Chloromethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
cis-1,2-Dichloroethene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Dibromochloromethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Dibromomethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Dichlorodifluoromethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Ethylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM

Note:

ALS Environmental

Date: *04-Feb-16*

Client: Water Defense
Project: Flint House #3
Sample ID: Bathtub Glass Grab Sample
Collection Date: 1/30/2016 05:15 PM

Work Order: 1602005
Lab ID: 1602005-02
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Isopropylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
m,p-Xylene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Methylene chloride	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Naphthalene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
n-Butylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
n-Propylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
o-Xylene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
p-Isopropyltoluene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
sec-Butylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Styrene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
tert-Butylbenzene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Tetrachloroethene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Toluene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Trichloroethene	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Trichlorofluoromethane	ND		5.0	µg/L	1	2/1/2016 05:14 PM
Vinyl chloride	ND		2.0	µg/L	1	2/1/2016 05:14 PM
Xylenes, Total	ND		10	µg/L	1	2/1/2016 05:14 PM
Surr: 4-Bromofluorobenzene	*96.4*		*61-131*	*%REC*	1	2/1/2016 05:14 PM
Surr: Dibromofluoromethane	*93.3*		*87-126*	*%REC*	1	2/1/2016 05:14 PM
Surr: Toluene-d8	*89.8*		*84-111*	*%REC*	1	2/1/2016 05:14 PM

Note:

ALS Environmental

Date: 04-Feb-16

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33539** Instrument ID **HG1** Method: **SW7471A**

MBLK Sample ID: **MBLK-33539-33539** Units: **mg/Kg** Analysis Date: **2/1/2016 12:59 PM**
Client ID: Run ID: **HG1_160201A** SeqNo: **1214929** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.30								

LCS Sample ID: **LCS-33539-33539** Units: **mg/Kg** Analysis Date: **2/1/2016 01:01 PM**
Client ID: Run ID: **HG1_160201A** SeqNo: **1214930** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.8154	0.30	0.8287	0	98.4	69-147	0			

LCSD Sample ID: **LCSD-33539-33539** Units: **mg/Kg** Analysis Date: **2/1/2016 01:03 PM**
Client ID: Run ID: **HG1_160201A** SeqNo: **1214931** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.8274	0.30	0.8324	0	99.4	69-147	0.8154	1.46	20	

MS Sample ID: **1602003-01A MS** Units: **mg/Kg** Analysis Date: **2/1/2016 01:28 PM**
Client ID: Run ID: **HG1_160201A** SeqNo: **1214941** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.791	0.29	0.8171	-0.006582	97.6	69-147	0			

MSD Sample ID: **1602003-01A MSD** Units: **mg/Kg** Analysis Date: **2/1/2016 01:30 PM**
Client ID: Run ID: **HG1_160201A** SeqNo: **1214942** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.8477	0.29	0.8136	-0.006582	105	69-147	0.791	6.92	20	

The following samples were analyzed in this batch: 1602005-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33544** Instrument ID **HG1** Method: **SW7470A**

MBLK Sample ID: **MBLK-33544-33544** Units: **µg/L** Analysis Date: **2/1/2016 02:16 PM**
Client ID: Run ID: **HG1_160201B** SeqNo: **1215013** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.50								

LCS Sample ID: **LCS-33544-33544** Units: **µg/L** Analysis Date: **2/1/2016 02:18 PM**
Client ID: Run ID: **HG1_160201B** SeqNo: **1215014** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	5.35	0.50	5	0	107	80-120	0			

LCSD Sample ID: **LCSD-33544-33544** Units: **µg/L** Analysis Date: **2/1/2016 02:20 PM**
Client ID: Run ID: **HG1_160201B** SeqNo: **1215015** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	5.77	0.50	5	0	115	80-120	5.35	7.55	20	

MS Sample ID: **1602003-03A MS** Units: **µg/L** Analysis Date: **2/1/2016 02:32 PM**
Client ID: Run ID: **HG1_160201B** SeqNo: **1215019** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	5.24	0.50	5	-0.01	105	75-125	0			

MSD Sample ID: **1602003-03A MSD** Units: **µg/L** Analysis Date: **2/1/2016 02:35 PM**
Client ID: Run ID: **HG1_160201B** SeqNo: **1215020** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	5.27	0.50	5	-0.01	106	75-125	5.24	0.571	20	

The following samples were analyzed in this batch: 1602005-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33538** Instrument ID **ICP3** Method: **SW6010B**

MBLK Sample ID: **mblk-33538-33538** Units: **mg/Kg** Analysis Date: **2/1/2016 12:24 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214953** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	480								
Arsenic	ND	4.8								
Barium	ND	9.7								
Beryllium	ND	0.48								
Cadmium	ND	0.97								
Calcium	ND	8,700								
Chromium	ND	1.9								
Cobalt	ND	4.8								
Copper	ND	4.8								
Iron	ND	97								
Lead	ND	4.8								
Lithium	ND	9.7								
Magnesium	ND	630								
Manganese	ND	4.8								
Molybdenum	ND	9.7								
Nickel	ND	4.8								
Phosphorus	ND	9.7								
Platinum	ND	97								
Selenium	ND	2.9								
Silver	ND	0.97								
Sodium	ND	480								
Tellurium	ND	9.7								
Thallium	ND	2.9								
Tin	ND	9.7								
Titanium	ND	9.7								
Tungsten	ND	97								
Vanadium	ND	4.8								
Yttrium	ND	9.7								
Zinc	ND	100								
Zirconium	ND	9.7								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33538** Instrument ID **ICP3** Method: **SW6010B**

LCS Sample ID: **lcs-33538-33538** Units: **mg/Kg** Analysis Date: **2/1/2016 12:27 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214954** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	480	193.8	0	126	80-120	0			S
Arsenic	198.8	4.8	193.8	0	103	80-120	0			
Barium	197.3	9.7	193.8	0	102	80-120	0			
Beryllium	190.7	0.48	193.8	0	98.4	80-120	0			
Cadmium	203.3	0.97	193.8	0	105	80-120	0			
Calcium	ND	8,700	193.8	0	3500	80-120	0			S
Chromium	195.9	1.9	193.8	0	101	80-120	0			
Cobalt	186.1	4.8	193.8	0	96	80-120	0			
Copper	187.5	4.8	193.8	0	96.7	80-120	0			
Iron	219.8	97	193.8	0	113	80-120	0			
Lead	202.3	4.8	193.8	0	104	80-120	0			
Magnesium	684.1	630	193.8	0	353	80-120	0			S
Manganese	184	4.8	193.8	0	95	80-120	0			
Molybdenum	183.5	9.7	193.8	0	94.7	80-120	0			
Nickel	186.6	4.8	193.8	0	96.3	80-120	0			
Selenium	189.3	2.9	193.8	0	97.7	80-120	0			
Silver	183.2	0.97	193.8	0	94.5	80-120	0			
Sodium	ND	480	193.8	0	96.3	80-120	0			
Thallium	184.4	2.9	193.8	0	95.1	80-120	0			
Titanium	189.7	9.7	193.8	0	97.9	80-120	0			
Vanadium	186	4.8	193.8	0	96	80-120	0			
Zinc	266.5	100	193.8	0	138	80-120	0			S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33538** Instrument ID **ICP3** Method: **SW6010B**

LCSD Sample ID: **lcsd-33538-33538** Units: **mg/Kg** Analysis Date: **2/1/2016 12:30 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214955** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	480	192.2	0	137	80-120	243.4	0	20	S
Arsenic	196.8	4.8	192.2	0	102	80-120	198.8	1.01	20	
Barium	193	9.6	192.2	0	100	80-120	197.3	2.2	20	
Beryllium	189.3	0.48	192.2	0	98.5	80-120	190.7	0.729	20	
Cadmium	199.9	0.96	192.2	0	104	80-120	203.3	1.67	20	
Calcium	9385	8,700	192.2	0	4880	80-120	6781	32.2	20	SR
Chromium	193	1.9	192.2	0	100	80-120	195.9	1.51	20	
Cobalt	183	4.8	192.2	0	95.2	80-120	186.1	1.71	20	
Copper	183	4.8	192.2	0	95.2	80-120	187.5	2.39	20	
Iron	242.2	96	192.2	0	126	80-120	219.8	9.72	20	S
Lead	198.4	4.8	192.2	0	103	80-120	202.3	1.97	20	
Magnesium	881.6	620	192.2	0	459	80-120	684.1	25.2	20	SR
Manganese	184.3	4.8	192.2	0	95.9	80-120	184	0.174	20	
Molybdenum	179.7	9.6	192.2	0	93.5	80-120	183.5	2.11	20	
Nickel	182.8	4.8	192.2	0	95.1	80-120	186.6	2.05	20	
Selenium	184.6	2.9	192.2	0	96	80-120	189.3	2.51	20	
Silver	179	0.96	192.2	0	93.1	80-120	183.2	2.33	20	
Sodium	ND	480	192.2	0	106	80-120	186.6	0	20	
Thallium	178.6	2.9	192.2	0	92.9	80-120	184.4	3.19	20	
Titanium	189.6	9.6	192.2	0	98.6	80-120	189.7	0.0168	20	
Vanadium	183.4	4.8	192.2	0	95.4	80-120	186	1.41	20	
Zinc	288.7	99	192.2	0	150	80-120	266.5	8.02	20	S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33538** Instrument ID **ICP3** Method: **SW6010B**

MS Sample ID: **1602001-01a ms** Units: **mg/Kg** Analysis Date: **2/1/2016 12:36 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214957** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	480	193.2	3.503	114	75-125	0			
Arsenic	200.7	4.8	193.2	0.00294	104	75-125	0			
Barium	196.9	9.7	193.2	0.005292	102	75-125	0			
Beryllium	192.3	0.48	193.2	-0.06703	99.6	75-125	0			
Cadmium	201.9	0.97	193.2	-0.0933	105	75-125	0			
Calcium	ND	8,700	193.2	2636	914	75-125	0			SO
Chromium	198	1.9	193.2	-0.1282	103	75-125	0			
Cobalt	187.7	4.8	193.2	-0.04743	97.2	75-125	0			
Copper	187.5	4.8	193.2	0.6201	96.7	75-125	0			
Iron	302.9	97	193.2	21.4	146	75-125	0			S
Lead	203.1	4.8	193.2	0.302	105	75-125	0			
Lithium	ND	9.7	193.2	-0.01744	0.0090	75-125	0			S
Magnesium	ND	630	193.2	187.4	163	75-125	0			S
Manganese	188.2	4.8	193.2	0.5098	97.2	75-125	0			
Molybdenum	186	9.7	193.2	0.2029	96.2	75-125	0			
Nickel	187.6	4.8	193.2	0.04273	97.1	75-125	0			
Selenium	194.9	2.9	193.2	0.5613	101	75-125	0			
Silver	185.3	0.97	193.2	-0.07644	95.9	75-125	0			
Sodium	ND	480	193.2	-2.399	101	75-125	0			
Thallium	187.1	2.9	193.2	0.05214	96.8	75-125	0			
Titanium	192.5	9.7	193.2	-0.4547	99.9	75-125	0			
Vanadium	190.3	4.8	193.2	0.5564	98.2	75-125	0			
Zinc	243.8	99	193.2	32.5	109	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33538** Instrument ID **ICP3** Method: **SW6010B**

MSD Sample ID: **1602001-01a msd** Units: **mg/Kg** Analysis Date: **2/1/2016 12:38 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214958** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	490	197.7	3.503	109	75-125	223.9	0	20	
Arsenic	207.4	4.9	197.7	0.00294	105	75-125	200.7	3.26	20	
Barium	202.1	9.9	197.7	0.005292	102	75-125	196.9	2.6	20	
Beryllium	195.9	0.49	197.7	-0.06703	99.1	75-125	192.3	1.84	20	
Cadmium	207.4	0.99	197.7	-0.0933	105	75-125	201.9	2.69	20	
Calcium	ND	8,900	197.7	2636	397	75-125	4403	0	20	SO
Chromium	202.5	2.0	197.7	-0.1282	102	75-125	198	2.21	20	
Cobalt	193	4.9	197.7	-0.04743	97.6	75-125	187.7	2.78	20	
Copper	191.2	4.9	197.7	0.6201	96.4	75-125	187.5	1.98	20	
Iron	235.9	99	197.7	21.4	108	75-125	302.9	24.9	20	R
Lead	208.6	4.9	197.7	0.302	105	75-125	203.1	2.69	20	
Magnesium	ND	640	197.7	187.4	121	75-125	501.9	0	20	
Manganese	191.9	4.9	197.7	0.5098	96.8	75-125	188.2	1.94	20	
Molybdenum	192.1	9.9	197.7	0.2029	97.1	75-125	186	3.22	20	
Nickel	193	4.9	197.7	0.04273	97.6	75-125	187.6	2.8	20	
Selenium	201.5	3.0	197.7	0.5613	102	75-125	194.9	3.29	20	
Silver	190.7	0.99	197.7	-0.07644	96.5	75-125	185.3	2.88	20	
Sodium	ND	490	197.7	-2.399	101	75-125	193.1	0	20	
Thallium	192.5	3.0	197.7	0.05214	97.3	75-125	187.1	2.84	20	
Titanium	195.7	9.9	197.7	-0.4547	99.2	75-125	192.5	1.61	20	
Vanadium	193.5	4.9	197.7	0.5564	97.6	75-125	190.3	1.66	20	
Zinc	235.1	150	197.7	32.5	102	75-125	243.8	3.65	20	

The following samples were analyzed in this batch: 1602005-01a

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33542** Instrument ID **ICP3** Method: **SW6010B**

MBLK Sample ID: **mblk-33542-33542** Units: **mg/L** Analysis Date: **2/1/2016 01:47 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214981** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	0.20								
Arsenic	ND	0.010								
Barium	ND	0.10								
Beryllium	ND	0.00040								
Cadmium	ND	0.0050								
Calcium	ND	0.20								
Chromium	ND	0.020								
Cobalt	ND	0.025								
Copper	ND	0.025								
Iron	ND	0.20								
Lead	ND	0.015								
Lithium	ND	0.10								
Magnesium	ND	0.20								
Manganese	ND	0.050								
Molybdenum	ND	0.10								
Nickel	ND	0.050								
Phosphorus	ND	0.10								
Platinum	ND	0.10								
Selenium	ND	0.030								
Silver	ND	0.010								
Sodium	ND	0.20								
Tellurium	ND	0.10								
Thallium	ND	0.0020								
Tin	ND	0.10								
Titanium	ND	0.10								
Tungsten	ND	0.10								
Vanadium	ND	0.050								
Yttrium	ND	0.10								
Zinc	ND	0.050								
Zirconium	ND	0.10								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33542** Instrument ID **ICP3** Method: **SW6010B**

LCS Sample ID: **lcs-33542-33542** Units: **mg/L** Analysis Date: **2/1/2016 01:50 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214982** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.9957	0.20	1.1	0	90.5	87.9-120	0			
Arsenic	1.144	0.010	1.1	0	104	80-120	0			
Barium	1.141	0.10	1.1	0	104	80-120	0			
Beryllium	1.083	0.00040	1.1	0	98.5	80-120	0			
Cadmium	1.152	0.0050	1.1	0	105	80-120	0			
Calcium	0.9776	0.20	1.1	0	88.9	80.3-122	0			
Chromium	1.138	0.020	1.1	0	104	80-120	0			
Cobalt	1.088	0.025	1.1	0	98.9	80-120	0			
Copper	1.069	0.025	1.1	0	97.2	80-120	0			
Lead	1.168	0.015	1.1	0	106	80-120	0			
Magnesium	1.011	0.20	1.1	0	91.9	80-120	0			
Manganese	1.066	0.050	1.1	0	96.9	80-120	0			
Molybdenum	1.077	0.10	1.1	0	97.9	80-120	0			
Nickel	1.084	0.050	1.1	0	98.5	80-120	0			
Selenium	1.118	0.030	1.1	0	102	80-120	0			
Silver	1.079	0.010	1.1	0	98.1	80-120	0			
Sodium	1.071	0.20	1.1	0	97.4	80-120	0			
Thallium	1.085	0.0020	1.1	0	98.6	80-120	0			
Titanium	1.086	0.10	1.1	0	98.7	80-120	0			
Vanadium	1.075	0.050	1.1	0	97.8	80-120	0			
Zinc	1.093	0.050	1.1	0	99.4	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33542** Instrument ID **ICP3** Method: **SW6010B**

LCSD Sample ID: **lcsd-33542-33542** Units: **mg/L** Analysis Date: **2/1/2016 01:53 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214983** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.9757	0.20	1.1	0	88.7	87.9-120	0.9957	2.03	20	
Arsenic	1.131	0.010	1.1	0	103	80-120	1.144	1.16	20	
Barium	1.136	0.10	1.1	0	103	80-120	1.141	0.386	20	
Beryllium	1.067	0.00040	1.1	0	97	80-120	1.083	1.46	20	
Cadmium	1.146	0.0050	1.1	0	104	80-120	1.152	0.479	20	
Calcium	0.9569	0.20	1.1	0	87	80.3-122	0.9776	2.14	20	
Chromium	1.132	0.020	1.1	0	103	80-120	1.138	0.581	20	
Cobalt	1.077	0.025	1.1	0	97.9	80-120	1.088	1.03	20	
Copper	1.067	0.025	1.1	0	97	80-120	1.069	0.175	20	
Iron	1.03	0.20	1.1	0	93.6	80-120	1.043	1.24	20	
Lead	1.159	0.015	1.1	0	105	80-120	1.168	0.756	20	
Magnesium	0.9874	0.20	1.1	0	89.8	80-120	1.011	2.36	20	
Manganese	1.049	0.050	1.1	0	95.4	80-120	1.066	1.6	20	
Molybdenum	1.077	0.10	1.1	0	97.9	80-120	1.077	0.0511	20	
Nickel	1.075	0.050	1.1	0	97.8	80-120	1.084	0.744	20	
Selenium	1.11	0.030	1.1	0	101	80-120	1.118	0.691	20	
Silver	1.067	0.010	1.1	0	97	80-120	1.079	1.15	20	
Sodium	1.047	0.20	1.1	0	95.2	80-120	1.071	2.25	20	
Thallium	1.079	0.0020	1.1	0	98.1	80-120	1.085	0.519	20	
Titanium	1.07	0.10	1.1	0	97.3	80-120	1.086	1.5	20	
Vanadium	1.061	0.050	1.1	0	96.5	80-120	1.075	1.35	20	
Zinc	1.085	0.050	1.1	0	98.6	80-120	1.093	0.747	20	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33542** Instrument ID **ICP3** Method: **SW6010B**

MS Sample ID: **1602001-03a ms** Units: **mg/L** Analysis Date: **2/1/2016 02:05 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214985** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.188	0.20	1.1	0.08	101	75-125	0			
Arsenic	1.166	0.010	1.1	-0.002659	106	75-125	0			
Barium	1.13	0.10	1.1	0.0002376	103	75-125	0			
Beryllium	1.1	0.00040	1.1	-0.0006347	100	75-125	0			
Cadmium	1.15	0.0050	1.1	-0.000616	105	75-125	0			
Calcium	24.44	0.20	1.1	24.05	36	75-125	0			SO
Chromium	1.126	0.020	1.1	-0.000396	102	75-125	0			
Cobalt	1.064	0.025	1.1	-0.0003916	96.8	75-125	0			
Copper	1.047	0.025	1.1	0.002449	94.9	75-125	0			
Iron	1.056	0.20	1.1	-0.04249	99.9	75-125	0			
Lead	1.143	0.015	1.1	0.002204	104	75-125	0			
Magnesium	10.03	0.20	1.1	9.144	80.4	75-125	0			O
Manganese	1.058	0.050	1.1	0.0001925	96.1	75-125	0			
Molybdenum	1.091	0.10	1.1	0.0007227	99.2	75-125	0			
Nickel	1.062	0.050	1.1	0.0003234	96.5	75-125	0			
Selenium	1.128	0.030	1.1	0.0007711	102	75-125	0			
Silver	1.051	0.010	1.1	-0.0007084	95.6	75-125	0			
Sodium	7.372	0.20	1.1	6.057	120	75-125	0			O
Thallium	1.059	0.0020	1.1	0.0007744	96.2	75-125	0			
Titanium	1.099	0.10	1.1	-0.002203	100	75-125	0			
Vanadium	1.088	0.050	1.1	0.0008877	98.8	75-125	0			
Zinc	1.164	0.050	1.1	0.08998	97.6	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33542** Instrument ID **ICP3** Method: **SW6010B**

MSD Sample ID: **1602001-03a msd** Units: **mg/L** Analysis Date: **2/1/2016 02:07 PM**
Client ID: Run ID: **ICP3_160201C** SeqNo: **1214986** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.241	0.20	1.1	0.08	106	75-125	1.188	4.35	20	
Arsenic	1.172	0.010	1.1	-0.002659	107	75-125	1.166	0.471	20	
Barium	1.135	0.10	1.1	0.0002376	103	75-125	1.13	0.486	20	
Beryllium	1.103	0.00040	1.1	-0.0006347	100	75-125	1.1	0.3	20	
Cadmium	1.154	0.0050	1.1	-0.000616	105	75-125	1.15	0.382	20	
Calcium	24.62	0.20	1.1	24.05	52	75-125	24.44	0.717	20	SO
Chromium	1.13	0.020	1.1	-0.000396	103	75-125	1.126	0.293	20	
Cobalt	1.071	0.025	1.1	-0.0003916	97.4	75-125	1.064	0.618	20	
Copper	1.048	0.025	1.1	0.002449	95	75-125	1.047	0.105	20	
Iron	1.069	0.20	1.1	-0.04249	101	75-125	1.056	1.25	20	
Lead	1.152	0.015	1.1	0.002204	104	75-125	1.143	0.767	20	
Magnesium	10.05	0.20	1.1	9.144	82.3	75-125	10.03	0.208	20	O
Manganese	1.061	0.050	1.1	0.0001925	96.4	75-125	1.058	0.27	20	
Molybdenum	1.092	0.10	1.1	0.0007227	99.2	75-125	1.091	0.0806	20	
Nickel	1.067	0.050	1.1	0.0003234	97	75-125	1.062	0.465	20	
Selenium	1.137	0.030	1.1	0.0007711	103	75-125	1.128	0.874	20	
Silver	1.057	0.010	1.1	-0.0007084	96.2	75-125	1.051	0.626	20	
Sodium	7.028	0.20	1.1	6.057	88.3	75-125	7.372	4.78	20	O
Thallium	1.062	0.0020	1.1	0.0007744	96.5	75-125	1.059	0.29	20	
Titanium	1.108	0.10	1.1	-0.002203	101	75-125	1.099	0.748	20	
Vanadium	1.098	0.050	1.1	0.0008877	99.8	75-125	1.088	0.946	20	
Zinc	1.168	0.050	1.1	0.08998	98	75-125	1.164	0.377	20	

The following samples were analyzed in this batch: 1602005-02a

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **33548** Instrument ID **SVMS1** Method: **SW8270C**

MBLK Sample ID: **MBLK-33548-33548** Units: **µg/Kg** Analysis Date: **2/1/2016 03:26 PM**
Client ID: Run ID: **SVMS1_160201A** SeqNo: **1215363** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4,5-Tetrachlorobenzene	ND	9,900								
1,2,4-Trichlorobenzene	ND	9,900								
1,2-Dichlorobenzene	ND	9,900								
1,3-Dichlorobenzene	ND	9,900								
1,3-Dinitrobenzene	ND	9,900								
1,4-Dichlorobenzene	ND	9,900								
1-Methylnaphthalene	ND	9,900								
1-Naphthylamine	ND	9,900								
2,3,4,6-Tetrachlorophenol	ND	9,900								
2,4,5-Trichlorophenol	ND	9,900								
2,4,6-Trichlorophenol	ND	9,900								
2,4-Dichlorophenol	ND	9,900								
2,4-Dimethylphenol	ND	9,900								
2,4-Dinitrophenol	ND	50,000								
2,4-Dinitrotoluene	ND	9,900								
2,6-Dichlorophenol	ND	9,900								
2,6-Dinitrotoluene	ND	9,900								
2-Acetylaminofluorene	ND	9,900								
2-Chloronaphthalene	ND	9,900								
2-Chlorophenol	ND	9,900								
2-Methylnaphthalene	ND	9,900								
2-Methylphenol	ND	9,900								
2-Naphthylamine	ND	9,900								
2-Nitroaniline	ND	50,000								
2-Nitrophenol	ND	9,900								
2-Picoline	ND	9,900								
3&4-Methylphenol	ND	9,900								
3,3`-Dichlorobenzidine	ND	20,000								
3-Methylcholanthrene	ND	9,900								
3-Nitroaniline	ND	50,000								
4,6-Dinitro-2-methylphenol	ND	50,000								
4-Aminobiphenyl	ND	20,000								
4-Bromophenyl phenyl ether	ND	9,900								
4-Chloro-3-methylphenol	ND	20,000								
4-Chloroaniline	ND	20,000								
4-Chlorophenyl phenyl ether	ND	9,900								
4-Nitroaniline	ND	20,000								
4-Nitrophenol	ND	50,000								
4-Nitroquinoline 1-oxide	ND	9,900								
5-Nitro-o-toluidine	ND	9,900								
7,12-Dimethylbenz(a)anthracene	ND	9,900								
Acenaphthene	ND	9,900								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **33548** Instrument ID **SVMS1** Method: **SW8270C**

Acenaphthylene	ND	9,900
Acetophenone	ND	9,900
Aniline	ND	9,900
Anthracene	ND	9,900
Azobenzene	ND	9,900
Benzidine	ND	9,900
Benzo(a)anthracene	ND	9,900
Benzo(a)pyrene	ND	9,900
Benzo(b)fluoranthene	ND	9,900
Benzo(g,h,i)perylene	ND	9,900
Benzo(k)fluoranthene	ND	9,900
Benzyl alcohol	ND	20,000
Bis(2-chloroethoxy)methane	ND	9,900
Bis(2-chloroethyl)ether	ND	9,900
Bis(2-chloroisopropyl)ether	ND	9,900
Bis(2-ethylhexyl)phthalate	ND	9,900
Butyl benzyl phthalate	ND	9,900
Carbazole	ND	9,900
Chrysene	ND	9,900
Dibenzo(a,h)anthracene	ND	9,900
Dibenzofuran	ND	9,900
Diethyl phthalate	ND	9,900
Dimethyl phthalate	ND	9,900
Di-n-butyl phthalate	ND	9,900
Di-n-octyl phthalate	ND	9,900
Dinoseb	ND	9,900
Diphenylamine	ND	9,900
Ethyl methanesulfonate	ND	9,900
Fluoranthene	ND	9,900
Fluorene	ND	9,900
Hexachlorobenzene	ND	9,900
Hexachlorobutadiene	ND	9,900
Hexachlorocyclopentadiene	ND	9,900
Hexachloroethane	ND	9,900
Indeno(1,2,3-cd)pyrene	ND	4,500
Isophorone	ND	9,900
Isosafrole	ND	9,900
Methapyrilene	ND	9,900
Methyl methanesulfonate	ND	9,900
Naphthalene	ND	9,900
Nitrobenzene	ND	9,900
N-Nitrosodiethylamine	ND	9,900
N-Nitrosodimethylamine	ND	9,900
N-Nitroso-di-n-butylamine	ND	9,900
N-Nitrosodi-n-propylamine	ND	9,900
N-Nitrosomethylethylamine	ND	9,900
N-Nitrosomorpholine	ND	9,900
N-Nitrosopiperidine	ND	9,900

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **33548** Instrument ID **SVMS1** Method: **SW8270C**

N-Nitrosopyrrolidine	ND	9,900					
o-Toluidine	ND	9,900					
p-Dimethylaminoazobenzene	ND	9,900					
Pentachlorobenzene	ND	9,900					
Pentachloroethane	ND	9,900					
Pentachloronitrobenzene	ND	20,000					
Pentachlorophenol	ND	50,000					
Phenacetin	ND	20,000					
Phenanthrene	ND	9,900					
Phenol	ND	9,900					
Pyrene	ND	9,900					
Pyridine	ND	9,900					
Safrole	ND	9,900					
Surr: 2,4,6-Tribromophenol	59460	0	*99900*	0	*59.5*	*10.1-79.8*	0
Surr: 2-Fluorobiphenyl	28320	0	*50100*	0	*56.5*	*2.13-90.1*	0
Surr: 2-Fluorophenol	19580	0	*99900*	0	*19.6*	*0-97.9*	0
Surr: 4-Terphenyl-d14	32180	0	*50100*	0	*64.2*	*2.32-87.7*	0
Surr: Nitrobenzene-d5	26840	0	*50100*	0	*53.6*	*.776-85.8*	0
Surr: Phenol-d5	24140	0	*99900*	0	*24.2*	*0-126*	0

LCS Sample ID: **LCS-33548-33548** Units: **µg/Kg** Analysis Date: **2/1/2016 03:51 PM**
Client ID: Run ID: **SVMS1_160201A** SeqNo: **1215364** Prep Date: **2/1/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	24150	9,900	50100	0	48.2	11.7-120	0			
1,4-Dichlorobenzene	19340	9,900	50100	0	38.6	6.03-104	0			
2,4-Dinitrotoluene	27160	9,900	50100	0	54.2	11.7-141	0			
2-Chlorophenol	17470	9,900	50100	0	34.9	1.26-113	0			
4-Chloro-3-methylphenol	26620	20,000	50100	0	53.1	7.56-113	0			
4-Nitrophenol	ND	50,000	50100	0	35.8	2.9-128	0			
Acenaphthene	23710	9,900	50100	0	47.3	46-107	0			
N-Nitrosodi-n-propylamine	21780	9,900	50100	0	43.5	13.4-115	0			
Pentachlorophenol	ND	50,000	50100	0	48.8	35-128	0			
Phenol	11510	9,900	50100	0	23	.578-121	0			
Surr: 2,4,6-Tribromophenol	53460	0	*99900*	0	*53.5*	*15.3-142*	0			
Surr: 2-Fluorobiphenyl	20770	0	*50100*	0	*41.5*	*2.13-90.1*	0			
Surr: 2-Fluorophenol	12650	0	*99900*	0	*12.7*	*0-97.9*	0			
Surr: 4-Terphenyl-d14	28120	0	*50100*	0	*56.1*	*2.32-87.7*	0			
Surr: Nitrobenzene-d5	17270	0	*50100*	0	*34.5*	*.776-85.8*	0			
Surr: Phenol-d5	19890	0	*99900*	0	*19.9*	*0-126*	0			

The following samples were analyzed in this batch: 1602005-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **R125576** Instrument ID **VMS1** Method: **SW8260B**

MBLK Sample ID: **MBLK-R125576** Units: **µg/L** Analysis Date: **2/1/2016 07:53 AM**
Client ID: Run ID: **VMS1_160201A** SeqNo: **1215177** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0								
1,1,1-Trichloroethane	ND	5.0								
1,1,2,2-Tetrachloroethane	ND	5.0								
1,1,2-Trichloroethane	ND	5.0								
1,1-Dichloroethane	ND	5.0								
1,1-Dichloroethene	ND	5.0								
1,1-Dichloropropene	ND	5.0								
1,2,3-Trichlorobenzene	ND	5.0								
1,2,3-Trichloropropane	ND	5.0								
1,2,4-Trichlorobenzene	ND	5.0								
1,2,4-Trimethylbenzene	ND	5.0								
1,2-Dibromo-3-chloropropane	ND	5.0								
1,2-Dibromoethane	ND	5.0								
1,2-Dichlorobenzene	ND	5.0								
1,2-Dichloroethane	ND	5.0								
1,2-Dichloropropane	ND	5.0								
1,3,5-Trimethylbenzene	ND	5.0								
1,3-Dichlorobenzene	ND	5.0								
1,3-Dichloropropane	ND	5.0								
1,4-Dichlorobenzene	ND	5.0								
2,2-Dichloropropane	ND	5.0								
2-Butanone	ND	5.0								
2-Chlorotoluene	ND	5.0								
2-Hexanone	ND	5.0								
4-Chlorotoluene	ND	5.0								
4-Methyl-2-pentanone	ND	5.0								
Acetone	ND	5.0								
Benzene	ND	5.0								
Bromobenzene	ND	5.0								
Bromochloromethane	ND	5.0								
Bromodichloromethane	ND	5.0								
Bromoform	ND	5.0								
Bromomethane	ND	5.0								
Carbon disulfide	ND	5.0								
Carbon tetrachloride	ND	5.0								
Chlorobenzene	ND	5.0								
Chloroethane	ND	5.0								
Chloroform	ND	5.0								
Chloromethane	ND	5.0								
cis-1,2-Dichloroethene	ND	5.0								
cis-1,3-Dichloropropene	ND	5.0								
Dibromochloromethane	ND	5.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **R125576** Instrument ID **VMS1** Method: **SW8260B**

Dibromomethane	ND	5.0					
Dichlorodifluoromethane	ND	5.0					
Ethylbenzene	ND	5.0					
Hexachlorobutadiene	ND	5.0					
Isopropylbenzene	ND	5.0					
m,p-Xylene	ND	5.0					
Methyl tert-butyl ether	ND	5.0					
Methylene chloride	ND	5.0					
Naphthalene	ND	5.0					
n-Butylbenzene	ND	5.0					
n-Propylbenzene	ND	5.0					
o-Xylene	ND	5.0					
p-Isopropyltoluene	ND	5.0					
sec-Butylbenzene	ND	5.0					
Styrene	ND	5.0					
tert-Butylbenzene	ND	5.0					
Tetrachloroethene	ND	5.0					
Toluene	ND	5.0					
trans-1,2-Dichloroethene	ND	5.0					
trans-1,3-Dichloropropene	ND	5.0					
Trichloroethene	ND	5.0					
Trichlorofluoromethane	ND	5.0					
Vinyl chloride	ND	2.0					
Xylenes, Total	ND	10					
Surr: 4-Bromofluorobenzene	50.92	0	*50*	0	*102*	*61-131*	0
Surr: Dibromofluoromethane	52.67	0	*50*	0	*105*	*87-126*	0
Surr: Toluene-d8	47.05	0	*50*	0	*94.1*	*84-111*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **R125576** Instrument ID **VMS1** Method: **SW8260B**

LCS Sample ID: **LCS-R125576** Units: **µg/L** Analysis Date: **2/1/2016 08:56 AM**
Client ID: Run ID: **VMS1_160201A** SeqNo: **1215178** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	34.49	5.0	50	0	69	48.4-140	0			
1,1-Dichloroethene	45.85	5.0	50	0	91.7	45.5-150	0			
1,2-Dichloroethane	32.17	5.0	50	0	64.3	46.5-141	0			
1,3-Dichlorobenzene	25.97	5.0	50	0	51.9	42.5-133	0			
1,4-Dichlorobenzene	26.13	5.0	50	0	52.3	38.9-136	0			
Benzene	33.57	5.0	50	0	67.1	50.7-134	0			
Carbon tetrachloride	36.3	5.0	50	0	72.6	45.5-143	0			
Chlorobenzene	27.29	5.0	50	0	54.6	45-133	0			
Chloroform	34.52	5.0	50	0	69	52.4-136	0			
cis-1,2-Dichloroethene	35.08	5.0	50	0	70.2	49.7-138	0			
Ethylbenzene	27.97	5.0	50	0	55.9	37.8-145	0			
m,p-Xylene	55.94	5.0	100	0	55.9	25.1-163	0			
Methyl tert-butyl ether	32.39	5.0	50	0	64.8	26.7-174	0			
Styrene	28.21	5.0	50	0	56.4	26.3-172	0			
Tetrachloroethene	27.89	5.0	50	0	55.8	37.3-139	0			
Toluene	32.56	5.0	50	0	65.1	44-135	0			
Trichloroethene	33.32	5.0	50	0	66.6	45.9-140	0			
Xylenes, Total	83.79	10	150	0	55.9	47.3-132	0			
Surr: 4-Bromofluorobenzene	50.67	0	*50*	0	*101*	*61-131*	0			
Surr: Dibromofluoromethane	51.85	0	*50*	0	*104*	*87-126*	0			
Surr: Toluene-d8	49.82	0	*50*	0	*99.6*	*84-111*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **R125576** Instrument ID **VMS1** Method: **SW8260B**

MS Sample ID: **1601877-06A MS** Units: **µg/L** Analysis Date: **2/1/2016 09:28 AM**
Client ID: Run ID: **VMS1_160201A** SeqNo: **1215179** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	53.98	5.0	50	0	108	40.4-134	0			
1,1-Dichloroethene	74.83	5.0	50	0	150	45.3-151	0			
1,2-Dichloroethane	51.33	5.0	50	0	103	37-139	0			
1,3-Dichlorobenzene	41.25	5.0	50	0	82.5	42.9-121	0			
1,4-Dichlorobenzene	41.25	5.0	50	0	82.5	53.4-129	0			
Benzene	52.5	5.0	50	0	105	37.4-144	0			
Carbon tetrachloride	56.87	5.0	50	0	114	33.8-150	0			
Chlorobenzene	43.06	5.0	50	0	86.1	52.4-132	0			
Chloroform	54.43	5.0	50	0	109	45.5-135	0			
cis-1,2-Dichloroethene	57.46	5.0	50	0	115	35.2-150	0			
Ethylbenzene	44.6	5.0	50	0	89.2	46.5-146	0			
m,p-Xylene	88.92	5.0	100	0	88.9	38.2-167	0			
Styrene	44.6	5.0	50	0	89.2	20.9-184	0			
Tetrachloroethene	44.19	5.0	50	0	88.4	55.2-134	0			
Toluene	50.76	5.0	50	0	102	32.7-140	0			
Trichloroethene	52.56	5.0	50	0	105	29.1-153	0			
Surr: 4-Bromofluorobenzene	51.27	0	*50*	0	*103*	*61-131*	0			
Surr: Dibromofluoromethane	53.06	0	*50*	0	*106*	*87-126*	0			
Surr: Toluene-d8	49.22	0	*50*	0	*98.4*	*84-111*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **R125576** Instrument ID **VMS1** Method: **SW8260B**

MSD Sample ID: **1601877-06A MSD** Units: **µg/L** Analysis Date: **2/1/2016 10:26 AM**
Client ID: Run ID: **VMS1_160201A** SeqNo: **1215180** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	56.53	5.0	50	0	113	40.4-134	53.98	4.61	20	
1,1-Dichloroethene	75.33	5.0	50	0	151	45.3-151	74.83	0.666	20	
1,2-Dichloroethane	52.92	5.0	50	0	106	37-139	51.33	3.05	20	
1,3-Dichlorobenzene	42.71	5.0	50	0	85.4	42.9-121	41.25	3.48	20	
1,4-Dichlorobenzene	42.59	5.0	50	0	85.2	53.4-129	41.25	3.2	20	
Benzene	54.39	5.0	50	0	109	37.4-144	52.5	3.54	20	
Carbon tetrachloride	59.38	5.0	50	0	119	33.8-150	56.87	4.32	20	
Chlorobenzene	44.15	5.0	50	0	88.3	52.4-132	43.06	2.5	20	
Chloroform	55.92	5.0	50	0	112	45.5-135	54.43	2.7	20	
cis-1,2-Dichloroethene	58.79	5.0	50	0	118	35.2-150	57.46	2.29	21	
Ethylbenzene	45.93	5.0	50	0	91.9	46.5-146	44.6	2.94	20	
m,p-Xylene	90.48	5.0	100	0	90.5	38.2-167	88.92	1.74	20	
Styrene	45.05	5.0	50	0	90.1	20.9-184	44.6	1	20	
Tetrachloroethene	45.74	5.0	50	0	91.5	55.2-134	44.19	3.45	20	
Toluene	52.59	5.0	50	0	105	32.7-140	50.76	3.54	20	
Trichloroethene	53.96	5.0	50	0	108	29.1-153	52.56	2.63	20	
Surr: 4-Bromofluorobenzene	50.7	0	*50*	0	*101*	*61-131*	51.27	*1.12*		
Surr: Dibromofluoromethane	51.83	0	*50*	0	*104*	*87-126*	53.06	*2.35*		
Surr: Toluene-d8	50.22	0	*50*	0	*100*	*84-111*	49.22	*2.01*		

The following samples were analyzed in this batch: 1602005-02B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **R125578** Instrument ID **VMS2** Method: **SW8260B**

MBLK Sample ID: **MBLK-R125578** Units: **µg/Kg** Analysis Date: **2/1/2016 10:42 AM**
Client ID: Run ID: **VMS2_160201A** SeqNo: **1215202** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0								
1,1,1-Trichloroethane	ND	5.0								
1,1,2,2-Tetrachloroethane	ND	5.0								
1,1,2-Trichloroethane	ND	5.0								
1,1-Dichloroethane	ND	5.0								
1,1-Dichloroethene	ND	5.0								
1,1-Dichloropropene	ND	5.0								
1,2,3-Trichlorobenzene	ND	5.0								
1,2,3-Trichloropropane	ND	5.0								
1,2,4-Trichlorobenzene	ND	5.0								
1,2,4-Trimethylbenzene	ND	5.0								
1,2-Dibromo-3-chloropropane	ND	5.0								
1,2-Dibromoethane	ND	5.0								
1,2-Dichlorobenzene	ND	5.0								
1,2-Dichloroethane	ND	5.0								
1,2-Dichloropropane	ND	5.0								
1,3,5-Trimethylbenzene	ND	5.0								
1,3-Dichlorobenzene	ND	5.0								
1,3-Dichloropropane	ND	5.0								
1,4-Dichlorobenzene	ND	5.0								
2,2-Dichloropropane	ND	5.0								
2-Butanone	ND	5.0								
2-Chlorotoluene	ND	5.0								
2-Hexanone	ND	5.0								
4-Chlorotoluene	ND	5.0								
4-Methyl-2-pentanone	ND	5.0								
Acetone	ND	5.0								
Benzene	ND	5.0								
Bromobenzene	ND	5.0								
Bromochloromethane	ND	5.0								
Bromodichloromethane	ND	5.0								
Bromoform	ND	5.0								
Bromomethane	ND	5.0								
Carbon disulfide	ND	5.0								
Carbon tetrachloride	ND	5.0								
Chlorobenzene	ND	5.0								
Chloroethane	ND	5.0								
Chloroform	ND	5.0								
Chloromethane	ND	5.0								
cis-1,2-Dichloroethene	ND	5.0								
cis-1,3-Dichloropropene	ND	5.0								
Dibromochloromethane	ND	5.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **R125578** Instrument ID **VMS2** Method: **SW8260B**

Dibromomethane	ND	5.0					
Dichlorodifluoromethane	ND	5.0					
Ethylbenzene	ND	5.0					
Hexachlorobutadiene	ND	5.0					
Isopropylbenzene	ND	5.0					
m,p-Xylene	ND	5.0					
Methyl tert-butyl ether	ND	5.0					
Methylene chloride	ND	5.0					
Naphthalene	ND	5.0					
n-Butylbenzene	ND	5.0					
n-Propylbenzene	ND	5.0					
o-Xylene	ND	5.0					
p-Isopropyltoluene	ND	5.0					
sec-Butylbenzene	ND	5.0					
Styrene	ND	5.0					
tert-Butylbenzene	ND	5.0					
Tetrachloroethene	ND	5.0					
Toluene	ND	5.0					
trans-1,2-Dichloroethene	ND	5.0					
trans-1,3-Dichloropropene	ND	5.0					
Trichloroethene	ND	5.0					
Trichlorofluoromethane	ND	5.0					
Vinyl chloride	ND	5.0					
Xylenes, Total	ND	10					
Surr: 4-Bromofluorobenzene	49.36	0	*50*	0	*98.7*	*62.7-159*	0
Surr: Dibromofluoromethane	51.41	0	*50*	0	*103*	*67.3-136*	0
Surr: Toluene-d8	47.52	0	*50*	0	*95*	*83-124*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Water Defense
Work Order: 1602005
Project: Flint House #3

QC BATCH REPORT

Batch ID: **R125578** Instrument ID **VMS2** Method: **SW8260B**

LCS Sample ID: **LCS-R125578** Units: **µg/Kg** Analysis Date: **2/1/2016 12:15 PM**
Client ID: Run ID: **VMS2_160201A** SeqNo: **1215203** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	37.92	5.0	50	0	75.8	70-132	0			
1,1-Dichloroethene	62.96	5.0	50	0	126	61.2-140	0			
1,2-Dichloroethane	44.16	5.0	50	0	88.3	67.3-139	0			
1,3-Dichlorobenzene	15.98	5.0	50	0	32	67.5-126	0			S
1,4-Dichlorobenzene	15.98	5.0	50	0	32	69.5-124	0			S
Benzene	37.55	5.0	50	0	75.1	67.2-135	0			
Carbon tetrachloride	32.01	5.0	50	0	64	68.6-138	0			S
Chlorobenzene	26.19	5.0	50	0	52.4	66.4-133	0			S
Chloroform	40.73	5.0	50	0	81.5	68.2-127	0			
cis-1,2-Dichloroethene	41.86	5.0	50	0	83.7	62.1-135	0			
Ethylbenzene	24.99	5.0	50	0	50	67.8-132	0			S
m,p-Xylene	49.28	5.0	100	0	49.3	66.4-132	0			S
Styrene	23.33	5.0	50	0	46.7	67.6-134	0			S
Tetrachloroethene	26.13	5.0	50	0	52.3	70.3-144	0			S
Toluene	28.17	5.0	50	0	56.3	67.8-130	0			S
Trichloroethene	32.89	5.0	50	0	65.8	68.5-136	0			S
Surr: 4-Bromofluorobenzene	51.77	0	*50*	0	*104*	*62.7-159*	0			
Surr: Dibromofluoromethane	56.31	0	*50*	0	*113*	*67.3-136*	0			
Surr: Toluene-d8	45.45	0	*50*	0	*90.9*	*83-124*	0			

The following samples were analyzed in this batch: 1602005-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 04-Feb-16

Client: Water Defense
Project: Flint House #3
WorkOrder: **1602005**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/Kg	
µg/L	
mg/Kg	
mg/L	

ALS Environmental

Sample Receipt Checklist

Client Name: **WATERDEFENSE-HURLEYVULL** Date/Time Received: **01-Feb-16 08:02**

Work Order: **1602005** Received by: **JAO**

Checklist completed by Jan Wilcox (eSignature) 01-Feb-16 (Date) Reviewed by: Rob Nieman (eSignature) 01-Feb-16 (Date)

Matrices:

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	16.1		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☐
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: