05-May-2016

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

Tel: (508) 345-6520
Fax:

Re: Flint Ex. 6 - Personal Privacy Work Order: **1605004**

Dear Scott,

ALS Environmental received 10 samples on 01-May-2016 06:06 PM 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 55.

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

Sincerely,

Rob Nieman

Electronically approved by: Jeff Ogle

Rob Nieman
Project Manager

ALS Environmental

Date: 05-May-16

Client: Water Defense
Project: Flin Ex. 6 - Personal Privacy
Work Order: **1605004**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1605004-01	Water Meter Grab	Water		4/29/2016	5/1/2016 18:06	☐
1605004-02	Water Meter WaterBug	Bulk		4/29/2016	5/1/2016 18:06	☐
1605004-03	Water Heater Grab	Water		4/29/2016	5/1/2016 18:06	☐
1605004-03	Water Heater Grab	Water		4/29/2016	5/1/2016 18:06	☐
1605004-04	Water Heater WaterBug	Bulk		4/29/2016	5/1/2016 18:06	☐
1605004-05	Downstairs Shower Grab	Water		4/29/2016	5/1/2016 18:06	☐
1605004-05	Downstairs Shower Grab	Water		4/29/2016	5/1/2016 18:06	☐
1605004-06	Downstairs Shower WaterBug Grab	Bulk		4/29/2016	5/1/2016 18:06	☐
1605004-07	Upstairs Shower Grab	Water		4/29/2016	5/1/2016 18:06	☐
1605004-07	Upstairs Shower Grab	Water		4/29/2016	5/1/2016 18:06	☐
1605004-08	Downstairs Shower WaterBug	Bulk		4/29/2016	5/1/2016 18:06	☐
1605004-09	Upstairs Shower WaterBug Grab	Bulk		4/29/2016	5/1/2016 18:06	☐
1605004-10	Upstairs Shower WaterBug	Bulk		4/29/2016	5/1/2016 18:06	☐

ALS Environmental

Date: 05-May-16

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Work Order: 1605004

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.

EPA-R5-2017-008527_0000368

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Meter Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7470A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.50	µg/L	1	5/3/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	**0.30**		**0.20**	**mg/L**	1	5/2/2016 05:49 PM
Arsenic	ND		0.010	mg/L	1	5/2/2016 05:49 PM
Barium	**0.23**		**0.10**	**mg/L**	1	5/2/2016 05:49 PM
Beryllium	ND		0.0040	mg/L	1	5/2/2016 05:49 PM
Cadmium	ND		0.0050	mg/L	1	5/2/2016 05:49 PM
Calcium	**25**		**0.20**	**mg/L**	1	5/2/2016 05:49 PM
Chromium	ND		0.020	mg/L	1	5/2/2016 05:49 PM
Cobalt	ND		0.050	mg/L	1	5/2/2016 05:49 PM
Copper	**0.34**		**0.025**	**mg/L**	1	5/2/2016 05:49 PM
Iron	**0.21**		**0.20**	**mg/L**	1	5/2/2016 05:49 PM
Lead	**0.15**		**0.015**	**mg/L**	1	5/2/2016 05:49 PM
Lithium	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Magnesium	**7.5**		**0.20**	**mg/L**	1	5/2/2016 05:49 PM
Manganese	ND		0.050	mg/L	1	5/2/2016 05:49 PM
Molybdenum	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Nickel	ND		0.040	mg/L	1	5/2/2016 05:49 PM
Phosphorus	**1.2**		**0.10**	**mg/L**	1	5/2/2016 05:49 PM
Platinum	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Selenium	ND		0.030	mg/L	1	5/2/2016 05:49 PM
Silver	ND		0.010	mg/L	1	5/2/2016 05:49 PM
Sodium	**4.5**		**0.20**	**mg/L**	1	5/2/2016 05:49 PM
Tellurium	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Thallium	ND		0.0020	mg/L	1	5/2/2016 05:49 PM
Tin	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Titanium	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Tungsten	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Vanadium	ND		0.050	mg/L	1	5/2/2016 05:49 PM
Yttrium	ND		0.10	mg/L	1	5/2/2016 05:49 PM
Zinc	**0.15**		**0.050**	**mg/L**	1	5/2/2016 05:49 PM
Zirconium	ND		0.10	mg/L	1	5/2/2016 05:49 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,1,1-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,1-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Meter Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,1-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2,3-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2,3-Trichloropropane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2,4-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2,4-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2-Dibromo-3-chloropropane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2-Dibromoethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,3,5-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,3-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,3-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
1,4-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
2,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
2-Butanone	ND		5.0	µg/L	1	5/3/2016 03:48 PM
2-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
2-Hexanone	ND		5.0	µg/L	1	5/3/2016 03:48 PM
4-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Acetone	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Benzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Bromobenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Bromochloromethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Bromodichloromethane	**5.5**		**5.0**	**µg/L**	1	5/3/2016 03:48 PM
Bromoform	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Bromomethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Carbon disulfide	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Carbon tetrachloride	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Chlorobenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Chloroethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Chloroform	**12**		**5.0**	**µg/L**	1	5/3/2016 03:48 PM
Chloromethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
cis-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Dibromochloromethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Dibromomethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Dichlorodifluoromethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Ethylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Meter Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Isopropylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
m,p-Xylene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Methylene chloride	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Naphthalene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
n-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
n-Propylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
o-Xylene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
p-Isopropyltoluene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
sec-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Styrene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
tert-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Tetrachloroethene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Toluene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Trichloroethene	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Trichlorofluoromethane	ND		5.0	µg/L	1	5/3/2016 03:48 PM
Vinyl chloride	ND		2.0	µg/L	1	5/3/2016 03:48 PM
Xylenes, Total	ND		10	µg/L	1	5/3/2016 03:48 PM
Surr: 4-Bromofluorobenzene	*99.2*		*61-131*	*%REC*	1	5/3/2016 03:48 PM
Surr: Dibromofluoromethane	*107*		*87-126*	*%REC*	1	5/3/2016 03:48 PM
Surr: Toluene-d8	*92.4*		*84-111*	*%REC*	1	5/3/2016 03:48 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Meter WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-02
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.30	mg/Kg	1	5/2/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	ND		470	mg/Kg	1	5/2/2016 07:32 PM
Arsenic	ND		4.7	mg/Kg	1	5/2/2016 07:32 PM
Barium	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Beryllium	ND		0.47	mg/Kg	1	5/2/2016 07:32 PM
Cadmium	ND		0.93	mg/Kg	1	5/2/2016 07:32 PM
Calcium	ND		5,100	mg/Kg	1	5/2/2016 07:32 PM
Chromium	ND		1.9	mg/Kg	1	5/2/2016 07:32 PM
Cobalt	ND		4.7	mg/Kg	1	5/2/2016 07:32 PM
Copper	ND		4.7	mg/Kg	1	5/2/2016 07:32 PM
Iron	ND		93	mg/Kg	1	5/2/2016 07:32 PM
Lead	ND		4.7	mg/Kg	1	5/2/2016 07:32 PM
Lithium	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Magnesium	ND		420	mg/Kg	1	5/2/2016 07:32 PM
Manganese	ND		4.7	mg/Kg	1	5/2/2016 07:32 PM
Molybdenum	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Nickel	ND		4.7	mg/Kg	1	5/2/2016 07:32 PM
Phosphorus	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Platinum	ND		93	mg/Kg	1	5/2/2016 07:32 PM
Selenium	ND		2.8	mg/Kg	1	5/2/2016 07:32 PM
Silver	ND		0.93	mg/Kg	1	5/2/2016 07:32 PM
Sodium	ND		470	mg/Kg	1	5/2/2016 07:32 PM
Tellurium	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Thallium	ND		2.8	mg/Kg	1	5/2/2016 07:32 PM
Tin	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Titanium	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Tungsten	ND		93	mg/Kg	1	5/2/2016 07:32 PM
Vanadium	ND		4.7	mg/Kg	1	5/2/2016 07:32 PM
Yttrium	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
Zinc	ND		65	mg/Kg	1	5/2/2016 07:32 PM
Zirconium	ND		9.3	mg/Kg	1	5/2/2016 07:32 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,1,1-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,1,2-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,1-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Meter WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-02
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,1-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2,3-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2,3-Trichloropropane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2,4-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2,4-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2-Dibromo-3-chloropropane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2-Dibromoethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,3,5-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,3-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,3-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
1,4-Dichlorobenzene	**510**		**25**	**µg/Kg**	5	5/3/2016 02:13 AM
2,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
2-Butanone	ND		25	µg/Kg	5	5/3/2016 02:13 AM
2-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
2-Hexanone	ND		25	µg/Kg	5	5/3/2016 02:13 AM
4-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
4-Methyl-2-pentanone	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Acetone	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Benzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Bromobenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Bromochloromethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Bromodichloromethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Bromoform	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Bromomethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Carbon disulfide	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Carbon tetrachloride	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Chlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Chloroethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Chloroform	**34**		**25**	**µg/Kg**	5	5/3/2016 02:13 AM
Chloromethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
cis-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
cis-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Dibromochloromethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Dibromomethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Dichlorodifluoromethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Ethylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Meter WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-02
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Isopropylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
m,p-Xylene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Methyl tert-butyl ether	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Methylene chloride	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Naphthalene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
n-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
n-Propylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
o-Xylene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
p-Isopropyltoluene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
sec-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Styrene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
tert-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Tetrachloroethene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Toluene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
trans-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
trans-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Trichloroethene	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Trichlorofluoromethane	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Vinyl chloride	ND		25	µg/Kg	5	5/3/2016 02:13 AM
Xylenes, Total	ND		50	µg/Kg	5	5/3/2016 02:13 AM
Surr: 4-Bromofluorobenzene	*145*		*62.7-159*	*%REC*	5	5/3/2016 02:13 AM
Surr: Dibromofluoromethane	*102*		*67.3-136*	*%REC*	5	5/3/2016 02:13 AM
Surr: Toluene-d8	*82.9*	S	*83-124*	*%REC*	5	5/3/2016 02:13 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Heater Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-03
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7470A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.50	µg/L	1	5/3/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	**0.23**		**0.20**	**mg/L**	1	5/2/2016 05:52 PM
Arsenic	ND		0.010	mg/L	1	5/2/2016 05:52 PM
Barium	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Beryllium	ND		0.0040	mg/L	1	5/2/2016 05:52 PM
Cadmium	ND		0.0050	mg/L	1	5/2/2016 05:52 PM
Calcium	**27**		**0.20**	**mg/L**	1	5/2/2016 05:52 PM
Chromium	ND		0.020	mg/L	1	5/2/2016 05:52 PM
Cobalt	ND		0.050	mg/L	1	5/2/2016 05:52 PM
Copper	ND		0.025	mg/L	1	5/2/2016 05:52 PM
Iron	ND		0.20	mg/L	1	5/2/2016 05:52 PM
Lead	ND		0.015	mg/L	1	5/2/2016 05:52 PM
Lithium	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Magnesium	**8.1**		**0.20**	**mg/L**	1	5/2/2016 05:52 PM
Manganese	ND		0.050	mg/L	1	5/2/2016 05:52 PM
Molybdenum	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Nickel	ND		0.040	mg/L	1	5/2/2016 05:52 PM
Phosphorus	**0.18**		**0.10**	**mg/L**	1	5/2/2016 05:52 PM
Platinum	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Selenium	ND		0.030	mg/L	1	5/2/2016 05:52 PM
Silver	ND		0.010	mg/L	1	5/2/2016 05:52 PM
Sodium	**4.5**		**0.20**	**mg/L**	1	5/2/2016 05:52 PM
Tellurium	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Thallium	ND		0.0020	mg/L	1	5/2/2016 05:52 PM
Tin	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Titanium	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Tungsten	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Vanadium	ND		0.050	mg/L	1	5/2/2016 05:52 PM
Yttrium	ND		0.10	mg/L	1	5/2/2016 05:52 PM
Zinc	ND		0.050	mg/L	1	5/2/2016 05:52 PM
Zirconium	ND		0.10	mg/L	1	5/2/2016 05:52 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,1,1-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,1-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Heater Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-03
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,1-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2,3-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2,3-Trichloropropane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2,4-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2,4-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2-Dibromo-3-chloropropane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2-Dibromoethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,3,5-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,3-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,3-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
1,4-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
2,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
2-Butanone	ND		5.0	µg/L	1	5/3/2016 04:20 PM
2-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
2-Hexanone	ND		5.0	µg/L	1	5/3/2016 04:20 PM
4-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Acetone	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Benzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Bromobenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Bromochloromethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Bromodichloromethane	**5.3**		**5.0**	**µg/L**	1	5/3/2016 04:20 PM
Bromoform	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Bromomethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Carbon disulfide	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Carbon tetrachloride	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Chlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Chloroethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Chloroform	**38**		**5.0**	**µg/L**	1	5/3/2016 04:20 PM
Chloromethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
cis-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Dibromochloromethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Dibromomethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Dichlorodifluoromethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Ethylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Heater Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-03
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Isopropylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
m,p-Xylene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Methylene chloride	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Naphthalene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
n-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
n-Propylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
o-Xylene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
p-Isopropyltoluene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
sec-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Styrene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
tert-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Tetrachloroethene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Toluene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Trichloroethene	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Trichlorofluoromethane	ND		5.0	µg/L	1	5/3/2016 04:20 PM
Vinyl chloride	ND		2.0	µg/L	1	5/3/2016 04:20 PM
Xylenes, Total	ND		10	µg/L	1	5/3/2016 04:20 PM
Surr: 4-Bromofluorobenzene	*101*		*61-131*	*%REC*	1	5/3/2016 04:20 PM
Surr: Dibromofluoromethane	*108*		*87-126*	*%REC*	1	5/3/2016 04:20 PM
Surr: Toluene-d8	*99.6*		*84-111*	*%REC*	1	5/3/2016 04:20 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Heater WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-04
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.30	mg/Kg	1	5/2/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	ND		500	mg/Kg	1	5/2/2016 07:36 PM
Arsenic	ND		5.0	mg/Kg	1	5/2/2016 07:36 PM
Barium	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Beryllium	ND		0.50	mg/Kg	1	5/2/2016 07:36 PM
Cadmium	ND		0.99	mg/Kg	1	5/2/2016 07:36 PM
Calcium	ND		5,500	mg/Kg	1	5/2/2016 07:36 PM
Chromium	ND		2.0	mg/Kg	1	5/2/2016 07:36 PM
Cobalt	ND		5.0	mg/Kg	1	5/2/2016 07:36 PM
Copper	ND		5.0	mg/Kg	1	5/2/2016 07:36 PM
Iron	ND		99	mg/Kg	1	5/2/2016 07:36 PM
Lead	ND		5.0	mg/Kg	1	5/2/2016 07:36 PM
Lithium	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Magnesium	ND		450	mg/Kg	1	5/2/2016 07:36 PM
Manganese	ND		5.0	mg/Kg	1	5/2/2016 07:36 PM
Molybdenum	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Nickel	ND		5.0	mg/Kg	1	5/2/2016 07:36 PM
Phosphorus	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Platinum	ND		99	mg/Kg	1	5/2/2016 07:36 PM
Selenium	ND		3.0	mg/Kg	1	5/2/2016 07:36 PM
Silver	ND		0.99	mg/Kg	1	5/2/2016 07:36 PM
Sodium	ND		500	mg/Kg	1	5/2/2016 07:36 PM
Tellurium	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Thallium	ND		3.0	mg/Kg	1	5/2/2016 07:36 PM
Tin	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Titanium	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Tungsten	ND		99	mg/Kg	1	5/2/2016 07:36 PM
Vanadium	ND		5.0	mg/Kg	1	5/2/2016 07:36 PM
Yttrium	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
Zinc	ND		69	mg/Kg	1	5/2/2016 07:36 PM
Zirconium	ND		9.9	mg/Kg	1	5/2/2016 07:36 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,1,1-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,1,2-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,1-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Heater WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-04
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,1-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2,3-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2,3-Trichloropropane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2,4-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2,4-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2-Dibromo-3-chloropropane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2-Dibromoethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,3,5-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,3-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,3-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
1,4-Dichlorobenzene	**85**		**25**	**µg/Kg**	5	5/3/2016 02:44 AM
2,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
2-Butanone	ND		25	µg/Kg	5	5/3/2016 02:44 AM
2-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
2-Hexanone	ND		25	µg/Kg	5	5/3/2016 02:44 AM
4-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
4-Methyl-2-pentanone	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Acetone	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Benzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Bromobenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Bromochloromethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Bromodichloromethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Bromoform	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Bromomethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Carbon disulfide	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Carbon tetrachloride	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Chlorobenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Chloroethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Chloroform	**100**		**25**	**µg/Kg**	5	5/3/2016 02:44 AM
Chloromethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
cis-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
cis-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Dibromochloromethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Dibromomethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Dichlorodifluoromethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Ethylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Water Heater WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-04
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Isopropylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
m,p-Xylene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Methyl tert-butyl ether	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Methylene chloride	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Naphthalene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
n-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
n-Propylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
o-Xylene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
p-Isopropyltoluene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
sec-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Styrene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
tert-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Tetrachloroethene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Toluene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
trans-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
trans-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Trichloroethene	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Trichlorofluoromethane	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Vinyl chloride	ND		25	µg/Kg	5	5/3/2016 02:44 AM
Xylenes, Total	ND		50	µg/Kg	5	5/3/2016 02:44 AM
Surr: 4-Bromofluorobenzene	*129*		*62.7-159*	*%REC*	5	5/3/2016 02:44 AM
Surr: Dibromofluoromethane	*109*		*67.3-136*	*%REC*	5	5/3/2016 02:44 AM
Surr: Toluene-d8	*86.3*		*83-124*	*%REC*	5	5/3/2016 02:44 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-05
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7470A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.50	µg/L	1	5/3/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	**0.23**		**0.20**	**mg/L**	1	5/2/2016 05:55 PM
Arsenic	ND		0.010	mg/L	1	5/2/2016 05:55 PM
Barium	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Beryllium	ND		0.0040	mg/L	1	5/2/2016 05:55 PM
Cadmium	ND		0.0050	mg/L	1	5/2/2016 05:55 PM
Calcium	**28**		**0.20**	**mg/L**	1	5/2/2016 05:55 PM
Chromium	ND		0.020	mg/L	1	5/2/2016 05:55 PM
Cobalt	ND		0.050	mg/L	1	5/2/2016 05:55 PM
Copper	**0.10**		**0.025**	**mg/L**	1	5/2/2016 05:55 PM
Iron	ND		0.20	mg/L	1	5/2/2016 05:55 PM
Lead	ND		0.015	mg/L	1	5/2/2016 05:55 PM
Lithium	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Magnesium	**8.0**		**0.20**	**mg/L**	1	5/2/2016 05:55 PM
Manganese	ND		0.050	mg/L	1	5/2/2016 05:55 PM
Molybdenum	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Nickel	ND		0.040	mg/L	1	5/2/2016 05:55 PM
Phosphorus	**0.50**		**0.10**	**mg/L**	1	5/2/2016 05:55 PM
Platinum	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Selenium	ND		0.030	mg/L	1	5/2/2016 05:55 PM
Silver	ND		0.010	mg/L	1	5/2/2016 05:55 PM
Sodium	**4.4**		**0.20**	**mg/L**	1	5/2/2016 05:55 PM
Tellurium	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Thallium	ND		0.0020	mg/L	1	5/2/2016 05:55 PM
Tin	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Titanium	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Tungsten	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Vanadium	ND		0.050	mg/L	1	5/2/2016 05:55 PM
Yttrium	ND		0.10	mg/L	1	5/2/2016 05:55 PM
Zinc	ND		0.050	mg/L	1	5/2/2016 05:55 PM
Zirconium	ND		0.10	mg/L	1	5/2/2016 05:55 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,1,1-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,1-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-05
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,1-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2,3-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2,3-Trichloropropane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2,4-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2,4-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2-Dibromo-3-chloropropane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2-Dibromoethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,3,5-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,3-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,3-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
1,4-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
2,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
2-Butanone	ND		5.0	µg/L	1	5/3/2016 04:52 PM
2-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
2-Hexanone	ND		5.0	µg/L	1	5/3/2016 04:52 PM
4-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Acetone	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Benzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Bromobenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Bromochloromethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Bromodichloromethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Bromoform	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Bromomethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Carbon disulfide	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Carbon tetrachloride	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Chlorobenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Chloroethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Chloroform	**28**		**5.0**	**µg/L**	1	5/3/2016 04:52 PM
Chloromethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
cis-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Dibromochloromethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Dibromomethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Dichlorodifluoromethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Ethylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-05
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Isopropylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
m,p-Xylene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Methylene chloride	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Naphthalene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
n-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
n-Propylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
o-Xylene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
p-Isopropyltoluene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
sec-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Styrene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
tert-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Tetrachloroethene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Toluene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Trichloroethene	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Trichlorofluoromethane	ND		5.0	µg/L	1	5/3/2016 04:52 PM
Vinyl chloride	ND		2.0	µg/L	1	5/3/2016 04:52 PM
Xylenes, Total	ND		10	µg/L	1	5/3/2016 04:52 PM
Surr: 4-Bromofluorobenzene	*100*		*61-131*	*%REC*	1	5/3/2016 04:52 PM
Surr: Dibromofluoromethane	*107*		*87-126*	*%REC*	1	5/3/2016 04:52 PM
Surr: Toluene-d8	*101*		*84-111*	*%REC*	1	5/3/2016 04:52 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower WaterBug Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-06
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.29	mg/Kg	1	5/2/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	ND		500	mg/Kg	1	5/2/2016 07:39 PM
Arsenic	ND		5.0	mg/Kg	1	5/2/2016 07:39 PM
Barium	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Beryllium	ND		0.50	mg/Kg	1	5/2/2016 07:39 PM
Cadmium	ND		0.99	mg/Kg	1	5/2/2016 07:39 PM
Calcium	ND		5,500	mg/Kg	1	5/2/2016 07:39 PM
Chromium	ND		2.0	mg/Kg	1	5/2/2016 07:39 PM
Cobalt	ND		5.0	mg/Kg	1	5/2/2016 07:39 PM
Copper	ND		5.0	mg/Kg	1	5/2/2016 07:39 PM
Iron	ND		99	mg/Kg	1	5/2/2016 07:39 PM
Lead	ND		5.0	mg/Kg	1	5/2/2016 07:39 PM
Lithium	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Magnesium	ND		450	mg/Kg	1	5/2/2016 07:39 PM
Manganese	ND		5.0	mg/Kg	1	5/2/2016 07:39 PM
Molybdenum	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Nickel	ND		5.0	mg/Kg	1	5/2/2016 07:39 PM
Phosphorus	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Platinum	ND		99	mg/Kg	1	5/2/2016 07:39 PM
Selenium	ND		3.0	mg/Kg	1	5/2/2016 07:39 PM
Silver	ND		0.99	mg/Kg	1	5/2/2016 07:39 PM
Sodium	ND		500	mg/Kg	1	5/2/2016 07:39 PM
Tellurium	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Thallium	ND		3.0	mg/Kg	1	5/2/2016 07:39 PM
Tin	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Titanium	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Tungsten	ND		99	mg/Kg	1	5/2/2016 07:39 PM
Vanadium	ND		5.0	mg/Kg	1	5/2/2016 07:39 PM
Yttrium	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
Zinc	ND		70	mg/Kg	1	5/2/2016 07:39 PM
Zirconium	ND		9.9	mg/Kg	1	5/2/2016 07:39 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,1,1-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,1,2-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,1-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower WaterBug Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-06
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,1-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2,3-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2,3-Trichloropropane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2,4-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2,4-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2-Dibromo-3-chloropropane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2-Dibromoethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,3,5-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,3-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,3-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
1,4-Dichlorobenzene	**500**		**25**	**µg/Kg**	5	5/3/2016 03:14 AM
2,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
2-Butanone	ND		25	µg/Kg	5	5/3/2016 03:14 AM
2-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
2-Hexanone	ND		25	µg/Kg	5	5/3/2016 03:14 AM
4-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
4-Methyl-2-pentanone	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Acetone	**41**		**25**	**µg/Kg**	5	5/3/2016 03:14 AM
Benzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Bromobenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Bromochloromethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Bromodichloromethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Bromoform	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Bromomethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Carbon disulfide	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Carbon tetrachloride	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Chlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Chloroethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Chloroform	**94**		**25**	**µg/Kg**	5	5/3/2016 03:14 AM
Chloromethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
cis-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
cis-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Dibromochloromethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Dibromomethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Dichlorodifluoromethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Ethylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower WaterBug Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-06
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Isopropylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
m,p-Xylene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Methyl tert-butyl ether	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Methylene chloride	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Naphthalene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
n-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
n-Propylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
o-Xylene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
p-Isopropyltoluene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
sec-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Styrene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
tert-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Tetrachloroethene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Toluene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
trans-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
trans-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Trichloroethene	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Trichlorofluoromethane	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Vinyl chloride	ND		25	µg/Kg	5	5/3/2016 03:14 AM
Xylenes, Total	ND		50	µg/Kg	5	5/3/2016 03:14 AM
Surr: 4-Bromofluorobenzene	*146*		*62.7-159*	*%REC*	5	5/3/2016 03:14 AM
Surr: Dibromofluoromethane	*112*		*67.3-136*	*%REC*	5	5/3/2016 03:14 AM
Surr: Toluene-d8	*82.4*	S	*83-124*	*%REC*	5	5/3/2016 03:14 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-07
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7470A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.50	µg/L	1	5/3/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	**0.20**		**0.20**	**mg/L**	1	5/2/2016 05:59 PM
Arsenic	ND		0.010	mg/L	1	5/2/2016 05:59 PM
Barium	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Beryllium	ND		0.0040	mg/L	1	5/2/2016 05:59 PM
Cadmium	ND		0.0050	mg/L	1	5/2/2016 05:59 PM
Calcium	**27**		**0.20**	**mg/L**	1	5/2/2016 05:59 PM
Chromium	ND		0.020	mg/L	1	5/2/2016 05:59 PM
Cobalt	ND		0.050	mg/L	1	5/2/2016 05:59 PM
Copper	**0.036**		**0.025**	**mg/L**	1	5/2/2016 05:59 PM
Iron	ND		0.20	mg/L	1	5/2/2016 05:59 PM
Lead	ND		0.015	mg/L	1	5/2/2016 05:59 PM
Lithium	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Magnesium	**8.3**		**0.20**	**mg/L**	1	5/2/2016 05:59 PM
Manganese	ND		0.050	mg/L	1	5/2/2016 05:59 PM
Molybdenum	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Nickel	ND		0.040	mg/L	1	5/2/2016 05:59 PM
Phosphorus	**0.56**		**0.10**	**mg/L**	1	5/2/2016 05:59 PM
Platinum	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Selenium	ND		0.030	mg/L	1	5/2/2016 05:59 PM
Silver	ND		0.010	mg/L	1	5/2/2016 05:59 PM
Sodium	**4.4**		**0.20**	**mg/L**	1	5/2/2016 05:59 PM
Tellurium	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Thallium	ND		0.0020	mg/L	1	5/2/2016 05:59 PM
Tin	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Titanium	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Tungsten	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Vanadium	ND		0.050	mg/L	1	5/2/2016 05:59 PM
Yttrium	ND		0.10	mg/L	1	5/2/2016 05:59 PM
Zinc	ND		0.050	mg/L	1	5/2/2016 05:59 PM
Zirconium	ND		0.10	mg/L	1	5/2/2016 05:59 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,1,1-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,1-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-07
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,1-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2,3-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2,3-Trichloropropane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2,4-Trichlorobenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2,4-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2-Dibromo-3-chloropropane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2-Dibromoethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2-Dichloroethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,3,5-Trimethylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,3-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,3-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
1,4-Dichlorobenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
2,2-Dichloropropane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
2-Butanone	ND		5.0	µg/L	1	5/3/2016 05:23 PM
2-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
2-Hexanone	ND		5.0	µg/L	1	5/3/2016 05:23 PM
4-Chlorotoluene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Acetone	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Benzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Bromobenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Bromochloromethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Bromodichloromethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Bromoform	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Bromomethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Carbon disulfide	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Carbon tetrachloride	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Chlorobenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Chloroethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Chloroform	**21**		**5.0**	**µg/L**	1	5/3/2016 05:23 PM
Chloromethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
cis-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Dibromochloromethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Dibromomethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Dichlorodifluoromethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Ethylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-07
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Isopropylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
m,p-Xylene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Methylene chloride	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Naphthalene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
n-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
n-Propylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
o-Xylene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
p-Isopropyltoluene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
sec-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Styrene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
tert-Butylbenzene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Tetrachloroethene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Toluene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Trichloroethene	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Trichlorofluoromethane	ND		5.0	µg/L	1	5/3/2016 05:23 PM
Vinyl chloride	ND		2.0	µg/L	1	5/3/2016 05:23 PM
Xylenes, Total	ND		10	µg/L	1	5/3/2016 05:23 PM
Surr: 4-Bromofluorobenzene	*101*		*61-131*	*%REC*	1	5/3/2016 05:23 PM
Surr: Dibromofluoromethane	*110*		*87-126*	*%REC*	1	5/3/2016 05:23 PM
Surr: Toluene-d8	*101*		*84-111*	*%REC*	1	5/3/2016 05:23 PM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-08
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.29	mg/Kg	1	5/2/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	ND		490	mg/Kg	1	5/2/2016 07:42 PM
Arsenic	ND		4.9	mg/Kg	1	5/2/2016 07:42 PM
Barium	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Beryllium	ND		0.49	mg/Kg	1	5/2/2016 07:42 PM
Cadmium	ND		0.97	mg/Kg	1	5/2/2016 07:42 PM
Calcium	ND		5,300	mg/Kg	1	5/2/2016 07:42 PM
Chromium	ND		1.9	mg/Kg	1	5/2/2016 07:42 PM
Cobalt	ND		4.9	mg/Kg	1	5/2/2016 07:42 PM
Copper	ND		4.9	mg/Kg	1	5/2/2016 07:42 PM
Iron	ND		97	mg/Kg	1	5/2/2016 07:42 PM
Lead	ND		4.9	mg/Kg	1	5/2/2016 07:42 PM
Lithium	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Magnesium	ND		440	mg/Kg	1	5/2/2016 07:42 PM
Manganese	ND		4.9	mg/Kg	1	5/2/2016 07:42 PM
Molybdenum	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Nickel	ND		4.9	mg/Kg	1	5/2/2016 07:42 PM
Phosphorus	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Platinum	ND		97	mg/Kg	1	5/2/2016 07:42 PM
Selenium	ND		2.9	mg/Kg	1	5/2/2016 07:42 PM
Silver	ND		0.97	mg/Kg	1	5/2/2016 07:42 PM
Sodium	ND		490	mg/Kg	1	5/2/2016 07:42 PM
Tellurium	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Thallium	ND		2.9	mg/Kg	1	5/2/2016 07:42 PM
Tin	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Titanium	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Tungsten	ND		97	mg/Kg	1	5/2/2016 07:42 PM
Vanadium	ND		4.9	mg/Kg	1	5/2/2016 07:42 PM
Yttrium	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
Zinc	ND		68	mg/Kg	1	5/2/2016 07:42 PM
Zirconium	ND		9.7	mg/Kg	1	5/2/2016 07:42 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,1,1-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,1,2-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,1-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-08
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,1-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2,3-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2,3-Trichloropropane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2,4-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2,4-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2-Dibromo-3-chloropropane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2-Dibromoethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,3,5-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,3-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,3-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
1,4-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
2,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
2-Butanone	ND		25	µg/Kg	5	5/3/2016 03:45 AM
2-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
2-Hexanone	ND		25	µg/Kg	5	5/3/2016 03:45 AM
4-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
4-Methyl-2-pentanone	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Acetone	**30**		**25**	**µg/Kg**	5	5/3/2016 03:45 AM
Benzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Bromobenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Bromochloromethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Bromodichloromethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Bromoform	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Bromomethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Carbon disulfide	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Carbon tetrachloride	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Chlorobenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Chloroethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Chloroform	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Chloromethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
cis-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
cis-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Dibromochloromethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Dibromomethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Dichlorodifluoromethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Ethylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Downstairs Shower WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-08
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Isopropylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
m,p-Xylene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Methyl tert-butyl ether	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Methylene chloride	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Naphthalene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
n-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
n-Propylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
o-Xylene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
p-Isopropyltoluene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
sec-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Styrene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
tert-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Tetrachloroethene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Toluene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
trans-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
trans-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Trichloroethene	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Trichlorofluoromethane	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Vinyl chloride	ND		25	µg/Kg	5	5/3/2016 03:45 AM
Xylenes, Total	ND		50	µg/Kg	5	5/3/2016 03:45 AM
Surr: 4-Bromofluorobenzene	*117*		*62.7-159*	*%REC*	5	5/3/2016 03:45 AM
Surr: Dibromofluoromethane	*111*		*67.3-136*	*%REC*	5	5/3/2016 03:45 AM
Surr: Toluene-d8	*91.5*		*83-124*	*%REC*	5	5/3/2016 03:45 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower WaterBug Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-09
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.30	mg/Kg	1	5/2/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	ND		480	mg/Kg	1	5/2/2016 07:45 PM
Arsenic	ND		4.8	mg/Kg	1	5/2/2016 07:45 PM
Barium	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Beryllium	ND		0.48	mg/Kg	1	5/2/2016 07:45 PM
Cadmium	ND		0.96	mg/Kg	1	5/2/2016 07:45 PM
Calcium	ND		5,300	mg/Kg	1	5/2/2016 07:45 PM
Chromium	ND		1.9	mg/Kg	1	5/2/2016 07:45 PM
Cobalt	ND		4.8	mg/Kg	1	5/2/2016 07:45 PM
Copper	ND		4.8	mg/Kg	1	5/2/2016 07:45 PM
Iron	ND		96	mg/Kg	1	5/2/2016 07:45 PM
Lead	ND		4.8	mg/Kg	1	5/2/2016 07:45 PM
Lithium	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Magnesium	ND		430	mg/Kg	1	5/2/2016 07:45 PM
Manganese	ND		4.8	mg/Kg	1	5/2/2016 07:45 PM
Molybdenum	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Nickel	ND		4.8	mg/Kg	1	5/2/2016 07:45 PM
Phosphorus	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Platinum	ND		96	mg/Kg	1	5/2/2016 07:45 PM
Selenium	ND		2.9	mg/Kg	1	5/2/2016 07:45 PM
Silver	ND		0.96	mg/Kg	1	5/2/2016 07:45 PM
Sodium	ND		480	mg/Kg	1	5/2/2016 07:45 PM
Tellurium	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Thallium	ND		2.9	mg/Kg	1	5/2/2016 07:45 PM
Tin	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Titanium	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Tungsten	ND		96	mg/Kg	1	5/2/2016 07:45 PM
Vanadium	ND		4.8	mg/Kg	1	5/2/2016 07:45 PM
Yttrium	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
Zinc	ND		67	mg/Kg	1	5/2/2016 07:45 PM
Zirconium	ND		9.6	mg/Kg	1	5/2/2016 07:45 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,1,1-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,1,2-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,1-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flin Ex. 6 - Personal Privacy
Work Order: 1605004
Sample ID: Upstairs Shower WaterBug Grab
Lab ID: 1605004-09
Collection Date: 4/29/2016
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,1-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2,3-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2,3-Trichloropropane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2,4-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2,4-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2-Dibromo-3-chloropropane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2-Dibromoethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,3,5-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,3-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,3-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
1,4-Dichlorobenzene	**170**		**25**	**µg/Kg**	5	5/3/2016 04:15 AM
2,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
2-Butanone	ND		25	µg/Kg	5	5/3/2016 04:15 AM
2-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
2-Hexanone	ND		25	µg/Kg	5	5/3/2016 04:15 AM
4-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
4-Methyl-2-pentanone	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Acetone	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Benzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Bromobenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Bromochloromethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Bromodichloromethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Bromoform	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Bromomethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Carbon disulfide	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Carbon tetrachloride	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Chlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Chloroethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Chloroform	**56**		**25**	**µg/Kg**	5	5/3/2016 04:15 AM
Chloromethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
cis-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
cis-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Dibromochloromethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Dibromomethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Dichlorodifluoromethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Ethylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower WaterBug Grab
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-09
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Isopropylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
m,p-Xylene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Methyl tert-butyl ether	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Methylene chloride	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Naphthalene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
n-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
n-Propylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
o-Xylene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
p-Isopropyltoluene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
sec-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Styrene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
tert-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Tetrachloroethene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Toluene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
trans-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
trans-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Trichloroethene	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Trichlorofluoromethane	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Vinyl chloride	ND		25	µg/Kg	5	5/3/2016 04:15 AM
Xylenes, Total	ND		50	µg/Kg	5	5/3/2016 04:15 AM
Surr: 4-Bromofluorobenzene	*129*		*62.7-159*	*%REC*	5	5/3/2016 04:15 AM
Surr: Dibromofluoromethane	*111*		*67.3-136*	*%REC*	5	5/3/2016 04:15 AM
Surr: Toluene-d8	*89.8*		*83-124*	*%REC*	5	5/3/2016 04:15 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-10
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471A**		Prep Date: **5/2/2016**	Analyst: **VAW**
Mercury	ND		0.29	mg/Kg	1	5/2/2016
METALS BY ICP			**SW6010B**		Prep Date: **5/2/2016**	Analyst: **VAW**
Aluminum	ND		440	mg/Kg	1	5/2/2016 07:48 PM
Arsenic	ND		4.4	mg/Kg	1	5/2/2016 07:48 PM
Barium	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Beryllium	ND		0.44	mg/Kg	1	5/2/2016 07:48 PM
Cadmium	ND		0.88	mg/Kg	1	5/2/2016 07:48 PM
Calcium	ND		4,800	mg/Kg	1	5/2/2016 07:48 PM
Chromium	ND		1.8	mg/Kg	1	5/2/2016 07:48 PM
Cobalt	ND		4.4	mg/Kg	1	5/2/2016 07:48 PM
Copper	ND		4.4	mg/Kg	1	5/2/2016 07:48 PM
Iron	ND		88	mg/Kg	1	5/2/2016 07:48 PM
Lead	ND		4.4	mg/Kg	1	5/2/2016 07:48 PM
Lithium	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Magnesium	ND		390	mg/Kg	1	5/2/2016 07:48 PM
Manganese	ND		4.4	mg/Kg	1	5/2/2016 07:48 PM
Molybdenum	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Nickel	ND		4.4	mg/Kg	1	5/2/2016 07:48 PM
Phosphorus	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Platinum	ND		88	mg/Kg	1	5/2/2016 07:48 PM
Selenium	ND		2.6	mg/Kg	1	5/2/2016 07:48 PM
Silver	ND		0.88	mg/Kg	1	5/2/2016 07:48 PM
Sodium	ND		440	mg/Kg	1	5/2/2016 07:48 PM
Tellurium	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Thallium	ND		2.6	mg/Kg	1	5/2/2016 07:48 PM
Tin	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Titanium	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Tungsten	ND		88	mg/Kg	1	5/2/2016 07:48 PM
Vanadium	ND		4.4	mg/Kg	1	5/2/2016 07:48 PM
Yttrium	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
Zinc	ND		61	mg/Kg	1	5/2/2016 07:48 PM
Zirconium	ND		8.8	mg/Kg	1	5/2/2016 07:48 PM
VOLATILE ORGANIC COMPOUNDS			**SW8260B**			Analyst: **LAK**
1,1,1,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,1,1-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,1,2-Trichloroethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,1-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-10
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,1-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,1-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2,3-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2,3-Trichloropropane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2,4-Trichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2,4-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2-Dibromo-3-chloropropane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2-Dibromoethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2-Dichloroethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,3,5-Trimethylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,3-Dichlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,3-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
1,4-Dichlorobenzene	**150**		**25**	**µg/Kg**	5	5/3/2016 04:45 AM
2,2-Dichloropropane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
2-Butanone	ND		25	µg/Kg	5	5/3/2016 04:45 AM
2-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
2-Hexanone	ND		25	µg/Kg	5	5/3/2016 04:45 AM
4-Chlorotoluene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
4-Methyl-2-pentanone	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Acetone	**58**		**25**	**µg/Kg**	5	5/3/2016 04:45 AM
Benzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Bromobenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Bromochloromethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Bromodichloromethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Bromoform	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Bromomethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Carbon disulfide	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Carbon tetrachloride	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Chlorobenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Chloroethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Chloroform	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Chloromethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
cis-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
cis-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Dibromochloromethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Dibromomethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Dichlorodifluoromethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Ethylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM

Note:

ALS Environmental

Date: *05-May-16*

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
Sample ID: Upstairs Shower WaterBug
Collection Date: 4/29/2016

Work Order: 1605004
Lab ID: 1605004-10
Matrix: BULK

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachlorobutadiene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Isopropylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
m,p-Xylene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Methyl tert-butyl ether	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Methylene chloride	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Naphthalene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
n-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
n-Propylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
o-Xylene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
p-Isopropyltoluene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
sec-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Styrene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
tert-Butylbenzene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Tetrachloroethene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Toluene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
trans-1,2-Dichloroethene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
trans-1,3-Dichloropropene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Trichloroethene	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Trichlorofluoromethane	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Vinyl chloride	ND		25	µg/Kg	5	5/3/2016 04:45 AM
Xylenes, Total	ND		50	µg/Kg	5	5/3/2016 04:45 AM
Surr: 4-Bromofluorobenzene	*140*		*62.7-159*	*%REC*	5	5/3/2016 04:45 AM
Surr: Dibromofluoromethane	*108*		*67.3-136*	*%REC*	5	5/3/2016 04:45 AM
Surr: Toluene-d8	*85.4*		*83-124*	*%REC*	5	5/3/2016 04:45 AM

Note:

ALS Environmental

Date: 05-May-16

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35586** Instrument ID **HG1** Method: **SW7470A**

MBLK Sample ID **mblk-35586-35586** Units: **µg/L** Analysis Date: **5/3/2016**
Client ID: Run ID: **HG1_160503A** SeqNo: **1272949** Prep Date: **5/2/2016** 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-35586-35586** Units: **µg/L** Analysis Date: **5/3/2016**
Client ID: Run ID: **HG1_160503A** SeqNo: **1272950** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	5.06	0.50	5	0	101	80-120	0			

LCSD Sample ID **lcsd-35586-35586** Units: **µg/L** Analysis Date: **5/3/2016**
Client ID: Run ID: **HG1_160503A** SeqNo: **1272951** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	5.31	0.50	5	0	106	80-120	5.06	4.82	20	

MS Sample ID **1605001-03b ms** Units: **µg/L** Analysis Date: **5/3/2016**
Client ID: Run ID: **HG1_160503A** SeqNo: **1272958** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	4.92	0.50	5	0	98.4	75-125	0			

MSD Sample ID **1605001-03b msd** Units: **µg/L** Analysis Date: **5/3/2016**
Client ID: Run ID: **HG1_160503A** SeqNo: **1272959** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	5.06	0.50	5	0	101	75-125	4.92	2.81	20	

The following samples were analyzed in this batch:

1605004-01B	1605004-03B	1605004-05B
1605004-07B		

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

Client: Water Defense
Work Order: 1605004
Project: Flin Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35596** Instrument ID **HG1** Method: **SW7471A**

MBLK Sample ID **mblk-35596-35596** Units: **mg/Kg** Analysis Date: **5/2/2016**
Client ID: Run ID: **HG1_160502C** SeqNo: **1273199** Prep Date: **5/2/2016** 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-35596-35596** Units: **mg/Kg** Analysis Date: **5/2/2016**
Client ID: Run ID: **HG1_160502C** SeqNo: **1273200** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.9043	0.30	0.8266	0	109	69-147		0		

LCSD Sample ID **lcsd-35596-35596** Units: **mg/Kg** Analysis Date: **5/2/2016**
Client ID: Run ID: **HG1_160502C** SeqNo: **1273201** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.9815	0.30	0.8262	0	119	69-147	0.9043	8.19	20	

MS Sample ID **1605001-02a ms** Units: **mg/Kg** Analysis Date: **5/2/2016**
Client ID: Run ID: **HG1_160502C** SeqNo: **1273203** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	1.003	0.30	0.828	0	121	69-147		0		

The following samples were analyzed in this batch:

1605004-02A	1605004-04A	1605004-06A
1605004-08A	1605004-09A	1605004-10A

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35576** Instrument ID **ICP3** Method: **SW6010B**

MBLK Sample ID **mblk-35576-35576** Units: **mg/L** Analysis Date: **5/2/2016 04:41 PM**
Client ID: Run ID: **ICP3_160502D** SeqNo: **1272432** Prep Date: **5/2/2016** 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: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35576** Instrument ID **ICP3** Method: **SW6010B**

LCS Sample ID **lcs-35576-35576** Units: **mg/L** Analysis Date: **5/2/2016 04:44 PM**
Client ID: Run ID: **ICP3_160502D** SeqNo: **1272433** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.032	0.20	1.1	0	93.8	87.9-120	0			
Arsenic	1.028	0.010	1.1	0	93.5	80-120	0			
Barium	1.038	0.10	1.1	0	94.4	80-120	0			
Beryllium	1.046	0.00040	1.1	0	95.1	80-120	0			
Cadmium	1.058	0.0050	1.1	0	96.2	80-120	0			
Calcium	1.041	0.20	1.1	0	94.7	80.3-122	0			
Chromium	1.075	0.020	1.1	0	97.8	80-120	0			
Cobalt	1.041	0.025	1.1	0	94.6	80-120	0			
Copper	1.053	0.025	1.1	0	95.7	80-120	0			
Lead	1.096	0.015	1.1	0	99.6	80-120	0			
Magnesium	1.087	0.20	1.1	0	98.8	80-120	0			
Manganese	1.04	0.050	1.1	0	94.5	80-120	0			
Molybdenum	1.046	0.10	1.1	0	95.1	80-120	0			
Nickel	1.061	0.050	1.1	0	96.4	80-120	0			
Selenium	1.009	0.030	1.1	0	91.8	80-120	0			
Silver	1.055	0.010	1.1	0	95.9	80-120	0			
Sodium	1.074	0.20	1.1	0	97.7	80-120	0			
Thallium	1.062	0.0020	1.1	0	96.6	80-120	0			
Titanium	1.049	0.10	1.1	0	95.4	80-120	0			
Vanadium	1.042	0.050	1.1	0	94.8	80-120	0			
Zinc	1.067	0.050	1.1	0	97	80-120	0			

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35576** Instrument ID **ICP3** Method: **SW6010B**

LCSD Sample ID **lcsd-35576-35576** Units: **mg/L** Analysis Date: **5/2/2016 04:47 PM**
Client ID: Run ID: **ICP3_160502D** SeqNo: **1272434** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.049	0.20	1.1	0	95.4	87.9-120	1.032	1.69	20	
Arsenic	1.026	0.010	1.1	0	93.3	80-120	1.028	0.214	20	
Barium	1.034	0.10	1.1	0	94	80-120	1.038	0.382	20	
Beryllium	1.04	0.00040	1.1	0	94.6	80-120	1.046	0.58	20	
Cadmium	1.052	0.0050	1.1	0	95.6	80-120	1.058	0.553	20	
Calcium	1.031	0.20	1.1	0	93.7	80.3-122	1.041	0.998	20	
Chromium	1.063	0.020	1.1	0	96.7	80-120	1.075	1.11	20	
Cobalt	1.036	0.025	1.1	0	94.2	80-120	1.041	0.455	20	
Copper	1.043	0.025	1.1	0	94.8	80-120	1.053	0.997	20	
Iron	1.058	0.20	1.1	0	96.2	80-120	1.066	0.756	20	
Lead	1.092	0.015	1.1	0	99.3	80-120	1.096	0.342	20	
Magnesium	1.094	0.20	1.1	0	99.4	80-120	1.087	0.656	20	
Manganese	1.054	0.050	1.1	0	95.9	80-120	1.04	1.43	20	
Molybdenum	1.048	0.10	1.1	0	95.2	80-120	1.046	0.158	20	
Nickel	1.054	0.050	1.1	0	95.8	80-120	1.061	0.614	20	
Selenium	0.9947	0.030	1.1	0	90.4	80-120	1.009	1.46	20	
Silver	1.049	0.010	1.1	0	95.3	80-120	1.055	0.607	20	
Sodium	1.073	0.20	1.1	0	97.6	80-120	1.074	0.123	20	
Thallium	1.053	0.0020	1.1	0	95.8	80-120	1.062	0.822	20	
Titanium	1.053	0.10	1.1	0	95.7	80-120	1.049	0.345	20	
Vanadium	1.045	0.050	1.1	0	95	80-120	1.042	0.253	20	
Zinc	1.06	0.050	1.1	0	96.4	80-120	1.067	0.641	20	

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35576** Instrument ID **ICP3** Method: **SW6010B**

MS Sample ID **16041086-06j ms** Units: **mg/L** Analysis Date: **5/2/2016 05:31 PM**
Client ID: Run ID: **ICP3_160502D** SeqNo: **1272444** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.824	0.20	1.1	0.7734	95.5	75-125	0			
Arsenic	1.037	0.010	1.1	-0.001856	94.5	75-125	0			
Barium	1.089	0.10	1.1	0.09534	90.3	75-125	0			
Beryllium	1.061	0.00040	1.1	-0.0001694	96.5	75-125	0			
Cadmium	1.039	0.0050	1.1	-0.000154	94.4	75-125	0			
Calcium	118	0.20	1.1	116.8	110	75-125	0			O
Chromium	1.026	0.020	1.1	0.001445	93.1	75-125	0			
Cobalt	0.9647	0.025	1.1	0.0000726	87.7	75-125	0			
Copper	0.9963	0.025	1.1	0.0007458	90.5	75-125	0			
Iron	1.107	0.20	1.1	0.04837	96.2	75-125	0			
Lead	1.034	0.015	1.1	0.01333	92.8	75-125	0			
Magnesium	47.37	0.20	1.1	46.3	97	75-125	0			O
Manganese	1.042	0.050	1.1	0.0009306	94.6	75-125	0			
Molybdenum	1.037	0.10	1.1	0.002964	94	75-125	0			
Nickel	0.9781	0.050	1.1	0.0005731	88.9	75-125	0			
Selenium	1.015	0.030	1.1	0.003086	92	75-125	0			
Silver	1.024	0.010	1.1	-0.0001573	93.1	75-125	0			
Sodium	46.46	0.20	1.1	45.61	78	75-125	0			O
Thallium	0.9834	0.0020	1.1	0.0005995	89.3	75-125	0			
Titanium	1.072	0.10	1.1	-0.0003146	97.5	75-125	0			
Vanadium	1.073	0.050	1.1	0.003957	97.2	75-125	0			
Zinc	1.018	0.050	1.1	0.005795	92	75-125	0			

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35576** Instrument ID **ICP3** Method: **SW6010B**

MSD Sample ID **16041086-06j msd** Units: **mg/L** Analysis Date: **5/2/2016 05:34 PM**
Client ID: Run ID: **ICP3_160502D** SeqNo: **1272445** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.759	0.20	1.1	0.7734	89.6	75-125	1.824	3.62	20	
Arsenic	1.029	0.010	1.1	-0.001856	93.7	75-125	1.037	0.788	20	
Barium	1.077	0.10	1.1	0.09534	89.3	75-125	1.089	1.06	20	
Beryllium	1.025	0.00040	1.1	-0.0001694	93.2	75-125	1.061	3.52	20	
Cadmium	1.025	0.0050	1.1	-0.000154	93.2	75-125	1.039	1.35	20	
Calcium	115.8	0.20	1.1	116.8	-90	75-125	118	1.88	20	SO
Chromium	1	0.020	1.1	0.001445	90.8	75-125	1.026	2.53	20	
Cobalt	0.9544	0.025	1.1	0.0000726	86.8	75-125	0.9647	1.08	20	
Copper	0.9725	0.025	1.1	0.0007458	88.3	75-125	0.9963	2.41	20	
Iron	1.077	0.20	1.1	0.04837	93.5	75-125	1.107	2.71	20	
Lead	1.02	0.015	1.1	0.01333	91.5	75-125	1.034	1.36	20	
Magnesium	46.6	0.20	1.1	46.3	27	75-125	47.37	1.64	20	SO
Manganese	1.012	0.050	1.1	0.0009306	91.9	75-125	1.042	2.92	20	
Molybdenum	1.022	0.10	1.1	0.002964	92.6	75-125	1.037	1.51	20	
Nickel	0.9649	0.050	1.1	0.0005731	87.7	75-125	0.9781	1.36	20	
Selenium	1.002	0.030	1.1	0.003086	90.8	75-125	1.015	1.29	20	
Silver	1.003	0.010	1.1	-0.0001573	91.2	75-125	1.024	2.04	20	
Sodium	45.84	0.20	1.1	45.61	21	75-125	46.46	1.36	20	SO
Thallium	0.9721	0.0020	1.1	0.0005995	88.3	75-125	0.9834	1.16	20	
Titanium	1.035	0.10	1.1	-0.0003146	94.1	75-125	1.072	3.56	20	
Vanadium	1.039	0.050	1.1	0.003957	94.1	75-125	1.073	3.21	20	
Zinc	1.008	0.050	1.1	0.005795	91.1	75-125	1.018	0.977	20	

The following samples were analyzed i n this batch:

1605004-01B	1605004-03B	1605004-05B
1605004-07B		

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35593** Instrument ID **ICP3** Method: **SW6010B**

MBLK Sample ID **mblk-35593-35593** Units: **mg/Kg** Analysis Date: **5/2/2016 07:02 PM**
Client ID: Run ID: **ICP3_160502E** SeqNo: **1272460** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	490								
Arsenic	ND	4.9								
Barium	ND	9.8								
Beryllium	ND	0.49								
Cadmium	ND	0.98								
Calcium	ND	5,400								
Chromium	ND	2.0								
Cobalt	ND	4.9								
Copper	ND	4.9								
Iron	ND	98								
Lead	ND	4.9								
Lithium	ND	9.8								
Magnesium	ND	440								
Manganese	ND	4.9								
Molybdenum	ND	9.8								
Nickel	ND	4.9								
Phosphorus	ND	9.8								
Platinum	ND	98								
Selenium	ND	3.0								
Silver	ND	0.98								
Sodium	ND	490								
Tellurium	ND	9.8								
Thallium	ND	3.0								
Tin	ND	9.8								
Titanium	ND	9.8								
Tungsten	ND	98								
Vanadium	ND	4.9								
Yttrium	ND	9.8								
Zinc	ND	69								
Zirconium	ND	9.8								

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35593** Instrument ID **ICP3** Method: **SW6010B**

LCS Sample ID **lcs-35593-35593** Units: **mg/Kg** Analysis Date: **5/2/2016 07:05 PM**
Client ID: Run ID: **ICP3_160502E** SeqNo: **1272461** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	500	199.8	0	109	80-120	0			
Arsenic	166.2	5.0	199.8	0	83.2	80-120	0			
Barium	168.2	10	199.8	0	84.2	80-120	0			
Beryllium	172.1	0.50	199.8	0	86.1	80-120	0			
Cadmium	170.5	1.0	199.8	0	85.3	80-120	0			
Calcium	ND	5,500	199.8	0	2210	80-120	0			S
Chromium	171.7	2.0	199.8	0	85.9	80-120	0			
Cobalt	166	5.0	199.8	0	83.1	80-120	0			
Copper	172.2	5.0	199.8	0	86.2	80-120	0			
Iron	199.8	100	199.8	0	100	80-120	0			
Lead	178.1	5.0	199.8	0	89.1	80-120	0			
Magnesium	504	450	199.8	0	252	80-120	0			S
Manganese	172	5.0	199.8	0	86.1	80-120	0			
Molybdenum	164.6	10	199.8	0	82.4	80-120	0			
Nickel	169	5.0	199.8	0	84.6	80-120	0			
Selenium	161.1	3.0	199.8	0	80.6	80-120	0			
Silver	174.3	1.0	199.8	0	87.2	80-120	0			
Sodium	ND	500	199.8	0	93.9	80-120	0			
Thallium	169.1	3.0	199.8	0	84.6	80-120	0			
Titanium	171.3	10	199.8	0	85.7	80-120	0			
Vanadium	169.7	5.0	199.8	0	84.9	80-120	0			
Zinc	221	70	199.8	0	111	80-120	0			

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35593** Instrument ID **ICP3** Method: **SW6010B**

LCSD Sample ID **lcsd-35593-35593** Units: **mg/Kg** Analysis Date: **5/2/2016 07:08 PM**
Client ID: Run ID: **ICP3_160502E** SeqNo: **1272462** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	490	196.7	0	126	80-120	217	0	20	S
Arsenic	184.5	4.9	196.7	0	93.8	80-120	166.2	10.4	20	
Barium	186.9	9.8	196.7	0	95	80-120	168.2	10.6	20	
Beryllium	189.5	0.49	196.7	0	96.3	80-120	172.1	9.6	20	
Cadmium	189.1	0.98	196.7	0	96.1	80-120	170.5	10.3	20	
Calcium	6406	5,400	196.7	0	3260	80-120	4414	36.8	20	SR
Chromium	188.6	2.0	196.7	0	95.9	80-120	171.7	9.36	20	
Cobalt	183.9	4.9	196.7	0	93.5	80-120	166	10.2	20	
Copper	189.3	4.9	196.7	0	96.3	80-120	172.2	9.47	20	
Iron	219.1	98	196.7	0	111	80-120	199.8	9.2	20	
Lead	194.6	4.9	196.7	0	98.9	80-120	178.1	8.85	20	
Magnesium	650.5	440	196.7	0	331	80-120	504	25.4	20	SR
Manganese	188.5	4.9	196.7	0	95.8	80-120	172	9.14	20	
Molybdenum	184.5	9.8	196.7	0	93.8	80-120	164.6	11.4	20	
Nickel	186.9	4.9	196.7	0	95	80-120	169	10.1	20	
Selenium	179.5	3.0	196.7	0	91.3	80-120	161.1	10.8	20	
Silver	193.6	0.98	196.7	0	98.4	80-120	174.3	10.5	20	
Sodium	ND	490	196.7	0	106	80-120	187.6	0	20	
Thallium	187.1	3.0	196.7	0	95.1	80-120	169.1	10.1	20	
Titanium	189.2	9.8	196.7	0	96.2	80-120	171.3	9.91	20	
Vanadium	187.8	4.9	196.7	0	95.5	80-120	169.7	10.2	20	
Zinc	264.6	69	196.7	0	134	80-120	221	17.9	20	S

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35593** Instrument ID **ICP3** Method: **SW6010B**

MS Sample ID **1605001-04a ms** Units: **mg/Kg** Analysis Date: **5/2/2016 07:17 PM**
Client ID: Run ID: **ICP3_160502E** SeqNo: **1272465** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	500	199.2	11.93	101	75-125	0			
Arsenic	186.7	5.0	199.2	0.8681	93.3	75-125	0			
Barium	188.6	10	199.2	0.1313	94.6	75-125	0			
Beryllium	193.4	0.50	199.2	0.02572	97.1	75-125	0			
Cadmium	191.2	1.0	199.2	0.01277	96	75-125	0			
Calcium	ND	5,500	199.2	1484	-7.76	75-125	0			SO
Chromium	193.2	2.0	199.2	0.1587	96.9	75-125	0			
Cobalt	189.7	5.0	199.2	-0.001524	95.2	75-125	0			
Copper	192.1	5.0	199.2	0.2349	96.3	75-125	0			
Iron	199	100	199.2	13.67	93.1	75-125	0			
Lead	198.7	5.0	199.2	0.3554	99.6	75-125	0			
Magnesium	ND	450	199.2	121.1	86.3	75-125	0			
Manganese	190.6	5.0	199.2	0.1532	95.6	75-125	0			
Molybdenum	186.3	10	199.2	0.4051	93.3	75-125	0			
Nickel	191.6	5.0	199.2	0.05278	96.2	75-125	0			
Selenium	185.3	3.0	199.2	-0.9531	93.5	75-125	0			
Silver	194.9	1.0	199.2	-0.1589	97.9	75-125	0			
Sodium	ND	500	199.2	6.338	97.9	75-125	0			
Thallium	192.3	3.0	199.2	0.02058	96.5	75-125	0			
Titanium	193.4	10	199.2	-0.1502	97.2	75-125	0			
Vanadium	191	5.0	199.2	1.178	95.3	75-125	0			
Zinc	208.4	70	199.2	15.01	97.1	75-125	0			

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **35593** Instrument ID **ICP3** Method: **SW6010B**

MSD Sample ID **1605001-04a msd** Units: **mg/Kg** Analysis Date: **5/2/2016 07:20 PM**
Client ID: Run ID: **ICP3_160502E** SeqNo: **1272466** Prep Date: **5/2/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	470	188.6	11.93	97.3	75-125	212.4	0	20	
Arsenic	179	4.7	188.6	0.8681	94.4	75-125	186.7	4.21	20	
Barium	178.4	9.4	188.6	0.1313	94.5	75-125	188.6	5.59	20	
Beryllium	184.4	0.47	188.6	0.02572	97.8	75-125	193.4	4.79	20	
Cadmium	183.1	0.94	188.6	0.01277	97.1	75-125	191.2	4.33	20	
Calcium	ND	5,200	188.6	1484	41.7	75-125	1469	0	20	SO
Chromium	184.9	1.9	188.6	0.1587	98	75-125	193.2	4.39	20	
Cobalt	181	4.7	188.6	-0.001524	96	75-125	189.7	4.69	20	
Copper	183.9	4.7	188.6	0.2349	97.4	75-125	192.1	4.34	20	
Iron	192.6	94	188.6	13.67	94.9	75-125	199	3.31	20	
Lead	189.6	4.7	188.6	0.3554	100	75-125	198.7	4.7	20	
Magnesium	ND	420	188.6	121.1	91.1	75-125	293	0	20	
Manganese	182.6	4.7	188.6	0.1532	96.8	75-125	190.6	4.24	20	
Molybdenum	179.6	9.4	188.6	0.4051	95	75-125	186.3	3.7	20	
Nickel	183.1	4.7	188.6	0.05278	97.1	75-125	191.6	4.53	20	
Selenium	176.2	2.8	188.6	-0.9531	93.9	75-125	185.3	4.99	20	
Silver	185.1	0.94	188.6	-0.1589	98.2	75-125	194.9	5.19	20	
Sodium	ND	470	188.6	6.338	96.5	75-125	201.4	0	20	
Thallium	183.2	2.8	188.6	0.02058	97.1	75-125	192.3	4.8	20	
Titanium	184.4	9.4	188.6	-0.1502	97.8	75-125	193.4	4.78	20	
Vanadium	182.4	4.7	188.6	1.178	96.1	75-125	191	4.58	20	
Zinc	201.8	66	188.6	15.01	99	75-125	208.4	3.2	20	

The following samples were analyzed in this batch:

1605004-02a	1605004-04a	1605004-06a
1605004-08a	1605004-09a	1605004-10a

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128439** Instrument ID **VMS2** Method: **SW8260B**

MBLK Sample ID **MBLK-R128439** Units: **µg/Kg** Analysis Date: **5/2/2016 11:41 PM**
Client ID: Run ID: **VMS2_160502B** SeqNo: **1272709** 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.

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128439** 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	61.6	0	*50*	0	*123*	*62.7-159*	0
Surr: Dibromofluoromethane	50.44	0	*50*	0	*101*	*67.3-136*	0
Surr: Toluene-d8	45.95	0	*50*	0	*91.9*	*83-124*	0

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128439** Instrument ID **VMS2** Method: **SW8260B**

LCS Sample ID **LCS-R128439** Units: **µg/Kg** Analysis Date: **5/3/2016 12:11 PM**
Client ID: Run ID: **VMS2_160502B** SeqNo: **1272727** 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	44.18	5.0	50	0	88.4	70-132	0			
1,1-Dichloroethene	80.53	5.0	50	0	161	61.2-140	0			S
1,2-Dichloroethane	53.68	5.0	50	0	107	67.3-139	0			
1,3-Dichlorobenzene	7.61	5.0	50	0	15.2	67.5-126	0			S
1,4-Dichlorobenzene	8.23	5.0	50	0	16.5	69.5-124	0			S
Benzene	44.19	5.0	50	0	88.4	67.2-135	0			
Carbon tetrachloride	38.95	5.0	50	0	77.9	68.6-138	0			
Chlorobenzene	19.02	5.0	50	0	38	66.4-133	0			S
Chloroform	45.25	5.0	50	0	90.5	68.2-127	0			
cis-1,2-Dichloroethene	50.97	5.0	50	0	102	62.1-135	0			
Ethylbenzene	16.17	5.0	50	0	32.3	67.8-132	0			S
m,p-Xylene	30.69	5.0	100	0	30.7	66.4-132	0			S
Styrene	13.19	5.0	50	0	26.4	67.6-134	0			S
Tetrachloroethene	19.31	5.0	50	0	38.6	70.3-144	0			S
Toluene	25.4	5.0	50	0	50.8	67.8-130	0			S
Trichloroethene	30.95	5.0	50	0	61.9	68.5-136	0			S
Surr: 4-Bromofluorobenzene	50.57	0	*50*	0	*101*	*62.7-159*	0			
Surr: Dibromofluoromethane	58.3	0	*50*	0	*117*	*67.3-136*	0			
Surr: Toluene-d8	45.32	0	*50*	0	*90.6*	*83-124*	0			

The following samples were analyzed in this batch:

1605004-02A	1605004-04A	1605004-06A
1605004-08A	1605004-09A	1605004-10A

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128476** Instrument ID **VMS1** Method: **SW8260B**

MBLK Sample ID **MBLK-R128476** Units: **µg/L** Analysis Date: **5/3/2016 08:52 AM**
Client ID: Run ID: **VMS1_160503B** SeqNo: **1273420** 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.

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128476** 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	50.51	0	*50*	0	*101*	*61-131*	0
Surr: Dibromofluoromethane	52.07	0	*50*	0	*104*	*87-126*	0
Surr: Toluene-d8	50.27	0	*50*	0	*101*	*84-111*	0

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128476** Instrument ID **VMS1** Method: **SW8260B**

LCS Sample ID **LCS-R128476** Units: **µg/L** Analysis Date: **5/3/2016 09:24 AM**
Client ID: Run ID: **VMS1_160503B** SeqNo: **1273421** 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	58.34	5.0	50	0	117	48.4-140	0			
1,1-Dichloroethene	59.5	5.0	50	0	119	45.5-150	0			
1,2-Dichloroethane	60.11	5.0	50	0	120	46.5-141	0			
1,3-Dichlorobenzene	46.85	5.0	50	0	93.7	42.5-133	0			
1,4-Dichlorobenzene	47.07	5.0	50	0	94.1	38.9-136	0			
Benzene	56.28	5.0	50	0	113	50.7-134	0			
Carbon tetrachloride	59.92	5.0	50	0	120	45.5-143	0			
Chlorobenzene	51.48	5.0	50	0	103	45-133	0			
Chloroform	59.71	5.0	50	0	119	52.4-136	0			
cis-1,2-Dichloroethene	59.05	5.0	50	0	118	49.7-138	0			
Ethylbenzene	50.78	5.0	50	0	102	37.8-145	0			
m,p-Xylene	101.6	5.0	100	0	102	25.1-163	0			
Methyl tert-butyl ether	69.08	5.0	50	0	138	26.7-174	0			
Styrene	52.02	5.0	50	0	104	26.3-172	0			
Tetrachloroethene	54.52	5.0	50	0	109	37.3-139	0			
Toluene	54.18	5.0	50	0	108	44-135	0			
Trichloroethene	56.49	5.0	50	0	113	45.9-140	0			
Xylenes, Total	152.2	10	150	0	101	47.3-132	0			
Surr: 4-Bromofluorobenzene	48.92	0	*50*	0	*97.8*	*61-131*	0			
Surr: Dibromofluoromethane	53.34	0	*50*	0	*107*	*87-126*	0			
Surr: Toluene-d8	51.26	0	*50*	0	*103*	*84-111*	0			

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128476** Instrument ID **VMS1** Method: **SW8260B**

MS Sample ID **1604738-01A MS** Units: **µg/L** Analysis Date: **5/3/2016 10:28 AM**
Client ID: Run ID: **VMS1_160503B** SeqNo: **1273423** 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	53.65	5.0	50	0	107	40.4-134	0			
1,1-Dichloroethene	55.05	5.0	50	0	110	45.3-151	0			
1,2-Dichloroethane	53.49	5.0	50	0	107	37-139	0			
1,3-Dichlorobenzene	46.18	5.0	50	0	92.4	42.9-121	0			
1,4-Dichlorobenzene	46.08	5.0	50	0	92.2	53.4-129	0			
Benzene	52.26	5.0	50	0	105	37.4-144	0			
Carbon tetrachloride	55.96	5.0	50	0	112	33.8-150	0			
Chlorobenzene	49.69	5.0	50	0	99.4	52.4-132	0			
Chloroform	54.9	5.0	50	0	110	45.5-135	0			
cis-1,2-Dichloroethene	53.89	5.0	50	0	108	35.2-150	0			
Ethylbenzene	49.15	5.0	50	0	98.3	46.5-146	0			
m,p-Xylene	99.21	5.0	100	0	99.2	38.2-167	0			
Styrene	49.94	5.0	50	0	99.9	20.9-184	0			
Tetrachloroethene	52.83	5.0	50	0	106	55.2-134	0			
Toluene	51.99	5.0	50	0	104	32.7-140	0			
Trichloroethene	53.48	5.0	50	0	107	29.1-153	0			
Surr: 4-Bromofluorobenzene	49.29	0	*50*	0	*98.6*	*61-131*	0			
Surr: Dibromofluoromethane	53.17	0	*50*	0	*106*	*87-126*	0			
Surr: Toluene-d8	51.01	0	*50*	0	*102*	*84-111*	0			

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

Client: Water Defense
Work Order: 1605004
Project: Flint Ex. 6 - Personal Privacy

QC BATCH REPORT

Batch ID: **R128476** Instrument ID **VMS1** Method: **SW8260B**

MSD Sample ID **1604738-01A MSD** Units: **µg/L** Analysis Date: **5/3/2016 11:34 AM**
Client ID: Run ID: **VMS1_160503B** SeqNo: **1273425** 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	55.44	5.0	50	0	111	40.4-134	53.65	3.28	20	
1,1-Dichloroethene	57.11	5.0	50	0	114	45.3-151	55.05	3.67	20	
1,2-Dichloroethane	55.48	5.0	50	0	111	37-139	53.49	3.65	20	
1,3-Dichlorobenzene	46.95	5.0	50	0	93.9	42.9-121	46.18	1.65	20	
1,4-Dichlorobenzene	47.11	5.0	50	0	94.2	53.4-129	46.08	2.21	20	
Benzene	53.69	5.0	50	0	107	37.4-144	52.26	2.7	20	
Carbon tetrachloride	57.57	5.0	50	0	115	33.8-150	55.96	2.84	20	
Chlorobenzene	50.67	5.0	50	0	101	52.4-132	49.69	1.95	20	
Chloroform	56.8	5.0	50	0	114	45.5-135	54.9	3.4	20	
cis-1,2-Dichloroethene	56.79	5.0	50	0	114	35.2-150	53.89	5.24	21	
Ethylbenzene	50.04	5.0	50	0	100	46.5-146	49.15	1.79	20	
m,p-Xylene	100.1	5.0	100	0	100	38.2-167	99.21	0.883	20	
Styrene	50.74	5.0	50	0	101	20.9-184	49.94	1.59	20	
Tetrachloroethene	53.4	5.0	50	0	107	55.2-134	52.83	1.07	20	
Toluene	53.14	5.0	50	0	106	32.7-140	51.99	2.19	20	
Trichloroethene	54.22	5.0	50	0	108	29.1-153	53.48	1.37	20	
Surr: 4-Bromofluorobenzene	49.17	0	*50*	0	*98.3*	*61-131*	49.29	*0.244*		
Surr: Dibromofluoromethane	53.85	0	*50*	0	*108*	*87-126*	53.17	*1.27*		
Surr: Toluene-d8	51.01	0	*50*	0	*102*	*84-111*	51.01	*0*		

The following samples were analyzed in this batch: 1605004-01A 1605004-03A 1605004-05A 1605004-07A

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

ALS Environmental

Date: 05-May-16

Client: Water Defense
Project: Flint Ex. 6 - Personal Privacy
WorkOrder: **1605004**

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-HURLEYVU LL** Date/Time Received: **01-May-16 18:06**

Work Order: **1605004** Received by: **JAO**

Checklist completed by Jan Wilcox (eSignature) 02-May-16 (Date) Reviewed by: Rob Nieman (eSignature) 03-May-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):	5.7		
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: