



HARBOR HISTORY MUSEUM

March 28, 2017

Mr. Panjini Balaraju
Toxics Cleanup Program
Southwest Regional Office
Department of Ecology

Dear Mr. Balaraju,

As you are aware, the Harbor History Museum have a desire to obtain a No Further Action (NFA) letter from the Department of Ecology in regards to the property located at 4121 Harborview Dr Gig Harbor, WA 98335. Our objective under the Voluntary Cleanup Program (VCP) is to obtain groundwater monitoring data for four consecutive quarters showing no detectable amounts of chemicals of concern. Listed below are the laboratory results from the latest sampling and analysis.

2017 QTR 1 Data analysis- sample

Two groundwater monitoring wells (MW-05 and MW-07) were sampled on 3/9/2017 using the proper low flow sampling techniques with the samples being sent to Spectra Laboratories in Tacoma Washington for Volatile Organic Analysis (VOA). The results from reported for these samples showed non-detects for all chemicals of concern from well MW7 and well MW5.

Included in this letter are:

- Copy of the raw laboratory data and associated QA/QC.
- The field data showing the typical field reporting results.
- Copy of the chain of custody.

Field Data

Well number	MW-5	MW-7
Date	3/9/17	3/9/17
Time	1020 hrs	1100 hrs
Depth to top of water	3'1"	5'0"
Depth to bottom of well	15'5"	15'4"
Water depth	12'4"	10'4"
Purge volume	5 gallons	5 gallons
Beginning Conductivity	95	285
Beginning pH	7.0	7.0
Ending Conductivity	95	285
Ending pH	7.0	7.0

Mirna Fritz
Harbor History Museum
Email: mirnaf@harborhistorymuseum.org



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03/27/2017

P.O.#: *


Harbor History Museum
4121 Harborview Dr.
Gig Harbor, WA 98332

Client ID: Trip Blank
Sample Matrix: Water
Date Sampled: 03/09/2017
Date Received: 03/09/2017
Spectra Project: 2017030300
Spectra Number: 1

Analyte	Result	Units	Method	Analyte	Result	Units	Method
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C
2,2-Dichloropropane	<1	µg/L	SW846 8260C	Chlorodibromomethane	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Dibromofluoromethane	97	SW846 8260C
1,2-Dichloroethane-d4	92	SW846 8260C
Toluene-d8	94	SW846 8260C
4-Bromofluorobenzene	103	SW846 8260C

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Jeffrey Cooper, Laboratory Manager
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Date Received: 03/09/2017
Spectra Project: 2017030300
Spectra Number: 1

Analyte	Result	Units	Method
Chloroethane	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C
Isopropylbenzene	<1	µg/L	SW846 8260C
Methyl-tert-Butyl Ether	<10	µg/L	SW846 8260C
Methylene chloride	<1	µg/L	SW846 8260C
Naphthalene	<1	µg/L	SW846 8260C
Styrene	<1	µg/L	SW846 8260C
Tetrachloroethene	<1	µg/L	SW846 8260C
Toluene	<1	µg/L	SW846 8260C
Total Xylenes	<2	µg/L	SW846 8260C
Trichloroethene	<1	µg/L	SW846 8260C
Trichlorofluoromethane	<1	µg/L	SW846 8260C
Vinyl Acetate	<10	µg/L	SW846 8260C
Vinyl chloride	<0.2	µg/L	SW846 8260C
cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C

Analyte	Result	Units	Method
cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
n-Butylbenzene	<1	µg/L	SW846 8260C
n-Propylbenzene	<1	µg/L	SW846 8260C
sec-Butylbenzene	<1	µg/L	SW846 8260C
tert-Butylbenzene	<1	µg/L	SW846 8260C
trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Dibromofluoromethane	97	SW846 8260C
1,2-Dichloroethane-d4	92	SW846 8260C
Toluene-d8	94	SW846 8260C
4-Bromofluorobenzene	103	SW846 8260C

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P.O.#: *


Harbor History Museum
4121 Harborview Dr.
Gig Harbor, WA 98332

Client ID: MW5
Sample Matrix: Water
Date Sampled: 03/09/2017
Date Received: 03/09/2017
Spectra Project: 2017030300
Spectra Number:2

Analyte	Result	Units	Method	Analyte	Result	Units	Method
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C
2,2-Dichloropropane	<1	µg/L	SW846 8260C	Chlorodibromomethane	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Dibromofluoromethane	95	SW846 8260C
1,2-Dichloroethane-d4	93	SW846 8260C
Toluene-d8	92	SW846 8260C
4-Bromofluorobenzene	97	SW846 8260C

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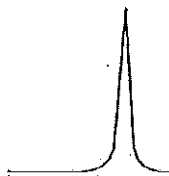
Client ID: MW5
Sample Matrix: Water
Date Sampled: 03/09/2017
Date Received: 03/09/2017
Spectra Project: 2017030300
Spectra Number:2

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<10	µg/L	SW846 8260C				
Methylene chloride	<1	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				
Styrene	<1	µg/L	SW846 8260C				
Tetrachloroethene	<1	µg/L	SW846 8260C				
Toluene	<1	µg/L	SW846 8260C				
Total Xylenes	<2	µg/L	SW846 8260C				
Trichloroethene	<1	µg/L	SW846 8260C				
Trichlorofluoromethane	<1	µg/L	SW846 8260C				
Vinyl Acetate	<10	µg/L	SW846 8260C				
Vinyl chloride	<0.2	µg/L	SW846 8260C				
cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C				

Surrogate	Recovery	Method
Dibromofluoromethane	95	SW846 8260C
1,2-Dichloroethane-d4	93	SW846 8260C
Toluene-d8	92	SW846 8260C
4-Bromofluorobenzene	97	SW846 8260C

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4121 Harborview Dr.
Gig Harbor, WA 98332

Client ID: MW7
Sample Matrix: Water
Date Sampled: 03/09/2017
Date Received: 03/09/2017
Spectra Project: 2017030300
Spectra Number:3

Analyte	Result	Units	Method	Analyte	Result	Units	Method
1,1,1,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Butanone (MEK)	<10	µg/L	SW846 8260C
1,1,1-Trichloroethane	<1	µg/L	SW846 8260C	2-Chloroethylvinyl Ether	<10	µg/L	SW846 8260C
1,1,2,2-Tetrachloroethane	<1	µg/L	SW846 8260C	2-Chlorotoluene	<1	µg/L	SW846 8260C
1,1,2-Trichloroethane	<1	µg/L	SW846 8260C	2-Hexanone (MBK)	<10	µg/L	SW846 8260C
1,1-Dichloroethane	<1	µg/L	SW846 8260C	4-Chlorotoluene	<1	µg/L	SW846 8260C
1,1-Dichloroethene	<1	µg/L	SW846 8260C	4-Isopropyltoluene	<1	µg/L	SW846 8260C
1,1-Dichloropropene	<1	µg/L	SW846 8260C	4-methyl-2-pentanone	<10	µg/L	SW846 8260C
1,2,3-Trichlorobenzene	<1	µg/L	SW846 8260C	Acetone	<10	µg/L	SW846 8260C
1,2,3-Trichloropropane	<1	µg/L	SW846 8260C	Acetonitrile	<10	µg/L	SW846 8260C
1,2,4-Trichlorobenzene	<1	µg/L	SW846 8260C	Acrolein	<10	µg/L	SW846 8260C
1,2,4-Trimethylbenzene	<1	µg/L	SW846 8260C	Acrylonitrile	<10	µg/L	SW846 8260C
1,2-Dibromo3Chloropropane	<10	µg/L	SW846 8260C	Benzene	<1	µg/L	SW846 8260C
1,2-Dibromoethane (EDB)	<1	µg/L	SW846 8260C	Bromobenzene	<1	µg/L	SW846 8260C
1,2-Dichlorobenzene	<1	µg/L	SW846 8260C	Bromochloromethane	<1	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C	Bromodichloromethane	<1	µg/L	SW846 8260C
1,2-Dichloropropane	<1	µg/L	SW846 8260C	Bromoform	<1	µg/L	SW846 8260C
1,3,5-Trimethylbenzene	<1	µg/L	SW846 8260C	Bromomethane	<1	µg/L	SW846 8260C
1,3-Dichlorobenzene	<1	µg/L	SW846 8260C	Carbon Disulfide	<10	µg/L	SW846 8260C
1,3-Dichloropropane	<1	µg/L	SW846 8260C	Carbon Tetrachloride	<1	µg/L	SW846 8260C
1,4-Dichlorobenzene	<1	µg/L	SW846 8260C	Chlorobenzene	<1	µg/L	SW846 8260C
2,2-Dichloropropane	<1	µg/L	SW846 8260C	Chlorodibromomethane	<1	µg/L	SW846 8260C

Surrogate	Recovery	Method
Dibromofluoromethane	96	SW846 8260C
1,2-Dichloroethane-d4	93	SW846 8260C
Toluene-d8	93	SW846 8260C
4-Bromofluorobenzene	98	SW846 8260C

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4121 Harborview Dr.
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Client ID: MW7
Sample Matrix: Water
Date Sampled: 03/09/2017
Date Received: 03/09/2017
Spectra Project: 2017030300
Spectra Number:3

Analyte	Result	Units	Method	Analyte	Result	Units	Method
Chloroethane	<1	µg/L	SW846 8260C	cis-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Chloroform	<1	µg/L	SW846 8260C	n-Butylbenzene	<1	µg/L	SW846 8260C
Chloromethane	<1	µg/L	SW846 8260C	n-Propylbenzene	<1	µg/L	SW846 8260C
Dibromomethane	<1	µg/L	SW846 8260C	sec-Butylbenzene	<1	µg/L	SW846 8260C
Dichlorodifluoromethane	<1	µg/L	SW846 8260C	tert-Butylbenzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C	trans-1,2-Dichloroethene	<1	µg/L	SW846 8260C
Hexachlorobutadiene	<1	µg/L	SW846 8260C	trans-1,3-Dichloropropene	<1	µg/L	SW846 8260C
Iodomethane	<10	µg/L	SW846 8260C				
Isopropylbenzene	<1	µg/L	SW846 8260C				
Methyl-tert-Butyl Ether	<10	µg/L	SW846 8260C				
Methylene chloride	<1	µg/L	SW846 8260C				
Naphthalene	<1	µg/L	SW846 8260C				
Styrene	<1	µg/L	SW846 8260C				
Tetrachloroethene	<1	µg/L	SW846 8260C				
Toluene	<1	µg/L	SW846 8260C				
Total Xylenes	<2	µg/L	SW846 8260C				
Trichloroethene	<1	µg/L	SW846 8260C				
Trichlorofluoromethane	<1	µg/L	SW846 8260C				
Vinyl Acetate	<10	µg/L	SW846 8260C				
Vinyl chloride	<0.2	µg/L	SW846 8260C				
cis-1,2-Dichloroethene	<1	µg/L	SW846 8260C				

Surrogate	Recovery	Method
Dibromofluoromethane	96	SW846 8260C
1,2-Dichloroethane-d4	93	SW846 8260C
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