



HARBOR HISTORY MUSEUM

July 6, 2015

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

Dear Mr. Balaraju,

My name is Mirna Fritz and I am the new Office Manager at Harbor History Museum. 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.

2015 QTR 2 Data analysis- Resample

Two groundwater monitoring wells (MW-05 and MW-07) were sampled on 5/01/2015 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 vinyl chloride results of 0.22 ppb from 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	5/01/2015	5/01/2015
Time	1030 hrs	1000 hrs
Depth to top of water	4'7"	6'4"
Depth to bottom of well	15'5"	15'4"
Water depth	11'1"	9'6"
Purge volume	5 gallons	5 gallons
Beginning Conductivity	150	340
Beginnning pH	6.9	6.8
Ending Conductivity	150	340
Ending pH	6.9	6.8

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



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

June 9, 2015

Harbor History Museum
4121 Harborview Drive
Gig Harbor, WA 98335
Attn: Rick Fuller

Case Narrative
Client Project:
Spectra Project: 2015050032

Three water samples--two from monitoring wells and an accompanying trip blank-- were received at the laboratory on May 1, 2015 for vinyl chloride analysis by EPA method SW 846-8260. The sample assigned spectra lab #1 was identified on the chain of custody as MW-7. Spectra lab #2 had a client ID of MW-5. Spectra sample #3 was the trip blank.

The samples were collected on the day they were received: May 01, 2015. The samples were submitted as part of a quarterly monitoring program. However, these were follow-up samples that were to be analyzed specifically for vinyl chloride purging a 25ml sample aliquot, in order to facilitate a method reporting limit of 0.2 ug/L.


The samples MW-7 and the Trip Blank were each found to be non-detect for Vinyl Chloride. However, the sample MW-5 (Spectra sample #2) showed a small but measurable amount of vinyl chloride at 0.22 ug/L. It should be noted that this sample ran between the two found to be non-detect in the sample sequence. The method blank was also found to be non-detect. Lastly, the vinyl chloride presence in MW-5 is confirmed by both its retention time and also mass spectra.

Future monitoring samples for VOC analysis will be done using the 25ml sample sparge in order to continue to achieve a Method Reporting Limit of 0.2 ug/L for vinyl chloride.

Lastly, as a donation to the Harbor History Museum, Spectra Laboratories would like to offer the future VOC testing of these quarterly samples at no charge.

Please feel free to call with any questions regarding these samples.

Sincerely



Steven G. Hibbs
Laboratory Manager



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

06/09/2015

P.O.#: N/C

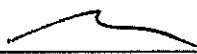
Harbor History Museum
4121 Harborview Dr.
Gig Harbor, WA 98332
Attn: Rick Fuller

Client ID: MW 7
Sample Matrix: Water
Date Sampled: 05/01/2015
Date Received: 05/01/2015
Spectra Project: 2015050032
Spectra Number: 1

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Vinyl chloride	<0.20	µg/L	SW846 8260C

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
1,2-Dichloroethane-d4	87	SW846 8260C
Dibromofluoromethane	89	SW846 8260C
Toluene-d8	101	SW846 8260C
4-Bromofluorobenzene	93	SW846 8260C

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager
a6/sgh



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

06/09/2015

P.O.#: N/C


Harbor History Museum
4121 Harborview Dr.
Gig Harbor, WA 98332
Attn: Rick Fuller

Client ID: MW 5
Sample Matrix: Water
Date Sampled: 05/01/2015
Date Received: 05/01/2015
Spectra Project: 2015050032
Spectra Number: 2

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Vinyl chloride	0.22	µg/L	SW846 8260C

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
1,2-Dichloroethane-d4	96	SW846 8260C
4-Bromofluorobenzene	96	SW846 8260C
Dibromofluoromethane	96	SW846 8260C
Toluene-d8	101	SW846 8260C

SPECTRA LABORATORIES


Steve Hibbs, Laboratory Manager
a6/sgh

Page 2 of 3



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

06/09/2015

P.O.#: N/C

Harbor History Museum
4121 Harborview Dr.
Gig Harbor, WA 98332
Attn: Rick Fuller

Client ID: Trip Blank
Sample Matrix: Water
Date Sampled: 05/01/2015
Date Received: 05/01/2015
Spectra Project: 2015050032
Spectra Number: 3

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Vinyl chloride	<0.20	µg/L	SW846 8260C

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
1,2-Dichloroethane-d4	97	SW846 8260C
4-Bromofluorobenzene	95	SW846 8260C
Dibromofluoromethane	102	SW846 8260C
Toluene-d8	100	SW846 8260C

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager
a6/sgh

Page 3 of 3



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

June 9, 2015


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

Sample Matrix: Water
EPA Method: 624/8260C
Spectra Project: 2015050032
Date Analyzed: 5/15/2015
Units: ug/L
Applies to Spectra #'s: 1-3
Spiked Sample 2015050388-1

GCMS VOLATILE ORGANIC ANALYSIS Matrix Spike/ Matrix Spike Duplicate Results

COMPOUND	SAMPLE RESULT	SPIKE AMOUNT	MS RESULT	MS %REC	MSD RESULT	MSD %REC	RPD
1,1-Dichloroethene	<1	10.00	11.47	115	13.27	133	14.6
Benzene	<1	10.00	11.33	113	12.25	123	7.8
Trichloroethene	<1	10.00	10.95	110	12.02	120	9.3
Toluene	2.87	10.00	11.79	89	12.76	99	10.3
Chlorobenzene (Results after dilution)	<1	10.00	10.54	105	11.26	113	6.6

Surrogates	MS	MSD	MB	Method Blank	ug/L
Dibromofluoromethane	133	142	117	Vinyl Chloride	<0.2
1,2-Dichloroethane-d4	100	113	113		
Toluene-d8	104	102	88		
4-Bromofluorobenzene	89	88	117		



Steven G. Hibbs
Laboratory Manager

