

May 27, 2016

File: 0063.03936.0

Mr. Brian Finos Manager of Facilities Charter Development Company 3850 Broadmoor SE, Suite 201 Grand Rapids, Michigan 49512

Re: Environmental Assessment – Drinking Water Quality Report Detroit Premier Charter Academy 7781 Asbury Park, Detroit, Michigan

Dear Mr. Finos:

Rose & Westra, Inc. (R&W) is pleased to present this drinking water quality report with results from the recent sampling and testing for the Detroit Premier Charter Academy located at 7781 Asbury Park, Detroit, Michigan (the Building). This work was requested due a concern about possible lead contaminates being present in the drinking water supplied to the Building. The water piping system to the Building and the water within the system are maintained by City of Detroit Water Department.

In summary, none of the tests conducted identified any contaminants exceeding the maximum contaminant levels (MCLs) or the Secondary MCLs allowed by the U. S. Environmental Protection Agency (U.S. EPA) for residential drinking water consumption.

Background

The Building is a multi-story structure constructed in several phases with the original Building constructed was completed in the 1940s and 1960s. Renovations and additions were completed in 2006 using new building materials. The City of Detroit Water Department maintains the water distribution system and provides the water within the piping system to the Building.

Drinking Water Sampling

On May 22, 2016, R&W staff collected water samples from eight water fixtures in the Building. The fixtures sampled consist of a drinking water fountain station (DFS) located across the hallway from Classroom 100 (sampled the older ceramic model [DFS-100], DFS located next to Classroom 103 (sampled the older ceramic model) [DFS-103], DFS next to Classroom 113 [DFS-113], DFS next to Classroom 201A [DFS-201A], DFS next to Classroom 213 [DFS-213], sink tap in the food prep room (Room 125) [FP-125], sink tap in the Teacher's Lounge (Room 132) [TL-132], and sink tap in Classroom 213 [CS-213].

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The locations have been illustrated on Figures 1 and 2 (Attachment 1). The sampling method used for the drinking water sample collection is known as first draw sampling, with a second sample collected from each location following a flush of the fixture. The first draw method required R&W staff to access the sampling location and flush the fixture to be sampled for a 30-minute period. Flushing the sampling locations was completed at 7:08 pm on May 21, 2016. Once the 30-minute flushing period was completed, R&W allowed each sample location to rest for a minimum of 6 hours. Each sample location was taped off to prevent use. The first draw water sample collection began at 10:24 am on May 22, 2016; thereby allowing for a nearly 15-hour rest period. Once the first draw sample was collected from the sample locations, the fixtures remained on for a 5-minute flush before the flushed sample was collected.

The first draw sample from each sample location has been identified in the sample name. The first draw samples are identified as DFS-100-FD, DFS-103-FD, DFS-113-FD, DFS-201A-FD, DFS-213-FD, FP-125-FD, TL-132-FD, and CS-213-FD. These water sample locations have been illustrated on Figures 1 and 2, Attachment 1.

The flushed sample from each sample location has also been identified in the sample name. The flushed samples are identified as DFS-100-FL, DFS-103-FL, DFS-113-FL, DFS-201A-FL, DFS-213-FL, FP-125-FL, TL-132-FL, and CS-213-FL. These water sample locations have been illustrated on Figures 1 and 2, Attachment 1.

Analytical Testing

Water samples collected by R&W on May 22, 2016 were placed in clean 1,000-ml sample containers (supplied by the lab), labeled, cooled, and stored for transportation. The samples were handled and transported to Prein & Newhof Environmental Laboratory, Inc. (Prein & Newhof Laboratory; Grand Rapids, Michigan) under chain-of-custody records using U.S. EPA and Michigan Department of Environmental Quality (MDEQ) recommended methods. The water samples were tested for several heavy metals (copper, iron, and lead). A copy of the laboratory report has been included in Attachment 2. The Prein & Newhof Laboratory has MDEQ Drinking Water Certification for testing water samples.

Evaluation of Testing Results

All of the lead results were reported as below the method detection limit (MDL) of <0.003 mg/L. These reported results are also below the MCL of 0.015 mg/L.

Trace copper levels were reported in most water samples collected. The reported copper concentrations ranged from <0.010 mg/l to 0.435 mg/L; however, all reported concentrations are well below the MCL of 1.300 mg/L.

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Trace iron levels were reported in all water samples collected. The reported iron concentrations ranged from 0.020 mg/L to 0.087 mg/L. The Secondary MCL for iron has been established at 0.300 mg/L for taste and color. All reported sample results were below the Secondary MCL for iron.

Conclusions

Based on the water sampling and chemical analyses conducted, none of the tests conducted identified any contaminants that exceeded the MCLs or Secondary MCLs allowed by the U. S. EPA for residential drinking water consumption.

If you have any questions regarding the information or data presented in this letter, please feel free to contact our staff.

Sincerely,

ROSE & WESTRA, INC.

William J. Bosze, P.E.

wjb/jac

Attachments:

Attachment 1: Figure 1 – First Floor Plan – Sample Locations – May 22, 2016

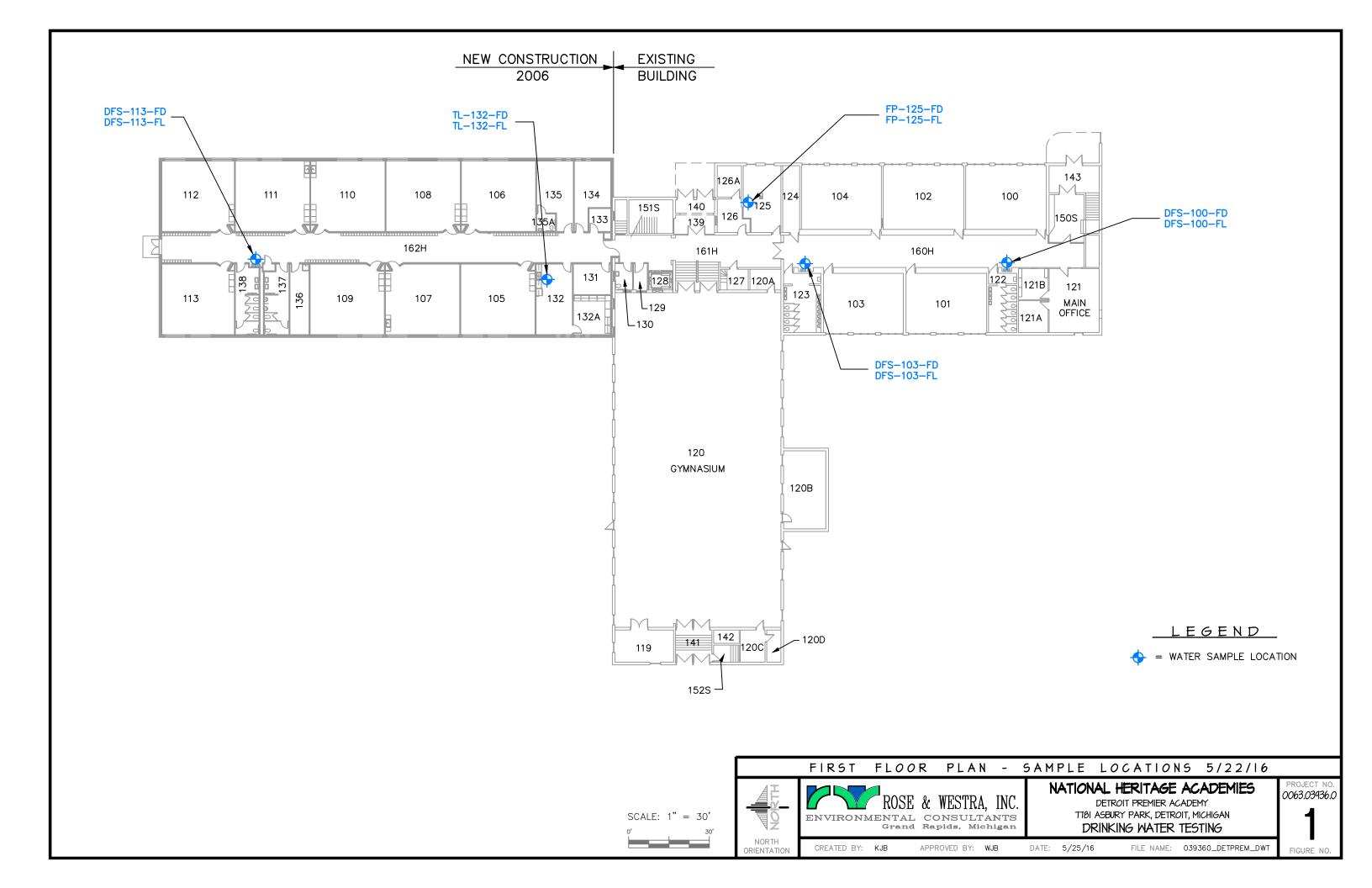
Figure 2 – Second Floor Plan – Sample Locations – May 22, 2016

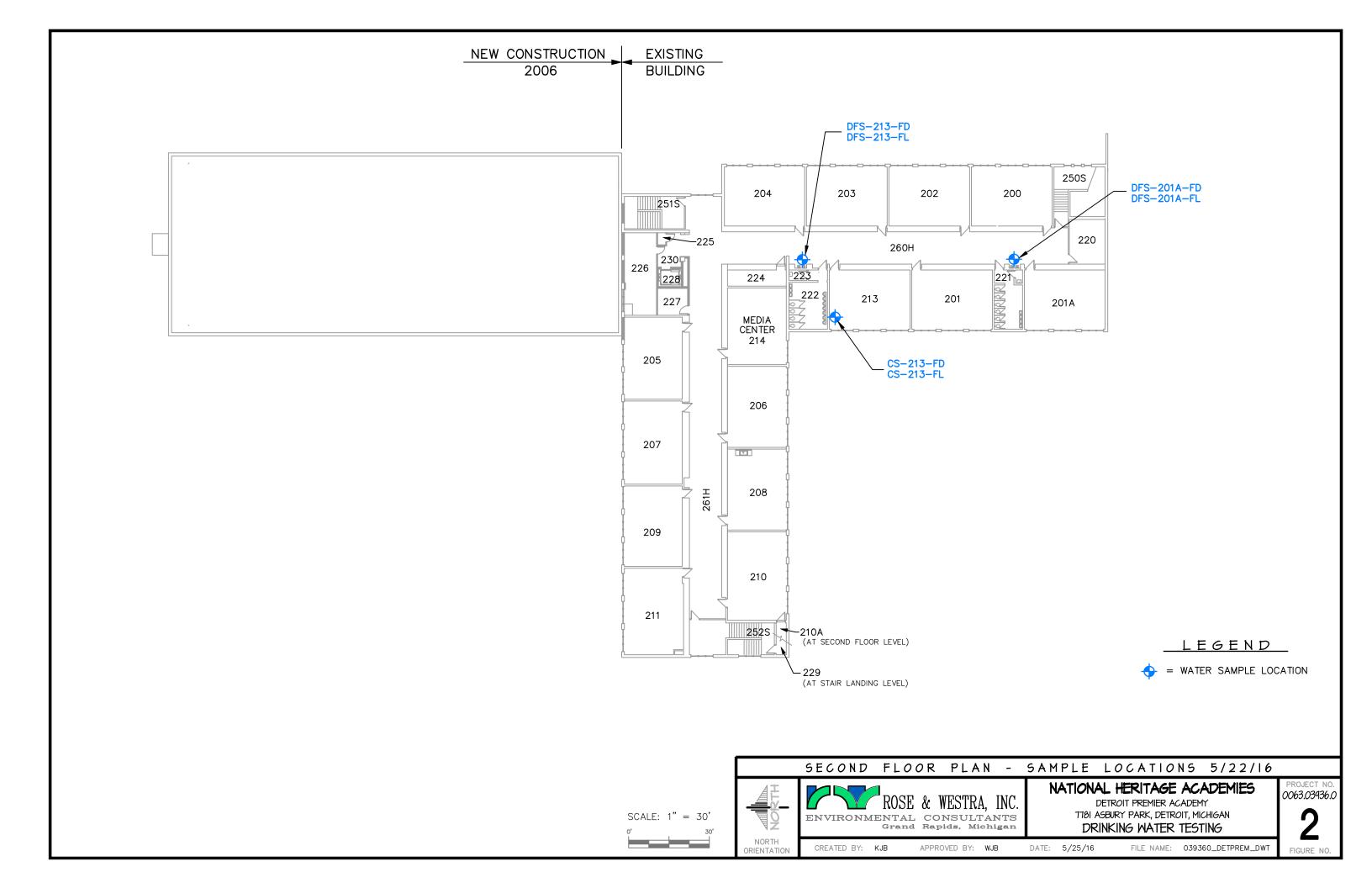
Attachment 2: Prein & Newhof Laboratory Report

Sent via Email Only

ATTACHMENT 1

FIGURES 1 AND 2 DRINKING WATER SAMPLE LOCATIONS – MAY 22, 2016





ATTACHMENT 2 PREIN & NEWHOF LABORATORY REPORT



Date: 25-May-16

Customer Name: Rose & Westra, Inc.

4328 3 Mile Rd NW Grand Rapids, MI 49544 Contact Name: Rose & Westra, Inc. 4328 3 Mile Rd NW Grand Rapids, MI 49544

Project: 0063.03936.0 **Project No: 2160001**

Matrix: DRINKING WATER **Lab Order:** 1605688

Sampled By: W. Bosze

Collection Date: 5/22/2016 **Lab ID:** 1605688-001A

Client Sample ID: DFS-100-FD **Received Date:** 5/23/2016 9:45 am

			Date				
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.066	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.035	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Lab ID: 1605688-002A **Collection Date:** 5/22/2016 10:29:00 Client Sample ID: DFS-100-FL

Received Date: 5/23/2016 9:45 am

		RPT			Date			
Analyses	Result	Units_	Limit	M.C.L.	Analyst	Analyzed	Method #	
Copper	0.013	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7	
Iron	0.074	mg/L	0.006		SB	5/24/2016	EPA 200.7	
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B	

Lab ID: 1605688-003A **Collection Date:** 5/22/2016 10:32:00 Client Sample ID: DFS-103-FD

Received Date: 5/23/2016 9:45 am

			RPT			Date			
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #		
Copper	0.055	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7		
Iron	0.041	mg/L	0.006		SB	5/24/2016	EPA 200.7		
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B		

Lab ID: 1605688-004A **Collection Date:** 5/22/2016 10:37:00 Client Sample ID: DFS-103-FL **Received Date:** 5/23/2016 9:45 am

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	< 0.010	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.047	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Collection Date: 5/22/2016 10:39:00 **Lab ID:** 1605688-005A Client Sample ID: FP-125-FD **Received Date:** 5/23/2016 9:45 am

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.280	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.052	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Project: 0063.03936.0 **Project No:** 2160001

Lab Order: 1605688 Matrix: DRINKING WATER

Sampled By: W. Bosze

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.018	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.023	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

 Lab ID:
 1605688-007A

 Client Sample ID:
 TL-132-FD

 Collection Date:
 5/22/2016
 10:41 am

 Received Date:
 5/23/2016
 9:45 am

			RPT		Date			
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #	
Copper	0.200	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7	
Iron	0.033	mg/L	0.006		SB	5/24/2016	EPA 200.7	
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B	

 Lab ID:
 1605688-008A

 Client Sample ID:
 TL-132-FL

 Client Sample ID:
 TL-132-FL

 Collection Date:
 5/22/2016
 10:41 am

 Received Date:
 5/23/2016
 9:45 am

		RPT			Date			
Analyses	Result	Units_	Limit	M.C.L.	Analyst	Analyzed	Method #	
Copper	0.021	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7	
Iron	0.020	mg/L	0.006		SB	5/24/2016	EPA 200.7	
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B	

 Lab ID:
 1605688-009A
 Collection Date:
 5/22/2016
 10:48 am

 Client Sample ID:
 DFS-113-FD
 Received Date:
 5/23/2016
 9:45 am

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.053	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.024	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

 Lab ID:
 1605688-010A
 Collection Date:
 5/22/2016
 10:53 am

 Client Sample ID:
 DFS-113-FL
 Received Date:
 5/23/2016
 9:45 am

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.042	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.022	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

 Lab ID: 1605688-011A
 Collection Date: 5/22/2016 10:58 am

 Client Sample ID: DFS-213-FD
 Received Date: 5/23/2016 9:45 am

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.024	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.031	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Prein&Newhof

Project: 0063.03936.0 **Project No:** 2160001

Lab Order: 1605688 Matrix: DRINKING WATER

Sampled By: W. Bosze

			RPT			Date			
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #		
Copper	0.011	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7		
Iron	0.039	mg/L	0.006		SB	5/24/2016	EPA 200.7		
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B		

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.435	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.042	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

 Lab ID:
 1605688-014A

 Client Sample ID:
 CS-213-FL

 Client Sample ID:
 CS-213-FL

 Collection Date:
 5/22/2016
 11:05 am

 Received Date:
 5/23/2016
 9:45 am

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.095	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.042	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

 Lab ID:
 1605688-015A
 Collection Date:
 5/22/2016
 11:08 am

 Client Sample ID:
 DFS-201A-FD
 Received Date:
 5/23/2016
 9:45 am

			RPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.056	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.031	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

 Lab ID:
 1605688-016A
 Collection Date:
 5/22/2016
 11:13 am

 Client Sample ID:
 DFS-201A-FL
 Received Date:
 5/23/2016
 9:45 am

			KPT			Date	
Analyses	Result	Units	Limit	M.C.L.	Analyst	Analyzed	Method #
Copper	0.012	mg/L	0.010	1.3	SB	5/24/2016	EPA 200.7
Iron	0.087	mg/L	0.006		SB	5/24/2016	EPA 200.7
Lead	< 0.003	mg/L	0.003	0.015	SB	5/24/2016	SM3113B

Prein&Newhof

Prein&Newhof

Engineers # Surveyors # Environmental # Laboratory

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Groundwater W
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Sludge L
Oil O
Other V

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