



**Semi-Annual Monitoring Report  
Second Half 2013**

**New Housing New York Legacy Project (Via Verde)  
700-730 Brook Avenue, Bronx, NY  
BCP Site ID: C203043**

**March 2014**

**Prepared for:**

**NYSDEC, Region 2  
Division of Environmental Remediation  
47-40 21st Street  
Long Island City, NY 1101**

**On Behalf of**

**Via Verde Homes, LLC  
Via Verde Rental Associates, L.P.  
902 Broadway, 13th Floor  
New York, New York 10010**

**Prepared by:**

**CA RICH CONSULTANTS, INC.  
17 Dupont Street  
Plainview, NY 11803-1614**



March 19, 2014

**NYSDEC, Region 2**

Division of Environmental Remediation  
47-40 21st Street  
Long Island City, NY 1101

Attn: Jane O'Connell

Re: **Semi-Annual Monitoring Report**  
**December 2013 Groundwater Sampling**  
Via Verde  
700-730 Brook Avenue, Bronx, NY  
BCP Site ID: C203043

Dear Ms. O'Connell:

CA RICH Consultants, Inc. is pleased to present the Semi-Annual Monitoring Report for the Second Half 2013 in connection with the above-captioned Site. This Report is being submitted on behalf of Via Verde Homes, LLC and Via Verde Rental Associates, L.P. (the BCP Volunteer) and was prepared in accordance with the NYSDEC-approved Site Management Plan (SMP) dated December, 2011 (revised May 23, 2013).

If there are any questions regarding this document, please do not hesitate to call our office.

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard J. Izzo".

Richard J. Izzo, CPG  
Senior Associate

cc: Chris Doroski, NYSDOH (email only)  
Dale White (email only)  
Michael Wadman (email only)

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## **1.0 INTRODUCTION**

The following Semi-Annual Monitoring Report has been prepared by CA RICH Consultants, Inc. (CA RICH) on behalf of Via Verde Homes, LLC and Via Verde Rental Associates, L.P. This document is required as an element of the Site Management Plan (SMP) (Ref. 1) at The New Housing New York Legacy Project (hereinafter referred to as Via Verde or the Site), 700-730 Brook Avenue, Bronx, NY (BCP Site ID: C203043. The Site is being managed under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index #W2-1129-08-11, Site #C203043, which was executed on February 23, 2009. The Certificate of Completion was received on December 23, 2011.

## **2.0 SITE DESCRIPTION AND BACKGROUND**

Via Verde Homes, LLC, Via Verde Rental Associates, L.P., and the City of New York Department of Housing Preservation and Development ("HPD") entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in February 2009 to investigate and remediate a 1.41-acre property located in the Bronx, New York. The property was remediated to restricted residential, use, and will be used for mixed commercial and residential purposes. It is noted that the Deed was transferred on December 30, 2009 and HPD no longer has any ownership interest.

The Site is located in the County of the Bronx, New York and is identified as Section 9, Block 2359; Lot 51, which includes Condominium Lots 1001, 1002, 1003, and 1004, and was formerly part of Lots 1 and 3 on the Bronx County Tax Map. The Site is an approximately 1.41-acre area bounded by East 156th Street to the north, an athletic field to the south, New York City Housing Authority Bronxchester Houses and South Bronx High School to the east, and Brook Avenue to the west (see Figure 1). The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the Environmental Easement. A copy of the Environmental Easement is included in the Final Engineering Report (Ref. 2).

Under the BCP, the Site was remediated to Track 4 Site Specific Soil Action Levels (“SSSALs”) established for the Site as listed in the FER. Low levels of polyaromatic hydrocarbons and metals remain in the soil in limited areas throughout the Site. Based upon the detection and distribution of groundwater contaminants, in-situ chemical oxidation was performed in the area of the former service station (northwest corner of the Site). On April 1st through 9th, 2010 Regenox™ and ORC® Advanced (ISCO treatment) was injected into the shallow groundwater and soil/fill in the smear zone.

The results from post-remedial groundwater monitoring indicate that fuel related volatile organic compounds (VOCs) and some metals remain within the groundwater above NYSDEC Technical and Administrative Guidance (TOGS) standards (Ref. 3).

As remaining contaminated soil and groundwater exist beneath the Site, implementation of Institutional Controls (ICs) and Engineering Controls (ECs) were required at the Site to be managed through implementation of the Site management Plan (SMP). Exposure to soil vapor (potential off-gassing from residual Volatile Organic Compounds (VOCs) in the groundwater) is being prevented by the composite cover system, which is comprised of concrete-covered sidewalks, courtyard areas, foundation walls, concrete building slabs as well as a 2-foot clean fill buffer on all non-capped areas. A vapor barrier and active Sub-Slab Depressurization (SSD) system were installed underneath each of the five building foundations as additional protection.

### **3.0 MEDIA MONITORING PROGRAM**

#### **3.1 Groundwater**

Four post-remedial groundwater monitoring wells designated MW-6, MW-7, MW-8, & MW-9 were installed, developed and surveyed at the Site in July 2011 and will serve as the groundwater monitoring wells for the post-remedial groundwater monitoring. The locations of the four wells and direction of groundwater flow are illustrated on Figure 2.

CA RICH conducted semi-annual groundwater sampling on December 12, 2013. The four monitoring wells were purged and sampled in accordance with EPA’s Low-Flow (minimal drawdown) Groundwater Sampling Procedures. Copies of the requisite field forms and Chain-of-

Custody are attached as Appendix A. Quality Assurance/Quality Control (QA/QC) samples were also collected and analyzed in connection with the testing as set forth in the SMP and included one trip blank, one field blank per day of field work, one duplicate, one matrix spike, and one matrix spike duplicate. In addition, the data was validated by a qualified third-party and a DUSR was prepared (Appendix B).

Groundwater samples were collected from the wells, submitted to ELAP and CLP-certified Accutest Laboratories in Dayton, NJ and analyzed for Volatile Organic Compounds (VOCs) via EPA Method 8260 and dissolved TAL metals with NYSDEC ASP Category B deliverables. All post-remedial groundwater sampling results have been provided to NYSDEC in the appropriate Electronic Data Deliverable format.

All on-site sampling equipment was decontaminated between each use in the following manner: laboratory grade detergent and fresh water wash using a scrub brush, followed by two fresh water rinses and final air dry. The submersible pump used for groundwater sample collection was decontaminated between sample collection by passing the detergent and water mixture through the pump, followed by two fresh water rinses. Gloves worn for sample handling were discarded between sample collections. Dedicated, new polyethylene tubing was used at each well location for purging and sampling. The 40-mil sample vials were filled completely and checked to ensure that no air bubbles were present.

### **3.1.1 Summary of Results**

The results of the sampling program are presented on Tables 1 and 2. In addition to the tabular presentation, a graph plotting the concentration of key constituents versus time is included as Figure 3.

As illustrated on Table 1, fuel-related VOCs in excess of NYSDEC TOGS continue to be detected in on-site well MW-8. The most elevated fuel-related compound concentration is 27.0 ug/L of n-propylbenzene. Chloroform, was detected in well MW-6 at a concentration in excess of TOGS standards during this most recent sampling event. No VOCs were detected in MW-7 or MW-9 in excess of TOGS Standards.

As shown on Figure 3, comparison of concentrations for naphthalene, n-propylbenzene, 1,2,4-trimethylbenzene, and total xylenes in MW-8 between the 4th quarter 2011 sampling event and the semi-annual 2013 sampling event indicates a continued general reduction in concentration for these selected compounds.

Analysis for metals (Table 2) detected chromium, iron, magnesium, manganese, nickel, and sodium at levels in excess of TOGS Standards.

Analysis for Semi-volatile organic compounds and PCBs is no longer required by the NYSDEC for the onsite wells.

#### **4.0 CONCLUSIONS AND RECOMMENDATIONS**

Based upon our review of the analytical results from the most recent (December 2013) sampling event and comparison of the results to those generated during the previous events, it appears that the detected levels of fuel-related VOCs generally continue to decline below initial concentrations. The levels of targeted metals continue to fluctuate above and below TOGS Standards.

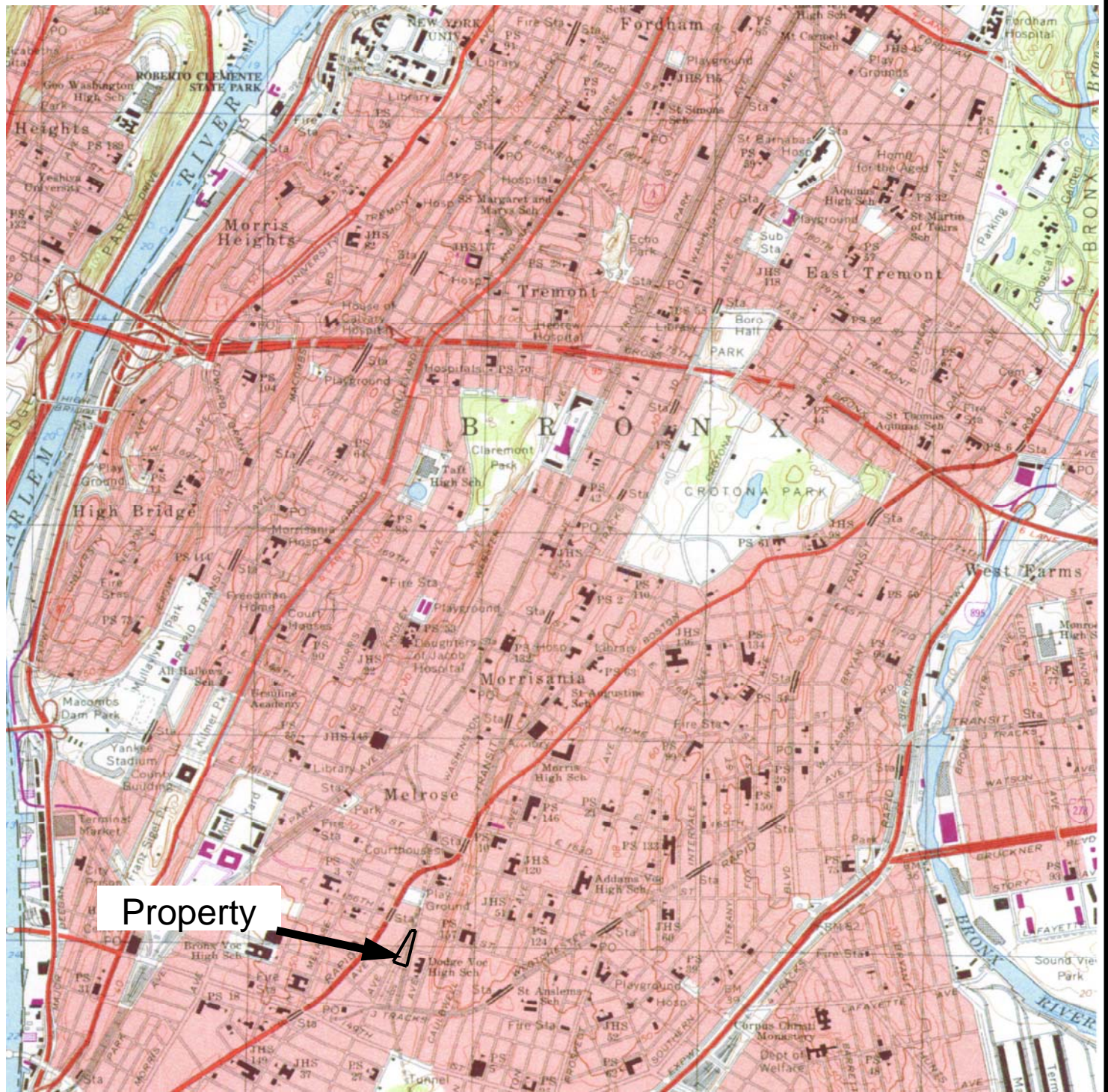
Based upon the results of the first year of post remedial monitoring, CA RICH submitted a formal petition to modify the sampling program on April 2, 2013. The petition was approved by the Department via their letter dated May 9, 2013 and includes reduction of sampling frequency from quarterly to semi-annually and reduction of the parameter list to include only VOCs and dissolved TAL metals. The modifications to the sampling program began during this current sampling event and will continue during future sampling rounds.

## **REFERENCES**

1. Stephen J. Osmundsen, P.E. Site Management Plan. New York: Author, December 7, 2011.
2. Stephen J. Osmundsen, P.E. Final Engineering Report. New York: Author, December 21, 2011.
3. New York State Department of Environmental Conservation; Division of Water Technical and Operation Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations; June 1998.



## FIGURES



Property

APPROX. SCALE (ft.)



0 1,200 2,400



N

Adapted from USGS 1995 Central Park Quadrangle Map.

## CA RICH CONSULTANTS, INC.

Certified Ground Water and Environmental Specialists  
17 Dupont Street, Plainview, NY 11803

TITLE:

**SITE LOCATION MAP ON  
TOPOGRAPHIC QUAD**

DATE:

**04/8/09**

SCALE:

**AS SHOWN**

FIGURE: **1A**

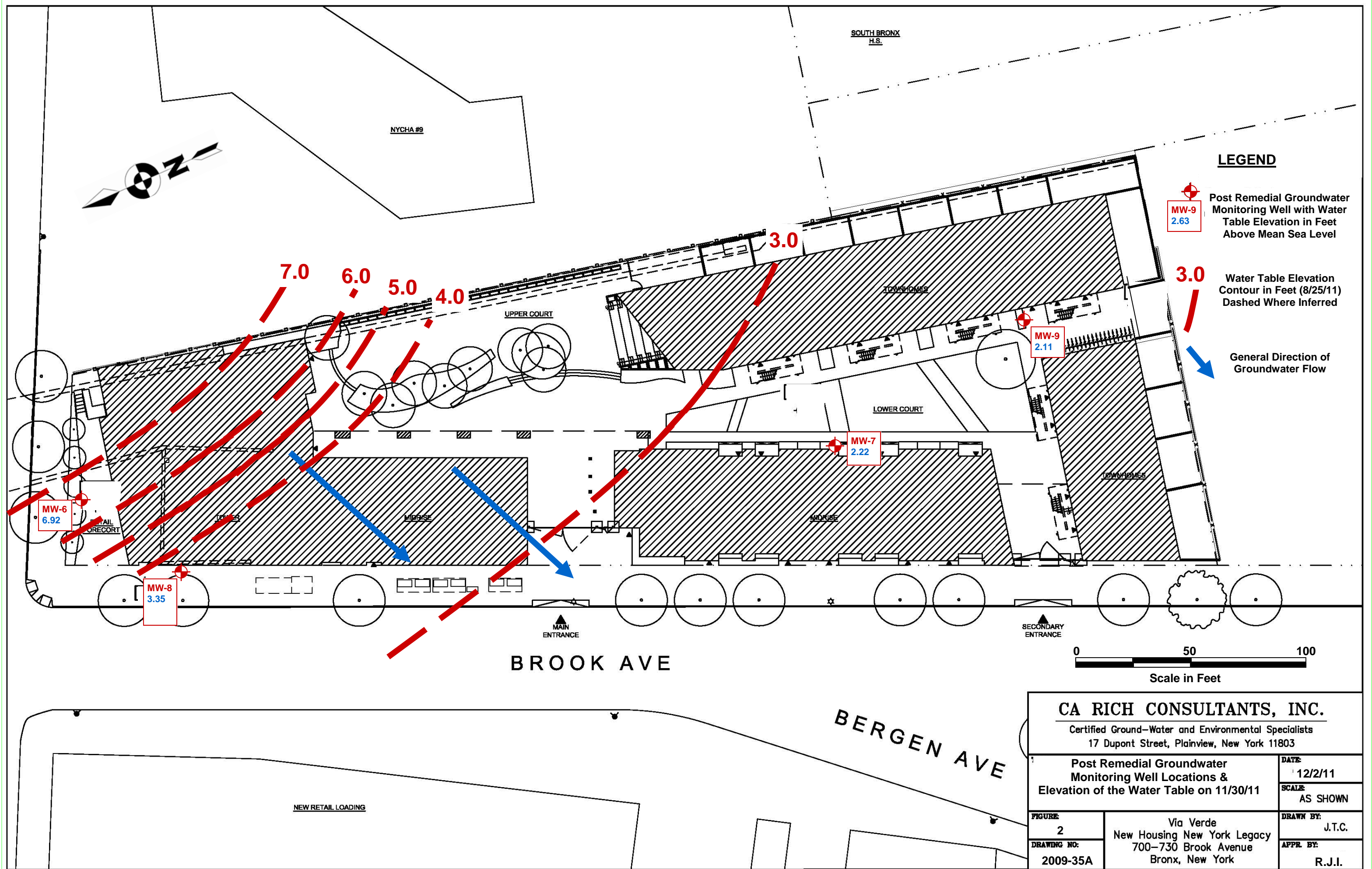
**Via Verde aka  
New Housing New York Legacy  
700-730 Brook Avenue  
Bronx, New York**

DRAWING:

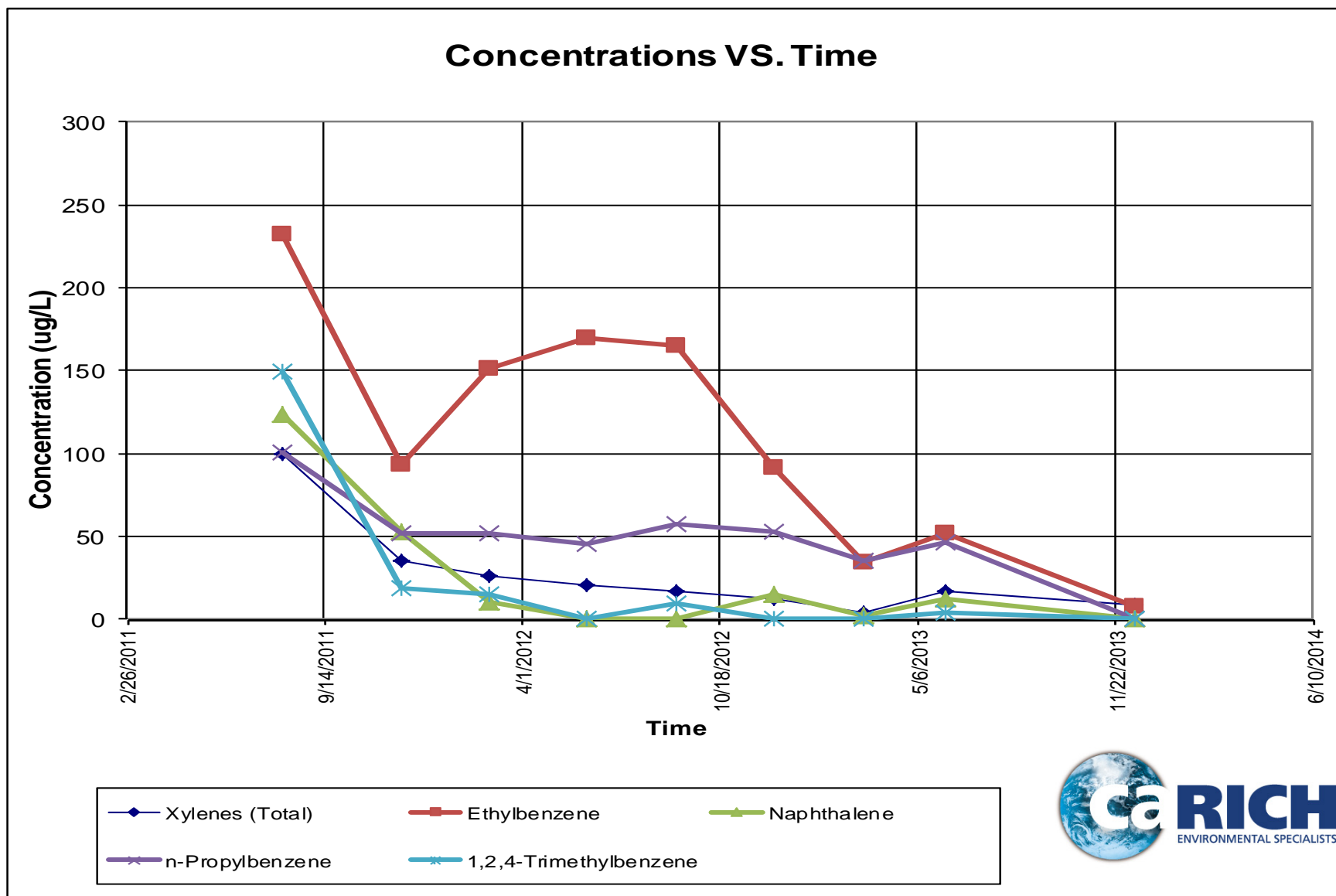
**D.S.**

**ADD RV:  
RJI**





**FIGURE 3**  
**Concentrations Trends of Selected Compounds in Groundwater Monitoring Well MW-8**  
**Via Verde**  
**700-730 Brook Avenue, Bronx, NY**



## **TABLES**

<p align="center"><b>Table 1</b></p> <p align="center"><b>Validated Analytical Results for Volatile Organic Compounds In Groundwater</b></p> <p align="center">Via Verde aka New Housing New York Legacy Project</p> <p align="center">700-730 Brook Avenue, Bronx, New York</p> <p align="center">BCP # C203043</p>								
Sample ID Matrix Date Sampled	MW-6 groundwater 12/12/2013	MW-7 groundwater 12/12/2013	MW-8 groundwater 12/12/2013	MW-9 groundwater 12/12/2013	MW-XX** groundwater 12/12/2013	Field Blank liquid 12/12/2013	Trip Blank liquid 12/12/2013	NYSDEC TOGs*
<b>Volatile Organic Compounds</b>								
<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acetone	ND	ND	ND	ND	ND	ND	ND	50
Benzene	ND	ND	<b>21.9</b>	ND	<b>20.7</b>	ND	ND	1
Bromobenzene	ND	ND	ND	ND	ND	ND	ND	5
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	2.3	ND	ND	ND	ND	ND	ND	50
Bromoform	ND	ND	ND	ND	ND	ND	ND	50
Bromomethane	ND	ND	ND	ND	ND	ND	ND	5
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	50
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	5
sec-Butylbenzene	ND	ND	3.8 J	ND	3.7 J	ND	ND	5
tert-Butylbenzene	ND	ND	0.83 J	ND	0.85 J	ND	ND	5
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	5
Chloroethane	ND	ND	ND	ND	ND	ND	ND	5
Chloroform	<b>21.9</b>	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	NVG
o-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	5
p-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	0.04
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	50
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	NVG
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	0.6
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	5
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	1
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	5
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	5
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	0.4
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	0.4
Ethylbenzene	ND	ND	<b>7.8</b>	ND	<b>7.5</b>	ND	ND	5
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	0.5
Isopropylbenzene	ND	ND	<b>17.2</b>	ND	<b>16.8</b>	ND	ND	5
p-Isopropyltoluene	ND	ND	0.60 J	ND	0.61 J	ND	ND	5
Methyl Tert Butyl Ether	ND	ND	ND	ND	ND	ND	ND	10
4-Methyl-2-pentanone(MIBK)	ND	ND	ND	ND	ND	ND	ND	NVG
Methylene bromide	ND	ND	ND	ND	ND	ND	ND	NVG
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	5
Naphthalene	ND	ND	<b>8.0</b>	ND	<b>7.7</b>	ND	ND	10
n-Propylbenzene	ND	ND	<b>27.0</b>	ND	<b>26.3</b>	ND	ND	5
Styrene	ND	ND	ND	ND	ND	ND	ND	5
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	4.9	ND	4.7	ND	ND	5
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	1
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	5
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	5
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	0.04
1,2,4-Trimethylbenzene	ND	ND	1.1 J	ND	1.0 J	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	1.6 J	ND	1.6 J	ND	ND	5
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	2
m,p-Xylene	ND	ND	<b>7.3</b>	ND	<b>7.1</b>	ND	ND	5
o-Xylene	ND	ND	0.80 J	ND	0.76 J	ND	ND	5
Xylene (total)	ND	ND	<b>8.1</b>	ND	<b>7.9</b>	ND	ND	5
<p><b>Notes:</b></p> <p>ug/L - micrograms per liter or parts per billion</p> <p>ND - Not detected at or above laboratory detection limits</p> <p>NVG - No Value Given</p> <p>J - Estimated Value</p> <p>*NYSDEC Technical and Operational Guidance Series (1.1.1)</p> <p>Ambient Water Quality Standards and Guidance Values</p> <p>and Groundwater Effluent Limitations; June 1998</p> <p>** MW-XX is a duplicate of MW-8</p>								
<b>Boxed and bold indicates exceedance groundwater standards or guidance values</b>						R-cannot be verified		

**Table 2**  
**Validated Analytical Results for Metals In Groundwater**  
Via Verde aka New Housing New York Legacy Project  
700-730 Brook Avenue, Bronx, New York  
BCP # C203043

Sample ID Matrix Date Sampled	MW-6 groundwater 12/12/2013	MW-7 groundwater 12/12/2013	MW-8 groundwater 12/12/2013	MW-9 groundwater 12/12/2013	MW-XX** groundwater 12/12/2013	Field Blank liquid 12/12/2013	NYSDEC TOGS*
<b>Total Metals Filtered</b>							
<b>Units</b>	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Aluminum	<200	587 J	333	457	345	<200	NVG
Antimony	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3
Arsenic	<3.0	<3.0	3.5	<3.0	3.3	<3.0	25
Barium	<200	<200	<200	<200	<200	<200	1,000
Beryllium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3
Cadmium	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	5
Calcium	14,400	128,000	141,000	116,000	142,000	<5,000	NVG
Chromium	<10	<10	<10	<b>67.6</b>	<10	<10	50
Cobalt	<50	<50	<50	<50	<50	<50	NVG
Copper	<10	<10	<10	<10	<10	<10	200
Iron	174	<b>636</b>	<b>375</b>	<b>656</b>	<b>449</b>	<100	300
Lead	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	25
Magnesium	<5,000	27,600	<b>39,200</b>	8,550	<b>39,300</b>	<5,000	35,000
Manganese	18.5	24.3	<b>3,100</b>	<b>778</b>	<b>3,070</b>	<15	300
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.7
Nickel	<10	<10	<10	<b>116</b>	<10	<10	100
Potassium	<10,000	<10,000	<10,000	14,100	<10,000	<10,000	NVG
Selenium	<10	<10	<10	<10	<10	<10	10
Silver	<10	<10	<10	<10	<10	<10	50
Sodium	13,400	<b>59,200</b>	<b>100,000</b>	<b>40,000</b>	<b>101,000</b>	<10,000	20,000
Thallium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.5
Vanadium	<50	<50	<50	<50	<50	<50	NVG
Zinc	<20	<20	<20	<20	<20	<20	2,000

**Notes:**

ug/L - micrograms per liter or parts per billion

ND - Not detected at or above laboratory detection limits

NVG - No Value Given

J - Estimated Value JJ- not detected, approx. quantitation limit

\*NYSDEC Technical and Operational Guidance Series (1.1.1)  
Ambient Water Quality Standards and Guidance Values  
and Groundwater Effluent Limitations; June 1998

\*\* MW-XX is a duplicate of MW-8

**Boxed and bold indicates exceedance of groundwater standards or guidance values**

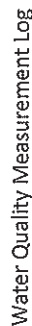
## **APPENDICES**



## **Appendix A**

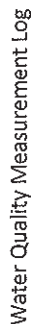
### **Field Forms and Chain of Custody**





## Water Quality Measurement Log

1. Pump dial setting (Example: hertz, cycles/minute, etc)
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (stand in for Eh)



# Water Quality Measurement Log

\* Tee did + long Length of tubing cut off well due to planter.  
NTU + Do not Real Readings

1. Pump dial setting (Example: hertz, cycles/minute, etc)
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (stand in for Eh)

## Water Quality Measurement Log

1. Pump dial setting (Example: hertz, cycles/minute, etc)
2. uSiemens per cm (same as umhos/cm) at 25°C
3. Oxidation reduction potential (stand in for Eh)

Sample MW-8 + Duplicate MW-XX



# CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3499/3480  
www.acctest.com

Client / Reporting Information				Project Information				Requested Analysis (see TEST CODE sheet)				Matrix Codes			
Company Name <b>CARICH Consultants</b>				Project Name <b>Via Verde</b>											
Street Address <b>17 Dupont St</b>				Street <b>BROOK AVE</b>				Billing Information (if different from Report to)							
City <b>PLAINVIEW NY 11803</b>				City <b>BRONX</b>				Company Name							
State <b>NY</b>				State <b>NY</b>				Street Address							
Zip <b>11803</b>				Zip <b>NY</b>				City							
Project Contact <b>Richard Riccio</b>				Project # <b>Post Rem. GWS</b>				State							
E-mail <b>richard@carich.com</b>				Client Purchase Order #				City							
Phone # <b>516 576 8844</b>				Phone # <b>516 576 0093</b>				Attention:							
Fax # <b>516 576 8844</b>				Project Manager <b>M. Vagge + T. Brown</b>											
Field ID / Point of Collection				Collection				Matrix				Number of preserved Bottles			
Accutest Sample #				MECH/ID Val #				Sampled by				HO NaOH H2SO4 HNO3 DI Water MECH ENCORE			
MW-16				12/12/13 1028				M/HB GW 4 3				X			
MW-7				12/12/13 1345				M/HB GW 4 3				X			
MW-7MS				12/12/13 1345				M/HB GW 4 3				X			
MW-7MSD				12/12/13 1345				M/HB GW 4 3				X			
MW-8				12/12/13 0905				M/HB GW 4 3				X			
MW-9				12/12/13 1835				M/HB GW 4 3				X			
MW-XX				12/12/13				M/HB GW 4 3				X			
FB 12/12/13				12/12/13				TB FB 3 2				X			
Trip Blank				12/12/13				TB 2 2				X			
Turnaround Time (Business days)				Data Deliverable Information				Data Deliverable Information				Comments / Special Instructions			
Approved By (Accutest PM): / Date:				Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C"				Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C"				NYS TOGS Detection Limits TAL Metals dissolved only - Lab to filter			
Emergency & Rush T/A data available VIA Lablink				Emergency & Rush T/A data available VIA Lablink				Emergency & Rush T/A data available VIA Lablink				Emergency & Rush T/A data available VIA Lablink			
Relinquished by Sampler:				Date Time:				Relinquished By:				Date Time:			
1/1/2014				12/13/13 13:55				Chris Ford				2			
Relinquished by Sampler:				Date Time:				Relinquished By:				Date Time:			
3				12/13/13 13:55				Chris Ford				4			
Relinquished by:				Date Time:				Relinquished By:				Date Time:			
5				12/13/13 13:55				Chris Ford				4			
On Ice				Cooler Temp.				On Ice				Cooler Temp.			

## **Appendix B**

### **DUSR**

**DATA USABILITY SUMMARY REPORT – DUSR  
DATA VALIDATION SUMMARY**

**ORGANIC/INORGANIC ANALYSES**

**TARGET COMPOUND LIST (TCL) VOLATILES BY GC/MS  
TARGET ANALYTE LIST (TAL) METALS (Dissolved) BY ICP/AA/CV**

**For Groundwater Samples Collected  
December 12, 2013  
From 700-730 Brook Avenue, Bronx, NY  
Via Verde aka New Housing New York Legacy Project  
Collected by CA Rich Consultants**

**SAMPLE DELIVERY GROUP NUMBERS:  
JB55647  
BY ACCUTEST LABORATORIES (ELAP #10983)**

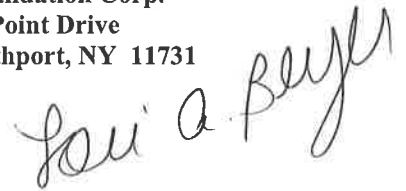
**SUBMITTED TO:**

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**March 18, 2014**

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700-730 Brook Avenue, Bronx – Via Verde; Groundwater Samples; Dec 2013 (Q4) Sampling Event  
Data Usability Summary Report (Data Validation): TCL Volatiles and TAL Metals (Dissolved).

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**Introduction:**

A validation was performed on groundwater samples and the associated quality control samples for organic/inorganic analysis for samples collected under chain of custody documentation by CA Rich Consultants and submitted to Accutest Laboratories for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. The groundwater samples were collected on December 12, 2013.

The samples were analyzed by Accutest Laboratories, utilizing SW846 Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing consisted of the Target Compound/Analyte Lists for Volatile Organics and TAL Metals (Dissolved).

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic and Inorganic Data Review (October 2006) and EPA Region II SOPs for 8260 and Metals (August 2008 with 2009 updates) and also in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following samples:

<b>Sample Identification</b>	<b>Laboratory Identification</b>	<b>Sample Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
MW-6	JB55647-1, JB55647-1F	Groundwater	12/12/13	12/13/13
MW-7 (plus MS/MSD)	JB65547-2, JB55647-2F, JB55647-2D, JB55647- 2FD, JB55647-2FS, JB55647-2S		12/12/13	12/13/13
MW-8	JB55647-3, JB55647-3F	Groundwater	12/12/13	12/13/13
MW-9	JB55647-4, JB55647-4F	Groundwater	12/12/13	12/13/13
MW-XX (Field Duplicate of MW-8)	JB55647-5, JB55647-5F	Groundwater	12/12/13	12/13/13
FB 12/12/13	JB55647-6, JB55647-6F	Aqueous	12/12/13	12/13/13
Trip Blank	JB55647-7	Aqueous	12/12/13	12/13/13

**Data Qualifier Definitions:**

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**
- J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**
- R - The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**
- N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.”**
- NJ - The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate quantity.**
- D - Indicates the analyte concentration is from diluted analysis.**

### **Sample Receipt:**

The Chain of Custody document indicates that the samples were received at Accutest Laboratories via laboratory courier on 12/13/13 upon completion of the sampling event. Sample login notes were generated. The cooler temperature for all sample receipts were recorded upon receipt at Accutest Laboratories and determined to be acceptable (<6.0 degrees C). The actual temperature is recorded on the chain of custody document (2.0 degrees C) in addition to the case narratives provided in Appendix C of this report.

No unresolved problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary tables included in Appendix A includes all usable (qualified) and unusable (rejected) results for the samples identified above. These tables summarize the detailed narrative section of the report. All data validation qualifications have been reported in the excel spreadsheet.

### **NOTE:**

L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

## **1.0 Target Analyte List (TCL) Volatile Organics by GC/MS SW846 Method 8260**

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Method Blanks, Tunes, Calibrations, Internal Standards, Target Compound Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results were considered to be valid and useable as noted within the following text:

### **1.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

**Samples pertaining to this SDG were performed within the Method required holding times as well as the technical holding times for data validation of 14 days from collection to analysis. Samples were properly preserved with HCL to pH <2. No data validation qualifiers were required based upon holding time.**

#### **1.2 System Monitoring Compound (Surrogate) Recovery**

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

**Surrogate recoveries (%R) were found to be within acceptable limits for all four (4) surrogate compounds for all analyses pertaining to this SDG for analysis.**

#### **1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

**MS/MSD analyses were conducted for each analytical sequence and were spiked with all components as required by the analytical procedure. Site-specific aqueous MS/MSD was performed by the laboratory on sample MW-7. Acceptable spike recoveries and RPD were obtained for site specific MS/MSD analysis.**

#### **1.4 Laboratory Control Sample/Blank Spikes**

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

**LCS/Blank Spikes were analyzed for each sequence. Recovery values were acceptable and no qualifications were applied.**

## 1.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Methylene Chloride, Acetone, Toluene & 2-Butanone	Sample Conc. Is >CRQL, but $\leq 10\times$ blank value	Sample Conc. is <CRQL and $\leq 10\times$ blank value	Sample Conc. is >CRQL and $> 10\times$ blank value
Other Contaminants	Sample Conc. Is >CRQL, but $\leq 5\times$ blank value	Sample Conc. Is <CRQL and $\leq 5\times$ blank value	Sample Conc. is >CRQL and $> 5\times$ blank value

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

**A) Method Blank Contamination:**

**No target analytes were detected in the method blank associated with sample analysis.**

**B) Field Blank Contamination:**

**No target analytes were detected in the field blank associated with sample analysis.**

**C) Trip Blank Contamination:**

**No target analytes were detected in the trip blank associated with sample analysis.**

## **1.6 GC/MS Instrument Performance Check**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

**Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for this SDG.**

## **1.7 Initial and Continuing Calibrations**

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence.

The continuing calibration checks document that the instrument is giving satisfactory daily performance.

### **A) Response Factor GC/MS:**

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $< 0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

**All the response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ), for the initial and continuing calibrations for all reported TCL analytes.**

**B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):**

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <30% and %D must be <25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high level results will be qualified, "J" in the portion of the curve where non linearity exists.

**Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (30%) for all compounds.**

**Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (25%) for all compounds.**

### **1.8 Internal Standards**

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.



All samples were spiked with the internal standards Chlorobenzene-d5, Fluorobenzene and 1,4-Dichlorobenzene-d4 prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with this SDG.

#### 1.9 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Generally an acceptable RPD is 10% for water samples.

Groundwater sample MW-8 was collected in duplicate, a summary of positive detections in ug/L is summarized below:

	<u>MW-8</u>	<u>MW-XX</u>
Benzene	21.9	20.7
Sec-Butylbenzene	3.8	3.7
Tert-Butylbenzene	0.83	0.85
Ethylbenzene	7.8	7.5
Isopropylbenzene	17.2	16.8
p-Isopropyltoluene	0.60	0.61
Naphthalene	8.0	7.7
n-Propylbenzene	27.0	26.3
Toluene	4.9	479
1,2,4-Trimethylbenzene	1.1	1.0
1,3,5-Trimethylbenzene	1.6	1.6
M,p-Xylene	7.3	7.1
o-Xylene	0.80	0.76
Xylene (total)	8.1	7.9

Acceptable precision was observed for all detected analytes.

#### 1.10 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$ RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

**GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.**

#### **1.11 Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis is considered to be acceptable. Correct internal standards per SW846 and response factors and dilution corrections were used to calculate final concentrations.

**As required, the laboratory reported “J” values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).**

**All groundwater samples were analyzed undiluted.**

#### **1.12 Overall System Performance**

**Good resolution and chromatographic performance were observed.**

**Tentatively Identified Compounds (TICs) were not generated and therefore not evaluated.**

### **2.0 TAL Metals (Dissolved) by ICP/Cold Vapor SW846 Methods 6010C/6020A/7470A**

The following method criteria were reviewed: holding times, CRDL standards, calibration, blanks, MS, laboratory duplicates, LCS, interference check sample, ICP serial dilutions and sample results verification. The groundwater results were considered to be valid and usable with the appropriate qualifiers as notated in the following text:

#### **2.1 Holding Times**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, “J”. The non-detects (sample quantitation limits) are required to be flagged as estimated, “J”, or unusable, “R”, if the holding times are grossly exceeded.

**All samples were filtered in the field and analyzed for Dissolved Metals within the method required holding times and the technical holding times for data validation. No qualifications were applied based upon holding time criteria.**

## **2.2 Calibration (ICV/CCV)**

Satisfactory instrument calibration is established to ensure that the instruments are capable of producing acceptable quantitative data. An initial calibration demonstrates that the instruments are capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instruments are giving satisfactory sequential performance and that the initial calibration is still valid.

**The ICP/AA and Mercury instruments were calibrated utilizing a minimum of a four-point curve in addition to blanks at the beginning of each analytical run. The calibrations had been determined to be acceptable, yielding correlation coefficients of 0.995 or greater.**

**For ICP analysis, satisfactory instrument performance near the Contract Required Detection Limit (CRDL) was demonstrated by analyzing a CRDL standard at the beginning and end of the analytical run. The instruments were calibrated properly by analyzing the CRDL solution at the correct levels, and analyzed at the required frequency at the beginning and end of each analytical run.**

**All recoveries were within acceptable limits of 90-110 % for initial calibration pertaining to field samples.**

**Continuing calibrations were within acceptable limits of 90-110% recovery of the true values for (80-120%) for all field samples.**

**No qualifications were applied based upon ICV/CCV analysis.**

## **2.3 Blanks**

Quality assurance (QA) blanks, i.e. method, field or preparation blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Preparation blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations.

All digestion/prep/ICB/CCB/Field blanks were generated within acceptable limits yielding final concentrations less than the CRDL.

No qualifications to the data were made based upon blank contamination.

## **2.4 Spiked Sample Recovery**

The spike data are generated to determine the long terms precision and accuracy of the analytical method in various matrices.

*Aqueous spike recoveries are qualified based on the criteria below:*

**<30% - "R" all detects and non-detects**

**Between 30%-74% - results  $\geq$ MDL "J" and non-detects "UJ"**

**Between 126-150% - results  $\geq$ MDL "J" and**

**>150% - results  $\geq$  MDL "R"**

**Aqueous MS/MSD was performed on MW-7 for dissolved metals.  
Analysis resulted in acceptable recovery values for all elements.  
Acceptable RPD was observed.**

## **2.5 Laboratory/Field Duplicates**

The laboratory uses duplicate sample determinations to demonstrate acceptable method precision at the time of analysis. Duplicate analyses are also performed to generate data in order to determine the long-term precision of the analytical method on various matrices.

### **Laboratory Duplicates:**

**RPD  $>20\%$  but  $<100\%$  - J detected concentrations**

**RPD  $\geq 100\%$  - R all detected and non-detected concentrations**

### **Field Duplicates:**

**RPD  $\geq 35\%$  but  $<120\%$  - qualify sample and duplicate results  $\geq$  CRQL "J"**

**RPD  $\geq 120\%$  - rejected sample and duplicate results  $\geq$  CRQL "R"**

**Aqueous Laboratory Duplicate analysis was conducted on MW-7.  
Acceptable RPD values were obtained for all elements.**

**Field Duplicate analysis was conducted on MW-8 (MW-XX).**

**A summary of detected concentrations in ppb is listed below:**

**Dissolved Metals:**

	<u>MW-8</u>	<u>MW-XX (Duplicate)</u>
<b>Aluminum</b>	<b>333</b>	<b>345</b>
<b>Arsenic</b>	<b>3.5</b>	<b>3.3</b>
<b>Calcium</b>	<b>141000</b>	<b>142000</b>
<b>Iron</b>	<b>375</b>	<b>449</b>
<b>Magnesium</b>	<b>39200</b>	<b>39300</b>
<b>Manganese</b>	<b>3100</b>	<b>3070</b>
<b>Sodium</b>	<b>100000</b>	<b>101000</b>

**No qualifications to the data were required based on field duplicate analysis.**

**2.6 Laboratory Control Sample**

The laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous and solid Laboratory Control samples shall be analyzed for each analyte utilizing the same sample preparation, analytical methods and QA/QC procedures as employed for the samples.

**The LCS was analyzed and reported for all Metals analysis. Associated LCS recoveries were within the acceptable limits for TAL Metals analyses (80-120%).**

**2.7 Interference Check Sample**

The interference check sample (ICS) verifies the laboratory's interelement and background correction factors. The ICS consists of two solutions A and AB. Solution A consists of interference, and solution AB consists of the analytes mixed with interferents.

**SW846 Method 6010 requires solution A and solution AB to be analyzed separately. The recoveries for the ICP interference check sample were all within the acceptable limits of 80-120%. No data qualifications were made based upon ICS analysis.**

## **2.8 ICP Serial Dilution**

The serial dilution of samples quantitated by ICP determines whether or not significant physical or chemical interferences exist due to sample matrix. An ICP serial dilution analysis must be performed on a sample for each group of samples with a similar matrix type and concentration, or for each Sample Delivery Group (SDG), whichever is more frequent.

Acceptable ICP and ICP-MS serial dilution was performed at a 5-fold dilution as required by the method where the initial concentration is equal or greater than 50x IDL. The serial dilution analysis agrees within a 10% difference of the original determination after correction for dilution for all elements where the sample concentration was determined to be <50x the IDL with the exception of Aluminum in MW-7. Results for this element have been qualified, "J."

## **2.9 Sample Results Verification**

Analyte quantitation was generated in accordance with protocols. The raw data was verified and found within the linear range of each instrument used for quantitation. Raw data supplied corresponds with reported values. Verification of the calculations yielded reported results.

Metals analysis resulted in acceptable results.

## **2.10 Overall Assessment of Data**

The data generated were of acceptable quality.

For the TAL analysis, results are usable at the concentration presented in the validated spreadsheets and in the Form I's provided in this report.

Reviewer's Signature

Lou A. Blye

Date

03/18/14

**Appendix A  
Data Summary Tables  
With Qualifications**





**Table 2**  
**Validated Analytical Results for Metals In Groundwater**  
**Via Verde aka New Housing New York Legacy Project**  
**700-730 Brook Avenue, Bronx, New York**  
**BCP # C203043**

Sample ID Matrix Date Sampled	MW-6 groundwater 12/12/2013	MW-7 groundwater 12/12/2013	MW-8 groundwater 12/12/2013	MW-9 groundwater 12/12/2013	MW-XX** groundwater 12/12/2013	Field Blank liquid 12/12/2013	NYSDEC TOGS*
<b>Total Metals Filtered</b> Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Aluminum	<200	587 J	333	457	345	<200	NVG
Antimony	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3
Arsenic	<3.0	<3.0	3.5	<3.0	3.3	<3.0	25
Barium	<200	<200	<200	<200	<200	<200	1,000
Beryllium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3
Cadmium	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	5
Calcium	14,400	128,000	141,000	116,000	142,000	<5,000	NVG
Chromium	<10	<10	<10	<b>67.6</b>	<10	<10	50
Cobalt	<50	<50	<50	<50	<50	<50	NVG
Copper	<10	<10	<10	<10	<10	<10	200
Iron	174	<b>636</b>	<b>375</b>	<b>656</b>	<b>449</b>	<100	300
Lead	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	25
Magnesium	<5,000	27,600	<b>39,200</b>	8,550	<b>39,300</b>	<5,000	35,000
Manganese	18.5	24.3	<b>3,100</b>	<b>778</b>	<b>3,070</b>	<15	300
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.7
Nickel	<10	<10	<10	<b>116</b>	<del>15.1</del> <10	<10	100
Potassium	<10,000	<10,000	<10,000	14,100	<10,000	<10,000	NVG
Selenium	<10	<10	<10	<10	<10	<10	10
Silver	<10	<10	<10	<10	<10	<10	50
Sodium	13,400	<b>59,200</b>	<b>100,000</b>	<b>40,000</b>	<b>101,000</b>	<10,000	20,000
Thallium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.5
Vanadium	<50	<50	<50	<50	<50	<50	NVG
Zinc	<20	<20	<20	<20	<20	<20	2,000

**Notes:**

ug/L - micrograms per liter or parts per billion

ND - Not detected at or above laboratory detection limits

NVG - No Value Given

J - Estimated Value UJ - not detected, approx. quantitation limit

\*NYSDEC Technical and Operational Guidance Series (1.1.1)  
Ambient Water Quality Standards and Guidance Values  
and Groundwater Effluent Limitations; June 1998

\*\* MW-XX is a duplicate of MW-8

**Boxed and bold indicates exceedance of groundwater standards or guidance values**

*for 3/13/17*

Accutest LabLink@782235 11:16 06-Mar-2014

## Report of Analysis

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Client Sample ID: MW-6	Date Sampled: 12/12/13
Lab Sample ID: JB55647-1	Date Received: 12/13/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260C	
Project: Via Verde, 700-730 Brook Avenue, Bronx, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D128084.D	1	12/17/13	CM	n/a	n/a	V2D5342
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	2.3	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	21.9	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 2 of 2

Client Sample ID:	MW-6	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-1	Date Received:	12/13/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.33	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		79-117%
17060-07-0	1,2-Dichloroethane-D4	90%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	91%		75-118%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

Client Sample ID:	MW-6	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-1F	Date Received:	12/13/13
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Antimony	< 1.0	1.0	ug/l	2	12/21/13	01/05/14	RP	SW846 6020A <sup>3</sup>
Arsenic	< 3.0	3.0	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Barium	< 200	200	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Beryllium	< 1.0	1.0	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Cadmium	< 3.0	3.0	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Calcium	14400	5000	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Chromium	< 10	10	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Cobalt	< 50	50	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Copper	< 10	10	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Iron	174	100	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Lead	< 3.0	3.0	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Magnesium	< 5000	5000	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Manganese	18.5	15	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Mercury	< 0.20	0.20	ug/l	1	12/20/13	12/20/13	JW	SW846 7470A <sup>1</sup>
Nickel	< 10	10	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Potassium	< 10000	10000	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Selenium	< 10	10	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Silver	< 10	10	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Sodium	13400	10000	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Thallium	< 1.0	1.0	ug/l	2	12/21/13	01/05/14	RP	SW846 6020A <sup>3</sup>
Vanadium	< 50	50	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>
Zinc	< 20	20	ug/l	1	12/21/13	12/28/13	ND	SW846 6010C <sup>2</sup>

- (1) Instrument QC Batch: MA32907  
 (2) Instrument QC Batch: MA32958  
 (3) Instrument QC Batch: MA33006  
 (4) Prep QC Batch: MP76825  
 (5) Prep QC Batch: MP76846  
 (6) Prep QC Batch: MP76846A

RL = Reporting Limit

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## Report of Analysis

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Client Sample ID:	MW-7	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-2	Date Received:	12/13/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D128081.D	1	12/17/13	CM	n/a	n/a	V2D5342
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 2 of 2

Client Sample ID:	MW-7	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-2	Date Received:	12/13/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.33	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		79-117%
17060-07-0	1,2-Dichloroethane-D4	91%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	90%		75-118%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

Client Sample ID:	MW-7	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-2F	Date Received:	12/13/13
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	587 <span style="color:red">J</span>	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Antimony	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Arsenic	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Barium	< 200	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Beryllium	< 1.0	1.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cadmium	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Calcium	128000	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Chromium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cobalt	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Copper	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Iron	636	100	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Lead	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Magnesium	27600	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Manganese	24.3	15	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Mercury	< 0.20	0.20	ug/l	1	12/20/13	12/20/13 JW	SW846 7470A <sup>1</sup>	SW846 7470A <sup>4</sup>
Nickel	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Potassium	< 10000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Selenium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Silver	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Sodium	59200	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Thallium	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Vanadium	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Zinc	< 20	20	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>

- (1) Instrument QC Batch: MA32907  
 (2) Instrument QC Batch: MA32958  
 (3) Instrument QC Batch: MA33006  
 (4) Prep QC Batch: MP76825  
 (5) Prep QC Batch: MP76846  
 (6) Prep QC Batch: MP76846A

JOP 3/13/14

RL = Reporting Limit

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## Report of Analysis

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Client Sample ID: MW-8		Date Sampled: 12/12/13	
Lab Sample ID: JB55647-3		Date Received: 12/13/13	
Matrix: AQ - Ground Water		Percent Solids: n/a	
Method: SW846 8260C			
Project: Via Verde, 700-730 Brook Avenue, Bronx, NY			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D128085.D	1	12/17/13	CM	n/a	n/a	V2D5342
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	21.9	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	3.8	5.0	0.48	ug/l	J
98-06-6	tert-Butylbenzene	0.83	5.0	0.25	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

Page 2 of 2

Client Sample ID:	MW-8	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-3	Date Received:	12/13/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	7.8	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
98-82-8	Isopropylbenzene	17.2	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.60	5.0	0.42	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.33	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	8.0	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	27.0	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	4.9	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.1	2.0	0.23	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	1.6	2.0	0.43	ug/l	J
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	7.3	1.0	0.40	ug/l	
95-47-6	o-Xylene	0.80	1.0	0.19	ug/l	J
1330-20-7	Xylene (total)	8.1	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		79-117%
17060-07-0	1,2-Dichloroethane-D4	91%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	93%		75-118%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

Client Sample ID: MW-8  
 Lab Sample ID: JB55647-3F  
 Matrix: AQ - Groundwater Filtered

Date Sampled: 12/12/13  
 Date Received: 12/13/13  
 Percent Solids: n/a

Project: Via Verde, 700-730 Brook Avenue, Bronx, NY

## Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	333	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Antimony	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Arsenic	3.5	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Barium	< 200	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Beryllium	< 1.0	1.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cadmium	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Calcium	141000	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Chromium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cobalt	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Copper	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Iron	375	100	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Lead	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Magnesium	39200	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Manganese	3100	15	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Mercury	< 0.20	0.20	ug/l	1	12/20/13	12/20/13 JW	SW846 7470A <sup>1</sup>	SW846 7470A <sup>4</sup>
Nickel	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Potassium	< 10000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Selenium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Silver	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Sodium	100000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Thallium	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Vanadium	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Zinc	< 20	20	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>

- (1) Instrument QC Batch: MA32907  
 (2) Instrument QC Batch: MA32958  
 (3) Instrument QC Batch: MA33006  
 (4) Prep QC Batch: MP76825  
 (5) Prep QC Batch: MP76846  
 (6) Prep QC Batch: MP76846A

RL = Reporting Limit

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## Report of Analysis

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Client Sample ID: MW-9  
 Lab Sample ID: JB55647-4  
 Matrix: AQ - Ground Water  
 Method: SW846 8260C  
 Project: Via Verde, 700-730 Brook Avenue, Bronx, NY

Date Sampled: 12/12/13  
 Date Received: 12/13/13  
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D128086.D	1	12/17/13	CM	n/a	n/a	V2D5342
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 2 of 2

Client Sample ID:	MW-9	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-4	Date Received:	12/13/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.33	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		79-117%
17060-07-0	1,2-Dichloroethane-D4	91%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	91%		75-118%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

Client Sample ID:	MW-9	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-4F	Date Received:	12/13/13
Matrix:	AQ - Groundwater Filtered	Percent Solids:	n/a
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	457	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Antimony	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Arsenic	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Barium	< 200	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Beryllium	< 1.0	1.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cadmium	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Calcium	116000	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Chromium	67.6	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cobalt	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Copper	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Iron	656	100	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Lead	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Magnesium	8550	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Manganese	778	15	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Mercury	< 0.20	0.20	ug/l	1	12/20/13	12/20/13 JW	SW846 7470A <sup>1</sup>	SW846 7470A <sup>4</sup>
Nickel	116	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Potassium	14100	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Selenium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Silver	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Sodium	40000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Thallium	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Vanadium	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Zinc	< 20	20	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>

(1) Instrument QC Batch: MA32907

(2) Instrument QC Batch: MA32958

(3) Instrument QC Batch: MA33006

(4) Prep QC Batch: MP76825

(5) Prep QC Batch: MP76846

(6) Prep QC Batch: MP76846A

RL = Reporting Limit

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## Report of Analysis

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Client Sample ID: MW-XX (MW-8)  
 Lab Sample ID: JB55647-5  
 Matrix: AQ - Ground Water  
 Method: SW846 8260C  
 Project: Via Verde, 700-730 Brook Avenue, Bronx, NY

Date Sampled: 12/12/13  
 Date Received: 12/13/13  
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D128087.D	1	12/17/13	CM	n/a	n/a	V2D5342
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	20.7	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	3.7	5.0	0.48	ug/l	J
98-06-6	tert-Butylbenzene	0.85	5.0	0.25	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 2 of 2

Client Sample ID:	MW-XX (MW-8)	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-5	Date Received:	12/13/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	7.5	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
98-82-8	Isopropylbenzene	16.8	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.61	5.0	0.42	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.33	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	7.7	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	26.3	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	4.7	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0	2.0	0.23	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	1.6	2.0	0.43	ug/l	J
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	7.1	1.0	0.40	ug/l	
95-47-6	o-Xylene	0.76	1.0	0.19	ug/l	J
1330-20-7	Xylene (total)	7.9	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		79-117%
17060-07-0	1,2-Dichloroethane-D4	92%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	93%		75-118%

ND = Not detected MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

Client Sample ID: MW-XX (MW-8)	Date Sampled: 12/12/13
Lab Sample ID: JB55647-5F	Date Received: 12/13/13
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: Via Verde, 700-730 Brook Avenue, Bronx, NY	

## Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	345	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Antimony	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Arsenic	3.3	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Barium	< 200	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Beryllium	< 1.0	1.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cadmium	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Calcium	142000	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Chromium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cobalt	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Copper	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Iron	449	100	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Lead	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Magnesium	39300	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Manganese	3070	15	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Mercury	< 0.20	0.20	ug/l	1	12/20/13	12/20/13 JW	SW846 7470A <sup>1</sup>	SW846 7470A <sup>4</sup>
Nickel	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Potassium	< 10000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Selenium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Silver	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Sodium	101000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Thallium	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Vanadium	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Zinc	< 20	20	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>

- (1) Instrument QC Batch: MA32907
- (2) Instrument QC Batch: MA32958
- (3) Instrument QC Batch: MA33006
- (4) Prep QC Batch: MP76825
- (5) Prep QC Batch: MP76846
- (6) Prep QC Batch: MP76846A

RL = Reporting Limit



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## Report of Analysis

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Client Sample ID:	FB 12/12/13	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-6	Date Received:	12/13/13
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D128083.D	1	12/17/13	CM	n/a	n/a	V2D5342
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 2 of 2

Client Sample ID:	FB 12/12/13	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-6	Date Received:	12/13/13
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.33	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		79-117%
17060-07-0	1,2-Dichloroethane-D4	91%		72-123%
2037-26-5	Toluene-D8	98%		82-118%
460-00-4	4-Bromofluorobenzene	90%		75-118%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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Client Sample ID:	FB 12/12/13	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-6F	Date Received:	12/13/13
Matrix:	AQ - Field Blank Filtered	Percent Solids:	n/a
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Antimony	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Arsenic	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Barium	< 200	200	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Beryllium	< 1.0	1.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cadmium	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Calcium	< 5000	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Chromium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Cobalt	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Copper	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Iron	< 100	100	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Lead	< 3.0	3.0	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Magnesium	< 5000	5000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Manganese	< 15	15	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Mercury	< 0.20	0.20	ug/l	1	12/20/13	12/20/13 JW	SW846 7470A <sup>1</sup>	SW846 7470A <sup>4</sup>
Nickel	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Potassium	< 10000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Selenium	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Silver	< 10	10	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Sodium	< 10000	10000	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Thallium	< 1.0	1.0	ug/l	2	12/21/13	01/05/14 RP	SW846 6020A <sup>3</sup>	SW846 3010A <sup>6</sup>
Vanadium	< 50	50	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>
Zinc	< 20	20	ug/l	1	12/21/13	12/28/13 ND	SW846 6010C <sup>2</sup>	SW846 3010A <sup>5</sup>

(1) Instrument QC Batch: MA32907

(2) Instrument QC Batch: MA32958

(3) Instrument QC Batch: MA33006

(4) Prep QC Batch: MP76825

(5) Prep QC Batch: MP76846

(6) Prep QC Batch: MP76846A

RL = Reporting Limit

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## Report of Analysis

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Client Sample ID: TRIP BLANK

Lab Sample ID: JB55647-7

Matrix: AQ - Trip Blank Water

Method: SW846 8260C

Project: Via Verde, 700-730 Brook Avenue, Bronx, NY

Date Sampled: 12/12/13

Date Received: 12/13/13

Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D128082.D	1	12/17/13	CM	n/a	n/a	V2D5342
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	1.0	0.28	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.21	ug/l	
75-25-2	Bromoform	ND	4.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.56	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	3.2	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.39	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.48	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.35	ug/l	
75-00-3	Chloroethane	ND	1.0	0.39	ug/l	
67-66-3	Chloroform	ND	1.0	0.25	ug/l	
74-87-3	Chloromethane	ND	1.0	0.36	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.17	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.19	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.16	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.31	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.30	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.63	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.22	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.34	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.38	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.28	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.23	ug/l	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 2 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	12/12/13
Lab Sample ID:	JB55647-7	Date Received:	12/13/13
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260C		
Project:	Via Verde, 700-730 Brook Avenue, Bronx, NY		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	5.0	0.21	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.17	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.42	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.42	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.29	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.33	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.86	ug/l	
91-20-3	Naphthalene	ND	5.0	0.25	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.32	ug/l	
100-42-5	Styrene	ND	5.0	0.30	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.21	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.22	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.33	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.67	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.23	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	1.0	0.40	ug/l	
95-47-6	o-Xylene	ND	1.0	0.19	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.19	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		79-117%
17060-07-0	1,2-Dichloroethane-D4	91%		72-123%
2037-26-5	Toluene-D8	97%		82-118%
460-00-4	4-Bromofluorobenzene	90%		75-118%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Appendix B  
Chain of Custody  
Documents**

2235 Route 130, Dayton, NJ 08510  
TEL: 732-329-0200 FAX: 732-329-3499/7480  
www.accutest.com

<b>Client / Reporting Information</b> Company Name: <u>CRick Consultants</u> Street Address: <u>17 DuPont St</u> City: <u>PLAINVIEW NY 11803</u> Project Contact: <u>Rich Izzo rizzo@carichinc.com</u> Phone #: <u>516 576 8844</u> Fax #: <u>516 576 0093</u> Sample(s) Name(s): <u>MAYAGER + T. BROWN</u>		<b>Project Information</b> Project Name: <u>VIA Verde</u> Street: <u>BROOK AVE</u> City: <u>BRONX</u> Project #: <u>Post Rem. GWS</u> Client Purchase Order #: <u></u> Project Manager: <u></u> Attention: <u></u>		<b>Requested Analysis (see TEST CODE sheet)</b> <u>VOC 8260</u> <u>TAL METALS dissolved</u>		<b>Matrix Codes</b> DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WIP - Wipe FR - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank									
<b>Accutest Sample #</b> <u>18</u>	<b>Field ID / Point of Collection</b> <u>MW-6</u> <u>MW-7</u> <u>MW-7MS</u> <u>MW-7MSD</u> <u>MW-8</u> <u>MW-9</u> <u>MW-XX</u> <u>FB 12/12/13</u> <u>TRIP BLANK</u>	<b>MECH/DI/Vol #</b> <u></u>	<b>Date</b> <u>12/12/13</u>	<b>Time</b> <u>1028</u>	<b>Sampled by</b> <u>MH/BGW</u>	<b>Matrix</b> <u>GW</u>	<b># of bottles</b> <u>4</u>	<b>Number of preserved bottles</b> <u>3</u>	<b>NAOH</b> <u>1</u>	<b>HNO3</b> <u>1</u>	<b>H2SO4</b> <u>1</u>	<b>DI Water</b> <u>1</u>	<b>MEQ</b> <u>1</u>	<b>ENCORE</b> <u>1</u>	<b>Comments / Special Instructions</b> <u>NYS TOGS Detection Limits</u> <u>TAL Metals dissolved only -</u> <u>Lab to filter</u>
<b>Turnaround Time (Business days)</b> <input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> other		<b>Approved By (Accutest PM) / Date:</b> <u></u>		<b>Data Deliverable Information</b> <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NYASP Category A <input checked="" type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other		<b>Emergency &amp; Rush TIA data available via Lablink</b>									
<b>Sampled by:</b> <u>Chris Laid</u> Date Time: <u>12/13/13 13:55</u>		<b>Received By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Requisitioned By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Requisitioned By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>									
<b>Requisitioned by:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Received By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Requisitioned By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Requisitioned By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>									
<b>Requisitioned by:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Received By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Requisitioned By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>		<b>Requisitioned By:</b> <u>Chris Laid</u> Date Time: <u>12/13/13</u>									

5.1 5



# Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB55647 Client: Project:

Date / Time Received: 12/13/2013 Delivery Method: Airbill #'s:

Cooler Temps (Initial/Adjusted): #1: (2/2): 0

**Cooler Security**      Y or N      Y or N

1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Cooler Temperature**      Y or N

1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	11	

**Quality Control Preservation**      Y or N      N/A

1. Trip Blank present / cooler:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. VOCs headspace free:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Sample Integrity - Documentation**      Y or N

1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Sample Integrity - Condition**      Y or N

1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

**Sample Integrity - Instructions**      Y or N      N/A

1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Accutest Laboratories  
V: 732.329.0200

2235 US Highway 130  
F: 732.329.3499

Dayton, New Jersey  
www.accutest.com

JB55647: Chain of Custody  
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**Appendix C  
Case Narratives**

**CASE NARRATIVE / CONFORMANCE SUMMARY****Client:** C. A. Rich Consultants**Job No** JB55647**Site:** Via Verde, 700-730 Brook Avenue, Bronx, NY**Report Date** 1/7/2014 11:22:00 AM

On 12/13/2013, 5 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB55647 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

**Volatiles by GCMS By Method SW846 8260C****Matrix:** AQ**Batch ID:** V2D5342

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB55647-2MS, JB55647-2MSD were used as the QC samples indicated.

**Metals By Method SW846 6010C****Matrix:** AQ**Batch ID:** MP76846

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB55647-2FMS, JB55647-2FMSD, JB55647-2FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Chromium, Nickel, Selenium, Silver, Vanadium, Zinc are outside control limits for sample MP76846-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP76846-SD1 for Aluminum: Serial dilution indicates possible matrix interference.

**Metals By Method SW846 6020A****Matrix:** AQ**Batch ID:** MP76846A

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB55647-2FMS, JB55647-2FMSD, JB55647-2FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Antimony, Thallium are outside control limits for sample MP76846A-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

**Metals By Method SW846 7470A****Matrix:** AQ**Batch ID:** MP76825

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB55647-2FMS, JB55647-2FMSD were used as the QC samples for metals.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover