SUPPLEMENTAL GROUNDWATER INVESTIGATION WORK PLAN

TEITELBAUM DRY CLEANING INC.
35-45 35TH STREET
Queens, NY 11106
NYSDEC BCP No. C241149

Prepared for
S & C Properties, LLC
2 Bay Club Drive, Apt. 10G
Bayside, NY 11360

Prepared by

61 Broadway
Suite 1601
New York, NY 10006

FINAL
September 2015

Affiliated with Integral Consulting Inc.

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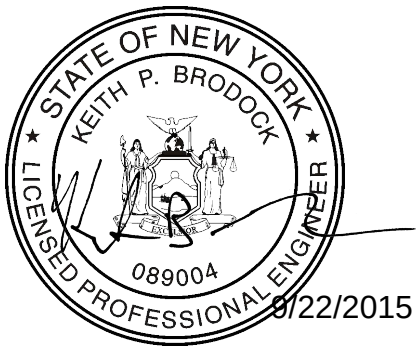
CERTIFICATION

I Keith P. Brodock, P.E. certify that I am currently a NYS registered professional engineer (#089004) as defined in 6 NYCRR Part 375 and that this Supplemental Groundwater Investigation Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

Date signed and sealed:



Keith P. Brodock, P.E.
NY License #089004

1 INTRODUCTION

In accordance with the requirements set forth by the New York State Department of Environmental Conservation (NYSDEC) in the Brownfield Cleanup Program, which S & C Properties, LLC (S & C) entered as a Participant on December 18, 2013, Integral Engineering, P.C. (Integral) has prepared this Supplemental Groundwater Investigation Work Plan (Work Plan) for the property located at 35-45 35th Street (Site or, the Teitelbaum site) (Block 639, Lot 4).

This Work Plan has been prepared at the request of the NYSDEC to assess whether the Site is currently contributing or historically has contributed to documented downgradient impacts to groundwater.

1.1 SITE BACKGROUND

The Site is located in a mixed use area of Astoria in the Borough of Queens. The Site is comprised of an approximately 9,950 square foot parcel (0.23 acres) located near the southwest corner of the block and is bound to the northwest by 35th Street, to the south by 36th Avenue, to the east by 36th Street, and to the northeast by 35th Avenue. The Site is identified on the New York City tax map as Block 639, Lot 4. Adjacent properties include mixed use commercial and residential buildings to the northwest, industrial and manufacturing to the south and northeast, and commercial and office buildings to the east. The Site is currently improved with one high-ceilinged commercial/manufacturing building (measuring approximately 100' x 100'). The ground floor of the building is currently utilized as an industrial dry cleaner not open to the public. A Site location map is provided as Figure 1.

Sanborn maps show that the property was first occupied by a commercial wagon and automobile garage as early as 1936. Building operations at this time included the use of a cleaning pit and automobile painting. In 1947 a machine shop and iron works business occupied the Site. Dry cleaning operations are first noted on Sanborn maps in 1970 and continue to be in operation to date. Additional records searches on the NYC Department of Buildings (DOB) Buildings Information System (BIS) provided Certificates of Occupancy from 1965 stating the Site was occupied by a commercial business that included cleaning, drying, pressing and storage. Interviews with the current Site owner indicate that a drycleaner has occupied the Site since at least 1952.

1.2 GEOLOGY AND HYDROGEOLOGY

The Site is mapped on the *Central Park, NY-NJ and Brooklyn* Quadrant 7.5 Minute Topographic Map, published by the United States Geological Survey (USGS). It entails approximately 0.23 acres (9,950 square feet) of relatively level land and is located approximately 37 feet above sea

level (NAVD 88). The Site is situated within the Atlantic Coastal Plain region of the Long Island Coastal Lowlands characterized by glacial till and outwash sands of the Pleistocene Epoch.

The regional stratigraphy of Long Island from surface to bedrock includes: glacial and alluvial deposits of Quaternary age; the Raritan Formation of Upper Cretaceous age consisting of clay, silty clay, sand, and gravel; The Monmouth Group, Matawan Group and Magothy Formation of Upper Cretaceous age consisting of silty clay, glauconitic sandy clay, sand, and gravel; Fordham Gneiss of Precambrian to Middle Proterozoic age consisting of garnet-biotite-quartz-plagioclase gneiss, and amphibolite; Inwood Marble of Early Cambrian to Lower Ordovician age consisting of dolomite marble, calc-schist, granulite, and quartzite, overlain by calcite marble; and Harrison/Ravenswood Gneiss of Ordovician age consisting of biotite-hornblende-quartz- plagioclase gneiss with accessory garnet and sphene (USGS, 2014).

The shallow subsurface at the Site was investigated during the Remedial Investigation (RI) conducted in September 2014. Historic fill is present across the Site from approximately 0-2 feet below site grade (ft-bsg) followed by a mixture of fine to medium-grained sand with some silt. A clay layer was observed at various (inconsistent) intervals and was generally present in the shallow subsurface 2-4 ft-bsg within the southern portion of the Site and found in deeper intervals 18-22' ft-bsg within the northern portion of the Site. Southern bedrock was not encountered during the performance of the RI.

Groundwater was encountered at approximately 20 ft-bsg. According to information provided by NYSDEC on downgradient properties, the groundwater flow direction is south/southwest towards Newtown Creek (approximately 1.0 miles to the south). Site specific groundwater flow direction will be determined as part of this investigation.

No wetlands or surface water bodies are present at the Site.

1.3 SURROUNDING PROPERTY INFORMATION

Land Uses for the Long Island City and Astoria sections of Queens have historically been industrial and manufacturing. Adjacent properties include mixed use commercial and residential buildings to the northwest, industrial and manufacturing to the south and northeast, and commercial and office buildings to the east. The surrounding properties are depicted in Figure 2. Based on a review of the New York City Mayor's Office of Environmental Remediation's (OER's) Searchable Property Environmental E-Database (SPEED), no hospitals or day care facilities are present within 500 feet of the Site. One school, the Baccalaureate School for Global Education, is present 160 feet (0.3 miles) southwest of the Site.

1.4 REGULATORY INTERACTION

On October 14, 2014, S & C Properties, LLC applied to the Brownfield Cleanup Program as a Volunteer and was accepted by the NYSDEC as a Participant (Site No. C241149) on December

18, 2013. A Remedial Investigation (RI) was performed by Integral at the Site in September 2014, groundwater results from this investigation are summarized in Section 1.5 of this Work Plan.

Prior to the RI, data was reviewed from investigations performed by TRC Engineers, Inc. (TRC) approximately 160 feet south of the Site at 34-12 36th Avenue, the former Luft Co. Inc. Cosmetics Manufacturer (site No. 241139) and current home to the Baccalaureate School for Global Education. Data collected as part of these investigations in 2012 indicated that elevated concentrations of chlorinated solvents are present in the soil vapor and groundwater downgradient and adjacent to the Site.

The results of the 2012 investigations were summarized in a New York State Department of Environmental Conservation (NYSDEC) letter to S & C dated May 20, 2013, at which point the Site was designated as a potential inactive hazardous waste disposal site. A comprehensive summary of TRC's findings and former investigations are provided in the Remedial Investigation Work Plan (RIWP) approved by the Department in May 2014.

On March 25, 2015, Integral received an email from NYSDEC stating that they had held an internal review of tetrachloroethene (PCE) contamination present in groundwater in locations at and downgradient of the Teitelbaum site. In this email, NYSDEC stated that their review indicated that the Teitelbaum site may be the source of the aforementioned PCE contamination. NYSDEC requested a meeting to discuss the formulation of a supplementary groundwater investigation in order to address the potential offsite migration of chlorinated solvent contamination. Prior to the meeting, NYSDEC provided Integral with ten documents describing offsite downgradient groundwater conditions for Integral's review. These documents are listed below.

- Boring/Sampling Logs, Silver Star Mercedes, 37-14 36th Street Queens, NY GZA GeoEnvironmental, Inc., 2012
- Remedial Action Work Plan, Silver Star Mercedes, 37-14 36th Street Queens, NY GZA GeoEnvironmental, Inc., 2012
- Remedial Investigation Report, Silver Star Mercedes, 37-14 36th Street Queens, NY GZA GeoEnvironmental, Inc., 2012
- Supplemental Site Investigation Report, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York, TRC Engineers, Inc. 2012
- Supplemental Site Investigation Addendum, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York, TRC Engineers, Inc. 2012
- Boring/Sampling Logs, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York, TRC Engineers, Inc. 2012

- Monitoring Well Construction Logs, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York, TRC Engineers, Inc. 2012
- Supplemental Site Investigation Addendum Scope of Work, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York, TRC Engineers, Inc. 2012
- Supplemental Site Investigation Work Plan, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York, TRC Engineers, Inc. 2012
- PCE Concentration in Groundwater Map for the Site and Downgradient Areas, NYSDEC, 2015

On April 24, 2015, Integral and NYSDEC had a conference call to discuss the next steps necessary to properly evaluate if the Teitelbaum site is a historical or current contributor to the downgradient chlorinated solvent plume. This Work Plan describes the scope of work and methodology for evaluating chlorinated solvent impacts to groundwater on and downgradient of the Teitelbaum site.

1.5 SAMPLING OBJECTIVES

Data from the onsite RI indicates that concentrations of PCE were present in the groundwater exceeding NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) Ambient Water Quality Standards (AWQSs) in all four samples collected. PCE breakdown products, trichloroethene (TCE) and cis-1,2-Dichlorothene (DCE) were present in two of the four samples at concentration exceeding their respective AWQS.

The purpose of this Supplemental Groundwater Investigation is to evaluate if onsite groundwater contamination is impacting downgradient properties, to delineate the area from which the Site is contributing (if necessary), and to differentiate the Site plume (if present) from other contributing sources. In order to evaluate the oxidation/reduction potential of the saturated zone and the degradation pathway of PCE, groundwater samples will be analyzed for water quality and natural attenuation parameters, as well as TCL VOCs.

A detailed description of sampling methodology is summarized in Section 2.1 and 2.1.1 of this Work Plan. Supplemental sampling locations are depicted on Figure 3.

2 SCOPE OF WORK

This section presents the approach and methods for performing the chlorinated solvent plume investigation. The bases for proposed investigative methodologies and laboratory analyses are derived from the NYSDEC Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10, 2010).

The Investigation will begin after NYSDEC of approval of this Work Plan. The Investigation will include the collection of groundwater from eight existing wells; five TRC wells installed in 2012 and three Integral wells installed in 2014. Groundwater sampling will be completed in accordance with the standard procedures included in the Field Sampling Plan (FSP) included as Appendix B of the RIWP and described below in Section 2.1.1. Quality assurance/quality control (QA/QC) procedures will be followed in accordance with the Quality Assurance Project Plan (QAPP) included as Appendix C of the RIWP. All field work will be conducted in accordance with the Site-Specific Health and Safety Plan (Appendix E of the RIWP). The HASP has been prepared to provide specific guidelines and establish procedures to protect Integral personnel during the investigation activities planned at the Site and adjacent properties.

Following the collection of this data, review and evaluation will be performed in order to determine if additional investigation is needed.

2.1 GROUNDWATER SAMPLING

The following scope of work is proposed to further characterize the groundwater at the Site:

- Sample eight existing groundwater monitoring wells
    - (3) 2-inch wells installed onsite and within the adjacent sidewalk by Integral in 2014
    - (5) 1-inch wells installed offsite and within the adjacent sidewalk in 2012
- Analyze four groundwater samples for:
    - Field water quality parameters[1]
    - Natural attenuation parameters:
        - Redox couples:
            - Nitrate/nitrite (Method 353.2)
            - Sulfate/sulfide (Methods 300.0/376)
            - Ferrous/ferric iron (Methods 3500/6010C)
        - Total organic carbon (TOC); (Method 415.1)

[1] pH, temperature, electrical conductivity (EC), dissolved oxygen (DO), oxidation reduction potential (ORP)

        - Ethene, ethane, and methane (Method RSK-175)
        - Alkalinity (Method 310.1)
        - Chloride (Method 300.0)
    - TCL VOCs (Method 8260C)

- Analyze four groundwater samples for:
    - Field quality parameters (see footnote 1)
    - TCL VOCs (Method 8260C)
- Survey all wells sampled
- Purge all wells in accordance with DER-10 requirements prior to sample collection. All purging and sampling will be performed in accordance with proper program protocols.
- Collect one round of depth-to-groundwater measurements from all wells sampled

2.1.1 Methodology

Following purging, one (1) representative groundwater sample will be collected from each well, using dedicated polyethylene tubing attached to a peristaltic pump capable of low flow control. During purging, water quality indicators (pH, temperature, specific conductivity, and turbidity) will be monitored using a flow through cell while purging. Purging is considered complete when field parameters have stabilized (e.g., turbidity reading of 5 NTU, see Appendix C for Integral well purging logs). Groundwater samples will be collected according to EPA's Low Flow Purging and Sampling Procedures for the Collection of Groundwater Samples from Monitoring Wells (Low Flow Procedures, January 2010).

The groundwater samples will be pumped directly into laboratory-supplied sample bottles. Samples will be collected, cooled, properly packaged to prevent breakage, and submitted to a NYSDOH ELAP-certified laboratory via courier service under standard chain-of-custody protocol. Laboratory analytical parameters and methods are outlined above, in Section 2.1. QA/QC procedures to be followed are described in the QAPP, included as Appendix C to the RIWP.

2.2 DATA ANALYSIS AND REPORTING

Analysis of the data collected during the supplemental groundwater investigation will include:

- Groundwater data evaluation
    - Summary tables with new and previous data
    - Plan view figure of VOC concentrations onsite and offsite (PCE, TCE, DCE, and others if detected)

  - Updated hydrogeologic cross section along primary groundwater flowpath (including onsite and offsite groundwater data) showing lithology, well locations, screen intervals, and VOC concentrations (PCE, TCE, and DCE, and others if detected)

- Potentiometric surface map (onsite and offsite data)
- Molar ratio evaluation using PCE, TCE, and DCE data (potential source identification)
- Compilation of groundwater fate and transport parameters

The results of the supplemental groundwater investigation will be documented in a Supplemental Groundwater Investigation Report. The report will include an assessment of the findings and recommendations/conclusions. If warranted, recommendations for additional actions will be included.

A Data Usability Summary Report (DUSR) will be provided in accordance with the BCP and DER-10.

All data will be submitted electronically to NYSDEC via the Environmental Information Management System (EIMS) in EQuIS format.

3 SCHEDULE

Task	**Task Duration**	**Total Duration**
NYSDEC/NYSDOH Approval of Work Plan	0	0
Mobilization	2 Weeks	2 Weeks
Implement Work Plan	1 Week	3 Weeks
Laboratory Analysis	1 Week	4 Weeks
Draft Report Submittal	4 Weeks	8 Weeks

4 KEY PROJECT CONTACT LIST

Name	Title	Phone Number	Email
Shaun Bollers	NYSDEC Project Manager	718-482-4096	shaun.bollers@dec.ny.gov
Christopher Doroski	NYSDOH Project Manager	518-402-7860	christopher.doroski@health.ny.gov
Alana Carroll	Integral Project Manager	212-440-6706	acarroll@integral-corp.com
Andrea Pampillonio	Participant (S & C Properties, LLC)	917-543-8513	apapap13@yahoo.com

5 REFERENCES

NY GZA GeoEnvironmental, Inc., Boring/Sampling Logs, Silver Star Mercedes, 37-14 36th Street Queens. 2012

NY GZA GeoEnvironmental, Inc., Remedial Action Work Plan, Silver Star Mercedes, 37-14 36th Street Queens, NY. 2012

NY GZA GeoEnvironmental, Inc., Remedial Investigation Report, Silver Star Mercedes, 37-14 36th Street Queens, NY. 2012

New York State Department of Environmental Conservation, Division of Environmental Remediation. PCE Concentration in Groundwater Map for the Site and Downgradient Areas. 2015

New York State Department of Environmental Conservation, Division of Environmental Remediation. DER Technical Guidance for Site Investigation and Remediation (DER-10). 2010

New York State Department of Environmental Conservation. 6 NYCRR Part 375 Environmental Remediation Programs. Division of Environmental Remediation, December, 2006

New York State Department of Environmental Conservation, Division of Water. Technical and Operational Guidance Series (TOGS) (1.1.1) Ambient Water Quality Standards (AWQSs)

TRC Engineers, Inc., Supplemental Site Investigation Report, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York. 2012

TRC Engineers, Inc., Supplemental Site Investigation Addendum, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York. 2012

TRC Engineers, Inc., Boring/Sampling Logs, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York. 2012

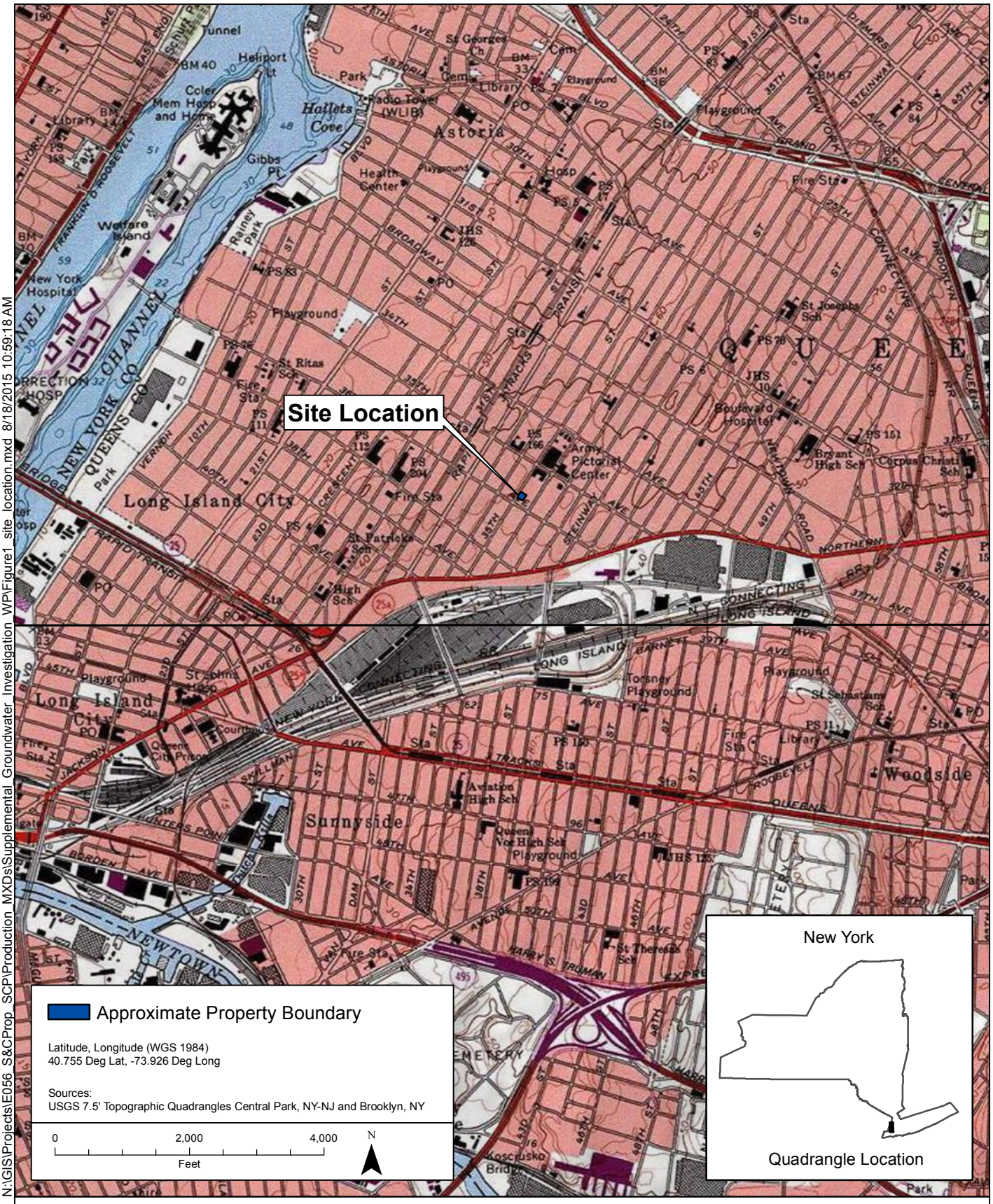
TRC Engineers, Inc., Monitoring Well Construction Logs, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York. 2012

TRC Engineers, Inc., Supplemental Site Investigation Addendum Scope of Work, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York. 2012

TRC Engineers, Inc., Supplemental Site Investigation Work Plan, Baccalaureate School for Global Education, 34-12 36th Avenue, Long Island City, New York. 2012

United States Geological Survey (USGS). *Central Park, NY-NJ and Brooklyn* Quadrant 7.5 Minute Topographic Map. 2014

FIGURES



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integral engineering p.c.
61 Broadway, Suite 1601
New York, New York 10006
www.integral-corp.com

Figure 1.
Site Location Map
Supplemental Groundwater Investigation Work Plan
Teitelbaum Dry Cleaning, Inc.
35-45 35th Street
Astoria, New York

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35th Ave

33rd St

34th St

35th St

36th St

37th St

38th St

Block 638

Block 639

7

42

41

43

4

46

1

36th Ave

37th Ave

Site Boundary
One and Two Family Residence
Multi-Family Residence
Mixed Residential and Commercial
Commercial
Industrial/Manufacturing
Transportation/Utility
Public Facilities and Institutions
Open Space and Recreation
Parking
Vacant Land
School
43 Tax Lot Number

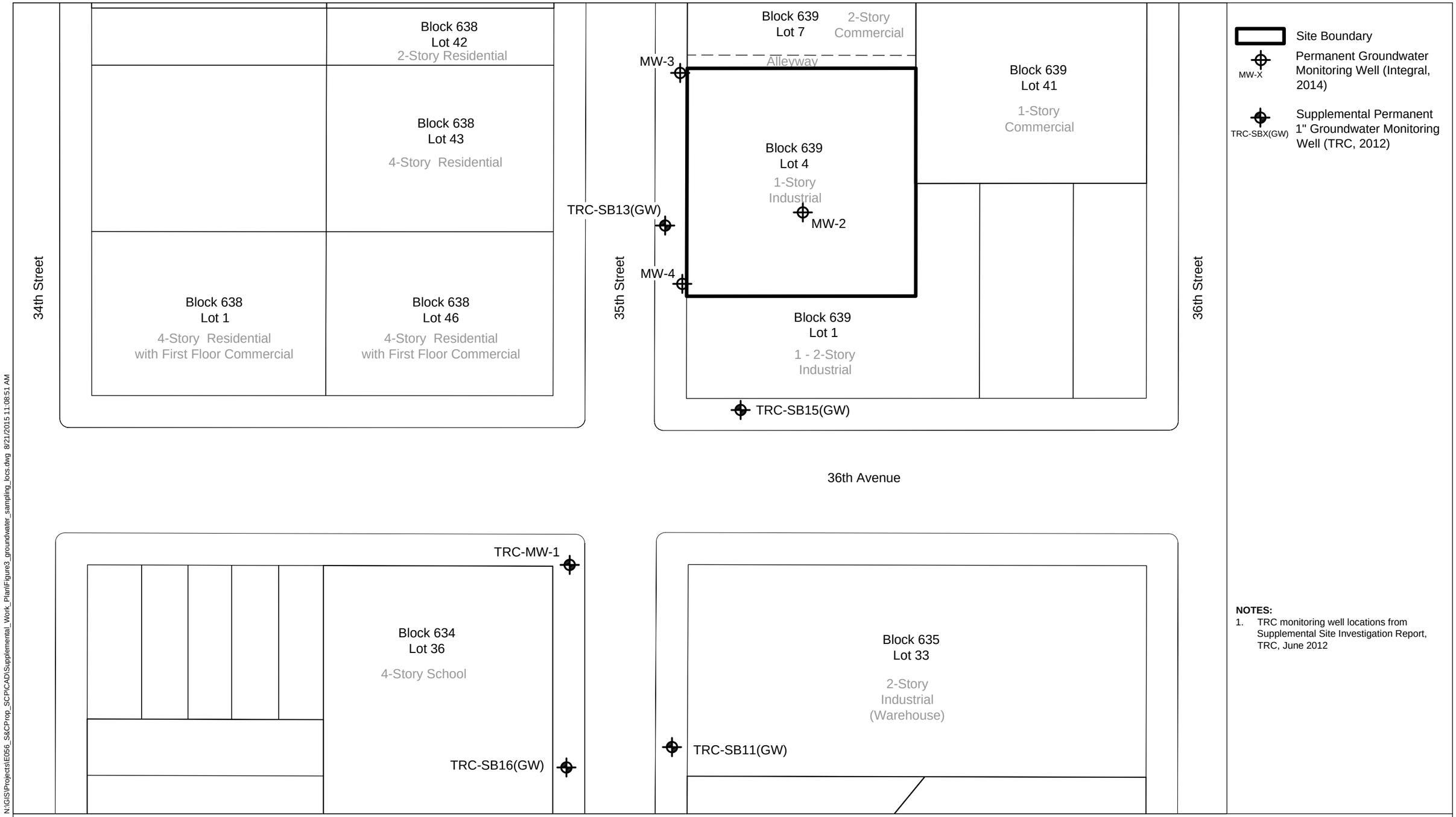
Sources:
Manhattan Tax Parcels: NYC Department of City Planning, 2013
Aerial: ESRI Mapping Services, Microsoft, 2012

0 200 400
Feet

N

integral engineering p.c.
61 Broadway, Suite 1601
New York, New York 10006
www.integral-corp.com

Figure 2.
Surrounding Properties
Supplemental Groundwater Investigation Work Plan
Teitelbaum Dry Cleaning, Inc.
35-45 35th Street
Astoria, New York



NOTES:

1. TRC monitoring well locations from Supplemental Site Investigation Report, TRC, June 2012

integral engineering pc.
61 BROADWAY, SUITE 1601
NEW YORK, NEW YORK 10006
www.integral-corp.com

0 20 40
Feet

N

Figure 3.
Proposed Groundwater Sampling Locations
Supplemental Groundwater Investigation Work Plan
Teitelbaum Dry Cleaning, Inc.
35-45 35th Street, Astoria, New York

APPENDICES

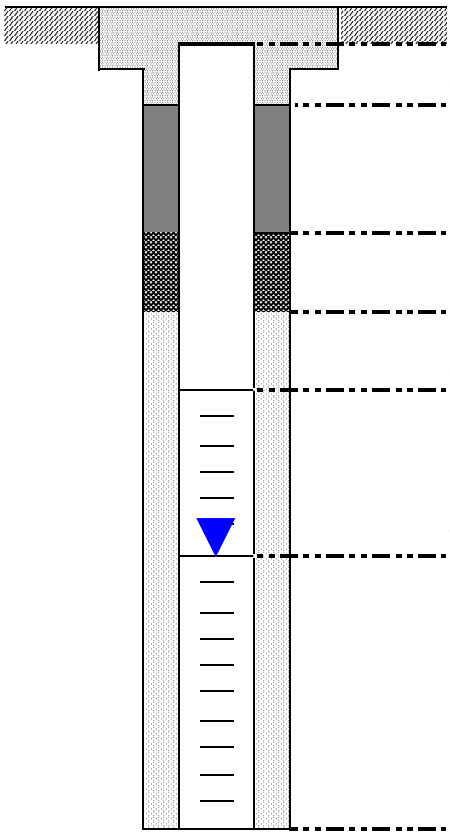
APPENDIX A

MONITORING WELL CONSTRUCTION LOGS

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-SB11(GW)** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	6/9/12
	Long Island City, New York	DEVELOPMENT DATE:	6/9/12
ELEVATION TOC[1]:	34.22	DEPTH TO WATER[2]:	16.56
INSPECTOR:	Daniel Schmidt	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	34.59	Protective Manhole Cover, Ground Surface
0.37	34.22	Top of Casing (TOC) 1" PVC
1.00	33.59	Top of Grout
5.17	29.42	Bottom of Grout/Top of Bentonite Seal
7.17	27.42	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
9.17	25.42	Top of Well Screen - Slot Size 0.01
16.93	17.66	Water Table
29.17	5.42	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

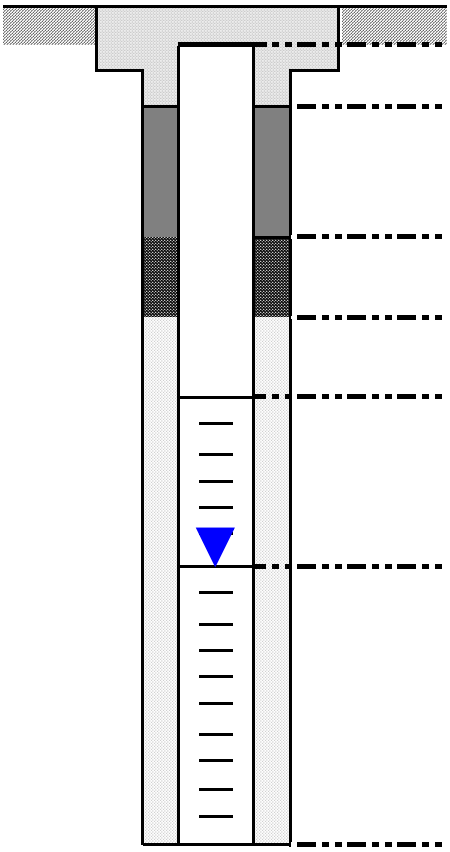
[1] Vertical datum is NAVD 1988. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on June 12, 2012.

[2] Feet below top of casing - measured on June 11, 2012.

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-SB12(GW)** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	6/9/12
	Long Island City, New York	DEVELOPMENT DATE:	6/9/12
ELEVATION TOC[1]:	35.44	DEPTH TO WATER[2]:	17.81
INSPECTOR:	Daniel Schmidt	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	35.87	Protective Manhole Cover, Ground Surface
0.43	35.44	Top of Casing (TOC) 1" PVC
1.00	34.87	Top of Grout
4.83	31.04	Bottom of Grout/Top of Bentonite Seal
6.83	29.04	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
8.83	27.04	Top of Well Screen - Slot Size 0.01
18.24	17.63	Water Table
28.83	7.04	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

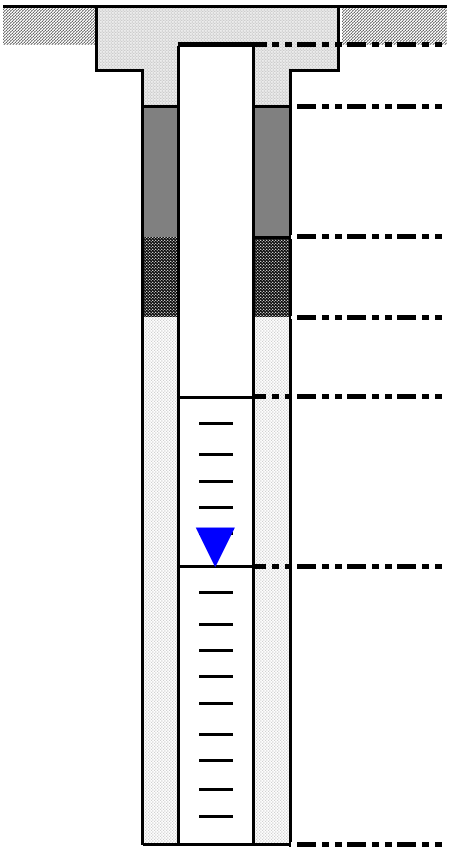
[1] Vertical datum is NAVD 1988. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on June 12, 2012.

[2] Feet below top of casing - measured on June 11, 2012.

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-SB13(GW)** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	6/10/12
	Long Island City, New York	DEVELOPMENT DATE:	6/10/12
ELEVATION TOC[1]:	36.85	DEPTH TO WATER[2]:	18.56
INSPECTOR:	Daniel Schmidt	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	37.18	Protective Manhole Cover, Ground Surface
0.33	36.85	Top of Casing (TOC) 1" PVC
1.00	36.18	Top of Grout
3.43	33.75	Bottom of Grout/Top of Bentonite Seal
5.43	31.75	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
7.43	29.75	Top of Well Screen - Slot Size 0.01
18.89	18.29	Water Table
27.43	9.75	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

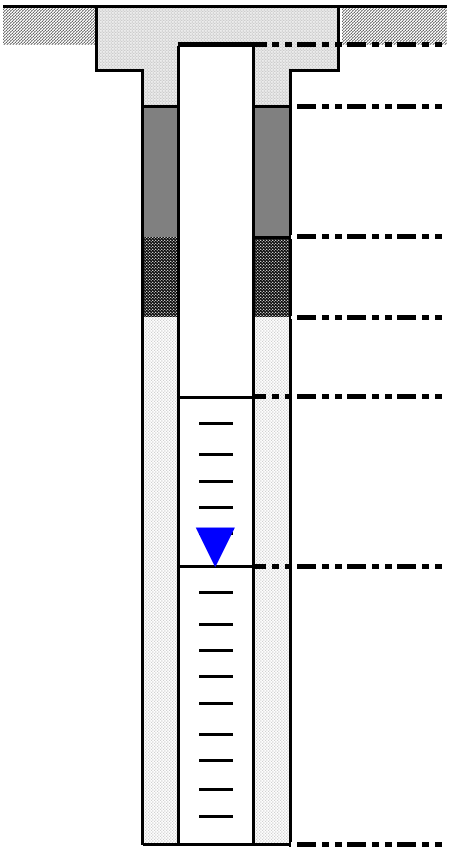
[1] Vertical datum is NAVD 1988. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on June 12, 2012.

[2] Feet below top of casing - measured on June 11, 2012.

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-SB14(GW)** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	6/10/12
	Long Island City, New York	DEVELOPMENT DATE:	6/10/12
ELEVATION TOC[1]:	37.93	DEPTH TO WATER[2]:	20.10
INSPECTOR:	Daniel Schmidt	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	38.16	Protective Manhole Cover, Ground Surface
0.23	37.93	Top of Casing (TOC) 1" PVC
1.00	37.16	Top of Grout
2.79	35.37	Bottom of Grout/Top of Bentonite Seal
4.79	33.37	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
6.79	31.37	Top of Well Screen - Slot Size 0.01
20.33	17.83	Water Table
26.79	11.37	Bottom of No. 1 Sand Pack/Bottom of Well Screen



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Notes:

[1] Vertical datum is NAVD 1988. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on June 12, 2012.

[2] Feet below top of casing - measured on June 11, 2012.

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018
Phone 212 221 7822

WELL CONSTRUCTION LOG

WELL: TRC-SB15(GW)

SHEET 1 OF 1

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
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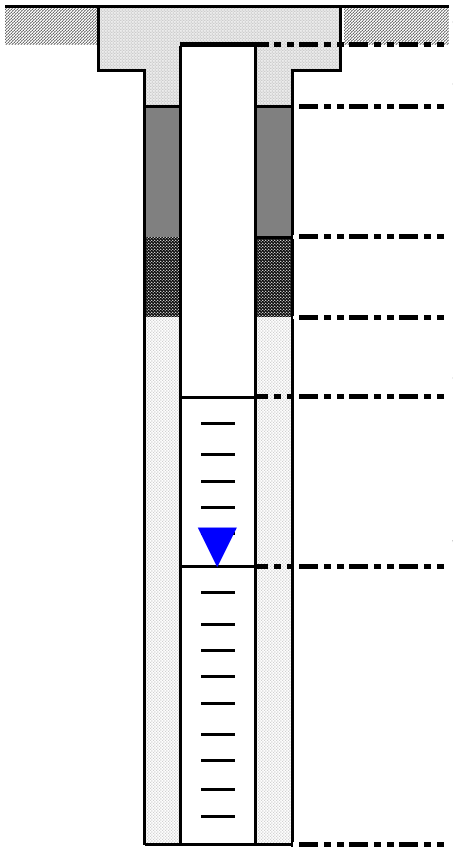
	Long Island City, New York	DEVELOPMENT DATE:	6/10/12
ELEVATION TOC[1]:	36.50	DEPTH TO WATER[2]:	18.63
INSPECTOR:	Daniel Schmidt	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	36.79	Protective Manhole Cover, Ground Surface
0.29	36.50	Top of Casing (TOC) 1" PVC
1.00	35.79	Top of Grout
4.59	32.20	Bottom of Grout/Top of Bentonite Seal
6.59	30.20	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
8.59	28.20	Top of Well Screen - Slot Size 0.01
18.92	17.87	Water Table
28.59	8.20	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

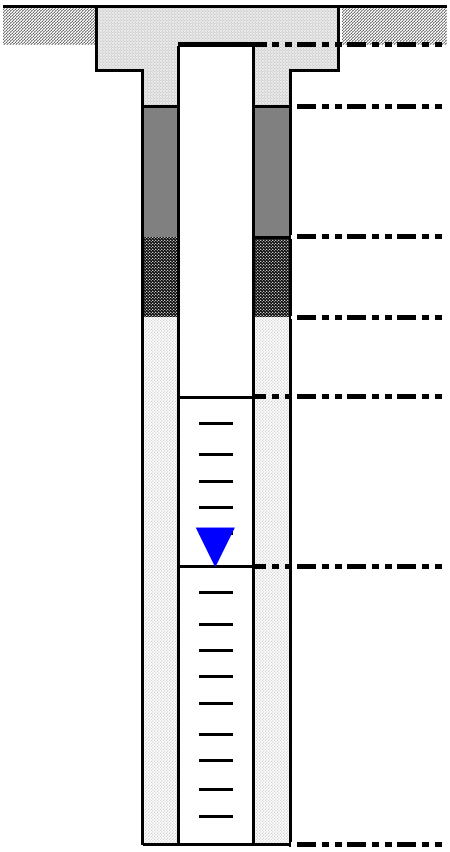
[1] Vertical datum is NAVD 1988. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on June 12, 2012.

[2] Feet below top of casing - measured on June 11, 2012.

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-SB16(GW)** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	6/9/12
	Long Island City, New York	DEVELOPMENT DATE:	6/9/12
ELEVATION TOC[1]:	34.50	DEPTH TO WATER[2]:	16.90
INSPECTOR:	Daniel Schmidt	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	34.81	Protective Manhole Cover, Ground Surface
0.31	34.50	Top of Casing (TOC) 1" PVC
1.00	33.81	Top of Grout
4.46	30.35	Bottom of Grout/Top of Bentonite Seal
6.46	28.35	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
8.46	26.35	Top of Well Screen - Slot Size 0.01
17.21	17.60	Water Table
28.46	6.35	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

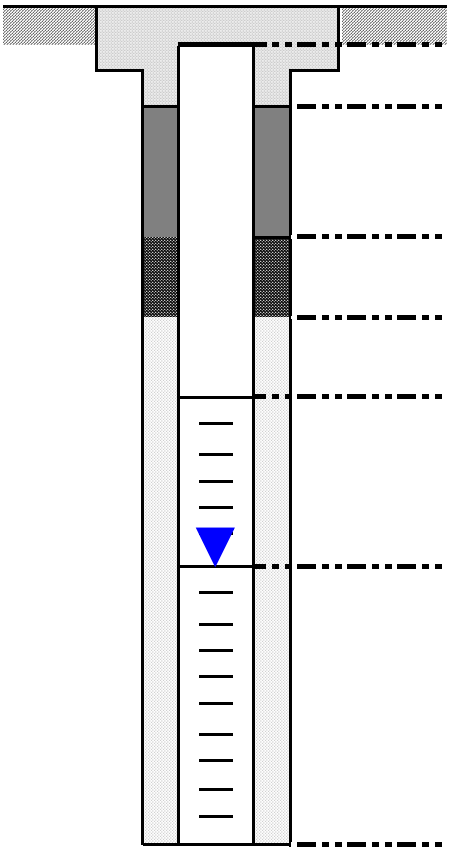
[1] Vertical datum is NAVD 1988. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on June 12, 2012.

[2] Feet below top of casing - measured on June 11, 2012.

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-SB17(GW)** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	6/10/12
	Long Island City, New York	DEVELOPMENT DATE:	6/10/12
ELEVATION TOC[1]:	39.48	DEPTH TO WATER[2]:	21.61
INSPECTOR:	Daniel Schmidt	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	39.83	Protective Manhole Cover, Ground Surface
0.35	39.48	Top of Casing (TOC) 1" PVC
1.00	38.83	Top of Grout
3.85	35.98	Bottom of Grout/Top of Bentonite Seal
5.85	33.98	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
7.85	31.98	Top of Well Screen - Slot Size 0.01
21.96	17.87	Water Table
27.85	11.98	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

[1] Vertical datum is NAVD 1988. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on June 12, 2012.

[2] Feet below top of casing - measured on June 11, 2012.

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018
Phone 212 221 7822

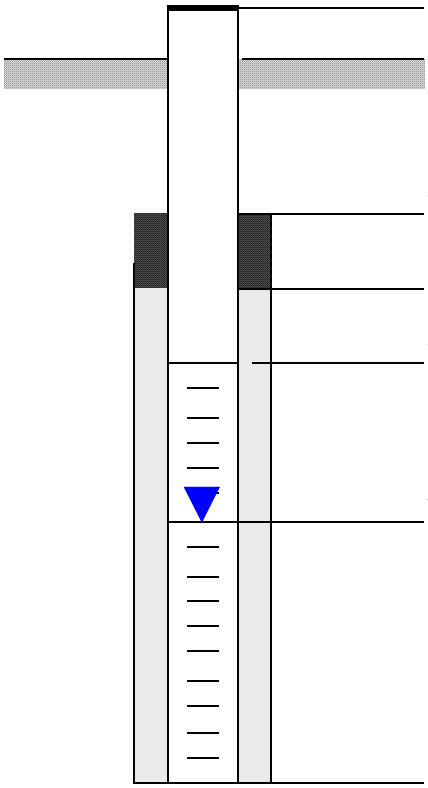
TEMPORARY WELL CONSTRUCTION LOG

TEMPORARY WELL: TRC-SB-5(GW)

SHEET 1 OF 1

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/21/12
	Long Island City, New York	DEVELOPMENT DATE:	2/21/12
ELEVATION TOC:	NA	DEPTH TO WATER (TOC):	21.70
INSPECTOR:	Patrick Narea	PRODUCT THICKNESS:	None detected

Depth from top of floor slab (feet)	Elevation	
0.30	NA	Top of Casing (TOC) 1" PVC
0.00	NA	First Floor Slab
11.00	NA	Top of Bentonite Seal
13.00	NA	Bottom of Bentonite Seal/Top of No. 1 Sand Pack
15.00	NA	Top of Well Screen - Slot Size 0.01
21.70	NA	Water Table
30.00	NA	Bottom of No. 1 Sand Pack/End of Well Screen/End of Boring



Not to Scale

Notes:
NA - Not Applicable

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018
Phone 212 221 7822

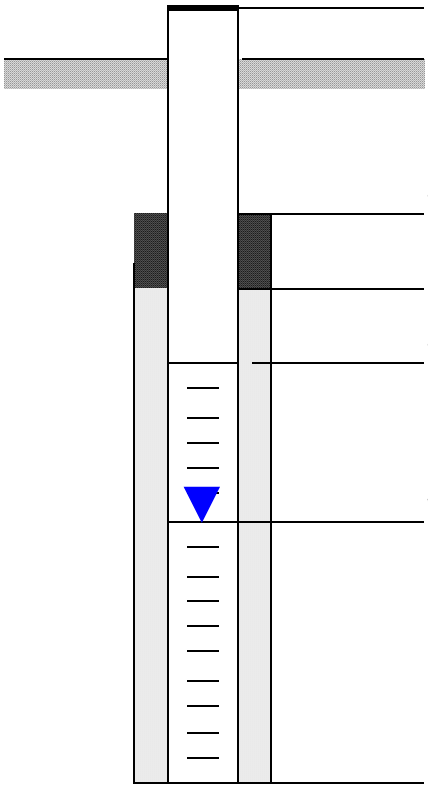
TEMPORARY WELL CONSTRUCTION LOG

TEMPORARY WELL: TRC-SB-7(GW)

SHEET 1 OF 1

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/18/12
	Long Island City, New York	DEVELOPMENT DATE:	2/18/12
ELEVATION TOC:	NA	DEPTH TO WATER (TOC):	20.20
INSPECTOR:	Patrick Narea	PRODUCT THICKNESS:	None detected

Depth from top of floor slab (feet)	Elevation	
0.18	NA	Top of Casing (TOC) 1" PVC
0.00	NA	First Floor Slab
11.00	NA	Top of Bentonite Seal
13.00	NA	Bottom of Bentonite Seal/Top of No. 1 Sand Pack
15.00	NA	Top of Well Screen - Slot Size 0.01
20.20	NA	Water Table
30.00	NA	Bottom of No. 1 Sand Pack/End of Well Screen/End of Boring



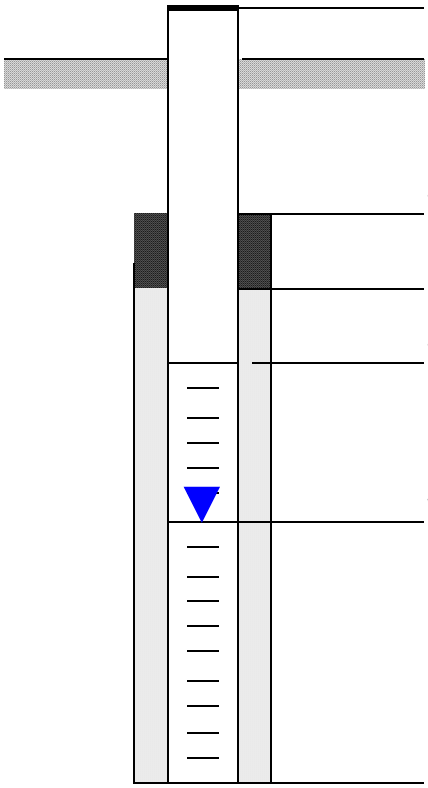
Not to Scale

Notes:
NA - Not Applicable

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**TEMPORARY WELL CONSTRUCTION LOG**	**TEMPORARY WELL: TRC-SB-8(GW)** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/20/12
	Long Island City, New York	DEVELOPMENT DATE:	2/20/12
ELEVATION TOC:	NA	DEPTH TO WATER (TOC):	20.50
INSPECTOR:	Patrick Narea	PRODUCT THICKNESS:	None detected

Depth from top of floor slab (feet)	Elevation	
0.18	NA	Top of Casing (TOC) 1" PVC
0.00	NA	First Floor Slab
11.00	NA	Top of Bentonite Seal
13.00	NA	Bottom of Bentonite Seal/Top of No. 1 Sand Pack
15.00	NA	Top of Well Screen - Slot Size 0.01
20.50	NA	Water Table
30.00	NA	Bottom of No. 1 Sand Pack/End of Well Screen/End of Boring



Not to Scale

Notes:
NA - Not Applicable

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018
Phone 212 221 7822

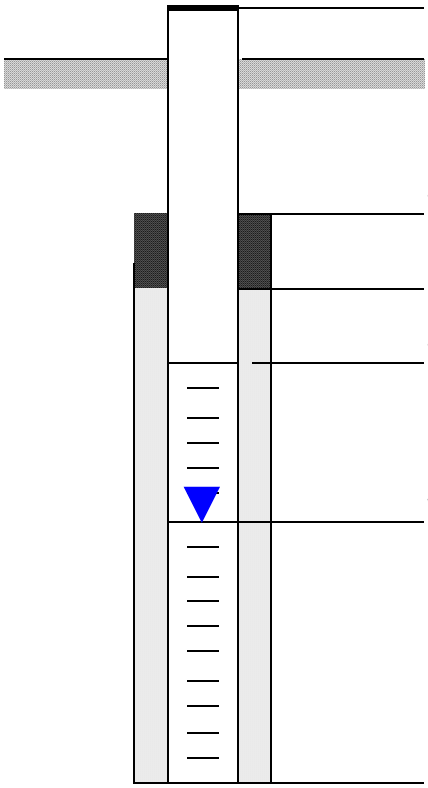
TEMPORARY WELL CONSTRUCTION LOG

TEMPORARY WELL: TRC-SB-9(GW)

SHEET 1 OF 1

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/23/12
	Long Island City, New York	DEVELOPMENT DATE:	2/23/12
ELEVATION TOC:	NA	DEPTH TO WATER (TOC):	9.94
INSPECTOR:	Patrick Narea	PRODUCT THICKNESS:	None detected

Depth from basement floor slab (feet)	Elevation	
0.10	NA	Top of Casing (TOC) 1" PVC
0.00	NA	Basement Floor Slab
1.00	NA	Top of Bentonite Seal
3.00	NA	Bottom of Bentonite Seal/Top of No. 1 Sand Pack
5.00	NA	Top of Well Screen - Slot Size 0.01
9.94	NA	Water Table
20.00	NA	Bottom of No. 1 Sand Pack/End of Well Screen/End of Boring



Not to Scale

Notes:
NA - Not Applicable

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018
Phone 212 221 7822

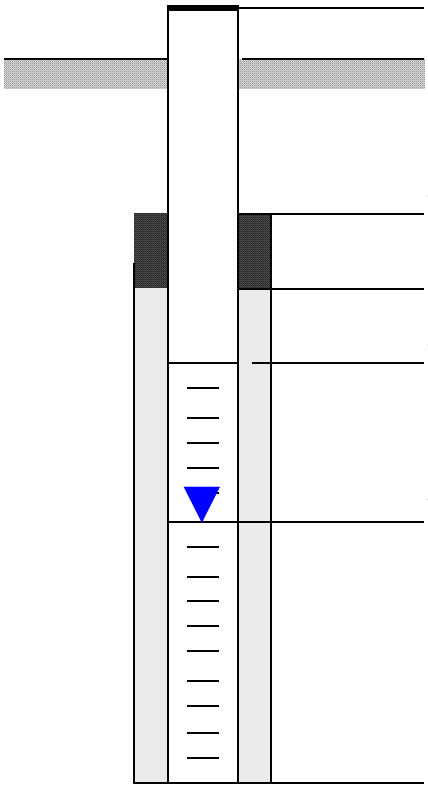
TEMPORARY WELL CONSTRUCTION LOG

TEMPORARY WELL: TRC-SB-10(GW)

SHEET 1 OF 1

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Direct Push
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/22/12
	Long Island City, New York	DEVELOPMENT DATE:	2/22/12
ELEVATION TOC:	NA	DEPTH TO WATER (TOC):	9.49
INSPECTOR:	Patrick Narea	PRODUCT THICKNESS:	None detected

Depth from basement floor slab (feet)	Elevation	
0.10	NA	Top of Casing (TOC) 1" PVC
0.00	NA	Basement Floor Slab
1.00	NA	Top of Bentonite Seal
3.00	NA	Bottom of Bentonite Seal/Top of No. 1 Sand Pack
5.00	NA	Top of Well Screen - Slot Size 0.01
9.49	NA	Water Table
20.00	NA	Bottom of No. 1 Sand Pack/End of Well Screen/End of Boring



Not to Scale

Notes:
NA - Not Applicable

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018
Phone 212 221 7822

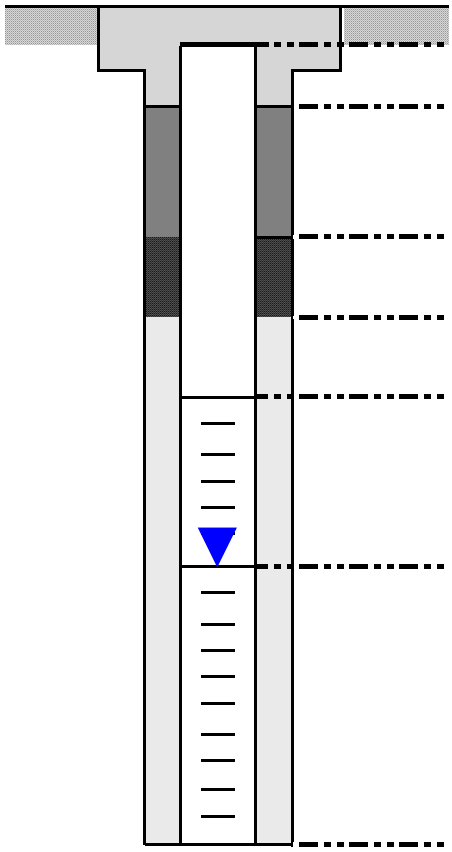
WELL CONSTRUCTION LOG

WELL: TRC-MW-1

SHEET 1 OF 1

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Hollow Stem Auger
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/19/12
	Long Island City, New York	DEVELOPMENT DATE:	2/19/12
ELEVATION TOC[1]:	99.68	DEPTH TO WATER[2]:	18.60
INSPECTOR:	Brian Bermingham	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	99.87	Protective Manhole Cover, Ground Surface
0.19	99.68	Top of Casing (TOC) 2" PVC
1.00	98.87	Top of Grout
8.94	90.88	Bottom of Grout/Top of Bentonite Seal
10.94	88.88	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
12.94	86.88	Top of Well Screen - Slot Size 0.01
18.79	81.08	Water Table
27.99	71.88	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

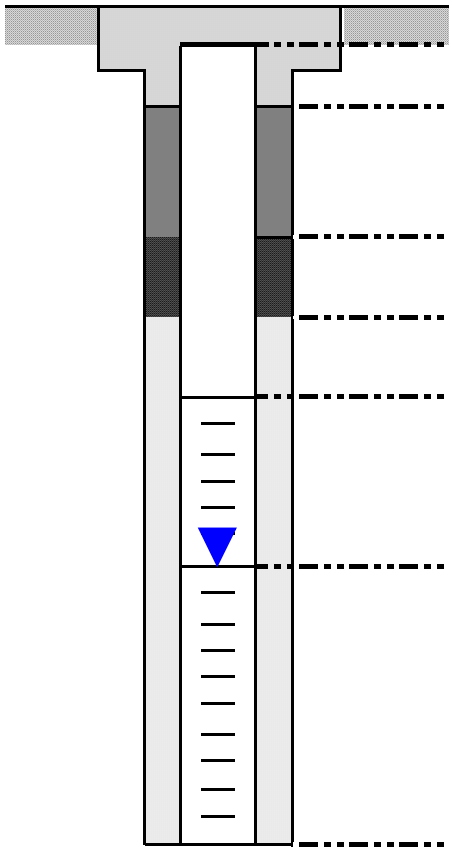
[1]Feet below arbitrary datum point (ground surface near the northeast corner of the Site building) which was given an elevation of 100 feet. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on March 15, 2012.

[2]Feet below top of casing.

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-MW-2** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Hollow Stem Auger
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/20/12
	Long Island City, New York	DEVELOPMENT DATE:	2/20/12
ELEVATION TOC[1]:	100.98	DEPTH TO WATER[2]:	19.78
INSPECTOR:	Brian Bermingham	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	101.24	Protective Manhole Cover, Ground Surface
0.26	100.98	Top of Casing (TOC) 2" PVC
1.00	100.24	Top of Grout
9.26	91.98	Bottom of Grout/Top of Bentonite Seal
11.26	89.98	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
13.26	87.98	Top of Well Screen - Slot Size 0.01
20.04	81.20	Water Table
28.26	72.98	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

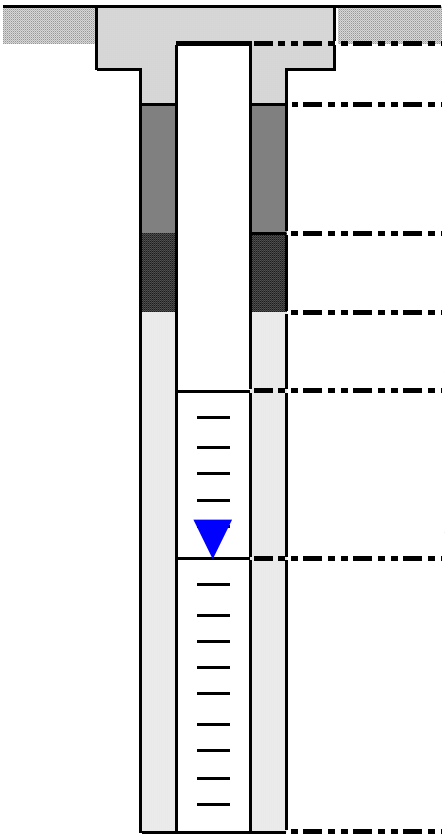
[1]Feet below arbitrary datum point (ground surface near the northeast corner of the Site building) which was given an elevation of 100 feet. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on March 15, 2012.

[2]Feet below top of casing.

TRC Engineers, Inc. 1430 Broadway, 10th Floor New York, New York 10018 Phone 212 221 7822	**WELL CONSTRUCTION LOG**	**WELL: TRC-MW-3** **SHEET 1 OF 1**

JOB NAME:	Baccalaureate School for Global Education (Q798)	DRILLING METHOD:	Hollow Stem Auger
		DRILLER:	Aquifer Drilling & Testing, Inc.
ADDRESS:	34-12 36th Avenue	INSTALLATION DATE:	2/19/12
	Long Island City, New York	DEVELOPMENT DATE:	2/19/12
ELEVATION TOC[1]:	98.56	DEPTH TO WATER[2]:	17.63
INSPECTOR:	Brian Bermingham	PRODUCT THICKNESS:	None detected

Depth from Ground Surface (feet)	Elevation[1]	
0.00	98.85	Protective Manhole Cover, Ground Surface
0.29	98.56	Top of Casing (TOC) 2" PVC
1.00	97.85	Top of Grout
9.53	89.32	Bottom of Grout/Top of Bentonite Seal
11.53	87.32	Bottom of Bentonite Seal/Top of No. 1 Sand Sand Pack
13.53	85.32	Top of Well Screen - Slot Size 0.01
17.92	80.93	Water Table
28.53	70.32	Bottom of No. 1 Sand Pack/Bottom of Well Screen



Not to Scale

Notes:

[1]Feet below arbitrary datum point (ground surface near the northeast corner of the Site building) which was given an elevation of 100 feet. Groundwater monitoring well was surveyed by Perfect Point Land Surveying on March 15, 2012.

[2]Feet below top of casing.

integral consulting inc.
61 Broadway, Suite 1601
New York, NY 10006
(212) 962-4301

Log of Monitoring Well ID: MW-1/SB-10
Project Name: S&C Teitelbaum
Project Number: E056
Logged by: Alana Carroll
Date: 9/4/2014

SAMPLE INFORMATION								Depth to water: Initial_____Completion_____	Well Diagram	TEMPORARY WELL CONSTRUCTION (all depths in feet bgs)
Sample ID	Tag #	Time	Sample Depth	% Recov.	PID (ppm)	Depth (Feet)	Symbol	**Soil Description** (USCS group name, minor components, color, moisture, additional descriptions)		
							FILL			
						--				
				75%	0		SM	**2-6':**Recovery=3', PID=0.0ppm		**Depths**
								Top 2.5': c.-m.-f. SAND; brown; some SILT; few c.-m.GRAVEL; some lenses of f. SAND. Bottom 0.5': f.-m. CLAYEY SAND; brown		Borehole Total Depth: 22'
						--5				Borehole Diameter: 3"
SB-10		22:30	7-9'					**6-10':** Recovery=FULL, PID=0.0ppm		Casing: 12-0'bgs
						--		CLAYEY SAND as above.		Screen: 12-22' bgs
										Sand Pack: 22-10'bgs
						--10				
				100%	0			**10-14':** Recovery=FULL, PID=0.0ppm		
						--	SP	Top 6": CLAYEY SAND as above. Next 1': f. SILTY SAND (micaceous); tan; grading to m.-c.-f. SAND intermixed with c.-m.-f. GRAVEL, amd crushed ROCK (schist and quartz).		
				63%	0			**14-18':** Recovery=2.5', PID=0.0ppm		
						--15		Same as 10-14' with more f. SAND and SILT (micaceous); less COBBLES.		
						--	SM			
				38%	0			**18-22':** Recovery=1.5', PID=0.0ppm		
								Top 6": m.-f.-c. SILTY SAND (micaceous); some m.-f.-c. GRAVEL. Bottom 1': m.-f.-c. SAND and large GRAVEL (2"); saturated; some m.-c.-f. GRAVEL (micaceous).		
						--20				
SB-10		22:20	20-22"							**WELL MATERIALS**
							SP			
						--				
										Casing:
								End of Boring = 22 ftbg		1" Schedule 40 PVC
						--25				Well Screen:
										1" Schedule 40 PVC 0.020 Slot
						--				
										Sand Pack:
						--				NO. 2
						--				WELL ABANDONED AFTER
										SAMPLE COLLECTED
						--				
						--				
						--				
						--				
						--				
						--				
						--				

Drilling Contractor: AARCO
Drilling Method/Equipment: Limited Access Geoprobe
Sampling Equipment: GS, 5' sampler
Start/End Time: 21:40 / 22:20
Latitude:
Longitude:

Notes: 1" well pushed with a 3" rod to allow for sufficient sand pack.

Samples Collected:
SB-10(7-9') - Full Scan Analysis
SB-10(20-22') - VOCs Analysis

Location Sketch

integral consulting inc.

61 Broadway, Suite 1601
New York, NY 10006
(212) 962-4301

Log of Monitoring Well ID: MW-2/SB-11
Project Name: S&C Teitelbaum
Project Number: E056
Logged by: Alana Carroll
Date: 9/3/2014

SAMPLE INFORMATION									Depth to water: Initial_____Completion_____	Well Diagram	WELL CONSTRUCTION (all depths in feet bgs)
Sample ID	Tag #	Time	Sample Depth	% Recov.	PID (ppm)	Depth (Feet)	Symbol	Soil Description (USCS group name, minor components, color, moisture, additional descriptions)			
				20	0		SM	**0-5':** Recovery=1', PID=0.0ppm f.-m. SILTY SAND; brown; some GRAVEL (micaceous); trace COBBLES; grades to f.-m. CLAYEY SAND to CLAY; brown; some SAND.		
						--				**Depths**
							SC			Borehole Total Depth: 26'
						--5				Borehole Diameter: 3"
				70	0		CL	**5-10':** Recovery=3.5', PID=0.0ppm Top 6": CLAY as above; trace COBBLES. Next 2": m.-f.-c. SAND and m.-c.-f. GRAVEL; brown; some SILT (micaceous) some large GRAVEL (3") and crushed ROCK.		Casing: 0-16' bgs
						--				Screen: 16-26' bgs
										Sand Pack: 14-26'bgs
						--10				Bentonite chips: 13-14'
				60	0			**10-15':** Recovery=3', PID=0.0ppm SAND and GRAVEL as above; some ROCK (native), COBBLES, small GRAVEL.		Fill: 13-1'
						--				Concrete: 1-0'
						--15	SW			
				70	0			**15-20':** Recovery=3.5', PID=0.0ppm Top 1': m.-f.-c. SAND; brown; some CLAY, MICA and f. GRAVEL. Bottom 2.5': c. SAND; tan/brown; well graded; some MICA and m.-f. GRAVEL; trace SILT.		
						--				
SB-11		22:30	18-20'							
						--20				
				60	63			**20-25':** Recover=3', PID=63ppm at 21'		**WELL MATERIALS**
SB-11		22:17	21-23'					Top 6": SAND as above. Next 18": f. SILTY SAND (micaceous); saturated grading to wet; some c. SAND, SILT, and MICA		
						--				
							SM			Cap: Manhole / J-Plug
							SP			Concrete: Yes
						--25				Bentonite: Yes
								End of Boring = 25' bgs		Casing:
						--				1" Schedule 40 PVC
										Well Screen:
						--				1" Schedule 40 PVC 20-Slot
						--				Sand Pack:
										NO. 2 Morie Sand
						--				
						--				
						--				
						--				
						--				
						--				

Drilling Contractor: AARCO
Drilling Method/Equipment: 6610 DT Geoprobe
Sampling Equipment: GS, 5' sampler
Start/End Time: 21:50 / 22:15
Latitude:
Longitude:

Notes: 1" well pushed with a 3" rod to allow for sufficient sand pack.
SB-11(18-20') - VOCs Analysis
SB-11(21-23') - VOCs Analysis

Location Sketch

integral consulting inc.

61 Broadway, Suite 1601
New York, NY 10006
(212) 962-4301

Log of Monitoring Well ID: MW-3/SB-12
Project Name: S&C Teitelbaum
Project Number: E056
Logged by: Alana Carroll
Date: 9/3/2014

SAMPLE INFORMATION							Symbol	Depth to water: Initial_____Completion_____ **Soil Description** (USCS group name, minor components, color, moisture, additional descriptions)	Well Diagram	WELL CONSTRUCTION (all depths in feet bgs)
Sample ID	Tag #	Time	Sample Depth	% Recov.	PID (ppm)	Depth (Feet)				
				60	0		FILL	**0-5':** Recovery=3', PID=0.0ppm		
						--		Top 6": CONCRETE. Bottom 2.5': f. SAND (micaceous); brown; some SILT.		
							SM			**Depths**
						--5				Borehole Total Depth: 26'
				80	0		SC	**5-10':** Recovery=4', PID=0.0ppm		Borehole Diameter: 6"
								Top 1': f. SAND; brown/tan; some CLAY; trace GRAVEL. Next 1'; f. SILTY SAND; brown; some MICA. Bottom 1': f. SILTY SAND; brown/tan; some CLAY; trace GRAVEL.		Casing: 0-16' bgs
						--				Screen: 16-26' bgs
										Sand Pack: 14-26'bgs
						--10		**10-15':** Recovery=4', PID=0.0ppm		Bentonite chips: 13-14' bgs
				80	0			Top 6": m.-f. SAND; brown; some CLAY; trace GRAVEL. Next 1': f. SILTY SAND; brown; some MICA. Next 1': f. SILTY SAND; brown/tan; some CLAY; trace GRAVEL		Clean Fill: 14-1' bgs
						--	SM			Concrete: 1-0" bgs
						--15				
SB-12		20:35	16-18'	100	1.5			**15-20':** Recovery=FULL, PID=1.5ppm at 16'		
						--		Top 1': f. SANDY SILT (micaceous); brown. Next 6": weathered ROCK (schist) intermixed with COBBLES and c.-m. SAND. Remainder SILTY SAND; brown/green; moist at 17'; wet at 20'; some MICA.		
SB-12		20:45	18-20'							
						--20				**WELL MATERIALS**
								End of Boring = 20' bgs		Monument: 6" Manhole Cover
						--				Cap: J-plug
										Concrete: Pad
						--				Bentonite: N/A
										Casing:
						--				2" Schedule 40 PVC
										Well Screen:
						--				2" Schedule 40 PVC; 20-Slot
						--				Sand Pack:
										No.2 Morie Sand
						--				
						--				
						--				
						--				
						--				
						--				
						--				

Drilling Contractor: AARCO
Drilling Method/Equipment: 6610 DT Geoprobe
Sampling Equipment: GS, 5' sampler
Start/End Time: 2015/2030
Latitude:
Longitude:

Notes:Well installed on 9/5/14.
SB-12(16-18') - Full Scan Analysis
SB-12(18-20') - VOCs Analysis

Location Sketch

integral consulting inc.
61 Broadway, Suite 1601
New York, NY 10006
(212) 962-4301

Log of Monitoring Well ID: MW-4/SB-13
Project Name: S&C Teitelbaum
Project Number: E056
Logged by: Alana Carroll
Date: 9/3/2014

SAMPLE INFORMATION

Depth to water: Initial__________Completion___________

Sample ID	Tag #	Time	Sample Depth	% Recov.	PID (ppm)	Depth (Feet)	Symbol	Soil Description (USCS group name, minor components, color, moisture, additional descriptions)
				60	0	0–5	SW	**0-5':** Recovery=3', PID=0.0ppm m.-f. SAND; brown; some GRAVEL. 4" interval of crushed ROCK. Bottom 2': CLAYEY f. SAND with intermixed m.-c. SAND
				50	0	5–10	SW	**5-10':** Recovery=2.5', PID=0.0ppm Well graded c. SAND; brown; trace f. SAND. Occasional interbedded, f. SAND lenses (micaceous).
				60	0	10–15	SW	**10-15':** Recovery=3', PID=0.0ppm SAND as above; with large COBBLES and c.m. GRAVEL.
SB-13		20:10	13-15'					
				0	NA	15–20	N/A	**15-20':** NO RECOVERY
				20		20–25	N/A	**20-25':** Recovery=1.0', PID=3.36ppm at 25' SAND collapsed from above. Bottom is f. SAND and SILT; brown; wet; micaceous.
SB-13		20:04	24-25'		3.6		SM	
						25		End of boring = 25' bgs

Well Diagram

WELL CONSTRUCTION
(all depths in feet bgs)

Depths
Borehole Total Depth: 26'
Borehole Diameter: 6"
Casing: 0-16' bgs
Screen: 16-26' bgs
Sand Pack: 14-26'bgs
Bentonite chips: 13-14' bgs
Clean Fill: 14-1' bgs
Concrete: 1-0" bgs

WELL MATERIALS
Monument: 6" Manhole Cover
Cap: J-plug
Concrete: Pad
Bentonite: N/A
Casing:
2" Schedule 40 PVC
Well Screen:
2" Schedule 40 PVC; 20-Slot
Sand Pack:
No.2 Morie Sand

Drilling Contractor: AARCO
Drilling Method/Equipment: 6610 DT Geoprobe
Sampling Equipment: GS, 5' sampler
Start/End Time: 20:15 / 20:30
Latitude:
Longitude:

Notes: Well installed on 9/5/14
SB-13(13-15') - VOCs Analysis
SB-13(24-25') - VOCs Analysis

Location Sketch