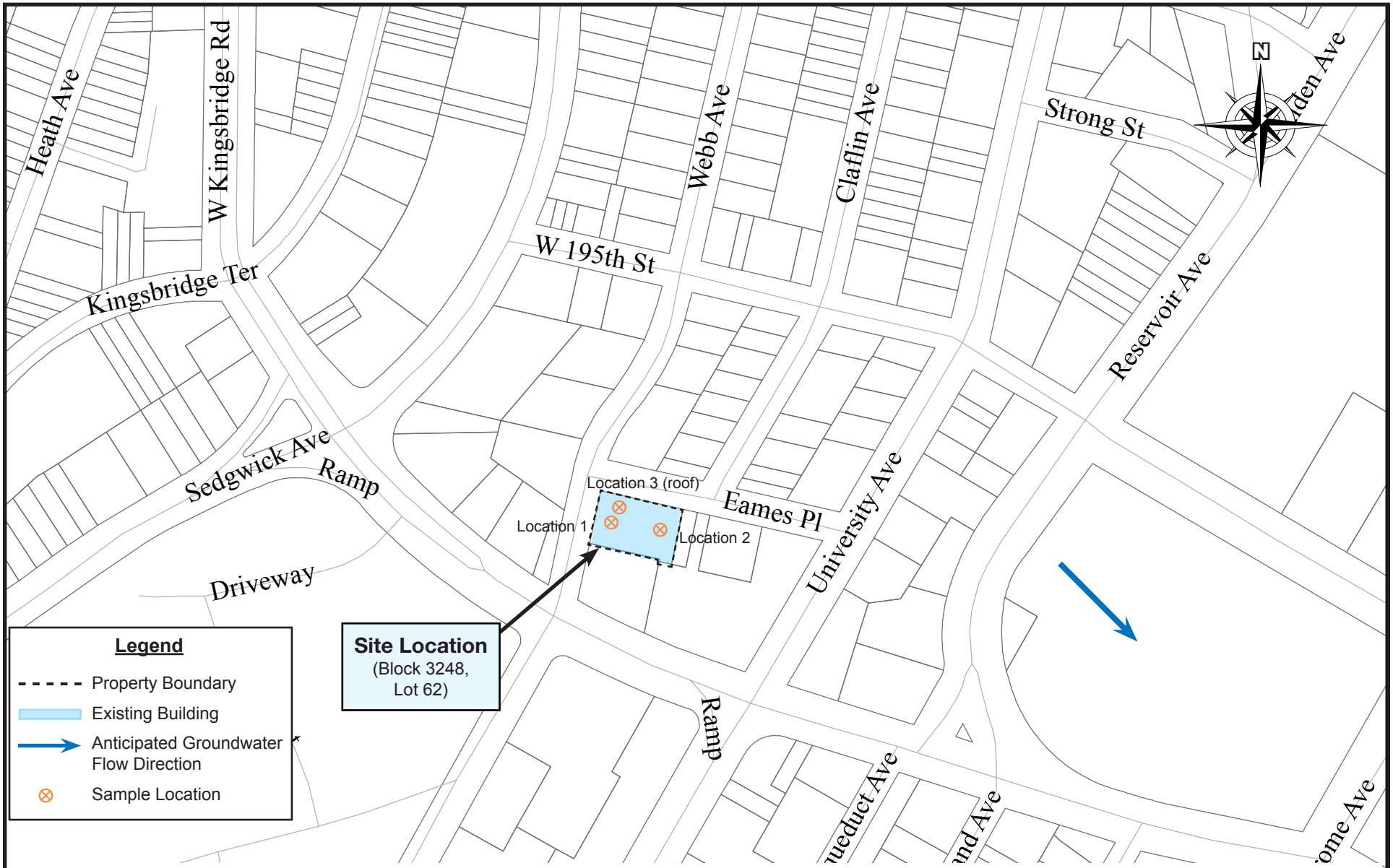


SOURCE: NEW YORK CITY DEPARTMENT OF PLANNING - MAPPLUTO - BROOKLYN, NY RELEASE 13V2

D&B ENGINEERS AND ARCHITECTS, P.C.

NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY

P.S. 86 ANNEX

124 EAMES PLACE, BRONX NY 10468

SITE PLAN WITH SAMPLE LOCATIONS

0 250

SCALE IN FEET

FIGURE 2

3415-AR2 - Site Plan with Sample Locations.indd (08/29/16 - 5:39 PM)

TABLES

TABLE 1

LIST OF ANALYZED VOLATILE ORGANIC COMPOUNDS

The following suite of 26 volatile organic compounds (VOCs) parameters has been selected from the TO-15 expanded list. The following VOCs have met the following three criteria and should be sufficient to achieve the "wide range of volatile chemicals" criteria listed in the October 2006 DOH Guidance Memorandum:

1. The compounds are listed in TO-15,
2. The compounds are associated with potential soil vapor concerns associated with petroleum spills and dry cleaner solvent management or auto repair facilities, and
3. The VOCs are analyzed by NYSDEC at ambient VOC monitoring stations in New York City.

	Compound	**Rationale for Including in Parameter Suite**
1	Benzene	Petroleum constituent
2	Carbon Tetrachloride	Historically used at dry cleaners
3	Chlorobenzene	Petroleum constituent
4	Chloroethane	Breakdown product of 1,1,1-TCA
5	Chloromethane	Breakdown product of carbon tetrachloride
6	1,2-Dichlorobenzene	Petroleum constituent
7	1,3-Dichlorobenzene	Petroleum constituent
8	1,1-Dichloroethane	Breakdown product of 1,1,1-TCA
9	1,2-Dichloroethane	Breakdown product of PCE and TCE
10	1,1-Dichloroethene	Breakdown product of PCE and TCE
11	cis-1,2-Dichloroethene	Breakdown product of PCE and TCE
12	trans-1,2-Dichloroethene	Breakdown product of PCE and TCE
13	1,2-Dichloropropane	Unleaded gasoline additive
14	Ethylbenzene	Petroleum constituent
15	Methyl tert-Butyl Ether	Gasoline additive
16	Methylene Chloride	Breakdown product of carbon tetrachloride, paint stripper and cleaning component
17	Naphthalene	Petroleum constituent
18	Tetrachloroethene (PCE)	Dry cleaning solvent
19	Toluene	Petroleum constituent
20	1,1,1-Trichloroethane	Common degreasing solvent
21	Trichloroethene (TCE)	Solvent; breakdown product of PCE
22	1,2,4-Trimethylbenzene	Petroleum constituent
23	1,3,5-Trimethylbenzene	Petroleum constituent
24	Vinyl Chloride	Breakdown product of PCE, TCE & DCE, used in PVC
25	m&p-Xylenes	Petroleum constituent
26	o-Xylene	Petroleum constituent

TABLE 2
SUMMARY OF SUB-SLAB AND AMBIENT AIR QUALITY ANALYTICAL DATA
NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
PUBLIC SCHOOL 86 ANNEX (X886) - LEASE RENEWAL
124 EAMES PLACE BRONX, NEW YORK
SOIL VAPOR INVESTIGATION
VOLATILE ORGANIC COMPOUNDS

	Sub-Slab Vapor		Ambient Air	NYSDOH AGV	NYSDOH Fuel Oil 2003 Upper Fence Limit [1]		USEPA BASE Data 90th Percentile Value[1]		HEI RIOPA 2005 95th Percentile Value [1]		NYSDEC Maximum Ambient VOCs[2]	NJDEP Vapor Intrusion Technical Guidance Soil Gas Screening Levels
Sample ID	**PS86A-SSV1**	**PS86A-SSV2**	**PS86A-AA3**									
Lab Sample ID	**H4786-02**	**H4786-04**	**H4786-05**									
Sampling Date	**9/10/2016**	**9/10/2016**	**9/10/2016**		**Outdoor**	**Indoor**	**Outdoor**	**Indoor**	**Outdoor**	**Indoor**		
COMPOUND	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m^3)	(µg/m3)
Benzene	0.7 J	8.3	0.64 J	--	4.8	13	6.6	9.4	5.16	10	2.16	16
Carbon Tetrachloride	0.44	0.38	0.38	--	1.2	1.3	0.7	<1.3	1	1.1	0.60	31
Chlorobenzene	<0.46	<0.46	<0.46	--	--	0.4	<0.8	<0.9	--	--	0.09	2600
Chloroethane	<0.26	**1.32**	<0.26	--	0.4	0.4	<1.2	<1.1	--	--	0.03	520000
Chloromethane	1.24	0.37 J	1.28	--	4.3	4.2	3.7	3.7	--	--	1.31	4700
1,2-Dichlorobenzene	<0.6	<0.6	<0.6	--	0.4	0.5	<1.2	<1.2	--	--	0.13	10000
1,3-Dichlorobenzene	<0.6	<0.6	<0.6	--	0.4	0.5	<2.2	<2.4	--	--	0.11	--
1,1-Dichloroethane	<0.4	<0.4	<0.4	--	--	0.4	<0.6	<0.7	--	--	0.03	76
1,2-Dichloroethane	<0.4	<0.4	<0.4	--	0.4	0.4	<0.8	<0.9	--	--	--	20
1,1-Dichloroethylene	<0.4	<0.4	<0.4	--	0.4	0.4	<1.4	<1.4	--	--	0.02	10000
cis-1,2-Dichloroethylene	<0.4	<0.4	<0.4	--	0.4	0.4	<1.8	<1.9	--	--	0.02	--
trans-1,2-Dichloroethene	<0.4	<0.4	<0.4	--	--	--	--	--	--	--	--	3100
1,2-Dichloropropane	<0.46	<0.46	<0.46	--	0.4	0.4	<1.6	<1.6	--	--	0.05	--
Ethylbenzene	0.69 J	4.13	1.09 J	--	1	6.4	3.5	5.7	3.04	7.62	0.50	49
Methyl tert-Butyl Ether (MTBE)	<0.36	<0.36	<0.36	--	--	14	6.2	11.5	22.1	36	0.03	470
Methylene Chloride	5.91 B	1.32 JB	2.81 B	60	1.6	16	6.1	10.0	2.46	7.5	0.85	4800
Naphthalene	1 J	**11.5**	<0.52	--	--	--	4.9	5.1	--	--	--	26
Tetrachloroethylene (PCE)	0.41	2.03	0.47	30	0.7	2.5	6.5	15.9	3.17	6.01	0.86	470
Toluene	4.15	10.6	4.52	--	5.1	57	33.7	43.0	19.6	39.8	2.95	260000
1,1,1-Trichloroethane (TCA)	<0.16	<0.16	<0.16	--	0.6	2.5	2.6	20.6	--	--	--	260000
Trichloroethylene (TCE)	0.16	0.54	0.21	2	0.4	0.5	1.3	4.2	0.79	1.36	0.11	27
1,2,4-Trimethylbenzene	2.11 J	7.37	2.36 J	--	1.9	9.8	5.8	9.5	--	--	0.70	--
1,3,5-Trimethylbenzene	0.64 J	**6.88**	0.84 J	--	0.7	3.9	2.7	3.7	--	--	0.21	--
Vinyl Chloride	<0.08	<0.08	<0.08	--	0.4	0.4	<1.8	<1.9	--	--	0.03	13
m,p-Xylenes	3.69 J	7.38	6.08	--	1	11	12.8	22.2	10	22.2	1.98	5200
o-Xylene	1.26 J	5.21	2.43	--	1.2	7.1	4.6	7.9	3.23	7.24	0.76	5200

Notes:
µg/m^3 = micrograms per cubic meter
< - Less than reporting limit
-- = Not Available
[1] - Per Appendix C of the Final NYSDOH Guidance.
[2] - NYSDEC 2015 Annual VOC Data from New York Botanical Gardens (Site #7094-06 and 7094-10, Bronx County)

NYSDOH - New York State Department of Health
AGV - Air Guideline Value
BASE - Building Assessment and Survey Evaluation
HEI RIOPA - Health Effects Institute: Relationship of Indoor, Outdoor and Personal Air

Items shown in bold font equal or exceed the range of highest corresponding published background air concentrations.

J: Estimated value

B: Detected in method blank

APPENDIX A

GEOPHYSICAL SURVEY REPORT

GEOPHYSICAL ENGINEERING SURVEY REPORT

PUBLIC SCHOOL PS X886

124 EAMES PLACE
BRONX, NEW YORK 10468

NOVA PROJECT NUMBER
16-0371

DATED
AUGUST 15, 2016

PREPARED FOR:
D&B Engineers and Architects, P.C.
330 Crossways Park Drive
Woodbury, New York 11797

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions

56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway, # 765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
www.nova-gsi.com

August 15, 2016

Maria Wright, P.E.
Senior Engineer
D&B Engineers and Architects, P.C.
330 Crossways Park Drive
Valley Stream, New York 11797
Direct: 516.364.9890 ext. 3060

Re: Geophysical Engineering Survey (GES) Report
Public School PS X886
124 Eames Place
Bronx, New York 10468

Dear Ms. Wright:

Nova Geophysical Services (NOVA) is pleased to provide findings of the geophysical engineering survey (GES) at the above referenced project site: PS X886: 124 Eames Place, Bronx, New York (the "Site"). Please see attached Site Location and Geophysical Survey maps for more details.

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a Geophysical engineering surveys (GES) consisting of a Ground Penetrating Radar (GPR) survey at the site. The purpose of this survey is to locate clear and mark proposed environmental boring areas on August 11th, 2016.

The equipment selected for this investigation was a Conquest HD 1000 MHz ground penetrating radar (GPR) shielded antenna and 3M DYNATL.

A GPR system consists of a radar control unit, control cable and a transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulses into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

GEOPHYSICAL METHODS

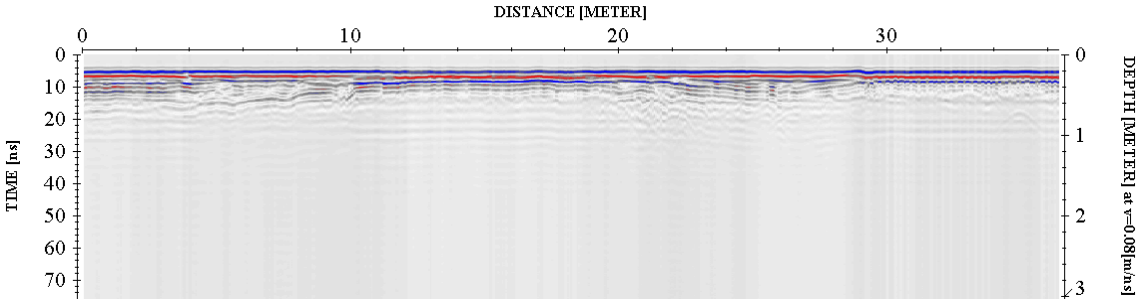
The project site was screened using the GPR to search the entire area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface.

GPR data profiles were collected for the areas of the Site specified by the client. The surveyed areas consisted of concrete and linoleum tiled surfaces.

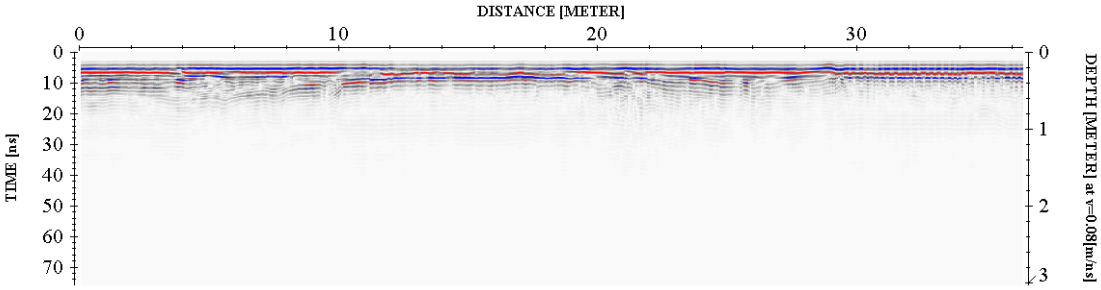
DATA PROCESSING

In order to improve the quality of the results and to better identify subsurface anomalies NOVA processed the collected data. The processes flow is briefly described at this section.

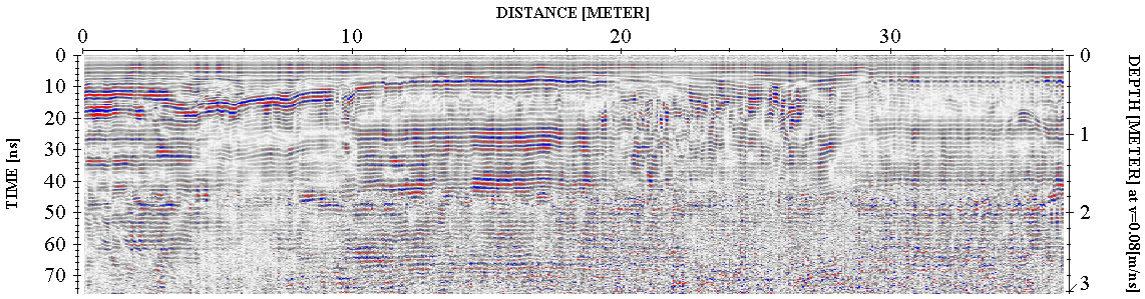
Step 1. Import raw RAMAC data to standard processing format



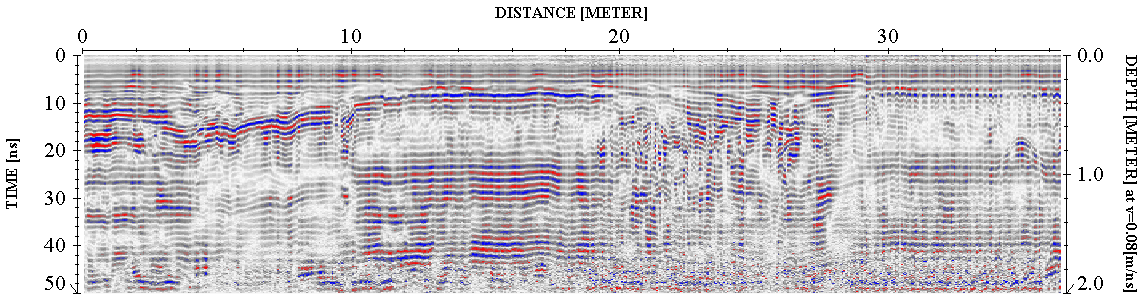
Step 2. Remove instrument noise *(dewow)*



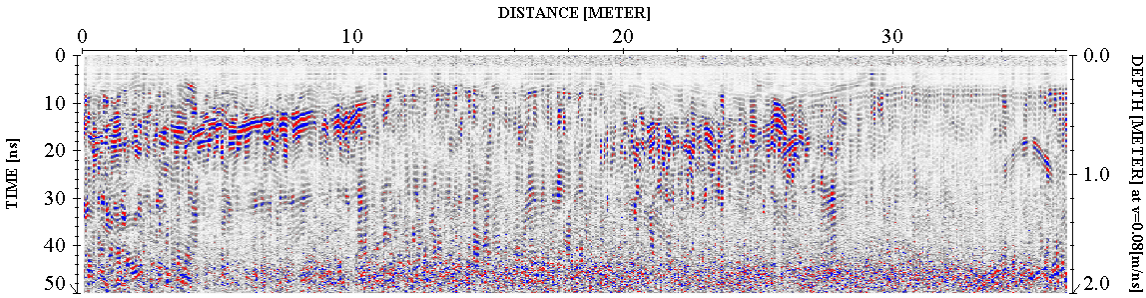
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and describes the subsurface anomalies more accurately.

PHYSICAL SETTINGS

Nova observed following physical conditions at the time of the survey:

The weather: Sunny

Temp: 86 Degrees (F).

Surface: Concrete and linoleum tiled surfaces

Geophysical Noise Level (GNL): Geophysical Noise Level (GNL) was medium high at the site. The noise was a result of the building materials located throughout.

RESULTS

The results of the geophysical engineering survey (GES) identified following at the project Site:

- GES identified reinforced concrete floor slab with rebar.
- NOVA cleared and marked all of the proposed environmental boring locations at the project site.
- Geophysical Survey Plan portrays the areas investigated during the geophysical survey.

If you have any questions please do not hesitate to contact the undersigned.
Sincerely,

NOVA Geophysical Services

Levent Eskicakit, P.G., E.P.
Project Engineer

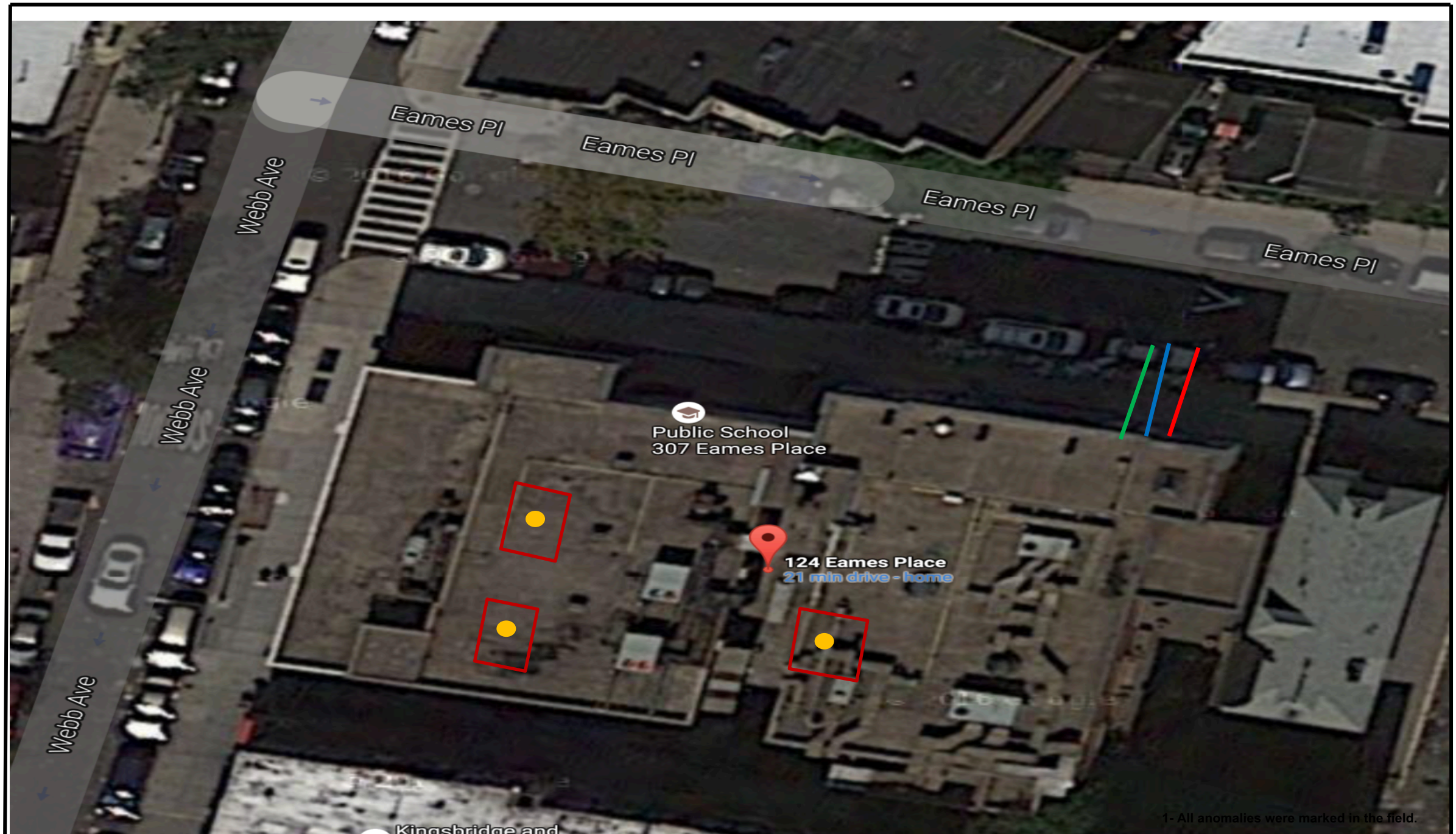
Attachments:
Figure 1 Site Location Map
Geophysical Survey Plan
Geophysical Images

FIGURE 1
SITE LOCATION MAP

NOVA
Geophysical Services
Subsurface Mapping Solutions
56-01 Marathon Pkwy, # 765, Douglaston, NY11362
(347) 556-7787 Fax (718) 261-1528
www.nova-gsi.com

SITE: **Public School**
124 Eames Place
Bronx, New York 10468

SCALE: See Map



NOVA
Geophysical Services
Subsurface Mapping Solutions
56-01 Marathon Parkway, PO Box 765
Douglaston, New York11362
Phone (347) 556-7787 * Fax (718) 261-1527
www.nova-gsi.com

GEOPHYSICAL SURVEY PLAN

SITE : **PS X886**
124 Eames Place
Bronx, New York 10468

CLIENT: **D&B Engineers and Architects, P.C.**
DATE: August 11, 2016
Scale: See Map

INFORMATION

- Survey Area
- Electrical Line
- Water Line
- Sewer Line
- Proposed Boring Areas

N

25 ft.

GEOPHYSICAL IMAGES

PS X886 Annex 86

124 Eames Place, Bronx,, New York

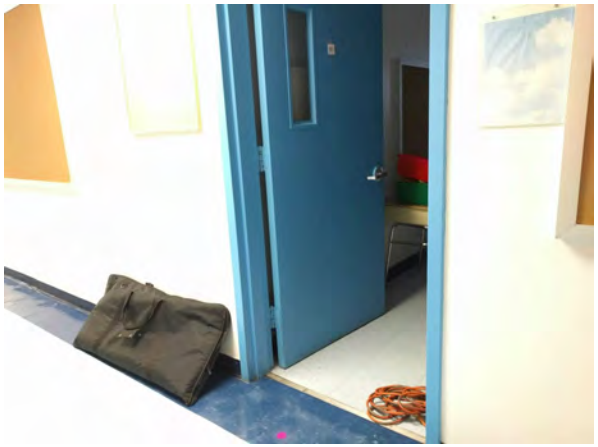
August 11, 2016

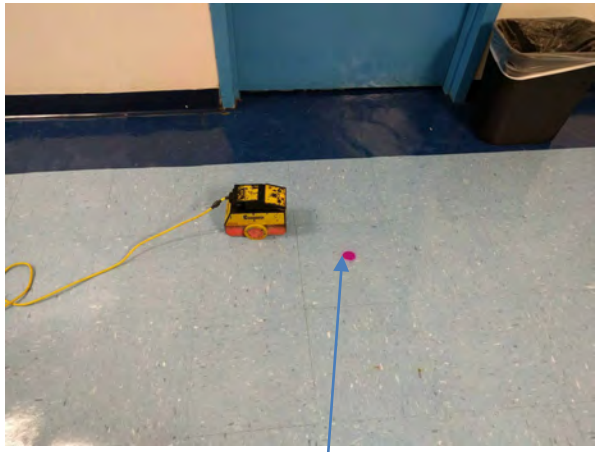
GEOPHYSICAL IMAGES

PS X886 Annex 86

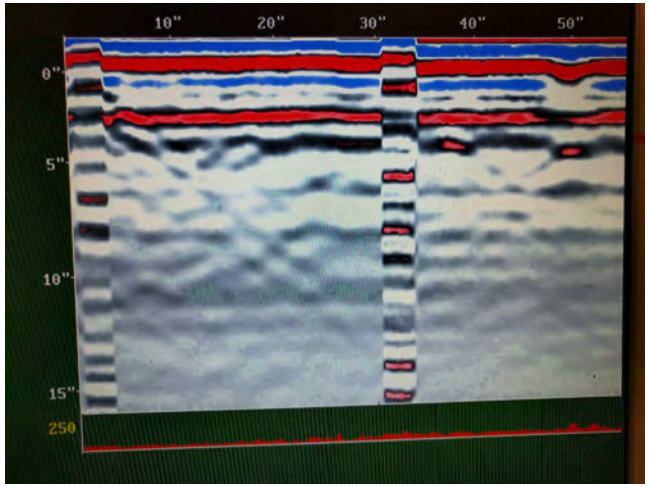
124 Eames Place, Bronx,, New York

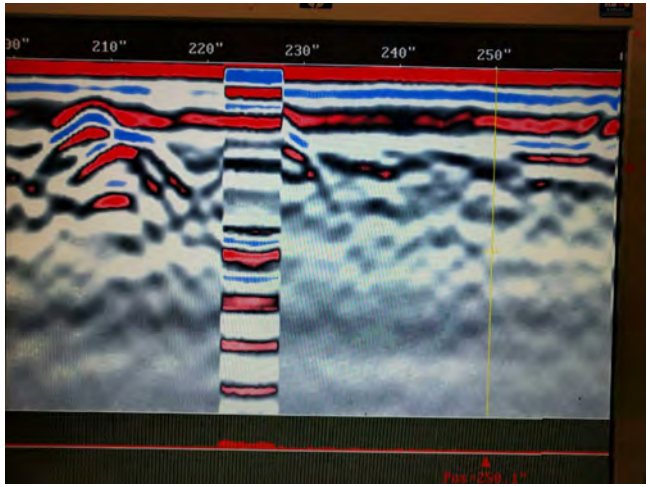
August 11, 2016





Proposed Boring Areas





APPENDIX B

ASBESTOS CLEARANCE REPORT

PRECISION ENVIRONMENTAL INC.

36-15A 23rd Street
Long Island City, NY11106
Tel: 718.383.2626 Fax: 718.383.7780
www.precision-enviro.com

August 16, 2016

Mr. Gianni DelDuca
Industrial &Environmental Hygiene Division
NYC School Construction Authority
30-30 Thomson Avenue
Long Island City, NY 11101

RE: Post Probe Survey
P.S. 86 Annex – Bronx (X886)
124 Eames Place, Bronx NY 10468
Service ID: 64798, SCA Project ID: 104997

Dear Mr. DelDuca:

Precision Environmental Inc. was retained by the New York City School Construction Authority as specified in the WA #: 801062 to investigate locations that will be impacted by the proposed activity:

- **Floor Probes - Environmental Due Diligence**

All accessible and representative materials were examined during the floor probes inspection as contained in the proposed probe location sketch by D&B Engineers and Architects, P.C.

The following table summarizes Precision's inspection results

P.S. 86 Annex – Bronx (X886) 124 Eames Place, Bronx NY 10468 Service ID: 64798, SCA Project ID: 104997				
Location	Material Description	No of Samples	Results	Comments
Ground Floor, Hallway Building addition	12 x 12 Black floor tiles/mastic	6	Non-ACM	
	Waterproof membrane under wood subfloor	3	ACM	
	Concrete subfloor	0	Non-Suspect	Waterproof membrane not observed under concrete slab
	Dirt	0	Non-Suspect	
Ground Floor, Hallway 1927 Building	12 x 12 light blue floor tile/mastic	0	Non-ACM	2007 AHERA Report
	Floor levelling compound	3	Non-ACM	
	Concrete subfloor	0	Non-Suspect	Waterproof membrane not observed under concrete slab
	Dirt	0	Non-Suspect	

Any suspect material not listed in the above table must be Assumed ACM.

Precision Environmental Inc. appreciates the opportunity to work with you. Should you have any questions or require additional information, feel free to contact me at (718) 383-2626.

Sincerely,
Precision Environmental Inc.

Patrick Ibeabuchi
NYC Asbestos Investigator

EMSL Analytical, Inc.
307 West 38th Street New York, NY 10018
Tel/Fax: (212) 290-0051 / (212) 290-0058
http://www.EMSL.com / manhattanlab@emsl.com

EMSL Order: 031624093
Customer ID: PCIS63
Customer PO:
Project ID:

Attention: Precision Environmental
36-15 A 23rd Street
2nd floor
Long Island City, NY 11106

Phone: (718) 383-2626
Fax: (718) 383-7780
Received Date: 08/12/2016 4:23 AM
Analysis Date: 08/12/2016
Collected Date: 08/11/2016

Project: 2181-16-0322/ NYC SCA/ P.S. 86 ANNEX/ IX886/ 801062/ 124 EAMES PLACE BRONX, NY 10468/ 64789/ 104997/ ENVIRONMENTAL DUE DILIGENCE/ GROUND FLOOR HALLWAYS

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID 01		**Description**	HALLWAY/ BUILDING ADDITION BY RM G26 - WATERPROOF MEMBRANE UNDER ROOF SUB- FLOOR SYSTEM		
031624093-0001		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Yellow	None	100.00% Other	**Inconclusive : <1.00% Chrysotile**
TEM NYS 198.4 NOB	08/12/2016				**Positive Stop (Not Analyzed)**
Sample ID 02		**Description**	HALLWAY/ BUILDING ADDITION BY RM G26 - WATERPROOF MEMBRANE UNDER ROOF SUB- FLOOR SYSTEM		
031624093-0002		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Black/ Yellow	None	98.90% Other	**1.10% Chrysotile**
TEM NYS 198.4 NOB	08/12/2016				**Positive Stop (Not Analyzed)**
Sample ID 03		**Description**	HALLWAY/ BUILDING ADDITION BY RM G26 - WATERPROOF MEMBRANE UNDER ROOF SUB- FLOOR SYSTEM		
031624093-0003		**Homogeneity**			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016				**Positive Stop (Not Analyzed)**
TEM NYS 198.4 NOB	08/12/2016				**Positive Stop (Not Analyzed)**
Sample ID 04		**Description**	HALLWAY/ ADDITION BUILDING G26 - 12X12 BLACK FLOOR TILE		
031624093-0004		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Black		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2016	Black		100.00% Other	**None Detected**
Sample ID 05		**Description**	BY RM G26 - 12X12 BLACK FLOOR TILE		
031624093-0005		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Black		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2016	Black		100.00% Other	**None Detected**

Initial report from: 08/12/2016 16:03:58

EMSL Analytical, Inc.
307 West 38th Street New York, NY 10018
Tel/Fax: (212) 290-0051 / (212) 290-0058
http://www.EMSL.com / manhattanlab@emsl.com

EMSL Order: 031624093
Customer ID: PCIS63
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID 06		**Description**	BY RM G27 - 12X12 BLACK FLOOR TILE		
031624093-0006		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Black		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2016	Black		100.00% Other	**None Detected**
Sample ID 07		**Description**	HALLWAY/ ADDITION BUILDING G26 - MASTIC ASSOCIATED WITH 12X12 BLACK FLOOR TILES		
031624093-0007		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Yellow		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2016	Yellow		100.00% Other	**None Detected**
Sample ID 08		**Description**	BY RM G26 - MASTIC ASSOCIATED WITH 12X12 BLACK FLOOR TILES		
031624093-0008		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Yellow		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2016	Yellow		100.00% Other	**None Detected**
Sample ID 09		**Description**	BY RM G27 - MASTIC ASSOCIATED WITH 12X12 BLACK FLOOR TILES		
031624093-0009		**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	08/12/2016	Yellow		100.00% Other	**Inconclusive: None Detected**
TEM NYS 198.4 NOB	08/12/2016	Yellow		100.00% Other	**None Detected**
Sample ID 10		**Description**	HALLWAY/ 1927 BUILDING G15 - FLOOR LEVELING COMPOUND		
031624093-0010		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable	08/12/2016	Red		30.00% Ca Carbonate 50.00% Non-fibrous (other) 20.00% Quartz	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID 11		**Description**	BY RM G10 - FLOOR LEVELING COMPOUND		
031624093-0011		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable	08/12/2016	Red		30.00% Ca Carbonate 45.00% Non-fibrous (other) 25.00% Quartz	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**

Initial report from: 08/12/2016 16:03:58

EMSL Analytical, Inc.
307 West 38th Street New York, NY 10018
Tel/Fax: (212) 290-0051 / (212) 290-0058
http://www.EMSL.com / manhattanlab@emsl.com

EMSL Order: 031624093
Customer ID: PCIS63
Customer PO:
Project ID:

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID 12		**Description**	BY RM G10 - FLOOR LEVELING COMPOUND		
031624093-0012		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable	08/12/2016	Brown/ Pink		45.00% Ca Carbonate 25.00% Non-fibrous (other) 30.00% Quartz	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**

Initial report from: 08/12/2016 16:03:58

EMSL Analytical, Inc.
307 West 38th Street New York, NY 10018
Tel/Fax: (212) 290-0051 / (212) 290-0058
http://www.EMSL.com / manhattanlab@emsl.com

EMSL Order:	031624093
Customer ID:	PCIS63
Customer PO:	
Project ID:	

Test Report:Asbestos Analysis of Bulk Material

Scope: Leica #6 Ser. 961374717AX0001 & Scope: JEOL / JEM-100CX II #03-04

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk Materials via NYS ELAP Approved Methods . The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:	8/12/2016	Sample Receipt Time:	4:23 AM
Analysis Completed Date:	8/12/2016	Analysis Completed Time:	1:49 PM

Analyst(s):

Emily Myint PLM NYS 198.1 Friable (1)

Ghaly Hemaya PLM NYS 198.1 Friable (2)

Jon Williams PLM NYS 198.6 NOB (8)

Yu Lin TEM NYS 198.4 NOB (6)

Samples reviewed and approved by:

James Hall, Laboratory Manager
or Other Approved Signatory

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non -asbestos containing.
All samples examined for the presence of vermiculite when analyzed via NYS 198.1.
-NYS Guidelines for Vermiculite containing samples are available at http ://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations . Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. New York, NY NYS ELAP 11506

Initial report from: 08/12/2016 16:03:58

OrderID: 031624093

PRECISION ENVIRONMENTAL INC.
38-15A 23rd Street, LIC, NY 11106
Tel: 718.383.2626, Fax: 718.383.7780

031624093

BULK SAMPLE DATA AND CHAIN OF CUSTODY

STOP AT FIRST POSITIVE +

TURNAROUND TIME
PLM ☐ 1 HRs ☐ 6 HRs ☐ 24 HRs — 12 HRS
PLM NOB ☐ 24 HRs — TEM NOB ☐ 24 HRs

CLIENT: NYCSCA	Building Name: P.S. 86 Annex	Building ID: X886	PEI Project No. 2181-16-0322
WA#: 801062 / Design No.	Project Address: 124 EAMES PLACE, Bronx NY 10468		Inspector: P. Ibeabuchi
Service ID: 64789 / Project ID: 104997	SCA Project Description: ENVIRONMENTAL DUE DILIGENCE	Ground Floor Hallways	Date: 09/11/16

BULK SAMPLE DATA

HOMOGENEOUS AREA No.	BULK SAMPLE ID/No.	MATERIAL DESCRIPTION	SYSTEM	SAMPLE LOCATION: FLOOR / SPACE ID	SAMPLE LOCATION: SAMPLE COORDINATES	QUANTITY	ASBESTOS CONTENT (%): PLM	NOBPLM	NOBTEM
1	01	Water proof membrane Under wood	M	G	Hallway/Building addition By Rm G26				
	02	Sub-floor system							
	03								
2	04	12x12 Black floor tile	M	G	Hallway/addition Building G26				
	05				By Rm. G26				
	06				By Rm G27				
3	07	Mastic associated with 12x12 Black floor tiles			Hallway/addition Building G26				
	08				By Rm G26				
	09				By Rm G27				

2016 AUG 12 AM 4:23
EMSL MANHATTAN LAB RECEIVED

CHAIN OF CUSTODY

RELINQUISHED BY:	RECEIVED BY:	DATE	TIME	METHOD OF SUBMITTAL
1 Patrick Ibeabuchi	Leah Ramani	8/12/16	4:22am	☐ By Hand ☐ Picked up ☐ Shipped via
2 8/11/16				☐ By Hand ☐ Picked up ☐ Shipped via
3 0421				☐ By Hand ☐ Picked up ☐ Shipped via

PRECISION'S LABORATORY INFORMATION

Precision Enviromental Analyzed by:	NVLAP: 200640-0 Date:	ELAP: 11764 Time:

SUBCONTRACTOR'S LABORATORY INFORMATION

NAME: Yu Lin 8/12/16 Analyzed by: [signature] 3:53PM	NVLAP: Date: 8/12/16	ELAP: Time: 2p

INSTRUCTIONS TO THE LABORATORY

Report Results to:	☐ Michael P.	☐ Andreas A.	☐ Office	☒ Patrick Ibeabuchi
Via Phone:	☐ 917.295.2600	☐ 917.642.2375	☐ 718.383.2626	☒ 551.580.2342
Via Email:	☒ info@precision-enviro.com		☒ pibeabuchi@precision-enviro.com	

☒ STOP at first POS.
☐ Other:

S:\Precision Environmental\SCA 2181\School\K-Brooklyn\K296 P.S 296 - Brooklyn\2181-16-0322\ALL FORMS & to fill\Bulk Sampling

OrderID: 031624093

PRECISION ENVIRONMENTAL INC.
36-15A 23rd Street, LIC, NY 11106
Tel: 718.383.2626 Fax: 718.383.7780

031624093

BULK SAMPLE DATA AND CHAIN OF CUSTODY

STOP AT FIRST POSITIVE +

TURNAROUND TIME
PLM ☒ 4 HRs ☐ 6 HRs ☐ 24 HRs
PLM NOB ☐ 24 HRs
TEM NOB ☐ 24 HRs

CLIENT: NYCSCA	Building Name: P.S 86 Annex	Building ID: 4866	PEI Project No: 2181-16-0222
WA#: 801062 / Design No.	Project Address: 124 Eames Place, Bronx NY 10468		Inspector: P. Ibeabuchi
Service ID: 64789 / Project ID: 104997	SCA Project Description: Environmental Due Diligence	Sampling Areas: Ground floor Hallway	Date: 8/11/16

BULK SAMPLE DATA

HOMOGENEOUS AREA No.	BULK SAMPLE ID/No.	MATERIAL DESCRIPTION	SYSTEM	SAMPLE LOCATION: FLOOR / SPACE ID	SAMPLE LOCATION: SAMPLE COORDINATES	QUANTITY	ASBESTOS CONTENT (%): PLM	NOBPLM	NOBTEM
4	10	Floor leveling compound	M	G	Hallway / 1927 Building / G15				
↓	11	↓	↓	↓	By Rm G10				
↓	12	↓	↓	↓	By Rm G10				
↓									

2016 AUG 12 AM 4:22
EMSL MANHATTAN LAB RECEIVED

CHAIN OF CUSTODY

RELINQUISHED BY:	RECEIVED BY:	DATE	TIME	METHOD OF SUBMITTAL
1 Patrick Ibeabuchi	[signature]	8/12/16	422am	☐ By Hand ☐ Picked up ☐ Shipped via
2				☐ By Hand ☐ Picked up ☐ Shipped via
3 0421				☐ By Hand ☐ Picked up ☐ Shipped via

PRECISION'S LABORATORY INFORMATION

Precision Enviromental Analyzed by:	NVLAP: 200640-0 Date:	ELAP: 11764 Time.

SUBCONTRACTOR'S LABORATORY INFORMATION

NAME: Yu Lin 8/12/16 Analyzed by: [signature] 3:53pm	NVLAP. Date: 8/12/16	ELAP. Time: [signature]
[signature]		

INSTRUCTIONS TO THE LABORATORY

Report Results to:	☐ Michael P.	☐ Andreas A.	☐ Office	☒ Patrick Ibeabuchi
Via Phone	☐ 917.295.2600	☐ 917.642.2375	☐ 718.383.2626	☒ 551.580.2342
Via Email:	☒ info@precision-enviro.com		☒ pibeabuchi@precision-enviro.com	

☒ STOP at first POS.
☐ Other:

S:\Precision Environmental\SCA 2181\School\K-Brooklyn\K296 P S 296 - Brooklyn\2181-16-0222\ALL FORMS auto fill\BulkSampling

APPENDIX C

LABORATORY ANALYTICAL DATA REPORTS

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

DATA FOR

VOLATILE ORGANICS

PROJECT NAME : SCA - 124 EAMES PLACE, BRONX, NY

D&B ENGINEERS AND ARCHITECTS, P.C.

330 Crossways Park Drive

Woodbury, NY - 11797

Phone No: 516-364-9890

ORDER ID : H4768

ATTENTION : Maria Wright

ACCREDITED IN ACCORDANCE WITH nelac

DoD ELAP

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

Date : 09/19/2016

Dear Maria Wright,

5 air samples for the **SCA - 124 Eames Place, Bronx, NY** project were received on **09/12/2016.** The analytical fax results for those samples requested for an expedited turn around time may be seen in this report. Please contact me if you have any questions or concerns regarding this report.

Regards,

Loreana Davi

Loreana@chemtech.net

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. : H4768

Client Contact Information	Bottle Order ID : **B1608124**	Courier : Chemtec Pickup	1 of 1 COCs
Client ID : **DVIR01** Project ID :	**SCA - 124 Eames Place, Bronx, NY**	Sampler Name(s) : Keith Robins	
Customer Name : **D&B Engineers and Architects, P.C.**	Project Manager **Maria wright**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **330 Crossways Park Drive**	Phone Number : **516-364-9890**		
	Fax Number : **5163649045**		
	Site Details:	Individual Certified	
City : **Woodbury**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **11797**	Standard : **15 business days** **OR**	Data Package Type : Category B	
Country :	Rush (Specify): 5 **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout	Can Cert ID	TO-15			Indoor/Ambient Air (Hold Analysis)	Soil Gas		
PS86A-IA1	9/10/16	0931 restart at 1255pm (B19)	1206pm Shut final	-30	-10			-30	-8.4	10587	10404	6 L	12.5	VL028515.D	✓			✓			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start				
Stop				

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments : * Started at 0931 when stopped at 1206 restarted at 1255 pm - shut down final at 6:11 pm (See project TO-15 analysis list). Provide detection limits of 0.25 ug/m3 for vinyl chloride, TCE, and carbon tetrachloride and detection limits of less than 1ug/m3 for all other compounds

Suspected Contamination: High Medium Low PID Readings: 0 ppb

Sampling site (State): New York * hold analysis until notified by Maria Wright at D&B office

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 8/31/16	Canisters Received by:	Date/Time:
Samples Relinquished by:	Date/Time: 9/12/16 1145	Received by:	Date/Time:
Relinquished by:	Date/Time: 9/12/16 1455	Received by:	Date/Time: 9/12 1450

B1608124 - 3

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. : H4768

Client Contact Information	Bottle Order ID : **B1608124**	Courier : Chemtech lab Pickup	1 of 1 COCs
Client ID : **DVIR01** Project ID :	**SCA - 124 Eames Place, Bronx, NY**	Sampler Name(s) : Keith Robins	Analysis / Matrix
Customer Name : **D&B Engineers and Architects, P.C.**	Project Manager **Maria wright**	AIR ANALYSIS CHAIN-OF-CUSTODY	
	Phone Number : **516-364-9890**		
Address : **330 Crossways Park Drive**	Fax Number : **5163649045**		
	Site Details:	Individual Certified	
City : **Woodbury**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **11797**	Standard : **15 business days** **OR**	Data Package Type : category B	
Country : New York	Rush (Specify): 5 **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
P586A-SSV-1	9/10/16	0930	1730	-29	-10.5			-30	-10.8	10485	10599	6 L	12.5	VL028500.D	✓					✓		

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start				
Stop				

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments : (See project TO-15 analysis list)

Suspected Contamination: High Medium Low

PID Readings: PID = 0.0 ppb

Sampling site (State): New York

Provide detection limits of 0.25 ug/m3 for vinyl chloride, TCE and carbon tetrachloride and a detection limit of less than 1 ug/m3 for all other compounds

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 8/31/16	Canisters Received by:	Date/Time:
Samples Relinquished by: Keith Robins	Date/Time: 9/13/16	Received by:	Date/Time:
Relinquished by:	Date/Time: 9/12/16 14:55	Received by:	Date/Time: 9/12 1450

B1608124 - 5

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. : H4768

Client Contact Information	Bottle Order ID : **B1608124**	Courier : Chemtech lab pickup	1 of 1 COCs
Client ID : **DVIR01** Project ID :	**SCA - 124 Eames Place, Bronx, NY**	Sampler Name(s) : Keith Robins	Analysis / Matrix
Customer Name : **D&B Engineers and Architects, P.C.**	Project Manager **Maria wright**	AIR ANALYSIS CHAIN-OF-CUSTODY	
	Phone Number : **516-364-9890**		
Address : **330 Crossways Park Drive**	Fax Number : **5163649045**	Individual Certified	
	Site Details:		
City : **Woodbury**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **11797**	Standard : **15 business days** **OR**	Data Package Type : Category B	
Country : United States	Rush (Specify): (5) **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout	Can Cert ID	TO-15				Indoor Ambient Air	Soil Gas		
B586A-IA2	9/10/16	0936	1736	>-30	-13			-30	-11.2	10535	10284	6 L	12.5	VL028646.D	✓				✓			

Hold Analysis

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start				
Stop				

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments : See project list for SCA TO-15 Analysis (Hold analysis until notified by Maria wright from the D+B office) Please provide detection limits of 0.25 ug/m3 for carbon tetrachloride, TCE and vinyl chloride, and a detection limit less than 1 ug/m3 for all other compounds

Suspected Contamination: High Medium Low PID Readings: 0.0 ppb

Sampling site (State): New York

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 8/31/16	Canisters Received by:	Date/Time:
Samples Relinquished by:	Date/Time: 9/12/16	Received by:	Date/Time:
Relinquished by:	Date/Time: 9/12/16 14:5	Received by:	Date/Time: 9/12 1480

B1608124 - 1

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. : H47168

Client Contact Information	Bottle Order ID : **B1608124**	Courier : Chemtech lab pickup	1 of 1 COCs
Client ID : **DVIR01** Project ID :	**SCA - 124 Eames Place, Bronx, NY**	Sampler Name(s) : Keith Robins	
Customer Name : **D&B Engineers and Architects, P.C.**	Project Manager **Maria wright**	AIR ANALYSIS CHAIN-OF-CUSTODY	
	Phone Number : **516-364-9890**		
Address : **330 Crossways Park Drive**	Fax Number : **5163649045**		
	Site Details:	Individual Certified	
City : **Woodbury**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **11797**	Standard : **15 business days** **OR**	Data Package Type : Category "B"	
Country : United States	Rush (Specify): 5 **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout	Can Cert ID	Analysis: TO-15	Matrix: Indoor/Ambinet Air	Matrix: Soil Gas
PS86A-SSV2	9/10/16	0934	1734	>-30	-12			-30	-11.2	10526	10442	6 L	12.5	VL028678.D	✓		✓

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start				
Stop				

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments : (See project list for TO-15 analysis for SCA)

Suspected Contamination: High Medium Low

PID Readings: PID = 0.0 ppb

Sampling site (State):

* Please provide detection limit of 0.25 ug/m³ for vinyl chloride, TCE and Carbon Tetrachloride and a detection limit of less than 1 ug/m³ for all other compounds

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 8/31/16	Canisters Received by:	Date/Time:
Samples Relinquished by: Keith Robins	Date/Time: 9/13/16 1:15pm	Received by:	Date/Time:
Relinquished by: Jordan Rivera	Date/Time: 9/12/16 14:50	Received by:	Date/Time: 9/12 1450

B1608124 - 4

CHEMTECH

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 89

CHEMTECH Project No. : H47768

Client Contact Information	Bottle Order ID : **B1608039**	Courier : Chemtech pickup	1 of 1 COCs
Client ID : **DVIR01** Project ID :	**SCA - 124 Eames Place, Bronx, NY**	Sampler Name(s) : Keith Palmer	Analysis / Matrix
Customer Name : **D&B Engineers and Architects, P.C.**	Project Manager **Maria wright**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **330 Crossways Park Drive**	Phone Number : **516-364-9890**		
	Fax Number : **5163649045**		
	Site Details:	Individual Certified	
City : **Woodbury**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **11797**	Standard : **15 business days** OR	Data Package Type : Category B	
Country : United States	Rush (Specify): 5 **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID	Can Size (L)	Flow Controller Readout	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
PS 86A-AA-3	9/10/16	0945	1745	-26	0			-30	-3.1	10563	~~10823~~ 10901 KSD 9/10/16	6 L	12.5	~~VL0268876.D~~ VL028594.D KSD 9/10/16	✓				✓			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start				
Stop				

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

** Submittal of this COC indicates approval of the analysis based on existing conditio

Please follow the instructions on the back of this CO

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low

PID Readings: 0.0 ppb

① See project TO-15 List for analysis ② TCE, carbon tetrachloride and vinyl chloride provide detection limits of 0.25 ug/m3 and all other compounds detected less than 1 ug/m3

Sampling site (State): New York

Quick Connector required :

Canisters Shiped by:	Date/Time:	Canisters Received by: Maria	Date/Time:		
Samples Relinquished by: Keith Palmer	Date/Time: 9/13/16 15 am	Received by:	Date/Time:		B1608039 - 4
Relinquished by:	Date/Time: 9/12/16	Received by:	Date/Time: 9/12 1450		

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	D&B Engineers and Architects, P.C.	Date Collected:	09/10/16
Project:	SCA - 124 Eames Place, Bronx, NY	Date Received:	09/12/16
Client Sample ID:	PS86A-SSV-1	SDG No.:	H4768
Lab Sample ID:	H4768-02	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL028782.D	1		09/13/16 15:51	VL091316

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS								
74-87-3	Chloromethane	0.6	1.24		0.04	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.03	0.08	U	0.05	0.08	0.08	ug/m3
75-00-3	Chloroethane	0.1	0.26	U	0.08	0.26	1.32	ug/m3
75-35-4	1,1-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.1	0.36	U	0.07	0.36	1.8	ug/m3
75-09-2	Methylene Chloride	1.7	5.91	B	0.07	0.35	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.1	0.4	U	0.04	0.4	2.02	ug/m3
56-23-5	Carbon Tetrachloride	0.07	0.44		0.13	0.19	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
71-55-6	1,1,1-Trichloroethane	0.03	0.16	U	0.05	0.16	0.16	ug/m3
71-43-2	Benzene	0.22	0.7	J	0.06	0.32	1.6	ug/m3
107-06-2	1,2-Dichloroethane	0.1	0.4	U	0.08	0.4	2.02	ug/m3
79-01-6	Trichloroethene	0.03	0.16		0.11	0.16	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.1	0.46	U	0.42	0.46	2.31	ug/m3
108-88-3	Toluene	1.1	4.15		0.04	0.38	1.88	ug/m3
127-18-4	Tetrachloroethene	0.06	0.41		0.14	0.2	0.2	ug/m3
108-90-7	Chlorobenzene	0.1	0.46	U	0.09	0.46	2.3	ug/m3
100-41-4	Ethyl Benzene	0.16	0.69	J	0.09	0.43	2.17	ug/m3
179601-23-1	m/p-Xylene	0.85	3.69	J	0.13	0.87	4.34	ug/m3
95-47-6	o-Xylene	0.29	1.26	J	0.09	0.43	2.17	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.13	0.64	J	0.1	0.49	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.43	2.11	J	0.1	0.49	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.1	0.6	U	0.12	0.6	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.1	0.6	U	0.12	0.6	3.01	ug/m3
91-20-3	Naphthalene	0.19	1	J	0.21	0.52	2.62	ug/m3
SURROGATES								
460-00-4	1-Bromo-4-Fluorobenzene	10.2			65 - 135		102%	SPK: 10
INTERNAL STANDARDS								
74-97-5	Bromochloromethane	1162230		6.02				
540-36-3	1,4-Difluorobenzene	3150440		7.54				
3114-55-4	Chlorobenzene-d5	2953340		12.48				

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	D&B Engineers and Architects, P.C.	Date Collected:	09/10/16
Project:	SCA - 124 Eames Place, Bronx, NY	Date Received:	09/12/16
Client Sample ID:	PS86A-SSV-1	SDG No.:	H4768
Lab Sample ID:	H4768-02	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL028782.D	1		09/13/16 15:51	VL091316

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	D&B Engineers and Architects, P.C.	Date Collected:	09/10/16
Project:	SCA - 124 Eames Place, Bronx, NY	Date Received:	09/12/16
Client Sample ID:	PS86A-SSV-2	SDG No.:	H4768
Lab Sample ID:	H4768-04	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL028785.D	1		09/13/16 17:54	VL091316

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS								
74-87-3	Chloromethane	0.18	0.37	J	0.04	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.03	0.08	U	0.05	0.08	0.08	ug/m3
75-00-3	Chloroethane	0.5	1.32		0.08	0.26	1.32	ug/m3
75-35-4	1,1-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.1	0.36	U	0.07	0.36	1.8	ug/m3
75-09-2	Methylene Chloride	0.38	1.32	JB	0.07	0.35	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.1	0.4	U	0.04	0.4	2.02	ug/m3
56-23-5	Carbon Tetrachloride	0.06	0.38		0.13	0.19	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
71-55-6	1,1,1-Trichloroethane	0.03	0.16	U	0.05	0.16	0.16	ug/m3
71-43-2	Benzene	2.6	8.31		0.06	0.32	1.6	ug/m3
107-06-2	1,2-Dichloroethane	0.1	0.4	U	0.08	0.4	2.02	ug/m3
79-01-6	Trichloroethene	0.1	0.54		0.11	0.16	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.1	0.46	U	0.42	0.46	2.31	ug/m3
108-88-3	Toluene	2.8	10.6		0.04	0.38	1.88	ug/m3
127-18-4	Tetrachloroethene	0.3	2.03		0.14	0.2	0.2	ug/m3
108-90-7	Chlorobenzene	0.1	0.46	U	0.09	0.46	2.3	ug/m3
100-41-4	Ethyl Benzene	0.95	4.13		0.09	0.43	2.17	ug/m3
179601-23-1	m/p-Xylene	1.7	7.38		0.13	0.87	4.34	ug/m3
95-47-6	o-Xylene	1.2	5.21		0.09	0.43	2.17	ug/m3
108-67-8	1,3,5-Trimethylbenzene	1.4	6.88		0.1	0.49	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	1.5	7.37		0.1	0.49	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.1	0.6	U	0.12	0.6	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.1	0.6	U	0.12	0.6	3.01	ug/m3
91-20-3	Naphthalene	2.2	11.5		0.21	0.52	2.62	ug/m3
SURROGATES								
460-00-4	1-Bromo-4-Fluorobenzene	11.8			65 - 135		118%	SPK: 10
INTERNAL STANDARDS								
74-97-5	Bromochloromethane	1272790		6.02				
540-36-3	1,4-Difluorobenzene	3388950		7.55				
3114-55-4	Chlorobenzene-d5	3147150		12.48				

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	D&B Engineers and Architects, P.C.	Date Collected:	09/10/16
Project:	SCA - 124 Eames Place, Bronx, NY	Date Received:	09/12/16
Client Sample ID:	PS86A-SSV-2	SDG No.:	H4768
Lab Sample ID:	H4768-04	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL028785.D	1		09/13/16 17:54	VL091316

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	D&B Engineers and Architects, P.C.	Date Collected:	09/10/16
Project:	SCA - 124 Eames Place, Bronx, NY	Date Received:	09/12/16
Client Sample ID:	PS86A-AA-3	SDG No.:	H4768
Lab Sample ID:	H4768-05	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL028787.D	1		09/13/16 19:15	VL091316

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS								
74-87-3	Chloromethane	0.62	1.28		0.04	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.03	0.08	U	0.05	0.08	0.08	ug/m3
75-00-3	Chloroethane	0.1	0.26	U	0.08	0.26	1.32	ug/m3
75-35-4	1,1-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.1	0.36	U	0.07	0.36	1.8	ug/m3
75-09-2	Methylene Chloride	0.81	2.81	B	0.07	0.35	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.1	0.4	U	0.04	0.4	2.02	ug/m3
56-23-5	Carbon Tetrachloride	0.06	0.38		0.13	0.19	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.1	0.4	U	0.08	0.4	1.98	ug/m3
71-55-6	1,1,1-Trichloroethane	0.03	0.16	U	0.05	0.16	0.16	ug/m3
71-43-2	Benzene	0.2	0.64	J	0.06	0.32	1.6	ug/m3
107-06-2	1,2-Dichloroethane	0.1	0.4	U	0.08	0.4	2.02	ug/m3
79-01-6	Trichloroethene	0.04	0.21		0.11	0.16	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.1	0.46	U	0.42	0.46	2.31	ug/m3
108-88-3	Toluene	1.2	4.52		0.04	0.38	1.88	ug/m3
127-18-4	Tetrachloroethene	0.07	0.47		0.14	0.2	0.2	ug/m3
108-90-7	Chlorobenzene	0.1	0.46	U	0.09	0.46	2.3	ug/m3
100-41-4	Ethyl Benzene	0.25	1.09	J	0.09	0.43	2.17	ug/m3
179601-23-1	m/p-Xylene	1.4	6.08		0.13	0.87	4.34	ug/m3
95-47-6	o-Xylene	0.56	2.43		0.09	0.43	2.17	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.17	0.84	J	0.1	0.49	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.48	2.36	J	0.1	0.49	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.1	0.6	U	0.12	0.6	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.1	0.6	U	0.12	0.6	3.01	ug/m3
91-20-3	Naphthalene	0.1	0.52	U	0.21	0.52	2.62	ug/m3
SURROGATES								
460-00-4	1-Bromo-4-Fluorobenzene	10.3			65 - 135		103%	SPK: 10
INTERNAL STANDARDS								
74-97-5	Bromochloromethane	1347070		6.01				
540-36-3	1,4-Difluorobenzene	3351760		7.54				
3114-55-4	Chlorobenzene-d5	3062760		12.48				

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	D&B Engineers and Architects, P.C.	Date Collected:	09/10/16
Project:	SCA - 124 Eames Place, Bronx, NY	Date Received:	09/12/16
Client Sample ID:	PS86A-AA-3	SDG No.:	H4768
Lab Sample ID:	H4768-05	Matrix:	Air
Analytical Method:	TO-15	Test:	VOCMS Group2
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL028787.D	1		09/13/16 19:15	VL091316

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOD	LOQ / CRQL	Units

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

APPENDIX D

LABORATORY CERTIFICATION

NEW YORK STATE OF OPPORTUNITY. | Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

LAB ID: 11376

April 01, 2016

MR. DIVYAJIT MEHTA
CHEMTECH
284 SHEFFIELD STREET
MOUNTAINSIDE, NJ 07092

Certificate Expiration Date:
April 01, 2017

Dear Mr. Mehta,

Enclosed are certificate(s) of approval issued to your environmental laboratory for the current permit year. The certificate(s) supersede(s) any previously issued one(s) and is(are) in effect through the expiration date listed. Please carefully examine the certificate(s) to insure that the categories, subcategories, analytes, and methods for which your laboratory is approved are correct. In addition, verify that your laboratory's name, address, lead technical director, and identification number are accurate.

Pursuant to NYCRR Subpart 55-2.2, original certificates must be posted conspicuously in the laboratory and copies shall be made available to any client of the laboratory upon request.

Pursuant to NYCRR Subpart 55-2.6, any misrepresentation of the fields of accreditation (category - method - analyte) for which your laboratory is approved may result in denial, suspension, or revocation of your certification. Any use of the Environmental Laboratory Approval Program (ELAP) or National Environmental Laboratory Accreditation Program (NELAP) name, reference to the laboratory's approval status, and/or using the NELAP logo in any catalogs, advertising, business solicitations, proposals, quotations, laboratory analytical reports, or other materials must include the laboratory's ELAP identification number and distinguish between testing for which the laboratory is approved and testing for which the laboratory is not approved.

If you have any questions, please contact ELAP at the New York State Department of Health (NYS DOH), Wadsworth Center, PO Box 509, Albany NY, 12201-0509; by phone at (518) 485-5570; by facsimile at (518) 485-5568; and by email at elap@health.ny.gov.

Sincerely,

Michael P. Ryan, M.T. (ASCP), Ph.D.
Director, Division of Laboratory Quality Certification
Environmental Laboratory Approval Program

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2017
Issued April 01, 2016

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. DIVYAJIT MEHTA
CHEMTECH
284 SHEFFIELD STREET
MOUNTAINSIDE, NJ 07092

NY Lab Id No: 11376

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Disinfection By-products	
Bromide	EPA 300.0 Rev. 2.1
Chlorate	EPA 300.0 Rev. 2.1
Fuel Additives	
Methyl tert-butyl ether	EPA 524.2
Naphthalene	EPA 524.2
Metals I	
Arsenic, Total	EPA 200.8 Rev. 5.4
Barium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Cadmium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Chromium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Copper, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Iron, Total	EPA 200.7 Rev. 4.4
	SM 18-22 3120B (-99)
Lead, Total	EPA 200.8 Rev. 5.4
Manganese, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Mercury, Total	EPA 245.1 Rev. 3.0
Selenium, Total	EPA 200.8 Rev. 5.4
Silver, Total	EPA 200.7 Rev. 4.4
	SM 18-22 3120B (-99)
	EPA 200.8 Rev. 5.4
Metals I	
Zinc, Total	EPA 200.7 Rev. 4.4
	SM 18-22 3120B (-99)
	EPA 200.8 Rev. 5.4
Metals II	
Aluminum, Total	EPA 200.7 Rev. 4.4
	SM 18-22 3120B (-99)
	EPA 200.8 Rev. 5.4
Antimony, Total	EPA 200.8 Rev. 5.4
Beryllium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Nickel, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
Thallium, Total	EPA 200.8 Rev. 5.4
Metals III	
Calcium, Total	EPA 200.7 Rev. 4.4
	SM 18-22 3120B (-99)
Magnesium, Total	EPA 200.7 Rev. 4.4
Sodium, Total	EPA 200.7 Rev. 4.4
Microextractibles	
1,2-Dibromo-3-chloropropane	EPA 504.1
1,2-Dibromoethane	EPA 504.1
Miscellaneous	
Methyl iodide	EPA 524.2
Odor	SM 18-22 2150B (-97)

Serial No.: 54232

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2017
Issued April 01, 2016

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. DIVYAJIT MEHTA
CHEMTECH
284 SHEFFIELD STREET
MOUNTAINSIDE, NJ 07092

NY Lab Id No: 11376

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Miscellaneous

Organic Carbon, Total	SM 21-22 5310B (-00)
Surfactant (MBAS)	SM 18-22 5540C (-00)
Turbidity	SM 18-22 2130 B (-01)
	EPA 180.1 Rev. 2.0

Non-Metals

Alkalinity	SM 18-22 2320B (-97)
Calcium Hardness	EPA 200.7 Rev. 4.4
Chloride	EPA 300.0 Rev. 2.1
Color	SM 18-22 2120B (-01)
Fluoride, Total	EPA 300.0 Rev. 2.1
Nitrate (as N)	EPA 300.0 Rev. 2.1
Nitrite (as N)	EPA 300.0 Rev. 2.1
Orthophosphate (as P)	EPA 300.0 Rev. 2.1
	SM 18-22 4500-P E (-99)
Solids, Total Dissolved	SM 18-22 2540C (-97)
Specific Conductance	SM 18-22 2510B (-97)
Sulfate (as SO4)	EPA 300.0 Rev. 2.1
	SM 18-22 4500-SO4 E (-97)

Trihalomethanes

Bromodichloromethane	EPA 524.2
Bromoform	EPA 524.2
Chloroform	EPA 524.2
Dibromochloromethane	EPA 524.2
Total Trihalomethanes	EPA 524.2

Volatile Aromatics

1,2,3-Trichlorobenzene	EPA 524.2
1,2,4-Trichlorobenzene	EPA 524.2
1,2,4-Trimethylbenzene	EPA 524.2
1,2-Dichlorobenzene	EPA 524.2
1,3,5-Trimethylbenzene	EPA 524.2
1,3-Dichlorobenzene	EPA 524.2
1,4-Dichlorobenzene	EPA 524.2
2-Chlorotoluene	EPA 524.2
4-Chlorotoluene	EPA 524.2
Benzene	EPA 524.2
Bromobenzene	EPA 524.2
Chlorobenzene	EPA 524.2
Ethyl benzene	EPA 524.2
Hexachlorobutadiene	EPA 524.2
Isopropylbenzene	EPA 524.2
n-Butylbenzene	EPA 524.2
n-Propylbenzene	EPA 524.2
p-Isopropyltoluene (P-Cymene)	EPA 524.2
sec-Butylbenzene	EPA 524.2
Styrene	EPA 524.2
tert-Butylbenzene	EPA 524.2
Toluene	EPA 524.2
Total Xylenes	EPA 524.2

Volatile Halocarbons

1,1,1,2-Tetrachloroethane	EPA 524.2

Serial No.: 54232

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.