PHASE II ENVIRONMENTAL SITE INVESTIGATION REPORT

for

2401 Third Avenue
Bronx, New York

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1.0 INTRODUCTION

Langan Engineering, Environmental, Surveying & Landscape Architecture, D.P.C. (Langan) prepared this Phase II Environmental Site Investigation (ESI) Report for the property located at 2401 Third Avenue (Block 2319, Lot 2) in the Mott Haven section of the Bronx, New York ("Subject Property"). The purpose of the investigation was to evaluate Recognized Environmental Conditions (RECs) identified in the August 2014 Phase I Environmental Site Assessment (ESA), which was performed concurrently with this Phase II ESI. The Phase II ESI was implemented between July 31 and August 1, 2014 in accordance with the proposal dated July 1, 2014. This investigation included a geophysical survey and soil, groundwater, and soil vapor sampling and analysis.

The Subject Property has an "E" designation for air, noise, and hazardous materials as a result of the Port Morris/Bruckner Boulevard Rezoning (CEQR # 05DCP005X). The "E" designation is to ensure proper investigation and remediation, as required, of the soil, soil vapor and groundwater and noise mitigation are implemented during future development plans. The New York City Office of Environmental Remediation (OER) overseas the implementation of the "E" Designation process. Note that additional sampling will likely be required to satisfy the "E" Designation and to obtain Department of Buildings (DOB) permits.

2.0 BACKGROUND

2.1 Site Location and Description

The Subject Property (Block 2319, Lot 2) is located at 2401 Third Avenue (Block 2319, Lot 2) in the Mott Haven section of the Bronx, New York and is comprised of an approximate 67,000-square-foot irregularly shaped lot and contains an approximate 20,000-square-foot one-story building (no basement); asphalt-, concrete-, and cobblestone-paved exterior driving/storage areas; an approximate 10,500-square-foot private parking lot, and sparsely-vegetated areas. The Subject Property is bordered to the northwest and northeast by commercial properties, to the southeast by the Third Avenue Bridge, and to the southwest by the Harlem River. A Site Location Map is included as Figure 1.

Global Energy Efficiency, an energy management company located approximately 550 feet east of the Subject Property (at 14 Bruckner Boulevard) operates the private parking lot at the southeast corner of the Subject Property. A shoring, scaffolding, and underpinning contractor (Richard C Mugler Co., Inc. [Mugler Inc.]), operates the remainder of the Subject Property. Mugler Inc. uses the Subject Property for equipment fabrication, storage, truck loading/unloading, and equipment repairs. According to the United States Geological Survey (USGS) Central Park Quadrangle 7.5-minute Series Topographic Maps, the Subject Property sits at an elevation of approximately 9 feet above mean sea level (msl) and topography in the immediate area of the Subject Property is generally flat.

2.2 Previous Environmental Reports

A Phase I ESA report, prepared by Langan in August 2014 is summarized below and provided in Appendix A:

The Phase I ESA identified the following RECs:

REC 1 – Current and Historical Manufacturing and Industrial Use

The Subject Property was historically used for manufacturing purposes since at least 1891. Historical operators include; J.L. Mott Iron Works (1891–1922), Hydraulic Steel Company (1922–1935), General Builders Supply Corporation (1935–1968), Brill Equipment Company (1949–1956), US Gear Manufacturing Company (1965–1971), Ohio Gasket Manufacturing Corporation (1971), and Mugler Inc. (1965–present). Inadvertent releases of solvents, petroleum products, metals, polychlorinated biphenyls (PCB) and/or other chemicals used during manufacturing operations may have adversely impacted soil, groundwater, building components and/or soil vapor. The Subject Property is presently operated by Mugler, Inc. for

shoring equipment fabrication, storage, truck loading/unloading, and equipment repairs. As such, there are typical tools, maintenance/repair materials, and miscellaneous equipment used and stored throughout. Discoloration and staining were apparent throughout the interior of the building, suggesting incidental releases of petroleum products during truck maintenance, and the concrete slab was compromised in several areas. Because fractures in the slab provide a conduit for spilled motor oils and/or petroleum products to impact subsurface conditions, current use by Mugler, Inc. constitutes a REC.

REC 2 – On-Site Petroleum Bulk Storage

The following historical underground storage tanks (USTs) were identified:

- One 550-gallon gasoline UST, located outside the southeast corner of the building, was reportedly closed-in place circa 1999 (see Figure 2).
- An area of patched concrete and an apparent abandoned fill port southeast of the building, which is suspected to be associated with another decommissioned UST, was identified during the site reconnaissance.
- One 1,550-gallone gasoline UST was identified on the 1935 through 1946 Sanborn maps.

Based on the known and suspected presence of historic tanks and lack of any documentation of tank closure, the historical USTs are a REC.

REC 3 – Current and Historical Use of Surrounding Properties

Current and historical use of properties surrounding the Subject Property include a private garage (1946–1951), lubricating oils storage (1935–1983), two chemical corporations (1935–1947), a paint manufacturer (1951), a coal yard (1935–1951), an auto building (1908–1947), an auto house (1935–1944), a private garage (1935–1944), a printing facility (1935–1947), and several auto repair shops (2005–2012). In addition, an active New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) site was identified approximately 660 feet northeast (up-gradient) of the Subject Property. Based on investigations conducted to date, the primary contaminants of concern in soil and groundwater are petroleum related compounds. No information was provided with respect to the off-Site migration of contaminants; however, the Environmental Database Report (EDR) report indicates that the potential exists for off-Site migration of site-related contaminants in soil vapor. Potential petroleum and solvent releases associated with the historical surrounding property uses may have adversely impacted groundwater and/or soil vapor at the Subject Property and is considered a REC.

3.0 FIELD INVESTIGATION

Langan implemented the field investigation between July 31 and August 1, 2014. The scope of work for this investigation consisted of the following:

- Completion of a geophysical investigation;
- Completion of seven soil borings and collection of 14 soil samples;
- Installation and sampling of six temporary monitoring wells; and
- Installation and sampling of six soil vapor points.

The results of the geophysical survey are provided in Section 3.1. Soil, groundwater, and soil vapor sampling procedures are discussed in Sections 3.2, 3.3, and 3.4, respectively. The results of the sampling are discussed in section 4. A summary of the environmental samples laboratory analytical data is provided in Tables 1 through 3 and all analytical results are shown on Figures 3 through 5. All samples were analyzed by a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory.

3.1 Geophysical Survey

The geophysical survey was completed by Nova Geophysical Services (Nova) of Douglaston, New York, using electromagnetic surveying equipment and ground penetrating radar (GPR). The purpose of the geophysical survey was to complete utility markouts at the proposed test boring locations as well as to attempt to locate subsurface structures identified in previous reports (USTs and oil/water separator). The geophysical report and associated images and map are provided as Appendix B.

3.2 Soil Investigation

Seven soil borings (SB-1 to SB-7) were installed by Aquifer Drilling and Testing, Inc. (ADT) of Mineola, New York under the supervision of a Langan field engineer on July 31 and August 1, 2014. The soil borings were completed using a track-mounted GeoprobeTM 6610DT direct-push drill rig equipped with a dual-tube sampling system to prevent the collapse of sidewall material as the borings are advanced to collect a core representative of the depth interval advanced. Soil samples were collected continuously into macrocore barrels lined with 5-foot dedicated acetate sleeves. Extracted soil was screened with a photoionization detector (PID) equipped with a 10.6 electron volt (eV) lamp, inspected for visual and olfactory evidence of contamination, and classified by Langan field staff. Groundwater was generally observed to be 5- to 7-feet below the current grade and soil borings were advanced to an average depth of 13 feet below grade surface (ft bgs). Soil boring logs are provided as Appendix C.

Two discrete (grab) soil samples were collected at each boring for laboratory analysis. At each boring location samples were collected at points of highest impact through field observations and PID readings, and just above the groundwater interface. All soil samples were submitted to York Analytical Laboratories of Stratford, Connecticut (York Laboratories) for analysis of Part 375 List of volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), metals, pesticides, and PCBs.

3.3 Groundwater Investigation

Six of the seven soil borings (SB-1 though SB-6) were each converted into temporary monitoring wells to assess groundwater conditions on the Subject Property. Monitoring wells were constructed of one-inch Schedule 40 PVC pipe with 0.010-inch slotted well screen across the groundwater interface and quartz filtration sand as the primarily filter pack. A one-foot annular seal of hydrated bentonite was installed above the primary filter pack. The annulus around the solid PVC pipe was filled with drill cuttings up to a cement-bentonite surface seal. New and existing monitoring wells were developed with a 12V submersible pump and dedicated polyethylene tubing until the purged water was visually clear. Well construction logs are provided in Appendix D.

One groundwater sample was collected from each monitoring well in accordance with NYSDEC DER-10 and USEPA's *Low Flow Purging and Sampling Procedures for the Collection of Groundwater Samples from Monitoring Wells*. The groundwater samples were collected approximately 36 hours after the monitoring wells were installed using a peristaltic pump and dedicated tubing. Before a groundwater sample was collected, the well was gauged and then continuously purged until groundwater quality parameters (pH, conductivity, turbidity, dissolved oxygen, temperature, and oxidation-reduction potential) stabilized, to the extent practicable, in accordance with the USEPA Low Flow Procedures. Stabilization is achieved when three consecutive readings of all parameters are within the limits specified in the USEPA Low Flow Procedures. A multi-parameter water quality system (Horiba U-52) was used to monitor the groundwater quality parameters during sampling. Well sampling logs are provided in Appendix E. All groundwater samples were submitted to York Laboratories for analysis of Part 375 List of VOC, SVOCs, metals, pesticides, and PCBs.

3.3 Soil Vapor Investigation

The soil vapor investigation included installation of six soil vapor points (SV-1 through SV-6) to evaluate the presence of volatile constituents in the subsurface. The vapor points were installed using a Geoprobe 6610 drill rig and hand tools were used to create a 2-inch diameter holes to approximately 3 ft bgs. A new, dedicated stainless-steel screen implant (3/8-inch in

diameter, and approximately 6 inches in length) was threaded to teflon tubing and lowered into the bottom of the hole. Approximately 1 ft of sand (Morie #1) filter pack was installed around the screen implant by pouring the material into the annulus. The remaining annular space was backfilled to grade with hydrated bentonite. Soil vapor logs are included in Appendix F.

Samples were collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH October 2006). Following soil vapor sample point construction, a MultiRAE multi-gas monitor (which pumps air at approximately 0.2 liters per minute) was attached to the Teflon tubing and a minimum of three times the tubing and screen setup volume was purged. The purged soil vapor was also monitored for VOCs and the value was recorded. As a quality assurance/quality control (QA/QC) measure, an inert tracer gas (helium) test was completed to document that the soil vapor sampling points were properly sealed, thereby preventing subsurface infiltration of ambient air.

Six soil vapor samples were collected into laboratory-cleaned and certified 6-liter stainless steel summa canisters with regulators that were supplied by York Laboratories. Each Summa canister arrived from the lab with approximate vacuums of 28 to 33 inches of mercury and sampling times ranged from 55 minutes to 85 minutes. The samples were submitted to York Laboratories for analysis of VOCs via EPA Method TO-15. Boring logs for each soil vapor sampling point are provided as Appendix C. Soil vapor sampling log sheets are provided as Appendix F.

4.0 OBSERVATIONS AND RESULTS

4.1 Geophysical Survey

Based on the results of the geophysical survey, two major anomalies were located along the southeast corner of the Subject Property Building. Based on their reflection rates and their proximities, these anomalies are indicative of USTs located approximately 2 to 3 ft bgs. Another anomaly area consistent with disturbed soil was located along the western edge of the Subject Property. The anomaly areas identified during the geophysical survey are consistent with the potential UST locations identified during the Phase I ESA (See Figure 2).

4.2 Subsurface Observations

The stratigraphy underlying the site comprises a surficial layer of historic fill material overlying native fine- to coarse-grained sandy soil and silty soil. The surficial historic fill material extends from ground surface to approximately 5 to 13 feet bgs and is composed of varying amounts of sand, silt, gravel, coal, brick, organics, concrete, and asphalt fragments. Bedrock was not

encountered during this investigation; however, based on USGS reports, bedrock is presumed to be at a depth of approximately 50 feet bgs.

One of the seven soil borings (SB-3) was installed next to suspected 550-gallon gasoline underground storage tank that was reportedly decommissioned in 1999 (see Figure 2). Petroleum-like odors and PID readings (up to 700 parts per million [ppm]) were observed in the soil boring at depths of approximately 8 to 9 ft bgs. To a lesser degree, olfactory evidence of petroleum-like odors were also observed within the fill material in borings SB-1, SB-2, SB-5, SB-6, and SB-7 (with PID reading up to 18.0 ppm). These odors are likely attributed to historic fill material and are regarded as background concentrations and considered as characteristic of properties in the urban environment. Soil boring logs are provided as Appendix C.

The approximate depth to groundwater is estimated at 5 to 7 ft bgs. Groundwater at the Subject Property is expected to flow to the southwest towards the Harlem River, which is located adjacent and to the southwest of the Subject Property. Potable water is provided to the Subject Property by the City of New York and is derived from surface impoundments in the Croton, Catskill, and Delaware watersheds. No free product was identifed during this Phase II ESI; however, a petroleum-like odor was detected during groundwater purging and sampling activities at SB-3 (MW).

The soil vapor investigation consisted of six soil vapor points, and each location was screened with a PID. During purging of the soil vapor points, PID readings ranged from 6.7 ppm to 32.3 ppm, with the highest PID reading recorded at SV-6.

4.3 Analytical Results

This section summarizes the soil, groundwater, and soil vapor sample results generated by this Phase II ESI. No previous environmental subsurface investigation reports were supplied to Langan for this Subject Property, and therefore summaries and interpretations are based on results found from this particular investigation. The full laboratory analytical data reports for soil, groundwater, and soil vapor are included in Appendix G, H, and I, respectively.

4.3.1 Soil Samples Results

Fourteen soil samples were submitted for laboratory analysis. The soil analytical results were compared to the NYSDEC Part 375-6.8(a) Unrestricted Used Soil Cleanup Objectives (SCOs). The soil analytical results are presented in Table 1 and Figure 3.

VOCs

One VOC, n-propylbenzene, was detected above its Unrestricted Use SCO in boring SB-3 at a depth of 4 to 6 ft bgs. Acetone, a common laboratory artifact, was also detected above its Unrestricted Use SCO in four soil samples. No other VOCs were detected above SCOs in soil samples collected.

SVOCs

Seven SVOCs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and naphthalene were detected at concentrations above their Unrestricted Use SCOs from boring SB-6 at depths of 1 to 5 feet bgs. No other SVOCs were detected above SCOs in soil samples collected.

Pesticides

Pesticides, including 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT were detected at concentration above their Unrestricted Use SCOs in boring SB-1 at a depth of 1 to 3 ft bgs. 4,4'-DDT was also detected above its Unrestricted Use SCO in boring SB-6 at a depth of 3 to 5 ft bgs. No other pesticides were detected above SCOs in soil samples collected.

PCBs

Total PCBs were detected at concentrations above its Unrestricted Use SCO is borings SB-1 and SB-6 at depths of 1 to 3 ft bgs and 3 to 5 ft bgs, respectively. No other PCBs were detected above SCOs in soil samples collected.

Metals

Nine metals, including arsenic, cadmium, trivalent chromium, copper, lead, manganese, mercury, nickel, and zinc were detected at concentrations exceeding the Unrestricted Use SCOs in each of the seven soil borings.

4.3.2 Groundwater Sample Results

Six groundwater samples were submitted for laboratory analysis. The groundwater analytical results were compared to the Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (SGVs) for Class GA waters. The groundwater analytical results are presented in Table 2 and Figure 4.

PCBs and Pesticides

There were no PCBs or pesticides detected at concentrations exceeding the Unrestricted Use SCOs.

VOCs

Four VOCs, including benzene, n-propylbenzene, p- & m- xylenes, and toluene were detected at concentrations above their TOGS SGVs in the sample collected from SB-3(MW). No other VOCs were detected above TOGS SGVs in groundwater samples collected.

SVOCs

One SVOC, naphthalene, was detected at a concentration above its TOGS SGVs in the sample collected from SB-3(MW). No other SVOCs were detected above TOGS SGVs in groundwater samples collected.

Metals

One metal, manganese, was detected at a concentration above its TOGS SGVs in the five or the six groundwater samples collected. No other metals were detected above TOGS SGVs in groundwater samples collected.

4.3.3 Soil Vapor Sample Results

Six soil vapor samples were submitted for laboratory analysis. The soil vapor analytical results are presented in Table 3 and Figure 5. Results for VOCs were compared to the New York State Department of Health (NYSDOH) Air Guideline Values (AGVs), which were established for methylene chloride, tetrachloroethene (PCE) and trichloroethene (TCE). Concentrations of detected contaminants were below AGVs. Several other VOCs were detected in soil vapor samples; however, there are no regulatory standards established for other VOCs. Total detected soil vapor VOCs ranged from 2,220 micrograms per cubic meter (µg/m^3) at SV-3 to 42,645 µg/m^3 at SV-1.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the observations and results of this investigation, we conclude and recommend the following:

- The geophysical survey identified two major anomaly areas along the southeast corner of the Subject Property Building. Based on their reflection rates and their proximities, these anomalies are indicative of USTs located approximately 2 to 3 ft bgs. Another anomaly area consistent with disturbed soil was located along the western edge of the Subject Property.
- A layer of historic fill was identified throughout the Subject Property with thicknesses ranging from approximately 5 to 13 feet. This fill layer contained SCO exceedances (SVOC and metal) throughout the majority of the Site.
- The suite of metals and SVOCs and their concentrations detected in soil and groundwater across the site are attributed to historic fill material.
- One of the seven soil borings (SB-3) was installed next to a suspect 550-gallon gasoline UST that was reportedly decommissioned in 1999. Petroleum-like odors and PID readings (up to 700 ppm) were observed in the soil boring at depths of approximately 8 to 9 ft bgs. Groundwater analytical sampling results from this location confirmed the presence of a petroleum release. Article 12 of the New York State Navigation Law requires that anyone with knowledge of a petroleum release must report the discovery to the New York State Spill Hotline as soon as possible. Therefore, on 13 August, 2014, Langan called in a spill and Spill Case No. 1405230 was opened by NYSDEC.
- Soil vapor concentrations are below NYSDOH AGV values; however, based on the presence of VOCs in the soil vapor, remedial measures should include installation of a soil vapor mitigation system.
- Due to the E-designation of the site, additional investigation including soil, groundwater and soil vapor sampling will be required in order to comply with NYCOER guidelines and obtain permits for construction and occupancy of proposed building structures.
- If site development is planned, a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) should be prepared and implemented. In accordance with the requirements of the E-Designation program, these documents must be submitted to OER for approval prior to the start of Site work. OER will require additional site investigation to support preparation of the RAP. The RAP and CHASP may need to address the following:
    - Handling, transport and disposal of excess material including fill and debris as required for development with all appropriate requirements.

- A composite cover system for impacted material that may be left in-place after development. The cover system will prevent direct contact with or inhalation of contaminated material.
- Odor and soil vapor intrusion should be addressed if odorous or VOC-impacted material is left in-place as part of the development.
- Registration, removal and closure of known petroleum storage tanks.
- Permitting and treatment, if required, of dewatering effluent.
- Health and safety requirements addressing the contaminants of concern including a Community Air Monitoring Plan (CAMP) to monitor odor and dust.
- A contingency plan for removal of currently unknown underground storage tanks or other subsurface structures

6.0 LIMITATIONS

This Phase II ESI report was prepared expressly for 2401 Third Avenue Associates, LLC for the property located at 2401 Third Avenue in Bronx, New York and for the objectives defined herein. Langan cannot assume responsibility for the use of this Report for any property other than the specific site addressed in this report, or by any third party without specific written authorization from Langan.

The conclusions, opinions, and recommendations provided in this report are based on subsurface conditions ascertained from the analysis of a limited number of samples and from environmental reports prepared by other professionals that were provided by "the Client". Recommendations provided are contingent upon one another and no recommendation should be followed independent of the others. Actual conditions encountered may differ substantially from those presented herein and should be brought to our attention whereby we may determine how such changes may affect our conclusions, opinions and recommendations.

TABLES

Table 1
Summary of Analytical Soil Data
Phase II Environmental Site Investigation

2401 Third Avenue
Bronx, New York
Langan Project No. 170305901

Sample ID Sampling Date Sample Depth (feet)	NYSDEC Part 375 Unrestricted SCO	SB-1 (1'-3') 7/31/2014 1 to 3		SB-1 (3'-5') 7/31/2014 3 to 5		SB-2 (2'-4') 7/31/2014 2 to 4		SB-2 (5'-7') 7/31/2014 5 to 7		SB-3 (2'-4') 7/31/2014 2 to 4		SB-3 (4'-6') 7/31/2014 4 to 6		SB-4 (2'-4') 7/31/2014 2 to 4		SB-4 (5'-7') 7/31/2014 5 to 7		SB-5 (2-4) 8/1/2014 2 to 4		SB-5 (8-10) 8/1/2014 8 to 10		SB-6 (1-3) 8/1/2014 1 to 3		SB-6 (3-5) 8/1/2014 3 to 5		SB-7 (2-4) 8/1/2014 2 to 4		SB-7 (4-6) 8/1/2014 4 to 6	
Volatile Organic Compounds (mg/kg)																															
1,2,4-Trimethylbenzene	3.6	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	0.54	D	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.013		0.0023	U	0.0032	U	0.0023	U
1,2-Dichloroethane	0.02	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	*0.22*	U	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
1,3,5-Trimethylbenzene	8.4	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	0.22	U	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0055	J	0.0023	U	0.0032	U	0.0023	U
1,4-Dioxane	0.1	0.044	U	0.046	U	0.048	U	0.044	U	0.045	U	*4.30*	U	0.062	U	0.048	U	0.027	U	0.050	U	0.056	U	0.047	U	0.064	U	0.046	U
2-Butanone	0.12	0.0022	U	0.0023	U	0.021		0.0089		0.0022	U	*0.22*	U	0.0031	U	0.0024	U	0.0095		0.021		0.0041	J	0.0080		0.0076		0.012	
Acetone	0.05	0.0037	JB	0.0090	JB	**0.052**	B	0.039	B	0.013	B	*0.22*	U	0.012	B	0.016	B	0.034		**0.058**		0.016		0.020		**0.057**	B	**0.071**	
Benzene	0.06	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	*0.22*	U	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
Methylene chloride	0.05	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	*0.22*	U	0.0031	U	0.0024	U	0.0019	J	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
n-Butylbenzene	12	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	2.60	D	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
n-Propylbenzene	3.9	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	**4.50**	D	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
o-Xylene	~	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	0.22	U	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0057		0.0023	U	0.0032	U	0.0023	U
p- & m- Xylenes	~	0.0044	U	0.0046	U	0.0048	U	0.0044	U	0.0045	U	0.63	JD	0.0062	U	0.0048	U	0.0027	U	0.0050	U	0.0056	U	0.0047	U	0.0064	U	0.0046	U
sec-Butylbenzene	11	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	1.30	D	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
Toluene	0.7	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	0.26	JD	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
trans-1,2-Dichloroethylene	0.19	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	*0.22*	U	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
Vinyl Chloride	0.02	0.0022	U	0.0023	U	0.0024	U	0.0022	U	0.0022	U	*0.22*	U	0.0031	U	0.0024	U	0.0013	U	0.0025	U	0.0028	U	0.0023	U	0.0032	U	0.0023	U
Xylenes, Total	0.26	0.0065	U	0.0069	U	0.0073	U	0.0065	U	0.0067	U	*0.65*	U	0.0094	U	0.0071	U	0.0040	U	0.0074	U	0.010	J	0.0070	U	0.0096	U	0.0069	U
Semi-Volatile Organic Compounds (mg/kg)																															
2-Methylphenol	0.33	*0.50*	U	0.098	U	0.094	U	0.096	U	0.094	U	*1.98*	U	*0.47*	U	*0.97*	U	0.087	U	*0.54*	U	*0.93*	U	*0.46*	U	0.087	U	0.091	U
Acenaphthene	20	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	0.99	U	0.24	U	0.48	U	0.044	U	0.27	U	4.03	D	0.25	JD	0.076	J	0.045	U
Anthracene	100	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	0.99	U	0.57	JD	0.48	U	0.044	U	0.27	U	3.65	D	1.10	D	0.12	J	0.045	U
Benzo(a)anthracene	1	0.53	JD	0.049	U	0.11	J	0.048	U	0.17	J	0.99	U	0.86	JD	0.48	U	0.093	J	0.27	U	**3.40**	D	**1.02**	D	0.085	J	0.045	U
Benzo(a)pyrene	1	0.28	JD	0.049	U	0.15	J	0.048	U	0.18	J	0.99	U	0.52	JD	0.48	U	0.046	J	0.27	U	**2.17**	D	0.86	JD	0.050	J	0.045	U
Benzo(b)fluoranthene	1	0.44	JD	0.049	U	0.11	J	0.048	U	0.088	J	0.99	U	0.40	JD	0.48	U	0.046	J	0.27	U	**2.57**	D	0.54	JD	0.044	U	0.045	U
Benzo(k)fluoranthene	0.8	0.32	JD	0.049	U	0.070	J	0.048	U	0.061	J	*0.99*	U	0.42	JD	0.48	U	0.063	J	0.27	U	**2.31**	D	0.75	JD	0.046	J	0.045	U
Chrysene	1	0.48	JD	0.049	U	0.10	J	0.048	U	0.14	J	0.99	U	0.75	JD	0.48	U	0.10	J	0.27	U	**3.27**	D	**1.39**	D	0.097	J	0.045	U
Dibenzo(a,h)anthracene	0.33	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	*0.99*	U	0.24	U	*0.48*	U	0.044	U	0.27	U	*0.46*	U	0.23	U	0.044	U	0.045	U
Dibenzofuran	7	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	0.99	U	0.24	U	0.48	U	0.044	U	0.27	U	3.46	D	0.41	JD	0.044	U	0.045	U
Fluoranthene	100	0.95	JD	0.049	U	0.12	J	0.048	U	0.26		0.99	U	1.39	D	0.48	U	0.20		0.27	U	7.85	D	2.57	D	0.36		0.045	U
Fluorene	30	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	0.99	U	0.24	U	0.48	U	0.044	U	0.27	U	3.20	D	0.89	JD	0.074	J	0.045	U
Hexachlorobenzene	0.33	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	*0.99*	U	0.24	U	*0.48*	U	0.044	U	0.27	U	*0.46*	U	0.23	U	0.044	U	0.045	U
Indeno(1,2,3-cd)pyrene	0.5	0.25	U	0.049	U	0.047	U	0.048	U	0.053	J	*0.99*	U	0.24	U	0.48	U	0.044	U	0.27	U	**0.74**	JD	0.26	JD	0.044	U	0.045	U
Naphthalene	12	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	0.99	U	0.24	U	0.48	U	0.044	U	0.27	U	**12.20**	D	0.51	JD	0.044	U	0.045	U
Pentachlorophenol	0.8	0.50	U	0.098	U	0.094	U	0.096	U	0.094	U	*1.98*	U	0.47	U	*0.97*	U	0.087	U	0.54	U	*0.93*	U	0.46	U	0.087	U	0.091	U
Phenanthrene	100	0.61	JD	0.049	U	0.051	J	0.048	U	0.16	J	0.99	U	1.19	D	0.48	U	0.12	J	0.27	U	12.30	D	3.35	D	0.51		0.045	U
Phenol	0.33	0.25	U	0.049	U	0.047	U	0.048	U	0.047	U	*0.99*	U	0.24	U	*0.48*	U	0.044	U	0.27	U	*0.46*	U	0.23	U	0.044	U	0.045	U
Pyrene	100	0.94	JD	0.049	U	0.13	J	0.048	U	0.24		0.99	U	1.47	D	0.48	U	0.18		0.27	U	6.24	D	2	D	0.30		0.045	U
Pesticides (mg/kg)																															
4,4'-DDD	0.0033	**0.053**	D	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
4,4'-DDE	0.0033	**0.18**	D	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
4,4'-DDT	0.0033	**0.26**	D	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	**0.013**	D	0.0017	U	0.0017	U
alpha-BHC	0.02	0.0026	D	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
alpha-Chlordane	0.094	0.056	D	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
beta-BHC	0.036	0.011	D	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
Polychlorinated Biphenyls (PCB)																															
Aroclor 1254	~	0.020	U	0.020	U	0.019	U	0.019	U	0.019	U	0.020	U	0.019	U	0.019	U	0.017	U	0.021	U	0.018	U	0.15		0.017	U	0.018	U
Aroclor 1260	~	0.14		0.020	U	0.019	U	0.019	U	0.019	U	0.020	U	0.019	U	0.019	U	0.017	U	0.021	U	0.032		0.034		0.017	U	0.018	U
Total PCBs	0.1	**0.14**		0.020	U	0.019	U	0.019	U	0.019	U	0.020	U	0.019	U	0.019	U	0.017	U	0.021	U	0.032		**0.18**		0.017	U	0.018	U
Metals (mg/kg)																															
Arsenic	13	**16.20**		7		12.10		1.14	U	6.05		9.42		6.35		4.10		6.58		**66.70**		3.99		1.11	U	2.24		2.05	
Barium	350	152		81.70		95.80		41.90		49.70		34.10		61.90		102		34		20		89.40		43.10		55		78.90	
Cadmium	2.5	0.64		0.35	U	1.15		**3.02**		0.33	U	0.75		0.34	U	0.64		0.31	U	**18**		**3.73**		**7.89**		1.66		1.76	
Chromium	~	29.90		15.10		15.20		35.10		18.90		26.90		10.80		19.40		18.90		60.50		16.40		22.20		17.20		17	
Chromium, Trivalent	30	29.90		15.10		15.20		**35.10**		18.90		26.90		10.80		19.40		18.20		**47.20**		14.90		20.10		16.50		15.70	
Copper	50	**108**		10.50		**804**		25.90		44.90		44.40		31.60		26.50		24.20		**82.50**		**131**		14.20		20.70		19.30	
Lead	63	**416**		11.40		**575**		24.40		**119**		**89.50**		**120**		62.30		**85.70**		13		**229**		**75.20**		**119**		**125**	
Manganese	1600	468		754		843		**1,640**		1,350		**2,170**		839		898		1,250		**2,060**		1,090		**2,660**		986		1,030	
Nickel	30	**38**		**31.80**		**33.50**		**74.60**		**41**		**50.30**		27.90		**55.70**		**42.30**		**238**		**46**		**59.30**		**33.90**		**40.10**	
Selenium	3.9	1.37		1.17	U	1.11	U	1.14	U	1.11	U	1.18	U	1.12	U	1.15	U	1.04	U	1.28	U	1.10	U	1.11	U	1.04	U	1.08	U
Zinc	109	**294**		22.80		**259**		23.50		47.80		60.20		80.80		35.70		65.70		35.60		**293**		38.10		49.30		45.40	
Mercury	0.18	**1.70**		0.057		**0.42**		0.034	U	**0.30**		0.12		0.16		0.16		0.096		0.16		**0.32**		0.054		0.059		0.032	U

Notes:
1. Soil Boring sample analytical results are compared to the New York State Department of Environmental Conservation (NYCDEC) title 6 of the official compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCO).
2. Reportable detection limits exceeding Part 375 Unrestricted SCOs are italicized.
3. NYSDEC Part 375 Unrestricted Use SCO exceedances are highlighted and in BOLD.
4. Only compounds with detections are shown in table.
5. mg/kg - milligrams per kilogram
7. Refer to laboratory reports for dilution factors.

Qualifiers:
U = Analyte included in the analysis, but not detected
J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.
D = Result is from an analysis that required a dilution
B = analyte found in the analysis batch blank
~ = no regulatory limit has been established for this analyte

Table 2
Summary of Analytical Groundwater Data
Phase II Environmental Site Investigation

2401 Third Avenue
Bronx, New York
Langan Project No. 170305901

Sample ID Lab Sample ID Sampling Date		SB-1 (MW) 14H0164-01 8/1/2014		SB-2 (MW) 14H0164-02 8/1/2014		SB-3 (MW) 14H0164-03 8/1/2014		SB-4 (MW) 14H0164-04 8/1/2014		SB-5 (MW) 14H0164-05 8/1/2014		SB-6 (MW) 14H0164-06 8/1/2014	
Volatile Organic Compounds (µg/L)													
1,2-Dichloroethane	0.6	0.20	U	0.20	U	*2*	U	0.20	U	0.20	U	0.20	U
1,3,5-Trimethylbenzene	5	0.20	U	0.20	U	2.40	JD	0.20	U	0.20	U	0.20	U
Acetone	50	1.10	JB	1	U	10	U	1	U	1	U	1	U
Benzene	1	0.20	U	0.20	U	**26**	D	0.20	U	0.20	U	0.20	U
Ethyl Benzene	5	0.20	U	0.20	U	2.50	JD	0.20	U	0.20	U	0.20	U
Methyl tert-butyl ether (MTBE)	10	0.26	J	0.30	J	2	U	0.20	U	0.20	U	0.42	J
Methylene chloride	5	1	U	1	U	*10*	U	1	U	1	U	1	U
n-Propylbenzene	5	0.20	U	0.20	U	**31**	D	0.20	U	0.20	U	0.20	U
p- & m- Xylenes	5	0.50	U	0.50	U	**5.20**	JD	0.50	U	0.50	U	0.50	U
sec-Butylbenzene	5	0.20	U	0.20	U	4.50	JD	0.20	U	0.20	U	0.20	U
Toluene	5	0.20	U	0.20	U	**5.60**	D	0.20	U	0.20	U	0.20	U
Vinyl Chloride	2	0.50	U	0.50	U	*5*	U	0.50	U	0.50	U	0.50	U
Xylenes, Total	5	0.60	U	0.60	U	*6*	U	0.60	U	0.60	U	0.60	U
Semi-Volatile Organic Compounds (µg/L)													
2-Methylphenol	1	*2.70*	U	*2.56*	U	*3.03*	U	*2.63*	U	*2.56*	U	*2.50*	U
Acenaphthene	20	0.054	U	0.051	U	0.061	U	0.053	U	0.051	U	0.24	
Acenaphthylene	~	0.054	U	0.051	U	0.073		0.053	U	0.051	U	0.080	
Benzo(a)anthracene	0.002	*0.054*	U	*0.051*	U	*0.061*	U	*0.053*	U	*0.051*	U	*0.050*	U
Benzo(a)pyrene	0.002	*0.054*	U	*0.051*	U	*0.061*	U	*0.053*	U	*0.051*	U	*0.050*	U
Benzo(b)fluoranthene	0.002	*0.054*	U	*0.051*	U	*0.061*	U	*0.053*	U	*0.051*	U	*0.050*	U
Benzo(k)fluoranthene	0.002	*0.054*	U	*0.051*	U	*0.061*	U	*0.053*	U	*0.051*	U	*0.050*	U
Chrysene	0.002	*0.054*	U	*0.051*	U	*0.061*	U	*0.053*	U	*0.051*	U	*0.050*	U
Fluorene	50	0.054	U	0.051	U	0.35		0.053	U	0.051	U	0.14	
Indeno(1,2,3-cd)pyrene	0.002	*0.054*	U	*0.051*	U	*0.061*	U	*0.053*	U	*0.051*	U	*0.050*	U
Naphthalene	10	0.054	U	0.051	U	**11.80**		0.053	U	0.051	U	2.19	
Phenanthrene	50	0.054	U	0.051	U	0.061	U	0.053	U	0.051	U	0.19	
Phenol	1	*2.70*	U	*2.56*	U	*3.03*	U	*2.63*	U	*2.56*	U	*2.50*	U
Pesticides (µg/L)													
Total Pesticides	~	ND		ND		ND		ND		ND		ND	
Polychlorinated Biphenyls (µg/L)													
Total PCBs	0.09	0.050	U	0.050	U	0.050	U	0.050	U	0.051	U	0.050	U
Metals µg/L													
Arsenic	25	4	U	4	U	4	U	4	U	4	U	8	
Barium	1000	122		139		144		44		33		77	
Lead	25	3		3	U	3	U	3	U	3	U	8	
Manganese	300	164		**612**		**1,400**		**1,310**		**424**		**5,760**	
Nickel	100	5	U	5	U	5	U	33		6		5	U
Zinc	2000	19		12		28		16		16		23	

NOTES:
1. Groundwater analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1. Ambient Water Quality Standards (AWQS) and Guidance Values for Drinking Water (class GA).
2. Only compounds with detections are shown in the table
3. NYSDEC TOGS 1.1.1 AWQS and Guidance Values exceedances are highlighted and bolded
4. Reporting Limits (RL) above NYSDEC TOGS 1.1.1 AWQS and Guidance Values are italicized. These instances are due to sample dilutions.
5. µg/l = micrograms per liter

Qualifiers:
U = Analyte included in the analysis, but not detected.
J = The analyte was detected above the Method Detection Limit (MDL), but below the Reporting Limit (RL); therefore, the result is an estimated concntration.
D = Result is from an analysis that required a dilution
B = The analyte was found in the analysis batch blank.
ND = Analyte included in the analysis, but not detected.
~ = no regulatory limit has been established for this analyte.

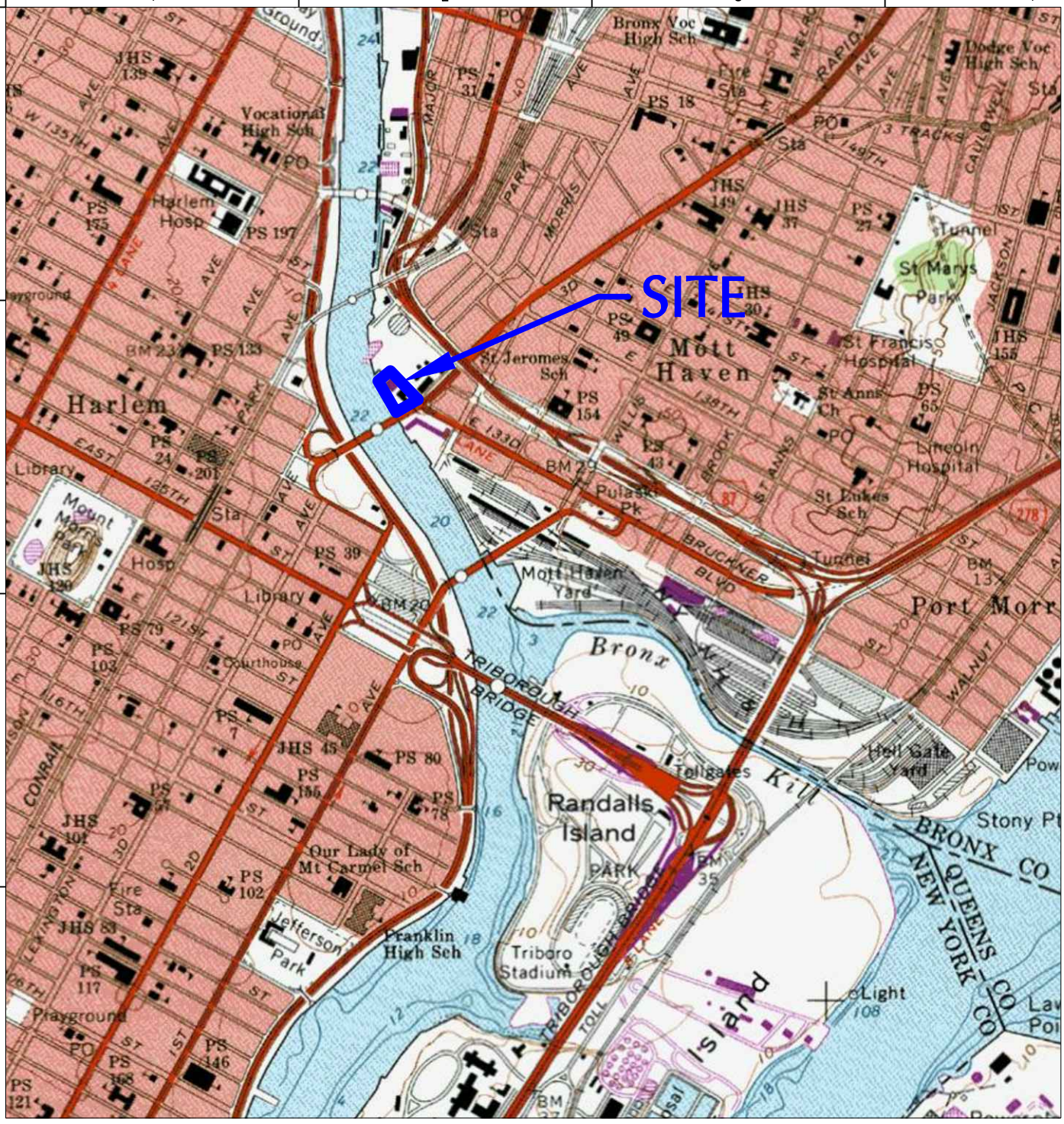
Table 3
Summary of Analytical Soil Vapor Data
Phase II Environmental Site Investigation

2401 Third Avenue
Bronx, New York
Langan Project No. 170305901

Sample ID Lab ID Dilution Factor Sampling Date	NYSDOH AGV	SV-1 14H0109-01 403.2 8/1/2014		SV-2 14H0109-02 395.2 8/1/2014		SV-3 14H0109-03 22.9 8/1/2014		SV-4 14H0109-04 373.4 8/1/2014		SV-5 14H0109-05 387.6 8/1/2014		SV-6 14H0109-06 373.4 8/1/2014	
Volatile Organic Compounds (µg/m³)													
1,1,1-Trichloroethane	~	10.91	U	10.91	U	12.54	U	10.36	U	10.36	U	10.36	U
1,1,2,2-Tetrachloroethane	~	13.72	U	13.72	U	15.78	U	13.04	U	13.04	U	13.04	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	15.32	U	15.32	U	17.62	U	14.56	U	14.56	U	14.56	U
1,1,2-Trichloroethane	~	10.91	U	10.91	U	12.54	U	10.36	U	10.36	U	10.36	U
1,1-Dichloroethane	~	8.09	U	8.09	U	9.31	U	7.69	U	7.69	U	7.69	U
1,1-Dichloroethylene	~	7.93	U	7.93	U	9.12	U	7.53	U	7.53	U	7.53	U
1,2,4-Trichlorobenzene	~	14.84	U	14.84	U	17.06	U	14.09	U	14.09	U	14.09	U
1,2,4-Trimethylbenzene	~	132.68	D	16.71	D	16.71	D	19.17	D	13.27	D	19.17	D
1,2-Dibromoethane	~	15.36	U	15.36	U	17.67	U	14.59	U	14.59	U	14.59	U
1,2-Dichlorobenzene	~	12.02	U	12.02	U	13.82	U	11.42	U	11.42	U	11.42	U
1,2-Dichloroethane	~	8.09	U	8.09	U	9.31	U	7.69	U	7.69	U	7.69	U
1,2-Dichloropropane	~	9.24	U	9.24	U	10.62	U	8.78	U	8.78	U	8.78	U
1,2-Dichlorotetrafluoroethane	~	13.98	U	13.98	U	16.07	U	13.28	U	13.28	U	13.28	U
1,3,5-Trimethylbenzene	~	157.25	D	9.83	U	11.30	U	9.34	U	9.34	U	9.34	U
1,3-Butadiene	~	8.67	U	8.67	U	9.97	U	8.23	U	8.23	U	8.23	U
1,3-Dichlorobenzene	~	13.22	D	12.02	U	13.82	U	13.22	D	11.42	U	15.63	D
1,4-Dichlorobenzene	~	12.02	U	12.02	U	13.82	U	13.22	D	11.42	U	15.63	D
1,4-Dioxane	~	7.20	U	7.20	U	8.28	U	6.84	U	6.84	U	6.84	U
2-Butanone	~	35.38	D	22.70	D	6.78	U	25.94	D	94.34	D	47.17	D
2-Hexanone	~	982.76	D	217.03	D	18.84	U	15.15	U	85.99	D	15.15	U
4-Methyl-2-pentanone	~	8.19	U	8.19	U	9.42	U	7.78	U	7.78	U	7.78	U
Acetone	~	427.56	D	204.28	D	209.03	D	641.33	D	641.33	D	593.83	D
Benzene	~	6.39	U	6.39	U	7.34	U	6.07	U	6.07	U	6.07	U
Benzyl chloride	~	10.35	U	10.35	U	11.90	U	9.83	U	9.83	U	9.83	U
Bromodichloromethane	~	12.41	U	12.41	U	14.27	U	11.79	U	11.79	U	11.79	U
Bromoform	~	20.67	U	20.67	U	23.77	U	19.63	U	19.63	U	19.63	U
Bromomethane	~	7.76	U	7.76	U	8.93	U	7.37	U	7.37	U	7.37	U
Carbon disulfide	~	164.98	D	46.69	D	22.10	D	168.09	D	560.31	D	311.28	D
Carbon tetrachloride	~	3.14	U	3.08	U	3.58	U	2.96	U	3.02	U	2.96	U
Chlorobenzene	~	9.20	U	9.20	U	10.58	U	8.74	U	8.74	U	8.74	U
Chloroethane	~	5.28	U	5.28	U	6.07	U	5.01	U	5.01	U	5.01	U
Chloroform	~	122.02	D	33.68	D	11.23	U	32.70	D	43.44	D	43.93	D
Chloromethane	~	5.37	D	4.13	U	4.75	U	5.78	D	7.22	D	3.92	U
cis-1,2-Dichloroethylene	~	7.93	U	7.93	U	9.12	U	7.53	U	7.53	U	7.53	U
cis-1,3-Dichloropropylene	~	9.07	U	9.07	U	10.43	U	8.62	U	8.62	U	8.62	U
Cyclohexane	~	584.92	D	61.93	D	103.22	D	302.78	D	230.53	D	378.48	D
Dibromochloromethane	~	16.05	U	16.05	U	18.45	U	15.24	U	15.24	U	15.24	U
Dichlorodifluoromethane	~	9.89	U	9.89	U	11.37	U	9.39	U	9.39	U	9.39	U
Ethyl acetate	~	14.41	U	14.41	U	16.57	U	13.33	U	14.05	U	13.33	U
Ethyl Benzene	~	477.46	D	12.15	D	9.98	U	8.25	U	15.19	D	9.12	D
Hexachlorobutadiene	~	21.32	U	21.32	U	24.52	U	20.26	U	20.26	U	20.26	U
Isopropanol	~	9.83	U	10.07	D	13.02	D	12.04	D	14.25	D	17.94	D
Methyl Methacrylate	~	0	U	0	U	0	U	0	U	0	U	0	U
Methyl tert-butyl ether (MTBE)	~	7.20	U	7.20	U	8.27	U	6.84	U	6.84	U	6.84	U
Methylene chloride	60	13.89	U	13.89	U	15.97	U	12.85	D	13.54	U	26.04	D
n-Heptane	~	12,290.68	D	5,325.96	D	573.57	D	2,335.23	D	3,195.58	D	7,374.41	D
n-Hexane	~	19,378.17	D	12,331.56	D	739.89	D	6,341.95	D	7,398.94	D	12,683.89	D
o-Xylene	~	651.08	D	9.55	D	9.98	U	9.55	D	12.59	D	11.29	D
p- & m- Xylenes	~	1,432.38	D	23.87	D	20.83	D	26.91	D	26.04	D	28.21	D
p-Ethyltoluene	~	265.36	D	12.78	D	11.30	D	14.74	D	11.30	D	14.74	D
Propylene	~	3.44	U	3.44	U	3.96	U	3.27	U	3.27	U	3.27	U
Styrene	~	8.52	U	8.52	U	9.79	U	8.09	U	8.09	U	8.09	U
Tetrachloroethylene	100	9.49	D	21.69	D	20.34	D	3.19	U	47.46	D	3.19	U
Tetrahydrofuran	~	4,421.50	D	2,682.38	D	471.63	D	1,031.68	D	1,208.54	D	3,831.97	D
Toluene	~	1,092.42	D	24.49	D	18.08	D	14.69	D	52.74	D	32.40	D
trans-1,2-Dichloroethylene	~	7.93	U	7.93	U	9.12	U	7.53	U	7.53	U	7.53	U
trans-1,3-Dichloropropylene	~	9.07	U	9.07	U	10.43	U	8.62	U	8.62	U	8.62	U
Trichloroethylene	5	2.69	U	2.63	U	3.06	U	2.52	U	2.58	U	2.52	U
Trichlorofluoromethane (Freon 11)	~	11.23	U	11.23	U	12.92	U	10.67	U	10.67	U	10.67	U
Vinyl acetate	~	7.04	U	7.04	U	8.10	U	6.69	U	6.69	U	6.69	U
Vinyl Chloride	~	2.56	U	2.53	U	2.81	U	2.38	U	2.48	U	2.38	U

NOTES:
1. No New York State Department of Health (NYSDOH) Air Guideline Value (AGV) exceedances were reported.
2. µg/m3 : micrograms per cubic meter
U = analyte not detected at or above the level indicated
B = analyte found in the analysis batch blank
D = result is from an analysis that required a dilution
~ = no regulatory limit has been established for this analyte

FIGURES



SOURCE: PORTION OF USGS CENTRAL PARK QUANDRANGLE MAP, 1995

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Project

2401 THIRD AVENUE

BLOCK No. 2319, LOT No. 2
BRONX
BRONX COUNTY NEW YORK

Drawing Title

SITE LOCATION MAP

Project No. 170305901	Drawing No. 1
Date 8/28/2014	
Scale NTS	
Drawn By SEC / Checked By RJW	
Submission Date 8/28/2014	

Filename: \\langan.com\data\NY\data9\170305901\Cadd Data - 170305901\2D-DesignFiles\Phase 2\Site Location Map.dwg Date: 8/26/2014 Time: 08:23 User: sclout Style Table: Langan.stb Layout: ANSIA-BP

LEGEND:

- APPROXIMATE SITE BOUNDARY
- SB-2(MW) — SOIL BORING AND TEMPORARY MONITORING WELL LOCATION AND ID (LANGAN 2014)
- SV-6 — SOIL VAPOR LOCATION AND ID (LANGAN 2014)
- KNOWN AND UNKONWN UST LOCATIONS

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE
2. ALL BORINGS WERE CONVERTED INTO TEMPORARY MONITORING WELLS EXCEPT FOR SB-7

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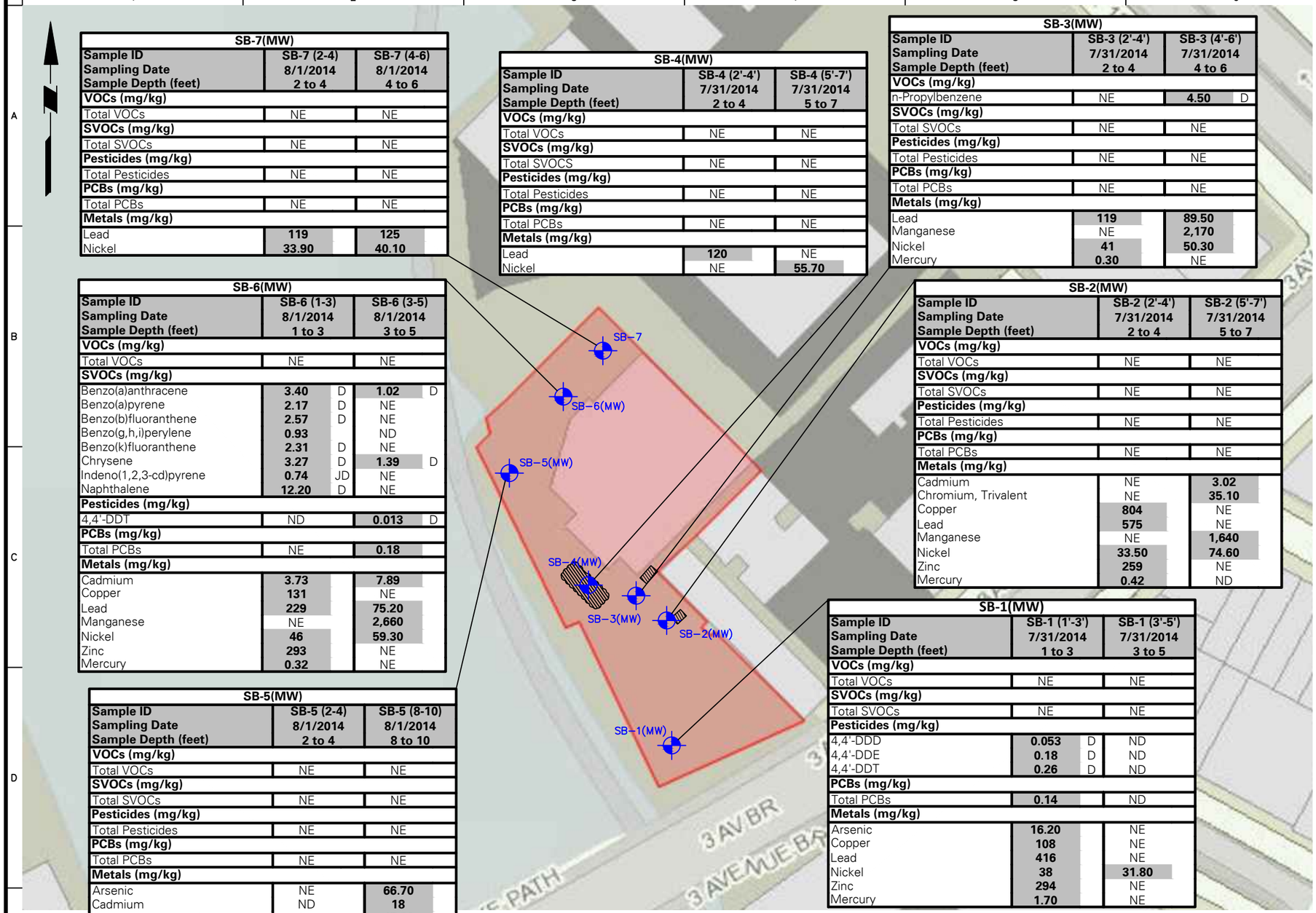
Drawing Title
SAMPLE LOCATION PLAN

Project No. 170305901	Drawing No. 2
Date 8/18/2014	
Scale 1" = 100'	
Drawn By SEC / Checked By RJW	
Submission Date	

Filename: \\langan.com\data\NY\data9\170305901\Cadd Data - 170305901\2D-DesignFiles\Phase 2\Sample Location Plan.dwg Date: 8/26/2014 Time: 10:12 User: sclout Style Table: Langan.stb Layout: ANSIB-BL



SB-7(MW)				
Sample ID	**SB-7 (2-4)**		**SB-7 (4-6)**	
Sampling Date	**8/1/2014**		**8/1/2014**	
Sample Depth (feet)	**2 to 4**		**4 to 6**	
VOCs (mg/kg)				
Total VOCs	NE		NE	
SVOCs (mg/kg)				
Total SVOCs	NE		NE	
Pesticides (mg/kg)				
Total Pesticides	NE		NE	
PCBs (mg/kg)				
Total PCBs	NE		NE	
Metals (mg/kg)				
Lead	**119**		**125**	
Nickel	**33.90**		**40.10**	

SB-4(MW)				
Sample ID	**SB-4 (2'-4')**		**SB-4 (5'-7')**	
Sampling Date	**7/31/2014**		**7/31/2014**	
Sample Depth (feet)	**2 to 4**		**5 to 7**	
VOCs (mg/kg)				
Total VOCs	NE		NE	
SVOCs (mg/kg)				
Total SVOCS	NE		NE	
Pesticides (mg/kg)				
Total Pesticides	NE		NE	
PCBs (mg/kg)				
Total PCBs	NE		NE	
Metals (mg/kg)				
Lead	**120**		NE	
Nickel	NE		**55.70**	

SB-3(MW)				
Sample ID	**SB-3 (2'-4')**		**SB-3 (4'-6')**	
Sampling Date	**7/31/2014**		**7/31/2014**	
Sample Depth (feet)	**2 to 4**		**4 to 6**	
VOCs (mg/kg)				
n-Propylbenzene	NE		**4.50**	D
SVOCs (mg/kg)				
Total SVOCs	NE		NE	
Pesticides (mg/kg)				
Total Pesticides	NE		NE	
PCBs (mg/kg)				
Total PCBs	NE		NE	
Metals (mg/kg)				
Lead	**119**		**89.50**	
Manganese	NE		**2,170**	
Nickel	**41**		**50.30**	
Mercury	**0.30**		NE	

SB-6(MW)				
Sample ID	**SB-6 (1-3)**		**SB-6 (3-5)**	
Sampling Date	**8/1/2014**		**8/1/2014**	
Sample Depth (feet)	**1 to 3**		**3 to 5**	
VOCs (mg/kg)				
Total VOCs	NE		NE	
SVOCs (mg/kg)				
Benzo(a)anthracene	**3.40**	D	**1.02**	D
Benzo(a)pyrene	**2.17**	D	NE	
Benzo(b)fluoranthene	**2.57**	D	NE	
Benzo(g,h,i)perylene	**0.93**		ND	
Benzo(k)fluoranthene	**2.31**	D	NE	
Chrysene	**3.27**	D	**1.39**	D
Indeno(1,2,3-cd)pyrene	**0.74**	JD	NE	
Naphthalene	**12.20**	D	NE	
Pesticides (mg/kg)				
4,4'-DDT	ND		**0.013**	D
PCBs (mg/kg)				
Total PCBs	NE		**0.18**	
Metals (mg/kg)				
Cadmium	**3.73**		**7.89**	
Copper	**131**		NE	
Lead	**229**		**75.20**	
Manganese	NE		**2,660**	
Nickel	**46**		**59.30**	
Zinc	**293**		NE	
Mercury	**0.32**		NE	

SB-2(MW)			
Sample ID	**SB-2 (2'-4')**	**SB-2 (5'-7')**	
Sampling Date	**7/31/2014**	**7/31/2014**	
Sample Depth (feet)	**2 to 4**	**5 to 7**	
VOCs (mg/kg)			
Total VOCs	NE	NE	
SVOCs (mg/kg)			
Total SVOCs	NE	NE	
Pesticides (mg/kg)			
Total Pesticides	NE	NE	
PCBs (mg/kg)			
Total PCBs	NE	NE	
Metals (mg/kg)			
Cadmium	NE	**3.02**	
Chromium, Trivalent	NE	**35.10**	
Copper	**804**	NE	
Lead	**575**	NE	
Manganese	NE	**1,640**	
Nickel	**33.50**	**74.60**	
Zinc	**259**	NE	
Mercury	**0.42**	ND	

SB-5(MW)		
Sample ID	**SB-5 (2-4)**	**SB-5 (8-10)**
Sampling Date	**8/1/2014**	**8/1/2014**
Sample Depth (feet)	**2 to 4**	**8 to 10**
VOCs (mg/kg)		
Total VOCs	NE	NE
SVOCs (mg/kg)		
Total SVOCs	NE	NE
Pesticides (mg/kg)		
Total Pesticides	NE	NE
PCBs (mg/kg)		
Total PCBs	NE	NE
Metals (mg/kg)		
Arsenic	NE	**66.70**
Cadmium	ND	**18**
Chromium, Trivalent	NE	**47.20**
Copper	NE	**82.50**
Lead	**85.70**	NE
Manganese	NE	**2,060**
Nickel	**42.30**	**238**

SB-1(MW)				
Sample ID	**SB-1 (1'-3')**		**SB-1 (3'-5')**	
Sampling Date	**7/31/2014**		**7/31/2014**	
Sample Depth (feet)	**1 to 3**		**3 to 5**	
VOCs (mg/kg)				
Total VOCs	NE		NE	
SVOCs (mg/kg)				
Total SVOCs	NE		NE	
Pesticides (mg/kg)				
4,4'-DDD	**0.053**	D	ND	
4,4'-DDE	**0.18**	D	ND	
4,4'-DDT	**0.26**	D	ND	
PCBs (mg/kg)				
Total PCBs	**0.14**		ND	
Metals (mg/kg)				
Arsenic	**16.20**		NE	
Copper	**108**		NE	
Lead	**416**		NE	
Nickel	**38**		**31.80**	
Zinc	**294**		NE	
Mercury	**1.70**		NE	

LEGEND:

- APPROXIMATE SITE BOUNDARY
- SB-2(MW) — SOIL BORING LOCATION AND ID (LANGAN 2014)
- KNOWN AND UNKNOWN UST LOCATIONS

NOTES:

1. SOIL SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NYSDEC 6 NYCRR PAR 375-6.8(A) UNRESTRICTED USE-RESIDENTIAL SOIL CLEANUP OBJECTIVES (SCO) (TABLE 1).
2. ONLY ANALYTES WITH DETECTIONS ARE SHOWN.
3. NYSDEC PART 375-6.8(A) UNRESTRICTED USE SCO EXCEEDANCES ARE SHADED AND BOLDED BLACK.
4. UST - UNDERGROUND STORAGE TANK
5. VOC - VOLATILE ORGANIC COMPOUND
6. SVOC - SEMI-VOLATILE ORGANIC COMPOUND
7. PCB - POLYCHLORINATED BIPHENYL
8. MG/KG - MILLIGRAMS PER KILOGRAM
9. NE - NOT EXCEEDANCE OF CRITERIA
10. ND - NOT DETECTED
11. D - RESULT IS FROM AN ANALYSIS THAT REQUIRED A DILUTION
12. J - ANALYTE DETECTED AT OR ABOVE THE MDL (METHOD DETECTION LIMIT) BUT BELOW THE RL (REPORTING LIMIT); DATA IS ESTIMATED

TABLE 1

Analyte	NYSDEC Part 375 Unrestricted SCO
VOCs (mg/kg)	
n-Propylbenzene	3.9
SVOCs (mg/kg)	
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1
Benzo(g,h,i)perylene	100
Benzo(k)fluoranthene	0.8
Chrysene	1
Indeno(1,2,3-cd)pyrene	0.5
Naphthalene	12
Pesticides (mg/kg)	
4,4'-DDD	0.0033
4,4'-DDE	0.0033
4,4'-DDT	0.0033
PCBs (mg/kg)	
Total PCBs	0.1
Metals (mg/kg)	
Arsenic	13
Cadmium	2.5
Chromium, Trivalent	30
Copper	50
Lead	63
Manganese	1600
Nickel	30
Zinc	109
Mercury	0.18

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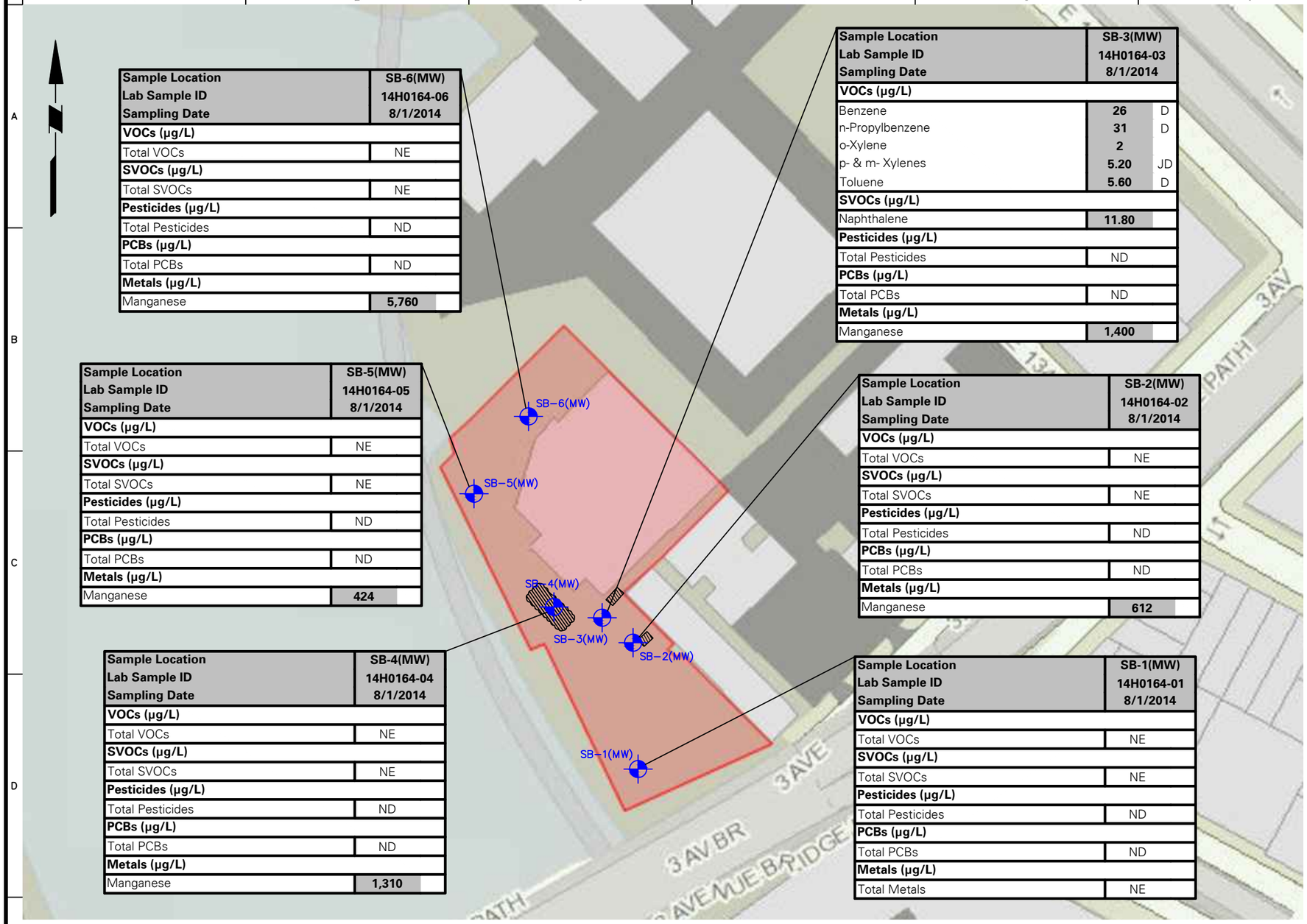
Drawing Title
SOIL ANALYTICAL RESULTS MAP

Project No. 170305901
Date 8/18/2014
Scale 1" = 100'
Drawn By HHG | Checked By RJW
Submission Date

Drawing No. 3

Filename: \\langan.com\data\NY\data9\170305901\Cadd Data - 170305901\2D-DesignFiles\Phase 2\Soil Analytical Results.dwg Date: 8/26/2014 Time: 10:31 User: sclout Style Table: Langan.stb Layout: ANSIB-BL



Sample Location	SB-6(MW)
Lab Sample ID	14H0164-06
Sampling Date	8/1/2014
VOCs (µg/L)	
Total VOCs	NE
SVOCs (µg/L)	
Total SVOCs	NE
Pesticides (µg/L)	
Total Pesticides	ND
PCBs (µg/L)	
Total PCBs	ND
Metals (µg/L)	
Manganese	**5,760**

Sample Location	SB-5(MW)
Lab Sample ID	14H0164-05
Sampling Date	8/1/2014
VOCs (µg/L)	
Total VOCs	NE
SVOCs (µg/L)	
Total SVOCs	NE
Pesticides (µg/L)	
Total Pesticides	ND
PCBs (µg/L)	
Total PCBs	ND
Metals (µg/L)	
Manganese	**424**

Sample Location	SB-4(MW)
Lab Sample ID	14H0164-04
Sampling Date	8/1/2014
VOCs (µg/L)	
Total VOCs	NE
SVOCs (µg/L)	
Total SVOCs	NE
Pesticides (µg/L)	
Total Pesticides	ND
PCBs (µg/L)	
Total PCBs	ND
Metals (µg/L)	
Manganese	**1,310**

Sample Location	SB-3(MW)	
Lab Sample ID	14H0164-03	
Sampling Date	8/1/2014	
VOCs (µg/L)		
Benzene	**26**	D
n-Propylbenzene	**31**	D
o-Xylene	**2**	
p- & m- Xylenes	**5.20**	JD
Toluene	**5.60**	D
SVOCs (µg/L)		
Naphthalene	**11.80**	
Pesticides (µg/L)		
Total Pesticides	ND	
PCBs (µg/L)		
Total PCBs	ND	
Metals (µg/L)		
Manganese	**1,400**	

Sample Location	SB-2(MW)
Lab Sample ID	14H0164-02
Sampling Date	8/1/2014
VOCs (µg/L)	
Total VOCs	NE
SVOCs (µg/L)	
Total SVOCs	NE
Pesticides (µg/L)	
Total Pesticides	ND
PCBs (µg/L)	
Total PCBs	ND
Metals (µg/L)	
Manganese	**612**

Sample Location	SB-1(MW)
Lab Sample ID	14H0164-01
Sampling Date	8/1/2014
VOCs (µg/L)	
Total VOCs	NE
SVOCs (µg/L)	
Total SVOCs	NE
Pesticides (µg/L)	
Total Pesticides	ND
PCBs (µg/L)	
Total PCBs	ND
Metals (µg/L)	
Total Metals	NE

LEGEND:

- APPROXIMATE SITE BOUNDARY
- SB–2(MW) MONITORING WELL LOCATION AND ID (LANGAN 2014)
- KNOWN AND UNKNOWN UST LOCATIONS

NOTES:

1. GROUNDWATER SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER (TABLE 1).
2. ONLY ANALYTES WITH DETECTIONS ARE SHOWN.
3. NYSDEC TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES EXCEEDANCES ARE HIGHLIGHTED AND BOLDED.
4. UST - UNDERGROUND STORAGE TANK
5. VOC - VOLATILE ORGANIC COMPOUND
6. SVOC - SEMI-VOLATILE ORGANIC COMPOUND
7. PCB - POLYCHLORINATED BIPHENYL
8. UG/L - MICROGRAM PER LITER
9. NE - NO EXCEEDANCE OF CRITERIA
10. ND - NOT DETECTED
11. "~" - CRITERIA DOES NOT EXIST
12. D - RESULT IS FROM AN ANALYSIS THAT REQUIRED A DILUTION
13. J - ANALYTE DETECTED AT OR ABOVE THE MDL (METHOD DETECTION LIMIT) BUT BELOW THE RL (REPORTING LIMIT); DATA IS ESTIMATED

TABLE 1

Analyte	NYSDEC TOGS Standards and Guidance Values - GA
VOCs (µg/L)	
Benzene	1
n-Propylbenzene	5
o-Xylene	5
p- & m- Xylenes	5
Toluene	5
SVOCs (µg/L)	
Naphthalene	10
Pesticides (µg/L)	
Total Pesticides	~
PCBs (µg/L)	
Total PCBs	0.09
Metals (µg/L)	
Manganese	300

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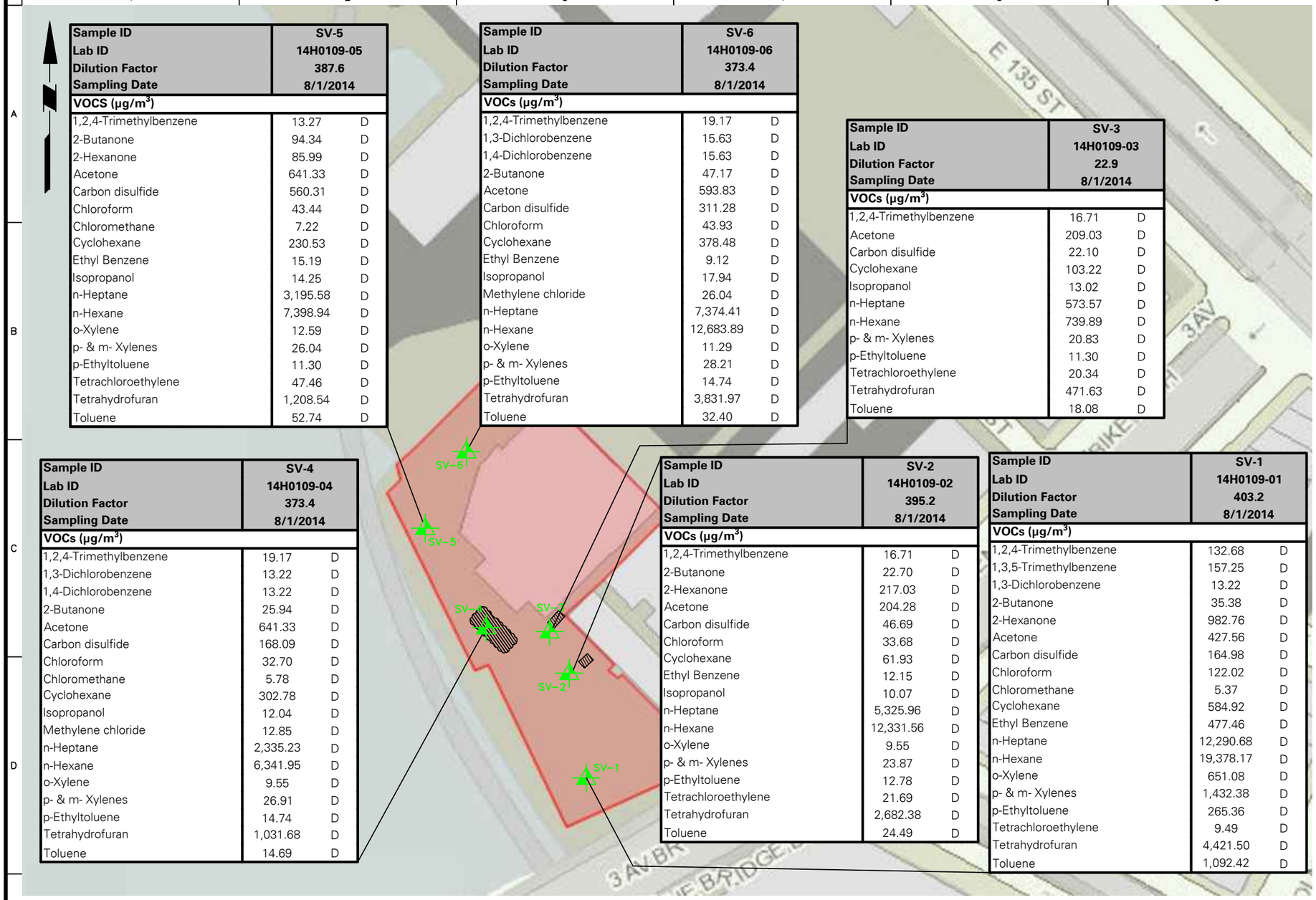
Drawing Title
GROUNDWATER ANALYTICAL RESULTS MAP

Project No. 170305901
Date 8/18/2014
Scale 1" = 100'
Drawn By HHG | Checked By RJW
Submission Date

Drawing No. 4

Filename: \\langan.com\data\NY\data9\170305901\Cadd Data - 170305901\2D-DesignFiles\Phase 2\Groundwater Analytical Results.dwg Date: 8/26/2014 Time: 10:44 User: sclout Style Table: Langan.stb Layout: ANSIB-BL



Sample ID	SV-5	
Lab ID	14H0109-05	
Dilution Factor	387.6	
Sampling Date	8/1/2014	
VOCS (µg/m³)		
1,2,4-Trimethylbenzene	13.27	D
2-Butanone	94.34	D
2-Hexanone	85.99	D
Acetone	641.33	D
Carbon disulfide	560.31	D
Chloroform	43.44	D
Chloromethane	7.22	D
Cyclohexane	230.53	D
Ethyl Benzene	15.19	D
Isopropanol	14.25	D
n-Heptane	3,195.58	D
n-Hexane	7,398.94	D
o-Xylene	12.59	D
p- & m- Xylenes	26.04	D
p-Ethyltoluene	11.30	D
Tetrachloroethylene	47.46	D
Tetrahydrofuran	1,208.54	D
Toluene	52.74	D

Sample ID	SV-6	
Lab ID	14H0109-06	
Dilution Factor	373.4	
Sampling Date	8/1/2014	
VOCs (µg/m³)		
1,2,4-Trimethylbenzene	19.17	D
1,3-Dichlorobenzene	15.63	D
1,4-Dichlorobenzene	15.63	D
2-Butanone	47.17	D
Acetone	593.83	D
Carbon disulfide	311.28	D
Chloroform	43.93	D
Cyclohexane	378.48	D
Ethyl Benzene	9.12	D
Isopropanol	17.94	D
Methylene chloride	26.04	D
n-Heptane	7,374.41	D
n-Hexane	12,683.89	D
o-Xylene	11.29	D
p- & m- Xylenes	28.21	D
p-Ethyltoluene	14.74	D
Tetrahydrofuran	3,831.97	D
Toluene	32.40	D

Sample ID	SV-3	
Lab ID	14H0109-03	
Dilution Factor	22.9	
Sampling Date	8/1/2014	
VOCs (µg/m³)		
1,2,4-Trimethylbenzene	16.71	D
Acetone	209.03	D
Carbon disulfide	22.10	D
Cyclohexane	103.22	D
Isopropanol	13.02	D
n-Heptane	573.57	D
n-Hexane	739.89	D
p- & m- Xylenes	20.83	D
p-Ethyltoluene	11.30	D
Tetrachloroethylene	20.34	D
Tetrahydrofuran	471.63	D
Toluene	18.08	D

Sample ID	SV-4	
Lab ID	14H0109-04	
Dilution Factor	373.4	
Sampling Date	8/1/2014	
VOCs (µg/m³)		
1,2,4-Trimethylbenzene	19.17	D
1,3-Dichlorobenzene	13.22	D
1,4-Dichlorobenzene	13.22	D
2-Butanone	25.94	D
Acetone	641.33	D
Carbon disulfide	168.09	D
Chloroform	32.70	D
Chloromethane	5.78	D
Cyclohexane	302.78	D
Isopropanol	12.04	D
Methylene chloride	12.85	D
n-Heptane	2,335.23	D
n-Hexane	6,341.95	D
o-Xylene	9.55	D
p- & m- Xylenes	26.91	D
p-Ethyltoluene	14.74	D
Tetrahydrofuran	1,031.68	D
Toluene	14.69	D

Sample ID	SV-2	
Lab ID	14H0109-02	
Dilution Factor	395.2	
Sampling Date	8/1/2014	
VOCs (µg/m³)		
1,2,4-Trimethylbenzene	16.71	D
2-Butanone	22.70	D
2-Hexanone	217.03	D
Acetone	204.28	D
Carbon disulfide	46.69	D
Chloroform	33.68	D
Cyclohexane	61.93	D
Ethyl Benzene	12.15	D
Isopropanol	10.07	D
n-Heptane	5,325.96	D
n-Hexane	12,331.56	D
o-Xylene	9.55	D
p- & m- Xylenes	23.87	D
p-Ethyltoluene	12.78	D
Tetrachloroethylene	21.69	D
Tetrahydrofuran	2,682.38	D
Toluene	24.49	D

Sample ID	SV-1	
Lab ID	14H0109-01	
Dilution Factor	403.2	
Sampling Date	8/1/2014	
VOCs (µg/m³)		
1,2,4-Trimethylbenzene	132.68	D
1,3,5-Trimethylbenzene	157.25	D
1,3-Dichlorobenzene	13.22	D
2-Butanone	35.38	D
2-Hexanone	982.76	D
Acetone	427.56	D
Carbon disulfide	164.98	D
Chloroform	122.02	D
Chloromethane	5.37	D
Cyclohexane	584.92	D
Ethyl Benzene	477.46	D
n-Heptane	12,290.68	D
n-Hexane	19,378.17	D
o-Xylene	651.08	D
p- & m- Xylenes	1,432.38	D
p-Ethyltoluene	265.36	D
Tetrachloroethylene	9.49	D
Tetrahydrofuran	4,421.50	D
Toluene	1,092.42	D

LEGEND:

- APPROXIMATE SITE BOUNDARY
- SV–6 SOIL VAPOR POINT LOCATION AND ID (LANGAN 2014)
- KNOWN AND UNKONWN UST LOCATIONS

NOTES:

1. SOIL VAPOR SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) AIR GUIDANCE VALUE (AGV) (TABLE 1).
2. ONLY DETECTIONS ARE SHOWN ON THE FIGURE.
3. NYSDOH AGV EXCEEDANCES ARE SHADED AND BOLDED.
4. UST - UNDERGROUND STORAGE TANK
5. VOC - VOLATILE ORGANIC COMPOUND
6. UG/M^3 - MICROGRAMS PER CUBIC METER
7. "~" - CRITERIA DOES NOT EXIST
8. D - RESULT IS FROM AN ANALYSIS THAT REQUIRED A DILUTION

TABLE 1

Sample ID / Lab ID / Dilution Factor / Sampling Date	NYSDOH AGV
VOCs (µg/m³)	
1,2,4-Trimethylbenzene	~
1,3,5-Trimethylbenzene	~
1,3-Dichlorobenzene	~
1,4-Dichlorobenzene	~
2-Butanone	~
2-Hexanone	~
Acetone	~
Carbon disulfide	~
Chloroform	~
Chloromethane	~
Cyclohexane	~
Ethyl Benzene	~
Isopropanol	~
Methylene chloride	60
n-Heptane	~
n-Hexane	~
o-Xylene	~
p- & m- Xylenes	~
p-Ethyltoluene	~
Tetrachloroethylene	60
Tetrahydrofuran	~
Toluene	~

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

100 0 50 100
SCALE IN FEET

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Langan Engineering and Environmental Services, Inc.
Langan CT, Inc.
Langan International LLC
Collectively known as Langan

Project
2401 THIRD AVENUE
BLOCK No. 2319, LOT No. 2
BRONX
BRONX COUNTY NEW YORK

Drawing Title
SOIL VAPOR ANALYTICAL RESULTS MAP

Project No.	Drawing No.
170305901	5
Date: 8/18/2014	
Scale: 1" = 100'	
Drawn By: HHG / Checked By: RJW	
Submission Date	

Filename: \\langan.com\data\NY\data9\170305901\Cadd Data - 170305901\2D-DesignFiles\Phase 2\Soil Vapor Analytical Results.dwg Date: 8/26/2014 Time: 10:56 User: sclout Style Table: Langan.stb Layout: ANSIB-BL