Quarterly Operation and Maintenance Report – 1Q2018

Stanton Cleaners

NYSDEC Site No: 130072

110 Cuttermill Road, Great Neck, New York

Work Assignment # D007625-06

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Prepared for:

New York State Department of Environmental Conservation

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

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ACRONYMS AND ABBREVIATIONS

AS	Air Sparge
ASP	Analytical Services Protocol
bgs	below ground surface
CAP	Contractor's Application for Payment
cfm	cubic feet per minute
COC	contaminant of concern
DUSR	data usability summary report
DVS	Data Validation Services
EC	emerging contaminant
ECL	Environmental Conservation Law
EFF	effluent
GAC	Granular Activated Carbon
gpm	gallons per minute
GWE&T	Groundwater Extraction and Treatment
GWQS	Groundwater Quality Standard
HC	Hampton Clarke
HDR	Henningson, Durham & Richardson Architecture and Engineering, P.C.
INF	influent
LIHA	Long Island Hebrew Academy
lbs	pounds
LEL	lower explosive limit
LGAC	liquid phase granular activated carbon
µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
MDL	minimum detection limit
ND	non-detect
ng/L	nanograms per liter
NPL	National Priorities List
NYCRR	New York Codes of Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operations and Maintenance
PCE	tetrachloroethene
PES	Preferred Environmental Services
PFC	perfluorinated compounds
PFOA	perfuorooctanoic acid
PFOS	perfluorooctane sulfonic acid
PID	photo-ionization detector

ACRONYMS AND ABBREVIATIONS (CONT.)

PRR	Periodic Review Report
RAO	Remedial Action Objective
ROD	Record of Decision
RSO	Remedial System Optimization
SCG	Standards, Criteria, and Guidance
SCO	Soil Cleanup Objective
SPDES	State Pollutant Discharge Elimination System
SSDS	sub-slab depressurization system
SVE	Soil Vapor Extraction
SVI	Soil Vapor Intrusion
TA	Test America
TCL	Target Compound List
TICs	Tentatively Identified Compounds
TOGS	Technical and Operational Guidance Series
UGA	Upper Glacial Aquifer
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
WA	Work Assignment
WAGNN	Water Authority of Great Neck North

1.0 INTRODUCTION

As part of on-going remediation system operations and maintenance (O&M) and monitoring at the Stanton Cleaners groundwater contamination site located in Great Neck, New York (NYSDEC Site#130072), the New York State Department of Environmental Conservation (NYSDEC) has assigned site management tasks to Henningson, Durham & Richardson Architecture and Engineering, P.C. (HDR) under Standby Engineering Contract D007625. The site is currently listed on the New York State Registry of Inactive Hazardous Waste Sites as a Class 4. This designation is for properly closed sites but requires continued management until remedial objectives are achieved. From 2001 to 2012, the United States Environmental Protection Agency (USEPA) oversaw the O&M and site management, with the NYSDEC resuming responsibility in 2012.

The on-going site management was assigned to HDR (D007625-06) in August 2012. This work assignment (WA) includes the following tasks:

- Task 1 – Project Scoping
- Task 2 – Site Management Plan
- Task 3 – O&M
- Task 4 – Monitoring and Reporting
- Task 5 – Periodic Review
- Task 6 – Remedial System Optimization (RSO)

This quarterly O&M Report (Task 4) summarizes the O&M and monitoring activities completed during the first quarter of 2018 (January through March 2018). This report provides a description of the work performed throughout the reporting period and includes all relevant data and performance monitoring documentation.

2.0 BACKGROUND

2.1 Site Location and Current Use

The site's physical address is 110 Cutter Mill Road in Great Neck, New York. The property is approximately ¼ acre in size and includes a vacant two-story building (formerly the Stanton Cleaners building), a one-story boiler/storage building, and the two-story groundwater extraction and treatment (GWE&T)/soil vapor extraction (SVE) system building. The site is bordered to the north and east by empty lots (former indoor tennis facility), to the south by a Sunoco gasoline fueling station and the Long Island Hebrew Academy (LIHA), and to the west by Cutter Mill Road. The surrounding area is largely urbanized and consists of various mixed uses with residential areas on side streets and commercial buildings along the main roadways. The entire area is serviced by public water and sewer with Water Authority of Great Neck North (WAGNN) as the primary water supplier. A United States Geological Survey (USGS) 7.5-minute map showing the site's location is provided on Figure 1.

As mentioned above, the Stanton Cleaners building is currently vacant. During a 2014 inspection, the NYSDEC verified that the facility terminated the use of a fourth generation tetrachloroethene (PCE) dry cleaning machine and surrendered their Air Facility Registration. In February 2017, the dry cleaning machinery was removed from the property and operations were moved to another location.

Three WAGNN public water supply wells are located approximately 1,000 feet west (downgradient) of the site. Two of these wells are approximately 145 feet deep and the third well is 434 feet deep. The two 145-foot deep wells, designated as PW-2A (N-12796) and PW-9 (N-4388), are screened within a deeper portion of the Upper Glacial Aquifer (UGA). The third 434-foot deep well, designated as PW-11, is within the Lloyd Aquifer and not believed to be impacted by the site. In October 2015, well PW-11 was taken out of service and replaced by well PW-11A in April 2017.

The WAGNN supply well treatment system is currently in operation and influent (INF) volatile organic compound (VOC) concentrations are treated to below federal and state drinking water standards. WAGNN analytical data provided to the NYSDEC indicates that PCE concentrations in raw water samples collected from PW-2A (down gradient of Stanton Cleaners site) periodically exceed its respective NYSDEC Groundwater Quality Standard (GWQS) of 5 micrograms per liter (µg/L).

2.1 Site Geology

Long Island's geology is composed of a sequence of unconsolidated glacial, lacustrine, deltaic, and marine deposits of clay, silt, and gravel that range in age from the Upper Cretaceous to Pleistocene epochs. These deposits overlay a Precambrian to Paleozoic crystalline bedrock. In Nassau County, where the site is located, the unconsolidated deposit thickness is approximately 500 feet.

Underlying the site, the UGA is subdivided into shallow, intermediate, and deep zones. For on-going site management, this naming convention is maintained such that all data collected is consistent with the *April*

2004 Final Hydrogeologic Investigation Report- Operable Unit 1 and *Final Capture Zone Analysis Report*. The shallow UGA consists of orange brown, poorly to well graded outwash sands and till of generally high permeability. The intermediate zone, at the water table's vicinity (depth between 50 to 60 feet below ground surface (bgs)), consists of a light grey to white fine grained micaceous silty sand and clay. The intermediate zone then transitions with depth into the North Shore confining unit, which separates the shallow-intermediate and deep zones. The confining unit consists of fine grained deposits and is described as light brown clay, light gray clayey silts, and silty clay. The finer grained materials are likely marine or post-glacial lake deposits which, in some areas of the site, overlie the deeper UGA. The deep UGA zone is generally a thin deposit of outwash sands and gravels that represent possible infilling of low lying areas during an interglacial stage.

Previous site investigations have shown that only the UGA has been impacted and groundwater PCE concentrations have declined significantly over time. The site groundwater levels are impacted by the pumping stress associated with the WAGNN pumping wells, with the most pronounced impacts in the UGA intermediate and deep zones.

2.2 Remedial History

Improper handling and disposal of spent dry cleaning solvents, including PCE, has resulted in hazardous substance releases at the site. As a result, PCE migrated from the underlying subsurface soils to surrounding indoor air and groundwater environments, producing significant threats to human health. Site remedial activities began in 1983 and are briefly summarized below.

- 1983 – Approximately 20 cubic yards of PCE-contaminated soil was removed from behind the Stanton Cleaners property
- 1986 – The NYSDEC funded construction of an air stripper treatment system for the WAGNN water supply wells.
- 1989 - A GWE&T system was installed by the potentially responsible party (PRP). The system performed poorly and was abandoned shortly thereafter.
- 1993 – The site was listed on the New York State Registry of Inactive Hazardous Waste Sites as a Class 2.
- 1998 – A new air stripper treatment system for the site-impacted WAGNN water supply wells was installed.
- 1998/1999 – USEPA assistance was requested; the site was proposed for addition to the National Priorities List (NPL); a Record of Decision (ROD) was finalized. The site was formally added to the NPL in May 1999.
- 2001 – The USEPA completed the installation of the dual GWE&T/SVE system on the property to address and contain the on-site contamination source. Additionally, the USEPA installed a sub-slab depressurization system (SSDS) on the LIHA.

- 2002 – Two 250-gallon PCE and one 500-gallon oil underground storage tanks (UST) were removed.
- 2008 – The USEPA conducted the first five-year site review. The review concluded that the remedy was in place and functioning as intended and did not identify significant issues requiring attention.
- 2011 – The site was reclassified from a Class 2 to a Class 4 Inactive Hazardous Waste site.
- 2012 – The USEPA completed the installation of a groundwater air sparge (AS) system and began operations in March. Additionally, the USEPA removed the LIHA SSDS prior to the NYSDEC assuming O&M in November.
- 2013 – The USEPA conducted the second five-year review in December.
- 2014 – Due to an air compressor oil leak, the AS system was shut down. The AS component of the groundwater system was removed from service such that the remaining remedial system consists of GWE&T and SVE. In February, snow and ice on the roof collapsed the gutter system, pulling the electrical service drop from the building. As a result, extensive downtime occurred due the electrical system damage and subsequent repairs.
- 2015 – In July, USEPA representatives met with NYSDEC representatives to review remedial action objective (RAO) progress and discuss site management program plans.
- 2016 – Significant downtime to the SVE system (approximately 10 months) occurred due to needed repairs for the blower. Repairs were delayed for administrative reasons during the Amendment 1 approval process.
- 2017 – The NYSDEC completed an RSO investigation from November 2016 through February 2017 to evaluate subsurface soil and the local aquifer in the vicinity of EPA-EXT-02. Additionally, the Stanton Cleaners building was vacated, with all associated equipment and operations removed from the site.

2.3 Site Cleanup Objectives

The site cleanup objective is, to the extent feasible, restore the impacted media to pre-disposal conditions. Closure criterion will be determined by the NYSDEC based on the future monitoring data. The Standards, Criteria, and Guidance (SCGs) currently used for the various sample media are summarized below.

- Soil – NYSDEC Environmental Conservation Law (*ECL*) *6 New York Code of Rules and Regulations (NYCRR) Part 375-6: Remedial Program Soil Cleanup Objectives (SCOs)*
- Groundwater - NYSDEC *Technical and Operational Guidance Series (TOGS) 1.1.1. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*.
- Soil Vapor - New York State Department of Health (NYSDOH) *Final Guidance for Evaluating Soil Vapor Intrusion (SVI) in the State of New York.*

3.0 OPERATIONS AND MAINTENANCE PROGRAM

The on-going O&M program at the Stanton Cleaners site includes the following:

- Monthly operational checks of the GWE&T and SVE systems;
- Monthly water level monitoring;
- Monthly influent (INF)/effluent (EFF) sampling of the GWE&T system;
- Quarterly INF/EFF sampling of the SVE system; Annual, or as needed, granular activated carbon (GAC) change outs on the GWE&T and SVE systems; and
- Annual State Pollutant Discharge Elimination System (SPDES) sampling of the GWE&T system EFF.

This report is a summary of all first quarter 2018 activities (January through March). Daily reports summarizing the activities completed for that day are in Appendix A.

3.1 Groundwater Extraction and Treatment System Operations and Maintenance

Currently EPA-EXT-02, located at the corner of Cutter Mill and Ascot Roads, is the only operational extraction well. Four additional extraction wells (EPA-EXT-01, EPA-EXT-03, EPA-EXT-04R, and ST-IW-01) are not operational and were formerly included in the groundwater monitoring well network. The locations of the five extractions wells are shown on Figure 2.

A summary of the first quarter 2018 GWE&T system mass removed, including average monthly flow rate, total and cumulative flow, PCE influent concentration and mass removal rate is provided in Table 1. Performance monitoring logs including the monthly O&M reports and Lookout® operational data is provided in Appendices B and C, respectively.

From January 1 through March 31, 2018 the GWE&T system treated and discharged a total of 7,501,457 gallons with an average flow rate of 59.7 gallons per minute (gpm). Since initial startup in November 2001, the GWE&T system has treated an approximate total of 402,835,521 gallons. Monthly flow rates and cumulative discharge amounts are calculated utilizing the continuous four-hour data logging software, Lookout®, located on the site computer and accessed remotely.

As a result of first quarter 2018 operations, approximately 0.38 pounds (lbs) of PCE have been removed in the liquid phase, totaling 8.01 lbs since the NYSDEC assumed O&M in 2013. To calculate monthly PCE mass removed, the average flow rate is multiplied by the number of operational days and the PCE concentration (from monthly O&M samples).

3.1.1 Groundwater Extraction and Treatment System Influent/Effluent Sampling

Sampling of the GWE&T system INF and EFF is performed monthly to monitor plant efficiency and determine whether liquid GAC (LGAC) breakthrough has occurred. All collected samples are submitted to Hampton Clarke Analytical and Field Services of Fairfield, New Jersey (HC) for the analysis of target compound list (TCL) VOCs and tentatively identified compounds (TICs) by USEPA Method 624. As a result of the laboratory analysis, PCE was detected in each of the three monthly INF samples and ranged in concentration from 4.7 (March) to 8.2 micrograms per liter (µg/L) (January). Detected PCE concentrations in the three monthly INF samples exceeded the NYSDEC GWQS of 5 µg/L in January and February. No VOCs were detected in any monthly EFF sample collected for analysis. A summary of the first quarter 2018 GWE&T system INF/EFF analytical results is provided in Table 2. A graph showing the GWE&T system influent PCE concentrations from 2003 through the first quarter of 2018 is provided on Figure 3.

3.1.2 Groundwater Extraction and Treatment System Annual SPDES Sampling

Sampling of the GWE&T system EFF is performed annually to verify that discharge parameters do not exceed the SPDES permit equivalency. During this quarter, a sample was not collected from the effluent port.

3.2 Soil Vapor Extraction System Operations and Maintenance

Air monitoring of the SVE system is performed on a monthly basis. In accordance with the *2012 O&M Manual*, monthly SVE system performance monitoring includes the collection of the following parameters: VOCs, carbon monoxide, oxygen, lower explosive limit (LEL), hydrogen sulfide, air velocity in cubic feet per minute (cfm), temperature, relative humidity, dew point, and vacuum pressure. Air monitoring is performed at the following locations:

- SVE wells: EPA-SVE-1 (shallow), EPA-SVE-1 (medium), EPA-SVE-2 (shallow), EPA-SVE-2 (medium), EPA-SVE-3A, EPA-SVE-3B, and SS-A
- SVE-Influent, SVE-1 Combined, SVE-2 Combined: Sampling ports on SVE influent lines, prior to blower and vapor phase carbon
- Post-Blower Pre-Carbon: Prior to vapor phase carbon treatment, post blower
- Post-VGAC – Post vapor phase treated effluent (quarterly as needed to evaluate carbon breakthrough)

As a result of the first quarter 2018 SVE system operations (January through March), approximately 3.9 lbs. of VOCs has been removed through the vapor phase. SVE mass removal rates are calculated utilizing total VOC measurements via a photo-ionization detector (PID). Since the start of operations in September 2003, the SVE system is estimated to have removed an approximately 2,034.7 lbs. of PCE. Graphs showing the cumulative PCE mass removed over the past year and since September 2003 can be found on Figures 4 and 5, respectively. Monthly performance monitoring logs including both the AS and SVE systems can be found in Appendices D and E, respectively.

Figure 5 uses the PID measurements obtained during monitoring to estimate the mass recovery of the SVE system over the life of the system. When applicable, measurement of the SVE influent from a more robust source, such as sample collection via summa canister and laboratory analysis is used instead of a PID measurement. Calculation assumes that PCE is the bulk of the VOC detected in PID readings attained at the site.

Quarterly, 1-liter SUMMA canister influent and effluent samples are collected. During this quarter, samples were not collected by Preferred Environmental Services from the influent and effluent ports.

4.0 MONITORING PROGRAM

The on-going Monitoring program at the Stanton Cleaners site includes the following:

- Quarterly O&M reports;
- Semi-annual groundwater sampling; and
- Semi-annual SVI sampling at the LIHA

4.1 Plume Perimeter Monitoring

Groundwater level measurements are obtained from both onsite and offsite wells once a month in order to evaluate capture zones(s) around groundwater extraction well EPA-EXT-02. The monitoring well network and well monitoring schedule are provided as Figures 6 and 7, respectively.

Water level measurements were collected during the January through March 2018 monthly O&M visits at 18 on and off-site monitoring wells. The location and number of monitoring wells was previously determined by the USEPA based on the 2014 *Final Capture Zone Analysis Report*. During the January 2018 monthly O&M visit, 16 monitoring wells were gauged, in February 2018, 17 wells were gauged and in March 2018, 15 wells were gauged; some wells were inaccessible during the site visits. Potentiometric surface maps for the shallow, intermediate, and deep UGA, based on the January 2018 values, can be found on Figures 8, 9, and 10, respectively. Groundwater level measurements for this quarter are provided in Appendix F.

The groundwater flow directions in the shallow and deep UGA resemble those measured previously for the site. In each of the contour maps, groundwater generally appears to flow to the southwest. A downward component of flow is also apparent when comparing the shallow, intermediate, and deep groundwater contours. A noticeable depression in the shallow water table (Figure 8) is centered around extraction well, EPA-EXT-02. The intermediate and deep UGA flow directions are to the southwest (Figures 9 and 10). During the February 2017 RSO aquifer test, it was found that the entire site falls within the capture zones of the public water supply wells, which strongly influence flow.

4.2 Groundwater Sampling

Routine semi-annual groundwater samples were not collected during this quarter. The next routine semi-annual groundwater sampling event is scheduled during the second quarter of 2018.

In January 2018, upon NYSDEC request, groundwater samples were collected from eight wells (EPA-EXT-02, EPA-MW-23, EPA-MW-26, ST-MW-15, ST-MW-16, ST-MW-18, ST-MW-19, and ST-MW-20) by HDR's subconsultant, Preferred Environmental Services of North Merrick, New York (PES) and submitted to the NYSDEC contract laboratory, TestAmerica of West Sacramento, California (TA) for the analysis of

perfluorinated compounds (PFCs) and 1,4-Dioxane by USEPA Methods modified 537 and 8270D SIM, respectively. Wells EPA-CL-4D and EPA-CL-4S were analyzed for 1,4-Dioxane only. A summary of the emerging contaminant (EC) analytical results is provided on Table 3. Groundwater sampling parameter logs can be found in Appendix G. DVS' data usability summary report (DUSR) is provided in Appendix J.

Various PFCs, including perfluorooctanoic acid (PFOA) and/or perfluorooctane sulfonic acid (PFOS), were detected in all eight wells sampled and analyzed for PFCs. The summed concentration of PFOA and PFOS ranged in a total concentration from 1.2 nanograms per liter (ng/L) (ST-MW-15) to 88.6 ng/L (EPA-MW-26). In the sample collected from EPA-MW-26, the sum of PFOA and PFOS exceeded the EPA Health Advisory Lifetime guidance value of 70 ng/L. The NYSDEC guidance value of 10 ng/L for PFOA and/or PFOS was exceeded in five of the eight sampled wells.

1,4-Dioxane was detected in four of the 10 monitoring wells at concentrations ranging from 0.11 (EPA-EXT-02) to 2.5 µg/L (EPA-MW-26). The USEPA guidance value of 0.35 ug/l was exceeded at EPA-MW-26.

4.3 Indoor Air Quality Sampling

On February 21, 2018, upon NYSDEC request, three indoor air samples (two basement level and one first level) and one outdoor air sample were collected from the LIHA building using 6-liter Summa® canisters, equipped with 24-hour flow controllers, and submitted to Chemtech of Mountainside, New Jersey (Chemtech) for the analysis of VOCs by USEPA Method TO-15. Laboratory deliverables were in accordance with NYSDEC Analytical Services Protocol (ASP) Category B and subjected to data validation by HDR's independent contract validator, Data Validation Services of North Creek, New York (DVS). A copy of the LIHA indoor air sampling questionnaire and DVS' data usability summary report (DUSR) are provided in Appendix H and I, respectively.

As indicated by the laboratory analytical results, site contaminants of concern (COCs) are below threshold action levels as described by the NYSDOH soil vapor/indoor air decision matrices A, B, and C (May 2017 amendment). The compound dichloromethane was detected in the LIHA-IA1 duplicate sample at a concentration of 18.8 micrograms per cubic meter (µg/m^3), which exceeds its respective concentration range 3 threshold of 10 µg/m^3 and greater. It should be noted that dichloromethane was not detected above its respective minimum detection limit (MDL) in any other sample, including its parent. Additionally, dichloromethane was not detected in any September 2017 SVI sample collected on the Stanton Cleaners property. This suggests that the compound is potentially a laboratory contaminant or representative of the use of chemicals within the LIHA building. A summary of the LIHA air sampling analytical results is provided on Table 4.

4.4 Water Authority of Great Neck North Public Supply Well Monitoring

On a periodic basis, WAGNN personnel collect raw and treated water samples from each of its public supply wells (PW-2A, PW-6, PW-9, and PW-11A) and submits for the analysis of various compounds, including site specific chlorinated VOCs. It should be noted that PW-11 was permanently removed from service on October 19, 2016 and abandoned in March 2017. A new location, PW-11A, was installed during that time and began operation in April 2017.

In the analytical data provided by WAGNN for this quarter, the highest PCE concentration in any pre-treatment sample occurred on January 10, 2018 in PW-2A at a concentration of 8.1 µg/L. All post-treatment samples were non-detect (ND) for PCE. A graph showing the contaminants of concern (COCs) concentrations in the WAGNN wells over time can be found on Figure 11.

5.0 MAINTENANCE ISSUES AND RECOMMENDED SOLUTIONS

Based on the site visits and data collected during this period, HDR has not identified any new maintenance issues.

5.1 Downtime Summary

During this quarterly monitoring period, most system components were found to be operational. One instance of SVE operational downtime was encountered during the February 22, 2018 O&M event. Upon arriving on-site, O&M personnel observed that the SVE blower was not active. The shutdown cause was not able to be determined and the SVE blower was restarted. The approximate downtime duration is unknown as the downloaded Lookout® data shows flow through the air flow meter during the entire month of February 2018. On March 1, 2018, Delta replaced the blower motor.

6.0 FUTURE ACTIVITIES

Upcoming maintenance and monitoring activities at the site includes the following:

- Routine monthly O&M activities will continue.
- Semi-annual groundwater sampling is scheduled to be completed during the second quarter of 2018.

7.0 PROGRESS TOWARD CLEANUP OBJECTIVES

As a result of ongoing GWE&T and SVE system operations during the first quarter of 2018, a total of 0.38 and 3.9 lbs. of VOCs have been removed in liquid and vapor phases, respectively. The total cost incurred in association with operation of these remedial system operations and subsequent site monitoring during this past quarter was $80,134.24 (see quarterly cost summary below). During this quarter, the cost of both liquid and vapor phase VOC removal was $18,722.95 per pound. Note that the cost per VOC pound removed is based on spending associated with WA D007625-06 Tasks 1 (Project Scoping), 2 (Site Management Plan), 3 (O&M), 4 (Monitoring and Reporting), and 5 (Periodic Review). Costs associated with Task 6 (RSO) are not included. Specific cost details can be found on HDR's Contractor's Application for Payments (CAPs) for this period.

Progress continues toward achieving the site cleanup objectives. An overall bulk reduction in the groundwater contaminant concentration has been achieved, but groundwater concentrations still exceed applicable goals. The SVE system continues to remove VOCs in the vapor phase, as determined by PID readings and flow measurements. Operation of the SVE system should continue until the cost per pound of VOC removed exceeds that which is determined efficient, or if asymptotic conditions have been reached.

Quarterly Cost Summary							
PERIOD	COST ($)	Total VOCS Measured at SVE (lbs.)	Total VOCs Measured at GWE&TS (lbs.)	Quarterly Sum ($)	Total VOCs Removed (lbs.)		Cost per Pound
12/31/2017 - 2/3/2018	$ 65,632.40						
2/4/2018 - 3/31/2018	$ 14,501.84	3.9	0.38	$ 80,134.24	4.3		$ 18,722.95

Table 1
Groundwater Extraction and Treatment System
PCE Mass Removal Summary - January through March 2018
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

Quarter No.	Date	Average Monthly Flow Rate (GPM)	Total Flow (gal/month)	Cumulative Flow (gal)	INF PCE Concentration (µg/L)	PCE Mass Removal Rate (lbs/Month)	Cumulative PCE Mass Removed (lbs)
1	January-18	57.32	2.536E+06	3.978E+08	8.2	0.17	7.80
	February-18	59.60	2.237E+06	4.001E+08	5.3	0.10	7.90
	March-18	62.14	2.729E+06	4.028E+08	4.7	0.11	8.01
					Quarter Total	**0.38**	NA
					Reporting Period Total	**0.38**	NA

Notes
GPM : gallons per minute
gal/month : gallons per month
INF : Influent
PCE : tetrachloroethene
µg/L : micrograms per liter
lbs/month : pounds per month
NA : Not applicable

Table 2
Groundwater Extraction and Treatment System
Influent and Effluent Analytical Results - January through March 2018
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

	Sample Location:	INF-GW	EFF-GW	INF-GW	EFF-GW	INF-GW	EFF-GW
	Sample Date:	1/25/2018	1/25/2018	2/22/2018	2/22/2018	3/29/2018	3/29/2018
Analyte	**GWQS (µg/L)**	**Results (µg/L)**					
Total TICs	NS	ND	ND	25.0 J	25.0 J	ND	ND
1,1,1-Trichloroethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1,2,2-Tetrachloroethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1,2-Trichloroethane	1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2,3-Trichlorobenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2,4-Trichlorobenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dibromo-3-chloropropane	0.04	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dibromoethane	NS	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichlorobenzene	3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	0.6	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
1,2-Dichloropropane	1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,3-Dichlorobenzene	3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,4-Dichlorobenzene	3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,4-Dioxane	NA	ND (50)	ND (50)	ND (50)	ND (50)	ND (250)	ND (250)
2-Butanone	NS	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
2-Hexanone	50*	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
4-Methyl-2-pentanone	NS	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	50*	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	1	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Bromochloromethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Bromodichloromethane	50*	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Bromoform	50*	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Bromomethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Carbon disulfide	60*	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Carbon tetrachloride	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroform	7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloromethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,3-Dichloropropene	0.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Cyclohexane	NS	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Dibromochloromethane	50*	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Dichlorodifluoromethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Isopropylbenzene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
m&p-Xylenes	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Methyl Acetate	NS	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Methylcyclohexane	NS	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Methylene chloride	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Methyl-t-butyl ether	10*	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)

Table 2
Groundwater Extraction and Treatment System
Influent and Effluent Analytical Results - January through March 2018
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

	Sample Location:	INF-GW	EFF-GW	INF-GW	EFF-GW	INF-GW	EFF-GW
	Sample Date:	1/25/2018	1/25/2018	2/22/2018	2/22/2018	3/29/2018	3/29/2018
Analyte	**GWQS (µg/L)**	**Results (µg/L)**					
o-Xylene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Styrene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Tetrachloroethene	5	**8.2**	ND (1.0)	**5.3**	ND (1.0)	4.7	ND (1.0)
Toluene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,3-Dichloropropene	0.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichlorofluoromethane	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (Total)	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

Notes:

GWQS : NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, *Table 1 - NYS Ambient Water Quality Standards and Guidance Values (Class GA)*
NYSDEC : New York State Department of Environmental Conservation
NS : No Standard
NA : Not Applicable
ND (#) : Not Detected at the indicated laboratory run limit
TICs : Tentatively Identified Compounds
J : Estimated value
Bold : Detected concentration exceeds its respective GWQS
* : Denotes a guidance value
INF : Influent
EFF : Effluent
µg/L : micrograms per liter

Table 3
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	EPA-CL-4D-011818-20180118		EPA-CL-4S-011818-20180118		EPA-EXT-02-012218-20180122		EPA-MW-23-011918-20180119		EPA-MW-26-012218-20180122		ST-MW-15-012218-20180122	
				Sample Location:	CL-4D		CL-4S		EPA-EXT-02		EPA-MW-23		EPA-MW-26		ST-MW-15	
				Sample Date:	1/18/2018		1/18/2018		1/22/2018		1/19/2018		1/22/2018		1/22/2018	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
PFCs																
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	NA		NA		18	U	20.1	U	198	U	17	U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	NA		NA		18	U	20.1	U	198	U	17	U
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	NA		NA		2.81		2.98		4.3		0.57	J
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	NA		NA		5.99	B	9.32	B	14	B	1.98	U
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	NA		NA		1.8	U	2.01	U	1.98	U	1.7	U
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	NA		NA		1.8	U	2.01	U	0.32	J	1.7	U
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	NA		NA		1.8	U	2.01	U	1.98	U	1.7	U
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	NA		NA		0.74	J	0.84	J	1.82	J	1.7	U
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	NA		NA		6.61		7.67		18.8		0.52	J
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	NA		NA		6.8	B	9.58	B	25.8	B	1.7	U
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	NA		NA		9.15		13.1		28.8		0.6	J
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	NA		NA		2.22		9.13		8.7		1.7	U
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	NA		NA		1.8	U	2.01	U	1.98	U	1.7	U
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	NA		NA		11.7		21.6		40.7		0.6	J
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	NA		NA		1.8	U	2.01	U	1.98	U	1.7	U
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	NA		NA		1.8	U	2.01	U	1.98	U	1.7	U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	NA		NA		1.8	U	2.01	U	1.98	U	1.7	U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE	39108-34-4	ng/l	NS	NS	NA		NA		18	U	20.1	U	198	U	17	U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE	27619-97-2	ng/l	NS	NS	NA		NA		4.47	J	20.1	U	198	U	17	U
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	NA		NA		**15**		**25.5**		**64.2**		1.7	U
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	NA		NA		**17**		**19.8**		**24.4**		1.2	J
Sum of PFOA and PFOS		ng/l	70	NS	NA		NA		32		45.3		88.6		1.2	J
1,4-Dioxane																
1,4-Dioxane	123-91-1	ug/l	0.35	1	0.42	U	0.42	U	0.11	J	0.4	U	***2.5***		0.046	J

Table 3
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	ST-MW-16-011918-20180119		DUPLICATE 1-011918-20180119		ST-MW-18-012218-20180122		ST-MW-19-011918-20180119		ST-MW-20-012218-20180122	
				Sample Location:	ST-MW-16		ST-MW-16		ST-MW-18		ST-MW-19		ST-MW-20	
				Sample Date:	1/19/2018		1/19/2018		1/22/2018		1/19/2018		1/22/2018	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
PFCs														
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	20.2	U	19.6	U	198	U	20	U	170	U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	20.2	U	19.6	U	198	U	20	U	170	U
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	4.52		4.23		0.65	J	2.56		2.44	
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	7.72	U	8.23	U	5.97	B	5.77	U	3.8	B
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	2.02	U	1.96	U	1.98	U	2	U	1.7	U
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	2.02	U	1.96	U	0.37	J	2	U	1.7	U
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	2.02	U	1.96	U	1.98	U	2	U	1.7	U
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	0.36	J	0.41	J	1.98	U	0.79	J	0.64	J
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	7.43		8.01		0.8	J	7.51		3.53	
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	5.22	B	5.8	B	1.98	U	6.72	B	4.47	B
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	10.6		10.7		1.73	J	7.79		6.2	
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	2.51		2.84		0.43	J	3.86		1.7	U
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	2.02	U	1.96	U	1.98	U	2	U	1.7	U
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	15		15.6		1.1	J	8.22		6.13	
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	2.02	U	1.96	U	1.98	U	2	U	1.7	U
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	2.02	U	1.96	U	1.98	U	2	U	1.7	U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	2.02	U	1.96	U	1.98	U	2	U	1.7	U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE	39108-34-4	ng/l	NS	NS	20.2	U	19.6	U	198	U	20	U	170	U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE	27619-97-2	ng/l	NS	NS	20.2	U	19.6	U	198	U	20	U	170	U
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	**21.4**		**21.9**		1.12	J	**20.8**		1.07	J
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	**13.5**		**13.6**		1.19	J	**25.4**		3.46	
Sum of PFOA and PFOS		ng/l	70	NS	34.9		35.5		2.31	J	46.2		4.53	
1,4-Dioxane														
1,4-Dioxane	123-91-1	ug/l	0.35	1	0.4	U	0.4	U	0.42	U	0.42	U	0.3	J

Table 4
Summary of LIHA Indoor Air Sampling Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

					Sample ID	**LIHA-IA1-20180222**		**LIHA-IA1-DUP-20180222**		**LIHA-IA2-20180222**	
					Sample Location	**LIHA-IA1**		**LIHA-IA1**		**LIHA-IA2**	
					Date	**2/22/2018**		**2/22/2018**		**2/22/2018**	
Analyte	**CAS Number**	**NYSDOH Decision Matrices A, B, C Indoor Air Concentration**				**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1-Trichloroethane (111-TCA)	71-55-6	<3	3 to <10	10 and above		*0.16*	*U*	*0.16*	*U*	*0.16*	*U*
1,1,2,2-Tetrachloroethane	79-34-5	-	-	-		*3.43*	*U*	*3.43*	*U*	*3.43*	*U*
1,1,2-Trichloroethane	79-00-5	-	-	-		*2.73*	*U*	*2.73*	*U*	*2.73*	*U*
1,1-Dichloroethane	75-34-3	-	-	-		*2.02*	*U*	*2.02*	*U*	*2.02*	*U*
1,1-Dichloroethene (11-DCE)	75-35-4	<0.2	0.2 to <1	1 and above		*1.98*	*U*	*1.98*	*U*	*1.98*	*U*
1,2,4-Trichlorobenzene	120-82-1	-	-	-		*3.71*	*U*	*3.71*	*U*	*3.71*	*U*
1,2,4-Trimethylbenzene	95-63-6	-	-	-		1.87	J	2.06	J	1.18	J
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	-	-	-		*3.84*	*U*	*3.84*	*U*	*3.84*	*U*
1,2-Dichlorobenzene	95-50-1	-	-	-		*3.01*	*U*	*3.01*	*U*	*3.01*	*U*
1,2-Dichloroethane	107-06-2	-	-	-		*2.02*	*U*	*2.02*	*U*	*2.02*	*U*
1,2-Dichloropropane	78-87-5	-	-	-		*2.31*	*U*	*2.31*	*U*	*2.31*	*U*
1,2-Dichlorotetrafluoroethane	76-14-2	-	-	-		*3.49*	*U*	*3.49*	*U*	*3.49*	*U*
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	-	-	-		0.54	J	0.64	J	*2.46*	*U*
1,3-Butadiene	106-99-0	-	-	-		*1.11*	*U*	*1.11*	*U*	*1.11*	*U*
1,3-Dichlorobenzene	541-73-1	-	-	-		*3.01*	*U*	*3.01*	*U*	*3.01*	*U*
1,4-Dichlorobenzene	106-46-7	-	-	-		*3.01*	*U*	*3.01*	*U*	*3.01*	*U*
1,4-Dioxane	123-91-1	-	-	-		*1.8*	*U*	*1.8*	*U*	*1.8*	*U*
2,2,4-Trimethylpentane	540-84-1	-	-	-		1.82	J	1.92	J	1.26	J
2-Butanone (MEK)	78-93-3	-	-	-		1.92		2.95		1.89	
2-Chlorotoluene	95-49-8	-	-	-		*2.59*	*U*	*2.59*	*U*	*2.59*	*U*
4-Ethyltoluene	622-96-8	-	-	-		*2.46*	*U*	*2.46*	*U*	*2.46*	*U*
4-Methyl-2-Pentanone	108-10-1	-	-	-		*2.05*	*U*	*2.05*	*U*	*2.05*	*U*
Acetone	67-64-1	-	-	-		32.1	B	33.3	B	18.8	B
Allyl Chloride (3-Chloropropene)	107-05-1	-	-	-		*1.57*	*U*	*1.57*	*U*	*1.57*	*U*
Benzene	71-43-2	-	-	-		1.28	J	1.5	J	0.96	J
Bromodichloromethane	75-27-4	-	-	-		*3.35*	*U*	*3.35*	*U*	*3.35*	*U*
Bromoform	75-25-2	-	-	-		*5.17*	*U*	*5.17*	*U*	*5.17*	*U*
Bromomethane	74-83-9	-	-	-		*1.94*	*U*	*1.94*	*U*	*1.94*	*U*
Carbon Disulfide	75-15-0	-	-	-		*1.56*	*U*	*1.56*	*U*	*1.56*	*U*
Carbon Tetrachloride	56-23-5	<0.2	0.2 to <1	1 and above		**0.44**		**0.5**		**0.5**	
Chlorobenzene	108-90-7	-	-	-		*2.3*	*U*	*2.3*	*U*	*2.3*	*U*
Chlorodibromomethane	124-48-1	-	-	-		*4.26*	*U*	*4.26*	*U*	*4.26*	*U*
Chloroethane	75-00-3	-	-	-		*1.32*	*U*	*1.32*	*U*	*1.32*	*U*
Chloroform	67-66-3	-	-	-		0.93	J	0.73	J	0.68	J
Chloromethane	74-87-3	-	-	-		1.38		1.34		7.02	
Cis-1,2-Dichloroethene (c12-DCE)	156-59-2	<0.2	0.2 to <1	1 and above		*1.98*	*U*	*1.98*	*U*	*1.98*	*U*
Cis-1,3-Dichloropropene	10061-01-5	-	-	-		*2.27*	*U*	*2.27*	*U*	*2.27*	*U*
Cyclohexane	110-82-7	-	-	-		1.58	J	3.79	J	0.96	J
Dichlorodifluoromethane	75-71-8	-	-	-		3.31	J	1.88	J	1.63	J
Dichloromethane	75-09-2	<3	3 to <10	10 and above		*4.86*	*UJ*	***18.8***	***J***	*1.74*	*U*
Ethylbenzene	100-41-4	-	-	-		1.13	J	2.13	J	1.09	J
Freon 113	76-13-1	-	-	-		*3.83*	*U*	*3.83*	*U*	*3.83*	*U*
Hexachlorobutadiene	87-68-3	-	-	-		*5.33*	*U*	*5.33*	*U*	*5.33*	*U*
m,p-Xylene	179601-23-1	-	-	-		3.95	J	8.25		2.48	J
Methyl Methacrylate	80-62-6	-	-	-		*2.05*	*U*	*2.05*	*U*	*2.05*	*U*
Methyl T-Butyl Ether (MTBE)	1634-04-4	-	-	-		*1.8*	*U*	*1.8*	*U*	*1.8*	*U*
Naphthalene	91-20-3	-	-	-		*2.62*	*U*	*2.62*	*U*	*2.62*	*U*
N-Heptane	142-82-5	-	-	-		2.38		3.16		1.84	J
N-Hexane	110-54-3	-	-	-		4.93	J	8.81	J	3.52	
O-Xylene	95-47-6	-	-	-		1.52	J	3.47		0.96	J

Table 4
Summary of LIHA Indoor Air Sampling Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

					LIHA-IA1-20180222		LIHA-IA1-DUP-20180222		LIHA-IA2-20180222	
				Sample Location	LIHA-IA1		LIHA-IA1		LIHA-IA2	
				Date	2/22/2018		2/22/2018		2/22/2018	
Analyte	CAS Number	NYSDOH Decision Matrices A, B, C Indoor Air Concentration			Result	Q	Result	Q	Result	Q
Styrene	100-42-5	-	-	-	1.7	J	2.98		0.72	J
Tert-Butyl Alcohol	75-65-0	-	-	-	8.19	J	3.94	J	*1.52*	*UJ*
Tetrachloroethene (PCE)	127-18-4	<3	3 to <10	10 and above	2.44		2.51		2.24	
Tetrahydrofuran	109-99-9	-	-	-	*1.47*	*U*	0.91	J	*1.47*	*U*
Toluene	108-88-3	-	-	-	7.54	J	14.7	J	7.91	
Trans-1,2-Dichloroethene	156-60-5	-	-	-	*1.98*	*U*	*1.98*	*U*	*1.98*	*U*
Trans-1,3-Dichloropropene	10061-02-6	-	-	-	*2.27*	*U*	*2.27*	*U*	*2.27*	*U*
Trichloroethylene (TCE)	79-01-6	<0.2	0.2 to <1	1 and above	*0.16*	*U*	0.16		*0.16*	*U*
Trichlorofluoromethane	75-69-4	-	-	-	1.18	J	1.35	J	1.12	J
Vinyl Bromide	593-60-2	-	-	-	*2.19*	*U*	*2.19*	*U*	*2.19*	*U*
Vinyl Chloride	75-01-4	<0.2	-	0.2 and above	*0.08*	*U*	*0.08*	*U*	*0.08*	*U*

Notes:
All sample results and NYSDOH guidance values are reported in µg/m3
All sample analytical results are compared to October 2006 and May 2017 NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Matrices A, B, and C
Outdoor air sample results from OA-1 are not compared to the NYSDOH Decision Matrices
µg/m3: : micrograms per cubic meter
NYSDOH: : New York State Department of Health
Q : Qualifier
J : indicates an estimated value
N : indicates presumptive evidence of the compound
B : Indicates the analyte was detected in the blank and the sample
U : indicates the compound was not detected at the indicated MDL
MDL : minimum detection limit
Shaded : the result was not detected but the MDL exceeds at least one concentration range of the decision matrix
Bold : the result was detected within concentration range 2 of the decision matrix
Bold/Italic : the results exceeds concentration range 3 of the decision matrix

Table 4
Summary of LIHA Indoor Air Sampling Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

					Sample ID		LIHA-IA3-20180222		LIHA-OA1-20180222	
					Sample Location		LIHA-IA3		LIHA-OA1	
					Date		2/22/2018		2/22/2018	
Analyte	CAS Number	NYSDOH Decision Matrices A, B, C Indoor Air Concentration			Result	Q	Result	Q
1,1,1-Trichloroethane (111-TCA)	71-55-6	<3	3 to <10	10 and above	*0.16*	*U*	*0.16*	*U*
1,1,2,2-Tetrachloroethane	79-34-5	-	-	-	*3.43*	*U*	*3.43*	*U*
1,1,2-Trichloroethane	79-00-5	-	-	-	*2.73*	*U*	*2.73*	*U*
1,1-Dichloroethane	75-34-3	-	-	-	*2.02*	*U*	*2.02*	*U*
1,1-Dichloroethene (11-DCE)	75-35-4	<0.2	0.2 to <1	1 and above	*1.98*	*U*	*1.98*	*U*
1,2,4-Trichlorobenzene	120-82-1	-	-	-	*3.71*	*U*	*3.71*	*U*
1,2,4-Trimethylbenzene	95-63-6	-	-	-	1.47	J	*2.46*	*U*
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	-	-	-	*3.84*	*U*	*3.84*	*U*
1,2-Dichlorobenzene	95-50-1	-	-	-	*3.01*	*U*	*3.01*	*U*
1,2-Dichloroethane	107-06-2	-	-	-	*2.02*	*U*	*2.02*	*U*
1,2-Dichloropropane	78-87-5	-	-	-	*2.31*	*U*	*2.31*	*U*
1,2-Dichlorotetrafluoroethane	76-14-2	-	-	-	*3.49*	*U*	*3.49*	*U*
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	-	-	-	*2.46*	*U*	*2.46*	*U*
1,3-Butadiene	106-99-0	-	-	-	*1.11*	*U*	*1.11*	*U*
1,3-Dichlorobenzene	541-73-1	-	-	-	*3.01*	*U*	*3.01*	*U*
1,4-Dichlorobenzene	106-46-7	-	-	-	*3.01*	*U*	*3.01*	*U*
1,4-Dioxane	123-91-1	-	-	-	*1.8*	*U*	*1.8*	*U*
2,2,4-Trimethylpentane	540-84-1	-	-	-	1.21	J	1.35	J
2-Butanone (MEK)	78-93-3	-	-	-	2.39		1.5	
2-Chlorotoluene	95-49-8	-	-	-	*2.59*	*U*	*2.59*	*U*
4-Ethyltoluene	622-96-8	-	-	-	*2.46*	*U*	*2.46*	*U*
4-Methyl-2-Pentanone	108-10-1	-	-	-	*2.05*	*U*	*2.05*	*U*
Acetone	67-64-1	-	-	-	30.4	B	9.98	B
Allyl Chloride (3-Chloropropene)	107-05-1	-	-	-	*1.57*	*U*	*1.57*	*U*
Benzene	71-43-2	-	-	-	0.96	J	0.89	J
Bromodichloromethane	75-27-4	-	-	-	*3.35*	*U*	*3.35*	*U*
Bromoform	75-25-2	-	-	-	*5.17*	*U*	*5.17*	*U*
Bromomethane	74-83-9	-	-	-	*1.94*	*U*	*1.94*	*U*
Carbon Disulfide	75-15-0	-	-	-	*1.56*	*U*	*1.56*	*U*
Carbon Tetrachloride	56-23-5	<0.2	0.2 to <1	1 and above	**0.44**		0.38	
Chlorobenzene	108-90-7	-	-	-	*2.3*	*U*	*2.3*	*U*
Chlorodibromomethane	124-48-1	-	-	-	*4.26*	*U*	*4.26*	*U*
Chloroethane	75-00-3	-	-	-	*1.32*	*U*	*1.32*	*U*
Chloroform	67-66-3	-	-	-	1.32	J	0.59	J
Chloromethane	74-87-3	-	-	-	1.47		2.27	
Cis-1,2-Dichloroethene (c12-DCE)	156-59-2	<0.2	0.2 to <1	1 and above	*1.98*	*U*	*1.98*	*U*
Cis-1,3-Dichloropropene	10061-01-5	-	-	-	*2.27*	*U*	*2.27*	*U*
Cyclohexane	110-82-7	-	-	-	1.17	J	1	J
Dichlorodifluoromethane	75-71-8	-	-	-	1.68	J	1.63	J
Dichloromethane	75-09-2	<3	3 to <10	10 and above	*3.82*	*U*	*1.74*	*U*
Ethylbenzene	100-41-4	-	-	-	0.87	J	0.78	J
Freon 113	76-13-1	-	-	-	*3.83*	*U*	*3.83*	*U*
Hexachlorobutadiene	87-68-3	-	-	-	*5.33*	*U*	*5.33*	*U*
m,p-Xylene	179601-23-1	-	-	-	2.87	J	2.52	J
Methyl Methacrylate	80-62-6	-	-	-	*2.05*	*U*	*2.05*	*U*
Methyl T-Butyl Ether (MTBE)	1634-04-4	-	-	-	*1.8*	*U*	*1.8*	*U*
Naphthalene	91-20-3	-	-	-	*2.62*	*U*	*2.62*	*U*
N-Heptane	142-82-5	-	-	-	1.68	J	1.11	J
N-Hexane	110-54-3	-	-	-	*4.93*	*U*	3.38	NJ
O-Xylene	95-47-6	-	-	-	1.09	J	1	J

Table 4
Summary of LIHA Indoor Air Sampling Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

					Sample ID	**LIHA-IA3-20180222**		**LIHA-OA1-20180222**	
					Sample Location	**LIHA-IA3**		**LIHA-OA1**	
					Date	**2/22/2018**		**2/22/2018**	
Analyte	**CAS Number**	**NYSDOH Decision Matrices A, B, C Indoor Air Concentration**			**Result**	**Q**	**Result**	**Q**
Styrene	100-42-5	-	-	-	1.45	J	*2.13*	*U*
Tert-Butyl Alcohol	75-65-0	-	-	-	2.43	J	*1.52*	*UJ*
Tetrachloroethene (PCE)	127-18-4	<3	3 to <10	10 and above	2.24		8.14	
Tetrahydrofuran	109-99-9	-	-	-	*1.47*	*U*	*1.47*	*U*
Toluene	108-88-3	-	-	-	6.03		6.78	
Trans-1,2-Dichloroethene	156-60-5	-	-	-	*1.98*	*U*	*1.98*	*U*
Trans-1,3-Dichloropropene	10061-02-6	-	-	-	*2.27*	*U*	*2.27*	*U*
Trichloroethylene (TCE)	79-01-6	<0.2	0.2 to <1	1 and above	*0.16*	*U*	*0.16*	*U*
Trichlorofluoromethane	75-69-4	-	-	-	1.29	J	1.29	J
Vinyl Bromide	593-60-2	-	-	-	*2.19*	*U*	*2.19*	*U*
Vinyl Chloride	75-01-4	<0.2	-	0.2 and above	*0.08*	*U*	*0.08*	*U*

Notes:
All sample results and NYSDOH guidance values are reported in µg/m3
All sample analytical results are compared to October 2006 and May 2017 NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Matrices A, B, and C
Outdoor air sample results from OA-1 are not compared to the NYSDOH Decision Matrices

µg/m3: : micrograms per cubic meter
NYSDOH: : New York State Department of Health
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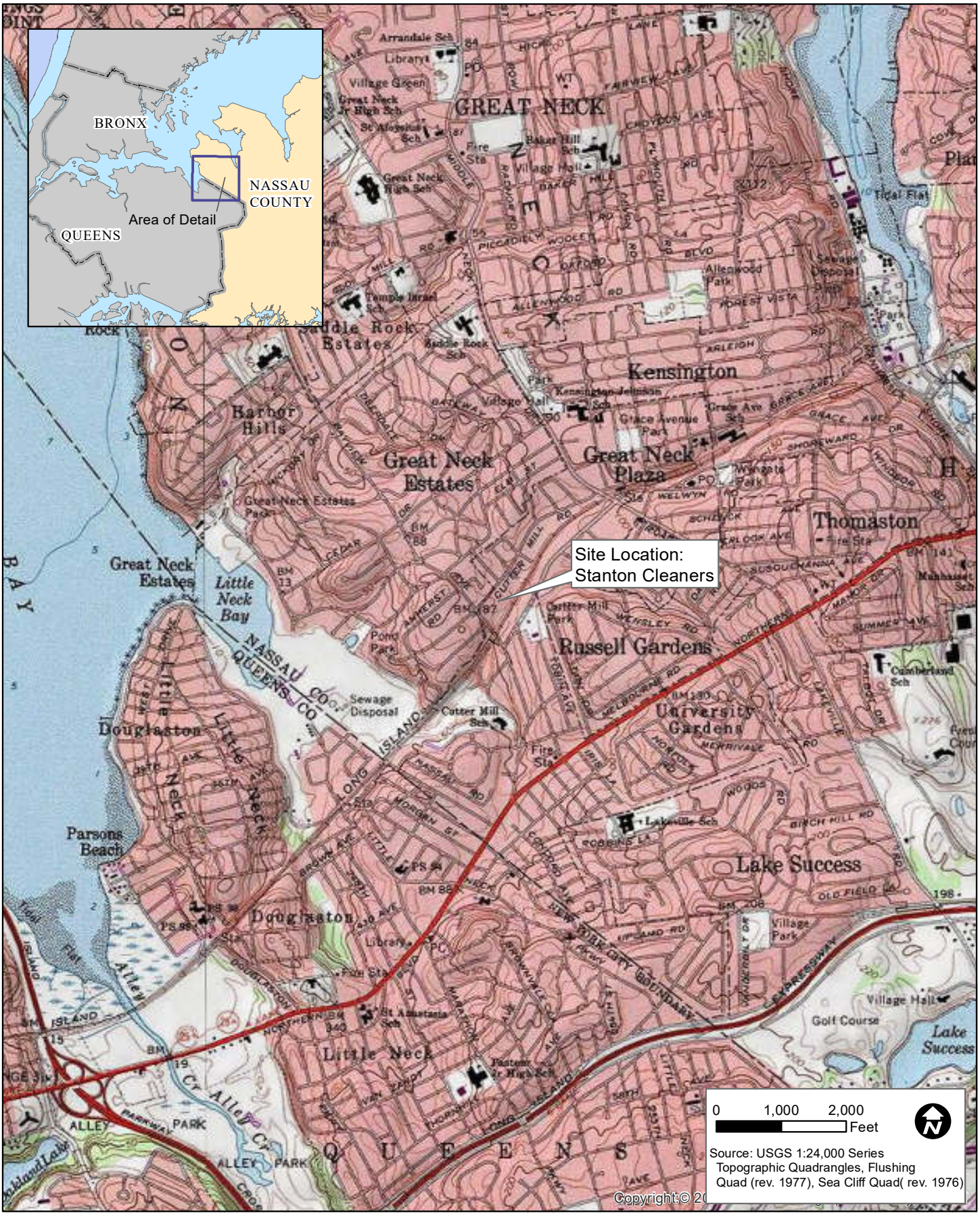
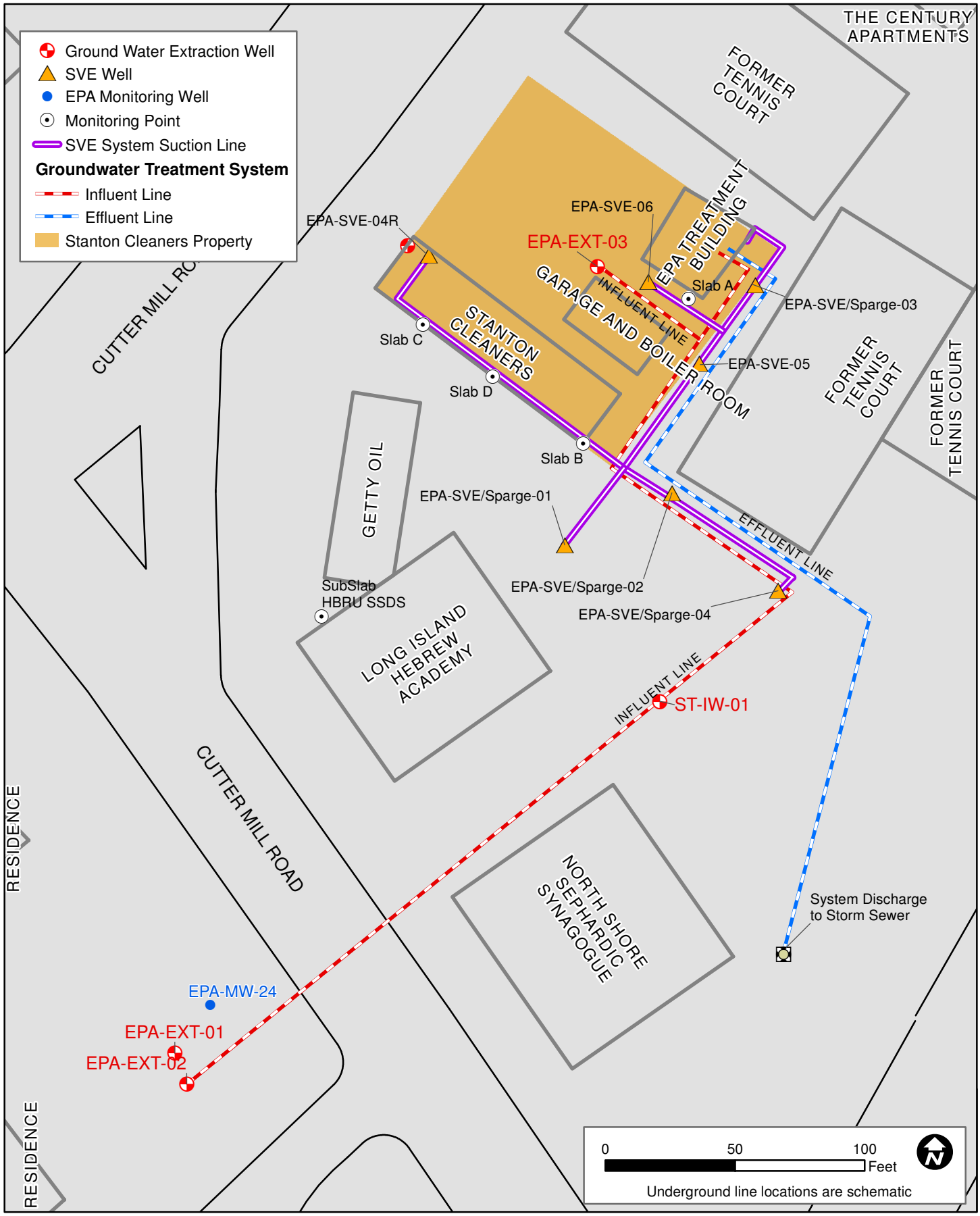
Bold : the result was detected within concentration range 2 of the decision matrix
Bold/Italic : the results exceeds concentration range 3 of the decision matrix



Site Location
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 1

March 30, 2018

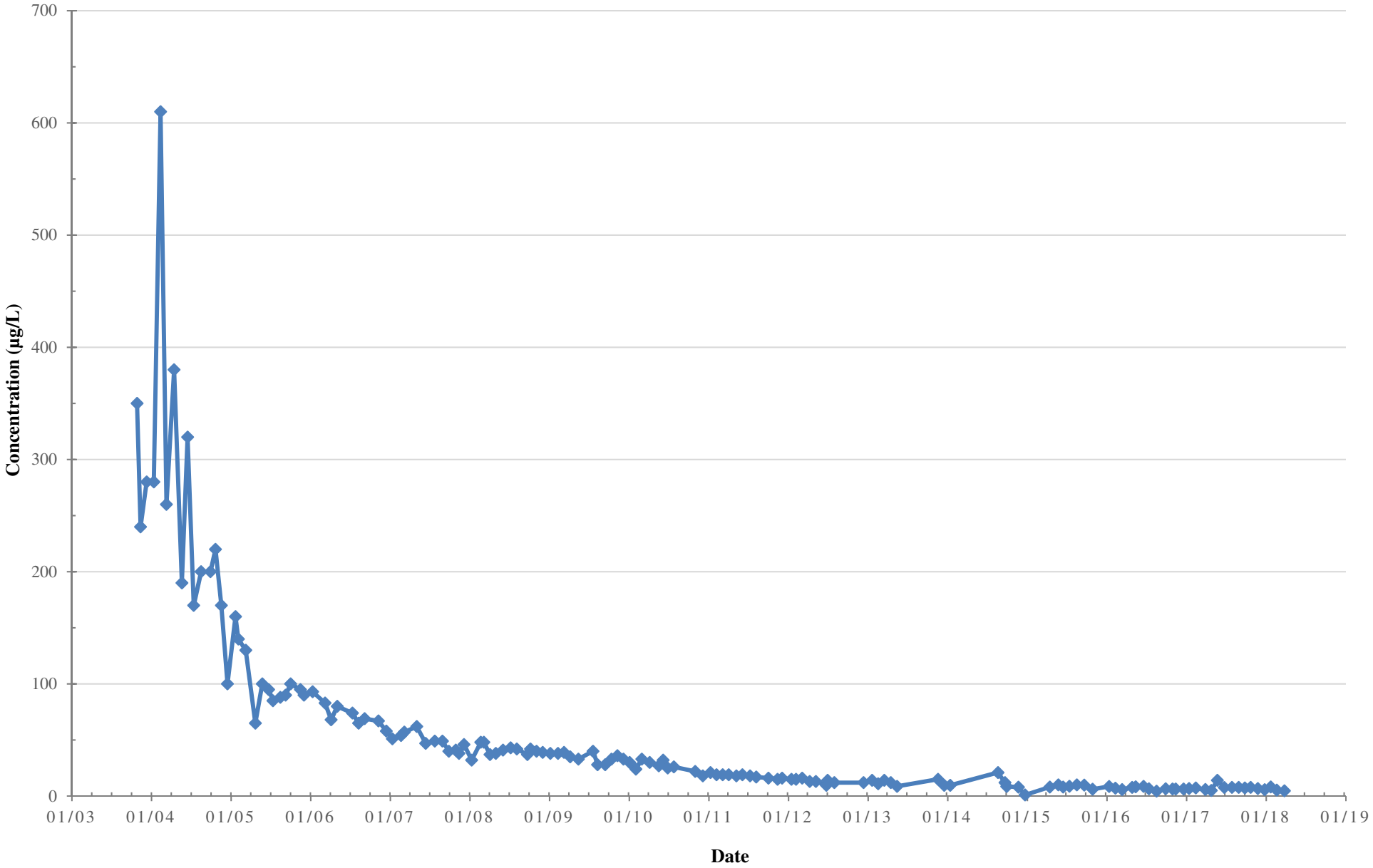


Site Layout
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 2

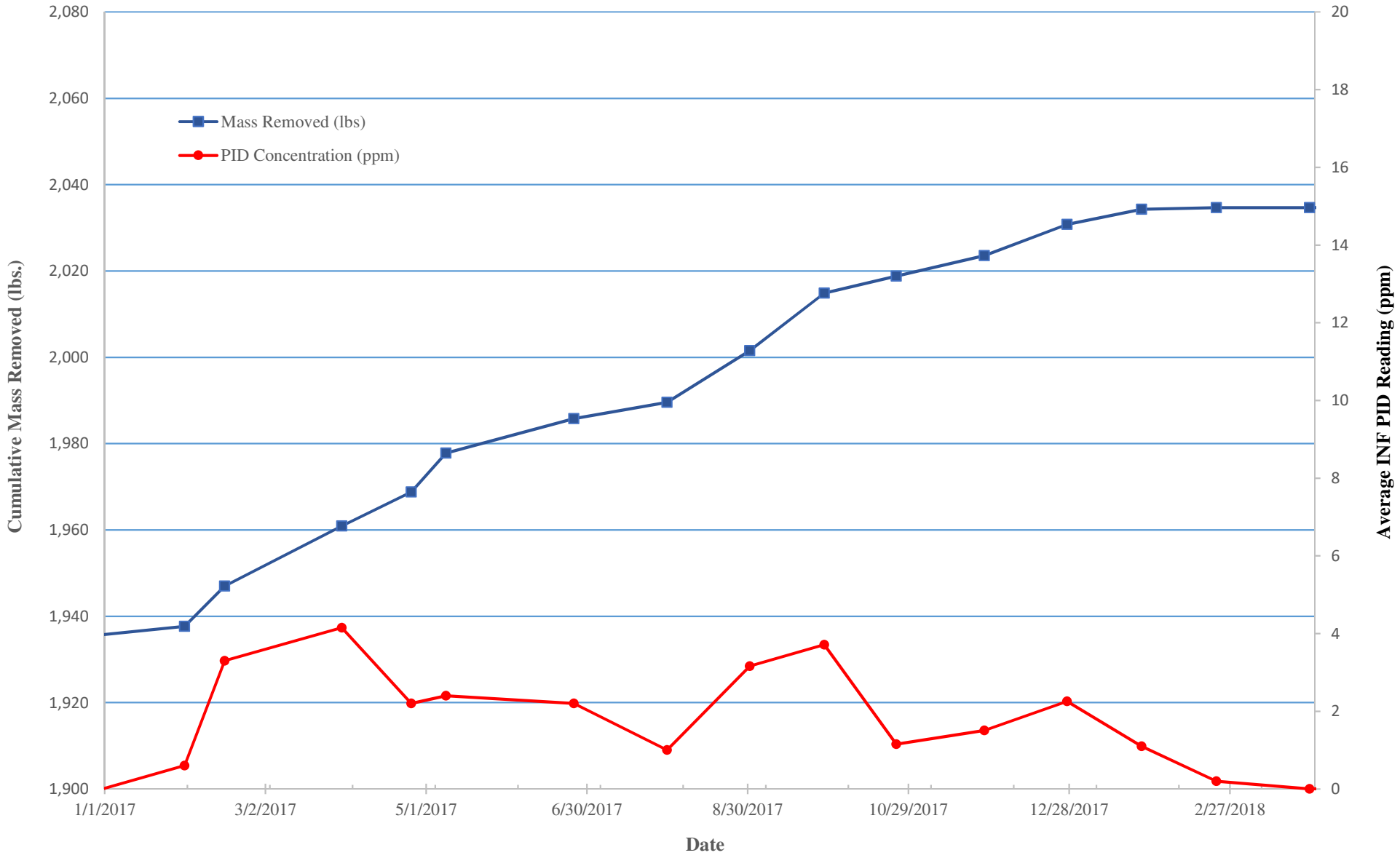
March 30, 2018

Figure 3
GWE&T System Influent PCE Concentrations - 2003-2018
Stanton Cleaners
110 Cuttermill Road, Great Neck, NY



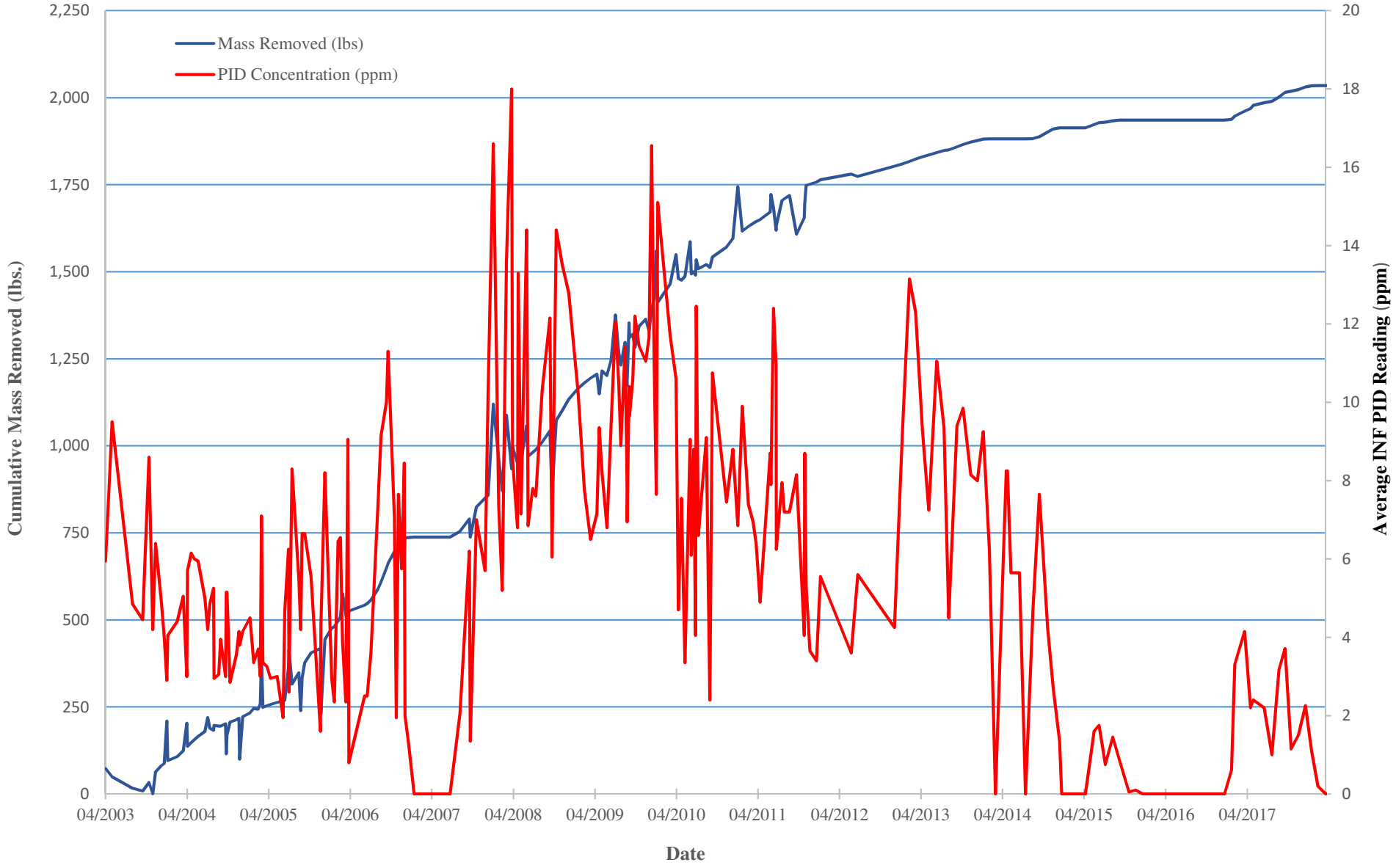
NYSDEC Site No: 130072
Standby Contract: D007625-06

Figure 4
SVE System Annual Cumulative PCE Mass Removal
Stanton Cleaners
110 Cuttermill Road, Great Neck, NY

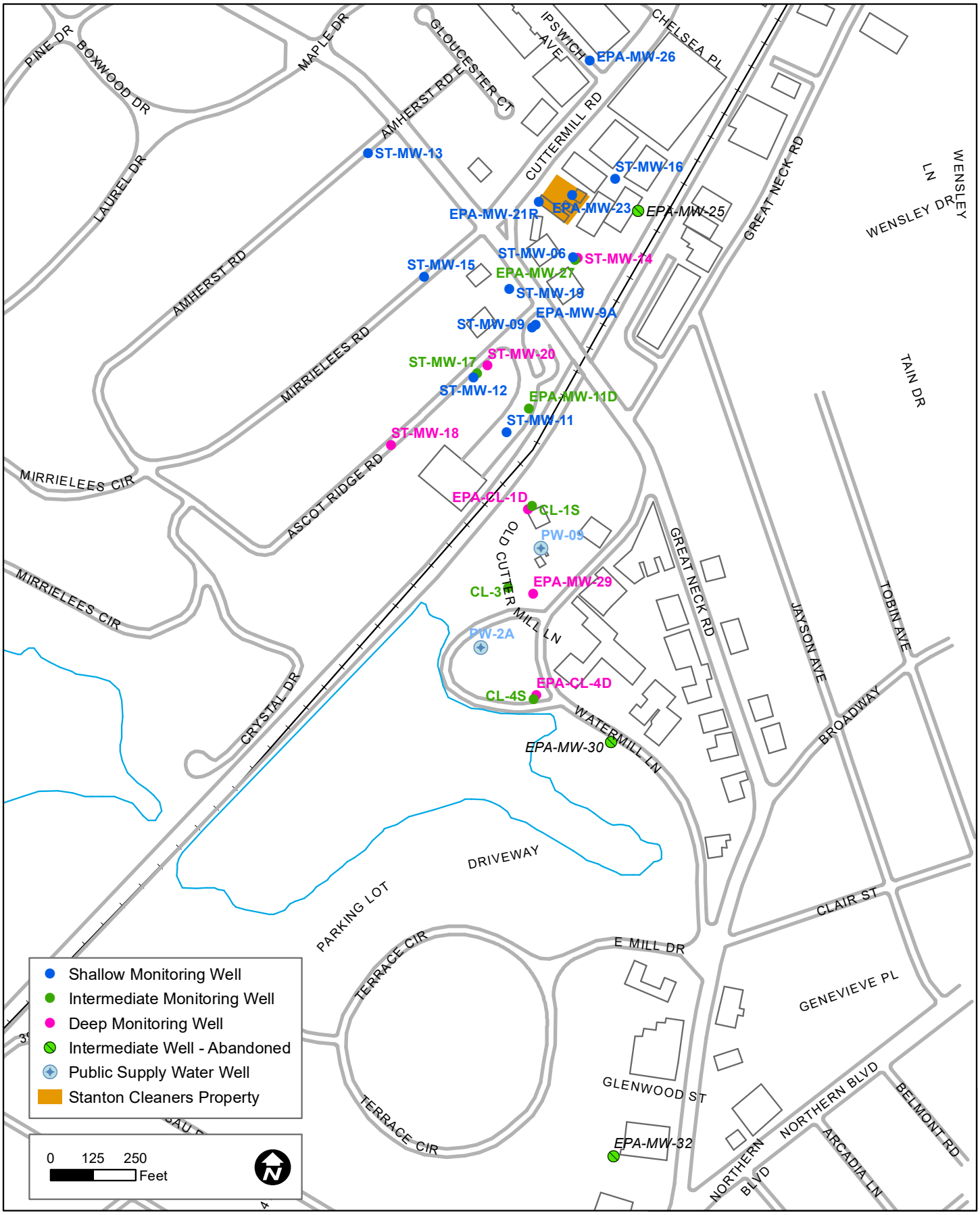


NYSDEC Site No: 130072
Standby Contract: D007625-06

Figure 5
SVE System Cumulative PCE Mass Removal
Stanton Cleaners
110 Cuttermill Road, Great Neck, NY



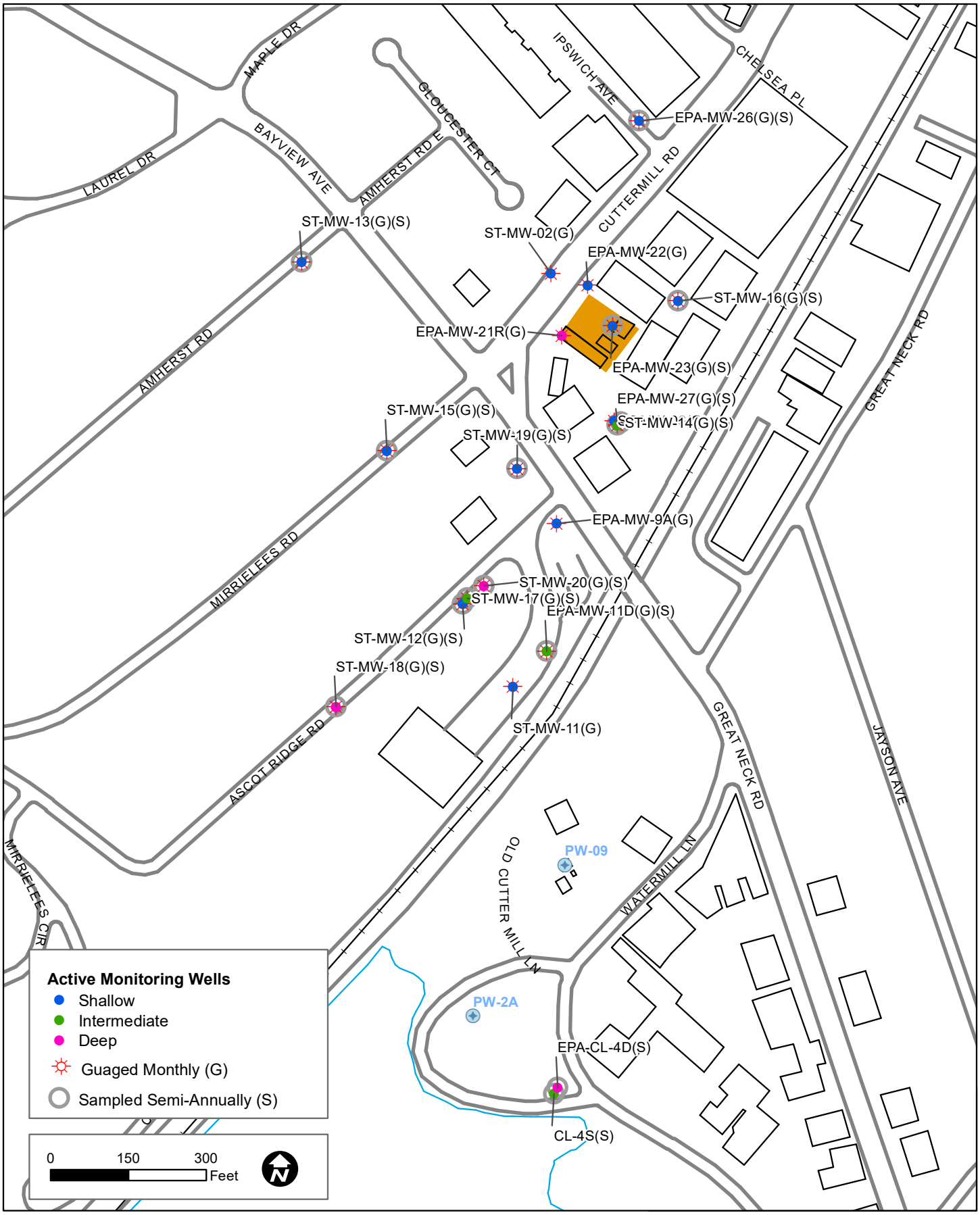
NYSDEC Site No: 130072
Standby Contract: D007625-06



Monitoring Well Network
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 6

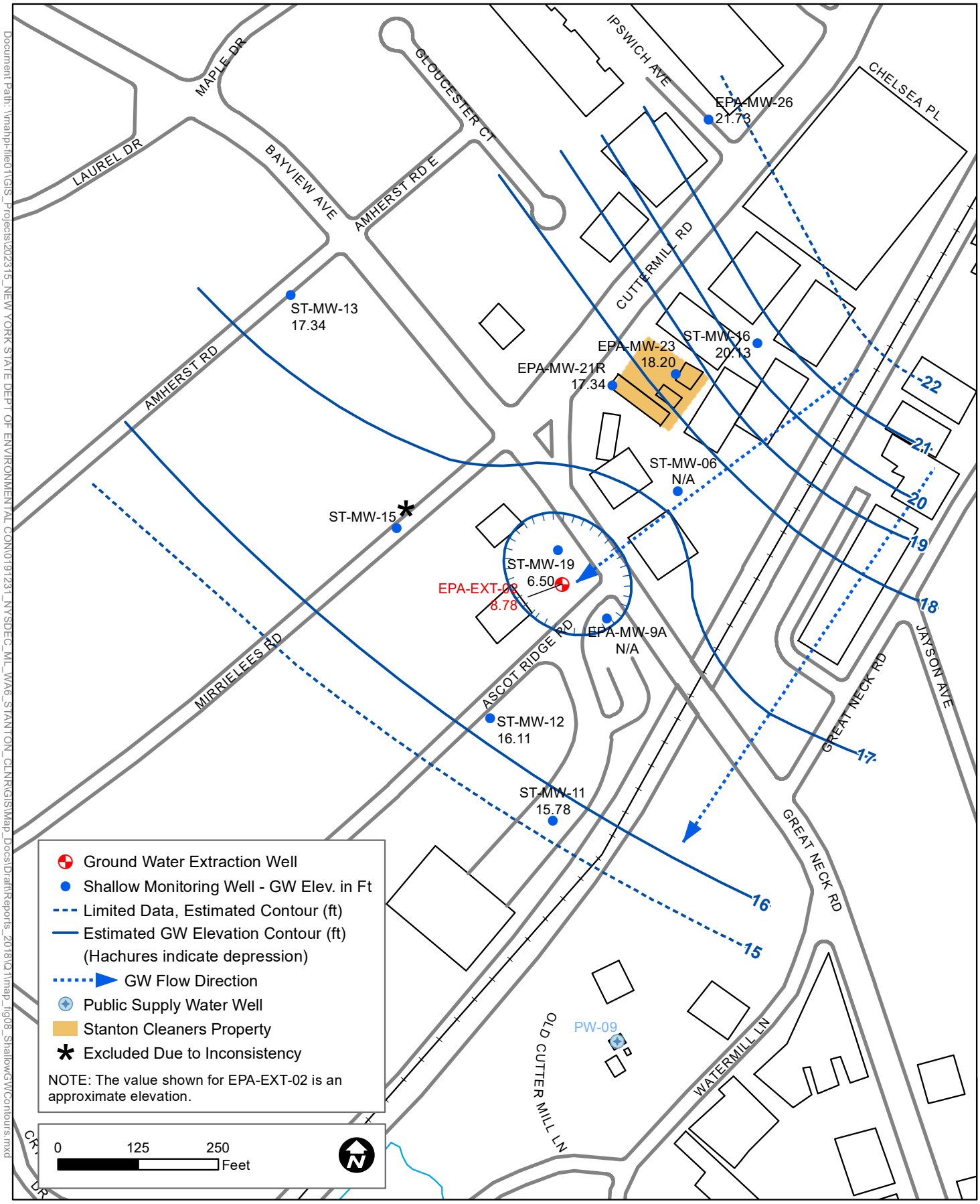
March 30, 2018



Well Monitoring Schedule
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 7

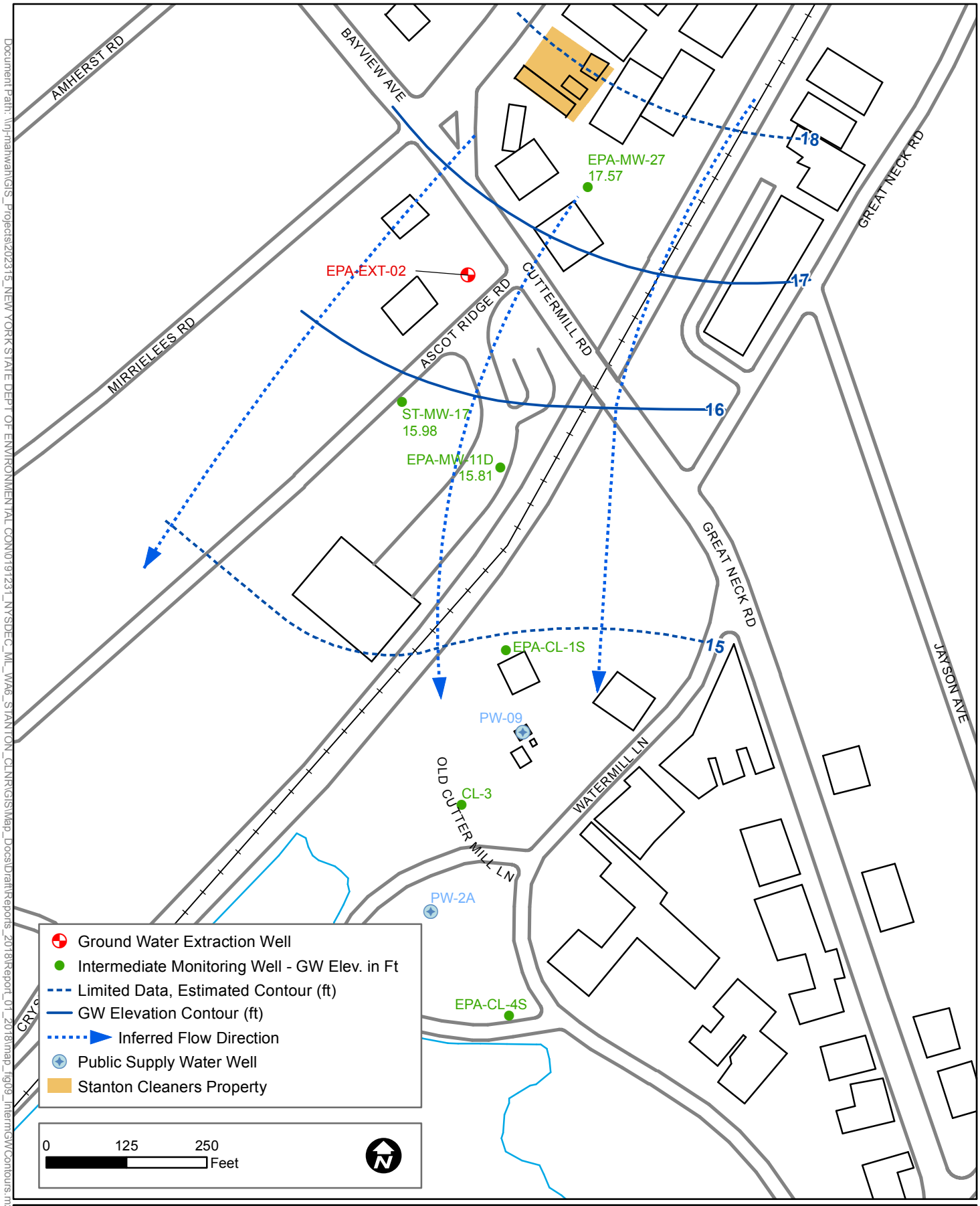
March 30, 2018



Shallow Ground Water Elevations (January 25, 2018)
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 8

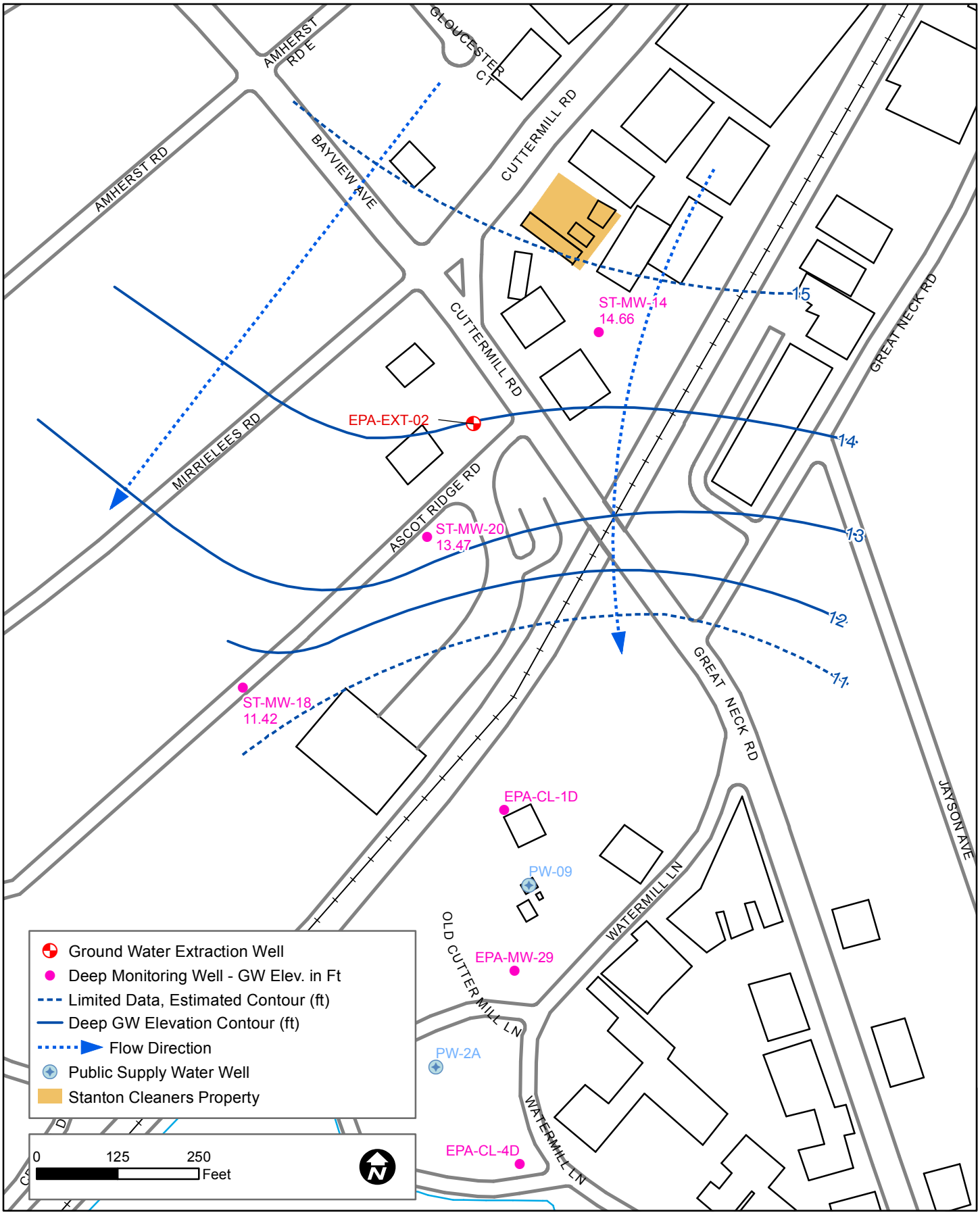
April 27, 2018



Intermediate Ground Water Elevations (January 25, 2018)
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 9

April 27, 2018

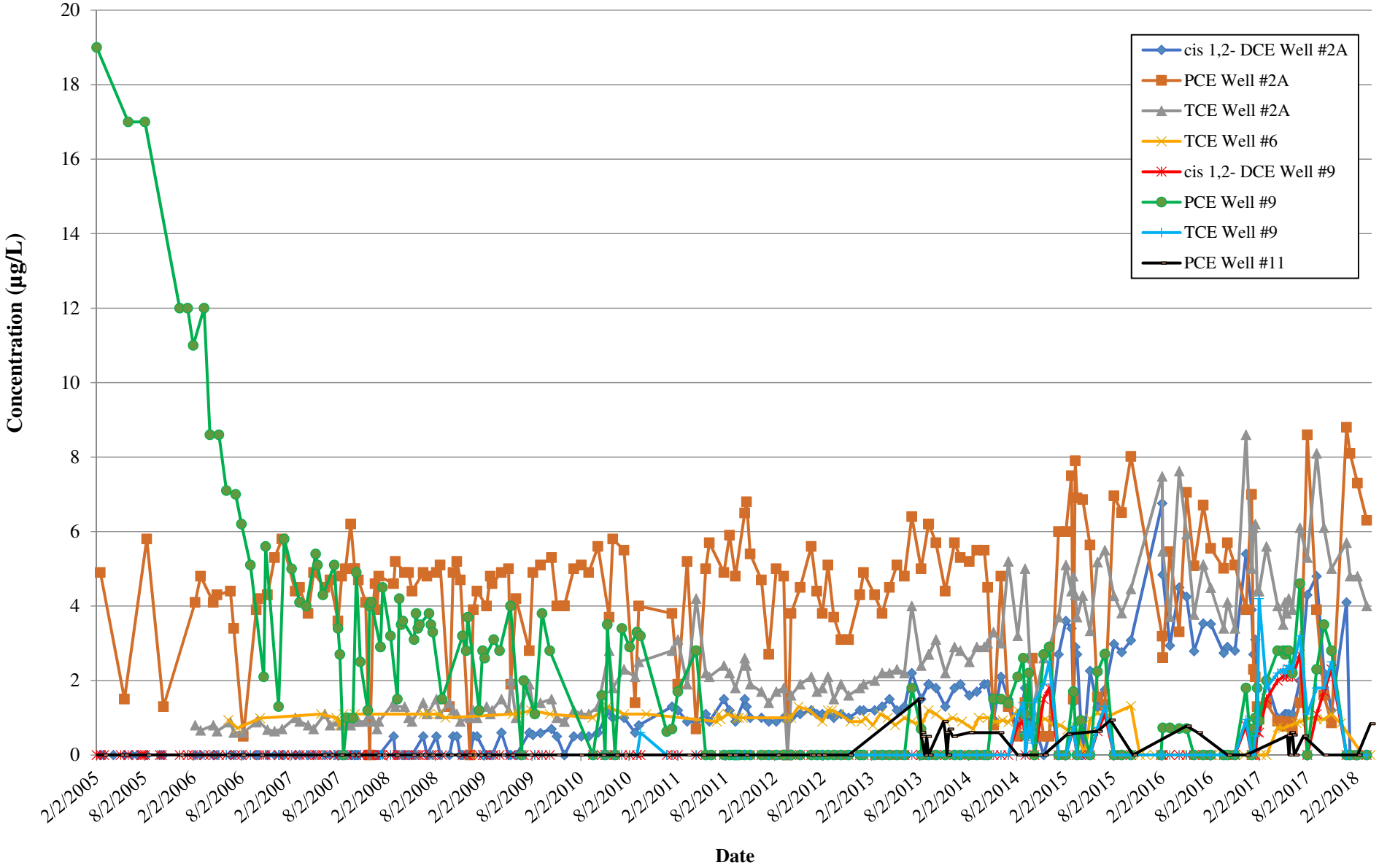


Deep Ground Water Elevations (January 25, 2018)
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 10

April 27, 2018

Figure 11
Contaminants of Concern in WAGNN Wells
Stanton Cleaners
110 Cuttermill Road, Great Neck, NY



Appendices

Appendix A

Daily O&M Reports

Project: Stanton Cleaners - Site Management
Contractors: HDR and Preferred Environmental Services

HDR Job No:
Site No:
HDR Project Manager: Michael Lehtinen

HDR
16 Corporate Woods Blvd
Albany, NY 12211
Telephone: 518.937.9500

DAILY REPORT

Day:	S	M	T	W	TH	F	S

Date: 1/25/2018
REPORT No.
PAGE No. 1

PREPARED BY: John Zator TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
John Zator	Technician	8:00 - 13:30	Preferred

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Five Gas Meter - W	5. Diaphragm Sampling Pump - W	
2. VelociCalc - TSI 8386 - W	4. 100-ft Solinst - W	6. Tedlar Bag + Tubing - W	

OPERATION & MAINTENANCE ACTIVITIES

HDR/Preferred Site Representative: John Zator - Preferred

8:10 - Preferred (JZ) on site. SVE and GWTS system on upon arrival. Air Sparge remains offline.
8:20 - Monthly O&M started. Collected system readings.
8:45 - 9-45 - Preferred collected SVE port readings with VelociCalc and Five Gas Meter. Also walked length of piping to check for cracks and/or damage due to cold weather. No damage noted.
10:06 - SVE system shut down.
10:10 - Oil change performed on blower. 5.0 oz oil replaced.
10:21 - Greased blower.
10:23 - SVE system restarted.
10:45 - 12:00 - Performed monitoring well gauging under task 4.
13:16 - Collected influent groundwater sample INF-GW-012518.
13:20 - Collected effluent groundwater sample EFF-GW-012518.
13:30 - Preferred (JZ) off-site. Treatment building secured.

[x] - Designates report is continued on additional pages

HDR/Preferred Site Representative: **John Zator (Preferred)** Project Manager: **M. Lehtinen**

Project: Stanton Cleaners - Site Management
Contractors: HDR and Preferred Environmental Services

HDR Job No:
Site No:
HDR Project Manager: Michael Lehtinen

HDR
16 Corporate Woods Blvd
Albany, NY 12211
Telephone: 518.937.9500

DAILY REPORT

Day:	S	M	T	W	TH	F	S

Date: 2/22/2018
REPORT No.
PAGE No. 1

PREPARED BY: John Zator TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
John Zator	Technician	8:00 - 14:00	Preferred

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Five Gas Meter - W	5. Diaphragm Sampling Pump - W	
2. VelociCalc - TSI 8386 - W	4. 100-ft Solinst - W	6. Tedlar Bag + Tubing - W	

OPERATION & MAINTENANCE ACTIVITIES

HDR/Preferred Site Representative: John Zator - Preferred

8:00 - Preferred (JZ) on site. SVE system offline upon arrival, blower switched to "on" position. GWTS system on upon arrival. Air Sparge remains offline. Preferred attempted to look for any tripped circuits within circuit breaker box, but was unable to locate. After limited troubleshooting, and updating HDR (Barbara Firebaugh), Preferred continued with scheduled O&M activities.

8:20 - Monthly O&M started. Collected system readings.

8:45 - 10:00 - Mobilized to LIHA to check on/collect indoor and outdoor air samples deployed the previous day.

10:12 - Oil change performed on blower. 5.0 oz oil replaced.

10:25 - Greased blower.

10:46 - 12:41 - Performed monitoring well gauging under task 4.

13:27 - Collected influent groundwater sample INF-GW-022218.

13:31 - Collected effluent groundwater sample EFF-GW-022218.

14:00 - Preferred (JZ) off-site. Treatment building secured.

[x] - Designates report is continued on additional pages

HDR/Preferred Site Representative: **John Zator (Preferred)** Project Manager: **M. Lehtinen**

Project: Stanton Cleaners - Site Management
Contractors: HDR and Preferred Environmental Services
HDR Job No:
Site No:
HDR Project Manager: Michael Lehtinen

HDR
16 Corporate Woods Blvd
Albany, NY 12211
Telephone: 518.937.9500

DAILY REPORT

Day:	S	M	T	W	TH	F	S

Date: 3/29/2018
REPORT No.
PAGE No. 1

PREPARED BY: Daniel Prisco-Buxbaum TITLE: Site Rep.

WEATHER	Bright Sun	Partly Cloudy	Overcast	Rain	Clear
TEMP	To 32	32-50	50-70	70-85	85 and up
WIND	Light	Moderate	High		
HUMIDITY	Dry	Moderate	Humid		
WIND DIR	NE	NW	SE	SW	
	N	S	E	W	

AVERAGE FIELD FORCE

Name of Contractor	Title	Hours Worked	Remarks
Daniel Prisco-Buxbaum	Technician	8:00 - 14:30	Preferred
Edward Combs	Technician	8:00 - 14:30	Preferred

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Five Gas Meter - W	5. Diaphragm Sampling Pump - W	
2. VelociCalc - TSI 8386 - W	4. 100-ft Solinst - W	6. Tedlar Bag + Tubing - W	

OPERATION & MAINTENANCE ACTIVITIES

HDR/Preferred Site Representative: Daniel Prisco-Buxbaum - Preferred
8:00 - Preferred (DPB and EC) on site. SVE and GWTS system online upon arrival. Air Sparge remains offline. Identified active drip from GWTS Influent Piping from location of previous repair.
8:15 - Monthly O&M started. Collected system readings.
9:05 - SVE Blower taken offline for routine maintenance.
9:15 - Oil change performed on blower. 6.0 oz oil replaced.
9:30 - Greased blower bearings.
9:40 - SVE Blower brought back online.
9:45 - Collected instrument readings from SVE sample ports.
10:25 - Collected influent groundwater sample INF-GW-032918.
10:30 - Collected effluent groundwater sample EFF-GW-032918.
10:45 - 12:15 - Performed monitoring well gauging under task 4.
12:15 - 13:00 - General Housekeeping performed around treatment building.
13:00 - 13:45 - Temporarily off-site to procure supplies necessary for minor system repairs.
13:45 - 14:15 - Repaired drip along influent GWTS piping utilizing epoxy putty (temporary fix).
14:30 - Preferred (DPB and EC) off-site. Treatment building secured.

[x] - Designates report is continued on additional pages

HDR/Preferred Site Representative: **Daniel Prisco-Buxbaum (Preferred)** Project Manager: **M. Lehtinen**

Appendix B

GWE&TS O&M Reports

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Monthly O&M Data Log

Date: 1/25/2018

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	61 GPM**	100%**

Total Gallons Treated:	390670610**
Discharge Rate:	0 GPM**
Discharge Conductivity:	0**
Discharge pH:	5.6**
SVE Air Flow Rate:	169 CFM** (200 CFM at meter)

**Computer Monitor Not Functioning

Visual Digital Readouts from Catwalk:

Discharge pH:	5.28
Discharge Temp:	15ºC
Discharge Conductivity:	-1.6

Flow meter reading:

Flow Rate:	60 GPM
Total gallons: 1,906,500 gallons	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	2,550 GPH
Total gallons:	4,462,431.4

Weather:
24ºF, Sunny, Dry, Northwest wind

Notes:
* Meter malfunctioning
** Computer screen not working. Unable to collect readings from the computer
Digital reading output for Discharge Rate and Total gallons on flow meter
GPM- Gallons Per Minute
CFM- Cubic Feet Per Minute

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Monthly O&M Data Log

Date: 2/22/2018

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	61 GPM**	100%**

Total Gallons Treated:	390670610**
Discharge Rate:	0 GPM**
Discharge Conductivity:	0**
Discharge pH:	5.6**
SVE Air Flow Rate:	169 CFM** (200 CFM at meter)

**Computer Monitor Not Functioning

Visual Digital Readouts from Catwalk:

Discharge pH:	4.88
Discharge Temp:	17ºC
Discharge Conductivity:	-1.5

Flow meter reading:

Flow Rate:	60 GPM
Total gallons: 4,125,481 gallons	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	2,542 GPH
Total gallons:	557,009.6

Weather:
45ºF, Rain, Humid, Northeast wind

Notes:
* Meter malfunctioning
** Computer screen not working. Unable to collect readings from the computer
Digital reading output for Discharge Rate and Total gallons on flow meter
GPM- Gallons Per Minute
CFM- Cubic Feet Per Minute

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Monthly O&M Data Log

Date: 3/29/2018

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	60 GPM	100%

Total Gallons Treated:	400,094,206	
Discharge Rate:	0 GPM	
Discharge Conductivity:	0	
Discharge pH:	5.6	
SVE Air Flow Rate:	165 CFM	(200 CFM at meter)

Visual Digital Readouts from Catwalk:

Discharge pH:	5.10
Discharge Temp:	17ºC
Discharge Conductivity:	-1.5

Flow meter reading:

Flow Rate:	60 GPM
Total gallons: 7,061,500 gallons	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	2,542 GPH
Total gallons:	8,393,427.8

Weather:
54ºF, Rain, Humid, West wind

Notes:
* Meter malfunctioning
** Computer screen not working. Unable to collect readings from the computer
Digital reading output for Discharge Rate and Total gallons on flow meter
GPM- Gallons Per Minute
CFM- Cubic Feet Per Minute

Appendix C

Lookout Operational Data Logs

Stanton Cleaners Groundwater Contamination Site Site Operational Data - January 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
1/1/2018 0:00	60	395,305,831.3	201
1/1/2018 4:00	60	395,320,081.6	201
1/1/2018 8:00	60	395,334,359.0	197
1/1/2018 12:00	59	395,348,636.4	199
1/1/2018 16:00	60	395,362,905.0	197
1/1/2018 20:00	59	395,377,187.7	199
1/2/2018 0:00	60	395,391,436.8	201
1/2/2018 4:00	62	395,405,683.8	198
1/2/2018 8:00	61	395,419,951.3	199
1/2/2018 12:00	60	395,434,260.7	201
1/2/2018 16:00	62	395,448,628.7	202
1/2/2018 20:00	59	395,462,884.3	200
1/3/2018 0:00	60	395,477,108.4	203
1/3/2018 4:00	58	395,491,343.0	201
1/3/2018 8:00	59	395,505,633.8	155
1/3/2018 12:00	59	395,519,969.6	157
1/3/2018 16:00	62	395,534,351.7	156
1/3/2018 20:00	62	395,548,938.8	165
1/4/2018 0:00	59	395,563,396.9	167
1/4/2018 4:00	62	395,577,768.8	164
1/4/2018 8:00	60	395,592,137.6	162
1/4/2018 12:00	60	395,606,530.3	165
1/4/2018 16:00	61	395,621,009.3	165
1/4/2018 20:00	59	395,635,432.1	162
1/5/2018 0:00	60	395,649,785.0	155
1/5/2018 4:00	62	395,664,167.7	165
1/5/2018 8:00	60	395,678,669.4	164
1/5/2018 12:00	61	395,693,219.6	164
1/5/2018 16:00	60	395,707,776.3	157
1/5/2018 20:00	62	395,722,267.8	166
1/6/2018 0:00	59	395,736,643.4	166
1/6/2018 4:00	60	395,751,101.0	88
1/6/2018 8:00	59	395,765,667.1	156
1/6/2018 12:00	63	395,780,311.4	157
1/6/2018 16:00	61	395,795,084.8	168
1/6/2018 20:00	59	395,809,610.3	169
1/7/2018 0:00	58	395,823,968.3	168
1/7/2018 4:00	62	395,838,334.0	158
1/7/2018 8:00	61	395,852,703.3	159
1/7/2018 12:00	61	395,867,106.9	167
1/7/2018 16:00	61	395,881,501.2	167
1/7/2018 20:00	61	395,895,849.0	168
1/8/2018 0:00	58	395,910,173.1	168
1/8/2018 4:00	60	395,924,502.5	167
1/8/2018 8:00	59	395,938,832.1	168
1/8/2018 12:00	62	395,953,162.2	164
1/8/2018 16:00	59	395,967,513.1	165
1/8/2018 20:00	60	395,981,835.3	168
1/9/2018 0:00	61	395,996,134.3	166
1/9/2018 4:00	60	396,010,439.9	164
1/9/2018 8:00	62	396,024,770.9	168

Stanton Cleaners Groundwater Contamination Site Site Operational Data - January 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
1/9/2018 12:00	62	396,039,230.5	166
1/9/2018 16:00	61	396,053,748.6	163
1/9/2018 20:00	61	396,068,120.7	168
1/10/2018 0:00	58	396,082,419.9	170
1/10/2018 4:00	58	396,096,725.0	174
1/10/2018 8:00	59	396,111,028.1	169
1/10/2018 12:00	60	396,125,339.2	169
1/10/2018 16:00	0	396,130,050.7	82
1/10/2018 20:00	0	396,130,050.7	164
1/11/2018 0:00	0	396,130,050.7	163
1/11/2018 4:00	0	396,130,050.7	167
1/11/2018 8:00	0	396,130,050.7	168
1/11/2018 12:00	0	396,130,050.7	167
1/11/2018 16:00	0	396,130,050.7	166
1/11/2018 20:00	61	396,137,798.8	162
1/12/2018 0:00	61	396,151,829.5	168
1/12/2018 4:00	57	396,165,911.5	167
1/12/2018 8:00	61	396,180,027.0	164
1/12/2018 12:00	59	396,194,164.3	165
1/12/2018 16:00	57	396,208,284.2	167
1/12/2018 20:00	60	396,222,457.4	167
1/13/2018 0:00	59	396,236,633.7	165
1/13/2018 4:00	61	396,250,830.7	168
1/13/2018 8:00	59	396,265,080.4	164
1/13/2018 12:00	58	396,279,392.1	168
1/13/2018 16:00	61	396,293,766.8	165
1/13/2018 20:00	58	396,308,113.2	167
1/14/2018 0:00	61	396,322,352.0	169
1/14/2018 4:00	58	396,336,567.4	164
1/14/2018 8:00	62	396,350,876.1	156
1/14/2018 12:00	58	396,365,146.6	163
1/14/2018 16:00	59	396,379,486.5	165
1/14/2018 20:00	58	396,393,768.9	168
1/15/2018 0:00	59	396,407,967.4	168
1/15/2018 4:00	58	396,422,151.5	167
1/15/2018 8:00	58	396,436,403.7	167
1/15/2018 12:00	58	396,450,657.2	166
1/15/2018 16:00	60	396,464,904.8	166
1/15/2018 20:00	60	396,479,156.3	167
1/16/2018 0:00	60	396,493,335.5	168
1/16/2018 4:00	59	396,507,560.9	167
1/16/2018 8:00	59	396,521,864.3	168
1/16/2018 12:00	57	396,536,132.2	166
1/16/2018 16:00	60	396,550,346.4	167
1/16/2018 20:00	60	396,564,535.5	165
1/17/2018 0:00	59	396,578,706.8	163
1/17/2018 4:00	60	396,592,894.3	166
1/17/2018 8:00	60	396,607,159.3	166
1/17/2018 12:00	58	396,621,498.2	165
1/17/2018 16:00	60	396,635,840.7	168
1/17/2018 20:00	59	396,650,086.7	167

Stanton Cleaners Groundwater Contamination Site Site Operational Data - January 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
1/18/2018 0:00	59	396,664,241.4	167
1/18/2018 4:00	59	396,678,392.7	165
1/18/2018 8:00	58	396,692,575.1	168
1/18/2018 12:00	58	396,706,780.8	167
1/18/2018 16:00	60	396,721,041.3	163
1/18/2018 20:00	58	396,735,215.4	166
1/19/2018 0:00	59	396,749,322.2	162
1/19/2018 4:00	60	396,763,426.6	177
1/19/2018 8:00	61	396,777,553.1	165
1/19/2018 12:00	60	396,791,700.4	167
1/19/2018 16:00	58	396,805,845.8	163
1/19/2018 20:00	60	396,819,982.7	163
1/20/2018 0:00	59	396,834,093.9	167
1/20/2018 4:00	58	396,848,194.4	167
1/20/2018 8:00	58	396,862,313.4	162
1/20/2018 12:00	60	396,876,447.5	168
1/20/2018 16:00	61	396,890,582.7	166
1/20/2018 20:00	58	396,904,705.7	165
1/21/2018 0:00	58	396,918,815.7	168
1/21/2018 4:00	57	396,932,925.3	163
1/21/2018 8:00	61	396,947,058.3	165
1/21/2018 12:00	59	396,961,173.4	163
1/21/2018 16:00	59	396,975,288.0	166
1/21/2018 20:00	61	396,989,399.8	167
1/22/2018 0:00	61	397,003,496.4	163
1/22/2018 4:00	60	397,017,596.1	167
1/22/2018 8:00	61	397,031,711.5	166
1/22/2018 12:00	58	397,045,840.2	165
1/22/2018 16:00	59	397,059,968.0	167
1/22/2018 20:00	59	397,074,086.8	166
1/23/2018 0:00	58	397,088,173.6	167
1/23/2018 4:00	58	397,102,238.7	167
1/23/2018 8:00	61	397,116,328.8	166
1/23/2018 12:00	58	397,130,431.0	164
1/23/2018 16:00	57	397,144,547.4	166
1/23/2018 20:00	59	397,158,670.1	166
1/24/2018 0:00	59	397,172,768.2	175
1/24/2018 4:00	57	397,186,893.8	166
1/24/2018 8:00	58	397,201,042.5	165
1/24/2018 12:00	59	397,215,314.9	163
1/24/2018 16:00	60	397,229,635.6	48
1/24/2018 20:00	58	397,243,866.6	158
1/25/2018 0:00	57	397,258,002.1	167
1/25/2018 4:00	58	397,272,140.5	164
1/25/2018 8:00	59	397,286,351.0	167
1/25/2018 12:00	59	397,300,638.6	168
1/25/2018 16:00	61	397,314,955.4	166
1/25/2018 20:00	59	397,329,142.1	166
1/26/2018 0:00	60	397,343,253.0	167
1/26/2018 4:00	58	397,357,380.1	166
1/26/2018 8:00	61	397,371,542.5	166

Stanton Cleaners Groundwater Contamination Site Site Operational Data - January 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
1/26/2018 12:00	61	397,385,709.8	168
1/26/2018 16:00	59	397,399,882.5	165
1/26/2018 20:00	61	397,414,032.4	165
1/27/2018 0:00	59	397,428,163.5	167
1/27/2018 4:00	58	397,442,296.1	163
1/27/2018 8:00	60	397,456,440.3	164
1/27/2018 12:00	59	397,470,583.9	167
1/27/2018 16:00	59	397,484,710.8	163
1/27/2018 20:00	61	397,498,831.3	163
1/28/2018 0:00	60	397,512,960.5	166
1/28/2018 4:00	61	397,527,084.4	165
1/28/2018 8:00	59	397,541,232.7	167
1/28/2018 12:00	61	397,555,370.5	167
1/28/2018 16:00	58	397,569,508.9	166
1/28/2018 20:00	58	397,583,637.5	166
1/29/2018 0:00	60	397,597,752.5	167
1/29/2018 4:00	59	397,611,889.7	167
1/29/2018 8:00	58	397,626,031.2	163
1/29/2018 12:00	59	397,640,191.6	167
1/29/2018 16:00	60	397,654,374.1	167
1/29/2018 20:00	60	397,668,557.6	167
1/30/2018 0:00	58	397,682,722.5	167
1/30/2018 4:00	61	397,697,019.5	166
1/30/2018 8:00	62	397,711,678.3	168
1/30/2018 12:00	61	397,726,474.5	166
1/30/2018 16:00	60	397,741,425.7	166
1/30/2018 20:00	58	397,755,908.2	164
1/31/2018 0:00	58	397,770,083.3	165
1/31/2018 4:00	58	397,784,356.0	167
1/31/2018 8:00	60	397,798,693.8	166
1/31/2018 12:00	58	397,813,046.2	164
1/31/2018 16:00	62	397,827,381.5	168
1/31/2018 20:00	59	397,841,614.4	166

Notes:

gpm : gallons per minute
cfm : cubic feet per minute
gal : gallons

Stanton Cleaners Groundwater Contamination Site Site Operational Data - February 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
2/1/2018 0:00	59	397,855,808.0	162
2/1/2018 4:00	61	397,870,037.6	166
2/1/2018 8:00	62	397,884,270.3	163
2/1/2018 12:00	59	397,898,511.1	164
2/1/2018 16:00	59	397,912,817.6	166
2/1/2018 20:00	62	397,927,192.6	168
2/2/2018 0:00	59	397,941,544.0	167
2/2/2018 4:00	60	397,956,132.3	157
2/2/2018 8:00	62	397,970,687.1	164
2/2/2018 12:00	62	397,985,348.0	164
2/2/2018 16:00	61	397,999,984.3	167
2/2/2018 20:00	61	398,014,421.7	166
2/3/2018 0:00	60	398,028,690.4	166
2/3/2018 4:00	59	398,043,032.3	166
2/3/2018 8:00	61	398,057,425.6	166
2/3/2018 12:00	61	398,071,814.5	162
2/3/2018 16:00	61	398,086,221.7	167
2/3/2018 20:00	59	398,100,511.7	163
2/4/2018 20:00	2	398,107,899.8	128
2/5/2018 16:00	1	398,108,019.2	129
2/5/2018 20:00	2	398,108,291.2	127
2/6/2018 0:00	2	398,108,771.0	130
2/6/2018 4:00	2	398,109,250.8	129
2/6/2018 8:00	2	398,109,730.5	130
2/6/2018 12:00	64	398,110,873.9	126
2/6/2018 16:00	65	398,126,450.4	128
2/6/2018 20:00	63	398,141,818.9	130
2/7/2018 0:00	64	398,157,427.7	130
2/7/2018 4:00	65	398,173,240.9	129
2/7/2018 8:00	67	398,189,111.4	130
2/7/2018 12:00	67	398,204,902.5	130
2/7/2018 16:00	64	398,220,505.5	130
2/7/2018 20:00	65	398,235,897.9	128
2/8/2018 0:00	64	398,251,065.7	130
2/8/2018 4:00	64	398,266,491.7	130
2/8/2018 8:00	68	398,282,159.8	131
2/8/2018 12:00	64	398,297,890.7	130
2/8/2018 16:00	64	398,313,130.3	127
2/8/2018 20:00	62	398,328,199.5	127
2/9/2018 0:00	66	398,343,689.9	130
2/9/2018 4:00	67	398,359,501.5	129
2/9/2018 8:00	67	398,375,475.4	126
2/9/2018 12:00	66	398,391,402.1	128
2/9/2018 16:00	67	398,406,901.1	129
2/9/2018 20:00	64	398,422,380.5	126
2/10/2018 0:00	66	398,437,931.7	129
2/10/2018 4:00	66	398,453,437.6	128
2/10/2018 8:00	64	398,468,847.8	128
2/10/2018 12:00	62	398,484,013.8	127
2/10/2018 16:00	61	398,498,668.6	126

Stanton Cleaners Groundwater Contamination Site Site Operational Data - February 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
2/10/2018 20:00	60	398,513,268.7	124
2/11/2018 0:00	62	398,527,906.1	129
2/11/2018 4:00	60	398,542,553.5	130
2/11/2018 8:00	61	398,557,172.3	129
2/11/2018 12:00	61	398,571,758.3	125
2/11/2018 16:00	60	398,586,245.9	124
2/11/2018 20:00	60	398,600,578.7	128
2/12/2018 0:00	59	398,614,846.1	129
2/12/2018 4:00	60	398,629,039.8	129
2/12/2018 8:00	61	398,643,232.9	124
2/12/2018 12:00	60	398,657,722.2	126
2/12/2018 16:00	60	398,672,394.8	126
2/12/2018 20:00	62	398,687,051.6	129
2/13/2018 0:00	65	398,702,127.6	130
2/13/2018 4:00	65	398,717,599.0	129
2/13/2018 8:00	69	398,733,319.6	128
2/13/2018 12:00	66	398,749,092.9	128
2/13/2018 16:00	62	398,764,215.4	120
2/13/2018 20:00	65	398,779,092.5	117
2/14/2018 0:00	64	398,794,411.1	118
2/14/2018 4:00	64	398,809,829.2	120
2/14/2018 8:00	66	398,825,250.8	121
2/14/2018 12:00	62	398,840,525.4	117
2/14/2018 16:00	60	398,855,185.8	116
2/14/2018 20:00	60	398,869,535.0	116
2/15/2018 0:00	60	398,884,108.5	120
2/15/2018 4:00	64	398,898,724.6	120
2/15/2018 8:00	61	398,913,326.5	121
2/15/2018 12:00	60	398,927,886.3	115
2/15/2018 16:00	60	398,942,136.3	120
2/15/2018 20:00	60	398,956,294.6	114
2/16/2018 0:00	60	398,970,409.5	114
2/16/2018 4:00	60	398,984,570.8	119
2/16/2018 8:00	60	398,998,693.1	117
2/16/2018 12:00	58	399,012,825.6	120
2/16/2018 16:00	60	399,026,889.8	122
2/16/2018 20:00	60	399,041,047.4	119
2/17/2018 0:00	65	399,055,670.1	121
2/17/2018 4:00	63	399,070,797.4	120
2/17/2018 8:00	64	399,086,274.2	118
2/17/2018 12:00	66	399,101,787.3	119
2/17/2018 16:00	64	399,116,700.8	120
2/17/2018 20:00	64	399,131,679.8	120
2/18/2018 0:00	63	399,146,879.0	118
2/18/2018 4:00	65	399,162,207.1	118
2/18/2018 8:00	66	399,177,604.0	119
2/18/2018 12:00	63	399,193,027.6	115
2/18/2018 16:00	63	399,207,949.4	117
2/18/2018 20:00	62	399,222,591.7	119
2/19/2018 0:00	64	399,237,681.4	117

Stanton Cleaners Groundwater Contamination Site Site Operational Data - February 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
2/19/2018 4:00	65	399,253,138.8	115
2/19/2018 8:00	64	399,268,740.7	116
2/19/2018 12:00	62	399,284,131.3	118
2/19/2018 16:00	62	399,298,972.4	117
2/19/2018 20:00	62	399,313,695.5	114
2/20/2018 0:00	62	399,328,424.7	118
2/20/2018 4:00	62	399,343,143.6	118
2/20/2018 8:00	62	399,357,746.8	120
2/20/2018 12:00	60	399,372,228.5	115
2/20/2018 16:00	59	399,386,340.8	118
2/20/2018 20:00	59	399,400,344.5	116
2/21/2018 0:00	58	399,414,364.6	116
2/21/2018 4:00	61	399,428,481.8	117
2/21/2018 8:00	60	399,442,599.7	117
2/21/2018 12:00	59	399,456,691.9	114
2/21/2018 16:00	57	399,470,654.6	118
2/21/2018 20:00	61	399,484,592.1	114
2/22/2018 0:00	59	399,498,485.3	119
2/22/2018 4:00	59	399,512,453.8	113
2/22/2018 8:00	60	399,526,509.4	117
2/22/2018 12:00	58	399,540,680.7	119
2/22/2018 16:00	60	399,554,815.2	119
2/22/2018 20:00	60	399,569,057.1	117
2/23/2018 0:00	61	399,583,503.9	117
2/23/2018 4:00	63	399,598,103.1	115
2/23/2018 8:00	64	399,612,835.1	116
2/23/2018 12:00	62	399,627,700.4	87
2/23/2018 16:00	63	399,642,516.4	84
2/23/2018 20:00	62	399,657,314.6	88
2/24/2018 0:00	62	399,672,075.1	88
2/24/2018 4:00	60	399,686,810.5	87
2/24/2018 8:00	62	399,701,498.2	88
2/24/2018 12:00	60	399,715,972.2	87
2/24/2018 16:00	60	399,730,131.7	83
2/24/2018 20:00	58	399,744,255.4	88
2/25/2018 0:00	60	399,758,472.2	88
2/25/2018 4:00	62	399,772,830.0	84
2/25/2018 8:00	62	399,787,303.5	89
2/25/2018 12:00	60	399,801,853.3	83
2/25/2018 16:00	63	399,816,400.0	87
2/25/2018 20:00	60	399,830,937.6	89
2/26/2018 0:00	60	399,845,476.0	87
2/26/2018 4:00	61	399,860,058.1	88
2/26/2018 8:00	64	399,874,742.9	86
2/26/2018 12:00	62	399,889,424.4	87
2/26/2018 16:00	59	399,903,861.0	87
2/26/2018 20:00	59	399,918,147.5	82
2/27/2018 0:00	61	399,932,718.0	85
2/27/2018 4:00	62	399,947,645.1	82
2/27/2018 8:00	65	399,962,895.4	86

Stanton Cleaners Groundwater Contamination Site Site Operational Data - February 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
2/27/2018 12:00	60	399,977,901.1	84
2/27/2018 16:00	58	399,992,130.2	87
2/27/2018 20:00	59	400,006,218.3	87
2/28/2018 0:00	60	400,020,465.8	84
2/28/2018 4:00	62	400,035,025.1	85
2/28/2018 8:00	61	400,049,763.2	86
2/28/2018 12:00	59	400,064,347.4	85
2/28/2018 16:00	57	400,078,408.8	84
2/28/2018 20:00	59	400,092,365.7	87

Notes:

gpm : gallons per minute
cfm : cubic feet per minute
gal : gallons

Stanton Cleaners Groundwater Contamination Site Site Operational Data - March 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
3/1/2018 0:00	58	400,106,405.0	87
3/1/2018 4:00	60	400,120,539.0	83
3/1/2018 8:00	60	400,134,682.0	88
3/1/2018 12:00	58	400,148,807.2	154
3/1/2018 16:00	62	400,162,798.6	155
3/1/2018 20:00	58	400,176,780.7	156
3/2/2018 0:00	59	400,190,770.0	153
3/2/2018 4:00	61	400,204,775.1	156
3/2/2018 8:00	58	400,218,814.6	155
3/2/2018 12:00	61	400,233,115.8	179
3/2/2018 16:00	69	400,248,472.2	184
3/2/2018 20:00	67	400,264,437.2	181
3/3/2018 0:00	66	400,280,296.1	187
3/3/2018 4:00	66	400,296,000.5	189
3/3/2018 8:00	67	400,311,603.9	187
3/3/2018 12:00	65	400,327,078.8	166
3/3/2018 16:00	65	400,341,959.6	165
3/3/2018 20:00	64	400,356,793.2	165
3/4/2018 0:00	62	400,371,720.4	166
3/4/2018 4:00	62	400,386,483.2	164
3/4/2018 8:00	63	400,401,517.1	164
3/4/2018 12:00	64	400,416,512.7	161
3/4/2018 16:00	63	400,431,067.4	161
3/4/2018 20:00	64	400,445,609.9	164
3/5/2018 0:00	61	400,460,343.3	162
3/5/2018 4:00	62	400,475,311.5	164
3/5/2018 8:00	66	400,490,560.2	167
3/5/2018 12:00	61	400,505,655.9	165
3/5/2018 16:00	61	400,520,454.9	165
3/5/2018 20:00	61	400,535,195.3	166
3/6/2018 0:00	63	400,549,871.9	166
3/6/2018 4:00	63	400,564,741.9	165
3/6/2018 8:00	64	400,579,842.5	166
3/6/2018 12:00	59	400,594,505.2	160
3/6/2018 16:00	58	400,608,521.0	154
3/6/2018 20:00	60	400,622,483.6	165
3/7/2018 0:00	60	400,636,549.4	166
3/7/2018 4:00	59	400,650,732.4	167
3/7/2018 8:00	63	400,665,123.7	166
3/7/2018 12:00	61	400,679,593.8	166
3/7/2018 16:00	61	400,694,337.4	166
3/7/2018 20:00	67	400,710,306.4	165
3/8/2018 0:00	63	400,725,619.9	165
3/8/2018 4:00	62	400,740,720.6	164
3/8/2018 8:00	62	400,755,806.0	187
3/8/2018 12:00	61	400,770,615.9	174
3/8/2018 16:00	61	400,785,001.6	182
3/8/2018 20:00	61	400,799,391.9	183
3/9/2018 0:00	64	400,814,000.4	187
3/9/2018 4:00	63	400,828,876.0	156
3/9/2018 8:00	62	400,843,997.7	192

Stanton Cleaners Groundwater Contamination Site Site Operational Data - March 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
3/9/2018 12:00	65	400,859,267.7	173
3/9/2018 16:00	60	400,873,770.7	179
3/9/2018 20:00	62	400,888,160.9	178
3/10/2018 0:00	61	400,902,889.5	165
3/10/2018 4:00	63	400,917,979.0	161
3/10/2018 8:00	65	400,933,309.1	164
3/10/2018 12:00	61	400,948,442.1	161
3/10/2018 16:00	62	400,963,163.1	164
3/10/2018 20:00	62	400,977,889.9	164
3/11/2018 0:00	66	400,992,848.4	165
3/11/2018 4:00	66	401,004,280.5	166
3/11/2018 8:00	65	401,019,678.3	161
3/11/2018 12:00	61	401,034,938.8	165
3/11/2018 16:00	60	401,049,301.9	166
3/11/2018 20:00	60	401,063,390.0	164
3/12/2018 0:00	59	401,077,673.2	165
3/12/2018 4:00	63	401,092,416.8	167
3/12/2018 8:00	64	401,107,587.5	165
3/12/2018 12:00	61	401,122,550.6	165
3/12/2018 16:00	61	401,136,993.1	165
3/12/2018 20:00	60	401,151,368.5	166
3/13/2018 0:00	60	401,165,886.7	163
3/13/2018 4:00	66	401,180,788.8	165
3/13/2018 8:00	64	401,196,083.1	163
3/13/2018 12:00	63	401,211,513.8	165
3/13/2018 16:00	61	401,226,635.6	165
3/13/2018 20:00	62	401,241,374.4	166
3/14/2018 0:00	64	401,256,426.6	164
3/14/2018 4:00	67	401,271,795.4	166
3/14/2018 8:00	66	401,287,353.9	167
3/14/2018 12:00	63	401,302,703.9	165
3/14/2018 16:00	61	401,317,418.3	166
3/14/2018 20:00	61	401,332,092.6	165
3/15/2018 0:00	63	401,347,071.5	162
3/15/2018 4:00	63	401,362,420.6	165
3/15/2018 8:00	64	401,377,992.1	165
3/15/2018 12:00	62	401,393,293.6	166
3/15/2018 16:00	62	401,407,719.1	164
3/15/2018 20:00	61	401,421,923.4	165
3/16/2018 0:00	60	401,436,413.8	164
3/16/2018 4:00	62	401,451,254.3	165
3/16/2018 8:00	65	401,466,475.2	165
3/16/2018 12:00	62	401,481,704.2	164
3/16/2018 16:00	64	401,496,777.2	164
3/16/2018 20:00	66	401,511,866.4	166
3/17/2018 0:00	66	401,527,340.4	165
3/17/2018 4:00	66	401,543,081.8	165
3/17/2018 8:00	65	401,558,956.4	163
3/17/2018 12:00	64	401,574,523.9	161
3/17/2018 16:00	61	401,589,186.5	166
3/17/2018 20:00	63	401,603,539.4	162

Stanton Cleaners Groundwater Contamination Site Site Operational Data - March 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
3/18/2018 0:00	61	401,618,170.7	163
3/18/2018 4:00	64	401,633,263.2	162
3/18/2018 8:00	68	401,648,784.0	165
3/18/2018 12:00	65	401,664,241.8	165
3/18/2018 16:00	61	401,679,086.3	165
3/18/2018 20:00	60	401,693,560.9	165
3/19/2018 0:00	62	401,708,420.8	162
3/19/2018 4:00	66	401,723,704.8	167
3/19/2018 8:00	65	401,739,147.1	167
3/19/2018 12:00	61	401,754,305.3	163
3/19/2018 16:00	60	401,768,647.4	166
3/19/2018 20:00	60	401,782,829.7	165
3/20/2018 0:00	61	401,797,389.0	163
3/20/2018 4:00	67	401,812,491.4	162
3/20/2018 8:00	65	401,827,930.3	161
3/20/2018 12:00	64	401,843,345.5	161
3/20/2018 16:00	63	401,858,686.9	165
3/20/2018 20:00	65	401,873,986.5	160
3/21/2018 0:00	65	401,889,292.2	165
3/21/2018 4:00	67	401,904,663.0	165
3/21/2018 8:00	66	401,920,144.7	165
3/21/2018 12:00	66	401,935,739.0	165
3/21/2018 16:00	64	401,951,369.1	165
3/21/2018 20:00	66	401,967,010.6	166
3/22/2018 0:00	66	401,982,680.6	163
3/22/2018 4:00	65	401,998,376.5	166
3/22/2018 8:00	66	402,013,973.5	166
3/22/2018 12:00	61	402,029,313.9	164
3/22/2018 16:00	62	402,043,727.0	165
3/22/2018 20:00	60	402,057,871.8	165
3/23/2018 0:00	61	402,072,377.9	165
3/23/2018 4:00	66	402,087,247.7	165
3/23/2018 8:00	63	402,102,392.4	166
3/23/2018 12:00	60	402,117,105.0	162
3/23/2018 16:00	58	402,131,195.6	164
3/23/2018 20:00	62	402,145,259.2	166
3/24/2018 0:00	63	402,159,540.2	165
3/24/2018 4:00	63	402,174,145.3	165
3/24/2018 8:00	61	402,189,056.5	165
3/24/2018 12:00	59	402,203,636.4	161
3/24/2018 16:00	58	402,217,630.2	165
3/24/2018 20:00	59	402,231,572.6	166
3/25/2018 0:00	58	402,245,664.1	166
3/25/2018 4:00	63	402,260,122.6	164
3/25/2018 8:00	63	402,274,912.6	165
3/25/2018 12:00	61	402,289,568.0	165
3/25/2018 16:00	59	402,303,839.3	165
3/25/2018 20:00	61	402,318,090.2	165
3/26/2018 0:00	62	402,332,850.7	166
3/26/2018 4:00	66	402,348,155.5	162
3/26/2018 8:00	63	402,363,704.7	165

Stanton Cleaners Groundwater Contamination Site Site Operational Data - March 2018			
Time	EPA-EXT02 Flow (gpm)	Total Flow (gal)	SVE Air Flow (cfm)
3/26/2018 12:00	60	402,378,658.3	167
3/26/2018 16:00	58	402,392,721.4	164
3/26/2018 20:00	60	402,406,785.0	165
3/27/2018 0:00	63	402,421,368.4	162
3/27/2018 4:00	67	402,436,588.7	165
3/27/2018 8:00	66	402,452,054.5	166
3/27/2018 12:00	61	402,466,876.8	165
3/27/2018 16:00	61	402,481,237.6	166
3/27/2018 20:00	62	402,495,779.7	164
3/28/2018 0:00	62	402,510,517.3	166
3/28/2018 4:00	64	402,525,350.9	165
3/28/2018 8:00	63	402,540,088.4	165
3/28/2018 12:00	59	402,554,400.6	165
3/28/2018 16:00	58	402,568,481.7	165
3/28/2018 20:00	57	402,582,543.0	166
3/29/2018 0:00	60	402,596,598.4	164
3/29/2018 4:00	59	402,610,676.8	165
3/29/2018 8:00	60	402,624,748.2	157
3/29/2018 12:00	59	402,638,766.7	157
3/29/2018 16:00	59	402,652,698.4	156
3/29/2018 20:00	58	402,666,638.7	155
3/30/2018 0:00	59	402,680,639.5	155
3/30/2018 4:00	58	402,694,675.8	157
3/30/2018 8:00	58	402,708,709.5	154
3/30/2018 12:00	57	402,722,676.9	156
3/30/2018 16:00	59	402,736,610.7	157
3/30/2018 20:00	59	402,750,573.2	156
3/31/2018 0:00	61	402,764,642.1	154
3/31/2018 4:00	60	402,778,967.4	156
3/31/2018 8:00	60	402,793,503.8	156
3/31/2018 12:00	58	402,807,629.0	156
3/31/2018 16:00	58	402,821,546.5	154
3/31/2018 20:00	59	402835521.1	154

Notes:

gpm : gallons per minute
cfm : cubic feet per minute
gal : gallons

Appendix D

AS System O&M

Reports

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Air Sparge System
O&M Data Log

Date: 1/25/2018

Readings at Well	
Near Well Head Bladder	N/A*

Treatment Room Readings	
SCFM	N/A* PSI
psi-1	N/A* PSI
psi-2	N/A* PSI
psi-3	N/A* PSI
P_1	N/A* PSI
P_2	N/A* PSI
P_3	N/A* PSI

System Readings	
Temp.	N/A* ºF
EN-37-1	N/A* bar
K/O Tank	N/A* PSI

Notes:
***Air readings could not be collected due to the Air Sparge System being offline.**

*Air Sparge System offline
SCFM- Standard Cubic Feet per Minute
psi- pounds per square inch

Locations:
Near Well Head- psi gauge at corner of New Stanton Cleaners Building
Bladder- psi gauge at well head
SCFM- gauge in treatment room (first gauge when looking at wall from left to right)
psi-1 - 2nd gauge attached to line on wall when looking left to right
psi-2 - 3rd gauge
psi-3- 4th gauge
P_1- influent relief valve
P_2- adjacent to catwalk
P_3- on top of carbon tank
Temp.- from compressor screen display
EN-37-1- gauge on compressor
K/O Tank- gauge on knockout tank

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Air Sparge System
O&M Data Log

Date: 2/22/2018

Readings at Well	
Near Well Head Bladder	N/A*

Treatment Room Readings	
SCFM	N/A* PSI
psi-1	N/A* PSI
psi-2	N/A* PSI
psi-3	N/A* PSI
P_1	N/A* PSI
P_2	N/A* PSI
P_3	N/A* PSI

System Readings	
Temp.	N/A* ºF
EN-37-1	N/A* bar
K/O Tank	N/A* PSI

Notes:
***Air readings could not be collected due to the Air Sparge System being offline.**

*Air Sparge System offline
SCFM- Standard Cubic Feet per Minute
psi- pounds per square inch

Locations:
Near Well Head- psi gauge at corner of New Stanton Cleaners Building
Bladder- psi gauge at well head
SCFM- gauge in treatment room (first gauge when looking at wall from left to right)
psi-1 - 2nd gauge attached to line on wall when looking left to right
psi-2 - 3rd gauge
psi-3- 4th gauge
P_1- influent relief valve
P_2- adjacent to catwalk
P_3- on top of carbon tank
Temp.- from compressor screen display
EN-37-1- gauge on compressor
K/O Tank- gauge on knockout tank

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Air Sparge System
O&M Data Log

Date: 3/29/2018

Readings at Well	
Near Well Head Bladder	N/A*

Treatment Room Readings	
SCFM	N/A* PSI
psi-1	N/A* PSI
psi-2	N/A* PSI
psi-3	N/A* PSI
P_1	N/A* PSI
P_2	N/A* PSI
P_3	N/A* PSI

System Readings	
Temp.	N/A* ºF
EN-37-1	N/A* bar
K/O Tank	N/A* PSI

Notes:
***Air readings could not be collected due to the Air Sparge System being offline.**

*Air Sparge System offline
SCFM- Standard Cubic Feet per Minute
psi- pounds per square inch

Locations:
Near Well Head- psi gauge at corner of New Stanton Cleaners Building
Bladder- psi gauge at well head
SCFM- gauge in treatment room (first gauge when looking at wall from left to right)
psi-1 - 2nd gauge attached to line on wall when looking left to right
psi-2 - 3rd gauge
psi-3- 4th gauge
P_1- influent relief valve
P_2- adjacent to catwalk
P_3- on top of carbon tank
Temp.- from compressor screen display
EN-37-1- gauge on compressor
K/O Tank- gauge on knockout tank

Appendix E

SVE System O&M

Reports

STANTON CLEANERS AREA GROUNDWATER
CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Monthly Air Monitoring Log

Date: 1/25/2018
Project #

		FID	MultiRAE Plus PGM-50					VelociCalc Plus				
	Pipe ID	VOC	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
SVE-Influent	**5.709**	N/A	0.4	0.0	20.5	0.0	0.0	46.2	NA**	25.5	-9.3	NA**
Post- Blower Pre-Carbon*	**5.706**	N/A	1.1	0.0	20.2	0.0	0.0	72.6	1.272	41.7	8.3	278.74
EPA-SVE-1 (shallow)	**1.913**	N/A	0.6	0.0	20.9	0.0	0.0	32.9	0.070	42.7	-10.0	0.14
EPA-SVE-1 (medium)	**1.913**	N/A	0.0	0.0	20.9	0.0	0.0	31.8	0.011	48.1	-9.3	0.10
EPA-SVE-2 (shallow)	**1.913**	N/A	0.0	0.0	20.9	0.0	0.0	32.5	-0.732	29.5	-13.9	1.61
EPA-SVE-2 (medium)	**1.913**	N/A	0.0	0.0	20.5	0.0	0.0	37.7	-2.355	34.5	-9.9	13.82
SS-A	**1.913**	N/A	0.0	0.0	20.9	0.0	0.0	30.0	-10.922	28.6	-15.2	32.27
SVE-3A	**1.913**	N/A	0.0	0.0	20.9	0.0	0.0	37.6	-12.891	30.2	-8.1	119.19
SVE-3B	**1.913**	N/A	0.4	0.0	20.9	0.0	0.0	36.5	-13.128	31.9	-10.8	114.43
SVE-1 Combined	**1.913**	N/A	0.0	0.0	20.9	0.0	0.0	36.0	-8.162	30.5	-3.7	48.90
SVE-2 Combined	**1.913**	N/A	0.0	0.0	20.9	0.0	0.0	31.3	-10.700	27.7	-0.3	93.32
Background		N/A	0.0	0.0	20.9	0.0	0.0	39.6	NA	21.4	-17.3	NA

Notes:
***SVE-Effluent relabeled as "Post-Blower Pre-Carbon Sampling Location"**
Dew Point data
unavailable, an alternate
velocicalc

Equipment calibrated by: **John Zator**
Air readings collected by: **John Zator**

Notes:
****Maxed out reading on meter**
FID: Flame Ionization Detector
VOC: Volatile Organic Compounds (in parts per million)
CO: Carbon Monoxide
LEL: Lower Explosive Limit
H2S: Hydrogen Sulfide
Temperature: Measured in Degrees Fahrenheit
Vacuum Pressure: measured in inches of water (in/H2O)
%RH: relative humidity
Dew Pt.: dew point in degrees Fahrenheit
Flow: measured in cubic feet per minute (CFM)

AS: Air Stripper
SVE: Soil Vapor Extraction System

	Prior to 10/3/05	After 10/3/05
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	off
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04
LIHA sub-slab system was removed by the EPA from service in the Fall of 2012.
N/A- Not Available

STANTON CLEANERS AREA GROUNDWATER
CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Monthly Air Monitoring Log

Date: 2/22/2018
Project #

		FID	MultiRAE Plus PGM-50					VelociCalc Plus				
	Pipe ID	VOC	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
SVE-Influent	**5.709**	N/A	***	***	***	***	***	***	***	***	***	***
Post- Blower Pre-Carbon*	**5.706**	N/A	***	***	***	***	***	***	***	***	***	***
EPA-SVE-1 (shallow)	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
EPA-SVE-1 (medium)	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
EPA-SVE-2 (shallow)	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
EPA-SVE-2 (medium)	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
SS-A	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
SVE-3A	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
SVE-3B	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
SVE-1 Combined	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
SVE-2 Combined	**1.913**	N/A	***	***	***	***	***	***	***	***	***	***
Background		N/A	***	***	***	***	***	***	***	***	***	***

Notes:
***SVE-Effluent relabeled as "Post-Blower Pre-Carbon Sampling Location"**
Dew Point data
unavailable, an alternate
velocicalc

Equipment calibrated by: **John Zator**
Air readings collected by: **John Zator**

Notes:
****Maxed out reading on meter**
***** Did not collect readings due to SVE system being offline**
FID: Flame Ionization Detector
VOC: Volatile Organic Compounds (in parts per million)
CO: Carbon Monoxide
LEL: Lower Explosive Limit
H2S: Hydrogen Sulfide
Temperature: Measured in Degrees Fahrenheit
Vacuum Pressure: measured in inches of water (in/H2O)
%RH: relative humidity
Dew Pt.: dew point in degrees Fahrenheit
Flow: measured in cubic feet per minute (CFM)

AS: Air Stripper
SVE: Soil Vapor Extraction System

	Prior to 10/3/05	**After 10/3/05**
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	off
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04
LIHA sub-slab system was removed by the EPA from service in the Fall of 2012.
N/A- Not Available

STANTON CLEANERS AREA GROUNDWATEF
CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Monthly Air Monitoring Log

Date: 3/29/2018
Project #

		FID	MultiRAE Plus PGM-50					VelociCalc Plus				
	Pipe ID	VOC	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
SVE-Influent	5.709	N/A	0.0	0.0	20.9	0.0	0.0	64.4	**	50.6	45.7	**
Post- Blower Pre-Carbon*	5.706	N/A	0.0	0.0	20.1	0.0	0.0	56.9	1.063	84.2	52.2	170.32
EPA-SVE-1 (shallow)	1.913	N/A	0.0	0.0	20.9	0.0	0.0	57.4	**	69.2	47.4	20.20
EPA-SVE-1 (medium)	1.913	N/A	0.0	0.0	20.9	0.0	0.0	57.7	**	67.2	46.4	21.13
EPA-SVE-2 (shallow)	1.913	N/A	0.0	0.0	20.9	0.0	0.0	58.2	-0.430	60.5	44.6	1.24
EPA-SVE-2 (medium)	1.913	N/A	0.0	0.0	20.4	0.0	0.0	60.6	-3.115	59.8	46.5	20.62
SS-A	1.913	N/A	0.0	0.0	20.9	0.0	0.0	56.7	-14.680	55.5	41.2	128.48
SVE-3A	1.913	N/A	0.0	0.0	20.9	0.0	0.0	61.2	**	61.8	48.0	185.18
SVE-3B	1.913	N/A	0.0	0.0	20.9	0.0	0.0	58.6	-14.473	55.2	42.6	114.99
SVE-1 Combined	1.913	N/A	0.0	0.0	20.9	0.0	0.0	59.2	**	64.2	47.1	**
SVE-2 Combined	1.913	N/A	0.0	0.0	20.9	0.0	0.0	55.6	-12.459	59.3	48.7	112.30
Background		N/A	0.0	0.0	20.9	0.0	0.0	58.4	NA	66.7	47.4	NA

Notes:
***SVE-Effluent relabeled as "Post-Blower Pre-Carbon Sampling Location"**
Dew Point data
unavailable, an alternate
velocicalc

Equipment calibrated by: **Daniel Prisco-Buxbaum**
Air readings collected by: **Daniel Prisco-Buxbaum**

Notes:
****Maxed out reading on meter**
***** Did not collect readings due to SVE system being offline**
FID: Flame Ionization Detector
VOC: Volatile Organic Compounds (in parts per million)
CO: Carbon Monoxide
LEL: Lower Explosive Limit
H2S: Hydrogen Sulfide
Temperature: Measured in Degrees Fahrenheit
Vacuum Pressure: measured in inches of water (in/H2O)
%RH: relative humidity
Dew Pt.: dew point in degrees Fahrenheit
Flow: measured in cubic feet per minute (CFM)

AS: Air Stripper
SVE: Soil Vapor Extraction System

	Prior to 10/3/05	After 10/3/05
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	off
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04
LIHA sub-slab system was removed by the EPA from service in the Fall of 2012.
N/A- Not Available

Appendix F

Monthly Groundwater Level Measurements

WATER LEVEL DATA SUMMARY

PROJECT: Stanton Cleaners
LOCATION: Great Neck, NY
CLIENT: HDR
SURVEY DATUM: ft msl
MEASURING DEVICE: Solinst Water Level Indicator

JOB NUMBER: _____
DATE: 1/25/2018
MEASURED BY: JZ

WELL NUMBER	MEASURING POINT		Time	DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)				
EPA-MW-11D	ft BTOC	74.63	11:26	58.82	15.81	4" well in p-lot by med sports bldg.
EPA-MW-21-R	ft BTOC	84.13	11:49	66.79	17.34	Getty Gas Station well
EPA-MW-22	ft BTOC	82.20	_____	____	N/A	Under clothing bin- SC p-lot
EPA-MW-23	ft BTOC	82.83	10:50	64.63	18.20	In front of treatment bldg.
EPA-MW-27	ft BTOC	69.32	11:41	51.75	17.57	LIHA PL
ST-MW-06	ft BTOC	69.83	*	*	#VALUE!	LIHA PL 4"
EPA-MW-9A	ft BTOC	80.24	*	*	#VALUE!	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	11:29	59.47	15.78	p-lot by entrance to med sports bldg.
ST-MW-12	ft BTOC	87.20	11:19	71.09	16.11	In front of apartment bldg.
ST-MW-14	ft BTOC	69.73	11:43	55.07	14.66	LIHA PL
ST-MW-16	ft BTOC	75.78	10:57	55.65	20.13	Other side treatment bldg. near fence
ST-MW-17	ft BTOC	86.53	11:21	70.55	15.98	In front of apartment bldg.
ST-MW-19	ft BTOC	82.50	11:35	76.00	6.50	Triangle park well
ST-MW-20	ft BTOC	84.53	11:23	71.06	13.47	Near apartment bldg.
EPA-MW-26	ft BTOC	78.37	11:03	56.64	21.73	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	11:12	79.83	10.30	Mirreless Rd
ST-MW-13	ft BTOC	103.95	11:08	86.61	17.34	Amherst Rd
ST-MW-18	ft BTOC	84.40	11:16	72.98	11.42	Ascot Ridge (past apt bldg)

Notes:
*Unable to gauge ST-MW-09A due to J-plug being frozen shut. Unable to gauge ST-MW-06 due to car covering it.

WATER LEVEL DATA SUMMARY

PROJECT:	Stanton Cleaners	**JOB NUMBER:**	
LOCATION:	Great Neck, NY	**DATE:**	2/22/2018
CLIENT:	HDR	**MEASURED BY:**	JZ
SURVEY DATUM:	ft msl		
MEASURING DEVICE:	Solinst Water Level Indicator		

WELL NUMBER	MEASURING POINT		Time	DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)				
EPA-MW-11D	ft BTOC	74.63	12:26	58.75	15.88	4" well in p-lot by med sports bldg.
EPA-MW-21-R	ft BTOC	84.13	10:48	66.88	17.25	Getty Gas Station well
EPA-MW-22	ft BTOC	82.20	_____	____	N/A	Under clothing bin- SC p-lot
EPA-MW-23	ft BTOC	82.83	10:46	64.69	18.14	In front of treatment bldg.
EPA-MW-27	ft BTOC	69.32	11:55	60.10	9.22	LIHA PL
ST-MW-06	ft BTOC	69.83	12:00	46.92	22.91	LIHA PL 4"
EPA-MW-9A	ft BTOC	80.24	*	*	#VALUE!	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	12:28	59.58	15.67	p-lot by entrance to med sports bldg.
ST-MW-12	ft BTOC	87.20	12:18	71.02	16.18	In front of apartment bldg.
ST-MW-14	ft BTOC	69.73	11:58	55.09	14.64	LIHA PL
ST-MW-16	ft BTOC	75.78	10:54	55.61	20.17	Other side treatment bldg. near fence
ST-MW-17	ft BTOC	86.53	12:20	71.80	14.73	In front of apartment bldg.
ST-MW-19	ft BTOC	82.50	12:31	76.17	6.33	Triangle park well
ST-MW-20	ft BTOC	84.53	12:22	71.24	13.29	Near apartment bldg.
EPA-MW-26	ft BTOC	78.37	11:02	57.97	20.40	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	12:10	81.30	8.83	Mirreless Rd
ST-MW-13	ft BTOC	103.95	12:06	86.53	17.42	Amherst Rd
ST-MW-18	ft BTOC	84.40	12:15	73.14	11.26	Ascot Ridge (past apt bldg)

Notes:
*Unable to gauge ST-MW-09A due to J-plug being stuck on well.

WATER LEVEL DATA SUMMARY

PROJECT: Stanton Cleaners
LOCATION: Great Neck, NY
CLIENT: HDR
SURVEY DATUM: ft msl
MEASURING DEVICE: Solinst Water Level Indicator

JOB NUMBER:
DATE: 3/29/2018
MEASURED BY: DPB

WELL NUMBER	MEASURING POINT		Time	DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)				
EPA-MW-11D	ft BTOC	74.63	11:32	57.69	16.94	4" well in p-lot by med sports bldg.
EPA-MW-21-R	ft BTOC	84.13	12:18	65.91	18.22	Getty Gas Station well
EPA-MW-22	ft BTOC	82.20	_____	____	N/A	Under clothing bin- SC p-lot
EPA-MW-23	ft BTOC	82.83	10:51	64.13	18.70	In front of treatment bldg.
EPA-MW-27	ft BTOC	69.32	12:12	50.92	18.40	LIHA PL
ST-MW-06	ft BTOC	69.83	12:10	45.60	24.23	LIHA PL 4"
EPA-MW-9A	ft BTOC	80.24	11:45	63.46	16.78	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	11:35	58.46	16.79	p-lot by entrance to med sports bldg.
ST-MW-12	ft BTOC	87.20	11:26	70.54	16.66	In front of apartment bldg.
ST-MW-14	ft BTOC	69.73	12:08	51.93	17.80	LIHA PL
ST-MW-16	ft BTOC	75.78	10:54	54.84	20.94	Other side treatment bldg. near fence
ST-MW-17	ft BTOC	86.53	11:28	69.48	17.05	In front of apartment bldg.
ST-MW-19	ft BTOC	82.50	11:17	66.17	16.33	Triangle park well
ST-MW-20	ft BTOC	84.53	11:30	68.59	15.94	Near apartment bldg.
EPA-MW-26	ft BTOC	78.37	10:57	59.13	N/A	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	11:14	72.94	N/A	Mirreless Rd
ST-MW-13	ft BTOC	103.95	11:04	86.12	17.83	Amherst Rd
ST-MW-18	ft BTOC	84.40	11:20	69.57	14.83	Ascot Ridge (past apt bldg)

Notes:
ST-MW-09A PVC cap which was stuck on well was freed, enabling Preferred to collect measurements as normal.

Appendix G

Groundwater Sampling Parameters Logs

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 1-18-18

SAMPLE ID: EPA-CL-417 011818
WELL ID: EPA-CL-170
SAMPLERS: BC, MC

Time On-site: 730 Time Off-site: 1500

Depth of well (from top of casing) [illegible] Time:
Initial static water level (from top of casing) 16.98 Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible Pump	____	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:

2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: X ft. of water x 0.65 = _____ gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
1330	6.89	10.6	0.152	2214.8	7.54	210.6
1335	6.79	10.8	0.151	2013.6	7.42	221.4
1340	6.79	10.9	0.151	1718.2	7.39	232.8
1345	6.77	11.1	0.150	1504.3	7.37	294.4
1350	6.67	11.3	0.150	1401.4	7.31	304.1
1355	6.74	11.2	0.149	1262.0	7.26	303.5
1400	6.73	11.1	0.149	1232.8	7.21	310.8
1405	6.73	10.9	0.149	1234.1	7.25	315.5
1410	6.70	10.9	0.149	1229.6	7.20	318.5
1415	6.71	10.9	0.149	1230.4	7.21	315.2

Sampling

Time of Sample Collection: 14:20

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump
- X Other: Disposable Bladder Pump (Low Flow)

Analyses:
- ____ TCL VOCs 602 _____ 503 _____ Other _____
- ____ TCL SVOCs
- ____ Target Analyte List Metals
- ____ Alkalinity

Observations

Weather/Temperature: Sunny 23°
Sample description: [illegible] SI cloudy
Free Product? yes ____ no ____ describe _____
Sheen? yes ____ no ____ describe _____
Odor? yes ____ no ____ describe _____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 1.18.18

SAMPLE ID: EPACL-45-011818
WELL ID: EPA-CL-45
SAMPLERS: MC / BC

Time On-site: 730
Time Off-site: 1500

Depth of well (from top of casing) .....
Initial static water level (from top of casing) 3.75
Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible Pump	____	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: X ft. of water x 0.65 = _____ gallons

volume of water removed:
_____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
1144	6.57	9.3	.301	1012.3	7.48	251.6
1149	6.56	9.3	.352	988.6	6.45	257.9
1154	6.56	9.6	.372	1096.5	6.73	263.7
1159	6.55	10.1	.381	1145.8	6.77	265.1
1204	6.55	10.6	.384	1235.0	6.40	268.3
1209	6.54	10.5	.387	310.6	6.47	270.9
1214	6.51	10.4	.393	270.7	6.47	278.4
1219	6.47	10.8	.395	263.4	6.23	282.2
1224	6.49	10.8	.398	254.6	6.31	282.0
1229	6.47	10.8	.397	244.8	6.31	283.9

Sampling
Time of Sample Collection: 1229

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
____ Dedicated pump
X Other: Disposable Bladder Pump (Low Flow)

Analyses:
____ TCL VOCs 602 _____ 503 _____ Other _____
____ TCL SVOCs
____ Target Analyte List Metals
____ Alkalinity

Observations
Weather/Temperature: _____
Sample description: _____
Free Product? yes ____ no ____ describe _____
Sheen? yes ____ no ____ describe _____
Odor? yes ____ no ____ describe _____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 01.19.18

SAMPLE ID: ST-MW-16-011918
WELL ID: ST-MW-16
SAMPLERS: AC, MC

Time On-site: 730
Time Off-site: 1430

Depth of well (from top of casing) .....
Initial static water level (from top of casing) 55.60
Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible Pump	____	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:
2 in. casing: X ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: ____ ft. of water x 0.65 = ____ gallons

volume of water removed: ____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
957	6.79	13.7	.612	5883.3	8.40	323.2
1002	6.82	13.9	.624	5146.4	8.22	326.7
1007	6.85	14.1	.630	4863.7	8.14	314.5
1012	6.87	14.2	.633	4276.6	8.00	308.4
1017	6.87	14.1	.631	3014.6	7.98	313.2
1022	6.86	14.1	.549	2463.9	7.98	298.3
1027	6.86	14.1	.632	1547.8	7.97	304.6
1032	6.86	14.1	.632	1328.4	7.97	311.2
1037	6.86	14.1	.632	1204.1	7.95	317.2
1042	6.86	14.1	.632	1143.2	7.95	319.4
1047	6.86	14.1	.632	1082.7	7.95	320.7

Sampling
Time of Sample Collection: 1047

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
____ Dedicated pump
X Other: Disposable Bladder Pump (Low Flow)

Analyses:
____ TCL VOCs 602 ____ 503 ____ Other ____
____ TCL SVOCs
____ Target Analyte List Metals
____ Alkalinity

Observations
Weather/Temperature: ____
Sample description: ____
Free Product? yes ____ no ____ describe ____
Sheen? yes ____ no ____ describe ____
Odor? yes ____ no ____ describe ____

Comments:
"Duplicate 1-011918" is a blind duplicate of ST-MW-16.

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 01.19.18

SAMPLE ID: EPA-MW-23-011918
WELL ID: EPA-MW-23
SAMPLERS: BC/MC

Time On-site: 730
Time Off-site: 1430

Depth of well (from top of casing) .....
Initial static water level (from top of casing) 64.46

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible Pump	____	Disposable Bladder Pump (Low Flow)	☒

Well Volume Calculation:
2 in. casing: X ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: ____ ft. of water x 0.65 = ____ gallons

volume of water removed: ____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

	Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
1005		6.30	11.8	.007	2988.9	8.11	261.8
1010		6.28	11.9	.340	3024.6	7.30	265.8
1015		6.63	12.0	.805	2733.4	6.77	250.4
1020		6.69	12.5	.844	683.0	6.42	261.8
1025		6.66	13.1	.014	1694.3	6.08	262.5
1030		6.60	12.8	.634	2488.1	5.95	266.4
1035		6.66	12.8	.886	1414.8	5.81	267.2
1040		6.66	12.7	.890	1495.1	5.81	270.1
1045		6.66	12.7	.891	1546.3	5.80	273.0
1050		6.66	12.6	.891	1609.2	5.79	275.4

Sampling
Time of Sample Collection: 1055

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
____ Dedicated pump
☒ Other: Disposable Bladder Pump (Low Flow)

Analyses:
____ TCL VOCs 602 ____ 503 ____ Other ____
____ TCL SVOCs
____ Target Analyte List Metals
____ Alkalinity

Observations
Weather/Temperature: ____
Sample description: ____
Free Product? yes ____ no ____ describe ____
Sheen? yes ____ no ____ describe ____
Odor? yes ____ no ____ describe ____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 1.19.18

SAMPLE ID: ~~SF~~ SF-MW-19-011918
WELL ID: SF-MW-19
SAMPLERS: BC
MC

Time On-site: ~~730~~ Time Off-site: ~~1430~~

Depth of well (from top of casing) _____ Time: _____
Initial static water level (from top of casing) 66.68 Time: _____

Purging Method

Airlift	~~X~~	Centrifugal	
Bailer		Pos. Displ.	
Submersible		Disposable Bladder Pump (Low Flow)	X
Pump	X		

Well Volume Calculation:
2 in. casing: X ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: 2.5 gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

	Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
1325	—	~~6.41~~	11.8	.273	2020.4	6.38	261.2
1330		6.43	11.8	.541	2001.1	6.42	269.6
1335		6.43	11.3	.589	15.02.1	6.30	291.3
1340		6.42	11.5	.601	1271.6	6.22	300.6
1345		6.41	11.9	.605	1189.7	5.47	301.4
1350		6.40	12.0	.605	931.4	5.24	302.1
1355		6.41	12.0	.603	800	5.70	303.8
1400		6.41	12.0	.600	795.6	5.66	306.4
1405		6.41	12.0	.598	791.7	5.65	307.0

Sampling
Time of Sample Collection: ~~1400~~ 1405

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
____ Dedicated pump
X Other: Disposable Bladder Pump (Low Flow)

Analyses:
____ TCL VOCs 602 _____ 503 _____ Other _____
____ TCL SVOCs
____ Target Analyte List Metals
____ Alkalinity

Observations
Weather/Temperature: _____
Sample description: _____
Free Product? yes ____ no ____ describe _____
Sheen? yes ____ no ____ describe _____
Odor? yes ____ no ____ describe _____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 1-22-18

SAMPLE ID: St MW-18 012218
WELL ID: St MW 18
SAMPLERS: BC
MC

Time On-site: 730
Time Off-site: 1330

Depth of well (from top of casing) .....
Initial static water level (from top of casing) 71.63

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible Pump	____	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:

2 in. casing: X ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: _____ ft. of water x 0.65 = _____ gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

	Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
5:30		11.14	12.1	0.834	17881	7.52	142.5
35		12.02	12.3	1.753	7663	7.08	111.9
40		11.12	12.3	1.752	4116	7.01	117.6
45		11.12	12.3	1.748	9516	6.98	118.6
50		11.11	12.4	1.737	9489	6.93	118.7
55		11.11	12.4	1.730	9379	6.87	118.9

Sampling

Time of Sample Collection: 8:00

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump
- X Other: Disposable Bladder Pump (Low Flow)

Analyses:
- ____ TCL VOCs 602 _____ 503 _____ Other _____
- ____ TCL SVOCs
- ____ Target Analyte List Metals
- ____ Alkalinity

Observations

Weather/Temperature: Cloudy 45°
Sample description: SI Cloudy
Free Product? yes ____ no ____ describe _____
Sheen? yes ____ no ____ describe _____
Odor? yes ____ no ____ describe _____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 1-22-18

SAMPLE ID: ~~STMW-20~~ -012218
WELL ID: ~~STMW-20~~
SAMPLERS: ~~BC~~ MC

Time On-site: ~~730~~

Time Off-site: 1330

Depth of well (from top of casing) .....
Initial static water level (from top of casing) 69.80

Time:
Time:

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Submersible Pump	___	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:

2 in. casing:	___ ft. of water x 0.16 =	___	gallons
3 in. casing:	___ ft. of water x 0.36 =	___	gallons
4 in. casing:	___ ft. of water x 0.65 =	___	gallons

volume of water removed: ___ gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

	Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
812	—	6.75	11.1	.292	4195.8	9.44	205.9
817		6.23	11.3	.405	2438.6	9.38	218.4
822		6.17	11.4	.601	1402.3	9.11	225.5
827		6.14	11.6	.625	1294.6	9.04	235.7
832		6.14	11.6	.625	1201.1	8.99	243.2
837		6.14	11.6	.625	1160.3	8.94	250.0
842		6.14	11.6	.626	1152.7	8.92	254.5
847		6.13	11.6	.626	1085.2	8.92	256.7

Sampling

Time of Sample Collection: 847

Method:
- ___ Stainless steel bailer
- ___ Teflon bailer
- ___ Pos. Disp. Pump
- ___ Disposable bailer
- ___ Dedicated pump
- X Other: Disposable Bladder Pump (Low Flow)

Analyses:
- ___ TCL VOCs 602 ___ 503 ___ Other ___
- ___ TCL SVOCs
- ___ Target Analyte List Metals
- ___ Alkalinity

Observations

Weather/Temperature:
Sample description: SI Cloudy
Free Product? yes ___ no ___ describe
Sheen? yes ___ no ___ describe
Odor? yes ___ no ___ describe

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 01.22.18

SAMPLE ID: ~~EPA-EXT-02~~ -012218
WELL ID: ~~EPA-EXT-02~~
SAMPLERS: BC, MC

Time On-site: ~~730~~
Time Off-site: 1330

Depth of well (from top of casing) .....
Initial static water level (from top of casing) .....

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible Pump	____	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:
2 in. casing: _____ ft. of water x 0.16 = _____ gallons
3 in. casing: _____ ft. of water x 0.36 = _____ gallons
4 in. casing: X ft. of water x 0.65 = _____ gallons

volume of water removed: _____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)

Sampling
Time of Sample Collection: _____

Method:
____ Stainless steel bailer
____ Teflon bailer
____ Pos. Disp. Pump
____ Disposable bailer
____ Dedicated pump
X Other: Disposable Bladder Pump (Low Flow)

Analyses:
____ TCL VOCs 602 _____ 503 _____ Other _____
____ TCL SVOCs
____ Target Analyte List Metals
____ Alkalinity

Observations
Weather/Temperature: _____
Sample description: _____
Free Product? yes ____ no ____ describe _____
Sheen? yes ____ no ____ describe _____
Odor? yes ____ no ____ describe _____

Comments:
Sample was collected directly from "Influent" port inside blower room at 9:40, due to extraction piping not allowing for bladder pump to fit

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 01.22.18

SAMPLE ID: ~~EPA-MW-26~~
WELL ID:
SAMPLERS: BC, MC

Time On-site: ~~730~~ 1330

Time Off-site:

Depth of well (from top of casing) .....
Initial static water level (from top of casing) 59.50

Time:
Time:

Purging Method

Airlift	____	Centrifugal	____
Bailer	____	Pos. Displ.	____
Submersible Pump	____	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:

2 in. casing: X ft. of water x 0.16 = ____ gallons
3 in. casing: ____ ft. of water x 0.36 = ____ gallons
4 in. casing: ____ ft. of water x 0.65 = ____ gallons

volume of water removed: ____ gal. >3 volumes: yes ____ no ____ purged dry? yes ____ no ____

Field Tests

	Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
1010	—	6.28	13.2	.963	2146.7	6.21	104.6
1015		6.40	13.0	.974	2007.4	8.80	110.8
1020		6.48	13.3	.988	1938.5	8.65	120.7
1025		6.50	13.4	.993	1764.6	8.60	116.4
1030		6.50	14.1	.995	1706.9	6.84	132.0
1035		6.50	14.1	1.021	1690.1	6.82	136.4
1040		6.51	14.1	1.041	1670.6	6.79	141.0
1045		6.52	14.1	1.047	1617.7	6.77	145.0
1050		6.51	14.1	1.051	1531.3	6.75	149.6
1055		6.51	14.1	1.052	1488.2	6.74	149.0

Sampling

Time of Sample Collection: 1055

Method:
- ____ Stainless steel bailer
- ____ Teflon bailer
- ____ Pos. Disp. Pump
- ____ Disposable bailer
- ____ Dedicated pump
- X Other: Disposable Bladder Pump (Low Flow)

Analyses:
- ____ TCL VOCs 602 ____ 503 ____ Other ____
- ____ TCL SVOCs
- ____ Target Analyte List Metals
- ____ Alkalinity

Observations

Weather/Temperature: ____
Sample description: ____
Free Product? yes ____ no ____ describe ____
Sheen? yes ____ no ____ describe ____
Odor? yes ____ no ____ describe ____

Comments:

FIELD OBSERVATION LOG
GROUNDWATER SAMPLING RECORD

SITE Stanton DATE 1-22-18

SAMPLE ID: SMW-15 012219
WELL ID: St-MW-15
SAMPLERS: DC, MC

Time On-site: 730
Time Off-site: 1330

Depth of well (from top of casing) .....
Time:
Initial static water level (from top of casing) 73.42
Time:

Purging Method

Airlift	___	Centrifugal	___
Bailer	___	Pos. Displ.	___
Submersible Pump	___	Disposable Bladder Pump (Low Flow)	X

Well Volume Calculation:

2 in. casing:	X	ft. of water x 0.16 =	___ gallons
3 in. casing:	___	ft. of water x 0.36 =	___ gallons
4 in. casing:	___	ft. of water x 0.65 =	___ gallons

volume of water removed: ___ gal. >3 volumes: yes ___ no ___ purged dry? yes ___ no ___

Field Tests

Volume of Purge Water (in ml)	pH	Temp (°C)	Spec. Cond. (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
1025	6.89	12.9	0.322	2058.8	3.79	123.1
30	6.71	13.2	0.412	1882.7	4.96	158.3
35	6.68	13.2	0.444	1695.9	6.03	183.1
40	6.66	13.3	0.460	1547.2	6.61	1541.2
45	6.65	13.3	0.466	1422.4	6.72	218.3
50	6.64	13.3	0.468	1374.6	6.68	221.7
55	6.64	13.2	0.470	1263.4	6.64	232.4
1100	6.64	13.2	0.472	1200.8	6.71	240.3
05						

Sampling
Time of Sample Collection: 11:10

Method:
- ___ Stainless steel bailer
- ___ Teflon bailer
- ___ Pos. Disp. Pump
- ___ Disposable bailer
- ___ Dedicated pump
- X Other: Disposable Bladder Pump (Low Flow)

Analyses:
- ___ TCL VOCs 602 ___ 503 ___ Other ___
- ___ TCL SVOCs
- ___ Target Analyte List Metals
- ___ Alkalinity

Observations
Weather/Temperature: Cloudy 45°
Sample description:
Free Product? yes ___ no X describe ___
Sheen? yes ___ no X describe ___
Odor? yes ___ no X describe ___

Comments:

Appendix H

LIHA Indoor Air Sampling Questionnaire

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Stanton Cleaners Site Code: 130072 Operable Unit:

Building Code: Building Name: Stanton Cleaners

Address: 122 Cutter Mill Road Apt/Suite No: 3A

City: Great Neck State: NY Zip: 11021 County: Nassau

Contact Information

Preparer's Name: Daniel Prisco-Buxbaum Phone No: 516-564-1100

Preparer's Affiliation: Preferred Environmental Services Company Code:

Purpose of Investigation: Indoor Air Sampling Date of Inspection: Feb 21, 2018

Contact Name: Elvis Gonzalez Affiliation: MANAGER

Phone No: 1-407-860-0438 Alt. Phone No: Email:

Number of Occupants (total): 100+ Number of Children: 100+

☒ Occupant Interviewed? ☐ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): North Shore Sephardic Synagogue Owner Phone: (516)482-4228

Owner Mailing Address: 130 Cutter Mill Road, Great Neck, NY

Building Details

Bldg Type (Res/Com/Ind/Mixed): COMMERCIAL/MIXED Bldg Size (S/M/L): MEDIUM

If Commercial or Industrial Facility, Select Operations: DAY CARE

If Residential Select Structure Type:

Number of Floors: 3 Approx. Year Construction: 1960 ☒ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Building seems well sealed and insulated

Foundation Description

Foundation Type: BASEMENT Foundation Depth (bgs): Unit: INCHES

Foundation Floor Material: POURED CONCRETE Foundation Floor Thickness: Unit: INCHES

Foundation Wall Material: POURED CONCRETE Foundation Wall Thickness:

☐ Floor penetrations? Describe Floor Penetrations: NA

☐ Wall penetrations? Describe Wall Penetrations: NA

Basement is: FINISHED Basement is: DRY ☒ Sumps/Drains? Water In Sump?: NO

Describe Foundation Condition (cracks, seepage, etc.) :

☐ Radon Mitigation System Installed? ☒ VOC Mitigation System Installed? ☐ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR Heat Fuel Type: GAS ☒ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: GAS Clothes Dryer Fuel Type:

Water Htr Vent Location: Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Stanton Cleaners Bldg Code: Date: ~~9-1-2017~~ 2/21/18

Bldg Address: 122 Cutter Mill Road Apt/Suite No: 3A

Bldg City/State/Zip: Great Neck NY, 11021

Make and Model of PID: MiniRae 3000 Date of Calibration: 2/21/18

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
Maintenance closet	Rust-Oleum Painters touch paint + primer	12 oz.	U		0.0	☐
	DAP caulk	10.1 fl oz.	UO		0.0	☐
	NCL Trigger	1 quart	U		0.0	☐
	ECP Clear View Ammoniated glass cleaner	1 gallon	U		0.0	☐
	windex Advanced glass + multisurface cleaner	1.34 gallons	U		0.0	☐
	Ridgways crystal clear		U		~~0.0~~ 4.5	☐
	ECP Heavy Duty Stripper	5-gal bucket	UO		0.0	☐
	Hi-Valu Bleach	1-gal	U		0.0	☐
	Minwax Wood Finish	1-gal	U		0.0	☐
Playroom	Lysol disinfectant spray	19 oz.	U		0.0	☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? No ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Stanton Cleaners Site Code: 130072 Operable Unit:

Building Code: Building Name: Stanton Cleaners

Address: 122 Cutter Mill Road Apt/Suite No: 3A

City: Great Neck State: NY Zip: 11021 County: Nassau

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: FULL TIME Floor Material: LINOLEUM/VINYL

☒ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: NONE ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener: No

☒ Cleaning Products Used Recently?: Description of Cleaning Products: Fabuloso; Windex lysol

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products: No

☒ New Carpet or Furniture? Location of New Carpet/Furniture: New Linoleum No September 2016

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics: No

☐ Recent Painting/Staining? Location of New Painting: NO

☐ Solvent or Chemical Odors? Describe Odors (if any): NO

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used: NO

☒ Recent Pesticide/Rodenticide? Description of Last Use: 1 every 3 months

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Lysol spray was used in [redacted] classroom where Sample LIHA-IA3 was housed during 24-hour sample period.

☐ Any Prior Testing For Radon? If So, When?:

☐ Any Prior Testing For VOCs? If So, When?:

Sampling Conditions

Weather Conditions: SUNNY Outdoor Temperature: 50 °F

Current Building Use: DAY CARE Barometric Pressure: in(hg)

Product Inventory Complete? ☐ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: _____ Address: 122 Cutter Mill Road Great Neck , NY 11021

Sampling Information

Sampler Name(s): Daniel Prisco-Buxbaum Sampler Company Code: _____

Sample Collection Date: Feb 21, 2018 Date Samples Sent To Lab: Feb 22, 2018

Sample Chain of Custody Number: _____ Outdoor Air Sample Location ID: _____

SUMMA Canister Information

Sample ID:	LIHA-IA1	LIHA-IA1 DUP	LIHA-IA2	LIHA-IA3	LIHA-OA1
Location Code:					
Location Type:	BASEMENT	BASEMENT	BASEMENT	FIRST FLOOR	OUTDOOR
Canister ID:	10403	10407	10266	10493	10488
Regulator ID:	10501	10910	10766	10478	10520
Matrix:	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Ambient Outd
Sampling Method:	SUMMA AIR SAMPLI	SUMMA AIR SA	SUMMA AIR SA	SUMMA AIR SA	SUMMA AIR SA

Sampling Area Info

Slab Thickness (inches):					
Sub-Slab Material:					
Sub-Slab Moisture:					
Seal Type:					
Seal Adequate?:	☒	☐	☐	☐	☐

Sample Times and Vacuum Readings

Sample Start Date/Time:	2/21/18 / 11:55	2/21/18 / 11:55	2/21/18 12:10	2/21/18 / 11:29	2/21/18 / 12:29
Vacuum Gauge Start:	>-30	7-30	>-30	-30	>-30
Sample End Date/Time:	2/22/18 / 8:58	2/22/18 / 8:58	2/22/18 / 14:15	2/22/18 / 11:21	2/22/18 / 12:36
Vacuum Gauge End:	-4	-6	-8	-7	-7
Sample Duration (hrs):					
Vacuum Gauge Unit:	in(hg)	in(hg)	in(hg)	in(hg)	in(hg)

Sample QA/QC Readings

Vapor Port Purge:	☐	☐	☐	☐	☐
Purge PID Reading:	0.0	0.0	0.0	0.0	0.0
Purge PID Unit:					
Tracer Test Pass:	☐	☐	☐	☐	☐

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM

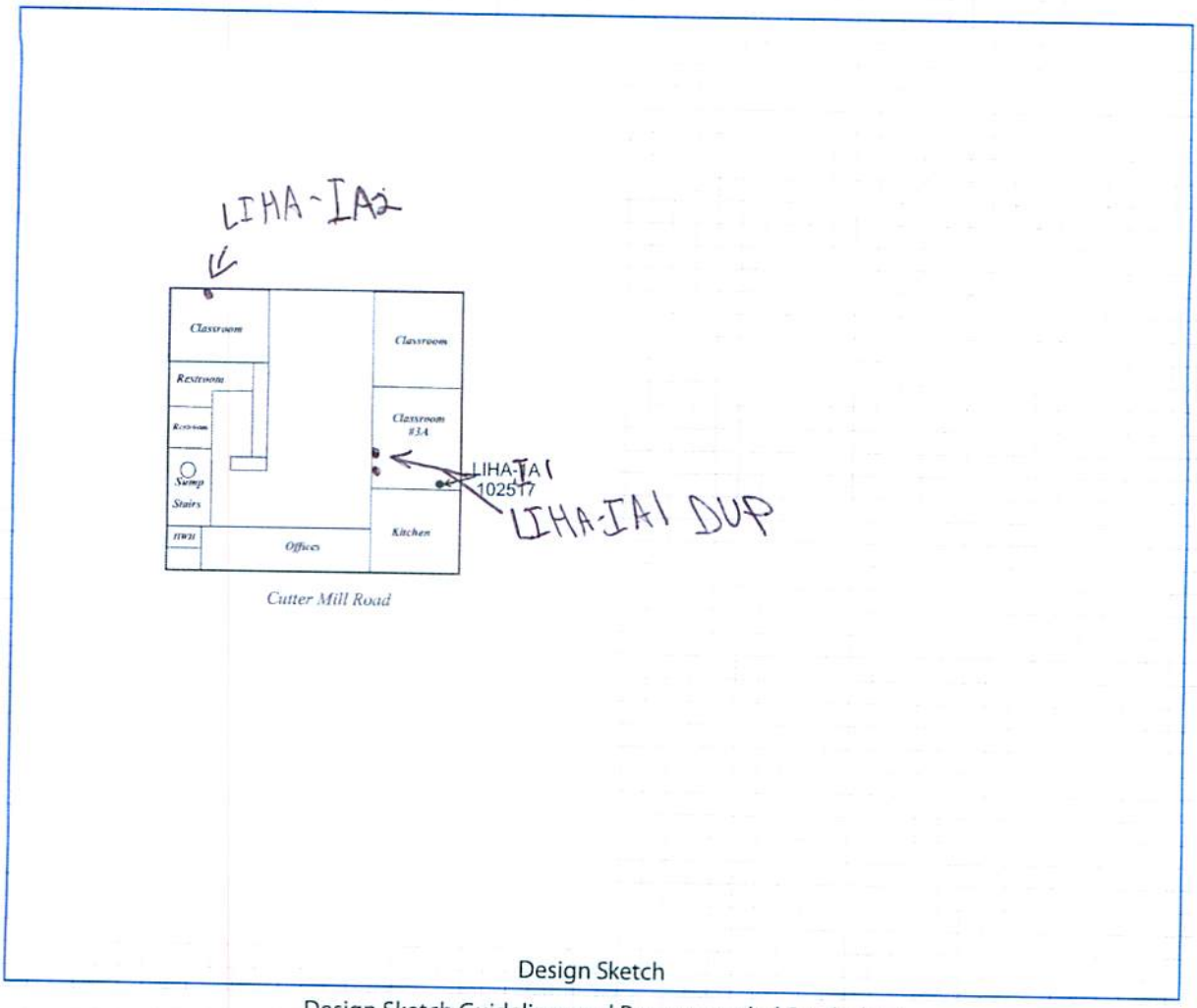
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level . The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or F	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	xxxxxxx	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	######	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

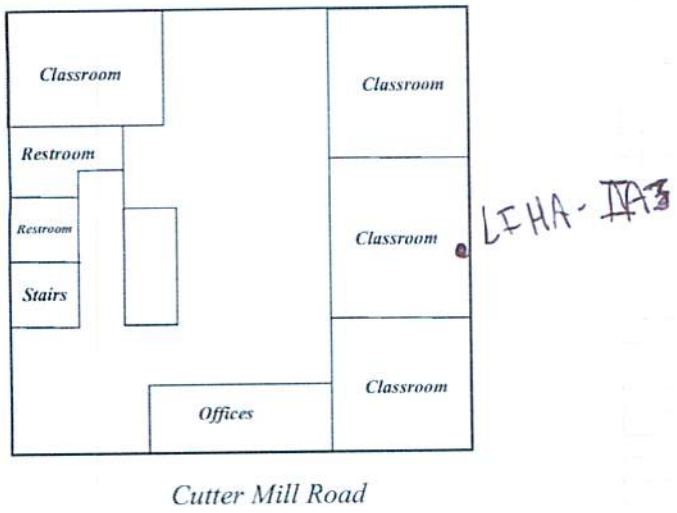
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

FIRST FLOOR BUILDING LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the first floor of the building. The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

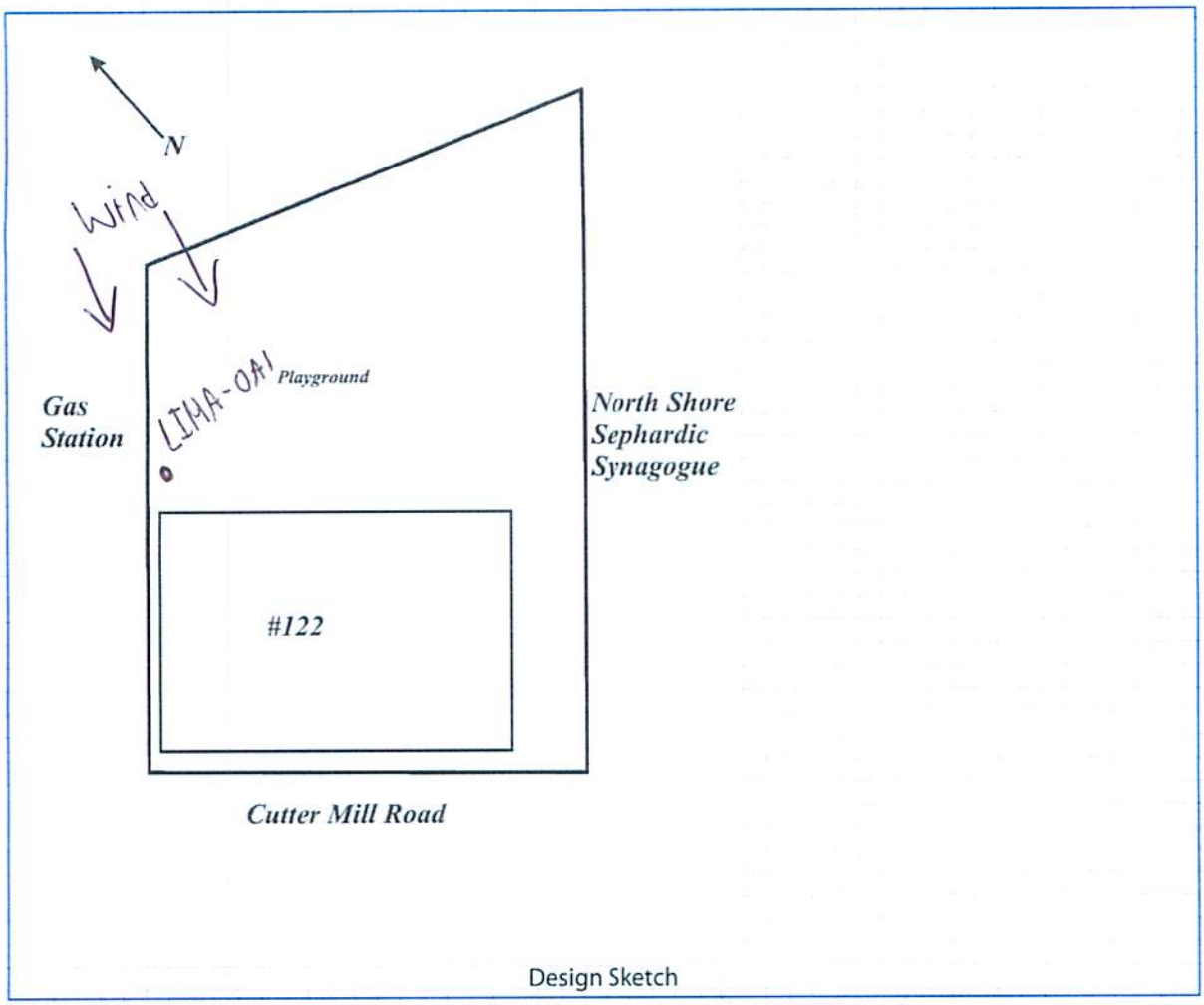
B or F	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	xxxxxxx	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	######	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Structure Sampling Questionnaire and Building Inventory
New York State Department of Environmental Conservation

OUTDOOR PLOT LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the outdoor plot of the building as well as the surrounding area. The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sket
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or F	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	xxxxxxx	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	######	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

Appendix I

DUSR, February 2018 Indoor Air

Samples

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

May 15, 2018

Justin Starr
HDR
16 Corporate Woods Blvd Suite 204
Albany, NY 12211

RE: Data Usability Summary Report (DUSR) of Stanton Cleaners Site Data Packages
Chemtech Labortories Alpha Analytical SDG No. J1696

Dear Mr. Starr:

Review has been completed for the data package generated by Chemtech Laboratories that pertains to the analyses of air samples collected 02/21/18 at the Stanton Cleaners site. Four 6- L summa canister air samples and a field duplicate were analyzed for volatile analytes by USEPA GC/MS method TO-15.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. Full validation has not been performed. However, the reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the 2006 USEPA Region II validation SOP HW-31, and in consideration of the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Holding Times
* Surrogate Standard Recoveries
* Internal Standard Recoveries
* Laboratory Duplicate Correlations
* Field Duplicate Correlations
* Method and Canister Blanks
* Laboratory Control Samples (LCSs)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level of review.

In summary, sample processing was conducted in compliance with the analysis protocol. All sample reported results are usable either as reported or with minor qualification.

The laboratory sample identifications and validation qualifier definitions are attached to this text. Also included in this report is the laboratory EQuIS EDD, with validation qualifiers and edits made in red.

Volatile Analyses by EPA TO-15

Holding times were met, internal standard responses are acceptable, and instrument tunes meet fragmentation requirements.

Due to presence in the associated method blank, the detections of methylene chloride in all samples except LIHA-IA1-DUP are considered external contamination and edited to reflect non-detection. This includes the parent sample of that duplicate.

LCSs show acceptable recoveries, with the exceptions of those for dichlorodifluoromethane (161%) and tert-butyl alcohol (64%). Results for those two analytes in the samples have been qualified as estimated in value.

The field duplicate correlations of LIHA-IA1 are acceptable. With the exception of those for t-butyl alcohol, methylene chloride, cyclohexane, n-hexane, and toluene. Results for those two compounds in that parent sample and the duplicate have been qualified as estimated in value.

Laboratory duplicate correlations of LIHA-IA2 were acceptable.

Due to interferences in the mass spectra, the hexane detections in the following samples are qualified/edited as indicated:

- LIHA-IA3 to non-detection
- LIHA-OA1 as tentative in identification and estimated in value
- LIHA-IA1 and LIHA-IA1-DUP as estimated in value

Initial and continuing calibration standard (ICV and CCV) linearity and calibration verification responses were compliant.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Client and Laboratory Sample IDs

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
LIHA-IA2	J1696-01	TO-15					
LIHA-IA1	J1696-02	TO-15					
LIHA-IA1-DUP	J1696-03	TO-15					
LIHA-IA3	J1696-04	TO-15					
LIHA-OA1	J1696-05	TO-15					

Appendix J

DUSR, January 2018 Emerging

Contaminant Aqueous Samples

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

October 2, 2018

Michael Lehtinen
HDR
16 Corporate Woods Blvd Suite 204
Albany, NY 12211

RE: Data Usability Summary Report (DUSR) of Stanton Cleaners Site Data Packages
TestAmerica Laboratories SDG Nos. 320-35137, 320-35294, 460-148719, 460-148827, and 460-148869

Dear Mr. Lehtinen:

Review has been completed for the data packages generated by TestAmerica Laboratories that pertain to the analyses of aqueous samples collected between 01/18/18 and 01/22/18 at the Stanton Cleaners site. Eight samples and a field duplicate were analyzed for for per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. Two additional samples were processed for 1,4-dioxane. Equipment and bladder blanks were also processed. The analytical methods utilized are USPA 8270D SIM and a modified USEPA method 537.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. Full validation has not been performed. However, the reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national data review guidance documents, in consideration of the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation
* Holding Times
* Surrogate/Isotopic Standard Recoveries
* Internal Standard Recoveries
* Laboratory Duplicate Correlations
* Field Duplicate Correlations
* Method, Equipment, and Bladder Blanks
* Laboratory Control Samples (LCSs)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level of review.

In summary, sample processing was conducted in compliance with the analysis protocol. All sample reported results are usable either as reported or with minor qualification.

Data completeness, accuracy, precision, representativeness, and comparability are acceptable.

Sample identifications and validation qualifier definitions are attached to this text. Also included in this report are the laboratory EQuIS EDDs, with validation qualifiers and edits made in red.

The laboratory report forms within the data packages improperly show method detection limits (MDLs) as reporting limits. The EDDs show the proper reporting limit concentrations, but improperly show MDLs as PQLS.

Chain-of-Custody/Sample Receipt

The initial relinquish date and time are not present on the custody form for the samples collected 01/18/18.

1,4-Dioxane Analyses by USEPA Method 8270D SIM

Holding time requirements were met. Sample surrogate and internal standard recoveries are compliant. Calibration standards show responses within the validation guidelines. Blanks show no contamination.

The matrix spike evaluation of EPA-MW-23-011918 shows recoveries and correlations within laboratory acceptance ranges.

The field duplicate correlations at location ST-MW-16 are acceptable.

PFAS by Modified EPA Method 537

PFAS compounds are at times identified by their common acronyms in this report. The data package report forms reference both the technical names and the acronyms.

Method, bladder, and equipment blanks consistently show low level responses of PFBA and PFHxS. Therefore, the field sample detections of these analytes that are within fivefold concentration of the associated blanks are considered external contamination and edited to reflect non-detection.

Internal and surrogate standards recoveries are within the laboratory acceptance ranges.

The matrix spike evaluation of EPA-M-23-011918 shows recoveries and correlations within laboratory acceptance ranges.

The field duplicate correlations at location ST-MW-16 are acceptable. LCS recoveries are within the laboratory acceptance ranges.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Client and Laboratory Sample Identifications

Sample Summary

Client: New York State D.E.C.
Project/Site: DEC Stanton Cleaners; Site: 130072

TestAmerica Job ID: 320-35237-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-35237-1	BB-EPA-MW-23-011918	Water	01/19/18 08:15	01/20/18 10:10
320-35237-2	EB-PUMP1-011918	Water	01/19/18 08:30	01/20/18 10:10
320-35237-3	BB-ST-MW-16-011918	Water	01/19/18 08:55	01/20/18 10:10
320-35237-4	EB-PUMP2-011918	Water	01/19/18 09:05	01/20/18 10:10
320-35237-5	ST-MW-16-011918	Water	01/19/18 10:47	01/20/18 10:10
320-35237-6	EPA-MW-23-011918	Water	01/19/18 10:55	01/20/18 10:10
320-35237-7	DUPLICATE1-011918	Water	01/19/18 00:00	01/20/18 10:10
320-35237-8	BB-ST-MW-19-011918	Water	01/19/18 11:41	01/20/18 10:10
320-35237-9	ST-MW-19-011918	Water	01/19/18 14:05	01/20/18 10:10

Sample Summary

Client: New York State D.E.C.
Project/Site: DEC Stanton Cleaners; Site: 130072

TestAmerica Job ID: 320-35294-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-35294-1	BB-ST-MW-15-012218	Water	01/22/18 09:55	01/23/18 09:55
320-35294-2	BB-EPA-MW-26-012218	Water	01/22/18 09:50	01/23/18 09:55
320-35294-3	EPA-EXT-02-012218	Water	01/22/18 09:40	01/23/18 09:55
320-35294-4	BB-ST-MW-18-012218	Water	01/22/18 07:55	01/23/18 09:55
320-35294-5	ST-MW-20-012218	Water	01/22/18 08:47	01/23/18 09:55
320-35294-6	ST-MW-18-012218	Water	01/22/18 09:00	01/23/18 09:55
320-35294-7	BB-ST-MW-20-012218	Water	01/22/18 07:50	01/23/18 09:55
320-35294-8	EPA-MW-26-012218	Water	01/22/18 10:55	01/23/18 09:55
320-35294-9	ST-MW-15-012218	Water	01/22/18 11:10	01/23/18 09:55

Sample Summary

Client: New York State D.E.C.
Project/Site: DEC Stanton Cleaners; Site: 130072

TestAmerica Job ID: 460-148719-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-148719-1	EPA-CL-4S-011818	Water	01/18/18 12:29	01/18/18 19:40
460-148719-2	EPA-CL-4D-011818	Water	01/18/18 14:20	01/18/18 19:40

Sample Summary

Client: New York State D.E.C.
Project/Site: DEC Stanton Cleaners; Site: 130072

TestAmerica Job ID: 460-148827-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-148827-1	EB-PUMP1-011918	Water	01/19/18 08:30	01/19/18 19:20
460-148827-2	St-MW-16-011918	Water	01/19/18 10:47	01/19/18 19:20
460-148827-3	Duplicate1-011918	Water	01/19/18 00:00	01/19/18 19:20
460-148827-4	EPA-MW-23-011918	Water	01/19/18 10:55	01/19/18 19:20
460-148827-5	ST-MW-19-011918	Water	01/19/18 14:05	01/19/18 19:20

Sample Summary

Client: New York State D.E.C.
Project/Site: DEC Stanton Cleaners; Site: 130072

TestAmerica Job ID: 460-148869-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-148869-1	EPA-EXT-02-012218	Water	01/22/18 09:40	01/22/18 19:05
460-148869-2	ST-MW-20-012218	Water	01/22/18 08:47	01/22/18 19:05
460-148869-3	ST-MW-18-012218	Water	01/22/18 09:00	01/22/18 19:05
460-148869-4	EPA-MW-26-012218	Water	01/22/18 10:55	01/22/18 19:05
460-148869-5	ST-MW-15-012218	Water	01/22/18 11:10	01/22/18 19:05