Quarterly Operation and Maintenance Report – 3Q2019

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

625 Broadway

Albany, New York 12233

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 third quarter of 2019 (July through September 2019). 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 third quarter 2019 activities (July through September). 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 third quarter 2019 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 Appendix B and C, respectively.

From July 1 through September 30, 2019 the GWE&T system treated and discharged a total of 15,060,010 gallons with an average flow rate of 60 gallons per minute (gpm). Since initial startup in November 2001, the GWE&T system has treated an approximate total of 477,510,341 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 third quarter 2019 operations, approximately 0.78 pounds (lbs) of PCE have been removed in the liquid phase, totaling 9.88 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 4.29 (September 13) to 7.44 micrograms per liter (µg/L) (July). Detected PCE concentrations in the three monthly INF samples exceeded the NYSDEC GWQS of 5 µg/L in July and September. No VOCs were detected in any monthly EFF sample collected for analysis. A summary of the third quarter 2019 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 third quarter of 2019 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. The results of the groundwater treatment system compliance sampling are summarized in Table 5. The annual SPDES sample was collected on July 29, 2019. The NYSDEC SPDES permit equivalent criteria were met for groundwater effluent discharges to groundwater for all criteria.

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)

Since the SVE system remained offline for the entire third quarter of 2019, VOC and PCE mass removal calculations were not prepared and graphs showing the cumulative PCE mass removed over the past year and since September 2003 are not updated (Figures 4 and 5, respectively) in this quarterly report. Monthly

performance monitoring logs including both the AS and SVE systems can be found in Appendix 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 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
- Annual SVI sampling at the LIHA (previously this was performed on a semi-annual basis)

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 extractions 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 third quarter 2019 monthly O&M visits at 17 of the18 on and off-site monitoring wells (one was not accessible). The location and number of monitoring wells was previously determined by the USEPA based on the 2014 *Final Capture Zone Analysis Report*. Groundwater level measurements for this quarter are provided in Appendix F. 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 collected during this quarter. The next routine semi-annual groundwater sampling event is scheduled for the second quarter of 2020.

Preferred Environmental Services collected a round of monitoring well samples on July 24-26, 2019. These samples were collected using the low-flow method. Samples were shipped to Eurofins TestAmerica Laboratory of Edison, NJ. Sampling results are presented in Table 3. Eleven of the fifteen wells sampled contained measurable quantities of VOCs. However, none of these detections exceeded the Class GA Standards. PCE was detected in EPA-CL-4D, EPA-CL-4S, EPA-MW-23 and ST-MW-12, at concentrations of 0.92 µg/l, 0.46 µg/l, 0.82 µg/l and 0.29 µg/l respectively. EPA-CL-4D contained 1,2-DCE at 2.5 µg/l, cis-1,2-DCE at 2.5 µg/l and TCE at 3.3 µg/l. ST-MW-13 contained acetone at 7.5 µg/l, bromodichloromethane at 0.97 µg/l, chlorodibromomethane at 1.3 µg/l, and chloroform at 0.72 µg/l. ST-MW-12 contained acetone at 7.6 µg/l. All of these wells are located downgradient of the site.

A comparison of the 2019Q3 semi-annual groundwater-sampling event to the 2018Q4 semi-annual groundwater-sampling event does not show a consistent relationship of where the highest contamination is typically found. Groundwater sampling parameter logs can be found in Appendix G.

In July 2019, upon NYSDEC request, groundwater samples were collected from the semi-annual monitoring wells 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. A summary of the emerging contaminant (EC) analytical results is provided on Table 4. DVS' data usability summary report (DUSR) is provided in Appendix H.

Various PFCs, including perfluorooctanoic acid (PFOA) and/or perfluorooctane sulfonic acid (PFOS), were detected in nine of the ten wells sampled and analyzed for PFCs. The only well that did not contains any PFCs was EPA-CL-4D. The summed concentration of PFOA and PFOS ranged in a total concentration from not detected to 53.9 nanograms per liter (ng/L) (EPA-MW-23). The sum of PFOA and PFOS did not exceed the EPA Health Advisory Lifetime guidance value of 70 ng/L in any of the samples collected. The NYSDEC guidance value of 10 ng/L for PFOA was exceeded in 4 of the sampled wells (EPA-MW-11, EPA-MW-23, EPA-MW-26, ST-MW-15). The NYSDEC guidance value of 10 ng/L for PFOS was exceeded in 4 of the sampled wells (EPA-MW-23, EPA-MW-26, ST-MW-15, ST-MW-16).

1,4-Dioxane was detected in two of the sixteen monitoring wells (EPA-MW-26, ST-MW-15) at concentrations ranging from 1.7 to 1.8 µg/l. The USEPA guidance value of 0.35 µg/l was exceeded at both of these same wells.

4.3 Indoor Air Quality Sampling

Annual indoor air quality samples were not collected from the LIHA building during this quarter. The next routine semi-annual indoor air quality sampling event is scheduled for 2020.

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-11) 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 September 11, 2019 in PW-2A at a concentration of 7.9 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 8.

5.0 MAINTENANCE ISSUES AND RECOMMENDED SOLUTIONS

Based on the site visits and data collected during this period HDR has identified the following maintenance issues and our recommendations relative to those findings.

- SVE remains offline.
- Slip cap for MW-9A was replaced by Preferred Environmental Services on 9/23/19.

Unless otherwise noted HDR has requested approval to proceed with our recommendations as outlined above and future quarterly reports will document how the maintenance issues were addressed.

5.1 Downtime Summary

During this quarterly monitoring period, the SVE system components were not operating for the reasons cited below.

- SVE not operating

6.0 FUTURE ACTIVITIES

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

- Routine monthly O&M activities will continue.
- Semi-annual indoor air sampling is scheduled to be completed during the fourth quarter of 2019.

7.0 PROGRESS TOWARD CLEANUP OBJECTIVES

As a result of ongoing GWE&T and SVE system operations during the third quarter of 2019, a total of 0.78 and 0.0 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 $49,029.13 (see quarterly cost summary below). During this quarter, the cost of both liquid and vapor phase VOC removal was $62,857.86 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
7/1/2019 - 8/3/2019	$ 17,833.33						
8/3/2019 - 8/31/2019	$ 14,761.10						
9/1/2019 - 9/30/2019	$ 16,434.70	0	0.78	$ 49,029.13	0.8		$ 62,857.86

Table 1
Groundwater Extraction and Treatment System
PCE Mass Removal Summary - July through September 2019
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, 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)
3	July-19	60	3.738E+06	4.661E+08	7.44	0.23	9.33
	August-19	60	4.959E+06	4.711E+08	4.29	0.18	9.51
	September-19	60	6.364E+06	4.775E+08	6.97	0.37	9.88
					Quarter Total	**0.78**	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 - July through September 2019
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:	7/24/2019	7/24/2019	9/13/2019	9/13/2019	9/23/2019	9/23/2019
Analyte	**GWQS (µg/L)**	**Results (µg/L)**					
Total TICs	NS	28 J	ND	ND	ND	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 (50)	ND (50)
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 - July through September 2019
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:	7/24/2019	7/24/2019	9/13/2019	9/13/2019	9/23/2019	9/23/2019
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	**7.44**	ND (1.0)	4.29	ND (1.0)	**6.97**	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
Summary of Semi-Annual Groundwater Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

			Sample ID		EPA-CL-4D-20190726		EPA-CL-45-20190726		EPA-MW-11D-20190725		EPA-MW-23-20190724		EPA-MW-23-DUP-20190724		EPA-ME-26-20190725		EPA-MW-27-20190724		ST-MW-12-20190724		ST-MW-13-20190725	
			Sample Location		CL-4D		CL-4S		EPA-MW-11D		EPA-MW-23		EPA-MW-23 DUP		EPA-MW-26		EPA-MW-27		ST-MW-12		ST-MW-13	
			Date		7/26/2019		7/26/2019		7/25/2019		7/24/2019		7/24/2019		7/25/2019		7/24/2019		7/24/2019		7/25/2019	
Analyte	**CAS Number**	**NYSDEC Guidance**		**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1,2-Tetrachloroethane	630-20-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1,1-Trichloroethane	71-55-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1,2,2-Tetrachloroethane	79-34-5	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1,2-Trichloroethane	79-00-5	1		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1-Dichloroethane	75-34-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1-Dichloroethene	75-35-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1-Dichloropropene	563-58-6			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,3-Trichlorobenzene	87-61-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,3-Trichloropropane	96-18-4	0.04		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,3-Trimethyl Benzene	526-73-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,4-Trichlorobenzene	120-82-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,4-Trimethylbenzene	95-63-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.04		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.0006		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dichlorobenzene	95-50-1	3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dichloroethane	107-06-2	0.6		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dichloroethene (Total)	540-59-0			2.5		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
1,2-Dichloropropane	78-87-5	1		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3-Butadiene	106-99-0			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3-Dichlorobenzene	541-73-1	3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3-Dichloropropane	142-28-9	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,4-Dichlorobenzene	106-46-7	3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,4-Dioxane	123-91-1	1		*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*
2,2-Dichloropropane	594-20-7	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
2-Butanone	78-93-3	50		*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
2-Chloroethyl Vinyl Ether	110-75-8			1	R	1	R	1	R	1	R	1	R	1	R	1	R	1	R	1	R	1	R
2-Chlorotoluene	95-49-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
2-Hexanone	591-78-6	50		*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
2-Methyl-1,3-Butadiene (Isoprene)	78-79-5			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
4-Chlorotoluene	106-43-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
4-Methyl-2-Pentanone	108-10-1			*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
Acetone	67-64-1	50		*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	7.6		7.5	
Acetonitrile	75-05-8			*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*
Acrolein	107-02-8	5		*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*
Acrylonitrile	107-13-1	5		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Allyl Chloride (3-Chloropropene)	107-05-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Amyl Acetate (Mixed Isomers)	628-63-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Benzene	71-43-2	1		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Benzyl Chloride	100-44-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*UJ*	*1*	*UT*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Bromobenzene	108-86-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Table 3
Summary of Semi-Annual Groundwater Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

			Sample ID		EPA-CL-4D-20190726		EPA-CL-45-20190726		EPA-MW-11D-20190725		EPA-MW-23-20190724		EPA-MW-23-DUP-20190724		EPA-ME-26-20190725		EPA-MW-27-20190724		ST-MW-12-20190724		ST-MW-13-20190725	
			Sample Location		CL-4D		CL-4S		EPA-MW-11D		EPA-MW-23		EPA-MW-23 DUP		EPA-MW-26		EPA-MW-27		ST-MW-12		ST-MW-13	
			Date		7/26/2019		7/26/2019		7/25/2019		7/24/2019		7/24/2019		7/25/2019		7/24/2019		7/24/2019		7/25/2019	
Analyte	**CAS Number**	**NYSDEC Guidance**		**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Bromochloromethane	74-97-5	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Bromodichloromethane	75-27-4	50		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	0.97	J
Bromoform	75-25-2	50		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*UJ*	*1*	*UJ*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Bromomethane	74-83-9	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Butyl Methacrylate	97-88-1			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Carbon Disulfide	75-15-0	60		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Carbon Tetrachloride	56-23-5	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chlorobenzene	108-90-7	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chlorodibromomethane	124-48-1	50		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	1.3	
Chloroethane	75-00-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chloroform	67-66-3	7		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	0.72	J
Chloromethane	74-87-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cis-1,2-Dichloroethene	156-59-2	5		2.5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cis-1,3-Dichloropropene	10061-01-5			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cyclohexane	110-82-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cymene	99-87-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Dibromomethane	74-95-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Dichlorodifluoromethane	75-71-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*UT*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Dichloromethane	75-09-2	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Diethyl Ether (Ethyl Ether)	60-29-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Epichlorohydrin	106-89-8			*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*					*5*	*U*
Ethanol	64-17-5			*100*	*U*	*100*	*U*	*100*	*U*	*100*	*U*	*100*	*U*	*100*	*U*	*100*	*U*					*100*	*U*
Ethyl Acetate	141-78-6			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Ethyl Acrylate	140-88-5			*1*	*UJ*	*1*	*UJ*	*1*	*UJ*	*1*	*U*	*1*	*U*	*1*	*UJ*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*UJ*
Ethylbenzene	100-41-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Freon 113	76-13-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Hexachlorobutadiene	87-68-3	0.5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Iodomethane (Methyl Iodide)	74-88-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*UJ*	*1*	*UT*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Isopropanol	67-63-0			*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*
Isopropyl Acetate	108-21-4			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Isopropyl benzene	98-82-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Isopropyl Ether	108-20-3			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
m,p-Xylene	179601-23-1			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Methyl acetate	79-20-9			*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
Methyl Methacrylate	80-62-6	50		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Methyl T-Butyl Ether (MTBE)	1634-04-4	10		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Methylcyclohexane	108-87-2			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Naphthalene	91-20-3	10		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
N-Butanol	71-36-3	50		*25*	*U*	*25*	*U*	*25*	*U*	*25*	*UT*	*25*	*U*	*25*	*U*	*25*	*U*	*25*	*U*	*25*	*U*	*25*	*U*
N-Butyl Acetate	123-86-4			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
N-Butyl Acrylate	141-32-2			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Table 3
Summary of Semi-Annual Groundwater Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

		Sample ID	EPA-CL-4D-20190726		EPA-CL-45-20190726		EPA-MW-11D-20190725		EPA-MW-23-20190724		EPA-MW-23-DUP-20190724		EPA-ME-26-20190725		EPA-MW-27-20190724		ST-MW-12-20190724		ST-MW-13-20190725	
		Sample Location	CL-4D		CL-4S		EPA-MW-11D		EPA-MW-23		EPA-MW-23 DUP		EPA-MW-26		EPA-MW-27		ST-MW-12		ST-MW-13	
		Date	7/26/2019		7/26/2019		7/25/2019		7/24/2019		7/24/2019		7/25/2019		7/24/2019		7/24/2019		7/25/2019	
Analyte	**CAS Number**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
N-Butylbenzene	104-51-8	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
N-Heptane	142-82-5		*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
N-Hexane	110-54-3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
N-Pentane	109-66-0		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
N-Propylbenzene	103-65-1	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
O-Xylene	95-47-6	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Propyl Acetate	109-60-4		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
SEC-Butylbenzene	135-98-8	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Styrene	100-42-5	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
T-Butylbenzene	98-06-6	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Tert-Butyl Alcohol	75-65-0		*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*
Tetrachloroethene	127-18-4	5	0.92	J	0.46	J	*1*	*U*	0.82	J	0.85	J	*1*	*U*	*1*	*U*	0.29	J	*1*	*U*
Tetrahydrofuran	109-99-9	50	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Toluene	108-88-3	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Total Xylenes	1330-20-7	5	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Trans-1,2-Dichloroethene	156-60-5	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Trans-1,3-Dichloropropene	10061-02-6		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Trichloroethylene	79-01-6	5	3.3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Trichlorofluoromethane	75-69-4	5	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Vinyl Acetate	108-05-4		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Vinyl Chloride	75-01-4	2	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Table 3
Summary of Semi-Annual Groundwater Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

			Sample ID	ST-MW-14-20190724		ST-MW-15-20190725		ST-MW-16-20190726		ST-MW-17-20190724		ST-MW-18-20190725		ST-MW-19-20190725		ST-MW-20-20190725	
			Sample Location	ST-MW-14		ST-MW-15		ST-MW-16		ST-MW-17		ST-MW-18		ST-MW-19		ST-MW-20	
			Date	7/24/2019		7/25/2019		7/26/2019		7/24/2019		7/25/2019		7/25/2019		7/25/2019	
Analyte	**CAS Number**	**NYSDEC Guidance**		**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
1,1,1,2-Tetrachloroethane	630-20-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1,1-Trichloroethane	71-55-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1,2,2-Tetrachloroethane	79-34-5	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1,2-Trichloroethane	79-00-5	1		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1-Dichloroethane	75-34-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1-Dichloroethene	75-35-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,1-Dichloropropene	563-58-6			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,3-Trichlorobenzene	87-61-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,3-Trichloropropane	96-18-4	0.04		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,3-Trimethyl Benzene	526-73-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,4-Trichlorobenzene	120-82-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2,4-Trimethylbenzene	95-63-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.04		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.0006		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dichlorobenzene	95-50-1	3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dichloroethane	107-06-2	0.6		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,2-Dichloroethene (Total)	540-59-0			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
1,2-Dichloropropane	78-87-5	1		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3-Butadiene	106-99-0			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3-Dichlorobenzene	541-73-1	3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,3-Dichloropropane	142-28-9	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,4-Dichlorobenzene	106-46-7	3		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
1,4-Dioxane	123-91-1	1		*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*	*50*	*U*
2,2-Dichloropropane	594-20-7	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
2-Butanone	78-93-3	50		*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
2-Chloroethyl Vinyl Ether	110-75-8			1	R	1	R	1	R	1	R	1	R	1	R	1	R
2-Chlorotoluene	95-49-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
2-Hexanone	591-78-6	50		*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
2-Methyl-1,3-Butadiene (Isoprene)	78-79-5			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
4-Chlorotoluene	106-43-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
4-Methyl-2-Pentanone	108-10-1			*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
Acetone	67-64-1	50		*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
Acetonitrile	75-05-8			*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*
Acrolein	107-02-8	5		*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*	*4*	*U*
Acrylonitrile	107-13-1	5		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Allyl Chloride (3-Chloropropene)	107-05-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Amyl Acetate (Mixed Isomers)	628-63-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Benzene	71-43-2	1		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Benzyl Chloride	100-44-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Bromobenzene	108-86-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Table 3
Summary of Semi-Annual Groundwater Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

			Sample ID	ST-MW-14-20190724		ST-MW-15-20190725		ST-MW-16-20190726		ST-MW-17-20190724		ST-MW-18-20190725		ST-MW-19-20190725		ST-MW-20-20190725	
			Sample Location	ST-MW-14		ST-MW-15		ST-MW-16		ST-MW-17		ST-MW-18		ST-MW-19		ST-MW-20	
			Date	7/24/2019		7/25/2019		7/26/2019		7/24/2019		7/25/2019		7/25/2019		7/25/2019	
Analyte	**CAS Number**	**NYSDEC Guidance**		**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
Bromochloromethane	74-97-5	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Bromodichloromethane	75-27-4	50		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Bromoform	75-25-2	50		*1*	*UJ*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Bromomethane	74-83-9	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Butyl Methacrylate	97-88-1			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Carbon Disulfide	75-15-0	60		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Carbon Tetrachloride	56-23-5	5		*1*	*UT*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chlorobenzene	108-90-7	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chlorodibromomethane	124-48-1	50		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chloroethane	75-00-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chloroform	67-66-3	7		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Chloromethane	74-87-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cis-1,2-Dichloroethene	156-59-2	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cis-1,3-Dichloropropene	10061-01-5			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cyclohexane	110-82-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Cymene	99-87-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Dibromomethane	74-95-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Dichlorodifluoromethane	75-71-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Dichloromethane	75-09-2	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Diethyl Ether (Ethyl Ether)	60-29-7			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Epichlorohydrin	106-89-8					*5*	*U*	*5*	*U*								
Ethanol	64-17-5					*100*	*U*	*100*	*U*								
Ethyl Acetate	141-78-6			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Ethyl Acrylate	140-88-5			*1*	*U*	*1*	*UJ*	*1*	*UJ*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Ethylbenzene	100-41-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Freon 113	76-13-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Hexachlorobutadiene	87-68-3	0.5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Iodomethane (Methyl Iodide)	74-88-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Isopropanol	67-63-0			*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*
Isopropyl Acetate	108-21-4			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Isopropyl benzene	98-82-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Isopropyl Ether	108-20-3			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
m,p-Xylene	179601-23-1			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Methyl acetate	79-20-9			*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
Methyl Methacrylate	80-62-6	50		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Methyl T-Butyl Ether (MTBE)	1634-04-4	10		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Methylcyclohexane	108-87-2			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Naphthalene	91-20-3	10		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
N-Butanol	71-36-3	50		*25*	*U*	*25*	*U*	*25*	*U*	*25*	*U*	*25*	*U*	*25*	*U*	*25*	*U*
N-Butyl Acetate	123-86-4			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
N-Butyl Acrylate	141-32-2			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Table 3
Summary of Semi-Annual Groundwater Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

			Sample ID	ST-MW-14-20190724		ST-MW-15-20190725		ST-MW-16-20190726		ST-MW-17-20190724		ST-MW-18-20190725		ST-MW-19-20190725		ST-MW-20-20190725	
			Sample Location	ST-MW-14		ST-MW-15		ST-MW-16		ST-MW-17		ST-MW-18		ST-MW-19		ST-MW-20	
			Date	7/24/2019		7/25/2019		7/26/2019		7/24/2019		7/25/2019		7/25/2019		7/25/2019	
Analyte	**CAS Number**	**NYSDEC Guidance**		**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
N-Butylbenzene	104-51-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
N-Heptane	142-82-5			*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*	*5*	*U*
N-Hexane	110-54-3			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
N-Pentane	109-66-0			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
N-Propylbenzene	103-65-1	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
O-Xylene	95-47-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Propyl Acetate	109-60-4			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
SEC-Butylbenzene	135-98-8	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Styrene	100-42-5	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
T-Butylbenzene	98-06-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Tert-Butyl Alcohol	75-65-0			*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*	*10*	*U*
Tetrachloroethene	127-18-4	5		0.98	J	*1*	*U*	0.63	J	1		1		1		0.48	J
Tetrahydrofuran	109-99-9	50		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Toluene	108-88-3	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Total Xylenes	1330-20-7	5		*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Trans-1,2-Dichloroethene	156-60-5	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Trans-1,3-Dichloropropene	10061-02-6			*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Trichloroethylene	79-01-6	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Trichlorofluoromethane	75-69-4	5		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*
Vinyl Acetate	108-05-4			*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*	*2*	*U*
Vinyl Chloride	75-01-4	2		*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*	*1*	*U*

Table 3
Summary of Semi-Annual Groundwater Analytical Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

Notes:
All sample results and NYSDEC guidance values are reported in ug/l
All sample analytical results are compared to Part 703.5 - Water Quality Standards Surface and Ground Water

µg/l:	: micrograms per liter
NYSDEC:	: New York State Department of Environmental Conservation
Q	: Qualifier
J	: indicates the numerical value is estimated
U	: indicates the compound was not detected above the MDL
UJ	: indicates the numerical value is estimated but may be imprecise
UT	: indicates the compound was not detected above the MDL, an QC control parameter has exceeded its limits
R	: indicates the result is rejected due to deficiencies in meeting QC limits
MDL	: method detection limit
NS	*:* no standard
Shaded	: the result was not detected above the MDL
Bold	: the result exceeded the NYSDEC Criteria

Table 4
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	EPA-CL-4S-20190726		EPA-CL-4D-20190726		EPA-MW-11D-20190725	
				Sample Location:	CL-4S		CL-4D		EPA-MW-11D	
				Sample Date:	7/26/2019		7/26/2019		7/25/2019	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
PFCs										
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	18.6	U	19.2	U	18.7	U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	18.6	U	19.2	U	18.7	U
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	0.24	J	1.92	U	3.51	
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	1.33	J	1.92	U	4.68	
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	1.86	U	1.92	U	1.87	U
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	1.86	U	1.92	U	1.87	U
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	1.86	U	1.92	U	1.87	U
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	1.86	U	1.92	U	0.24	J
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	0.71	J	1.92	U	5.1	
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	1.86	U	1.92	U	4.97	B
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	0.94	J	1.92	U	6.4	
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	1.86	U	1.92	U	0.4	J
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	1.86	U	1.92	U	1.87	U
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	1.23	J	1.92	U	6.18	
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	1.86	U	1.92	U	1.87	U
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	1.86	U	1.92	U	1.87	U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	1.86	U	1.92	U	1.87	U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	39108-34-4	ng/l	NS	NS	18.6	U	19.2	U	18.7	U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	27619-97-2	ng/l	NS	NS	18.6	U	19.2	U	18.7	U
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	1.86	U	1.92	U	7.58	
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	1.54	J	1.92	U	**17.9**	
Sum of PFOA and PFOS		ng/l	70	NS	1.54				25.48	
1,4-Dioxane										
1,4-Dioxane	123-91-1	ug/l	0.35	1	0.42	R	0.42	R	0.42	R

Table 4
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	EPA-MW-23-20190724		EPA-MW-23-DUP-20190724		EPA-MW-26-20190725	
				Sample Location:	EPA-MW-23		EPA-MW-23 DUP		EPA-MW-26	
				Sample Date:	7/24/2019		7/24/2019		7/25/2019	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
PFCs										
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	19	U	18.8	U	18.8	U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	19	U	18.8	U	18.8	U
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	4.43		4.54		2.6	
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	12.1		11.9		4.57	
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	1.9	U	1.88	U	1.88	U
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	0.33	J	1.88	U	1.88	U
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	1.9	U	1.88	U	1.88	U
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	0.87	J	0.87	J	0.28	J
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	11.5		11.1		4.99	
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	8.8	B	8.24	B	4.73	B
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	21.5		19.3		6.47	
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	9.5		11		2.22	
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	1.9	U	1.88	U	1.88	U
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	26.9		29		7.78	
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	0.3	J	1.88	U	1.88	U
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	1.9	U	1.88	U	1.88	U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	1.9	U	1.88	U	1.88	U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	39108-34-4	ng/l	NS	NS	19	U	18.8	U	18.8	U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	27619-97-2	ng/l	NS	NS	13.3	J	13.5	J	18.8	U
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	**29.4**		**28.5**		**16.8**	
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	**24.5**		**22.5**		**12.5**	
Sum of PFOA and PFOS		ng/l	70	NS	53.9		51		29.3	
1,4-Dioxane										
1,4-Dioxane	123-91-1	ug/l	0.35	1	***0.4***	R	*0.4*	*R*	***1.7***	***J-***

Table 4
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	EPA-MW-27-20190724		ST-MW-12-20190724		ST-MW-13-20190725	
				Sample Location:	EPA-MW-27		ST-MW-12		ST-MW-13	
				Sample Date:	7/24/2019		7/24/2019		7/25/2019	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
PFCs										
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	NA		NA		4.97	J
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	NA		NA		18.8	U
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	NA		NA		0.85	J
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	NA		NA		0.99	J
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	NA		NA		1.88	U
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	NA		NA		1.88	U
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	NA		NA		1.88	U
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	NA		NA		1.88	U
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	NA		NA		0.98	J
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	NA		NA		1.88	U
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	NA		NA		1.74	J
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	NA		NA		1.88	U
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	NA		NA		1.88	U
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	NA		NA		1.21	J
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	NA		NA		1.88	U
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	NA		NA		1.88	U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	NA		NA		1.88	U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	39108-34-4	ng/l	NS	NS	NA		NA		18.8	U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	27619-97-2	ng/l	NS	NS	NA		NA		27.5	
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	NA		NA		2.07	
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	NA		NA		2.59	
Sum of PFOA and PFOS		ng/l	70	NS	NA		NA		4.66	
1,4-Dioxane										
1,4-Dioxane	123-91-1	ug/l	0.35	1	*0.4*	*R*	*0.4*	*R*	*0.42*	*R*

Table 4
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	ST-MW-14-20190724		ST-MW-15-20190725		ST-MW-16-20190726	
				Sample Location:	ST-MW-14		ST-MW-15		ST-MW-16	
				Sample Date:	7/24/2019		7/25/2019		7/26/2019	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
PFCs										
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	NA		18.4	U	18.7	U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	NA		18.4	U	18.7	U
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	NA		2.48		2.85	
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	NA		4.63		1.95	
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	NA		1.84	U	1.87	U
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	NA		1.84	U	1.87	U
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	NA		1.84	U	1.87	U
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	NA		0.32	J	0.25	J
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	NA		4.84		2.54	
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	NA		4.95	B	3.39	B
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	NA		6.91		3.11	
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	NA		2.06		1.09	J
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	NA		1.84	U	1.87	U
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	NA		7.47		3.56	
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	NA		1.84	U	1.87	U
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	NA		1.84	U	1.87	U
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	NA		1.84	U	1.87	U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	39108-34-4	ng/l	NS	NS	NA		18.4	U	18.7	U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	27619-97-2	ng/l	NS	NS	NA		18.4	U	18.7	U
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	NA		**16.7**		**10.8**	
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	NA		**13.1**		8.2	
Sum of PFOA and PFOS		ng/l	70	NS	NA		29.8		19	
1,4-Dioxane										
1,4-Dioxane	123-91-1	ug/l	0.35	1	*0.4*	*R*	***1.8***	***J-***	*0.42*	*R*

Table 4
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	ST-MW-17-20190724		ST-MW-18-20190725		ST-MW-19-20190725	
				Sample Location:	ST-MW-17		ST-MW-18		ST-MW-19	
				Sample Date:	7/24/2019		7/25/2019		7/25/2019	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**	**Result**	**Q**	**Result**	**Q**
PFCs										
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	39108-34-4	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	27619-97-2	ng/l	NS	NS	NA	NA	NA	NA	NA	NA
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	NA	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	NA	NA	NA	NA	NA	NA
Sum of PFOA and PFOS		ng/l	70	NS	NA	NA	NA	NA	NA	NA
1,4-Dioxane										
1,4-Dioxane	123-91-1	ug/l	0.35	1	*0.4*	*R*	*0.4*	*R*	*0.4*	*R*

Table 4
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Rd., Great Neck, NY

				Sample ID:	ST-MW-20-20190725	
				Sample Location:	ST-MW-20	
				Sample Date:	7/25/2019	
Analyte	**CAS Number**	**Units**	**USEPA Guidance**	**NYSDEC Guidance**	**Result**	**Q**
PFCs						
2-(N-methyl perfluorooctanesulfonamido) acetic acid	2355-31-9	ng/l	NS	NS	NA	
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	2991-50-6	ng/l	NS	NS	NA	
Perfluorobutanesulfonic Acid	375-73-5	ng/l	NS	NS	NA	
Perfluorobutyric Acid (PFBA)	375-22-4	ng/l	NS	NS	NA	
Perfluorodecane Sulfonic Acid	335-77-3	ng/l	NS	NS	NA	
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	NS	NS	NA	
Perfluorododecanoic Acid (PFDoA)	307-55-1	ng/l	NS	NS	NA	
Perfluoroheptane Sulfonate (PFHpS)	375-92-8	ng/l	NS	NS	NA	
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	NS	NS	NA	
Perfluorohexanesulfonic Acid	355-46-4	ng/l	NS	NS	NA	
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	NS	NS	NA	
Perfluorononanoic Acid	375-95-1	ng/l	NS	NS	NA	
Perfluorooctane Sulfonamide (FOSA)	754-91-6	ng/l	NS	NS	NA	
Perfluoropentanoic Acid (PFPeA)	2706-90-3	ng/l	NS	NS	NA	
Perfluorotetradecanoic Acid (PFTeA)	376-06-7	ng/l	NS	NS	NA	
Perfluorotridcanoic Acid (PFTriA)	72629-94-8	ng/l	NS	NS	NA	
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	ng/l	NS	NS	NA	
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	39108-34-4	ng/l	NS	NS	NA	
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	27619-97-2	ng/l	NS	NS	NA	
Perfluorooctane Sulfonic Acid (PFOS)	1763-23-1	ng/l	NS	10	NA	
Perfluorooctanoic acid (PFOA)	335-67-1	ng/l	NS	10	NA	
Sum of PFOA and PFOS		ng/l	70	NS	NA	
1,4-Dioxane						
1,4-Dioxane	123-91-1	ug/l	0.35	1	*0.4*	*R*

Table 4
Emerging Contaminant Sampling of Monitoring Wells
Stanton Cleaners
110 Cuttermill Road, Great Neck, NY

Notes:

NS	: No Standard	Q	: Qualifier
NA	: Not Analyzed	U	: not detected at the indicated concentration
ng/l	: nanograms per liter	J	: result is estimated
ug/l	: micrograms per liter	J-	: result is estimated and biased low
PFCs	: Perflourinated Compounds	B	: compound was found in the blank and sample
CAS	: Chemical Abstracts Service	R	: results are rejected due to QC failures
USEPA	: United States Protection Agency	5	: not detected
NYSDEC	: New York State Department of Environmental Conservation	**Bold**	: the concentration exceeds NYSDEC guidance
NYSDOH	: New York State Department of Health	*Italic*	: the concentration exceeds EPA guidance
NYSDWC	: New York State Drinking Water Council	***Bold/It.***	: the concentration exceeds NYSDEC and USEPA guidance

NYSDEC Guidance are recommendations by the NYSDEC/NYSDOH to the NYSDOH for PFOS/PFAS and 1,4-Dioxane
https://www.health.ny.gov/press/releases/2018/2018-12-18_drinking_water_quality_council_recommendations.htm

EPA Guidance recommends a 0.35 ug/l drinking water concentration represeinting a 1x10^-6 cancer risk level for 1,4-Dioxane
https://www.epa.gov/sites/production/files/2014-03/documents/ffrro_factsheet_contaminant_14-dioxane_january2014_final.pdf

EPA Guidance recommends a 70 ppt drinking water concentration for the combined concentrations of PFOA and PFOS
https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_updated_5.31.16.pdf

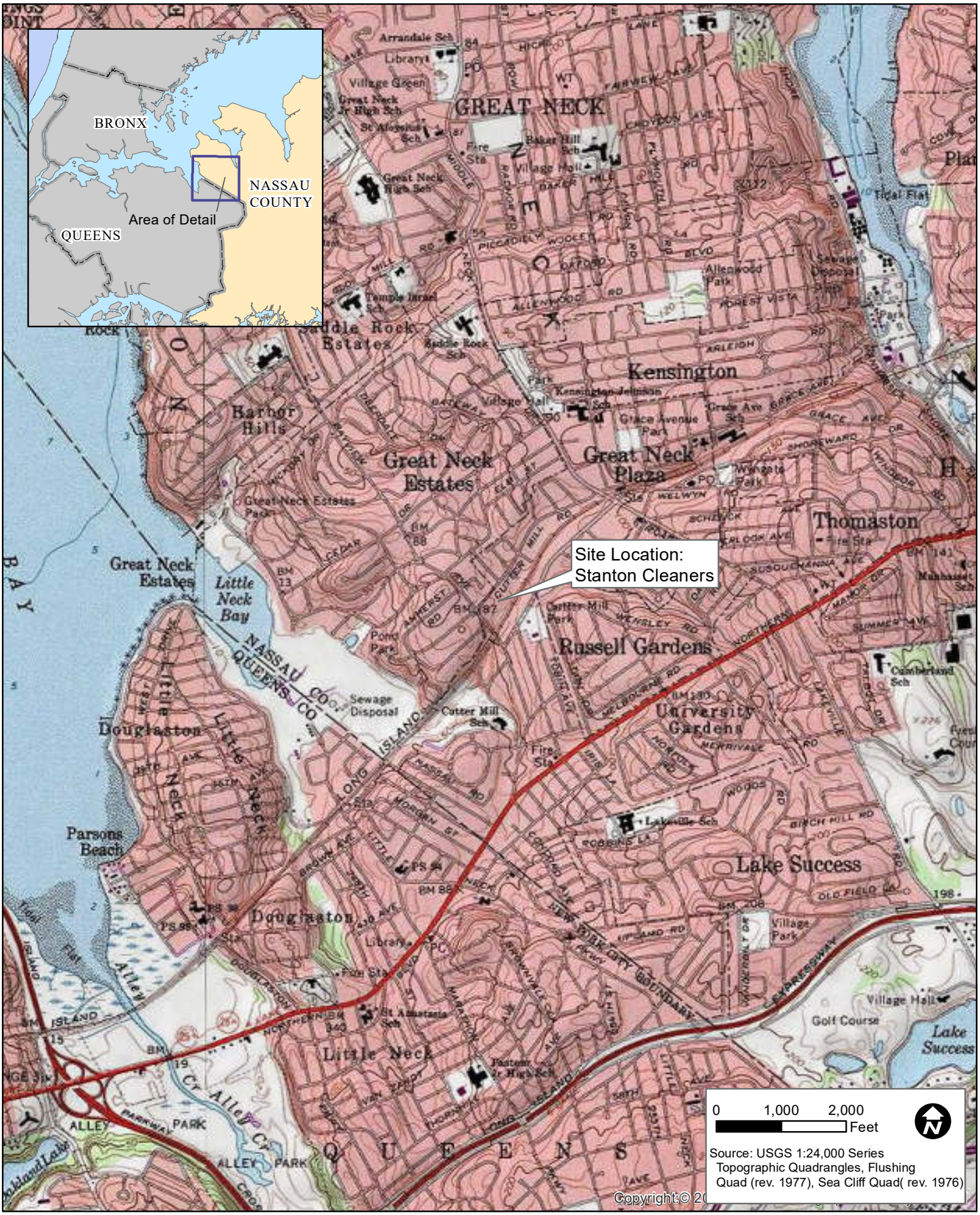
Table 5
Summary of Annual State Pollutant Discharge Elimination System (SPDES) Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

		Sample ID	SW-CB-1 _20190729	
		Sample Location	CB-1	
		Date	7/29/2019	
Analyte	CAS Number	NYSDEC Guidance	Result	Q
VOCs				
1,1,1-Trichloroethane	71-55-6	5	*1.0*	*U*
1,1,2,2-Tetrachloroethane	79-34-5	5	*1.0*	*U*
1,1,2-Trichloroethane	79-00-5	1	*1.0*	*U*
1,1-Dichloroethane	75-34-3	5	*1.0*	*U*
1,1-Dichloroethene	75-35-4	5	*1.0*	*U*
1,2,3-Trichlorobenzene	87-61-6	5	*1.0*	*U*
1,2,4-Trichlorobenzene	120-82-1	5	*1.0*	*U*
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	0.04	*1.0*	*U*
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.0006	*1.0*	*U*
1,2-Dichlorobenzene	95-50-1	3	*1.0*	*U*
1,2-Dichloroethane	107-06-2	0.6	*0.5*	*U*
1,2-Dichloropropane	78-87-5	1	*1.0*	*U*
1,3-Dichlorobenzene	541-73-1	3	*1.0*	*U*
1,4-Dichlorobenzene	106-46-7	3	*1.0*	*U*
1,4-Dioxane	123-91-1	1	*50*	*U*
2-Butanone	78-93-3	50	*1.0*	*U*
2-Hexanone	591-78-6	50	*1.0*	*U*
4-Methyl-2-Pentanone	108-10-1	NS	*1.0*	*U*
Acetone	67-64-1	50	*5.0*	*U*
Benzene	71-43-2	1	*0.5*	*U*
Bromochloromethane	74-97-5	5	*1.0*	*U*
Bromodichloromethane	75-27-4	50	*1.0*	*U*
Bromoform	75-25-2	50	*1.0*	*U*
Bromomethane	74-83-9	5	*1.0*	*U*
Carbon Disulfide	75-15-0	60	*1.0*	*U*
Carbon Tetrachloride	56-23-5	5	*1.0*	*U*
Chlorobenzene	108-90-7	5	*1.0*	*U*
Chlorodibromomethane	124-48-1	50	*1.0*	*U*
Chloroethane	75-00-3	5	*1.0*	*U*
Chloroform	67-66-3	7	*1.0*	*U*
Chloromethane	74-87-3	5	*1.0*	*U*
Cis-1,2-Dichloroethene	156-59-2	5	*1.0*	*U*
Cis-1,3-Dichloropropene	10061-01-5	NS	*1.0*	*U*
Cyclohexane	110-82-7	NS	*1.0*	*U*
Dichlorodifluoromethane	75-71-8	5	*1.0*	*U*
Dichloromethane	75-09-2	5	*1.0*	*U*
Ethylbenzene	100-41-4	5	*1.0*	*U*
Freon 113	76-13-1	5	*1.0*	*U*
Isopropyl benzene	98-82-8	5	*1.0*	*U*
m,p-Xylene	136777-61-2	NS	*1.0*	*U*
Methyl acetate	79-20-9	NS	*1.0*	*U*
Methyl T-Butyl Ether (MTBE)	1634-04-4	10	*0.5*	*U*
Methylcyclohexane	108-87-2	NS	*1.0*	*U*
O-Xylene	95-47-6	5	*1.0*	*U*
Styrene	100-42-5	5	*1.0*	*U*
Tetrachloroethene	127-18-4	5	*1.0*	*U*
Toluene	108-88-3	5	*1.0*	*U*
Total Xylenes	1330-20-7	5	*1.0*	*U*
Trans-1,2-Dichloroethene	156-60-5	5	*1.0*	*U*
Trans-1,3-Dichloropropene	10061-02-6	NS	*1.0*	*U*

Table 5
Summary of Annual State Pollutant Discharge Elimination System (SPDES) Results
Stanton Cleaners - NYSDEC Site# 130072
110 Cuttermill Road, Great Neck, NY

		Sample ID	SW-CB-1 _20190729	
		Sample Location	CB-1	
		Date	7/29/2019	
Analyte	CAS Number	NYSDEC Guidance	Result	Q
Trichloroethylene	79-01-6	5	*1.0*	*U*
Trichlorofluoromethane	75-69-4	5	*1.0*	*U*
Vinyl Chloride	75-01-4	2	*1.0*	*U*
PCBs				
Aroclor 1016	12674-11-2	NS	*0.25*	*U*
Aroclor 1221	11104-28-2	NS	*0.25*	*U*
Aroclor 1232	11141-16-5	NS	*0.25*	*U*
Aroclor 1242	53469-21-9	NS	*0.25*	*U*
Aroclor 1248	12672-29-6	NS	*0.25*	*U*
Aroclor 1254	11097-69-1	NS	*0.25*	*U*
Aroclor 1260	11096-82-5	NS	*0.25*	*U*
Aroclor 1262	37324-23-5	NS	*0.25*	*U*
Aroclor 1268	11100-14-4	NS	*0.25*	*U*
Total PCBs	1336-36-3	0.09	*0.25*	*U*

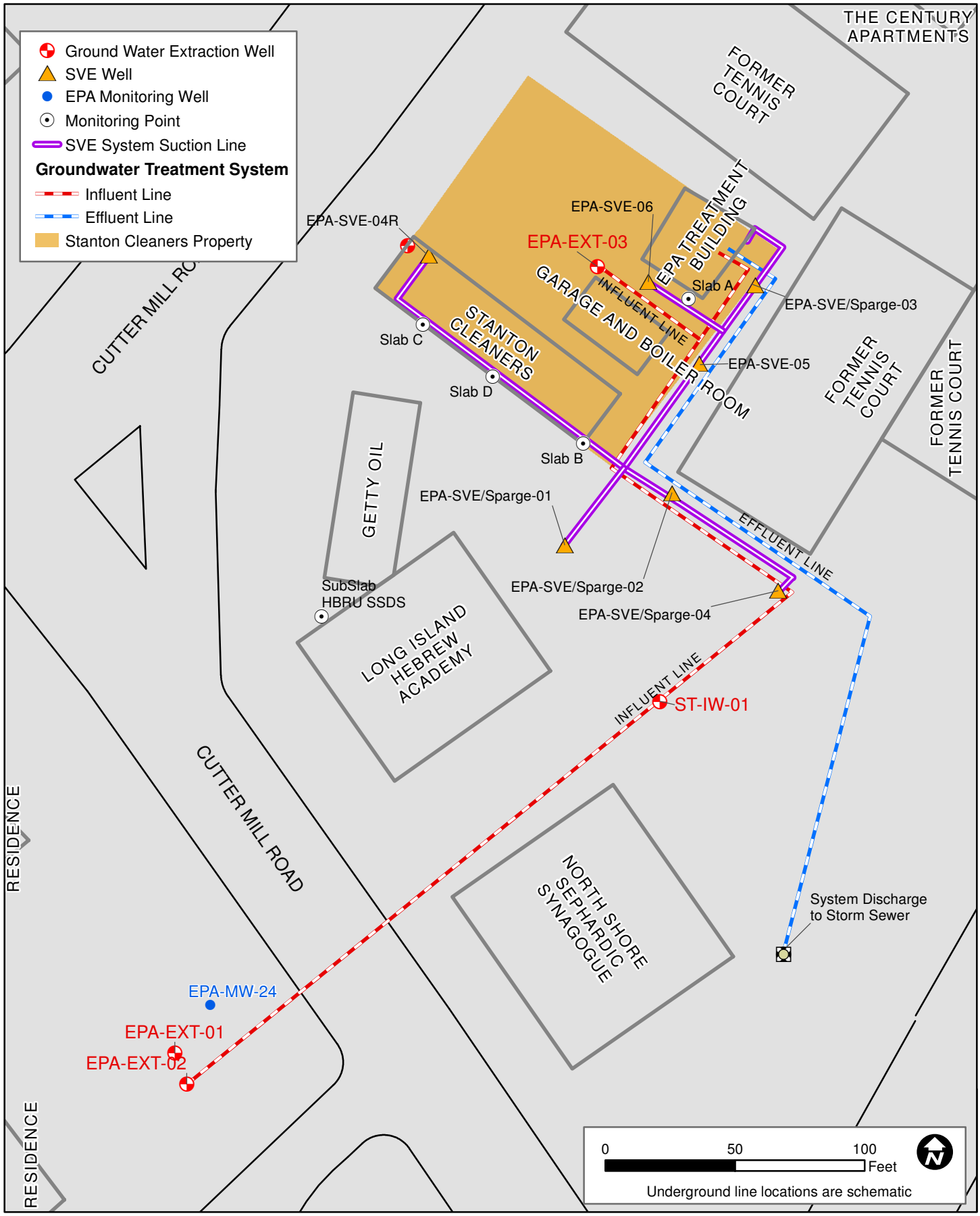
Notes:
All sample results and NYSDEC guidance values are reported in ug/l
All sample analytical results are compared to Part 703.5 - Water Quality Standards Surface and Ground Water
µg/l: : micrograms per liter
NYSDEC: : New York State Department of Environmental Conservation
Q : Qualifier
U : indicates the compound was not detected above the MDL
MDL : method detection limit
NS : no standard
Shaded : the result was not detected above the MDL
Bold : the result exceeded the NYSDEC Criteria



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

Figure 1

September 27, 2019

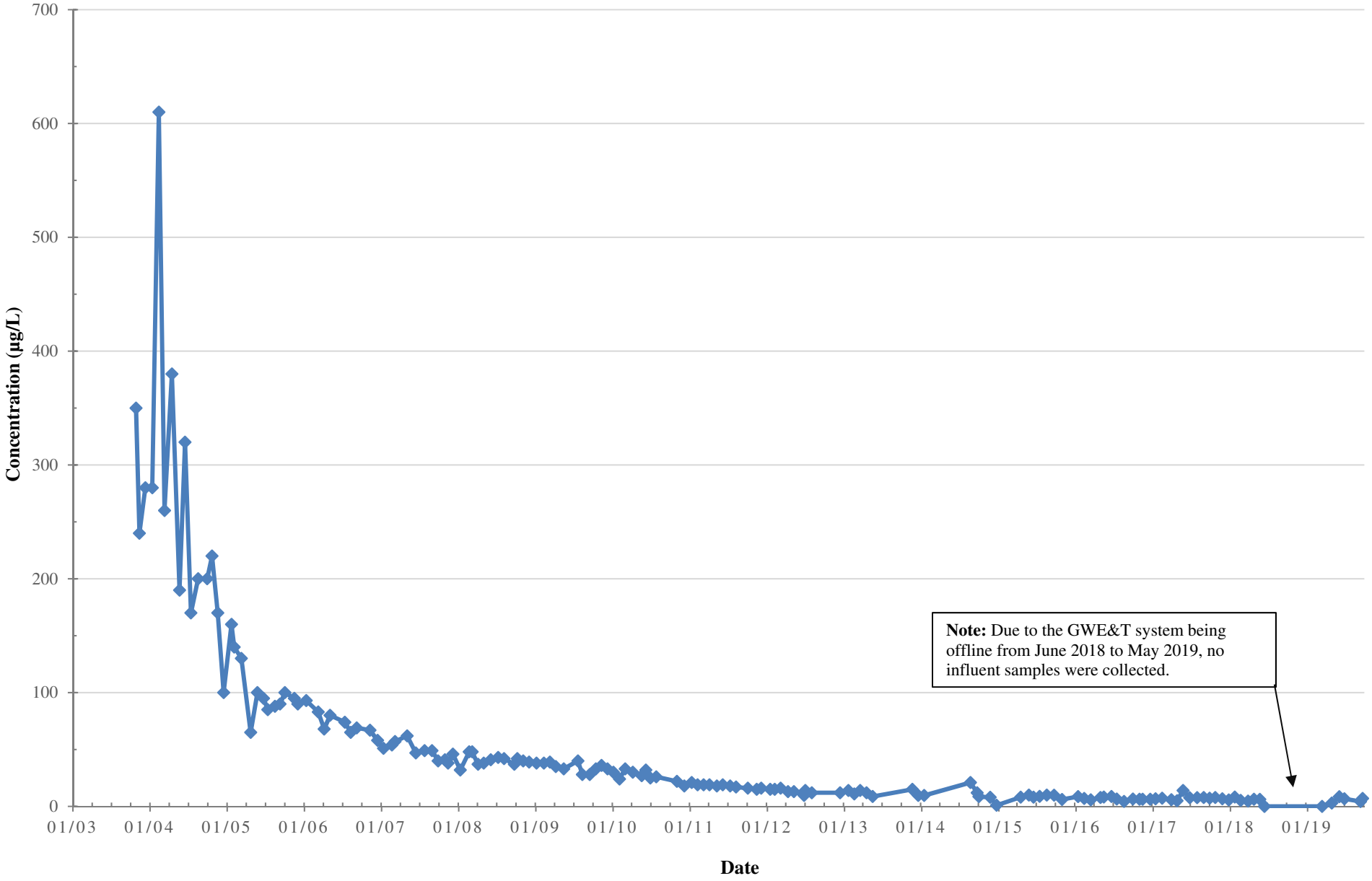


Site Layout
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 2

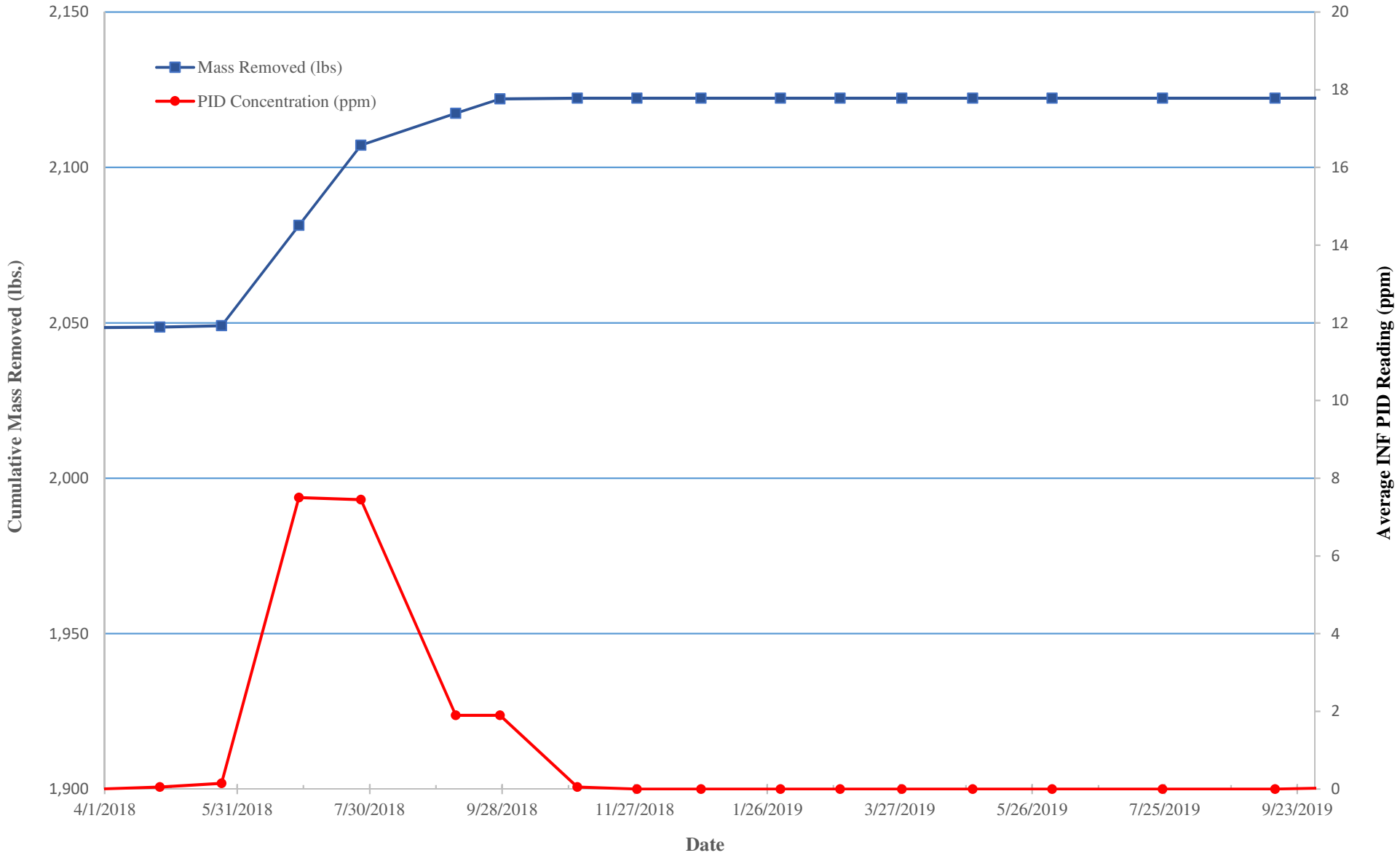
September 27, 2019

Figure 3
GWE&T System Influent PCE Concentrations - 2003-2019
Stanton Cleaners
110 Cuttermill Road, Great Neck, NY



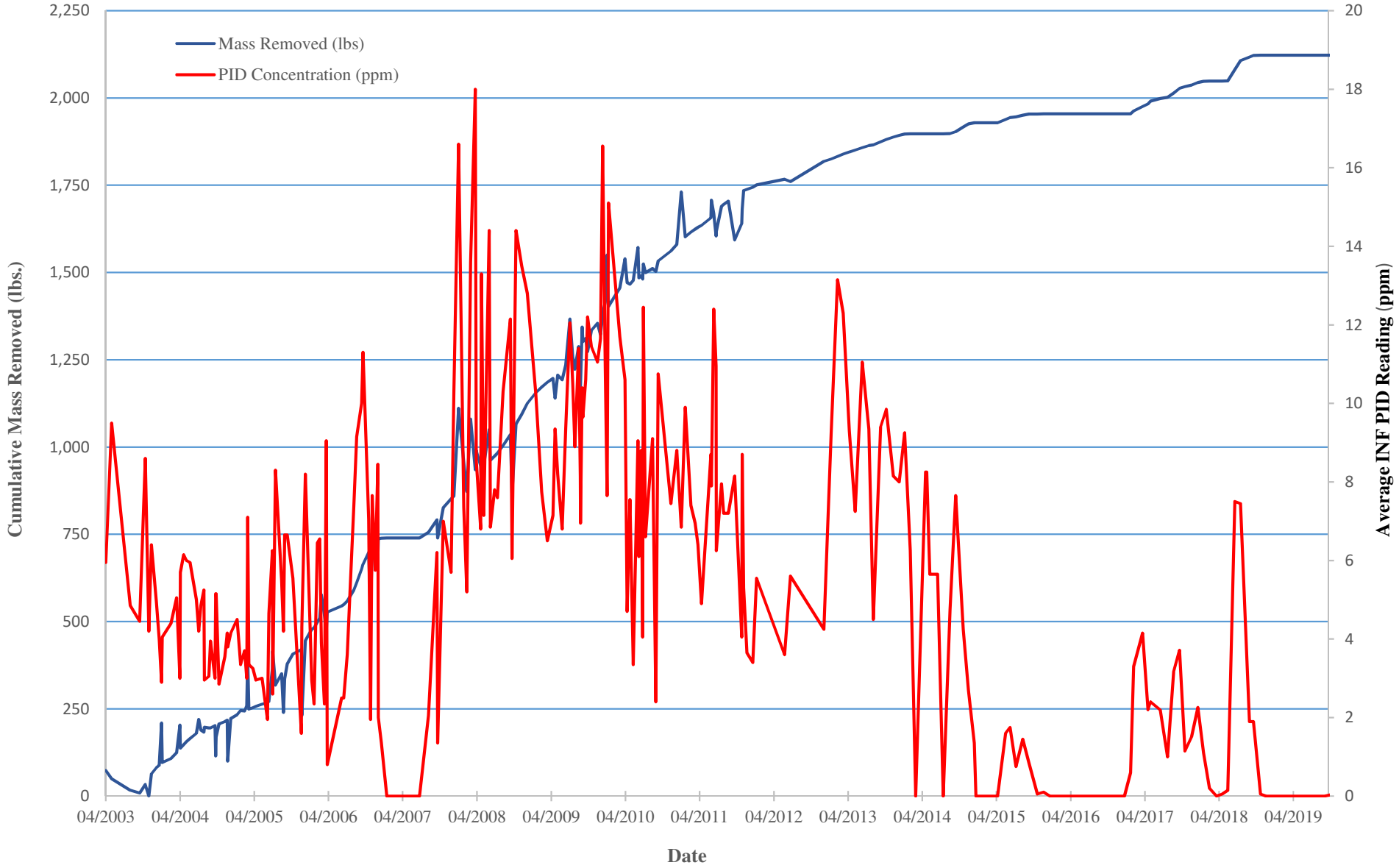
NYSDEC Site No: 130072
Standby Contract: D007625-06

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

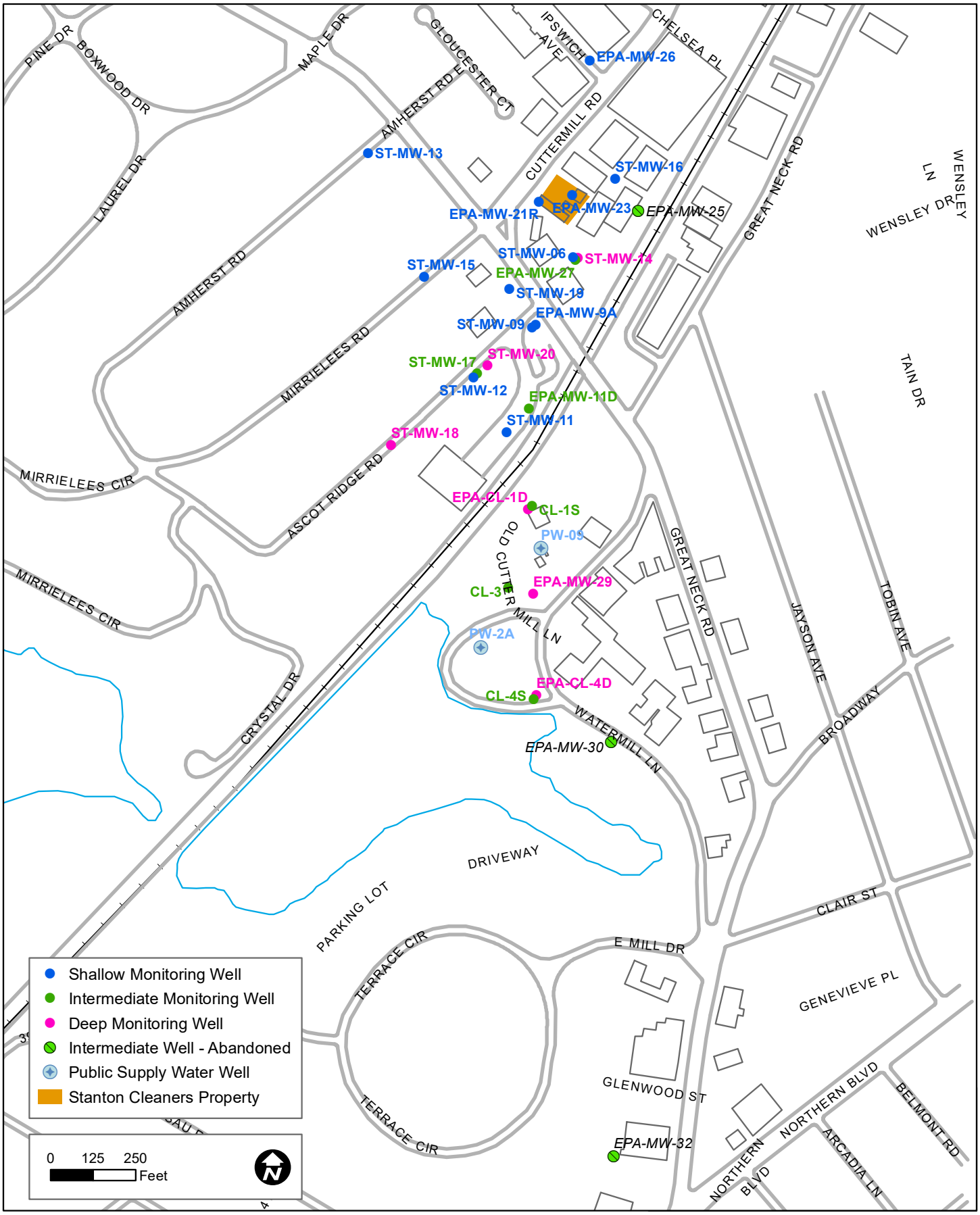


NYSDEC Site No: 130072
Standby Contract: D007625-06

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



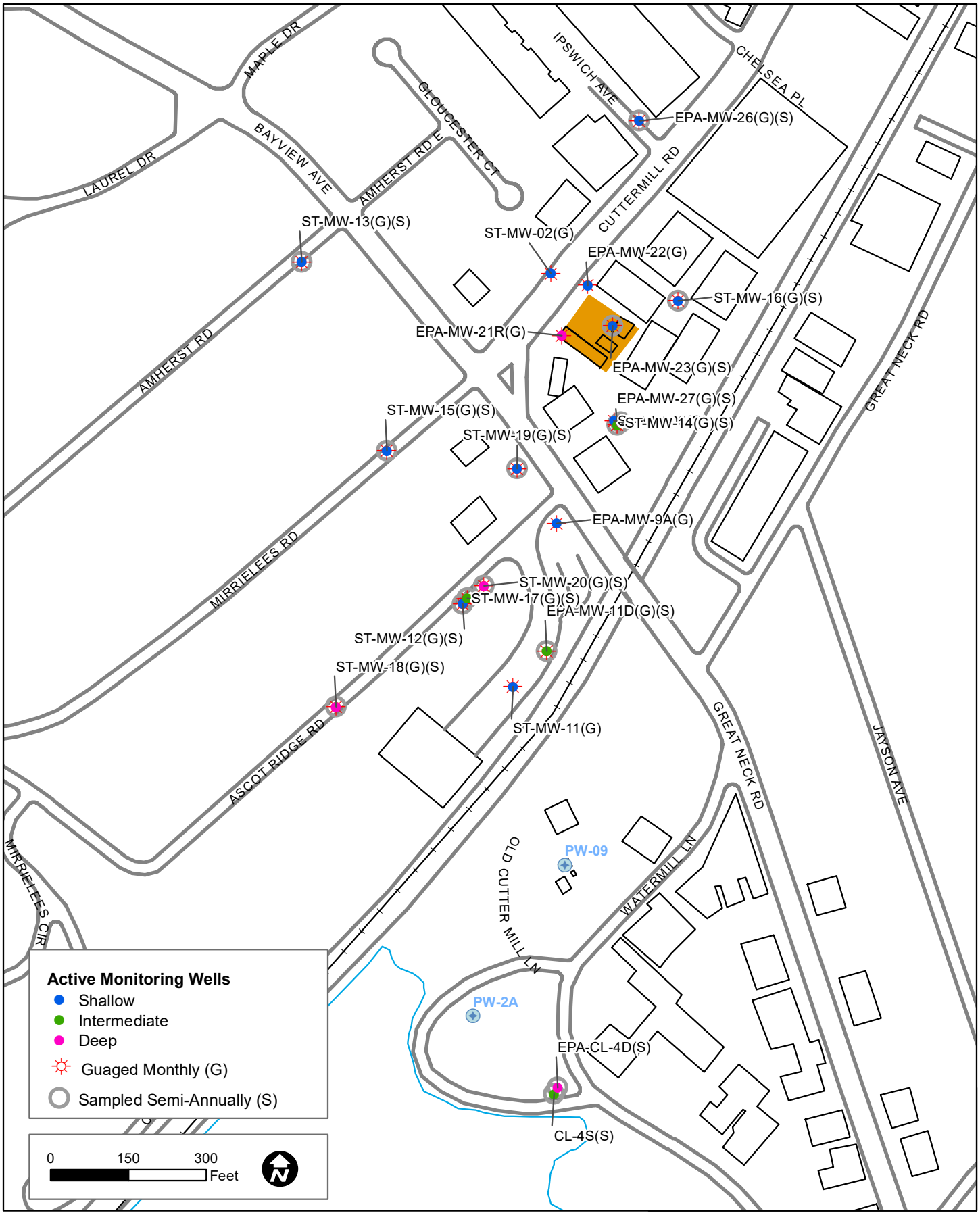
NYSDEC Site No: 130072
Standby Contract: D007625-06



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

Figure 6

June 28, 2019

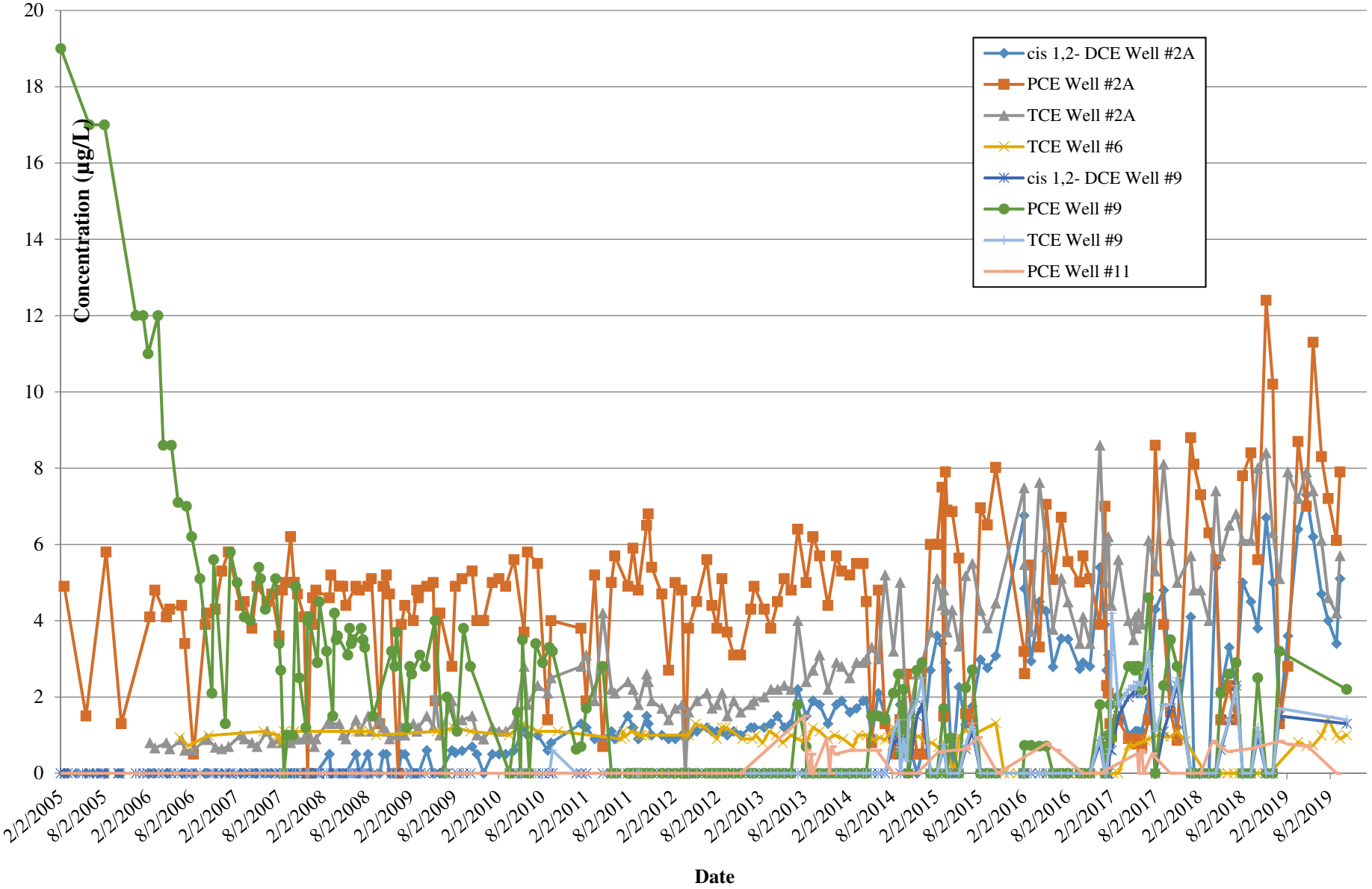


Well Monitoring Schedule
Stanton Cleaners
NYSDEC Site # 130072
Great Neck-North Hempstead, New York

Figure 7

June 28, 2019

Figure 8
Contaminants of Concern in WAGNN Wells
Stanton Cleaners
110 Cuttermill Road, Great Neck, NY



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: 7/24/2019
REPORT No.
PAGE No. 1

PREPARED BY: Edward Combs 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
Edward Combs	Technician	8:00-17:00	Preferred
Michael Otton	Technician	8:00-17:00	Preferred

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Five Gas Meter - W		
2. 100-ft Solinst - W			

OPERATION & MAINTENANCE ACTIVITIES

HDR/Preferred Site Representative: Edward Combs - Preferred

8:00 - EC & MO (Preferred) on-site. SVE offline and GWTS online upon arrival. - O&M being performed concurrently with PFC Sampling Event. Preparation for sampling completed before beginning O&M activites.

9:45 - Collect system readings in treatment building.

10:30 - Collect GWTS Influent and Effluent Samples

11:00 - Collect readings from SVE well headspaces and sample ports with 5-gas meter.

11:30 - Perform general housekeeping around property.

12:30 - EC complete O&M, continue with PFC Sampling. Task 4 Monitoring Well gauging performed after sample collection (7/29/19).

17:00 - Treatment building secured, EC & MO (Preferred) offsite.

[x] - Designates report is continued on additional pages

HDR/Preferred Site Representative: **Edward Combs (Preferred)** Project Manager: **M. Lehtinen**

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

Date: 7/24/2019

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	85 GPM	100%

Total Gallons Treated:	460,977,863
Discharge Rate:	150
Discharge Conductivity:	0*
Discharge pH:	5.6*
SVE Air Flow Rate:	10 CFM*

Visual Digital Readouts from Catwalk:

Discharge pH:	5.01
Discharge Temp:	19ºC
Discharge Conductivity:	-1.4

Flow meter reading:

Flow Rate:	60 GPM
Total gallons: 12,054,436 gallons	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	2,597 GPH
Total gallons: 9,150,250.2 gallons	

Weather:
80ºF, clear, moderate humidity, light northeasterly wind

Notes:
* Meter malfunctioning

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
Air Sparge System
O&M Data Log

Date: 7/24/2019

Readings at Well	
Near Well Head	N/A*
Bladder	

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
Soil-Vapor Extraction and Pump and Treat System
Monthly Air Monitoring Log

Date: 7/24/2019
Project #

		FID	MultiRAE PGM-6228					VelociCalc Plus				
	Pipe ID	VOC	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
SVE-Influent	**5.709**	N/A	0.3*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
Post- Blower Pre-Carbon*	**5.706**	N/A	0.1*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (shallow)	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (medium)	**1.913**	N/A	0.4*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (shallow)	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (medium)	**1.913**	N/A	0.7*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SS-A	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3A	**1.913**	N/A	0.1*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3B	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-1 Combined	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-2 Combined	**1.913**	N/A	0.2*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
Background	**N/A**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR

Historical Notes:
***SVE-Effluent relabeled as "Post-Blower Pre-Carbon Sampling Location"**

Equipment calibrated by: **Edward Combs**
Air readings collected by: **Edward Combs**

Notes:
***Reading was collected while SVE system was offline**
****Maxed out reading on meter**
NR- No reading collected 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 GROUNDWATER CONTAMINATION SITE

Air Sparge System Monitoring Log

Date: 7/24/2019

	MultiRAE Plus PGM-50				
	VOC	**CO**	**Oxygen**	**LEL**	**H2S**
EPA-EXT-04	N/A	N/A	N/A	N/A	N/A
EPA-MW-21R	N/A	N/A	N/A	N/A	N/A
ST-MW-19	N/A	N/A	N/A	N/A	N/A
Background	N/A	N/A	N/A	N/A	N/A

VOC: Volatile Organic Compounds (in ppm)
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
All PID readings taken at well heads.

	HORIBA						
	pH	**Conduc.**	**Turb.**	**DO**	**Temp.**	**Sal.**	**ORP**
Effluent	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA-MW-21R	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST-MW-19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Influent	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
***Air readings could not be collected due to the SVE Blower being offline.**

TEMP. - Temperature measured in degrees Fahrenheit.
COND. - Conductivity measured in milliSiemens per centimeter (mS/cm).
TURB. - Turbidity measure in nephelometric turbidity units (NTU).
DO - Dissolved Oxygen measured in milligrams per liter (mg/L).
SALINITY - Salinity in percentage.
ORP- Oxidation Reduction Potential

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: 7/29/2019
MEASURED BY: EC

WELL NUMBER	MEASURING POINT		Time	DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)				
EPA-MW-11D	ft BTOC	74.63	9:51	54.70	19.93	4" well in p-lot by med sports bldg.
EPA-MW-21-R	ft BTOC	84.13	10:08	65.20	18.93	Getty Gas Station well
EPA-MW-22	ft BTOC	82.20	N/A	N/A	N/A	Under clothing bin- SC p-lot
EPA-MW-23	ft BTOC	82.83	10:20	63.44	19.39	In front of treatment bldg.
EPA-MW-27	ft BTOC	69.32	10:01	47.85	21.47	LIHA PL
ST-MW-06	ft BTOC	69.83	10:09	42.45	27.38	LIHA PL 4"
ST-MW-09A	ft BTOC	78.13	9:55	63.89	14.24	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	9:48	57.82	17.43	p-lot by entrance to med sports bldg.
ST-MW-12	ft BTOC	87.20	9:39	69.11	18.09	In front of apartment bldg.
ST-MW-14	ft BTOC	69.73	10:05	52.12	17.61	LIHA PL
ST-MW-16	ft BTOC	75.78	10:14	50.85	24.93	Other side treatment bldg. near fence
ST-MW-17	ft BTOC	86.53	9:43	68.82	17.71	In front of apartment bldg.
ST-MW-19	ft BTOC	82.50	9:58	64.20	18.30	Triangle park well
ST-MW-20	ft BTOC	84.53	9:45	68.33	16.20	Near apartment bldg.
EPA-MW-26	ft BTOC	78.37	9:20	56.62	21.75	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	9:30	70.53	19.60	Mirreless Rd
ST-MW-13	ft BTOC	130.95	9:24	83.61	47.34	Amherst Rd
ST-MW-18	ft BTOC	84.40	9:36	68.93	15.47	Ascot Ridge (past apt bldg)

Notes:

PHOTOGRAPHIC LOG
Date: 7/24/19
HDR Job No.
Stanton Cleaners Site

PHOTO	DATE	TIME	DESCRIPTION	COMMENTS
IMG_8609	7/24/2019	10:30	GWTS influent and effluent samples were collected during this O&M event.	
IMG_8610	7/24/2019	11:10	SVE sample port readings were collected using a 5-Gas Meter only during this O&M event, due to the system currently being offline.	

Photos 7/24/2019

IMG_8609

GWTS influent and effluent samples were collected during this O&M event.

IMG_8610

SVE sample port readings were collected using a 5-Gas Meter only during this O&M event, due to the system currently being offline.

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: 13-Sep-19
REPORT No.
PAGE No. 1

PREPARED BY: Michael Otton 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
Michael Otton	Technician	9:45 - 13:45	Preferred

VISITORS

Name	Time (From - To)	Representing	Remarks

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. 100-ft Solinst - W		
2. Five Gas Meter - W			

OPERATION & MAINTENANCE ACTIVITIES

HDR/Preferred Site Representative: Edward Combs - Preferred

9:45 - Preferred (MO) on-site. SVE and GWTS remain offline.

10:00 - Collected system readings (noting systems remain offline); collected readings from SVE well headspaces and sample ports with 5-gas meter.

11:30 - Performed monitoring well gauging under Task 4.

13:15 - General Housekeeping performed under Task 3, and photos taken of property for potential future drilling.

13:45 - Treatment building secured. Preferred (MO) off-site.

[x] - Designates report is continued on additional pages

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

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

Date: 9/13/2019

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	166** GPM	100%

Total Gallons Treated:	428,985,359*	
Discharge Rate:	293 GPM*	
Discharge Conductivity:	0.07*	
Discharge pH:	5.6*	
SVE Air Flow Rate:	59 CFM*	(0 CFM at meter)

Visual Digital Readouts from Catwalk:

Discharge pH:	3.24**
Discharge Temp:	5ºC**
Discharge Conductivity:	0.4**

Flow meter reading:

Flow Rate:	0 GPM**
Total gallons: 4,583,000 gallons**	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	0 GPH**
Total gallons:	5,772,403.7 **

Weather:
26ºF Partly Cloudy, Moderate Humidity, light west wind

Notes:
* Meter Malfunctioning
** GWTS offline
GPM- Gallons Per Minute

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

Date: 9/13/2019

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	16 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 GROUNDWATEF
CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Monthly Air Monitoring Log

Date: 9/13/2019
Project #

		FID	MultiRAE PGM-6228					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*	NR	NR	NR	NR	NR
Post- Blower Pre-Carbon**	5.706	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (shallow)	1.913	N/A	0.1*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (medium)	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (shallow)	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (medium)	1.913	N/A	0.3*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SS-A	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3A	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3B	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-1 Combined	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-2 Combined	1.913	N/A	0.8*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
Background		N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR

Notes:
MultiRAE PGM-6228 (5-gas meter) readings taken with SVE Offline
No VelociCalc Plus readings taken as SVE remains offline

Equipment calibrated by: **Edward Combs**
Air readings collected by: **Edward Combs**

Notes:
***Indicates Reading was Collected while the SVE System was Offline**
****SVE-Effluent relabeled as "Post-Blower Pre-Carbon" Sampling Location**
*****Maxed out reading on meter**
NR- Indicates No Reading Was Collected
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

Air Sparge System Monitoring Log

Date: 9/13/2019

	MultiRAE Plus PGM-50				
	VOC	**CO**	**Oxygen**	**LEL**	**H2S**
EPA-EXT-04	N/A	N/A	N/A	N/A	N/A
EPA-MW-21R	N/A	N/A	N/A	N/A	N/A
ST-MW-19	N/A	N/A	N/A	N/A	N/A
Background	N/A	N/A	N/A	N/A	N/A

VOC: Volatile Organic Compounds (in ppm)
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
All PID readings taken at well heads.

	HORIBA						
	pH	**Conduc.**	**Turb.**	**DO**	**Temp.**	**Sal.**	**ORP**
Effluent	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA-MW-21R	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST-MW-19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Influent	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
***Air readings could not be collected due to the SVE Blower being offline.**

TEMP. - Temperature measured in degrees Fahrenheit.
COND. - Conductivity measured in milliSiemens per centimeter (mS/cm).
TURB. - Turbidity measure in nephelometric turbidity units (NTU).
DO - Dissolved Oxygen measured in milligrams per liter (mg/L).
SALINITY - Salinity in percentage.
ORP- Oxidation Reduction Potential

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: 9/13/2019
MEASURED BY: EC

WELL NUMBER	MEASURING POINT		Time	DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)				
EPA-MW-11D	ft BTOC	74.63	12:31	50.68	23.95	4" well in p-lot by med sports bldg.
EPA-MW-21-R	ft BTOC	84.13	12:56	63.81	20.32	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	13:10	62.00	20.83	In front of treatment bldg.
EPA-MW-27	ft BTOC	69.32	12:42	49.01	20.31	LIHA PL
ST-MW-06	ft BTOC	69.83	13:15	43.38	26.45	LIHA PL 4"
ST-MW-09A	ft BTOC	78.13	12:38	60.94	17.19	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	12:28	57.19	18.06	p-lot by entrance to med sports bldg.
ST-MW-12	ft BTOC	87.20	12:10	68.53	18.67	In front of apartment bldg.
ST-MW-14	ft BTOC	69.73	12:45	53.79	15.94	LIHA PL
ST-MW-16	ft BTOC	75.78	13:05	52.32	23.46	Other side treatment bldg. near fence
ST-MW-17	ft BTOC	86.53	12:15	68.02	18.51	In front of apartment bldg.
ST-MW-19	ft BTOC	82.50	12:23	62.95	19.55	Triangle park well
ST-MW-20	ft BTOC	84.53	12:18	69.59	14.94	Near apartment bldg.
EPA-MW-26	ft BTOC	78.37	11:42	57.07	N/A	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	11:57	70.88	N/A	Mirreless Rd
ST-MW-13	ft BTOC	130.95	11:52	83.98	46.97	Amherst Rd
ST-MW-18	ft BTOC	84.40	12:05	70.03	14.37	Ascot Ridge (past apt bldg)

Notes:

PHOTOGRAPHIC LOG
Date: 2-1-19
HDR Job No.
Stanton Cleaners Site

PHOTO	DATE	TIME	DESCRIPTION	COMMENTS
Picture DSCF3456	2/1/2019	11:24	The Fernco connection near the SS-D port was found to be disconnected again. This is likely a result of tree growth along the exterior wall of the building distorting the piping.	
Picture DSCF3462	2/1/2019	12:55	Routine monitoring well gauging was performed under Task 4.	

Photos

9/13/2019

Picture DSCF3456

The Fernco connection near the SS-D port was found to be disconnected again. This is likely a result of tree growth along the exterior wall of the building distorting the piping.

Picture DSCF3462

Routine monitoring well gauging was performed under Task 4.

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: 9/23/2019
REPORT No.
PAGE No. 1

PREPARED BY: Michael Otton 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
Michael Otton	Technician	9:00 - 14:00	Preferred

VISITORS

Name	Time (From - To)	Representing	Remarks
John Nead	10:00-10:30	DEC	

EQUIPMENT AT THE SITE

I = Idle W = Working

1. Camera - W	3. Five Gas Meter - W		
2. 100-ft Solinst - W			

OPERATION & MAINTENANCE ACTIVITIES

HDR/Preferred Site Representative: Edward Combs - Preferred

9:00 - MO (Preferred) on-site. SVE offline and GWTS online upon arrival.
9:30 - Collect system readings in treatment building.
10:00 - Collect GWTS Influent and Effluent Samples
10:30 - Collect readings from SVE well headspaces and sample ports with 5-gas meter.
11:00 - Perform Task 4 monitoring well gauging activities; Replaced PVC slip cap for MW-09A.
12:45 - Perform general housekeeping around property.
14:00 - Treatment building secured, EC (Preferred) offsite.

[x] - Designates report is continued on additional pages

HDR/Preferred Site Representative: **Michael Otton (Preferred)**

Project Manager: **M. Lehtinen**

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

Date: 9/23/2019

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	166 GPM	100%

Total Gallons Treated:	469,791,512
Discharge Rate:	293 GPM
Discharge Conductivity:	0*
Discharge pH:	5.6*
SVE Air Flow Rate:	12 CFM

Visual Digital Readouts from Catwalk:

Discharge pH:	4.91
Discharge Temp:	19ºC
Discharge Conductivity:	-1.4

Flow meter reading:

Flow Rate:	60 GPM
Total gallons: 73,440,802 gallons	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	2,594 GPH
Total gallons: 7,712,959.7 gallons	

Weather:
80ºF, Clear, Moderate humidity, southwest wind

Notes:
* Meter malfunctioning

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 Air Monitoring Log

Date: 9/23/19

		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	20.9%	0	0					
Post-Blower Pre-Carbon	**5.706**	N/A	0.4	0	20.9%	0	0					
EPA-SVE-1 (shallow)	**1.913**	N/A	0.2	0	20.9%	0	0					
EPA-SVE-1 (medium)	**1.913**	N/A	0.1	0	20.9%	0	0					
EPA-SVE-2 (shallow)	**1.913**	N/A	0.0	0	20.9%	0	0					
EPA-SVE-2 (medium)	**1.913**	N/A	0.6	0	20.9%	0	0					
SS-A	**1.913**	N/A	0.2	0	20.9%	0	0					
SVE-3A	**1.913**	N/A	N/A	N/A	N/A	N/A	N/A					
SVE-3B	**1.913**	N/A	N/A	N/A	N/A	N/A	N/A					
SVE-1 Combined	**1.913**	N/A	0.7	0	20.9%	0	0					
SVE-2 Combined	**1.913**	N/A	1.8	0	20.9%	0	0					
Background		N/A	0.0	0	20.9%	0	0					

*** Formerly SVE-Effluent**

WATER LEVEL DATA SUMMARY

PROJECT:	Stanton Cleaners	**JOB NUMBER:**	
LOCATION:	Great Neck, NY	**DATE:**	9/23/2019
CLIENT:	HDR	**MEASURED BY:**	MO
SURVEY DATUM:	ft msl		
MEASURING DEVICE:	Solinst Water Level Indicator		

WELL NUMBER	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
EPA-MW-11D	ft BTOC	74.63	53.14	74.63	4" well in p-lot by med sports bldg
EPA-MW-21-R	ft BTOC	84.13	62.55	N/A	Getty Gas Station well
EPA-MW-22	ft BTOC	82.20	N/A	N/A	Under clothing bin- SC p-lot
EPA-MW-23	ft BTOC	82.83	62.98	82.83	In front of treatment bldg
EPA-MW-27	ft BTOC	69.32	48.75	69.32	LIHA PL
ST-MW-06	ft BTOC	69.83	45.76	N/A	LIHA PL 4"
ST-MW-09A	ft BTOC	78.13	66.02	78.13	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	56.42	75.25	p-lot by entrance to med sports bldg
ST-MW-12	ft BTOC	87.20	68.72	87.20	In front of apartment bldg
ST-MW-14	ft BTOC	69.73	52.33	69.73	LIHA PL
ST-MW-16	ft BTOC	75.78	51.10	75.78	Other side treatment bldg near fence
ST-MW-17	ft BTOC	86.53	67.15	86.53	In front of apartment bldg
ST-MW-19	ft BTOC	82.50	64.42	82.50	Triangle park well
ST-MW-20	ft BTOC	84.53	68.79	84.53	Near apartment bldg
EPA-MW-26	ft BTOC	78.37	57.14	N/A	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	69.31	N/A	Mirreless Rd
ST-MW-13	ft BTOC	130.95	83.82	130.95	Amherst Rd
ST-MW-18	ft BTOC	84.40	66.29	84.40	Ascot Ridge

Notes: WAGGN wells pumping:

PHOTOGRAPHIC LOG
Date: 9/23/19
HDR Job No.
Stanton Cleaners Site

PHOTO	DATE	TIME	DESCRIPTION	COMMENTS
DSCF1749	9/23/2019	9:31	As part of the September 20198 O&M event, punch-list items from the NYSDEC were addressed including looking into replacement parts (batteries, lamps, etc.) for the facility exit lights.	
DSCF1749	9/23/2019	11:41	As part of the September 20198 O&M event, the air filter for the Air Sparge System was inspected. The Air Sparge is currently indefinitely offline, but if brought back online, the air filter will need to be replaced.	

Photos 9/23/2019

DSCF1749
As part of the September 20198 O&M event, punch-list items from the NYSDEC were addressed including looking into replacement parts (batteries, lamps, etc.) for the facility exit lights.

DSCF1749
As part of the September 20198 O&M event, the air filter for the Air Sparge System was inspected. The Air Sparge is currently indefinitely offline, but if brought back online, the air filter will need to be replaced.

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: 7/24/2019

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	85 GPM	100%

Total Gallons Treated:	460,977,863
Discharge Rate:	150
Discharge Conductivity:	0*
Discharge pH:	5.6*
SVE Air Flow Rate:	10 CFM*

Visual Digital Readouts from Catwalk:

Discharge pH:	5.01
Discharge Temp:	19ºC
Discharge Conductivity:	-1.4

Flow meter reading:

Flow Rate:	60 GPM
Total gallons: 12,054,436 gallons	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	2,597 GPH
Total gallons: 9,150,250.2 gallons	

Weather:
80ºF, clear, moderate humidity, light northeasterly wind

Notes:
* Meter malfunctioning

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: 9/13/2019

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	166** GPM	100%

Total Gallons Treated:	428,985,359*	
Discharge Rate:	293 GPM*	
Discharge Conductivity:	0.07*	
Discharge pH:	5.6*	
SVE Air Flow Rate:	59 CFM*	(0 CFM at meter)

Visual Digital Readouts from Catwalk:

Discharge pH:	3.24**
Discharge Temp:	5ºC**
Discharge Conductivity:	0.4**

Flow meter reading:

Flow Rate:	0 GPM**
Total gallons: 4,583,000 gallons**	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	0 GPH**
Total gallons:	5,772,403.7 **

Weather:
26ºF Partly Cloudy, Moderate Humidity, light west wind

Notes:
* Meter Malfunctioning
** GWTS offline
GPM- Gallons Per Minute

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

Date: 9/23/2019

Data from Computer Display Screen:

Pump	Flow	Valve open
RW-2	166 GPM	100%

Total Gallons Treated:	469,791,512
Discharge Rate:	293 GPM
Discharge Conductivity:	0*
Discharge pH:	5.6*
SVE Air Flow Rate:	12 CFM

Visual Digital Readouts from Catwalk:

Discharge pH:	4.91
Discharge Temp:	19ºC
Discharge Conductivity:	-1.4

Flow meter reading:

Flow Rate:	60 GPM
Total gallons: 73,440,802 gallons	meter display in 100 of gallons

Effluent flow meter reading:

Flow Rate:	2,594 GPH
Total gallons: 7,712,959.7 gallons	

Weather:
80ºF, Clear, Moderate humidity, southwest wind

Notes:
* Meter malfunctioning

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 - July 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
7/1/2019 0:00	85	462390959	11
7/1/2019 4:00	85	462411081.4	11
7/1/2019 8:00	85	462431205.1	11
7/1/2019 12:00	85	462451328.9	12
7/1/2019 16:00	85	462471451.2	11
7/1/2019 20:00	85	462491574.9	11
7/2/2019 0:00	85	462511698.7	12
7/2/2019 4:00	85	462531821	11
7/2/2019 8:00	85	462551944.8	11
7/2/2019 12:00	85	462572068.5	7
7/2/2019 16:00	85	462592190.9	11
7/2/2019 20:00	85	462612314.6	8
7/3/2019 0:00	85	462632438.4	12
7/3/2019 4:00	85	462652560.7	12
7/3/2019 8:00	85	462672684.4	6
7/3/2019 12:00	85	462692808.2	6
7/3/2019 16:00	85	462712930.5	11
7/3/2019 20:00	85	462733054.3	10
7/4/2019 0:00	85	462753178	11
7/4/2019 4:00	85	462773300.4	9
7/4/2019 8:00	85	462793424.1	7
7/4/2019 12:00	85	462813547.9	11
7/4/2019 16:00	85	462833670.2	6
7/4/2019 20:00	85	462853793.9	11
7/5/2019 0:00	85	462873917.7	11
7/5/2019 4:00	85	462894040	12
7/5/2019 8:00	85	462914163.8	9
7/5/2019 12:00	85	462934287.5	11
7/5/2019 16:00	85	462954409.9	11
7/5/2019 20:00	85	462974533.6	11
7/6/2019 0:00	85	462994657.4	11
7/6/2019 4:00	85	463014779.7	11
7/6/2019 8:00	85	463034903.5	12
7/6/2019 12:00	85	463055025.8	11
7/6/2019 16:00	85	463075149.5	12
7/6/2019 20:00	85	463095273.3	7
7/7/2019 0:00	85	463115395.6	11
7/7/2019 4:00	85	463135519.4	12
7/7/2019 8:00	85	463155643.1	10
7/7/2019 12:00	85	463175765.5	8
7/7/2019 16:00	85	463195889.2	7

Stanton Cleaners Groundwater Contamination Site - July 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
7/7/2019 20:00	85	463216013	11
7/8/2019 0:00	85	463236135.3	10
7/8/2019 4:00	85	463256259	12
7/8/2019 8:00	85	463276382.8	10
7/8/2019 12:00	85	463296505.1	12
7/8/2019 16:00	85	463316628.9	10
7/8/2019 20:00	85	463336752.6	10
7/9/2019 0:00	85	463356875	11
7/9/2019 4:00	85	463376998.7	12
7/9/2019 8:00	85	463397122.5	8
7/9/2019 12:00	85	463417244.8	11
7/9/2019 16:00	85	463437368.5	10
7/9/2019 20:00	85	463457492.3	11
7/10/2019 0:00	85	463477614.6	11
7/10/2019 4:00	85	463497738.4	7
7/10/2019 8:00	85	463517862.1	10
7/10/2019 12:00	85	463537984.5	7
7/10/2019 16:00	85	463558108.2	11
7/10/2019 20:00	85	463578232	12
7/11/2019 0:00	85	463598354.3	11
7/11/2019 4:00	85	463618478	11
7/11/2019 8:00	85	463638601.8	7
7/11/2019 12:00	85	463658724.1	8
7/11/2019 16:00	85	463678847.9	10
7/11/2019 20:00	85	463698971.6	10
7/12/2019 0:00	85	463719094	10
7/12/2019 4:00	85	463739217.7	12
7/12/2019 8:00	85	463759340	9
7/12/2019 12:00	85	463779463.8	11
7/12/2019 16:00	85	463799587.5	9
7/12/2019 20:00	85	463819709.9	11
7/13/2019 0:00	85	463839833.6	10
7/13/2019 4:00	85	463859957.4	11
7/13/2019 8:00	85	463880079.7	9
7/13/2019 12:00	85	463900203.5	10
7/13/2019 16:00	85	463920327.2	8
7/13/2019 20:00	85	463940449.5	13
7/14/2019 0:00	85	463960573.3	12
7/14/2019 4:00	85	463980697	6
7/14/2019 8:00	85	464000819.4	9
7/14/2019 12:00	85	464020943.1	11

Stanton Cleaners Groundwater Contamination Site - July 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
7/14/2019 16:00	85	464041066.9	10
7/14/2019 20:00	85	464061189.2	8
7/15/2019 0:00	85	464081313	11
7/15/2019 4:00	85	464101436.7	12
7/15/2019 8:00	85	464121559.1	11
7/15/2019 12:00	85	464141682.8	7
7/15/2019 16:00	85	464161806.6	9
7/15/2019 20:00	85	464181928.9	10
7/16/2019 0:00	85	464202052.6	7
7/16/2019 4:00	85	464222176.4	8
7/16/2019 8:00	85	464242298.7	11
7/16/2019 12:00	85	464262422.5	11
7/16/2019 16:00	85	464282546.2	10
7/16/2019 20:00	85	464302668.6	11
7/17/2019 0:00	85	464322792.3	11
7/17/2019 4:00	85	464342916.1	8
7/17/2019 8:00	85	464363038.4	11
7/17/2019 12:00	85	464383162.1	11
7/17/2019 16:00	85	464403285.9	11
7/17/2019 20:00	85	464423408.2	9
7/18/2019 0:00	85	464443532	11
7/18/2019 4:00	85	464463654.3	11
7/18/2019 8:00	85	464483778.1	12
7/18/2019 12:00	85	464503901.8	10
7/18/2019 16:00	85	464524024.1	12
7/18/2019 20:00	85	464544147.9	12
7/19/2019 0:00	85	464564271.6	10
7/19/2019 4:00	85	464584394	10
7/19/2019 8:00	85	464604517.7	11
7/19/2019 12:00	85	464624641.5	12
7/19/2019 16:00	85	464644763.8	8
7/19/2019 20:00	85	464664887.6	12
7/20/2019 0:00	85	464685011.3	7
7/20/2019 4:00	85	464705133.6	9
7/20/2019 8:00	85	464725257.4	10
7/20/2019 12:00	85	464745381.1	10
7/20/2019 16:00	85	464765503.5	12
7/20/2019 20:00	85	464785627.2	11
7/21/2019 0:00	85	464805751	11
7/21/2019 4:00	85	464825873.3	11
7/21/2019 8:00	85	464845997.1	11

Stanton Cleaners Groundwater Contamination Site - July 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
7/21/2019 12:00	85	464866120.8	7
7/21/2019 16:00	85	464886243.1	7
7/21/2019 20:00	85	464906366.9	11
7/22/2019 0:00	85	464926490.6	10
7/22/2019 4:00	85	464946613	9
7/22/2019 8:00	85	464966736.7	11
7/22/2019 12:00	85	464986860.5	7
7/22/2019 16:00	85	465006982.8	10
7/22/2019 20:00	85	465027106.6	10
7/23/2019 0:00	85	465047230.3	11
7/23/2019 4:00	85	465067352.6	12
7/23/2019 8:00	85	465087476.4	7
7/23/2019 12:00	85	465107598.7	12
7/23/2019 16:00	85	465127722.5	12
7/23/2019 20:00	85	465147846.2	8
7/24/2019 0:00	85	465167968.6	11
7/24/2019 4:00	85	465188092.3	11
7/24/2019 8:00	85	465208216.1	11
7/24/2019 12:00	85	465228338.4	12
7/24/2019 16:00	85	465248462.1	10
7/24/2019 20:00	85	465268585.9	10
7/25/2019 0:00	85	465288708.2	7
7/25/2019 4:00	85	465308832	7
7/25/2019 8:00	85	465328955.7	11
7/25/2019 12:00	85	465349078.1	12
7/25/2019 16:00	85	465369201.8	11
7/25/2019 20:00	85	465389325.6	11
7/26/2019 0:00	85	465409447.9	11
7/26/2019 4:00	85	465429571.7	8
7/26/2019 8:00	85	465449695.4	11
7/26/2019 12:00	85	465469817.7	10
7/26/2019 16:00	85	465489941.5	11
7/26/2019 20:00	85	465510065.2	8
7/27/2019 0:00	85	465530187.6	12
7/27/2019 4:00	85	465550311.3	9
7/27/2019 8:00	166	465582040.6	12
7/27/2019 12:00	85	465605563.3	8
7/27/2019 16:00	85	465625687.1	12
7/27/2019 20:00	85	465645810.8	12
7/28/2019 0:00	85	465665933.1	11
7/28/2019 4:00	85	465686056.9	7

Stanton Cleaners Groundwater Contamination Site - July 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
7/28/2019 8:00	85	465706178.6	9
7/28/2019 12:00	85	465726302.3	8
7/28/2019 16:00	85	465746426.1	7
7/28/2019 20:00	85	465766548.4	12
7/29/2019 0:00	85	465786672.1	12
7/29/2019 4:00	85	465806795.9	10
7/29/2019 8:00	85	465826918.2	11
7/29/2019 12:00	85	465847042	11
7/29/2019 16:00	85	465867165.7	8
7/29/2019 20:00	85	465887288.1	6
7/30/2019 0:00	85	465907411.8	11
7/30/2019 4:00	85	465927535.6	11
7/30/2019 8:00	85	465947657.9	8
7/30/2019 12:00	85	465967781.6	12
7/30/2019 16:00	85	465987905.4	10
7/30/2019 20:00	85	466008027.7	9
7/31/2019 0:00	85	466028151.5	12
7/31/2019 4:00	85	466048275.2	11
7/31/2019 8:00	85	466068397.6	11
7/31/2019 12:00	85	466088521.3	10
7/31/2019 16:00	85	466108645.1	12
7/31/2019 20:00	85	466128767.4	11

Stanton Cleaners Groundwater Contamination Site - August 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
8/1/2019 0:00	85	466148891.1	10
8/1/2019 4:00	85	466169014.9	7
8/1/2019 8:00	85	466189137.2	11
8/1/2019 12:00	85	466209261	11
8/1/2019 16:00	85	466229383.3	11
8/1/2019 20:00	85	466249507.1	8
8/2/2019 0:00	85	466269630.8	11
8/2/2019 4:00	85	466289753.1	10
8/2/2019 8:00	85	466309876.9	12
8/2/2019 12:00	85	466330000.6	11
8/2/2019 16:00	85	466350123	12
8/2/2019 20:00	85	466370246.7	12
8/3/2019 0:00	85	466390370.5	10
8/3/2019 4:00	85	466410492.8	8
8/3/2019 8:00	85	466430616.6	12
8/3/2019 12:00	85	466450740.3	8
8/3/2019 16:00	85	466470862.6	11
8/3/2019 20:00	85	466490986.4	10
8/4/2019 0:00	85	466511110.1	11
8/4/2019 4:00	85	466531232.5	7
8/4/2019 8:00	85	466551356.2	11
8/4/2019 12:00	85	466571480	11
8/4/2019 16:00	85	466591602.3	12
8/4/2019 20:00	85	466611726.1	9
8/5/2019 0:00	85	466631849.8	11
8/5/2019 4:00	85	466651972.2	12
8/5/2019 8:00	85	466672095.9	11
8/5/2019 12:00	85	466692219.7	10
8/5/2019 16:00	85	466712342	12
8/5/2019 20:00	85	466732465.7	9
8/6/2019 0:00	85	466752589.5	11
8/6/2019 4:00	85	466772711.8	11
8/6/2019 8:00	85	466792835.6	13
8/6/2019 12:00	85	466812959.3	8
8/6/2019 16:00	85	466833081.7	9
8/6/2019 20:00	85	466853205.4	10
8/7/2019 0:00	85	466873329.2	11
8/7/2019 4:00	85	466893451.5	11
8/7/2019 8:00	85	466913575.2	11
8/7/2019 12:00	85	466933697.6	11
8/7/2019 16:00	85	466953821.3	12

Stanton Cleaners Groundwater Contamination Site - August 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
8/7/2019 20:00	85	466973945.1	11
8/8/2019 0:00	85	466994067.4	11
8/8/2019 4:00	85	467014191.2	12
8/8/2019 8:00	85	467034314.9	7
8/8/2019 12:00	166	467059046.8	9
8/8/2019 16:00	166	467098347.3	11
8/8/2019 20:00	166	467137647.8	10
8/9/2019 0:00	85	467169935.3	12
8/9/2019 4:00	85	467190059.1	11
8/9/2019 8:00	85	467210182.8	11
8/9/2019 12:00	85	467230305.1	9
8/9/2019 16:00	166	467265539.3	11
8/9/2019 20:00	166	467304839.8	12
8/10/2019 0:00	85	467328903.7	8
8/10/2019 4:00	85	467349027.4	12
8/10/2019 8:00	85	467369151.2	12
8/10/2019 12:00	166	467395603.7	10
8/10/2019 16:00	166	467434904.2	11
8/10/2019 20:00	166	467474204.7	12
8/11/2019 0:00	85	467497613.2	8
8/11/2019 4:00	85	467517736.9	11
8/11/2019 8:00	166	467539986	8
8/11/2019 12:00	166	467579283.8	11
8/11/2019 16:00	166	467618584.3	12
8/11/2019 20:00	166	467657884.8	11
8/12/2019 0:00	85	467678192	9
8/12/2019 4:00	85	467698315.8	12
8/12/2019 8:00	166	467721211	7
8/12/2019 12:00	166	467760508.8	11
8/12/2019 16:00	166	467799809.3	12
8/12/2019 20:00	85	467823951.8	11
8/13/2019 0:00	85	467844074.2	8
8/13/2019 4:00	85	467864197.9	11
8/13/2019 8:00	166	467887237.1	12
8/13/2019 12:00	166	467926537.6	11
8/13/2019 16:00	85	467962587.3	11
8/13/2019 20:00	85	467982709.7	10
8/14/2019 0:00	85	468002833.4	12
8/14/2019 4:00	85	468022957.2	11
8/14/2019 8:00	166	468043431.6	12
8/14/2019 12:00	166	468082732.1	8

Stanton Cleaners Groundwater Contamination Site - August 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
8/14/2019 16:00	85	468113457	12
8/14/2019 20:00	85	468133579.3	8
8/15/2019 0:00	85	468153703.1	11
8/15/2019 4:00	85	468173826.8	11
8/15/2019 8:00	85	468193949.2	11
8/15/2019 12:00	85	468214072.9	8
8/15/2019 16:00	85	468234196.7	11
8/15/2019 20:00	85	468254319	10
8/16/2019 0:00	85	468274442.7	12
8/16/2019 4:00	85	468294566.5	11
8/16/2019 8:00	166	468324628.1	11
8/16/2019 12:00	166	468363928.6	11
8/16/2019 16:00	85	468386070.1	11
8/16/2019 20:00	85	468406192.4	10
8/17/2019 0:00	85	468426316.2	7
8/17/2019 4:00	21	468445513.9	12
8/17/2019 8:00	166	468484410.4	8
8/17/2019 12:00	42	468519912.9	11
8/17/2019 16:00	85	468538091.2	12
8/17/2019 20:00	85	468558213.5	10
8/18/2019 0:00	85	468578337.2	12
8/18/2019 4:00	166	468597466.8	10
8/18/2019 8:00	166	468636764.5	12
8/18/2019 12:00	85	468665454.6	11
8/18/2019 16:00	85	468685577	12
8/18/2019 20:00	85	468705700.7	11
8/19/2019 0:00	85	468725824.5	11
8/19/2019 4:00	85	468745946.8	12
8/19/2019 8:00	85	468766070.6	10
8/19/2019 12:00	85	468786194.3	11
8/19/2019 16:00	85	468806316.6	11
8/19/2019 20:00	85	468826440.4	7
8/20/2019 0:00	85	468846564.1	8
8/20/2019 4:00	85	468866686.5	11
8/20/2019 8:00	85	468880309	8
8/20/2019 12:00	85	468900432.7	11
8/20/2019 16:00	85	468920555.1	7
8/20/2019 20:00	166	468940774	9
8/21/2019 0:00	166	468980074.5	9
8/21/2019 4:00	166	469019372.2	11
8/21/2019 8:00	166	469058672.7	12

Stanton Cleaners Groundwater Contamination Site - August 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
8/21/2019 12:00	166	469097973.2	12
8/21/2019 16:00	166	469137271	10
8/21/2019 20:00	166	469176571.5	12
8/22/2019 0:00	166	469215872	11
8/22/2019 4:00	166	469255169.7	9
8/22/2019 8:00	166	469294470.2	10
8/22/2019 12:00	85	469329006.6	8
8/22/2019 16:00	166	469353125.1	10
8/22/2019 20:00	166	469392425.6	12
8/23/2019 0:00	166	469431726.1	11
8/23/2019 4:00	166	469471023.8	10
8/23/2019 8:00	166	469510324.3	12
8/23/2019 12:00	85	469532672.8	12
8/23/2019 16:00	85	469552795.2	7
8/23/2019 20:00	166	469583671.5	11
8/24/2019 0:00	166	469622969.2	10
8/24/2019 4:00	166	469662269.7	12
8/24/2019 8:00	85	469689364.7	10
8/24/2019 12:00	85	469709487	8
8/24/2019 16:00	85	469729610.8	10
8/24/2019 20:00	166	469764509.9	10
8/25/2019 0:00	166	469803807.7	12
8/25/2019 4:00	166	469843108.2	10
8/25/2019 8:00	85	469874221	10
8/25/2019 12:00	85	469894343.4	12
8/25/2019 16:00	85	469914467.1	12
8/25/2019 20:00	166	469949224.3	12
8/26/2019 0:00	166	469988522	12
8/26/2019 4:00	85	470016108.7	12
8/26/2019 8:00	85	470036232.5	12
8/26/2019 12:00	85	470056354.8	8
8/26/2019 16:00	85	470076478.6	10
8/26/2019 20:00	85	470096602.3	12
8/27/2019 0:00	85	470116724.7	12
8/27/2019 4:00	85	470136848.4	11
8/27/2019 8:00	85	470156972.2	12
8/27/2019 12:00	85	470177094.5	11
8/27/2019 16:00	166	470208654.2	11
8/27/2019 20:00	166	470247954.7	12
8/28/2019 0:00	166	470287252.4	11
8/28/2019 4:00	166	470326552.9	11

Stanton Cleaners Groundwater Contamination Site - August 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
8/28/2019 8:00	166	470365853.4	12
8/28/2019 12:00	166	470405151.1	8
8/28/2019 16:00	166	470444451.6	11
8/28/2019 20:00	166	470483752.1	10
8/29/2019 0:00	166	470523049.9	12
8/29/2019 4:00	166	470562350.4	12
8/29/2019 8:00	166	470601650.9	11
8/29/2019 12:00	166	470640948.6	10
8/29/2019 16:00	166	470680249.1	11
8/29/2019 20:00	166	470719546.8	11
8/30/2019 0:00	53	470757915.7	11
8/30/2019 4:00	85	470777989.6	11
8/30/2019 8:00	85	470798112	11
8/30/2019 12:00	166	470820660.5	10
8/30/2019 16:00	166	470859961	11
8/30/2019 20:00	166	470899258.8	9
8/31/2019 0:00	166	470938559.3	11
8/31/2019 4:00	85	470958328.9	12
8/31/2019 8:00	166	470989675.7	11
8/31/2019 12:00	166	471028976.2	10
8/31/2019 16:00	166	471068276.7	8
8/31/2019 20:00	166	471107574.5	12

Stanton Cleaners Groundwater Contamination Site - September 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
9/1/2019 0:00	9	471146823.2	11
9/1/2019 4:00	85	471166547.1	11
9/1/2019 8:00	166	471203780.3	9
9/1/2019 12:00	166	471243080.8	10
9/1/2019 16:00	166	471282381.3	10
9/1/2019 20:00	166	471321679	12
9/2/2019 0:00	166	471360979.5	12
9/2/2019 4:00	166	471400280	8
9/2/2019 8:00	166	471439577.7	8
9/2/2019 12:00	166	471478878.2	9
9/2/2019 16:00	166	471518178.7	9
9/2/2019 20:00	166	471557476.5	12
9/3/2019 0:00	166	471596777	12
9/3/2019 4:00	166	471636077.5	11
9/3/2019 8:00	166	471675375.2	11
9/3/2019 12:00	166	471714675.7	11
9/3/2019 16:00	166	471753973.4	11
9/3/2019 20:00	166	471793273.9	10
9/4/2019 0:00	40	471823893.7	12
9/4/2019 4:00	166	471861562	9
9/4/2019 8:00	166	471900862.5	11
9/4/2019 12:00	166	471940163	11
9/4/2019 16:00	166	471979460.8	11
9/4/2019 20:00	85	472013191.2	12
9/5/2019 0:00	85	472033314.9	8
9/5/2019 4:00	166	472057163	12
9/5/2019 8:00	166	472096463.5	11
9/5/2019 12:00	166	472135764	11
9/5/2019 16:00	166	472175061.7	11
9/5/2019 20:00	85	472197417.9	8
9/6/2019 0:00	85	472217541.7	12
9/6/2019 4:00	85	472237664	10
9/6/2019 8:00	166	472266982.3	9
9/6/2019 12:00	166	472306280.1	12
9/6/2019 16:00	85	472332440.7	12
9/6/2019 20:00	85	472352564.5	11
9/7/2019 0:00	85	472372686.8	8
9/7/2019 4:00	85	472392810.6	11
9/7/2019 8:00	85	472412934.3	11
9/7/2019 12:00	85	472427888.8	11
9/7/2019 16:00	85	472448012.5	8

Stanton Cleaners Groundwater Contamination Site - September 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
9/7/2019 20:00	85	472468136.3	8
9/8/2019 0:00	166	472489170.5	12
9/8/2019 4:00	166	472528471	11
9/8/2019 8:00	166	472567771.5	12
9/8/2019 12:00	166	472607069.2	11
9/8/2019 16:00	85	472638780.6	11
9/8/2019 20:00	85	472658904.3	12
9/9/2019 0:00	166	472681723	12
9/9/2019 4:00	166	472721023.5	11
9/9/2019 8:00	166	472760324	12
9/9/2019 12:00	166	472799621.8	11
9/9/2019 16:00	85	472821427	10
9/9/2019 20:00	166	472845988.5	12
9/10/2019 0:00	166	472885286.3	12
9/10/2019 4:00	166	472924586.8	12
9/10/2019 8:00	166	472963884.5	9
9/10/2019 12:00	166	473003185	12
9/10/2019 16:00	85	473029116.4	11
9/10/2019 20:00	166	473059177.1	11
9/11/2019 0:00	166	473098477.6	10
9/11/2019 4:00	166	473137778.1	10
9/11/2019 8:00	166	473177075.8	11
9/11/2019 12:00	85	473210549.2	11
9/11/2019 16:00	85	473230672.9	11
9/11/2019 20:00	85	473250795.2	12
9/12/2019 0:00	166	473270021.5	12
9/12/2019 4:00	166	473309322	11
9/12/2019 8:00	21	473348442.2	8
9/12/2019 12:00	85	473368049.9	12
9/12/2019 16:00	85	473388173.7	12
9/12/2019 20:00	166	473408496.5	12
9/13/2019 0:00	166	473447797	11
9/13/2019 4:00	166	473487097.5	9
9/13/2019 8:00	166	473526395.2	12
9/13/2019 12:00	166	473565695.7	11
9/13/2019 16:00	166	473604996.2	11
9/13/2019 20:00	166	473644293.9	8
9/14/2019 0:00	166	473683594.4	12
9/14/2019 4:00	166	473722894.9	12
9/14/2019 8:00	166	473762192.7	8
9/14/2019 12:00	85	473784357.4	9

Stanton Cleaners Groundwater Contamination Site - September 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
9/14/2019 16:00	85	473804481.1	12
9/14/2019 20:00	5	473822664.1	10
9/15/2019 0:00	166	473861887.5	9
9/15/2019 4:00	85	473893912.8	10
9/15/2019 8:00	85	473914035.1	11
9/15/2019 12:00	85	473934158.8	11
9/15/2019 16:00	85	473954282.6	9
9/15/2019 20:00	42	473974292.9	10
9/16/2019 0:00	166	474012683	12
9/16/2019 4:00	166	474051980.7	5
9/16/2019 8:00	166	474091281.2	8
9/16/2019 12:00	166	474130581.7	8
9/16/2019 16:00	166	474169879.5	11
9/16/2019 20:00	166	474209180	11
9/17/2019 0:00	166	474248480.5	11
9/17/2019 4:00	166	474287778.2	7
9/17/2019 8:00	166	474327078.7	11
9/17/2019 12:00	166	474366379.2	11
9/17/2019 16:00	166	474405676.9	7
9/17/2019 20:00	166	474444977.4	7
9/18/2019 0:00	166	474484277.9	7
9/18/2019 4:00	166	474523575.7	10
9/18/2019 8:00	166	474562876.2	11
9/18/2019 12:00	166	474602176.7	11
9/18/2019 16:00	166	474641474.4	10
9/18/2019 20:00	166	474680774.9	11
9/19/2019 0:00	166	474720075.4	10
9/19/2019 4:00	166	474759373.1	11
9/19/2019 8:00	166	474798673.6	12
9/19/2019 12:00	166	474837974.1	11
9/19/2019 16:00	166	474877271.9	11
9/19/2019 20:00	166	474916572.4	11
9/20/2019 0:00	166	474955872.9	10
9/20/2019 4:00	166	474995170.6	9
9/20/2019 8:00	166	475034471.1	11
9/20/2019 12:00	166	475073771.6	7
9/20/2019 16:00	166	475113069.3	12
9/20/2019 20:00	166	475152369.8	11
9/21/2019 0:00	166	475191670.3	11
9/21/2019 4:00	166	475230968.1	11
9/21/2019 8:00	166	475270268.6	12

Stanton Cleaners Groundwater Contamination Site - September 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
9/21/2019 12:00	166	475309566.3	11
9/21/2019 16:00	166	475348866.8	11
9/21/2019 20:00	166	475388167.3	12
9/22/2019 0:00	166	475427465	11
9/22/2019 4:00	166	475466765.5	11
9/22/2019 8:00	166	475506066	11
9/22/2019 12:00	166	475545363.7	11
9/22/2019 16:00	166	475584664.2	10
9/22/2019 20:00	166	475623964.7	11
9/23/2019 0:00	166	475663262.5	12
9/23/2019 4:00	166	475702563	10
9/23/2019 8:00	166	475741863.5	11
9/23/2019 12:00	166	475781161.2	9
9/23/2019 16:00	166	475820461.7	11
9/23/2019 20:00	166	475859762.2	12
9/24/2019 0:00	166	475899059.9	10
9/24/2019 4:00	166	475938360.4	11
9/24/2019 8:00	166	475977660.9	8
9/24/2019 12:00	166	476016958.7	11
9/24/2019 16:00	166	476056259.2	10
9/24/2019 20:00	166	476095559.7	9
9/25/2019 0:00	166	476134857.4	12
9/25/2019 4:00	166	476174157.9	11
9/25/2019 8:00	166	476213458.4	11
9/25/2019 12:00	166	476252756.1	11
9/25/2019 16:00	166	476292056.6	11
9/25/2019 20:00	166	476331357.1	8
9/26/2019 0:00	166	476370654.9	10
9/26/2019 4:00	166	476409955.4	7
9/26/2019 8:00	166	476449255.9	12
9/26/2019 12:00	166	476488553.6	12
9/26/2019 16:00	166	476527854.1	10
9/26/2019 20:00	166	476567154.6	12
9/27/2019 0:00	166	476606452.3	7
9/27/2019 4:00	166	476645752.8	12
9/27/2019 8:00	166	476685050.6	10
9/27/2019 12:00	166	476724351.1	12
9/27/2019 16:00	166	476763651.6	9
9/27/2019 20:00	166	476802949.3	11
9/28/2019 0:00	166	476842249.8	12
9/28/2019 4:00	166	476881550.3	11

Stanton Cleaners Groundwater Contamination Site - September 2019 - Site Operational Data			
Time	Recovery Well 3 Flow (GPM)	Total Gallons Discharged	SVE Air Flow
9/28/2019 8:00	166	476920848	11
9/28/2019 12:00	166	476960148.5	10
9/28/2019 16:00	166	476999449	12
9/28/2019 20:00	166	477038746.8	11
9/29/2019 0:00	166	477078047.3	10
9/29/2019 4:00	166	477117347.8	9
9/29/2019 8:00	166	477156645.5	9
9/29/2019 12:00	166	477195946	8
9/29/2019 16:00	166	477235246.5	11
9/29/2019 20:00	166	477274544.2	8
9/30/2019 0:00	166	477313844.7	10
9/30/2019 4:00	166	477353145.2	9
9/30/2019 8:00	166	477392443	11
9/30/2019 12:00	166	477431743.5	11
9/30/2019 16:00	166	477471044	11
9/30/2019 20:00	166	477510341.7	10

Appendix D

AS System O&M

Reports

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

Date: 7/24/2019

Readings at Well	
Near Well Head	N/A*
Bladder	

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: 9/13/2019

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	16 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: 9/23/2019

Readings at Well	
Near Well Head	N/A*
Bladder	

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: 7/24/2019
Project #

		FID	MultiRAE PGM-6228					VelociCalc Plus				
	Pipe ID	VOC	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
SVE-Influent	**5.709**	N/A	0.3*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
Post- Blower Pre-Carbon*	**5.706**	N/A	0.1*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (shallow)	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (medium)	**1.913**	N/A	0.4*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (shallow)	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (medium)	**1.913**	N/A	0.7*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SS-A	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3A	**1.913**	N/A	0.1*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3B	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-1 Combined	**1.913**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-2 Combined	**1.913**	N/A	0.2*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
Background	**N/A**	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR

Historical Notes:
***SVE-Effluent relabeled as "Post-Blower Pre-Carbon Sampling Location"**

Equipment calibrated by: **Edward Combs**
Air readings collected by: **Edward Combs**

Notes:
***Reading was collected while SVE system was offline**
****Maxed out reading on meter**
NR- No reading collected 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 – July 2019 O&M (7/24/19) – Additional SVE Monitoring

- Collect headspace readings directly on the SVE wells with associated piping valves closed

Well ID	VOC	CO	Oxygen	LEL	H_2S
EPA-SVE-Sparge 1	0.0	0	20.9	0	0
EPA-SVE-Sparge 2	0.2	0	20.9	0	0
EPA-SVE-Sparge 3	Could Not Locate				
EPA-SVE-Sparge 4	0.1	0	20.9	0	0
EPA-SVE-4R	Steel Vault Cover Welded Shut				
EPA-SVE-5	0.0	0	20.9	0	0
EPA-SVE-6	Could Not Locate				

- Collect headspace readings on Sub-Slab Ports

Well ID	DTW (ft)	Total Depth (ft)	VOC	CO	Oxygen	LEL	H_2S
SS-A	8.54	16.30	0.0	0	20.9	0	0
SS-B	Could Not Measure		0.2	0	20.9	0	0
SS-C	N/A	2.8	0.0	0	20.9	0	0
SS-D *	Could Not Measure		0.0	0	20.9	0	0

*The Fernco connection of SS-D was found to be disconnected again, likely from the piping being distorted by tree growth along the side of the building. This was reconnected, although this tree will need to be removed to prevent further incidence of the Fernco connection becoming disconnected.

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

Date: 9/13/2019
Project #

		FID	MultiRAE PGM-6228					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*	NR	NR	NR	NR	NR
Post- Blower Pre-Carbon**	5.706	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (shallow)	1.913	N/A	0.1*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-1 (medium)	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (shallow)	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
EPA-SVE-2 (medium)	1.913	N/A	0.3*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SS-A	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3A	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-3B	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-1 Combined	1.913	N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
SVE-2 Combined	1.913	N/A	0.8*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR
Background		N/A	0.0*	0.0*	20.9*	0.0*	0.0*	NR	NR	NR	NR	NR

Notes:
MultiRAE PGM-6228 (5-gas meter) readings taken with SVE Offline
No VelociCalc Plus readings taken as SVE remains offline

Equipment calibrated by: **Edward Combs**
Air readings collected by: **Edward Combs**

Notes:
***Indicates Reading was Collected while the SVE System was Offline**
****SVE-Effluent relabeled as "Post-Blower Pre-Carbon" Sampling Location**
*****Maxed out reading on meter**
NR- Indicates No Reading Was Collected
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 – August 2019 O&M (9/13/19) – Additional SVE Monitoring

- Collect headspace readings directly on the SVE wells with associated piping valves closed

Well ID	VOC	CO	Oxygen	LEL	H_2S
EPA-SVE-Sparge 1	0.0	0	20.9	0	0
EPA-SVE-Sparge 2	0.1	0	20.9	0	0
EPA-SVE-Sparge 3	Could Not Locate				
EPA-SVE-Sparge 4	0.1	0	20.9	0	0
EPA-SVE-4R	Steel Vault Cover Welded Shut				
EPA-SVE-5	0.0	0	20.9	0	0
EPA-SVE-6	Could Not Locate				

- Collect headspace readings on Sub-Slab Ports

Well ID	DTW (ft)	Total Depth (ft)	VOC	CO	Oxygen	LEL	H_2S
SS-A	8.56	16.30	0.0	0	20.9	0	0
SS-B	Could Not Measure		0.2	0	20.9	0	0
SS-C	N/A	2.8	0.0	0	20.9	0	0
SS-D *	Could Not Measure		0.0	0	20.9	0	0

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

Date: 9/23/19

		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	20.9%	0	0					
Post-Blower Pre-Carbon	**5.706**	N/A	0.4	0	20.9%	0	0					
EPA-SVE-1 (shallow)	**1.913**	N/A	0.2	0	20.9%	0	0					
EPA-SVE-1 (medium)	**1.913**	N/A	0.1	0	20.9%	0	0					
EPA-SVE-2 (shallow)	**1.913**	N/A	0.0	0	20.9%	0	0					
EPA-SVE-2 (medium)	**1.913**	N/A	0.6	0	20.9%	0	0					
SS-A	**1.913**	N/A	0.2	0	20.9%	0	0					
SVE-3A	**1.913**	N/A	N/A	N/A	N/A	N/A	N/A					
SVE-3B	**1.913**	N/A	N/A	N/A	N/A	N/A	N/A					
SVE-1 Combined	**1.913**	N/A	0.7	0	20.9%	0	0					
SVE-2 Combined	**1.913**	N/A	1.8	0	20.9%	0	0					
Background		N/A	0.0	0	20.9%	0	0					

*** Formerly SVE-Effluent**

Stanton Cleaners – September 2019 O&M (9/23/19) – Additional SVE Monitoring

- Collect headspace readings directly on the SVE wells with associated piping valves closed

Well ID	VOC	CO	Oxygen	LEL	H_2S
EPA-SVE-Sparge 1	0.0	0	20.9	0	0
EPA-SVE-Sparge 2	0.2	0	20.9	0	0
EPA-SVE-Sparge 3	Could Not Locate				
EPA-SVE-Sparge 4	0.1	0	20.9	0	0
EPA-SVE-4R	Steel Vault Cover Welded Shut				
EPA-SVE-5	0.0	0	20.9	0	0
EPA-SVE-6	Could Not Locate				

- Collect headspace readings on Sub-Slab Ports

Well ID	DTW (ft)	Total Depth (ft)	VOC	CO	Oxygen	LEL	H_2S
SS-A	8.48	16.30	0.0	0	20.9	0	0
SS-B	Could Not Measure		0.2	0	20.9	0	0
SS-C	N/A	2.8	0.0	0	20.9	0	0
SS-D *	Could Not Measure		0.0	0	20.9	0	0

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: 7/29/2019
MEASURED BY: EC

WELL NUMBER	MEASURING POINT		Time	DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)				
EPA-MW-11D	ft BTOC	74.63	9:51	54.70	19.93	4" well in p-lot by med sports bldg.
EPA-MW-21-R	ft BTOC	84.13	10:08	65.20	18.93	Getty Gas Station well
EPA-MW-22	ft BTOC	82.20	N/A	N/A	N/A	Under clothing bin- SC p-lot
EPA-MW-23	ft BTOC	82.83	10:20	63.44	19.39	In front of treatment bldg.
EPA-MW-27	ft BTOC	69.32	10:01	47.85	21.47	LIHA PL
ST-MW-06	ft BTOC	69.83	10:09	42.45	27.38	LIHA PL 4"
ST-MW-09A	ft BTOC	78.13	9:55	63.89	14.24	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	9:48	57.82	17.43	p-lot by entrance to med sports bldg.
ST-MW-12	ft BTOC	87.20	9:39	69.11	18.09	In front of apartment bldg.
ST-MW-14	ft BTOC	69.73	10:05	52.12	17.61	LIHA PL
ST-MW-16	ft BTOC	75.78	10:14	50.85	24.93	Other side treatment bldg. near fence
ST-MW-17	ft BTOC	86.53	9:43	68.82	17.71	In front of apartment bldg.
ST-MW-19	ft BTOC	82.50	9:58	64.20	18.30	Triangle park well
ST-MW-20	ft BTOC	84.53	9:45	68.33	16.20	Near apartment bldg.
EPA-MW-26	ft BTOC	78.37	9:20	56.62	21.75	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	9:30	70.53	19.60	Mirreless Rd
ST-MW-13	ft BTOC	130.95	9:24	83.61	47.34	Amherst Rd
ST-MW-18	ft BTOC	84.40	9:36	68.93	15.47	Ascot Ridge (past apt bldg)

Notes:

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: 9/13/2019
MEASURED BY: EC

WELL NUMBER	MEASURING POINT		Time	DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)				
EPA-MW-11D	ft BTOC	74.63	12:31	50.68	23.95	4" well in p-lot by med sports bldg.
EPA-MW-21-R	ft BTOC	84.13	12:56	63.81	20.32	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	13:10	62.00	20.83	In front of treatment bldg.
EPA-MW-27	ft BTOC	69.32	12:42	49.01	20.31	LIHA PL
ST-MW-06	ft BTOC	69.83	13:15	43.38	26.45	LIHA PL 4"
ST-MW-09A	ft BTOC	78.13	12:38	60.94	17.19	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	12:28	57.19	18.06	p-lot by entrance to med sports bldg.
ST-MW-12	ft BTOC	87.20	12:10	68.53	18.67	In front of apartment bldg.
ST-MW-14	ft BTOC	69.73	12:45	53.79	15.94	LIHA PL
ST-MW-16	ft BTOC	75.78	13:05	52.32	23.46	Other side treatment bldg. near fence
ST-MW-17	ft BTOC	86.53	12:15	68.02	18.51	In front of apartment bldg.
ST-MW-19	ft BTOC	82.50	12:23	62.95	19.55	Triangle park well
ST-MW-20	ft BTOC	84.53	12:18	69.59	14.94	Near apartment bldg.
EPA-MW-26	ft BTOC	78.37	11:42	57.07	N/A	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	11:57	70.88	N/A	Mirreless Rd
ST-MW-13	ft BTOC	130.95	11:52	83.98	46.97	Amherst Rd
ST-MW-18	ft BTOC	84.40	12:05	70.03	14.37	Ascot Ridge (past apt bldg)

Notes:

WATER LEVEL DATA SUMMARY

PROJECT:	Stanton Cleaners	**JOB NUMBER:**	
LOCATION:	Great Neck, NY	**DATE:**	9/23/2019
CLIENT:	HDR	**MEASURED BY:**	MO
SURVEY DATUM:	ft msl		
MEASURING DEVICE:	Solinst Water Level Indicator		

WELL NUMBER	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
EPA-MW-11D	ft BTOC	74.63	53.14	74.63	4" well in p-lot by med sports bldg
EPA-MW-21-R	ft BTOC	84.13	62.55	N/A	Getty Gas Station well
EPA-MW-22	ft BTOC	82.20	N/A	N/A	Under clothing bin- SC p-lot
EPA-MW-23	ft BTOC	82.83	62.98	82.83	In front of treatment bldg
EPA-MW-27	ft BTOC	69.32	48.75	69.32	LIHA PL
ST-MW-06	ft BTOC	69.83	45.76	N/A	LIHA PL 4"
ST-MW-09A	ft BTOC	78.13	66.02	78.13	P-lot across from triangle park
ST-MW-11	ft BTOC	75.25	56.42	75.25	p-lot by entrance to med sports bldg
ST-MW-12	ft BTOC	87.20	68.72	87.20	In front of apartment bldg
ST-MW-14	ft BTOC	69.73	52.33	69.73	LIHA PL
ST-MW-16	ft BTOC	75.78	51.10	75.78	Other side treatment bldg near fence
ST-MW-17	ft BTOC	86.53	67.15	86.53	In front of apartment bldg
ST-MW-19	ft BTOC	82.50	64.42	82.50	Triangle park well
ST-MW-20	ft BTOC	84.53	68.79	84.53	Near apartment bldg
EPA-MW-26	ft BTOC	78.37	57.14	N/A	Ipswich Ave.
ST-MW-15	ft BTOC	90.13	69.31	N/A	Mirreless Rd
ST-MW-13	ft BTOC	130.95	83.82	130.95	Amherst Rd
ST-MW-18	ft BTOC	84.40	66.29	84.40	Ascot Ridge

Notes: WAGGN wells pumping:

Appendix G

Groundwater Sampling Parameters Logs

Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York
Semi-Annual Monitoring Well Sampling Event Report November 2018

MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level	Flow Rate	Sample Time
ST- MW 12 Acot APT	7/24	1550		5.73	1.284	20.7	545	9.66	185.1	281			
	1555	1600		5.72	1.283	20.5	334	9.66	183.7	275			
	1600	1605		5.71	1.282	20.4	218.3	9.61	185.5	273			
	1605	1610		5.72	1.280	20.0	200.0	9.65	184.5	264			
	1610	1615		5.73	1.214	19.7	54.2	9.64	187.2	190			
	1615	1620		5.74	1.214	19.6	48.1	9.67	186.2	154			
	1620	1625		5.71	1.213	19.5	33.0	9.66	183.1	95			
	1625	1630		5.70	1.212	19.6	29.1	9.60	183.7	74			
	1630			5.70	1.212	19.6	29.0	9.68	183.1	77			
											6.19		
ST- MW 13 Amhurst	NO												
ST- MW 14 LIRA	NO												
ST- MW 15 Microbag	7/25	1135		6.05	.520	19.1	3.24	7.43	180.2	377			
		1140		6.15	.538	19.1	3.55	7.01	170.8	362			
		1145		6.14	.550	18.8	3.93	6.96	170.5	380			
		1150		6.32	.585	19.1	10.14	6.50	165.9	379			
		1155		6.40	.9591	17.9	17.80	6.36	160.8	381			
		1200		6.41	.590	17.9	22.31	6.32	156.1	380			
		1205		6.83	.591	17.8	23.05	6.31	155.9	360			
		1210		6.82	.593	17.9	23.20	6.31	155.2	381			

Notes:

All water quality readings taken using a U-52 HORIBA water quality meter attached to a flow through cell. Readings taken initially and every five minutes during low flow pumping

Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York
Semi-Annual Monitoring Well Sampling Event Report November 2018

139.60 – 500' roll

MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level	Flow Rate	Sample Time
ST- MW 16 Next Door	NO												
ST- MW 17 Astro Apt	NO												
ST- MW 18 Ascot Down Back	7/25	1030		7.01	.150	17.1	62.1	8.25	168.2	100			
		1035		7.00	.155	16.0	41.3	7.92	166.3	98			
		1040		6.82	.160	15.8	12.2	7.90	150.2	92			
		1045		6.81	.161	15.7	8.10	7.89	147.1	95			
		1050		6.80	.161	15.5	1.66	7.89	147.0	92			
		1055		6.80	.160	15.5	1.51	7.88	147.5	92			
		1100		6.79	.160	155	1.51	7.88	147.6	92			
											16.23		
ST- MW 19 T. Park	7/25	935		6.39	.141	16.1	8.3	148.2		98			
		940		6.42	.143	16.0	4.2			95			
		945		6.38	.142	15.9	3.8	7.93	148.3	96			
		950		6.38	.141	15.8	1.97	7.92	149.4	92			
		955		6.38	.141	15.8	1.95	7.91	148.6	92			
		1000		6.37	.141	15.7	1.70	7.90	150.1	92			
		1005		6.37	.141	15.6	1.72	7.89	150.1	92			
											03.81		

DO ORP
8.10 158.1
7.93 148.0

10:08|10 Start

Notes:

All water quality readings taken using a U-52 HORIBA water quality meter attached to a flow through cell. Readings taken initially and every five minutes during low flow pumping

Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York
Semi-Annual Monitoring Well Sampling Event Report November 2018

Field Analysis													
MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level	Flow Rate	Sample Time
EPA-CL-4S	NM												
EPA-CL-4D	7/26	1040		6.30	.227	14.7	3.51	5.99	136.2	147			
		1045		5.94	.226	14.7	3.11	5.92	135.0	147			
		1050		5.90	.226	14.6	2.62	5.89	132.1	147			
		1055		5.87	.226	14.7	2.29	5.86	127.0	147			
		1100		5.86	.226	14.5	2.14	5.87	124.8	147			
		1105		5.86	.227	14.6	2.20	5.87	122.9	147			
											15.15		
EPA-MW 11 D	NM												
EPA- MW 26	7/25	1325		6.19	.516	19.2	2.36	7.48	170.4	378			
		1330		6.17	.513	18.8	2.56	7.42	170.7	378			
		1335		6.12	.505	18.3	3.40	7.26	170.3	377			
		1340		6.12	.535	17.6	15.2	7.03	170.0	376			
		1345		6.89	.568	17.4	19.0	6.95	153.2	377			
		1350		6.92	.570	17.7	19.2	6.90	155.2	377			
		1355		6.90	.577	17.7	20.21	6.88	156.1	375			
		1400		6.89	.577	17.7	20.20	6.86	156.0	375			

Notes:

Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York
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MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level	Flow Rate	Sample Time
EPA MW 23 Building	T/24	1000		6.50	.735	19.5	12.80	5.31	203.1	320	61.2		
		1005		6.48	.240	19.2	11.00	5.30	204.2	325			
		1010		6.50	.241	19.3	10.65	5.25	204.0	319			
		1015		6.51	0.240	19.2	10.1	5.20	202.1	295			
		1020		6.50	0.255	19.0	9.7	5.24	201.4	294			
		1025		6.34	0.349	18.8	9.7	5.01	197.8	296			
		1030		6.25	0.481	19.1	9.6	4.96	195.7	295			
		1035		6.22	0.709	19.1	9.9	5.02	190.3	282			
		1040		6.25	.717	19.2	12.7	5.19	182.1	284			
		1045		6.27	.765	19.6	13.0	5.18	180.2	281			
ST- MW 20 Access VAULT	NO												
EPA- MW 27 CHA	NO												

Notes:

All water quality readings taken using a U-52 HORIBA water quality meter attached to a flow through cell. Readings taken initially and every five minutes during low flow pumping

Water levels taken using a Solinst water level meter (Model 101)

Flow rate taken using a marked graduated beaker and stop watch. Volume purged represents gallons.

Temperature is measured in degrees Celsius

Conductivity is measured in milliSiemens per centimeter (mS/cm)

Turbidity is measured in nephelometric turbidity units (NTU). 1000* = Turbidity greater than 1000 NTU.

Dissolved Oxygen (DO) is measured in milligrams per liter (mg/L)

Oxidation Reduction Potential (ORP)

Total Dissolved Solids (TDS) is measured in grams per liter (g/L)

Stanton Cleaners Area Groundwater Contamination Site
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MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level x	Flow Rate x	Sample Time
ST- MW 12													
ST- MW 13		245 250 255 300 305		6.67 8.75 8.77 6.79 6.85	1.230 1.177 1.110 1.110 1.115	8.0.2 25.2 25.3 23.9 23.7	146.7 198.9 199.9 [illegible]1.5	7.91 9.04 9.03 9.28 9.29	125.4 132.1 141.2 145.7 148.5	801 750 750 726 730	83.2		
ST- MW 14	7/24	135 140 145 150 155 200 210		8.26 8.30 8.33 8.18 8.04 8.08 7.98	.431 .419 .412 .408 .410 .411 .411	24.0 22.3 26.0 25.4 25.3 25.1 26.2	17.58 13.79 17.30 17.15 22.09 26.97 27.11	8.63 8.23 8.18 8.33 8.13 8.06 8.05	50.4 62.3 69.9 74.2 74.8 76.6 77.0	140 145 145 144 144 142 143	50.45		
ST- MW 15													

Notes:

All water quality readings taken using a U-52 HORIBA water quality meter attached to a flow through cell. Readings taken initially and every five minutes during low flow pumping

Stanton Cleaners Area Groundwater Contamination Site
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MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level	Flow Rate	Sample Time
St-MW 17 ~~ST-MW18~~	7/24	405		7.60	0.176	24.0	16.0	8.85	140.7	109			
		410		7.29	.170	22.2	24.8	9.77	141.6	110			
		415		7.03	0.174	20.6	33.8	8.43	146.6	110			
		420		6.92	0.178	19.7	39.2	7.55	153.0	111			
		425		6.87	0.179	19.8	40.8	7.45	158.0	110			
		430		6.87	0.180	19.5	42.8	7.40	154	110			
		435		6.85	0.180	19.3	44.9	7.41	153.7	111			
St-MW 16 ~~ST-MW17~~		855		6.26	.287	18.7	44.0	6.49	207.4	132			
		900		5.77	.493	17.5	25.2	7.70	226.9	191			
		905		5.69	.560	17.3	12.3	8.53	231.1	77			
		910		5.76	.586	17.1	14.3	8.72	231.5	74			
		915		5.86	.604	17.1	14.0	8.74	229.5	71			
		920		5.85	.621	17.2	11.9	8.75	229.4	72	51.1		
ST- MW 18													
ST- MW 19													

Notes:

All water quality readings taken using a U-52 HORIBA water quality meter attached to a flow through cell. Readings taken initially and every five minutes during low flow pumping

Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York
Semi-Annual Monitoring Well Sampling Event Report November 2018

Field Analysis													
MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level	Flow Rate	Sample Time
EPA-CL-4S		1030		6.59	.239	19.5	33.3	5.14	188.3	321			
		1035		6.77	.229	14.6	32.1	9.13	174.3	301			
		1040		6.91	.237	18.9	30.6	8.53	173.0	300			
		1045		7.06	.229	14.3	83.2	10.18	166.1	300			
		1050		7.22	.231	19.2	62.2	10.18	160.9	299			
		1055		7.26	.232	19.0	50.4	10.25	156.9	299			
		11		7.27	.237	19.0	48.9	10.02	154.1	300	2.2		
EPA-CL-4D													
EPA-MW 11 D	7/25	1050		6.16	.557	16.3	1.2	9.13	228.5	171			
		1055		6.07	.554	15.5	0.7	8.96	230.4	170			
		11		6.10	.541	15.3	1.1	8.95	229.1	170			
		1105		6.10	.541	15.2	0.7	9.06	229.1	170			
		1110		6.10	.540	15.1	0.4	9.06	229.9	165			
		1115		6.11	.540	15.2	0.3	8.99	229.0	164			
		1120		6.11	.534	15.1	0.3	9.01	229.1	164	54.3		
EPA- MW 26													

Some sort of vapor coming out of well (very bubbly)

Notes:

Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York
Semi-Annual Monitoring Well Sampling Event Report November 2018

MW #	Date	Time	Volume Purged	pH	Conductivity	Water Temperature	Turbidity	DO	ORP	TDS	Water Level	Flow Rate	Sample Time
ST- MW ~~EPA- MW 23~~ 20	7/25	9:35		5.59	.652	16.9	2.4	9.97	248.7	147			
		9:40		5.48	.636	16.1	1.3	9.91	253.3	146			
		9:45		5.52	.620	15.9	1.1	9.88	251.0	147			
		9:50		5.55	.625	15.9	1.3	9.85	249.7	147			
		9:55		5.57	.622	15.8	1.1	9.85	248.7	147	66.9		
CPA- MW ~~ST- MW 20~~ 23													
EPA- MW 27	7/24	1:55		9.69	.283	23.0	7.2	8.33	104.3	190			
		2		9.68	.325	21.3	14.7	7.90	115.8	190			
		2:05		9.65	.279	21.2	16.7	7.53	120.4	186			
		2:10		9.58	.284	21.0	17.6	7.09	122.2	151			
		2:15		9.23	.301	20.9	15.4	5.79	126.1	147			
		2:20		8.97	.331	20.9	14.0	4.52	125.9	146			
		2:25		6.79	.341	20.8	13.5	4.30	125.8	145	48.30		

Notes:

All water quality readings taken using a U-52 HORIBA water quality meter attached to a flow through cell. Readings taken initially and every five minutes during low flow pumping

Water levels taken using a Solinst water level meter (Model 101)

Flow rate taken using a marked graduated beaker and stop watch. Volume purged represents gallons.

Temperature is measured in degrees Celsius

Conductivity is measured in milliSiemens per centimeter (mS/cm)

Turbidity is measured in nephelometric turbidity units (NTU). 1000* = Turbidity greater than 1000 NTU.

Dissolved Oxygen (DO) is measured in milligrams per liter (mg/L)

Oxidation Reduction Potential (ORP)

Total Dissolved Solids (TDS) is measured in grams per liter (g/L)

Appendix H

DUSR, July 2019 Semi-Annual and

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

September 7, 2019

Carol Zurlo
HDR
1 International Blvd
Mahwah, NJ 07495

RE: Validation of the Stanton Cleaners Site Analytical Laboratory Data
Data Usability Summary Report (DUSR)
TA SDG Nos. 320-152680-1 and 460-187481-1

Dear Ms. Zurlo:

Review has been completed for the data packages generated by Eurofins TestAmerica Laboratories that pertain to aqueous samples collected between 07/24/19 and 07/26/19 at the Stanton Cleaners site. Sixteen samples and a field duplicate were processed for an expanded list of volatiles analytes by USEPA method 624.1 and 1,4-dioxane by USEPA method 8270D Selective Ion Monitoring (SIM). Nine of those aqueous samples and the field duplicate were also processed for per- and polyfluoroalkyl substances (PFAS) by a modified USEPA method 537. An equipment blank was also processed.

The data package submitted by the laboratory contains full deliverables for validation. 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. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

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

The data review includes evaluation of the specific items noted in The NYS DER-10 Appendix B section 2.0 (c). The items listed above that show deficiencies are discussed within the text of this narrative. The laboratory QC forms illustrating the excursions can be found in the laboratory package.

In summary, sample results are usable either as reported or with minor qualification or edit, with the following exceptions:

- 2-Chloroethyl vinyl ether results are not usable due to inherent instability of that compound in a preserved matrix
- The results for 1,4-dioxane derived from the semivolatile analysis are not usable due to laboratory processing. The results for that analyte derived from the volatile analysis are usable, but those reporting limits are more than two orders of magnitude higher.than those of the semivolatile fraction.

Data completeness, accuracy, precision, representativeness, sensitivity, and the analytical method comparability for analytes other than 1,4-dioxane are acceptable.

The laboratory modifications to the USEPA method 537 are significant, including acceptance ranges, consistent in many respects to the advances in the available monitoring compounds. Validation actions are based on the laboratory procedures, in consideration that the laboratory undergoes NYS DOH certifications and NYS SOP review.

Client sample identifications are attached to this text. Also included in the submission are the client results table EDDs, annotated in red to include edits and qualifiers recommended in this report.

Chain-of-Custody/Sample Receipt

The interim laboratory receipt entries did not include the date and time.

Blind Field Duplicate

The field duplicate was collected at EPA-MW-23. Correlations are within validation guidelines.

Volatile Analyses by USEPA Method 624.1

Due to the instability of 2-chloroethyl vinyl ether (2-CEVE) in a preserved medium, the results for that analyte are rejected in the samples and equipment blank.

The matrix spike evaluation was performed on EPA-MW-23. It shows acceptable analyte recoveries and correlations, with the exceptions of 2-CEVE (noted above), iodomethane (30% and 46%), and benzyl chloride (43% and 42%). The results for the latter two analytes in that parent sample have been qualified as estimated.

Results for bromoform in ST-MW-14, EPA-MW-23, EPA-MW-23-Dup, and 2419-EB are qualified as estimated due to low recoveries (42% to 67%) in the associated LCSs.

The detected results for isopropyl alcohol in the samples are considered external contamination and edited to reflect non-detection due to presence in the associated equipment blank.

Calibration standards show acceptable responses, with the exception of those for ethyl acrylate (RRFs<0.05) in the calibration associated with the samples collected 07/25/19. The results for that analyte in those samples have been qualified as estimated in value.

The laboratory data package incorrectly shows MDLs as reporting limits in the “Results” field on the report forms. The EDD shows correct values for reporting limits.

1,4-Dioxane by EPA8270D Full Scan and SIM

All results for 1,4-dioxane derived from the semivolatile fraction that show no detection are rejected due to processing outliers. Three of the four laboratory control samples show responses for that analyte that are below the noise level (MDL). The reported recoveries (1% to 15%) of 1,4-dioxane on the QC summary forms for those three LCSs are misleading in that they are not derived from true detections. The matrix spikes show no recovery, and one of the LCSs shows a recovery of 57%. This analyte is quite volatile, and the rapid chromatographic programming used by the laboratory results in elution of this analyte just after the detector comes on following the elution of the solvent, and the analyte may be lost in that process. The volatile nature also makes the analyte more susceptible to losses during the evaporation step. It is noted the more volatile of the other spiked TCL compounds in those LCSs also show lower recoveries than the less volatile components.

The values for the detections of 1,4-dioxane are qualified as estimated, with a low bias. Those results should be used with caution.

PFAS by Modified EPA Method 537

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

The detections of PFHxS in EPA-CL-4D-20190726, EPA-CL-4S-20190726, ST-MW-13-20190725, and PW-6-20190726 are considered external contamination and edited to reflect non-detection due to detection of that compound in the associated equipment blank.

Matrix spikes of EPA-MW-23 show recoveries and correlations within validation action guidelines.

Holding times were met, and LCS recoveries are compliant. Isotopic dilution and internal standards show compliant recoveries.

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

Very truly yours,

Judy Harry

Judy Harry

Att: Validation Qualifier Definitions
Sample Identifications
Qualified Client EDDs

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.

Sample Summaries

Sample Summary

Client: New York State D.E.C.
Job ID: 320-52680-1
Project/Site: DEC Stanton Cleaners; Site: 130072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-52680-1	EPA-MW-23	Water	07/24/19 10:50	07/25/19 09:30	
320-52680-2	EPA-MW-23-DUP	Water	07/24/19 10:55	07/25/19 09:30	
320-52680-3	72419-EB	Water	07/24/19 11:10	07/25/19 09:30	
320-52725-1	EPA-MW-11D	Water	07/25/19 12:00	07/27/19 09:10	
320-52725-2	ST-MW-15	Water	07/25/19 12:30	07/27/19 09:10	
320-52725-3	EPA-MW-26	Water	07/25/19 14:00	07/27/19 09:10	
320-52725-4	ST-MW-13	Water	07/25/19 14:45	07/27/19 09:10	
320-52725-5	ST-MW-16	Water	07/26/19 09:40	07/27/19 09:10	
320-52725-6	EPA-CL-4S	Water	07/26/19 11:00	07/27/19 09:10	
320-52725-7	EPA-CL-4D	Water	07/26/19 11:15	07/27/19 09:10	
320-52725-8	PW-6	Water	07/26/19 12:00	07/27/19 09:10	

Sample Summary

Client: New York State D.E.C.
Job ID: 460-187481-1
Project/Site: DEC Stanton Cleaners; Site: 130072

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-187481-1	EPA-MW-23	Water	07/24/19 10:50	07/24/19 14:00	
460-187481-2	EPA-MW-23-Dup	Water	07/24/19 10:55	07/24/19 14:00	
460-187481-3	72419-EB	Water	07/24/19 11:10	07/24/19 14:00	
460-187514-1	ST-MW-14	Water	07/24/19 13:00	07/25/19 19:00	
460-187514-2	EPA-MW-27	Water	07/24/19 13:30	07/25/19 19:00	
460-187514-3	ST-MW-12	Water	07/24/19 16:30	07/25/19 19:00	
460-187514-4	ST-MW-17	Water	07/24/19 16:35	07/25/19 19:00	
460-187514-5	ST-MW-20	Water	07/25/19 09:50	07/25/19 19:00	
460-187514-6	ST-MW-19	Water	07/25/19 10:10	07/25/19 19:00	
460-187514-7	ST-MW-18	Water	07/25/19 11:00	07/25/19 19:00	
460-187681-1	EPA-MW-11D	Water	07/25/19 12:00	07/26/19 18:20	
460-187681-2	ST-MW-15	Water	07/25/19 12:30	07/26/19 18:20	
460-187681-3	EPA-ME-26	Water	07/25/19 14:00	07/26/19 18:20	
460-187681-4	ST-MW-13	Water	07/25/19 14:45	07/26/19 18:20	
460-187681-5	ST-MW-16	Water	07/26/19 09:40	07/26/19 18:20	
460-187681-6	EPA-CL-45	Water	07/26/19 11:00	07/26/19 18:20	
460-187681-7	EPA-CL-4D	Water	07/26/19 11:15	07/26/19 18:20	
460-187683-1	PW-6	Water	07/26/19 00:00	07/26/19 18:20	