SUPPLEMENTAL REMEDIAL INVESTIGATION WORK PLAN2 (SRIWP2) FOR

AMERICAN DRIVE-IN CLEANERS OF HEWLETT, INC.

1345 PENINSULA BOULEVARD
HEWLETT, NEW YORK

Site No.: 130228
Index No.: CO 1-20180509-116

PREPARED FOR

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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FINAL

V2
March 2023

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1.0 INTRODUCTION

This Supplemental Remedial Investigation Work Plan (SRIWP) has been developed pursuant to the requirements of an executed Order on Consent (OOC) dated June 25, 2018. Previously the site was listed under the Voluntary Cleanup Agreement (June, 2003) between the New York State Department of Environmental Conservation, Division of Environmental Remediation (DER), and American Drive-In Cleaners of Hewlett, Inc., the Volunteer. The site has formally transitioned to an Order on Consent as of the June 25, 2018 date. The site is located at 1345 Peninsula Boulevard, Hewlett, New York 11557 (see Figure 1), fully described as Section 038, Block 446, Lot Nos. 61, 63, 70 and 72.

1.1 Purpose

The purpose of the SRIWP is to:

- delineate the extent of contamination in groundwater and soil gas off-site based on results of the previous SRIW
- collect and evaluate on and off-site groundwater and soil gas data to evaluate the current potential impact to public health and the environment;
- Identify collected data needed for monitoring natural attenuation, potential feasible cleanup technologies and presumptive remedies.

2.0 SITE HISTORY

2.1 Physical Site Description

Site Name: American Drive-In Cleaners of Hewlett, Inc.
Owner: Mr. Bertram Moreida, President of American Drive-In Cleaners of Hewlett, Inc.
Location: 1345 Peninsula Boulevard, Hewlett, New York 11557, Latitude 40º 38'40" N, Longitude 73º42'7"W
Former Voluntary Cleanup Agreement: Site No.: V-00616-1

2.2 Site Description, History of Ownership and Land Use

The American Drive-In Cleaners of Hewlett, Inc. (American Drive-In Cleaners) site is situated on a triangular shaped parcel approximately 0.6686 acres in size located on the south side of Peninsula Boulevard and 432.28 feet east of the intersection of Mill Road and Peninsula Boulevard (Figures 1 and 2). The eastern boundary of the site abuts the Rockaway Branch right-of-way of the Long Island Rail Road (LIRR). The LIRR tracks are installed in a north/south direction and parallel to Harris Avenue located to the east of this right-of-way.

The site is developed with a one-story slab-on-grade approximately10,000 ft^2 cinder block/ brick-faced building that encompasses more than 60 percent of the footprint of the subject parcel. The building is situated along the eastern boundary of the parcel. The building shape is an irregular triangle and measures between 144 feet and 164 feet in the north/south direction and between 35 feet and 178 feet in the east/west direction. The south rear-side of the building measures approximately 50-feet in the east/west direction. The front side (entrance) of the property is at the south side of Peninsula Boulevard. The undeveloped portion of the property, to the west and south of the building, is asphalt paved for parking.

In an interview with Mr. Moreida on October 3, 2003, he indicated that the subject property had been developed from vacant land circa 1958-59 for use as a dry cleaner. He purchased solely the dry cleaning business at the subject property in 1960 and the real estate (the subject property) in1965 from the Estate of Philip Basser. He further indicated that the original portion of the building (northern portion) was constructed in 1958-59 with two minor additions to the southern portion of the building in 1963 (boiler room) and circa 1985 (dry cleaning machine room).

2.3 Adjacent Property Land Use

The Peninsula Boulevard corridor and surrounding areas have been used for commercial purposes and residential housing since before the date of development of the subject property. (Figures 2 and 3). In particular, the adjacent properties' current uses include:

North: Directly to the north is Peninsula Boulevard. A strip shopping center is present on the north side of Peninsula Boulevard with various retail/commercial operations such as the following: jewelry store, liquor store, food restaurant, hair cutting salon, nail salon, clothing store, butcher, florist, shoe store, electronic store, optical store, stationary stores, video store, toy shop, bakery and a large supermarket (Food Town located at 1368 Peninsula Boulevard). A ballfield and associated park are located to the north of the shopping center.

South: The areas to the southeast and southwest of the subject property are predominantly residential. A u-shaped residentially-developed street is present to the southwest (Chestnut Drive) with additional residential development along Harris Avenue to the southeast.

East: Directly to the east of the subject property is the elevated portion of the railroad tracks of the Long Island Railroad. Further to the east is residential development along Harris Avenue.

West: Directly to the west is a commercial bank building (HSBC). Further to the west is a Sunoco Gasoline Station, a Shell Gasoline Station, a hair cutting salon and another dry cleaners (Mill Road Drive-In Dry Cleaners), along Mill Road. To the northwest, along Peninsula Boulevard, a commercial retail zone exists. Further to the west-southwest is residential development

2.4 Geographic Setting

Previous investigators have concluded that the Laurentide continental ice sheet deposited two major terminal moraines on Long Island during the Wisconsinan stage of the Pleistocene Epoch (Cadwell, 1989). These moraines formed two lines of hills that trend generally east-west along the island. American Drive-In Cleaners of Hewlett, Inc. lies in the outwash plain south of the confluence of the Harbor Hill and Ronkonkoma moraines and is within the drainage area of the south shore bays of Long Island.

2.5 Hydrogeology

A concise and accurate description of the geology, physiography and drainage of Nassau County is found in the Soil Survey of Nassau County, New York (USDA).

Relevant excerpts of this study are included below. Nassau County is part of the Coastal Plain physiographic province. The county is characterized by undulating or rolling landscapes in the northern part and a flat plain with a gently southward tilt in the southern part. A lobe of rolling topography protrudes farther to the south along the eastern edge of the county. Extensive tidal areas and marshes are just south of the plain and a barrier beach and dunes form the southern outline of the county.

Elevation in the county ranges from sea level to about 340 feet above sea level near the eastern edge of the county, just south of NYS Route 25. The landforms at the higher elevations were deposited as a terminal moraine. These areas have irregular topography that is crossed by deep glacial drainage channels near the north shore. These channels empty into deep bays on the north shore. The steepest relief is along drainage channels or on the side slopes adjacent to the bays. An outwash plain, which is to the south of the terminal moraine, has a maximum elevation of about 180 feet just northeast of Hicksville and slopes gradually to the south some 8 to 10 miles, finally reaching tidal area at sea level.

Nassau County is underlain by bedrock, but most of it is at a depth of several hundred feet. The closest surficial bedrock is to the west in the boroughs of Bronx and Queens in New York City and areas to the northwest in Westchester County near Long Island Sound. From these areas of surface exposure, the rock surface dips to the southeast to form a solid basement below Nassau County. Most of the bedrock consists of Cretaceous sedimentary layers. Some of the older rocks in the area are the 200 million year old Triassic red beds and lava flows off New Jersey and Connecticut and Cambrian metamorphic rocks in the New York City area that are 450 million years old.

During the late Cretaceous Period the sediments from the eroding Appalachian Highlands were carried by streams and rivers to low-lying coastal areas. The sand, silt and clay of the Raritan and Magothy formations, which form the foundation of Long Island, were deposited as deltas in areas of shallow water. The Raritan formation is below sea level and the Magothy formation is at the surface of several sites along the north shore. The Magothy is the primary potable water supply aquifer on Long Island.

During the Tertiary Period the area of Long Island was uplifted above sea level and the Cretaceous sediments were eroded and dissected by streams and rivers. The valley now occupied by Long Island Sound was cut by a major river and smaller tributary streams formed valleys which are now the north shore bays.

During the Pleistocene Epoch of the Quaternary Period, several major glacial advances into the northern United States occurred. This epoch is divided into four major glacial stages. From oldest to youngest, they are: Nebraskan, Kansan, Illinoisan and Wisconsinan. During the Illinoisan advance, the ice sheet reached a position just north of the Long Island area. Outwash sand and gravel, of the Jameco gravel formation, was deposited by meltwater streams. Following the Illinoisan stage, sea level rose close to its present level and a clay (Gardiner clay) containing marine fossils was deposited in the shallow coastal waters surrounding Long Island.

During the Wisconsinan glacial advance the ice reached a position represented on most of Long Island by the Ronkonkoma terminal moraine. In the latter part of this stage, the ice sheet receded from a point east of Lake Success and established a new position along the north shore marked by the Harbor Hill terminal moraine. West of Lake Success this lobe of ice overrode the Ronkonkoma moraine and pushed as far south as Staten Island. This caused the terminal moraine/deposits in Nassau County to form a wide band of irregular topography occupying the northern half of the county, while in adjacent Suffolk County the terminal moraine deposits were far enough apart to be two distinct landforms separated by a flat plain. During the Wisconsinan advance sea level dropped about 350 feet below its current elevation to expose a broad flat coastal plain.

As the climate again warmed, about 11,000 years ago, the Wisconsinan period ended and the Holocene, or present, period began. The ice sheet receded to its present polar limits and sea level rose to its present level. Currents and wave action modified the outwash plain to create the present-day shoreline.

These overlying Pleistocene deposits, referred to as the Upper Glacial aquifer, is a highly prolific aquifer and consists of three distinct units. The oldest and deepest unit is a sand and gravel layer associated with the Ronkonkoma ice sheet. After the recession of the ice sheet sea level rose to near its' present level. During this interstadial period, marine and/or lacustrine sediments were deposited over the Ronkonkoma deposits, a clay bed at the base, separated from an upper clay bed by a band of silty sandy beds. Overlying the clay is a terminal moraine and adjacent outwash deposits associated with the Harbor Hill ice sheet.

Direction and rate of groundwater flow are controlled by the rate and distribution of water entering and leaving the aquifer systems, the geometry of these systems and the distribution of water transmitting and storage properties of these aquifer systems. Based upon a projection from review of Nassau County Water Table Maps, local groundwater flow direction in the shallowest aquifer (the Upper Glacial aquifer) is expected to be in the south (either southwest or southeast) dependent upon local discharge patterns to surface water headwater areas. Published literature values for estimated average hydraulic conductivity for the Upper Glacial Aquifer is 270 feet per day horizontal with rates of 27 feet per day for vertical flow. Previous work performed by BEI proximate to the study area has determined the depth to groundwater within the Upper Glacial aquifer as approximately 5-10 feet below grade surface (bgs). Previous groundwater flow surveys conducted have documented flow direction to the northwest, possibly due to the PSW (N-01346) to the northwest changing the gradient. An updated groundwater flow survey will be conducted and will include: updated casing elevations and also current depth to water measurements.

The subject property is located within the boundaries of Hydrogeologic Zone VII: South Shore Shallow Flow Discharge System. Zone VII is located south of the Magothy recharge zone on the South Shore and discharges to Nassau and western Suffolk South Shore bays where tidal exchange facilitates the dilution and dispersion of contaminants. Zone VII is a shallow flow zone, thus contamination from activities in Zone VII will mainly affect the Glacial aquifer. Zone VII contains a number of streams that feed the South Shore bays. These streams are important recreationally, ecologically and as a freshwater source to South Shore bays.

2.6 Topography

The subject site is located approximately 25-30 feet above mean sea level and the National Geodetic Vertical Datum of 1929 (USGS-Lynbrook Quadrangle - Figure 2). The land surface is relatively flat within the study area with slope in topographic grade to the south-southwest towards proximate surface water (canals and bays).

2.7 Water Supply Wells

Berninger Environmental conducted an investigation on the potable (drinking) and non-potable water supply wells located within a half-mile radius of the subject site. Region I of the NYSDEC requires that all wells (potable supply and non-potable supply) which pump at least 45 gallons per minute must be permitted. A review of these records indicated that the Long Island Water Corporation (LIWC) is the distributer of potable water in the area of the subject site and one public supply well (N-01346) is located within approximately ½ mile of the study site. The location of this well is presented in Figure 4. This public supply well is located approximately ½ mile to the northwest and hydraulic down gradient of the site. The table below provides data on this well.

Well Field Data

Well No.	Aquifer	Land Surface	Depth to Bottom	Depth to Screen
N-01346	Jameco	10 ft msl	160 ft bgs	135 ft bgs

2.8 Drainage Pattern

There are several proximate surface water areas relative to the study property. These include Motts Creek (closest), Willow Pond and Georges Creek within a one mile radius. Based upon an evaluation of topographic grade changes, the local surficial and hydraulic drainage pattern is likely into the drainage basin of Motts Creek (slightly up gradient) or Georges Creek, which ultimately discharge to the areas of the south shore bays and the Atlantic Ocean. The surface water bodies observed within a ½ mile radius of the site include only Motts Creek. The localized groundwater flow direction for the shallow Upper Glacial aquifer at the site is to the northwest as depicted in the localized groundwater flow survey. Figure-5.

2.9 Soils

According to the United States Department of Agriculture Soil Conservation Service and the Soil Survey of Nassau County, New York, the soils at the subject site are classified Us-Urban land Sudbury complex. This unit consists of urbanized areas and very deep, moderately well drained soils. This soil unit is noted to be on nearly level plains. The areas of this soil are variable in shape and are as much as several hundred acres each. Slope ranges from 0 to 3 percent. This unit consists of about 70 percent urbanized areas, 20 percent moderately well drained Sudbury soils and 10 percent other soils. The urbanized areas and Sudbury soils are so intermingled that it was not practical to map them separately. The urbanized areas are buildings, roads, driveways, parking lots and other manmade structures. Included with this soil, in mapping, are small areas of excessively drained to moderately well drained Udipsamments and well drained Riverhead soils. The Udipsamments are in areas of construction activity where sandy material has been mixed with the surface layer and subsoil. The typical sequence, depth and composition of the layers of Sudbury soils are as follows:

Surface layer: Surface to 5-inches, dark reddish brown fine sandy loam

Subsoil: 5 to 18-inches, yellowish brown sandy loam
18+-inches, mottled, yellowish brown gravelly loamy sand

Substratum: 28-to 40-inches, mottled, pale brown very gravelly sand
40 to 60-inches, very pale brown, very gravelly sand

2.10 Infrastructure

During the interview with Mr. Moreida, the following site specific information regarding utilities and infrastructure relative to the subject property was established (Figure 6). The property has been connected to the municipal sewer system since its development circa 1958-59. Therefore, all bathrooms and wastewater piping within the building have been and are connected to the on-site municipal sanitary system. No other in-situ drainage structure were identified within the building. The municipal sewer line enters the building at its northwest corner, at which location both natural gas and municipal water lines are also present.

Electric and telephone service enter the building from above ground poles. The property is served by natural gas (KeySpan), which is used predominantly for a dual-fired boiler steam generation and heating system. A 1,000 gallon No. 2 fuel oil above ground storage tank (AST), with secondary containment (lube cube-style) is present at the western exterior side of the building, near the interior boiler room. A small capacity on-site water supply well is used, in addition to municipal potable water, for make-up water for the non-contact cooling water system.

The hazardous materials storage area is a steel trailer located at the rear southern portion of the subject property, exterior and not joined to the building. The current and historic dumpster location is at the mid-central portion of the subject property. No storm water dry wells or catch basins were observed to be present on the subject property. Drainage appears to flow into Peninsula Boulevard and to perimeter areas of the subject property.

3.0 SUMMARY OF PAST INVESTIGATIONS

Information available to Berninger Environmental, Inc. (BEI) from an interview with Mr. Moreida indicated that the Nassau County Department of Health (NCDOH) had previously inspected, collected and analyzed samples of wastewater emanating from boiler blow-down water and/or former evaporative water discharges and the shallow soils at the southeastern perimeter of the subject property. A discussion of these activities is provided below; BEI has not been provided with actual copies of the NCDH inspection reports, with the exception of that data provided in Appendix B. These inspection reports have been requested under the Freedom of Information (FOIL) Process

3.1 NCDH Sampling 2002 Program

On January 15, 2002, Nassau County Department of Health (NCDH) collected samples of wastewater being discharged to a location outside the southeastern side of the site building. The water samples were collected from a wastewater stream caused by either former boiler blow-down and/or evaporator discharges from a unit located within the American Drive-In Cleaners. This sample analyzed by the NCDH laboratory detected a concentration of tetrachloroethylene (PCE) at a concentration of 7.3 parts per billion (ppb). A second round of sampling in March 2002 reported a concentration of 16 ppb.

On March 19, 2002 soil samples were also collected by NCDH at the same wastewater discharge location at the southeastern side of the building from a depth of 2 to 6-inches below grade surface (bgs). These soil samples reported concentrations of PCE up to 4,000 ppb. The same soil sample contained an elevated concentration of a breakdown product of PCE, known as cis-l,2-Dichloroethene (1,2-DCE) at a concentration of 7,400 ppb.

A soil gas study was also conducted during January of 2008 and the results concluded that neither PCE nor TCE was detected in three (3) soil gas samples collected. The samples were collected south of the site within the backyard areas of the three (3) closest residences to the subject site.

3.2 Supplemental Remedial Investigation Results

A total of seven (7) monitoring wells were sampled from the subject property on July 31, 2019 and analyzed via EPA test method 8260 (VOCs) and select wells MW-1, 3 and 6A were sampled for emerging contaminants PFAS (21 list) and 1,4 Dioxane. During the investigation off-site monitoring wells MW-4, 5 and 6 were unable to be located as new construction of the sidewalk in this area north of the site, appeared to be the cause for the missing wells. In leu of sampling from the off-site wells, temporary sampling points were installed off-site at these locations in order to replicate the sampling intervals proposed in the SRIWP.

Utilizing the currently viable monitoring wells located throughout the site, samples were obtained using low-flow sampling techniques. Temporary well points were installed to the north of the property along Peninsula Boulevard and sampled at depths of 5-9'; 15-19' and 26-30'. Further information on the sample collection protocol is provided in section 5.0 of the SRIWP. Please see Figure-7 for the locations of the monitoring wells and temporary off-site well locations.

Analytical data provided for on-site monitoring wells (MW-1, MW-2, MW-3, MW-6A, MW-7, MW-8 and MW-N. Samples were analyzed via EPA method 8260 for VOCs utilizing low-flow sampling techniques. All the on-site monitoring wells exhibited some amount of PCE and daughter breakdown products from 110 ppb in MW-3 to 32,000 ppb at MW-1. Complete breakdown through to Vinyl Chloride was observed at select well locations where *cis*-1, 2 DCE was present at elevated levels ranging from 2,000 ppb 15,000 ppb. The data for each of the wells is tabulated and included as Table-1 of the Report.

Off-site groundwater was collected at three (3) locations GW-4, GW-5 and GW-6 and at multiple depths: 5-9', 15-19', 26-30'. The highest concentration detected was cis-1, 2, DCE at GW-4@ 15-19' at 35,000 ppb. Contamination levels at the bottom of GW-4, at the 30' mark was mainly non-detect with very minimal DCE. GW-5 was similar to GW-4 with regard to the distribution of PCE and breakdown products throughout each depth. The highest detection at the GW-5 location was again, *cis*-1, 2 DCE at 15-19' with a concentration of 10,000 ppb and leveling off at 570 ppb from 25-29' bgs. GW-6 was the western most off-site groundwater sample collected. Very minimal contamination was detected at this location with the highest detection in the 15-19' depth with cis-1, 2 DCE at 110 ppb and TCE at 12 ppb. Based on these concentration levels, further delineation to the west of GW-6 does not appear necessary. Tabulated data for the off-site groundwater samples is included as Table-2 .

Sampling for emerging contaminants was sampled at select wells MW-1, MW-3 and MW-6A. Sampling was originally intended at MW-2, but there was not enough recovery from this well to procure a sample. MW-6A was used to substitute sampling in lieu of MW-2 and was a field-based decision.

The lab results indicated detections of PFOA and PFOS at MW-1 of 181 ppt and 3,530 ppt; MW-3 at 235 ppt and 40.3 ppt; and MW-6A at 121 ppt and 2,380 ppt respectively.

Tabulate analytical data is provided for PFAS and 1,4 Dioxane as Table-3. Please refer to Figure-7 for the sampling locations.

4.0 SUPPLEMENTAL WORK PLAN OBJECTIVES

The objective of this work plan is to provide detailed specifications for the performance of sample collection and analysis of off-site groundwater and off-site sub-slab vapor to determine the extent of contamination of tetrachloroethylene (PCE) and its breakdown products to the satisfaction of the DER. The focus of the investigation work will include efforts to identify actual or potential impacts to sensitive receptors.

4.1 Potential Environmental Concerns

Based on the review of available documents supplied to BEI, the primary environmental concerns at the subject property are the potential for on and off-site soil gas migration and the potential impacts to groundwater from contaminated shallow soils from the prior discharge of wastewaters.

4.2 Scope of Supplemental Investigation

BEI has defined the scope of the investigation into two (2) specific tasks. These tasks will be outlined as follows:

Task 1 – Off-site Groundwater Sampling

Purpose: To determine the current off-site groundwater conditions using viable temporary wells off-site and one (1) permanent monitoring well northeast of the site. A total of three (3) temporary wells (GW-7-9) will be installed down gradient of the property and previous samples collected at GW-4, 5 and 6. An additional sample will be collected down gradient and east of the railroad tracks as a newly installed permanent monitoring well (MW-9). This well will also be incorporated into the groundwater flow survey. Sampling for VOCs will be conducted at GW-7, GW-8, GW-9 and MW-9 at depths of 5-9’, 15-19’ and 26-30’. PFAS will be analyzed at locations GW-4, GW-5, GW-7, GW-8, GW-9 and MW-9 from a depth of 15’-19’ and 26-30’.

Specifications: Utilizing temporary/permanent monitoring wells located north of the property, and east of the railroad, samples will be obtained using low-flow sampling techniques. Wells will be sampled for VOCs at multi-levels with sampling depths of: 5-9', 15-19' and 26-30'. PFAS will be sampled at the above mentioned locations from a depth of 26-30'. Further information on the sample collection protocol is provided in section 5.0. Please see Figure-8 for the sampling locations. A monitoring well construction log is also included as Figure-9 depicting the specifications for the permanent well proposed to be installed northeast of the site.

Task 2 – Off-site Sub-slab/Indoor Air and Soil Vapor Sampling

Purpose: The main objective for determining concentrations of volatile organic compounds in soil vapor is analyzing for the potential for soil vapor intrusion (SVI) in down gradient commercial businesses and to the east of the site (east of railroad tracks).

Specifications: All sub-slab, indoor, outdoor and soil vapor samples will be collected in accordance with the New York State Health Department (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" protocols. A total of two (2) sub-slab samples are proposed to be collected from within the down gradient Food Mart located on the north side of Peninsula Boulevard. One (1) additional soil vapor sample will be collected just northeast of the site. Sample collection procedure and quality assurance/quality control procedures are discussed in Section 5.0. Please see Figure-8 for the locations of the proposed sub-slab sampling locations.

5.0 QUALITY ASSURANCE / QUALITY CONTROL PROCEDURES

Appropriate Quality Assurance /Quality Control (QA/QC) Procedures were developed to ensure that suitable and verifiable data results from sampling and analysis are maintained. To achieve this objective, the quality assurance procedures detailed in this section were adopted from NYSDEC, DER "Technical Guidance for Site Investigation and Remediation", May 3, 2010 and will be followed for all sampling and laboratory analysis activities.

5.1 Quality Assurance Requirements

The person responsible for conducting the investigation and/or remediation will ensure suitable and verifiable data results from sampling and analysis. To achieve this objective, the quality assurance procedures detailed in this section will be followed for all sampling and laboratory analysis activities. Quality Assurance/Quality Control procedures were developed to ensure that suitable and verifiable data will result from the prescribed sampling and analysis programs. The procedures to be implemented during the investigation are summarized below.

5.1.1 Sampling Personnel

The activities associated with the field sampling and analysis program will be performed under the supervision of a Quality Assurance Officer, in accordance with the NYSDEC, DER "Technical Guidance for Site Investigation and Remediation", May 2010. The samplers assigned will possess a minimum of two or more years' experience in environmental field work. Additionally, all samplers will have received the mandatory forty-hour Occupational Safety and Health Administration (OSHA) training on working with potentially hazardous materials and appropriate Hazard Communication Program and Right-To-Know training.

5.1.2 Sampling Equipment

Individual QA/QC measures will be implemented for each of the types of equipment, field screening instruments, sample containers, etc. used in the performance of the sampling program as follows:

5.1.3 Geoprobe

Prior to arrival on the subject property and between sample locations, all equipment associated with the Geoprobe drilling system will be decontaminated by a physical scrub with detergent (Alconox) and potable water solution and rinsing them with potable water of demonstrated environmental quality.

5.1.4 Glassware

All sample glassware will be "Level A" certified decontaminated-containers supplied by a NYSDOH-Certified Commercial Laboratory. Samples analyzed for media potentially containing VOCs will be placed in Teflon-lined containers. All samples (except the soil gas samples) will be preserved by cooling them to a temperature of approximately four degrees Celsius during maintenance prior to transport to laboratory. PFAS samples will be collected in PFAS free high density polyethylene containers with the proper preservative.

5.1.5 Sample Documentation

To establish and maintain proper sample documentation control, the following sample identification and chain-of custody procedures will be followed:

5.1.5.1 Sample Identification

Sample identification will be executed by use of a sample tag, log book and Chain-of-custody forms. Said documentation will provide the following information: 1) the project code; 2) the sample laboratory number; 3) the sample preservation; 4) the date the sample was secured from the source media; 5) the time the sample was secured from the source media; and 6) the person who secured the sample from the source media.

5.1.5.2 Chain-of Custody Procedures

Due to the evidential nature of samples, possession will be traceable from the time the samples are collected until they are received by the testing laboratory. A sample is considered under custody if it: is in a person's possession; it is in a person's view, after being in possession; if it is in a person's possession and they locked it up; or, it is in a designated secure area. When transferring custody, the individuals relinquishing and receiving the samples will sign, date and note the time on the Chain-of Custody form.

5.1.5.3 Laboratory-Custody Procedures

A designated sample custodian will accept custody of the delivered samples and verify that the information on the sample tags matches that on the Chain-of-Custody Records. Pertinent information as to delivery, pick-up, courier, etc., will be entered in the "remarks" section. The custodian will enter the sample tag data into a bound logbook. The laboratory custodian will use the sample tag number, or assign a unique laboratory number to each sample tag, and assure that all samples will be transferred to the proper analyst or stored in the appropriate source area. The laboratory custodian will distribute samples to the appropriate analysts. Laboratory personnel will be responsible for the care and custody of samples, from the time they are received, until the sample is exhausted or returned to the sample custodian. All identifying data sheets and laboratory records will be retained as part of the permanent documentation. Samples received by the laboratory will be retained until after analysis and quality assurance checks are completed.

5.2 Sub-slab/Indoor Air and Soil Vapor Sample Collection

The sub-slab sampling will be conducted using a rotary hammer and drill bit to penetrate the slab on grade foundations at the selected locations within the Food Mart. An approximately ½” diameter hole will be drilled through the foundation slab and a soil vapor sampling probe will be set to a depth of approximately 2-3” below the slab surface. Clean 3/8” poly-tubing will be affixed to the sampling probe and exit the borehole in order to connect to a six (6) liter summa canister. The vapor sampling probe will be backfilled with clean gravel pack (#2 Morie Fil-pro) and a clay seal will be installed at the slab surface to create an air tight seal around the tubing.

Indoor air sampling will collected at co-located sub-slab locations via a six (6) liter summa canister. The canisters will be set at a height of approximately five (5’) above the ground surface in order to achieve air collection from the representative breathing zone. All sample canisters will be affixed with an 8 hour flow controller. An outdoor air sample (1) will be collected following the same protocol as the indoor air samples.

Soil vapor samples will be collected from beneath whatever land surface materials (concrete, asphalt or grass) are encountered. Clean 3/8” poly-tubing will be set at a minimum depth of 4 feet (bgs) and backfilled with clean gravel pack. The probe rod borehole will be sealed with bentonite or a hydraulic cement at the surface of the borehole. The area around the soil vapor sample collection point will be encompassed by a plastic container for the introduction of a tracer gas such as helium. Helium will be introduced via a tubing penetration into the plastic container as a tracer gas in order to quantify that no circumvention of air is occurring. The plastic tracer container will be sealed to the ground surface and also sealed where the tubing exits the container. A helium detector will be connected inline between the sample container sampling point to ensure that no more than ten percent (<10%) helium infiltrates the sampling media.

Subsequent to the introduction of helium tracer gas, the annular space will be purged a minimum of one volume of soil gas using a personal sampling pump. During purging and sampling, the flow rate will not exceed 0.2 liters per minute. A pre-set regulator and dedicated summa cannister will be used to procure the soil gas sample. The cannister will be labeled with all pertinent information for the laboratory. Again, the regulator used will ensure a flow rate less than 0.2 liters per minute. Sufficient volume will be collected to achieve the detection limits required. Sample collection procedure, quality assurance/quality control and equipment decontamination procedures are discussed in Section 5.0. Please see Figure-8 for the locations of the proposed soil gas sampling locations.

During all sampling, the flow rate will not exceed 0.2 liters per minute for a period of 8 hours. A pre-set regulator and dedicated summa canister will be used to procure the sample. The canister will be labeled with all pertinent information for the laboratory. Again, the regulator used will ensure a flow rate less than 0.2 liters per minute. Sufficient volume will be collected to achieve the detection limits required and each sample will be analyzed at a NYS ELAP certified laboratory via EPA method TO-15 Select ion Monitoring (SIM) for VOCs.

5.3 Groundwater Sample Collection (Off-site GW-7-9 and MW-9)

The groundwater sampling will be conducted utilizing an SP-15 stainless steel four foot (4') sampling device (GW-7-9) and newly installed permanent monitoring well MW-9. Once the desired depth to water is reached, starting from the deepest depth (26-30'), the screen point will be deployed via centering rods. New high density (HD) polyethylene tubing will be inserted down through the well screen to the desired depth. The groundwater will then be extracted through the HD polyethylene tubing by a peristaltic pump until 3 to 5 times the approximate volume in the probe rods have been purged. The retrieved samples will be placed in new laboratory supplied analyte free 40 ml vials with hydrochloric acid (HCL) preservative for VOCs and PFAS in plastic containers containing the proper preservative. The samples will be stored in a cooler containing ice to maintain a temperature of 4º Celsius and delivered under strict chain-of-custody to a NYSDOH ELAP-certified laboratory providing Category ASP-B deliverables. EPA low flow procedures will be executed. Low flow procedures help to isolate the screened interval water from the overlying stagnant casing water allowing for most of the sample water to be drawn directly from the adjacent formation. Typical flow rates consist of collecting groundwater at a flow rate of 100ml-500 ml per minute. Samples will be analyzed by EPA method 8260 for VOCs and EPA method 1633 for PFAS. PFAS will also be sampled at GW-4, GW-5, GW-7, GW-8, GW-9 and MW-9 from a depth of 15-19' and 26-30'. Field blanks, trip blanks, MS/MSD and sample duplicates will be collected as necessary for VOCs and PFAS.

5.4 Laboratory Analysis Requirements

5.4.1 *Certification and Data Acceptance*

Laboratories performing analysis will conform to the following:

For the analysis of any aqueous or vapor samples for a parameter or category of parameters for which laboratory certification exists pursuant to NYSDOH ELAP Certification, the laboratory will be certified for that specific parameter or category of parameters pursuant to NYSDOH ELAP Certification.

6.0 HEALTH AND SAFETY PLAN (HASP)

The site specific Health and Safety Plan developed and approved under the initial Remedial Investigation Work Plan will be adhered to by all personnel involved in the investigation.

Incorporated into the plan is a section on community health and safety with measures to ensure the public living and working near the site, including facility employees or visitors, are protected from exposure to site contaminants during intrusive activities or on-site treatment actions.

7.0 COMMUNITY AIR MONITORING PLAN

A Community Air Monitoring Plan (CAMP) provides for real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Summary tables will be transmitted to the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) Project Managers on a minimum weekly basis. Any exceedances of CAMP action levels and corrective measures taken will be reported to NYSDEC and NYSDOH immediately (within 24 hours) in addition to inclusion in Daily Field Reports.

7.1 Continuous Monitoring

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching and the installation of soil borings or monitoring wells.

7.2 Periodic Monitoring

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well bailing/purging and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park or adjacent to a school or residence.

7.3 VOC Monitoring, Response Levels and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

8.0 PROJECT SCHEDULE AND REPORTING

BEI will be prepared to mobilize to the site within 2-4 weeks after approval of the SRIWP. If access agreements are needed to perform the off-site work this time frame may need to be extended. BEI will notify the DEC 5 days prior to the work start date.

All data generated from the supplemental investigation work will be included in a Supplemental Investigation Remedial Investigation Report (SRIR) including: data from all off-site groundwater samples and data from sub-slab samples collected.

FIGURES

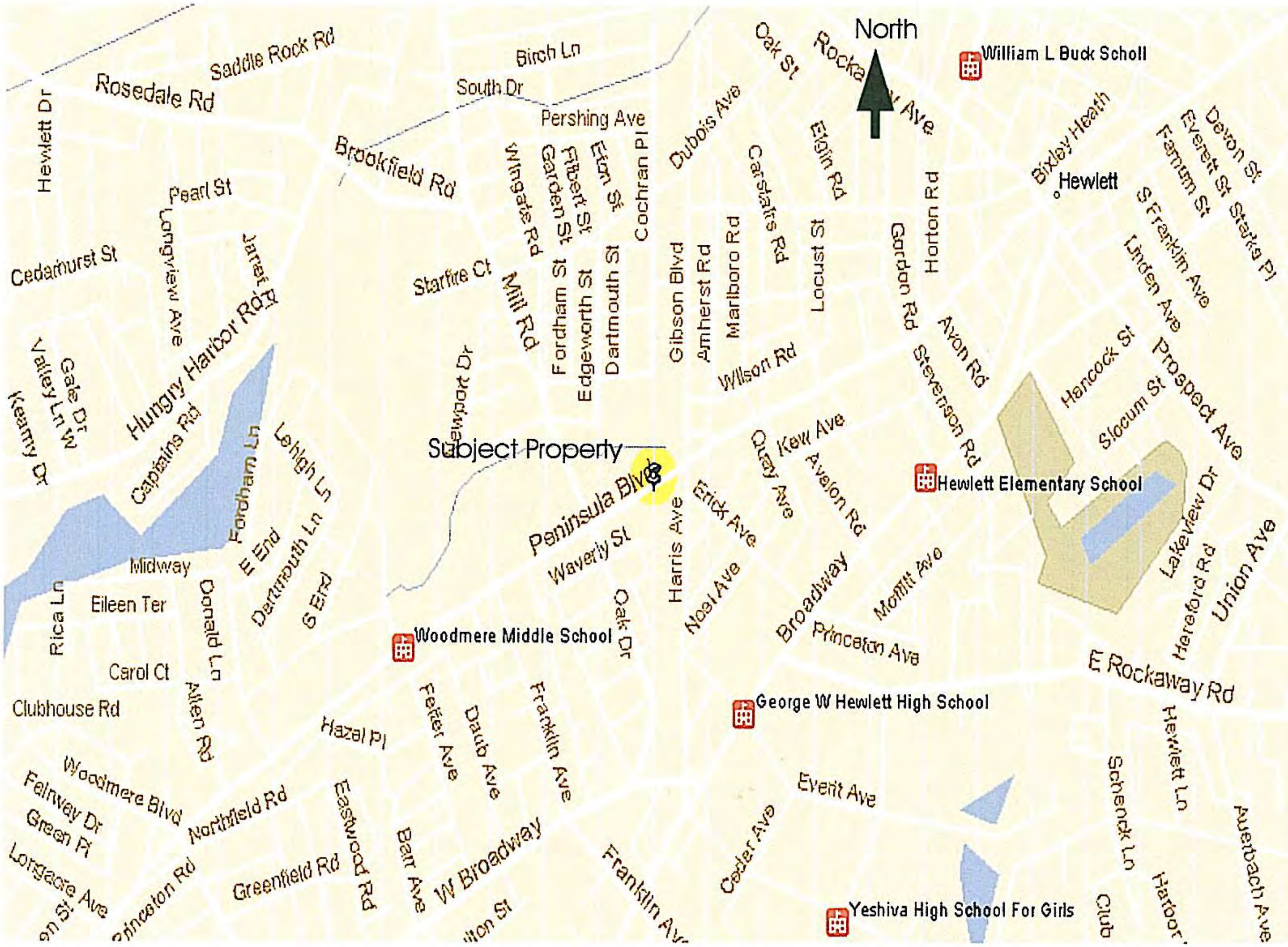
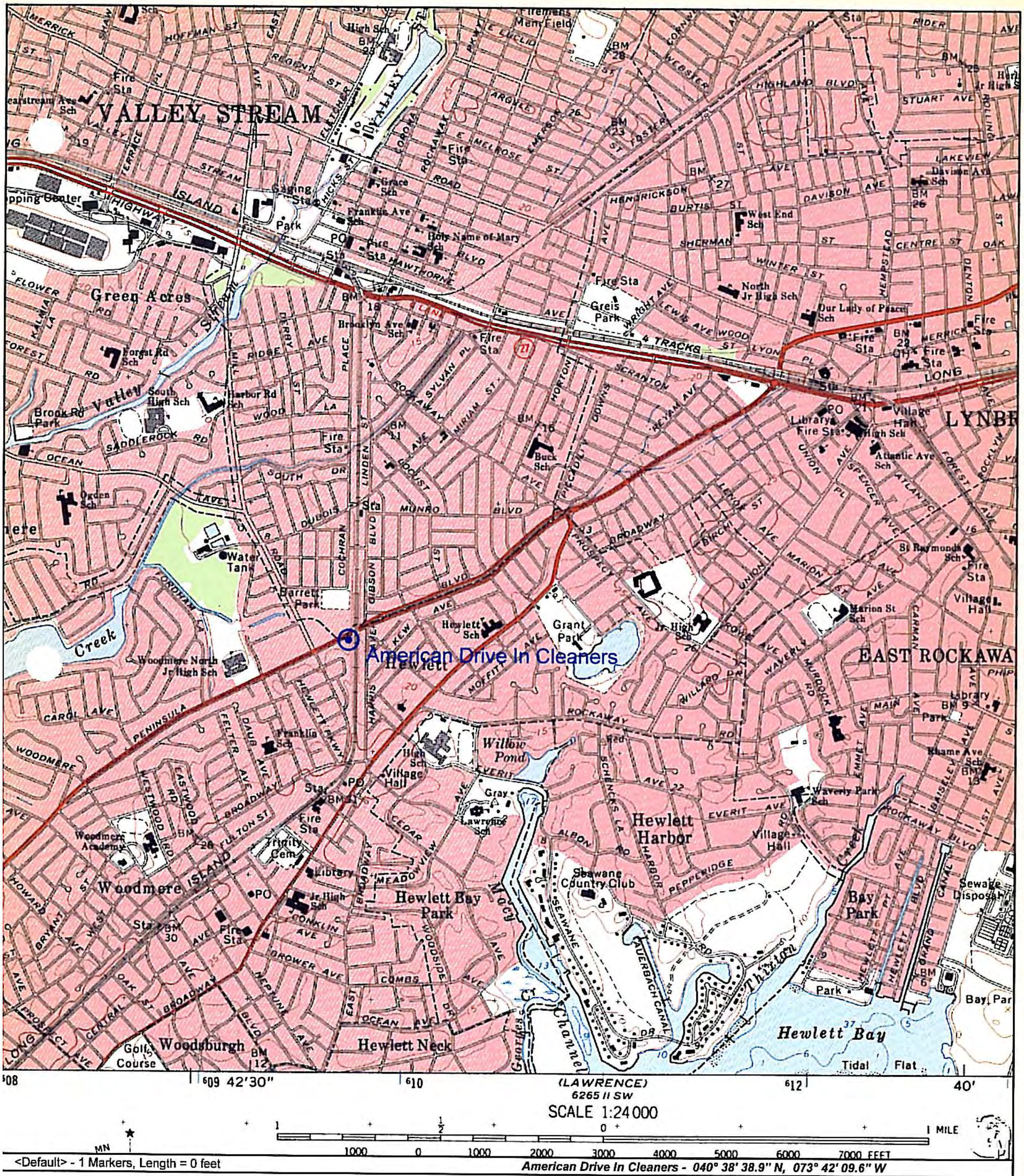


Figure 1 - Location Map for American Drive-In Cleaners
1345 Peninsula Boulevard, Hewlett, New York

No scale

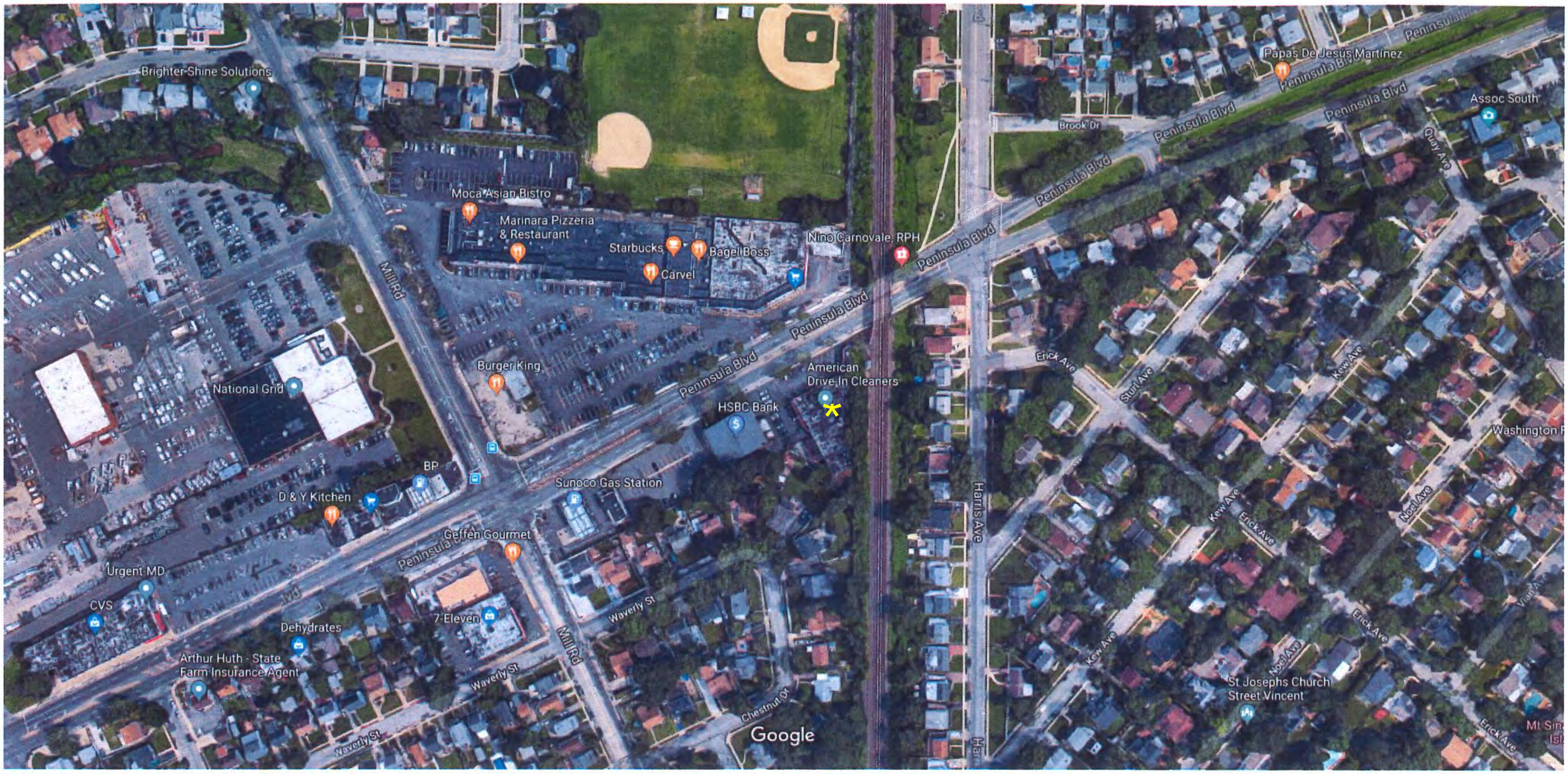


ıe: LYNBROOK
Date: 10/3/103
Scale: 1 inch equals 2000 feet

Location: 040° 38' 48.6" N 073° 41' 36.2" W
Caption: American Drive In Cleaners
1345 Peninsula Blvd.
Hewlett, NY 11557
Figure #2

Figure-2

Google Maps



Imagery ©2018 Google, Map data ©2018 Google 100 ft

* site (yellow asterisk)

Set a home address

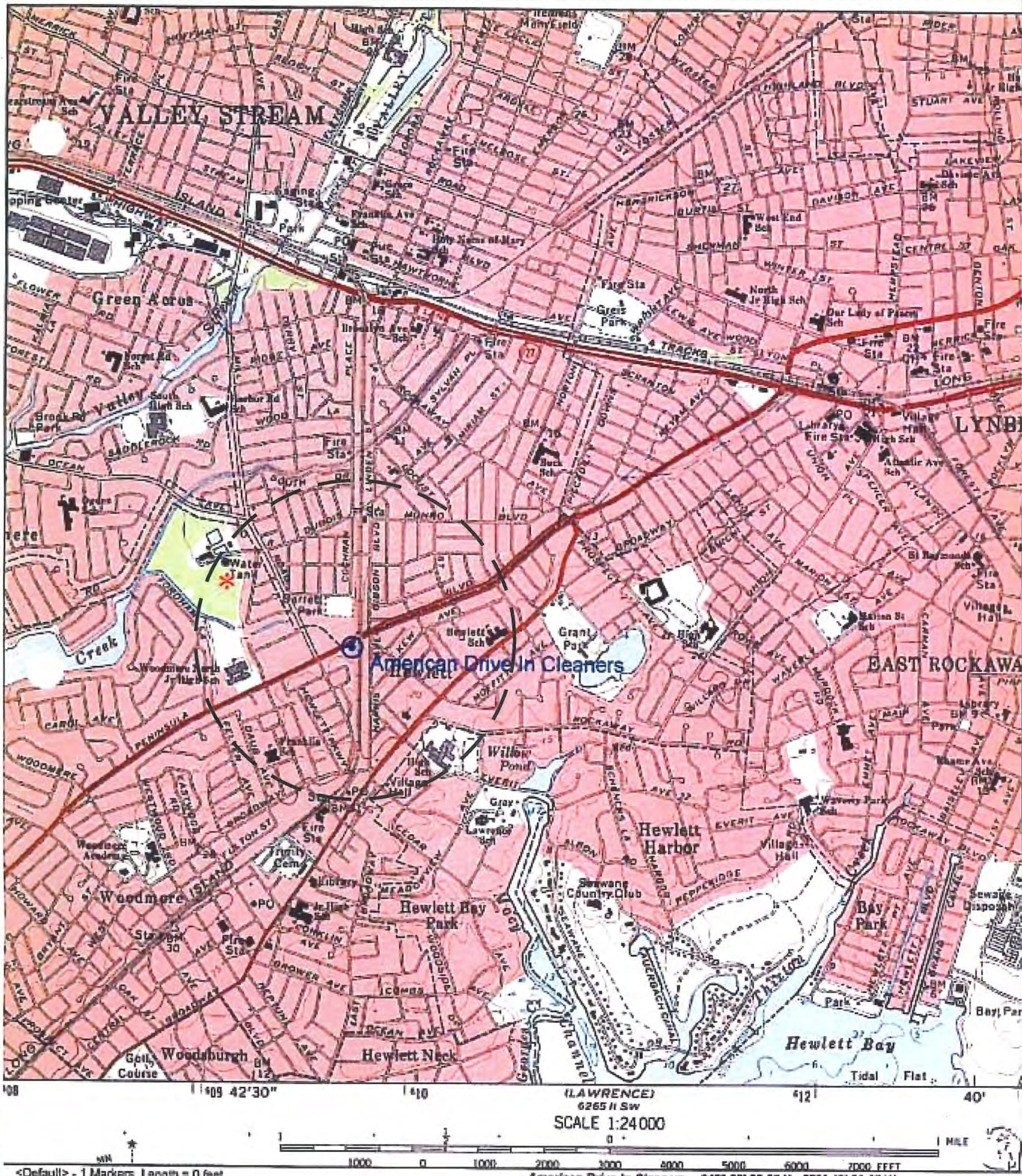
Set a work address

Updated 3 min ago

Moderate traffic in this area
Typical conditions

Hewlett 83°

FIGURE-3

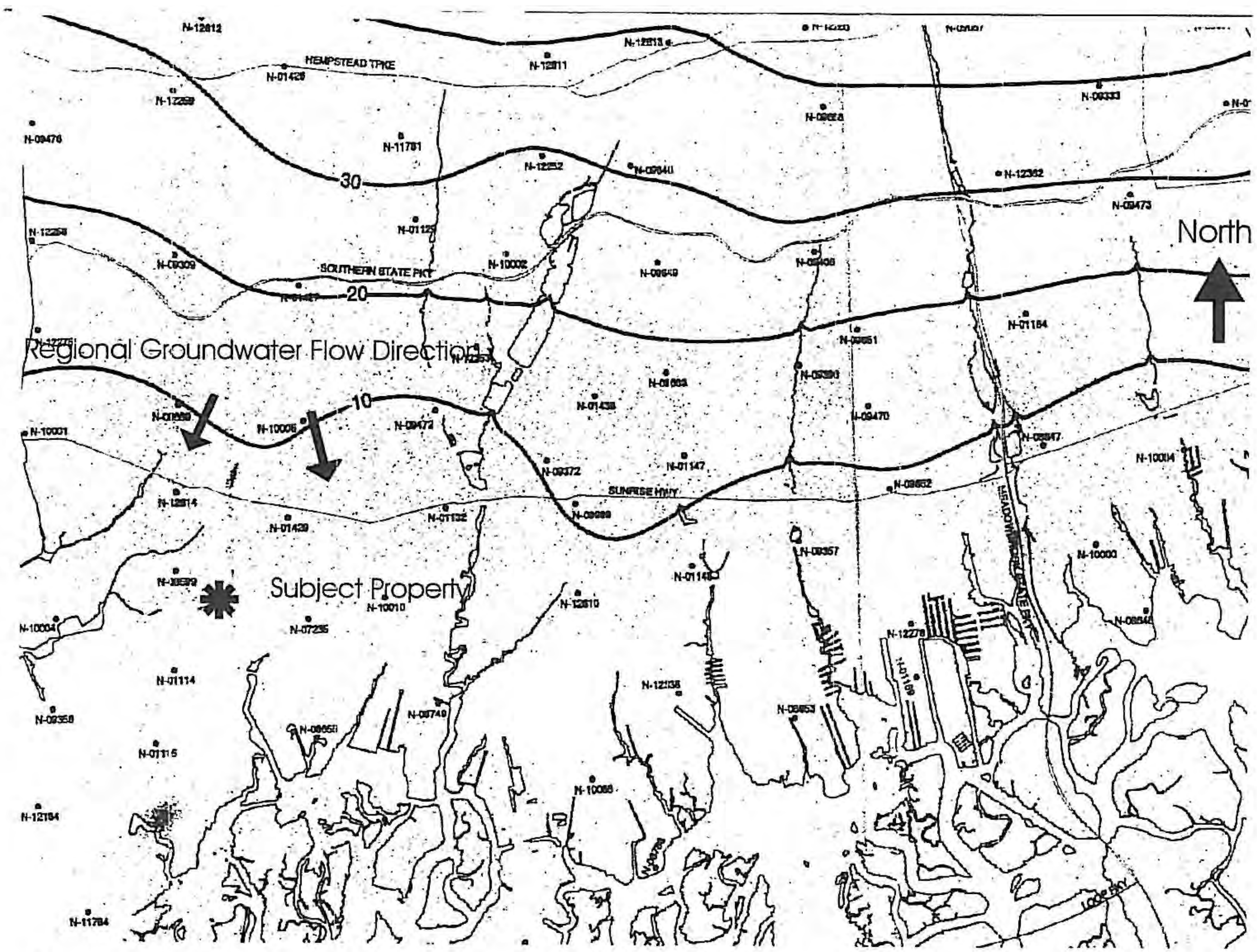


le: LYNBROOK
Date: 10/3/103
Scale: 1 inch equals 2000 feet

Location: 040° 38' 48.6" N 073° 41' 36.2" W
Caption: American Drive In Cleaners
1345 Peninsula Blvd.
Hewlett, NY 11557

Figure-4 * Public Supply Water Well Location

1/2 mile radius ( )

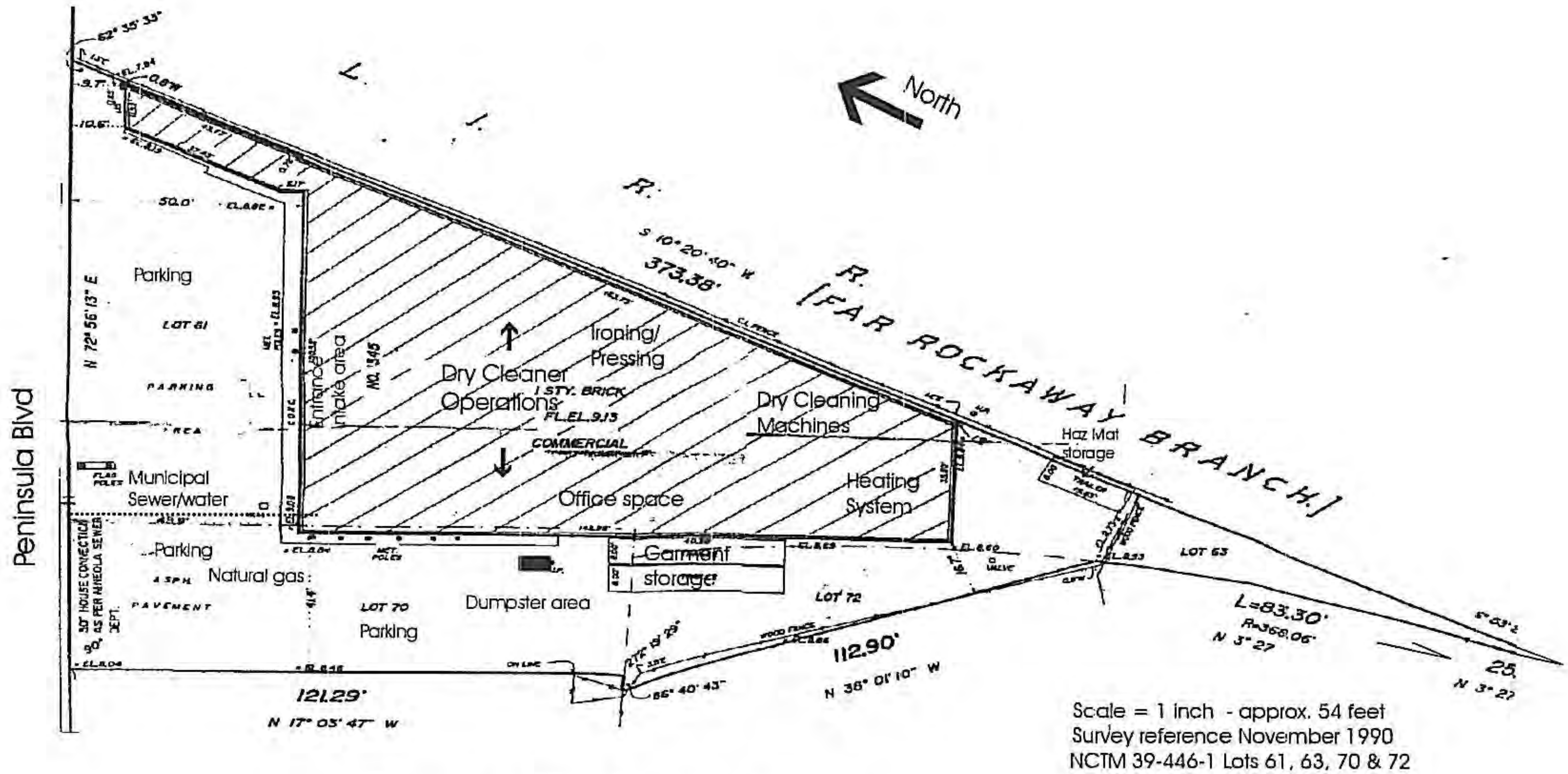


Source: Nassau County Dept. Public Works
Water Management Unit
Divsion of Sanitation & Water Supply

No scale

Water Table Elevation Map
Nassau County, New York 1995

Figure 5 - Groundwater Elevation Map with Subject Property



Parking

Figure 6 - Site Plan and Survey
American Drive-In Cleaners of Hewlett, Inc.
1345 Peninsula Boulevard, Hewlett, New York

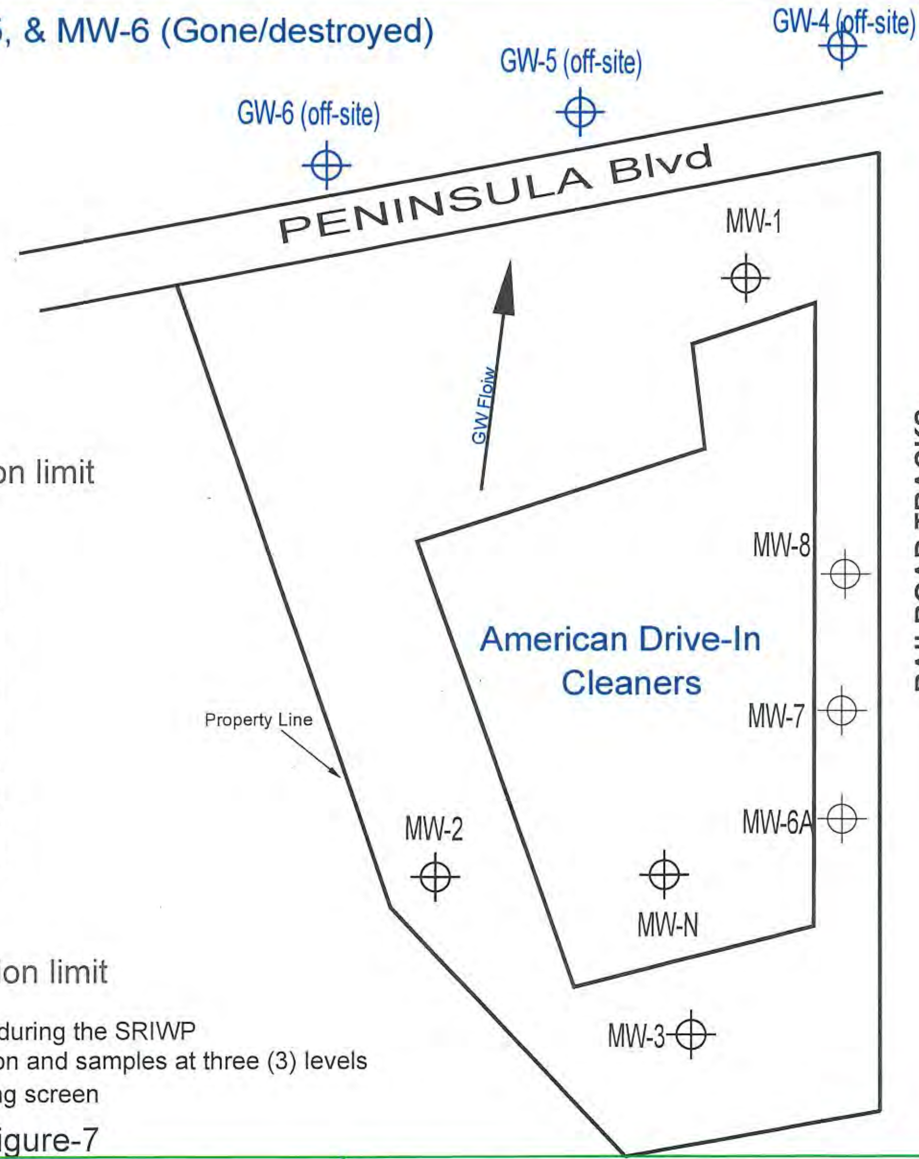
*Monitoring Wells MW-4, MW-5, & MW-6 (Gone/destroyed)

ID	Depth'	PCE	TCE	DCE	VC
GW-4	5-9'	150	100	350	n/d
	15-19'	J	1,300	35,000	24
	26-30'	J	n/d	60	n/d
GW-5	5-9'	33	46	260	n/d
	15-19'	47	1,700	10,000	12
	26-30'	9	300	570	9
GW-6	5-9'	n/d	n/d	7	n/d
	15-19'	n/d	12	110	n/d
	26-30'	n/d	n/d	n/d	n/d

*all results in ppb
** n/d=non-detect
*** J lab qualifier detected below detection limit

ID	Depth'	PCE	TCE	DCE	VC
MW-1	surfac~ 5'	32,000	9,900	14,000	140
MW-2	surfac~ 5'	190	75	100	n/d
MW-3	surfac~ 5'	110	31	18	n/d
MW-6A	surfac~ 5'	5,200	1,400	2,600	5
MW-7	surfac~ 5'	11,000	1,300	1,800	120
MW-8	surfac~ 5'	270	110	5,625	120
MW-N	surfac~ 5'	1,600	13	17	n/d

*all results in ppb
** n/d=non-detect
*** J lab qualifier indicates analyte detected below detection limit



Note: Off-site wells MW-4, 5 and 6 were found to be covered by new sidewalk during the SRIWP
Temp groundwater borings will be performed at each former off-site MW location and samples at three (3) levels : surface: 5'-9'; 15'-19'; and 26' -30', utilizing a 4' - SP-15 stainless steel sampling screen

Figure-7

BEi Berninger Environmental
groundwater consultants, geologists and scientists
A WRS Environmental Services Company
Phone: 631 589 6521
17 Old Dock Road Yaphank, NY 11980

AMERICAN DRIVE-IN CLEANERS

MONITORING WELLS

DRAWN BY: WB

AMERICAN DRIVE-IN CLEANERS
13454 PENINSULA BLVD.
HEWLETT, NEW YORK

Note:
Temp groundwater borings will be performed at proposed GW-7, 8 and 9 with three (3) depths sampled 5'-9', 15'-19' and 26-30' utilizing a 4' - SP-15 stainless steel sampling device

Scale: 1"=128'

Proposed Outdoor Air Sample

Proposed Sampling Locations (GW)

Proposed Sub-slab/Indoor Air Samples

Proposed Soil Vapor Samples

BEi Berninger Environmental
groundwater consultants, geologists and scientists
A WRS Environmental Services Company
Phone: 631 589 6521
17 Old Dock Road Yaphank, NY 11980

AMERICAN DRIVE-IN CLEANERS

Off-site Sampling Locations

Figure-8

AMERICAN DRIVE-IN CLEANERS
1345 PENINSULA BLVD.
HEWLETT, NEW YORK

BEi Berninger Environmental
groundwater consultants, geologists and scientists
A WRS Environmental Services Company
Phone: 631 589 6521
17 Old Dock Road Yaphank, NY 11980

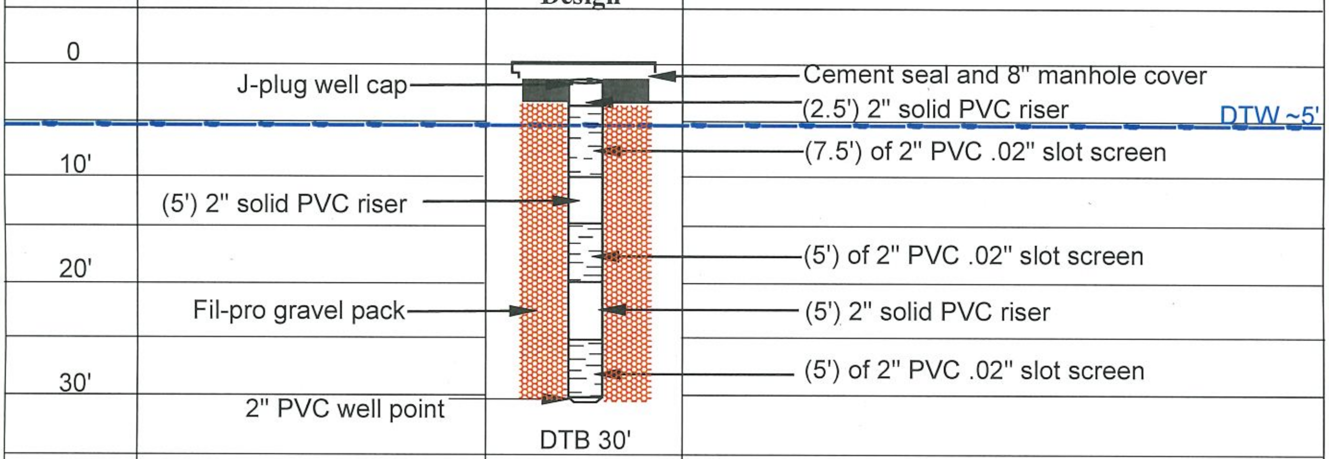
MW-9

Figure-9

Project: American Drive-in Cleaners
Client: Morieda
Location: 1345 Peninsula Boulevard Hewlett, NY 11557
Well No: MW-9 (new Well) **Use:** Monitoring/Sampling
Install Method: Direct Push
Casing Type: sch 40 PVC **Casing Dia:** 2" **Casing Length:** 2.5'
Screen Type: sch 40 PVC **Screen Dia:** 2" **Screen Length:** 5' X 3
Screen Slot: 0.02" **Gravel Pack:** #2 fil-pro
Casing Seal: Grout/Bentonite **Finish:** Cement Flush

Date: April 2023
Be Job No:
Installer: BEI
Bore Hole Dia: 3.5"
Sample Method: 8260 (VOCs)
Depth to Water: 5'
Total Depth: 30'
Security: 8" manway

Depth bgs	Sample Information	Well Design	Identification/Remarks



TABLES

Table-1

Monitoring Well Data

American Analytical Laboratories, LLC.
WorkOrder: 1908001
Client: WRS d.b.a Berninger Environmental
Project: American Drive-In Cleaners, 1345 Peninsula Blvd, Hewlett, NY

(19) TOGsGW Limits

Abbreviation:
NA = Not available, no value specified in TOGsGW Limits

		Client Sample ID:		**MW-1**		**MW-2**		**MW-3**		
		Laboratory ID:		**1908001-001**		**1908001-002**		**1908001-003**		
		Sampling Date:		**07/31/2019**		**07/31/2019**		**07/31/2019**		
Cas #:	**Procedure:**	**Analyte:**	**Units:**		**Q**		**Q**		**Q**	**Limits**
630-20-6	VOLATILE SW-846 METHOD 8260	1,1,1,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	5
71-55-6	VOLATILE SW-846 METHOD 8260	1,1,1-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	5
79-34-5	VOLATILE SW-846 METHOD 8260	1,1,2,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	5
76-13-1	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloro-1,2,2-trifluoroethane	PPB	0.25	U	0.25	U	0.25	U	5
79-00-5	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	1
75-34-3	VOLATILE SW-846 METHOD 8260	1,1-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	5
75-35-4	VOLATILE SW-846 METHOD 8260	***1,1-Dichloroethene***	PPB	**15**		0.25	U	0.25	U	**5**
563-58-6	VOLATILE SW-846 METHOD 8260	1,1-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	1
87-61-6	VOLATILE SW-846 METHOD 8260	1,2,3-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
96-18-4	VOLATILE SW-846 METHOD 8260	1,2,3-Trichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
95-93-2	VOLATILE SW-846 METHOD 8260	1,2,4,5-Tetramethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
120-82-1	VOLATILE SW-846 METHOD 8260	1,2,4-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
95-63-6	VOLATILE SW-846 METHOD 8260	1,2,4-Trimethylbenzene	PPB	3.6		0.25	U	0.25	U	5
96-12-8	VOLATILE SW-846 METHOD 8260	1,2-Dibromo-3-chloropropane	PPB	0.25	U	0.25	U	0.25	U	0.04
106-93-4	VOLATILE SW-846 METHOD 8260	1,2-Dibromoethane	PPB	0.25	U	0.25	U	0.25	U	0.0006
95-50-1	VOLATILE SW-846 METHOD 8260	1,2-Dichlorobenzene	PPB	0.65	J	0.25	U	0.25	U	3
107-06-2	VOLATILE SW-846 METHOD 8260	1,2-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	0.6
78-87-5	VOLATILE SW-846 METHOD 8260	1,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	1
108-67-8	VOLATILE SW-846 METHOD 8260	1,3,5-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
541-73-1	VOLATILE SW-846 METHOD 8260	1,3-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
142-28-9	VOLATILE SW-846 METHOD 8260	1,3-dichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
106-46-7	VOLATILE SW-846 METHOD 8260	1,4-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
123-91-1	VOLATILE SW-846 METHOD 8260	1,4-Dioxane	PPB	0.25	U	0.25	U	0.25	U	NA
594-20-7	VOLATILE SW-846 METHOD 8260	2,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
78-93-3	VOLATILE SW-846 METHOD 8260	2-Butanone	PPB	0.50	U	0.50	U	0.50	U	50
110-75-8	VOLATILE SW-846 METHOD 8260	2-Chloroethyl vinyl ether	PPB	10	U	10	U	10	U	NA
95-49-8	VOLATILE SW-846 METHOD 8260	2-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	5
591-78-6	VOLATILE SW-846 METHOD 8260	2-Hexanone	PPB	0.50	U	0.50	U	0.50	U	50
67-63-0	VOLATILE SW-846 METHOD 8260	2-Propanol	PPB	0.25	U	0.25	U	0.25	U	NA
106-43-4	VOLATILE SW-846 METHOD 8260	4-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	5
99-87-6	VOLATILE SW-846 METHOD 8260	4-Isopropyltoluene	PPB	0.25	U	0.25	U	0.25	U	5
108-10-1	VOLATILE SW-846 METHOD 8260	4-Methyl-2-pentanone	PPB	0.50	U	0.50	U	0.50	U	NA
67-64-1	VOLATILE SW-846 METHOD 8260	Acetone	PPB	19	B	39	B	25	B	50
71-43-2	VOLATILE SW-846 METHOD 8260	Benzene	PPB	0.25	U	0.25	U	0.25	U	1
108-86-1	VOLATILE SW-846 METHOD 8260	Bromobenzene	PPB	0.25	U	0.25	U	0.25	U	5
74-97-5	VOLATILE SW-846 METHOD 8260	Bromochloromethane	PPB	0.25	U	0.25	U	0.25	U	5
75-27-4	VOLATILE SW-846 METHOD 8260	Bromodichloromethane	PPB	0.25	U	0.25	U	0.25	U	50
75-25-2	VOLATILE SW-846 METHOD 8260	Bromoform	PPB	0.25	U	0.25	U	0.25	U	50
74-83-9	VOLATILE SW-846 METHOD 8260	Bromomethane	PPB	0.25	U	0.25	U	0.25	U	5
75-15-0	VOLATILE SW-846 METHOD 8260	Carbon disulfide	PPB	0.25	U	0.25	U	0.25	U	NA
56-23-5	VOLATILE SW-846 METHOD 8260	Carbon tetrachloride	PPB	0.25	U	0.25	U	0.25	U	5
108-90-7	VOLATILE SW-846 METHOD 8260	Chlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
75-45-6	VOLATILE SW-846 METHOD 8260	Chlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	NA
75-00-3	VOLATILE SW-846 METHOD 8260	Chloroethane	PPB	0.25	U	0.25	U	0.25	U	5
67-66-3	VOLATILE SW-846 METHOD 8260	Chloroform	PPB	0.25	U	0.25	U	0.25	U	7
74-87-3	VOLATILE SW-846 METHOD 8260	Chloromethane	PPB	0.25	U	0.25	U	0.25	U	5
156-59-2	VOLATILE SW-846 METHOD 8260	***cis-1,2-Dichloroethene***	PPB	**14000**	D	**100**		**18**		**5**
10061-01-5	VOLATILE SW-846 METHOD 8260	cis-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.4
110-82-7	VOLATILE SW-846 METHOD 8260	Cyclohexane	PPB	0.25	U	0.25	U	0.25	U	NA
124-48-1	VOLATILE SW-846 METHOD 8260	Dibromochloromethane	PPB	0.25	U	0.25	U	0.25	U	50
74-95-3	VOLATILE SW-846 METHOD 8260	Dibromomethane	PPB	0.25	U	0.25	U	0.25	U	5
75-71-8	VOLATILE SW-846 METHOD 8260	Dichlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	5
108-20-3	VOLATILE SW-846 METHOD 8260	Diisopropyl ether	PPB	0.50	U	0.50	U	0.50	U	NA
64-17-5	VOLATILE SW-846 METHOD 8260	Ethanol	PPB	2.5	U	2.5	U	2.5	U	NA
100-41-4	VOLATILE SW-846 METHOD 8260	Ethylbenzene	PPB	0.76	J	0.25	U	0.25	U	5
76-14-2	VOLATILE SW-846 METHOD 8260	Freon-114	PPB	0.25	U	0.25	U	0.25	U	NA
87-68-3	VOLATILE SW-846 METHOD 8260	Hexachlorobutadiene	PPB	0.25	U	0.25	U	0.25	U	0.5
98-82-8	VOLATILE SW-846 METHOD 8260	***Isopropylbenzene***	PPB	**24**		0.25	U	0.25	U	**5**
179601-23-1	VOLATILE SW-846 METHOD 8260	m,p-Xylene	PPB	0.67	J	0.50	U	0.50	U	5
79-20-9	VOLATILE SW-846 METHOD 8260	Methyl Acetate	PPB	0.25	U	0.25	U	0.25	U	NA
1634-04-4	VOLATILE SW-846 METHOD 8260	Methyl tert-butyl ether	PPB	0.25	U	0.25	U	0.25	U	10
75-09-2	VOLATILE SW-846 METHOD 8260	Methylene chloride	PPB	2.4	B	2.8	B	2.9	B	5
104-51-8	VOLATILE SW-846 METHOD 8260	n-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
103-65-1	VOLATILE SW-846 METHOD 8260	n-Propylbenzene	PPB	2.7		0.25	U	0.25	U	5
91-20-3	VOLATILE SW-846 METHOD 8260	Naphthalene	PPB	0.25	U	0.25	U	0.25	U	10
95-47-6	VOLATILE SW-846 METHOD 8260	o-Xylene	PPB	1.1	J	0.25	U	0.25	U	5
105-05-5	VOLATILE SW-846 METHOD 8260	p-Diethylbenzene	PPB	0.25	U	0.25	U	0.25	U	NA
622-96-8	VOLATILE SW-846 METHOD 8260	p-Ethyltoluene	PPB	4.4		0.25	U	0.25	U	NA
135-98-8	VOLATILE SW-846 METHOD 8260	sec-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
100-42-5	VOLATILE SW-846 METHOD 8260	Styrene	PPB	0.25	U	0.25	U	0.25	U	5
75-65-0	VOLATILE SW-846 METHOD 8260	t-Butyl alcohol	PPB	2.5	U	2.5	U	2.5	U	NA
98-06-6	VOLATILE SW-846 METHOD 8260	tert-Butylbenzene	PPB	1.0	J	0.25	U	0.25	U	5
127-18-4	VOLATILE SW-846 METHOD 8260	***Tetrachloroethene***	PPB	**32000**	D	**190**		**110**		**5**
108-88-3	VOLATILE SW-846 METHOD 8260	Toluene	PPB	0.49	J	0.25	U	0.26	BJ	5
156-60-5	VOLATILE SW-846 METHOD 8260	***trans-1,2-Dichloroethene***	PPB	**120**		0.85	J	1.1	J	**5**
10061-02-6	VOLATILE SW-846 METHOD 8260	trans-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.4
79-01-6	VOLATILE SW-846 METHOD 8260	***Trichloroethene***	PPB	**9900**	D	**75**		**31**		**5**
75-69-4	VOLATILE SW-846 METHOD 8260	Trichlorofluoromethane	PPB	0.25	U	0.25	U	0.25	U	5
108-05-4	VOLATILE SW-846 METHOD 8260	Vinyl acetate	PPB	0.25	U	0.25	U	0.25	U	NA
75-01-4	VOLATILE SW-846 METHOD 8260	***Vinyl chloride***	PPB	**140**		0.25	U	0.25	U	**2**
108-87-2	VOLATILE SW-846 METHOD 8260	Methylcyclohexane	PPB	0.25	U	0.25	U	0.25	U	NA
107-02-8	VOLATILE SW-846 METHOD 8260	Acrolein	PPB	1.0	U	1.0	U	1.0	U	5
107-13-1	VOLATILE SW-846 METHOD 8260	Acrylonitrile	PPB	0.25	U	0.25	U	0.25	U	5
1330-20-7	VOLATILE SW-846 METHOD 8260	Xylenes, Total	PPB	1.8	J	0.75	U	0.75	U	5

American Analytical Laboratories, LLC.
WorkOrder: 1908001
Client: WRS d.b.a Berninger Environmental
Project: American Drive-In Cleaners, 1345 Peninsula Blvd, Hewlett, NY

(19) TOGsGW Limits

Abbreviation:
NA = Not available, no value specified in TOGsGW Limits

		Client Sample ID:		**MW-6A**		**MW-7**		**MW-8**		**MW-N**		
		Laboratory ID:		**1908001-004**		**1908001-005**		**1908001-006**		**1908001-007**		
		Sampling Date:		**07/31/2019**		**07/31/2019**		**07/31/2019**		**07/31/2019**		
Cas #:	**Procedure:**	**Analyte:**	**Units:**		**Q**		**Q**		**Q**		**Q**	**Limits**
630-20-6	VOLATILE SW-846 METHOD 8260	1,1,1,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
71-55-6	VOLATILE SW-846 METHOD 8260	1,1,1-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
79-34-5	VOLATILE SW-846 METHOD 8260	1,1,2,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
76-13-1	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloro-1,2,2-trifluoroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
79-00-5	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	1
75-34-3	VOLATILE SW-846 METHOD 8260	1,1-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
75-35-4	VOLATILE SW-846 METHOD 8260	1,1-Dichloroethene	PPB	0.50	J	1.0	J	1.1	J	0.25	U	5
563-58-6	VOLATILE SW-846 METHOD 8260	1,1-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	1
87-61-6	VOLATILE SW-846 METHOD 8260	1,2,3-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
96-18-4	VOLATILE SW-846 METHOD 8260	1,2,3-Trichloropropane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
95-93-2	VOLATILE SW-846 METHOD 8260	1,2,4,5-Tetramethylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
120-82-1	VOLATILE SW-846 METHOD 8260	1,2,4-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
95-63-6	VOLATILE SW-846 METHOD 8260	1,2,4-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
96-12-8	VOLATILE SW-846 METHOD 8260	1,2-Dibromo-3-chloropropane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	0.04
106-93-4	VOLATILE SW-846 METHOD 8260	1,2-Dibromoethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	0.0006
95-50-1	VOLATILE SW-846 METHOD 8260	1,2-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	3
107-06-2	VOLATILE SW-846 METHOD 8260	1,2-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	0.6
78-87-5	VOLATILE SW-846 METHOD 8260	1,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	1
108-67-8	VOLATILE SW-846 METHOD 8260	1,3,5-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
541-73-1	VOLATILE SW-846 METHOD 8260	1,3-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	3
142-28-9	VOLATILE SW-846 METHOD 8260	1,3-dichloropropane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
106-46-7	VOLATILE SW-846 METHOD 8260	1,4-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	3
123-91-1	VOLATILE SW-846 METHOD 8260	1,4-Dioxane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
594-20-7	VOLATILE SW-846 METHOD 8260	2,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
78-93-3	VOLATILE SW-846 METHOD 8260	2-Butanone	PPB	0.50	U	0.50	U	0.50	U	0.50	U	50
110-75-8	VOLATILE SW-846 METHOD 8260	2-Chloroethyl vinyl ether	PPB	10	U	10	U	10	U	10	U	NA
95-49-8	VOLATILE SW-846 METHOD 8260	2-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
591-78-6	VOLATILE SW-846 METHOD 8260	2-Hexanone	PPB	0.50	U	0.50	U	0.50	U	0.50	U	50
67-63-0	VOLATILE SW-846 METHOD 8260	2-Propanol	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
106-43-4	VOLATILE SW-846 METHOD 8260	4-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
99-87-6	VOLATILE SW-846 METHOD 8260	4-Isopropyltoluene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
108-10-1	VOLATILE SW-846 METHOD 8260	4-Methyl-2-pentanone	PPB	0.50	U	0.50	U	0.50	U	0.50	U	NA
67-64-1	VOLATILE SW-846 METHOD 8260	Acetone	PPB	47	B	23	B	23	B	18	B	50
71-43-2	VOLATILE SW-846 METHOD 8260	Benzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	1
108-86-1	VOLATILE SW-846 METHOD 8260	Bromobenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
74-97-5	VOLATILE SW-846 METHOD 8260	Bromochloromethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
75-27-4	VOLATILE SW-846 METHOD 8260	Bromodichloromethane	PPB	0.25	U	0.25	U	0.44	J	0.25	U	50
75-25-2	VOLATILE SW-846 METHOD 8260	Bromoform	PPB	0.25	U	0.25	U	0.25	U	0.25	U	50
74-83-9	VOLATILE SW-846 METHOD 8260	Bromomethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
75-15-0	VOLATILE SW-846 METHOD 8260	Carbon disulfide	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
56-23-5	VOLATILE SW-846 METHOD 8260	Carbon tetrachloride	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
108-90-7	VOLATILE SW-846 METHOD 8260	Chlorobenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
75-45-6	VOLATILE SW-846 METHOD 8260	Chlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
75-00-3	VOLATILE SW-846 METHOD 8260	Chloroethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
67-66-3	VOLATILE SW-846 METHOD 8260	Chloroform	PPB	0.25	U	0.25	U	0.29	J	0.25	U	7
74-87-3	VOLATILE SW-846 METHOD 8260	Chloromethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
156-59-2	VOLATILE SW-846 METHOD 8260	***cis-1,2-Dichloroethene***	PPB	**2600**	D	**1800**	D	**5500**	D	**17**		**5**
10061-01-5	VOLATILE SW-846 METHOD 8260	cis-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	0.4
110-82-7	VOLATILE SW-846 METHOD 8260	Cyclohexane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
124-48-1	VOLATILE SW-846 METHOD 8260	Dibromochloromethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	50
74-95-3	VOLATILE SW-846 METHOD 8260	Dibromomethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
75-71-8	VOLATILE SW-846 METHOD 8260	Dichlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
108-20-3	VOLATILE SW-846 METHOD 8260	Diisopropyl ether	PPB	0.50	U	0.50	U	0.50	U	0.50	U	NA
64-17-5	VOLATILE SW-846 METHOD 8260	Ethanol	PPB	2.5	U	2.5	U	2.5	U	2.5	U	NA
100-41-4	VOLATILE SW-846 METHOD 8260	Ethylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
76-14-2	VOLATILE SW-846 METHOD 8260	Freon-114	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
87-68-3	VOLATILE SW-846 METHOD 8260	Hexachlorobutadiene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	0.5
98-82-8	VOLATILE SW-846 METHOD 8260	Isopropylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
179601-23-1	VOLATILE SW-846 METHOD 8260	m,p-Xylene	PPB	0.50	U	0.50	U	0.50	U	0.50	U	5
79-20-9	VOLATILE SW-846 METHOD 8260	Methyl Acetate	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
1634-04-4	VOLATILE SW-846 METHOD 8260	Methyl tert-butyl ether	PPB	0.25	U	0.25	U	0.25	U	0.25	U	10
75-09-2	VOLATILE SW-846 METHOD 8260	Methylene chloride	PPB	2.8	B	2.7	B	2.9	B	2.8	B	5
104-51-8	VOLATILE SW-846 METHOD 8260	n-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
103-65-1	VOLATILE SW-846 METHOD 8260	n-Propylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
91-20-3	VOLATILE SW-846 METHOD 8260	Naphthalene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	10
95-47-6	VOLATILE SW-846 METHOD 8260	o-Xylene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
105-05-5	VOLATILE SW-846 METHOD 8260	p-Diethylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
622-96-8	VOLATILE SW-846 METHOD 8260	p-Ethyltoluene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
135-98-8	VOLATILE SW-846 METHOD 8260	sec-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
100-42-5	VOLATILE SW-846 METHOD 8260	Styrene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
75-65-0	VOLATILE SW-846 METHOD 8260	t-Butyl alcohol	PPB	2.5	U	2.5	U	2.5	U	2.5	U	NA
98-06-6	VOLATILE SW-846 METHOD 8260	tert-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
127-18-4	VOLATILE SW-846 METHOD 8260	***Tetrachloroethene***	PPB	**5200**	D	**11000**	D	**270**	D	**1600**	D	**5**
108-88-3	VOLATILE SW-846 METHOD 8260	Toluene	PPB	0.36	BJ	0.25	U	0.25	U	0.31	BJ	5
156-60-5	VOLATILE SW-846 METHOD 8260	***trans-1,2-Dichloroethene***	PPB	**25**		**23**		**120**		0.25	U	**5**
10061-02-6	VOLATILE SW-846 METHOD 8260	trans-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.25	U	0.4
79-01-6	VOLATILE SW-846 METHOD 8260	***Trichloroethene***	PPB	**1400**	D	**1300**	D	**110**		**13**		**5**
75-69-4	VOLATILE SW-846 METHOD 8260	Trichlorofluoromethane	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
108-05-4	VOLATILE SW-846 METHOD 8260	Vinyl acetate	PPB	0.25	U	0.25	U	0.25	U	0.25	U	NA
75-01-4	VOLATILE SW-846 METHOD 8260	***Vinyl chloride***	PPB	**5.0**		**23**		**120**		0.25	U	**2**
108-87-2	VOLATILE SW-846 METHOD 8260	Methylcyclohexane	PPB	0.75	U	0.75	U	0.75	U	0.75	U	NA
107-02-8	VOLATILE SW-846 METHOD 8260	Acrolein	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5
107-13-1	VOLATILE SW-846 METHOD 8260	Acrylonitrile	PPB	1.0	U	1.0	U	1.0	U	1.0	U	5
1330-20-7	VOLATILE SW-846 METHOD 8260	Xylenes, Total	PPB	0.25	U	0.25	U	0.25	U	0.25	U	5

Table-2

Off-site Groundwater Data

(GW-4, 5, and 6)

American Analytical Laboratories, LLC.
WorkOrder: 1908134
Client: WRS d.b.a Berninger Environmental
Project: American Drive-In Cleaners, 1345 Peninsula Blvd, Hewlett, NY

Abbreviation:
NA = Not available, no value specified in TOGsGW Limits

		Client Sample ID:		**GW-4 @ 5-9'**		**GW-4 @ 15-19'**		**GW-4 @ 26-30'**		**TOGs**
		Laboratory ID:		**1908134-001**		**1908134-002**		**1908134-003**		**Groundwater**
		Sampling Date:		**08/15/2019**		**08/15/2019**		**08/15/2019**		**Limits**
Cas #:	**Procedure:**	**Analyte:**	**Units:**		**Q**		**Q**		**Q**	
630-20-6	VOLATILE SW-846 METHOD 8260	1,1,1,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	**5**
71-55-6	VOLATILE SW-846 METHOD 8260	1,1,1-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	**5**
79-34-5	VOLATILE SW-846 METHOD 8260	1,1,2,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	**5**
76-13-1	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloro-1,2,2-trifluoroethane	PPB	0.25	U	0.25	U	0.25	U	**5**
79-00-5	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	**1**
75-34-3	VOLATILE SW-846 METHOD 8260	1,1-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	**5**
75-35-4	VOLATILE SW-846 METHOD 8260	***1,1-Dichloroethene***	PPB	2.1		***99***		0.25	U	**5**
563-58-6	VOLATILE SW-846 METHOD 8260	1,1-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	**1**
87-61-6	VOLATILE SW-846 METHOD 8260	1,2,3-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
96-18-4	VOLATILE SW-846 METHOD 8260	1,2,3-Trichloropropane	PPB	0.25	U	0.25	U	0.25	U	**5**
95-93-2	VOLATILE SW-846 METHOD 8260	1,2,4,5-Tetramethylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
120-82-1	VOLATILE SW-846 METHOD 8260	1,2,4-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
95-63-6	VOLATILE SW-846 METHOD 8260	1,2,4-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
96-12-8	VOLATILE SW-846 METHOD 8260	1,2-Dibromo-3-chloropropane	PPB	0.25	U	0.25	U	0.25	U	**0.04**
106-93-4	VOLATILE SW-846 METHOD 8260	1,2-Dibromoethane	PPB	0.25	U	0.25	U	0.25	U	**0.0006**
95-50-1	VOLATILE SW-846 METHOD 8260	1,2-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	**3**
107-06-2	VOLATILE SW-846 METHOD 8260	1,2-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	**0.6**
78-87-5	VOLATILE SW-846 METHOD 8260	1,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	**1**
108-67-8	VOLATILE SW-846 METHOD 8260	1,3,5-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
541-73-1	VOLATILE SW-846 METHOD 8260	1,3-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	**3**
142-28-9	VOLATILE SW-846 METHOD 8260	1,3-dichloropropane	PPB	0.25	U	0.25	U	0.25	U	**5**
106-46-7	VOLATILE SW-846 METHOD 8260	1,4-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	**3**
123-91-1	VOLATILE SW-846 METHOD 8260	1,4-Dioxane	PPB	0.25	U	0.25	U	0.25	U	**NA**
594-20-7	VOLATILE SW-846 METHOD 8260	2,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	**5**
78-93-3	VOLATILE SW-846 METHOD 8260	2-Butanone	PPB	0.50	U	0.50	U	0.50	U	**50**
110-75-8	VOLATILE SW-846 METHOD 8260	2-Chloroethyl vinyl ether	PPB	10	U	10	U	10	U	**NA**
95-49-8	VOLATILE SW-846 METHOD 8260	2-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	**5**
591-78-6	VOLATILE SW-846 METHOD 8260	2-Hexanone	PPB	0.50	U	0.50	U	0.50	U	**50**
67-63-0	VOLATILE SW-846 METHOD 8260	2-Propanol	PPB	0.25	U	0.25	U	0.25	U	**NA**
106-43-4	VOLATILE SW-846 METHOD 8260	4-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	**5**
99-87-6	VOLATILE SW-846 METHOD 8260	4-Isopropyltoluene	PPB	0.25	U	0.25	U	0.25	U	**5**
108-10-1	VOLATILE SW-846 METHOD 8260	4-Methyl-2-pentanone	PPB	0.50	U	0.50	U	0.50	U	**NA**
67-64-1	VOLATILE SW-846 METHOD 8260	Acetone	PPB	17	B	13	B	11	B	**50**
71-43-2	VOLATILE SW-846 METHOD 8260	Benzene	PPB	0.25	U	0.25	U	0.25	U	**1**
108-86-1	VOLATILE SW-846 METHOD 8260	Bromobenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
74-97-5	VOLATILE SW-846 METHOD 8260	Bromochloromethane	PPB	0.25	U	0.25	U	0.25	U	**5**
75-27-4	VOLATILE SW-846 METHOD 8260	Bromodichloromethane	PPB	0.25	U	0.25	U	0.25	U	**50**
75-25-2	VOLATILE SW-846 METHOD 8260	Bromoform	PPB	0.25	U	0.25	U	0.25	U	**50**
74-83-9	VOLATILE SW-846 METHOD 8260	Bromomethane	PPB	0.25	U	0.25	U	0.25	U	**5**
75-15-0	VOLATILE SW-846 METHOD 8260	Carbon disulfide	PPB	0.25	U	0.25	U	0.25	U	**NA**
56-23-5	VOLATILE SW-846 METHOD 8260	Carbon tetrachloride	PPB	0.25	U	0.25	U	0.25	U	**5**
108-90-7	VOLATILE SW-846 METHOD 8260	Chlorobenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
75-45-6	VOLATILE SW-846 METHOD 8260	Chlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	**NA**
75-00-3	VOLATILE SW-846 METHOD 8260	Chloroethane	PPB	0.25	U	0.25	U	0.25	U	**5**
67-66-3	VOLATILE SW-846 METHOD 8260	Chloroform	PPB	0.25	U	0.25	U	0.25	U	**7**
74-87-3	VOLATILE SW-846 METHOD 8260	Chloromethane	PPB	0.25	U	0.25	U	0.25	U	**5**
156-59-2	VOLATILE SW-846 METHOD 8260	***cis-1,2-Dichloroethene***	PPB	***330***	D	***35000***	D	***59***		**5**
10061-01-5	VOLATILE SW-846 METHOD 8260	cis-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	**0.4**
110-82-7	VOLATILE SW-846 METHOD 8260	Cyclohexane	PPB	0.25	U	0.25	U	0.25	U	**NA**
124-48-1	VOLATILE SW-846 METHOD 8260	Dibromochloromethane	PPB	0.25	U	0.25	U	0.25	U	**50**
74-95-3	VOLATILE SW-846 METHOD 8260	Dibromomethane	PPB	0.25	U	0.25	U	0.25	U	**5**
75-71-8	VOLATILE SW-846 METHOD 8260	Dichlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	**5**
108-20-3	VOLATILE SW-846 METHOD 8260	Diisopropyl ether	PPB	0.50	U	0.50	U	0.50	U	**NA**
64-17-5	VOLATILE SW-846 METHOD 8260	Ethanol	PPB	2.5	U	2.5	U	2.5	U	**NA**
100-41-4	VOLATILE SW-846 METHOD 8260	Ethylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
76-14-2	VOLATILE SW-846 METHOD 8260	Freon-114	PPB	0.25	U	0.25	U	0.25	U	**NA**
87-68-3	VOLATILE SW-846 METHOD 8260	Hexachlorobutadiene	PPB	0.25	U	0.25	U	0.25	U	**0.5**
98-82-8	VOLATILE SW-846 METHOD 8260	Isopropylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
179601-23-1	VOLATILE SW-846 METHOD 8260	m,p-Xylene	PPB	0.50	U	0.50	U	0.50	U	**5**
79-20-9	VOLATILE SW-846 METHOD 8260	Methyl Acetate	PPB	0.25	U	0.25	U	0.25	U	**NA**
1634-04-4	VOLATILE SW-846 METHOD 8260	Methyl tert-butyl ether	PPB	0.25	U	0.54	J	0.25	U	**10**
75-09-2	VOLATILE SW-846 METHOD 8260	Methylene chloride	PPB	6.4	B	6.2	B	6.3	B	**5**
104-51-8	VOLATILE SW-846 METHOD 8260	n-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
103-65-1	VOLATILE SW-846 METHOD 8260	n-Propylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
91-20-3	VOLATILE SW-846 METHOD 8260	Naphthalene	PPB	0.25	U	0.25	U	0.25	U	**10**
95-47-6	VOLATILE SW-846 METHOD 8260	o-Xylene	PPB	0.25	U	0.25	U	0.25	U	**5**
105-05-5	VOLATILE SW-846 METHOD 8260	p-Diethylbenzene	PPB	0.25	U	0.25	U	0.25	U	**NA**
622-96-8	VOLATILE SW-846 METHOD 8260	p-Ethyltoluene	PPB	0.25	U	0.25	U	0.25	U	**NA**
135-98-8	VOLATILE SW-846 METHOD 8260	sec-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
100-42-5	VOLATILE SW-846 METHOD 8260	Styrene	PPB	0.25	U	0.25	U	0.25	U	**5**
75-65-0	VOLATILE SW-846 METHOD 8260	t-Butyl alcohol	PPB	2.5	U	2.5	U	2.5	U	**NA**
98-06-6	VOLATILE SW-846 METHOD 8260	tert-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	**5**
127-18-4	VOLATILE SW-846 METHOD 8260	***Tetrachloroethene***	PPB	***150***	D	0.78	J	0.79	J	**5**
108-88-3	VOLATILE SW-846 METHOD 8260	Toluene	PPB	0.25	U	0.68	J	0.25	U	**5**
156-60-5	VOLATILE SW-846 METHOD 8260	***trans-1,2-Dichloroethene***	PPB	***6.7***		***190***		0.49	J	**5**
10061-02-6	VOLATILE SW-846 METHOD 8260	trans-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	**0.4**
79-01-6	VOLATILE SW-846 METHOD 8260	***Trichloroethene***	PPB	***100***		***1300***	D	0.25	U	**5**
75-69-4	VOLATILE SW-846 METHOD 8260	Trichlorofluoromethane	PPB	0.25	U	0.25	U	0.25	U	**5**
108-05-4	VOLATILE SW-846 METHOD 8260	Vinyl acetate	PPB	0.25	U	0.25	U	0.25	U	**NA**
75-01-4	VOLATILE SW-846 METHOD 8260	***Vinyl chloride***	PPB	0.25	U	***24***		0.25	U	**2**
1330-20-7	VOLATILE SW-846 METHOD 8260	Xylenes, Total	PPB	0.75	U	0.75	U	0.75	U	**5**
108-87-2	VOLATILE SW-846 METHOD 8260	Methylcyclohexane	PPB	0.25	U	0.25	U	0.25	U	**NA**
107-02-8	VOLATILE SW-846 METHOD 8260	Acrolein	PPB	1.0	U	1.0	U	1.0	U	**5**
107-13-1	VOLATILE SW-846 METHOD 8260	Acrylonitrile	PPB	0.25	U	0.25	U	0.25	U	**5**

American Analytical Laboratories, LLC.
WorkOrder: 1908134
Client: WRS d.b.a Berninger Environmental
Project: American Drive-In Cleaners, 1345 Peninsula Blvd, Hewlett, NY

Abbreviation:
NA = Not available, no value specified in TOGsGW Limits

		Client Sample ID: Laboratory ID: Sampling Date:		GW-5 @ 5-9' 1908134-004 08/15/2019		GW-5 @ 15-19" 1908134-005 08/15/2019		GW-5 @ 26-30' 1908134-006 08/15/2019		TOGs Groundwater Limits
Cas #:	**Procedure:**	**Analyte:**	**Units:**		**Q**		**Q**		**Q**	
630-20-6	VOLATILE SW-846 METHOD 8260	1,1,1,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	5
71-55-6	VOLATILE SW-846 METHOD 8260	1,1,1-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	5
79-34-5	VOLATILE SW-846 METHOD 8260	1,1,2,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	5
76-13-1	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloro-1,2,2-trifluoroethane	PPB	0.25	U	0.25	U	0.25	U	5
79-00-5	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	1
75-34-3	VOLATILE SW-846 METHOD 8260	1,1-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	5
75-35-4	VOLATILE SW-846 METHOD 8260	***1,1-Dichloroethene***	PPB	0.25	U	***30***		***12***		5
563-58-6	VOLATILE SW-846 METHOD 8260	1,1-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	1
87-61-6	VOLATILE SW-846 METHOD 8260	1,2,3-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
96-18-4	VOLATILE SW-846 METHOD 8260	1,2,3-Trichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
95-93-2	VOLATILE SW-846 METHOD 8260	1,2,4,5-Tetramethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
120-82-1	VOLATILE SW-846 METHOD 8260	1,2,4-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
95-63-6	VOLATILE SW-846 METHOD 8260	1,2,4-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
96-12-8	VOLATILE SW-846 METHOD 8260	1,2-Dibromo-3-chloropropane	PPB	0.25	U	0.25	U	0.25	U	0.04
106-93-4	VOLATILE SW-846 METHOD 8260	1,2-Dibromoethane	PPB	0.25	U	0.25	U	0.25	U	0.0006
95-50-1	VOLATILE SW-846 METHOD 8260	1,2-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
107-06-2	VOLATILE SW-846 METHOD 8260	1,2-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	0.6
78-87-5	VOLATILE SW-846 METHOD 8260	1,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	1
108-67-8	VOLATILE SW-846 METHOD 8260	1,3,5-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
541-73-1	VOLATILE SW-846 METHOD 8260	1,3-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
142-28-9	VOLATILE SW-846 METHOD 8260	1,3-dichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
106-46-7	VOLATILE SW-846 METHOD 8260	1,4-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
123-91-1	VOLATILE SW-846 METHOD 8260	1,4-Dioxane	PPB	0.25	U	0.25	U	0.25	U	NA
594-20-7	VOLATILE SW-846 METHOD 8260	2,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
78-93-3	VOLATILE SW-846 METHOD 8260	2-Butanone	PPB	0.50	U	0.50	U	0.50	U	50
110-75-8	VOLATILE SW-846 METHOD 8260	2-Chloroethyl vinyl ether	PPB	10	U	10	U	10	U	NA
95-49-8	VOLATILE SW-846 METHOD 8260	2-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	5
591-78-6	VOLATILE SW-846 METHOD 8260	2-Hexanone	PPB	0.50	U	0.50	U	0.50	U	50
67-63-0	VOLATILE SW-846 METHOD 8260	2-Propanol	PPB	0.25	U	0.25	U	0.25	U	NA
106-43-4	VOLATILE SW-846 METHOD 8260	4-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	5
99-87-6	VOLATILE SW-846 METHOD 8260	4-Isopropyltoluene	PPB	0.25	U	0.25	U	0.25	U	5
108-10-1	VOLATILE SW-846 METHOD 8260	4-Methyl-2-pentanone	PPB	0.50	U	0.50	U	0.50	U	NA
67-64-1	VOLATILE SW-846 METHOD 8260	Acetone	PPB	19	B	13	B	30	B	50
71-43-2	VOLATILE SW-846 METHOD 8260	Benzene	PPB	0.25	U	0.25	U	0.25	U	1
108-86-1	VOLATILE SW-846 METHOD 8260	Bromobenzene	PPB	0.25	U	0.25	U	0.25	U	5
74-97-5	VOLATILE SW-846 METHOD 8260	Bromochloromethane	PPB	0.25	U	0.25	U	0.25	U	5
75-27-4	VOLATILE SW-846 METHOD 8260	Bromodichloromethane	PPB	0.25	U	0.25	U	0.25	U	50
75-25-2	VOLATILE SW-846 METHOD 8260	Bromoform	PPB	0.25	U	0.25	U	0.25	U	50
74-83-9	VOLATILE SW-846 METHOD 8260	Bromomethane	PPB	0.25	U	0.25	U	0.25	U	5
75-15-0	VOLATILE SW-846 METHOD 8260	Carbon disulfide	PPB	0.25	U	0.25	U	0.25	U	NA
56-23-5	VOLATILE SW-846 METHOD 8260	Carbon tetrachloride	PPB	0.25	U	0.25	U	0.25	U	5
108-90-7	VOLATILE SW-846 METHOD 8260	Chlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
75-45-6	VOLATILE SW-846 METHOD 8260	Chlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	NA
75-00-3	VOLATILE SW-846 METHOD 8260	Chloroethane	PPB	0.25	U	0.25	U	0.25	U	5
67-66-3	VOLATILE SW-846 METHOD 8260	Chloroform	PPB	0.25	U	0.25	U	0.25	U	7
74-87-3	VOLATILE SW-846 METHOD 8260	Chloromethane	PPB	0.25	U	0.25	U	0.25	U	5
156-59-2	VOLATILE SW-846 METHOD 8260	***cis-1,2-Dichloroethene***	PPB	***260***	D	***10000***	D	***570***	D	5
10061-01-5	VOLATILE SW-846 METHOD 8260	cis-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.4
110-82-7	VOLATILE SW-846 METHOD 8260	Cyclohexane	PPB	0.25	U	0.25	U	0.25	U	NA
124-48-1	VOLATILE SW-846 METHOD 8260	Dibromochloromethane	PPB	0.25	U	0.25	U	0.25	U	50
74-95-3	VOLATILE SW-846 METHOD 8260	Dibromomethane	PPB	0.25	U	0.25	U	0.25	U	5
75-71-8	VOLATILE SW-846 METHOD 8260	Dichlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	5
108-20-3	VOLATILE SW-846 METHOD 8260	Diisopropyl ether	PPB	0.50	U	0.50	U	0.50	U	NA
64-17-5	VOLATILE SW-846 METHOD 8260	Ethanol	PPB	2.5	U	2.5	U	2.5	U	NA
100-41-4	VOLATILE SW-846 METHOD 8260	Ethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
76-14-2	VOLATILE SW-846 METHOD 8260	Freon-114	PPB	0.25	U	0.25	U	0.25	U	NA
87-68-3	VOLATILE SW-846 METHOD 8260	Hexachlorobutadiene	PPB	0.25	U	0.25	U	0.25	U	0.5
98-82-8	VOLATILE SW-846 METHOD 8260	Isopropylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
179601-23-1	VOLATILE SW-846 METHOD 8260	m,p-Xylene	PPB	0.50	U	0.50	U	0.50	U	5
79-20-9	VOLATILE SW-846 METHOD 8260	Methyl Acetate	PPB	0.25	U	0.25	U	0.25	U	NA
1634-04-4	VOLATILE SW-846 METHOD 8260	Methyl tert-butyl ether	PPB	0.25	U	0.27	J	0.25	U	10
75-09-2	VOLATILE SW-846 METHOD 8260	Methylene chloride	PPB	6.2	B	5.2	B	5.5	B	5
104-51-8	VOLATILE SW-846 METHOD 8260	n-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
103-65-1	VOLATILE SW-846 METHOD 8260	n-Propylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
91-20-3	VOLATILE SW-846 METHOD 8260	Naphthalene	PPB	0.25	U	0.25	U	0.25	U	10
95-47-6	VOLATILE SW-846 METHOD 8260	o-Xylene	PPB	0.25	U	0.25	U	0.25	U	5
105-05-5	VOLATILE SW-846 METHOD 8260	p-Diethylbenzene	PPB	0.25	U	0.25	U	0.25	U	NA
622-96-8	VOLATILE SW-846 METHOD 8260	p-Ethyltoluene	PPB	0.25	U	0.25	U	0.25	U	NA
135-98-8	VOLATILE SW-846 METHOD 8260	sec-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
100-42-5	VOLATILE SW-846 METHOD 8260	Styrene	PPB	0.25	U	0.25	U	0.25	U	5
75-65-0	VOLATILE SW-846 METHOD 8260	t-Butyl alcohol	PPB	2.5	U	2.5	U	2.5	U	NA
98-06-6	VOLATILE SW-846 METHOD 8260	tert-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
127-18-4	VOLATILE SW-846 METHOD 8260	***Tetrachloroethene***	PPB	***33***		***47***		***9.6***		5
108-88-3	VOLATILE SW-846 METHOD 8260	Toluene	PPB	0.25	U	0.28	J	0.25	U	5
156-60-5	VOLATILE SW-846 METHOD 8260	***trans-1,2-Dichloroethene***	PPB	1.5	J	***63***		2.7		5
10061-02-6	VOLATILE SW-846 METHOD 8260	trans-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.4
79-01-6	VOLATILE SW-846 METHOD 8260	***Trichloroethene***	PPB	***46***		***1700***	D	***300***		5
75-69-4	VOLATILE SW-846 METHOD 8260	Trichlorofluoromethane	PPB	0.25	U	0.25	U	0.25	U	5
108-05-4	VOLATILE SW-846 METHOD 8260	Vinyl acetate	PPB	0.25	U	0.25	U	0.25	U	NA
75-01-4	VOLATILE SW-846 METHOD 8260	***Vinyl chloride***	PPB	0.25	U	***12***		***8.9***		2
1330-20-7	VOLATILE SW-846 METHOD 8260	Xylenes, Total	PPB	0.75	U	0.75	U	0.75	U	5
108-87-2	VOLATILE SW-846 METHOD 8260	Methylcyclohexane	PPB	0.25	U	0.25	U	0.25	U	NA
107-02-8	VOLATILE SW-846 METHOD 8260	Acrolein	PPB	1.0	U	1.0	U	1.0	U	5
107-13-1	VOLATILE SW-846 METHOD 8260	Acrylonitrile	PPB	0.25	U	0.25	U	0.25	U	5

American Analytical Laboratories, LLC.
WorkOrder: 1908134
Client: WRS d.b.a Berninger Environmental
Project: American Drive-In Cleaners, 1345 Peninsula Blvd, Hewlett, NY

Abbreviation:
NA = Not available, no value specified in TOGsGW Limits

		Client Sample ID: / Laboratory ID: / Sampling Date:		GW-6 @ 5-9' 1908134-007 08/15/2019		GW-6 @ 15-19' 1908134-008 08/15/2019		GW-6 @ 26-30' 1908134-009 08/15/2019		TOGs Groundwater Limits
Cas #:	Procedure:	Analyte:	Units:		Q		Q		Q	
630-20-6	VOLATILE SW-846 METHOD 8260	1,1,1,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	5
71-55-6	VOLATILE SW-846 METHOD 8260	1,1,1-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	5
79-34-5	VOLATILE SW-846 METHOD 8260	1,1,2,2-Tetrachloroethane	PPB	0.25	U	0.25	U	0.25	U	5
76-13-1	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloro-1,2,2-trifluoroethane	PPB	0.25	U	0.25	U	0.25	U	5
79-00-5	VOLATILE SW-846 METHOD 8260	1,1,2-Trichloroethane	PPB	0.25	U	0.25	U	0.25	U	1
75-34-3	VOLATILE SW-846 METHOD 8260	1,1-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	5
75-35-4	VOLATILE SW-846 METHOD 8260	1,1-Dichloroethene	PPB	0.25	U	0.51	J	0.25	U	5
563-58-6	VOLATILE SW-846 METHOD 8260	1,1-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	1
87-61-6	VOLATILE SW-846 METHOD 8260	1,2,3-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
96-18-4	VOLATILE SW-846 METHOD 8260	1,2,3-Trichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
95-93-2	VOLATILE SW-846 METHOD 8260	1,2,4,5-Tetramethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
120-82-1	VOLATILE SW-846 METHOD 8260	1,2,4-Trichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
95-63-6	VOLATILE SW-846 METHOD 8260	1,2,4-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
96-12-8	VOLATILE SW-846 METHOD 8260	1,2-Dibromo-3-chloropropane	PPB	0.25	U	0.25	U	0.25	U	0.04
106-93-4	VOLATILE SW-846 METHOD 8260	1,2-Dibromoethane	PPB	0.25	U	0.25	U	0.25	U	0.0006
95-50-1	VOLATILE SW-846 METHOD 8260	1,2-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
107-06-2	VOLATILE SW-846 METHOD 8260	1,2-Dichloroethane	PPB	0.25	U	0.25	U	0.25	U	0.6
78-87-5	VOLATILE SW-846 METHOD 8260	1,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	1
108-67-8	VOLATILE SW-846 METHOD 8260	1,3,5-Trimethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
541-73-1	VOLATILE SW-846 METHOD 8260	1,3-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
142-28-9	VOLATILE SW-846 METHOD 8260	1,3-dichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
106-46-7	VOLATILE SW-846 METHOD 8260	1,4-Dichlorobenzene	PPB	0.25	U	0.25	U	0.25	U	3
123-91-1	VOLATILE SW-846 METHOD 8260	1,4-Dioxane	PPB	0.25	U	0.25	U	0.25	U	NA
594-20-7	VOLATILE SW-846 METHOD 8260	2,2-Dichloropropane	PPB	0.25	U	0.25	U	0.25	U	5
78-93-3	VOLATILE SW-846 METHOD 8260	2-Butanone	PPB	0.50	U	0.50	U	0.50	U	50
110-75-8	VOLATILE SW-846 METHOD 8260	2-Chloroethyl vinyl ether	PPB	10	U	10	U	10	U	NA
95-49-8	VOLATILE SW-846 METHOD 8260	2-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	5
591-78-6	VOLATILE SW-846 METHOD 8260	2-Hexanone	PPB	0.50	U	0.50	U	0.50	U	50
67-63-0	VOLATILE SW-846 METHOD 8260	2-Propanol	PPB	0.25	U	0.25	U	0.25	U	NA
106-43-4	VOLATILE SW-846 METHOD 8260	4-Chlorotoluene	PPB	0.25	U	0.25	U	0.25	U	5
99-87-6	VOLATILE SW-846 METHOD 8260	4-Isopropyltoluene	PPB	0.25	U	0.25	U	0.25	U	5
108-10-1	VOLATILE SW-846 METHOD 8260	4-Methyl-2-pentanone	PPB	0.50	U	0.50	U	0.50	U	NA
67-64-1	VOLATILE SW-846 METHOD 8260	Acetone	PPB	16	B	24	B	18	B	50
71-43-2	VOLATILE SW-846 METHOD 8260	Benzene	PPB	0.25	U	0.25	U	0.25	U	1
108-86-1	VOLATILE SW-846 METHOD 8260	Bromobenzene	PPB	0.25	U	0.25	U	0.25	U	5
74-97-5	VOLATILE SW-846 METHOD 8260	Bromochloromethane	PPB	0.25	U	0.25	U	0.25	U	5
75-27-4	VOLATILE SW-846 METHOD 8260	Bromodichloromethane	PPB	0.25	U	0.25	U	0.25	U	50
75-25-2	VOLATILE SW-846 METHOD 8260	Bromoform	PPB	0.25	U	0.25	U	0.25	U	50
74-83-9	VOLATILE SW-846 METHOD 8260	Bromomethane	PPB	0.25	U	0.25	U	0.25	U	5
75-15-0	VOLATILE SW-846 METHOD 8260	Carbon disulfide	PPB	0.25	U	0.25	U	0.25	U	NA
56-23-5	VOLATILE SW-846 METHOD 8260	Carbon tetrachloride	PPB	0.25	U	0.25	U	0.25	U	5
108-90-7	VOLATILE SW-846 METHOD 8260	Chlorobenzene	PPB	0.25	U	0.25	U	0.25	U	5
75-45-6	VOLATILE SW-846 METHOD 8260	Chlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	NA
75-00-3	VOLATILE SW-846 METHOD 8260	Chloroethane	PPB	0.25	U	0.25	U	0.25	U	5
67-66-3	VOLATILE SW-846 METHOD 8260	Chloroform	PPB	0.25	U	0.25	U	0.25	U	7
74-87-3	VOLATILE SW-846 METHOD 8260	Chloromethane	PPB	0.25	U	0.25	U	0.25	U	5
156-59-2	VOLATILE SW-846 METHOD 8260	***cis-1,2-Dichloroethene***	PPB	***6.8***		***110***		0.25	U	5
10061-01-5	VOLATILE SW-846 METHOD 8260	cis-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.4
110-82-7	VOLATILE SW-846 METHOD 8260	Cyclohexane	PPB	0.25	U	0.25	U	0.25	U	NA
124-48-1	VOLATILE SW-846 METHOD 8260	Dibromochloromethane	PPB	0.25	U	0.25	U	0.25	U	50
74-95-3	VOLATILE SW-846 METHOD 8260	Dibromomethane	PPB	0.25	U	0.25	U	0.25	U	5
75-71-8	VOLATILE SW-846 METHOD 8260	Dichlorodifluoromethane	PPB	0.25	U	0.25	U	0.25	U	5
108-20-3	VOLATILE SW-846 METHOD 8260	Diisopropyl ether	PPB	0.50	U	0.50	U	0.50	U	NA
64-17-5	VOLATILE SW-846 METHOD 8260	Ethanol	PPB	2.5	U	2.5	U	2.5	U	NA
100-41-4	VOLATILE SW-846 METHOD 8260	Ethylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
76-14-2	VOLATILE SW-846 METHOD 8260	Freon-114	PPB	0.25	U	0.25	U	0.25	U	NA
87-68-3	VOLATILE SW-846 METHOD 8260	Hexachlorobutadiene	PPB	0.25	U	0.25	U	0.25	U	0.5
98-82-8	VOLATILE SW-846 METHOD 8260	Isopropylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
179601-23-1	VOLATILE SW-846 METHOD 8260	m,p-Xylene	PPB	0.50	U	0.50	U	0.50	U	5
79-20-9	VOLATILE SW-846 METHOD 8260	Methyl Acetate	PPB	0.25	U	0.25	U	0.25	U	NA
1634-04-4	VOLATILE SW-846 METHOD 8260	Methyl tert-butyl ether	PPB	0.25	U	0.60	J	0.25	U	10
75-09-2	VOLATILE SW-846 METHOD 8260	Methylene chloride	PPB	5.8	B	5.6	B	6.9	B	5
104-51-8	VOLATILE SW-846 METHOD 8260	n-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
103-65-1	VOLATILE SW-846 METHOD 8260	n-Propylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
91-20-3	VOLATILE SW-846 METHOD 8260	Naphthalene	PPB	0.25	U	0.25	U	0.25	U	10
95-47-6	VOLATILE SW-846 METHOD 8260	o-Xylene	PPB	0.25	U	0.25	U	0.25	U	5
105-05-5	VOLATILE SW-846 METHOD 8260	p-Diethylbenzene	PPB	0.25	U	0.25	U	0.25	U	NA
622-96-8	VOLATILE SW-846 METHOD 8260	p-Ethyltoluene	PPB	0.25	U	0.25	U	0.25	U	NA
135-98-8	VOLATILE SW-846 METHOD 8260	sec-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
100-42-5	VOLATILE SW-846 METHOD 8260	Styrene	PPB	0.25	U	0.25	U	0.25	U	5
75-65-0	VOLATILE SW-846 METHOD 8260	t-Butyl alcohol	PPB	2.5	U	2.5	U	2.5	U	NA
98-06-6	VOLATILE SW-846 METHOD 8260	tert-Butylbenzene	PPB	0.25	U	0.25	U	0.25	U	5
127-18-4	VOLATILE SW-846 METHOD 8260	Tetrachloroethene	PPB	0.25	U	0.25	U	0.25	U	5
108-88-3	VOLATILE SW-846 METHOD 8260	Toluene	PPB	0.25	U	0.25	U	0.25	U	5
156-60-5	VOLATILE SW-846 METHOD 8260	trans-1,2-Dichloroethene	PPB	0.25	U	0.93	J	0.25	U	5
10061-02-6	VOLATILE SW-846 METHOD 8260	trans-1,3-Dichloropropene	PPB	0.25	U	0.25	U	0.25	U	0.4
79-01-6	VOLATILE SW-846 METHOD 8260	***Trichloroethene***	PPB	0.25	U	***12***		0.25	U	5
75-69-4	VOLATILE SW-846 METHOD 8260	Trichlorofluoromethane	PPB	0.25	U	0.25	U	0.25	U	5
108-05-4	VOLATILE SW-846 METHOD 8260	Vinyl acetate	PPB	0.25	U	0.25	U	0.25	U	NA
75-01-4	VOLATILE SW-846 METHOD 8260	Vinyl chloride	PPB	0.25	U	0.25	U	0.25	U	2
1330-20-7	VOLATILE SW-846 METHOD 8260	Xylenes, Total	PPB	0.75	U	0.75	U	0.75	U	5
108-87-2	VOLATILE SW-846 METHOD 8260	Methylcyclohexane	PPB	0.25	U	0.25	U	0.25	U	NA
107-02-8	VOLATILE SW-846 METHOD 8260	Acrolein	PPB	1.0	U	1.0	U	1.0	U	5
107-13-1	VOLATILE SW-846 METHOD 8260	Acrylonitrile	PPB	0.25	U	0.25	U	0.25	U	5

Table-3

PFAS and 1, 4, Dioxane Data

SAMPLE		PREPARED	ANALYZED		ANALYTE	RESULT	UNIT	QUALIFIER	MDL	RL	DIL FAC
MW-1	PFOA	8/8/2019 6:01	8/10/2019 20:59	Dilution1	Perfluorobutanoic acid (PFBA)	12.4	ng/l	JD	3.12	17.8	10
MW-1	PFOA	8/8/2019 6:01	8/13/2019 10:07	Dilution2	Perfluorooctanesulfonic acid (PFOS)	3530	ng/l	DB	9.64	35.7	20
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluoropentanoic acid (PFPeA)	16.2	ng/l		0.44	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorohexanoic acid (PFHxA)	25.9	ng/l		0.52	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluoroheptanoic acid (PFHpA)	29	ng/l		0.22	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorooctanoic acid (PFOA)	181	ng/l		0.76	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorononanoic acid (PFNA)	17.5	ng/l		0.24	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorodecanoic acid (PFDA)	17.1	ng/l		0.28	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluoroundecanoic acid (PFUnA)	1.45	ng/l	J	0.98	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorododecanoic acid (PFDoA)			U	0.49	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorotridecanoic acid (PFTriA)			U	1.16	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorotetradecanoic acid (PFTeA)			U	0.26	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorobutanesulfonic acid (PFBS)	11.8	ng/l		0.18	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorohexanesulfonic acid (PFHxS)	49.3	ng/l	B	0.15	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluoroheptanesulfonic Acid (PFHpS)	27.1	ng/l		0.17	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorodecanesulfonic acid (PFDS)			U	0.29	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	Perfluorooctanesulfonamide (FOSA)	18.9	ng/l	B	0.31	1.78	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	322	ng/l		2.77	17.8	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	22.9	ng/l		1.7	17.8	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	6:2 FTS			U	1.78	17.8	1
MW-1	PFOA	8/8/2019 6:01	8/9/2019 8:26	INITIAL	8:2 FTS			U	1.78	17.8	1
MW-1	SW8270D SIM	8/6/2019 8:33	8/8/2019 1:20	INITIAL	1,4-Dioxane			UF1*	0.17	0.17	1

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B = Compound was found in the blank and sample.

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D = Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

SAMPLE		PREPARED	ANALYZED		ANALYTE	RESULT	UNIT	QUALIFIER	MDL	RL	DIL FAC
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorobutanoic acid (PFBA)	5.77	ng/l		0.3	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluoropentanoic acid (PFPeA)	7.36	ng/l		0.42	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorohexanoic acid (PFHxA)	10.3	ng/l		0.5	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluoroheptanoic acid (PFHpA)	7.2	ng/l		0.22	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorooctanoic acid (PFOA)	40.3	ng/l		0.73	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorononanoic acid (PFNA)	6.72	ng/l		0.23	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorodecanoic acid (PFDA)	2.94	ng/l		0.27	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluoroundecanoic acid (PFUnA)			U	0.95	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorododecanoic acid (PFDoA)			U	0.47	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorotridecanoic acid (PFTriA)			U	1.12	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorotetradecanoic acid (PFTeA)	0.35	ng/l	J	0.25	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorobutanesulfonic acid (PFBS)	8.11	ng/l		0.17	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorohexanesulfonic acid (PFHxS)	8.88	ng/l	B	0.15	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluoroheptanesulfonic Acid (PFHpS)	2.51	ng/l		0.16	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorooctanesulfonic acid (PFOS)	235	ng/l	B	0.47	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorodecanesulfonic acid (PFDS)			U	0.28	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	Perfluorooctanesulfonamide (FOSA)	0.35	ng/l	JB	0.3	1.72	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			U	2.67	17.2	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			U	1.64	17.2	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	6:2 FTS			U	1.72	17.2	1
MW-3	PFOA	8/8/2019 6:01	8/9/2019 9:14	INITIAL	8:2 FTS			U	1.72	17.2	1
MW-3	SW8270D SIM	8/6/2019 8:33	8/7/2019 9:05	INITIAL	1,4-Dioxane			U*	0.17	0.17	1

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SAMPLE		PREPARED	ANALYZED		ANALYTE	RESULT	UNIT	QUALIFIER	MDL	RL	DIL FAC
MW-6A	PFOA	8/8/2019 6:01	8/10/2019 21:47	Dilution1	Perfluorooctanesulfonic acid (PFOS)	2380	ng/l	D	4.81	17.8	10
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorobutanoic acid (PFBA)	4.83	ng/l		0.31	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluoropentanoic acid (PFPeA)	13.2	ng/l		0.44	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorohexanoic acid (PFHxA)	18.8	ng/l		0.52	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluoroheptanoic acid (PFHpA)	21.2	ng/l		0.22	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorooctanoic acid (PFOA)	121	ng/l		0.76	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorononanoic acid (PFNA)	12.1	ng/l		0.24	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorodecanoic acid (PFDA)	6.97	ng/l		0.28	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluoroundecanoic acid (PFUnA)	1.96	ng/l		0.98	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorododecanoic acid (PFDoA)	1.22	ng/l	J	0.49	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorotridecanoic acid (PFTriA)			U	1.16	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorotetradecanoic acid (PFTeA)	0.42	ng/l	J	0.26	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorobutanesulfonic acid (PFBS)	14.2	ng/l		0.18	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorohexanesulfonic acid (PFHxS)	111	ng/l	B	0.15	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluoroheptanesulfonic Acid (PFHpS)	55.4	ng/l		0.17	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorodecanesulfonic acid (PFDS)			U	0.28	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	Perfluorooctanesulfonamide (FOSA)	139	ng/l	B	0.31	1.78	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	229	ng/l		2.76	17.8	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	3.07	ng/l	J	1.69	17.8	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	6:2 FTS			U	1.78	17.8	1
MW-6A	PFOA	8/8/2019 6:01	8/9/2019 9:22	INITIAL	8:2 FTS			U	1.78	17.8	1
MW-6A	SW8270D SIM	8/6/2019 8:33	8/7/2019 9:26	INITIAL	1,4-Dioxane			U*	0.17	0.17	1

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