



**DRAFT**

**Supplemental Spill  
Investigation  
Report**

715 Dobbs Ferry  
Road, Greenburgh NY

709 Westchester Avenue  
White Plains, NY 10604  
914-448-2266

**woodardcurran.com**

COMMITMENT & INTEGRITY DRIVE RESULTS

213948.03

**Town of Greenburgh**

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## 1. INTRODUCTION

Woodard & Curran P.A.P.C. (Woodard & Curran), on behalf of the Town of Greenburgh (Greenburgh) has prepared the following Supplemental Remedial Investigation Report (SRIR) for the property located at 715 Dobbs Ferry Road (herein referred to as the "Site"), in Greenburgh, Westchester County, New York (Figure 1). This SRIR was prepared based on the results of a supplemental remedial investigation (SRI) conducted in April 2015 to further investigate and delineate subsurface impacts related to New York State Department of Environmental Conservation (NYSDEC) Spill No. 0100881. This SRIR was conducted based on the results of previous investigations conducted by Woodard & Curran at the Site as outlined herein and in consultation with the NYSDEC Region 3 staff.

NYSDEC Spill No. 0100881 is associated with a release of No. 2 Fuel Oil that was reported at the Site on April 23, 2001 and remains an open spill case. Approximately 500-gallons of No. 2 fuel oil spilled on the Site and seeped under the greenhouse (the southeastern portion of the building), and the southern parking lot behind the building (Source Area). Soil and ground water impacts were confirmed during historic investigations conducted by others. All remediation activities ceased when the former owner filed for bankruptcy. Fuel oil impacted soil and ground water are still present at the Site.

## 2. SITE BACKGROUND

### 2.1 PHYSICAL SETTING

The Site is a 6.89-acre lot located at 715 Dobbs Ferry Road in Greenburgh, Westchester County, New York (Figure 1). The Site was most currently utilized as a plant nursery and retail store and has been vacant for approximately ten years. Impervious surfaces including asphalt and cement/concrete and the existing building footprint cover the majority of the Site, with the exception of a vegetative area in the southern portion of the Site. According to the Town of Greenburgh Assessor's office, the Site is identified as Section 8.50, Block 28, and Lot 9.

### 2.2 SITE LOCATION AND USE

As shown on Figure 1, the Site is situated on the south side of Dobbs Ferry Road approximately one-third of a mile west of the Sprain Brook Parkway. As shown on Figure 2, the Site is developed with a one-story masonry building that is approximately 50,000 square feet in area. There are two associated asphalt paved parking lots including one to the north of the building and a smaller lot to the south of the building (Figure 2).

According to the Town of Greenburgh Building Department, the Subject Property is zoned "R 30." Uses allowed in the "R-30" zone include single-family dwellings; parks; playgrounds; recreational facilities; municipal or government uses; religious uses; regularly organized elementary or secondary schools.

### 2.3 SITE OPERATIONAL HISTORY

The Site is currently vacant. Prior to vacancy, the Site was operated by Frank's Nursery and Crafts, Inc. (Frank's), a nursery and retailer of lawn and garden products. Frank's was in operation between 1994 and 1997. Based on a City Directory review, the Site was used as a nursery/garden retailer as early as 1971 and aerial photographs indicate the Site was developed between 1964 and 1974. A copy of the City Directory and aerial photographs are included in Appendix A.

### 2.4 SURROUNDING LAND USE

The Site is bordered to the north by Dobbs Ferry Road and the Elmwood Country Club; to the west by Westchester Golf Range; to the south by Westchester Greenhouses, and to the east by a public right-of-way containing electrical transmission lines. The area surrounding the Site is zoned "R 30" and "R 7.5" for one-family residence. The nearest residential property is located approximately 260 feet to the east of the Site.

### 2.5 SITE TOPOGRAPHY AND GEOLOGY

The Site is located approximately 320 feet above mean sea level. The Site is covered with impervious surfaces and is relatively flat. According to Caldwell et. al. (1991), the Site is underlain by glacial till approximately three to nine feet thick. The glacial till is described as a poorly sorted mix of sand, gravel, silt and clay with boulders and cobbles and is generally unstratified. Based on a review of USDA Soil Survey Maps, soils near the Site are classified as urban land in the direct vicinity of the Site. Sutton loam with 3-8% slopes is to the north side of the Site, Udorthents wet substratum soil is to the east side of the Site and Udorthents smoothed soil is to the south and west side of the Site (Figure 3). According to Fisher et. al. (1970), the Site is underlain by the Manhattan formation, which is a pelitic schist.

Subsurface soils observed in soil borings advanced during previous investigations suggest that the Site previously contained a forested wetland area which was cleared and then covered with approximately 5 feet of debris-laden fill. Soil borings contained assorted fill materials including sands, concrete, asphalt, brick, gravels, and other similar

materials in the top several feet, followed by a layer of woody debris in the 5 feet below ground surface (bgs) to 7 feet bgs range.

## 2.6 SITE HYDROLOGY AND HYDROGEOLOGY

The Site is located in the Sprain Brook River watershed, which is part of the larger Bronx River watershed that drains to the Long Island sound. A pond is located to the north of the Site at the golf course (Figure 1). The Sprain Brook is located approximately 1/3-mile east-southeast of the Site (Figure 1). The Sprain Brook in that region has been classified by the NYSDEC as a Class C surface water body. The designated uses for Class C surface water are fishing and limited primary and secondary recreational contact. The water is presumed to meet the requirements for these designated uses. The Site is not located in a FEMA Flood Zone nor located in a national wetland (Figure 4).

Ground water during previous investigations was observed at depths ranging from approximately 5.5 feet bgs to 7.8 feet bgs across the Site. Ground water flow direction was observed to be towards the south/southeast during previous investigations.

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### 3. PREVIOUS INVESTIGATIONS

There have been several investigations conducted at the Site to identify potential areas of concern and/or characterize the nature and extent of contamination identified. Below is a detailed discussion of the previous investigations conducted at the Site by Woodard & Curran between October 2011 and March 2013.

#### 3.1 HISTORIC INVESTIGATIONS

There have been several historic investigations conducted at the Site related to NYSDEC Spill No. 0100881, including initial spill response activities and remedial actions. Woodard & Curran obtained several documents from the Westchester County Department of Health (WCDOH) related to the initial investigation of NYSDEC Spill No. 0100881 as part of a file review conducted in 2011. The WCDOH documents included laboratory analytical results from soil sampling, figures identifying the approximate extent of fuel oil contamination, and correspondence between project stakeholders and regulatory agencies. Copies of the WCDOH documents are including in Appendix A.

#### 3.2 PHASE I ENVIRONMENTAL SITE ASSESSMENT

Woodard & Curran conducted a Phase I Environmental Site Assessment (ESA) at the Site in 2011. The Phase I ESA identified areas of potential concern based on a review of Site operation history, historical Sanborn Fire Insurance Maps, an environmental database review, and a Site visit. The Phase I ESA identified the following recognized environmental concerns (RECs):

- REC-1: 6,000-gallon Underground Storage Tank (UST)
- REC -2: Open NYSDEC Spill (Spill No. 0100881)
- REC-3: Drum Storage Area
- REC-4: Above Ground Emergency Heating Oil Tank
- REC-5: Electrical Transformer
- REC-6: Historical Fill and Use
- Historical REC 1A/B/C: Closed NYSDEC Spills

Based on the findings of the Phase I ESA, Woodard & Curran recommended an additional investigation of the above referenced RECs, including REC-1 (6,000-gallon UST), REC-2 (NYSDEC Spill No. 0100881), and REC-4 (Above Ground Emergency Heating Oil Tank). A copy of the Phase I ESA is included in Appendix A.

#### 3.3 OCTOBER 2012 SPILL INVESTIGATION

Following the Phase I ESA, Woodard & Curran was retained by the Town of Greenburgh to investigate soil and groundwater at the Site. The focus of the October 2012 Spill Investigation included the investigation of NYSDEC Spill No. 0100881 and the above ground emergency heating oil tank. The spill investigation included the advancement of fifteen soil borings and collection of soil samples, the installation of one permanent ground water monitoring well, and the sampling of six ground water monitoring wells (including wells installed as part of the initial investigation of NYSDEC Spill No. 0100881 and the newly installed well).

Results from the October 2012 Spill Investigation indicated that impacted soil and ground water from NYSDEC Spill Number 0100881 are still present at the Site. The observed subsurface conditions, including petroleum product in

ground water monitoring well MW-6 and volatile organic compounds (VOCs) identified in ground water monitoring well MW-2, indicated the impacted soils and ground water are limited to the immediate area of the historic fuel oil spill.

Additional soil and ground water impacts were observed onsite, specifically the concentrations of several semi volatile organic compounds (SVOCs) and metals in soil and SVOCs in ground water exceeding NYSDEC standards outside the MW-6/MW-2 area. These were believed to be likely attributable to the historic fill observed in borings throughout the southern portion of the Site. Woodard & Curran recommended additional delineation of potential impacts to soil and ground water in the vicinity of the spill area. In addition, Woodard & Curran recommended conducting an investigation to confirm the presence and extent of historic fill material at the Site. A copy of the Spill Investigation Report is included in Appendix A.

### **3.4 MARCH 2013 SITE INVESTIGATION**

To investigate the presence of historic fill material and to further delineate soil and ground water impacts at the Site, Woodard & Curran conducted a Site Investigation in early 2013. Site Investigation activities included the advancement and sampling of twelve soil borings, the installation of two permanent ground water monitoring wells, and the sampling of new and existing ground water monitoring wells.

Results of the March 2013 Site Investigation indicate that concentrations of several SVOCs and metals in soil and SVOCs in ground water exceeding NYSDEC standards are present outside the MW-6/MW-2 area. These impacts are believed to be likely attributable to the historic fill observed in borings throughout the southern portion of the Site. SVOCs exceeding NYSDEC soil standards were distributed sporadically and the sample locations exhibiting elevated SVOCs and metals in soil appear to be related to the historic fill.

The March 2013 Site Investigation also indicated that SVOCs consistent with fuel oil contamination were detected in several down-gradient and cross-gradient monitoring wells at concentrations exceeding the NYSDEC ambient water quality standards (AWQS). However, due to the presence of historic fill encountered in both the September 2012 Spill Investigation and the March 2013 Site Investigation, SVOCs in ground water may be related to the fill layer underlying the Site. A copy of the Site Investigation Report is included in Appendix A.

## 4. SUPPLEMENTAL REMEDIAL INVESTIGATION

In consideration of the previously conducted characterization and investigation activities, this SRI included the following scope of work for the Site:

- Utility clearance, mapping, and geophysical investigation;
- Soil boring advancement;
- Soil characterization and field petroleum screening;
- Collection of soil samples for laboratory analysis;
- Review of historic Site data;
- Data evaluation and reporting.

A detailed discussion of each phase of the Site Investigation is outlined below:

### 4.1 UTILITY CLEARANCE, MAPPING, AND GEOPHYSICAL INVESTIGATION

As part of the Site Investigation, subsurface features and structures were located and mapped to ensure no utilities are encountered during intrusive work. Stage one of the utility clearance was conducted by public utility companies through the Dig Safely New York hotline prior to mobilization of drilling subcontractors. Stage two was conducted by Master Locators, Inc. (Master Locators) on March 26, 2015.

### 4.2 SOIL BORING INVESTIGATION METHODOLOGY

Following utility clearance, Woodard & Curran mobilized to the Site on April 1 and 2, 2015 to oversee the advancement of 18 soil borings in the vicinity of NYSDEC Spill No. 0100881 Source Area with the goal of delineating the extent of fuel oil impacted soils. Boring locations were selected to further delineate fuel oil impacted soils based on the results of previous investigations. SRI soil boring locations and historic Woodard & Curran sample locations are shown on Figure 3. Soil borings were advanced by Eastern Environmental Solutions, Inc. of Manorville, NY with a Geoprobe utilizing direct-push drilling methodology. Recovered soils were field screened with a photoionization detector (PID) and inspected for visual and olfactory signs of petroleum contamination. In addition, field petroleum testing kits were used to screen for the presence of petroleum in soils and to aid in the selection of a sample depth interval. Following field screening, a sample was collected from the interval with greatest indication of contamination and transferred under chain-of-custody protocol to a New York certified laboratory.

As stated in Section 3.4, contaminants typically associated with fuel oil impacted soils were also identified in the historic fill material encountered in the Source Area and throughout most portions of the Site. Historically, samples were analyzed for VOCs and SVOCs and compared to NYSDEC CP-51 Soil Cleanup Levels for Fuel Oil Contaminated Soils (SCLs). CP-51 SVOCs found in the historic fill material appear to be ubiquitous and at relatively the same concentrations in the majority of Site soils both inside and outside the Source Area. Therefore, in an attempt to differentiate potential impacts from the fuel oil spill compared to the historic fill material, samples collected for this SRI were analyzed for Total Petroleum Hydrocarbons (TPH) and petroleum fingerprinting.

While TPH concentrations exist both in the historic fill material and the Source Area, concentrations of TPH are expected to be higher in the Source Area. To facilitate differentiation of impacts and gain a better understanding of relative TPH concentrations at locations inside and outside the approximate Source Area, Woodard & Curran advanced one boring adjacent to an uncontaminated non-Source Area historic sample (March 2013 Site Investigation

Boring SB-8), and one boring adjacent to a monitoring well with confirmed fuel oil contamination (Source Area ground water monitoring well MW-6).

A new soil boring SB-13 was advanced adjacent to the uncontaminated non-Source Area historic boring SB-8 to determine baseline TPH concentrations outside the Source Area. SB-8 was previously advanced during the March 2013 Spill Investigation and contained several CP-51 Fuel Oil SVOCs, but at concentrations below the NYSDEC CP-51 SCLs for Fuel Oil Contaminated Soil. Collecting a sample adjacent to SB-8 provides a baseline TPH concentration for a location with no known fuel oil contamination and helps determine if TPH concentrations from other 2015 SRI samples are consistent with TPH concentrations outside the Source Area of NYSDEC Spill No. 0100881.

A new soil boring SB-14 was advanced adjacent to existing ground water monitoring well MW-6 to determine baseline TPH concentrations within the Source Area. MW-6 was installed during initial spill response activities conducted in 2001 and has historically contained the greatest amount of light non-aqueous phase liquid (LNAPL) measured at the Site. Collecting a sample adjacent to MW-6 provides a baseline TPH concentration for a location with known fuel oil contamination and helps determine if TPH concentrations from other 2015 SRI samples are consistent with TPH concentrations inside the Source Area of NYSDEC Spill No. 0100881.

Sixteen additional soil borings were advanced outbound of historic soil borings and/or ground water monitoring well locations to further delineate the Source Area and extent of fuel oil impacts at the Site as shown on Figure 3. Fifteen samples (including the two baseline samples) were analyzed for TPH and petroleum fingerprinting analysis by Alpha Analytical Laboratories Inc. of Mansfield, MA. Results of the TPH and petroleum fingerprinting analysis are discussed below.

#### 4.3 SOIL BORING INVESTGATION RESULTS

Analytical results from the April 2015 SRI are summarized on Table 2 and laboratory reports are provided in Appendix C. Based on the laboratory analysis and petroleum fingerprinting, the results indicated the following:

- TPH were detected in all fifteen soil samples analyzed for TPH and fingerprinting;
- TPH were detected at a concentration of 744 milligrams per kilogram (mg/kg) in the sample collected from SB-13, the non-Source Area baseline boring advanced adjacent to historic soil boring SB-8;
- TPH were detected at a concentration of 25,900 mg/kg in the sample collected from SB-14, the Source Area baseline boring advanced adjacent to the existing ground water monitoring well MW-6;
- TPH concentrations from the Source Area baseline sample were two orders of magnitude higher than the TPH concentration in the non-Source Area baseline sample (25,900 mg/kg in SB-14 compared to 744 mg/kg in SB-13);
- TPH concentrations in the remaining 13 soil samples ranged from 429 to 31,500 mg/kg, with the highest concentrations detected in samples closest to MW-6 and the lowest concentrations to the north and east of MW-6;
- Petroleum fingerprinting analysis indicated that samples SB-13, SB-14, SB-15, SB-16, SB-17, SB-18, SB-19, SB-20, SB-23, SB-26, SB-28, SB-29, and SB-30 contained material similar to a combination of No. 2 fuel oil/diesel fuel
- Petroleum fingerprinting analysis indicated that samples SB-13, SB-14, SB-15, SB-16, SB-17, SB-18, SB-19, SB-20, SB-23, SB-26, SB-28, SB-29, and SB-30 also contained material similar to a combination of lubricating oil and heavily degraded "asphalt/coal tar type" product;

- Petroleum fingerprinting analysis indicates that sample SB-21 contained materials similar to a combination of coal tar/creosote and does not appear to be related to No. 2 fuel oil;
- Petroleum fingerprinting analysis indicates that sample SB-24 contained materials similar to a combination of lubricating oil and heavily degraded asphalt/coal tar type product, and does not appear to be related to No. 2 fuel oil; and
- The presence of polynuclear aromatic hydrocarbons typically found in both No. 2 fuel oil and historic fill was noted in all samples based on the results of petroleum fingerprinting.

#### 4.4 INVESTIGATION RESULTS

Laboratory analytical results indicated that several samples collected as part of the April 2015 SRI contain TPH consistent with No. 2 fuel oil and asphalt/coal tar. When compared to the TPH concentrations in the sample collected from the Source Area baseline sample (SB-14), TPH concentrations in the following soil borings were within the same order of magnitude and/or similar in concentration to SB-14: SB-15, SB-16, SB-18, SB-23, and SB-26. This suggests that soil borings SB-15, SB-16, SB-18, SB-23 and SB-26 are within the Source Area for NYSDEC Spill No. 0100881.

Woodard & Curran reviewed boring logs to determine if the remaining borings were within the Source Area based on the presence of field indications of contamination. Field observations (free product, sheen, and odor) indicate that LNAPL and/or petroleum-impacted soils were encountered in the following borings: SB-14, SB-15, SB-16, SB-17, SB-18, SB-22, SB-25, SB-26, SB-27, SB-28, SB-29, and SB-30. This suggests that in addition to borings with TPH concentrations, the following borings are considered to be within the Source Area: SB-17, SB-22, SB-25, SB-27, SB-28 SB-29, and SB-30.

It should be noted that although TPH concentrations in SB-21 are consistent with the baseline Source Area sample, petroleum fingerprinting determined that SB-21 contain "creosote/coal tar" and not No. 2 fuel oil. This suggests that the elevated TPH concentrations in SB-21 are likely related to the presence of historic fill and not associated with NYSDEC Spill No. 0100881.

The results from field screening indicate that no obvious signs of petroleum contamination were noted in borings SB-19, SB-20, SB-21, and SB-24. TPH concentrations in borings with no field indications of petroleum contamination ranged from 429 mg/kg to 1360 mg/kg (with the exception of SB-21), and are similar in concentration to the baseline sample collection from the non-Source Area (SB-13). This suggests that the relatively low TPH concentrations within that range may be attributed in part to historic fill documented at the Site, rather than fuel oil impacted soils.

## 5. CONCLUSIONS AND RECCOMENDATIONS

### 5.1 CONCLUSIONS

Based on the results of the April 2015 SRI discussed above, and a review of analytical results and boring logs from previous investigations, Woodard & Curran believes there is sufficient data for the delineation and remediation of Source Area impacted soils with the goal of expediting the closure of NYSDEC Spill No. 0100811.

Delineation of subsurface petroleum impacts to the south of the Source Area is confirmed based on the laboratory analytical results from Woodard & Curran soil borings WC-2 and WC-14, collected during the October 2012 Spill Investigation. As shown in the historic analytical data included in Appendix A, there were no exceedences of the NYSDEC CP-51 SCLs in the sample collected from WC-14 (7-8' bgs) or in either sample collected from WC-2 (4-5' bgs, 8-9' bgs) suggesting that vertical and horizontal delineation of impacted soils to the south of the Source Area has been achieved.

Delineation of subsurface petroleum impacts to the east of the Source Area is confirmed based on the laboratory analytical results from Woodard & Curran soil borings SB-8 and WC-1 collected during the March 2013 Site Investigation and October 2012 Spill Investigation, respectively. As shown in the historic analytical data included in Appendix A, there were no exceedences of the NYSDEC CP-51 SCLs in the sample collected from SB-8 (7-8' bgs), or either sample collected from WC-1 (4-5' bgs, 8-9' bgs). In addition, the petroleum impacted soils are further delineated to the east based on the low TPH concentrations in SB-24 as compared to the baseline non-Source Area sample, and the fingerprinting analysis which indicated SB-24 contains heavily degraded "coal tar/asphalt", rather than No. 2 fuel oil.

Fuel oil impacted soils are delineated to the northeast based on field observations and comparatively low TPH concentrations in borings SB-13, SB-19 and SB-20. In addition, fuel oil impacted soils are delineated to the southeast based on the results of the petroleum fingerprinting for SB-21, which indicates that elevated TPH concentrations are related to the presence of "creosote/coal tar" and not No. 2 fuel oil.

Delineation of subsurface petroleum impacts to the west of the Source Area is confirmed based on the laboratory analytical results from ground water sampling conducted during the October 2012 Spill Investigation and March 2013 Site Investigation. Laboratory analytical results from both sampling events indicate that there are no exceedences of the NYSDEC AWQS for VOCs or SVOCs in samples collected from ground water monitoring wells MW-3 and MW-4, both located to the west of the Source Area and MW-2. MW-2 has historically contained LNAPL and recent ground water sampling results indicated that exceedences of the AWQS are present. In addition, during well gauging events conducted in January 2013, LNAPL was present in MW-2, but absent in MW-3 and MW-4. LNAPL gauging results from the January 2013 events are summarized on Table 3.

Delineation of subsurface petroleum impacts to the north of the Source Area has not been confirmed based on the laboratory results from the April 2015 SRI or previous investigations. Laboratory analytical results from ground water sampling conducted during the March 2013 Site Investigation indicated that only chrysene was present at an estimated concentration exceeding the AWQS in MW-A, located to the north of the Source Area. There were no other SVOCs consistent with No. 2 fuel oil contamination present in the sample collected from MW-A, and no LNAPL was present during the January 2013 gauging events. However, visual observations and laboratory analytical results from soil borings SB-18 and SB-28 indicate that No. 2 fuel oil is present and has not been fully delineated.

Using Geographic Information Systems (GIS) analytical tools, Woodard & Curran prepared an isopleth contour map of TPH concentrations based on the results of the April 2015 SRI. The GIS analysis used TPH analytical data and sample location data gathered via GPS to extrapolate TPH concentrations outbound of all existing borings, as shown

on Figure 4. Based on GIS analysis and the decreasing TPH concentrations shown on Figure 4, Woodard & Curran believes sufficient information exists to determine the approximate extent of No. 2 fuel oil impacts to the north, northwest, and southwest of the Source Area using the baseline Source Area and non-Source Area TPH values collected during the April 2015 SRI.

Recommendations to address No. 2 fuel oil impacts soils based on the conclusions of the April 2015 SRI are discussed below.

## 5.2 RECCOMENDATIONS

Based on the conclusions outline above, the results of the April 2015 SRI and a review of data collected during previous investigations, Woodard & Curran recommends the preparation of a Remedial Action Work Plan (RAWP) to address the remediation of Source Area impacted soils at the Site. The RAWP will outline proposed remedial objectives and will likely include the excavation and offsite disposal of Source Area fuel oil impacted soils to expedite closure of NYSDEC Spill No. 0100881. Because portions of Source Area No. 2 fuel oil impacts extend beneath the existing Site building, Woodard & Curran recommends the targeted removal of all accessible Source Area impacted soils. To address the feasibility and technical practicality of excavating the portion of the Source Area impacted soils located beneath the Site building and near other existing Site infrastructure (subsurface utilities, electric transformers, etc.), Woodard & Curran recommends meeting with the NYSDEC to discuss the results of the April 2015 SRI prior to the development of a Draft RAWP. In addition, Woodard & Curran recommends incorporating the results of the proposed NYSDEC meeting into the Draft RAWP to ensure proposed remedial actions are consistent with NYSDEC expectations and expedite the RAWP approval process.

## TABLES

**Table 1**  
**Summary of Soil and Ground Water Sampling Program**  
**Supplemental Remedial Investigation**  
**715 Dobbs Ferry Road, Greenburgh, NY**

SAMPLES					ANALYTICAL PROGRAM								
Investigation	Sample ID	Date	Depth (ft bgs)	Sample Matrix	VOCs	SVOCs	Metals (Total)	Metals (Dissolved)	Hexavalent Chromium	PCBs	Pesticides/Herbicides	TPH	Fingerprinting
October 2012 Spill Investigation	WC-1	9/10/2012	4-5	Soil	X	X							
October 2012 Spill Investigation	WC-1	9/10/2012	8-9	Soil	X	X							
October 2012 Spill Investigation	WC-2	9/10/2012	4-5	Soil	X	X							
October 2012 Spill Investigation	WC-2	9/10/2012	8-9	Soil	X	X							
October 2012 Spill Investigation	WC-3	9/10/2012	2-3	Soil	X	X							
October 2012 Spill Investigation	WC-3	9/10/2012	7-8	Soil	X	X							
October 2012 Spill Investigation	WC-4	9/10/2012	4-5	Soil	X	X							
October 2012 Spill Investigation	WC-4	9/10/2012	7-8	Soil	X	X							
October 2012 Spill Investigation	WC-5	9/10/2012	4-5	Soil									
October 2012 Spill Investigation	WC-5	9/10/2012	7-8	Soil									
October 2012 Spill Investigation	WC-6	9/10/2012	4-5	Soil	X	X							
October 2012 Spill Investigation	WC-6	9/10/2012	7-8	Soil	X	X							
October 2012 Spill Investigation	WC-7	9/10/2012	7-8	Soil	X	X							
October 2012 Spill Investigation	WC-8	9/10/2012	8-9	Soil									
October 2012 Spill Investigation	WC-9	9/10/2012	7-8	Soil									
October 2012 Spill Investigation	WC-10	9/10/2012	6-6.5	Soil									
October 2012 Spill Investigation	WC-11	9/10/2012	N/A	Soil									
October 2012 Spill Investigation	WC-12	9/10/2012	N/A	Soil									
October 2012 Spill Investigation	WC-13	9/10/2012	7-8	Soil									
October 2012 Spill Investigation	WC-14	9/10/2012	4-5	Soil	X	X							
October 2012 Spill Investigation	WC-14	9/10/2012	7-8	Soil	X	X							
October 2012 Spill Investigation	B-15 (6-6.5)	3/21/2014	6-6.5	Soil									
October 2012 Spill Investigation	WCMW-1	9/11/2012	N/A	Ground Water									
October 2012 Spill Investigation	MW-2	9/11/2012	N/A	Ground Water									
October 2012 Spill Investigation	MW-3	9/11/2012	7-8	Ground Water									
October 2012 Spill Investigation	MW-4	9/11/2012	4-5	Ground Water	X	X							
October 2012 Spill Investigation	MW-7	9/11/2012	7-8	Ground Water	X	X							
October 2012 Spill Investigation	MW-8	9/11/2012	6-6.5	Ground Water									
March 2013 Site Investigation	SB-1	1/17/2013	7-8	Soil	X	X	X		X	X	X		
March 2013 Site Investigation	SB-2	1/17/2013	N/A	Soil									
March 2013 Site Investigation	SB-3	1/17/2013	8.5-9.5	Soil	X	X	X		X	X	X		
March 2013 Site Investigation	SB-4	1/17/2013	N/A	Soil									
March 2013 Site Investigation	SB-5	1/17/2013	N/A	Soil									
March 2013 Site Investigation	SB-6	1/17/2013	6-7	Soil	X	X	X		X	X	X		
March 2013 Site Investigation	SB-7	1/17/2013	N/A	Soil									
March 2013 Site Investigation	SB-8	1/17/2013	7-8	Soil	X	X	X		X	X	X		
March 2013 Site Investigation	SB-9	1/17/2013	7.5-8.5	Soil	X	X	X		X	X	X		
March 2013 Site Investigation	SB-10	1/17/2013	8.5-9.5	Soil	X	X	X		X	X	X		
March 2013 Site Investigation	SB-11	1/17/2013	8.5-9.5	Soil	X	X	X		X	X	X		
March 2013 Site Investigation	SB-12	1/17/2013	N/A	Soil									

**Table 1**  
**Summary of Soil and Ground Water Sampling Program**  
**Supplemental Remedial Investigation**  
**715 Dobbs Ferry Road, Greenburgh, NY**

SAMPLES					ANALYTICAL PROGRAM								
Investigation	Sample ID	Date	Depth (ft bgs)	Sample Matrix	VOCs	SVOCs	Metals (Total)	Metals (Dissolved)	Hexavalent Chromium	PCBs	Pesticides/Herbicides	TPH	Fingerprinting
March 2013 Site Investigation	WCMW-1	10/15/2014	N/A	Ground Water	X	X	X	X	X	X	X		
March 2013 Site Investigation	MW-3	10/15/2014	N/A	Ground Water	X	X	X		X	X	X		
March 2013 Site Investigation	MW-4	1/8/2015	N/A	Ground Water	X	X	X	X	X	X	X		
March 2013 Site Investigation	MW-7	1/8/2015	N/A	Ground Water	X	X	X		X	X	X		
March 2013 Site Investigation	MW-18	1/8/2015	N/A	Ground Water	X	X	X		X	X	X		
March 2013 Site Investigation	MW-A	1/8/2015	N/A	Ground Water	X	X	X		X	X	X		
March 2013 Site Investigation	MW-B	1/8/2015	N/A	Ground Water	X	X	X		X	X	X		
April 2015 Remedial Investigation	SB-13	4/1/2015	9-10	Soil									X
April 2015 Remedial Investigation	SB-14	4/1/2015	9-10	Soil									X
April 2015 Remedial Investigation	SB-15	4/1/2015	9-10	Soil									X
April 2015 Remedial Investigation	SB-16	4/1/2015	9.5-10	Soil									X
April 2015 Remedial Investigation	SB-17	4/1/2015	9-9.5	Soil									X
April 2015 Remedial Investigation	SB-18	4/1/2015	9.5-10	Soil									X
April 2015 Remedial Investigation	SB-19	4/1/2015	6-6.5	Soil									X
April 2015 Remedial Investigation	SB-20	4/1/2015	NA	Soil									X
April 2015 Remedial Investigation	SB-21	4/2/2015	3-3.5	Soil									X
April 2015 Remedial Investigation	SB-22	4/2/2015	NA	Soil									
April 2015 Remedial Investigation	SB-23	4/2/2015	9.5-10	Soil									X
April 2015 Remedial Investigation	SB-24	4/2/2015	6.5-7	Soil									X
April 2015 Remedial Investigation	SB-25	4/2/2015	NA	Soil									
April 2015 Remedial Investigation	SB-26	4/2/2015	9.5-10	Soil									X
April 2015 Remedial Investigation	SB-27	4/2/2015	NA	Soil									
April 2015 Remedial Investigation	SB-28	4/2/2015	8-8.5	Soil									X
April 2015 Remedial Investigation	SB-29	4/2/2015	8-8.5	Soil									X
April 2015 Remedial Investigation	SB-30	4/2/2015	8.5-9	Soil									X

NA - Not Applicable

ft bgs - feet below ground surface

VOC - Volatile Organic Compounds

SVOC - Semi-Volatile Organic Compounds

TPH - Total Petroleum Hydrocarbons

\* QA/QC Samples note included in above summary

**Table 1**  
**Summary of Soil Analytical Data - Total Petroleum Hydrocarbons**  
**Former Frank's Nursery Site**  
**715 Dobbs Ferry Road, Greenburgh NY**

LOCATION		SB-13	SB-14	SB-15	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21	SB-23	SB-24	SB-26	SB-28	SB-29	SB-30	
SAMPLING DATE		4/1/2015	4/1/2015	4/1/2015	4/1/2015	4/1/2015	4/1/2015	4/1/2015	4/1/2015	4/2/2015	4/2/2015	4/2/2015	4/2/2015	4/2/2015	4/2/2015	4/2/2015	
LAB SAMPLE ID		L1506438-01	L1506438-02	L1506438-04	L1506438-05	L1506438-06	L1506438-07	L1506438-09	L1506438-11	L1506589-01	L1506589-05	L1506589-07	L1506589-11	L1506589-15	L1506589-17	L1506589-19	
SAMPLE DEPTH (ft.)		9.0-10.0	9.0-10.0	9.0-10.0	9.5-10.0	9.0-9.5	9.5-10.0	6.0-6.5	6.0-6.5	3.0-3.5	9.5-10.0	6.5-7.0	9.5-10.0	8.0-8.5	8-8.5	8.5-9.0	
	Units		Q		Q		Q		Q		Q		Q		Q		Q
<b>Petroleum Hydrocarbon Identification</b>																	
Total Petroleum Hydrocarbons (C9-C44)	mg/kg	744	25900	28800	16000	5050	25000	1360	1070	6960	25600	429	31500	9950	2800	3900	

Notes:

Q - Qualifier

mg/kg - milligrams per kilogram

Indicates baseline Source Area Sample

Indicates baseline Non-Source Area Sample

**Table 3**  
**Summary of LNAPL Gauging Records**  
**Supplemental Remedial Investigation**  
**715 Dobbs Ferry Road, Greenburgh NY**

Well ID	January 15, 2013			January 29, 2013			December 3, 2014		
	DTL (ft)	DTW (ft)	LT (ft)	DTL (ft)	DTW (ft)	LT (ft)	DTL (ft)	DTW (ft)	LT (ft)
WCMW-1	---	6.49	N/A	---	6.5	N/A	---	---	N/A
MW-2	--	7.65	N/A	7.72	7.73	0.01	---	---	N/A
MW-3	---	9.22	N/A	---	7.76	N/A	---	---	N/A
MW-4	---	8.25	N/A	---	7.83	N/A	---	---	N/A
MW-6	6.83	6.91	0.08	7.9	7.96	0.06	---	Obstructed*	N/A
MW-7	---	6.4	N/A	---	6.5	N/A	---	6.41	N/A
MW-18	---	6.67	N/A	---	6.98	N/A	---	5.53	N/A
MW-A	---	6.05	N/A	---	6.13	N/A	---	---	N/A
MW-B	---	5.56	N/A	---	5.61	N/A	---	---	N/A

Notes:

ft - Feet

LNAPL - Light Non-Aqueous Phase Liquid

DTL - Depth to LNAPL

DTW - Depth to Water

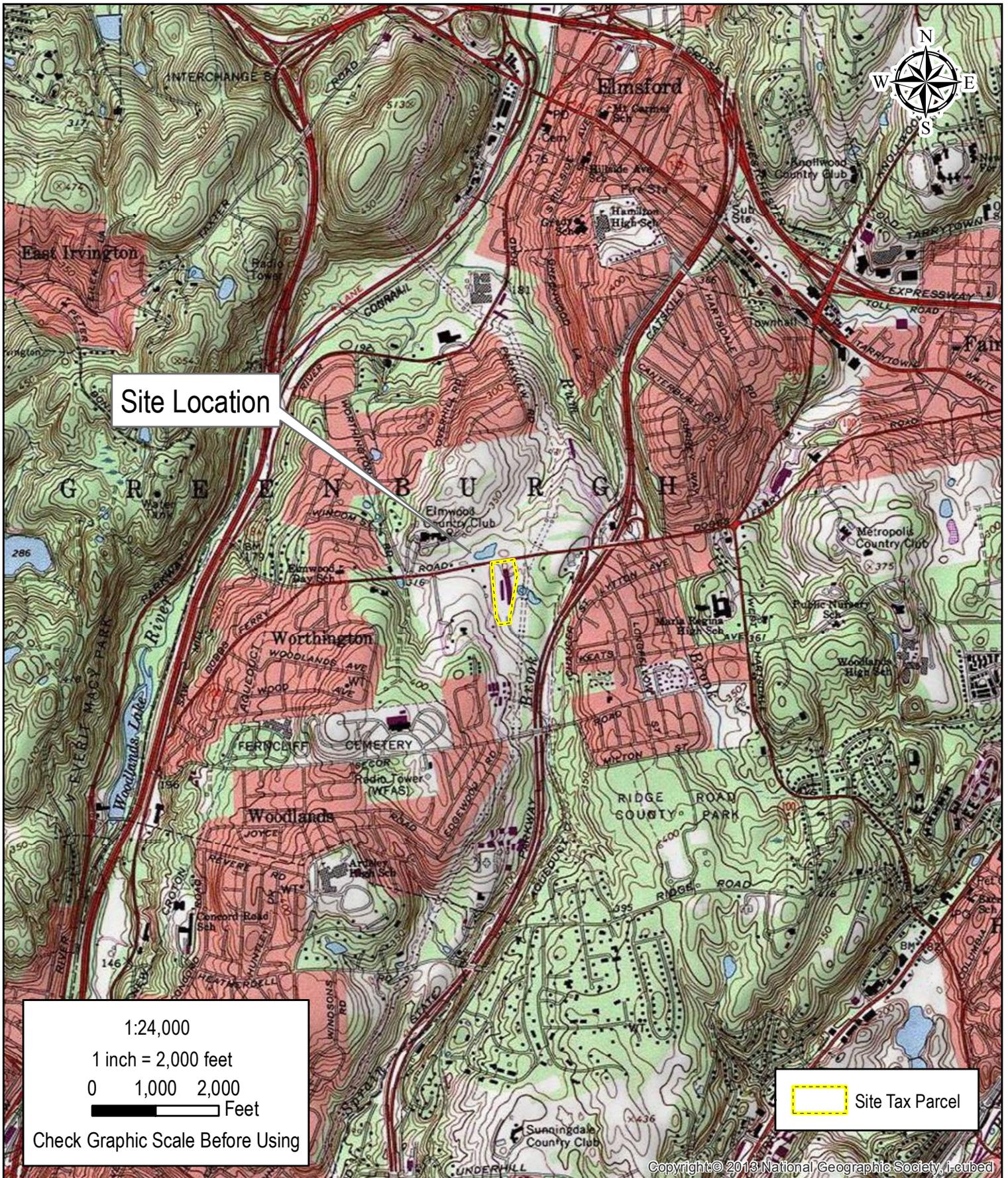
LT - LNAPL Thickness

N/A - No LNAPL present in well

\* Well was obstructed during gauging event - depth to water/LNAPL not measured

---

## FIGURES



JOB NO. 213948.03	Town of Greenburgh Spill Investigation Report
	715 Dobbs Ferry Road Greenburgh, NY

# Site Location

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**WOODARD & CURRAN**  
 COMMITMENT & INTEGRITY DRIVE RESULTS

FIGURE 1

DATE: May 2015

DRAWN BY: KCS



Dobbs Ferry Road

NY State East X Coordinate: 678971.3  
NY State East Y Coordinate: 802164.1

1:1,200  
1 inch = 100 feet  
0 50 100 Feet  
Check Graphic Scale Before Using

NOTES:  
Data Source: Westchester County GIS

**Legend**

-  Center of Site
-  Property Tax Parcel
-  Surrounding Tax Parcels

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**WOODARD & CURRAN**

COMMITMENT & INTEGRITY DRIVE RESULTS

# Site Layout

Town of Greenburgh  
Spill Investigation Report

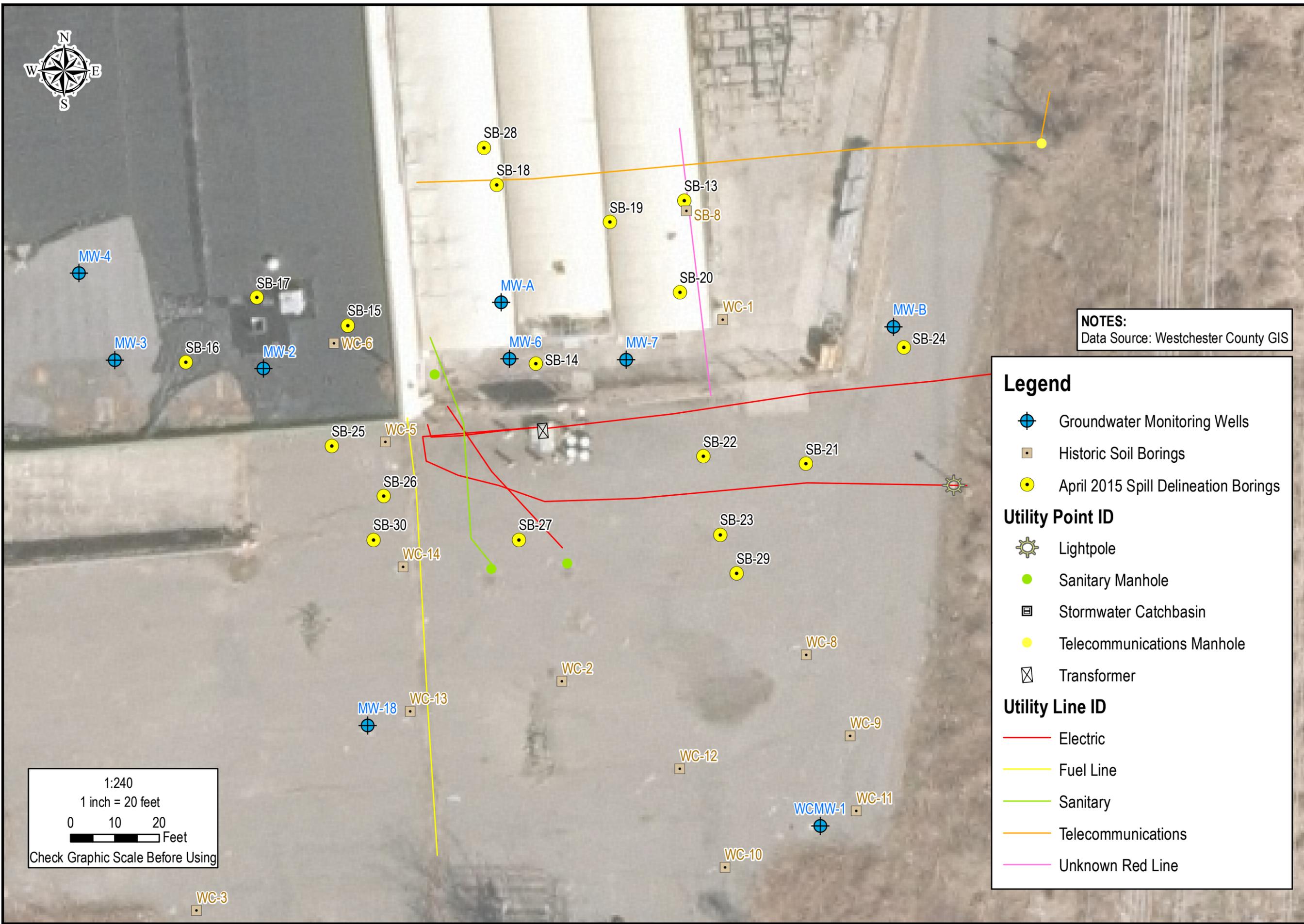
715 Dobbs Ferry Road  
Greenburgh, NY 10607

JOB NO.: 213948.03

DRAWN BY: KCS

DATE: May 2015

**FIGURE 2**



**NOTES:**  
Data Source: Westchester County GIS

**Legend**

- Groundwater Monitoring Wells
- Historic Soil Borings
- April 2015 Spill Delineation Borings

**Utility Point ID**

- Lightpole
- Sanitary Manhole
- Stormwater Catchbasin
- Telecommunications Manhole
- Transformer

**Utility Line ID**

- Electric
- Fuel Line
- Sanitary
- Telecommunications
- Unknown Red Line

1:240  
1 inch = 20 feet  
0 10 20 Feet  
Check Graphic Scale Before Using

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**WOODARD & CURRAN**  
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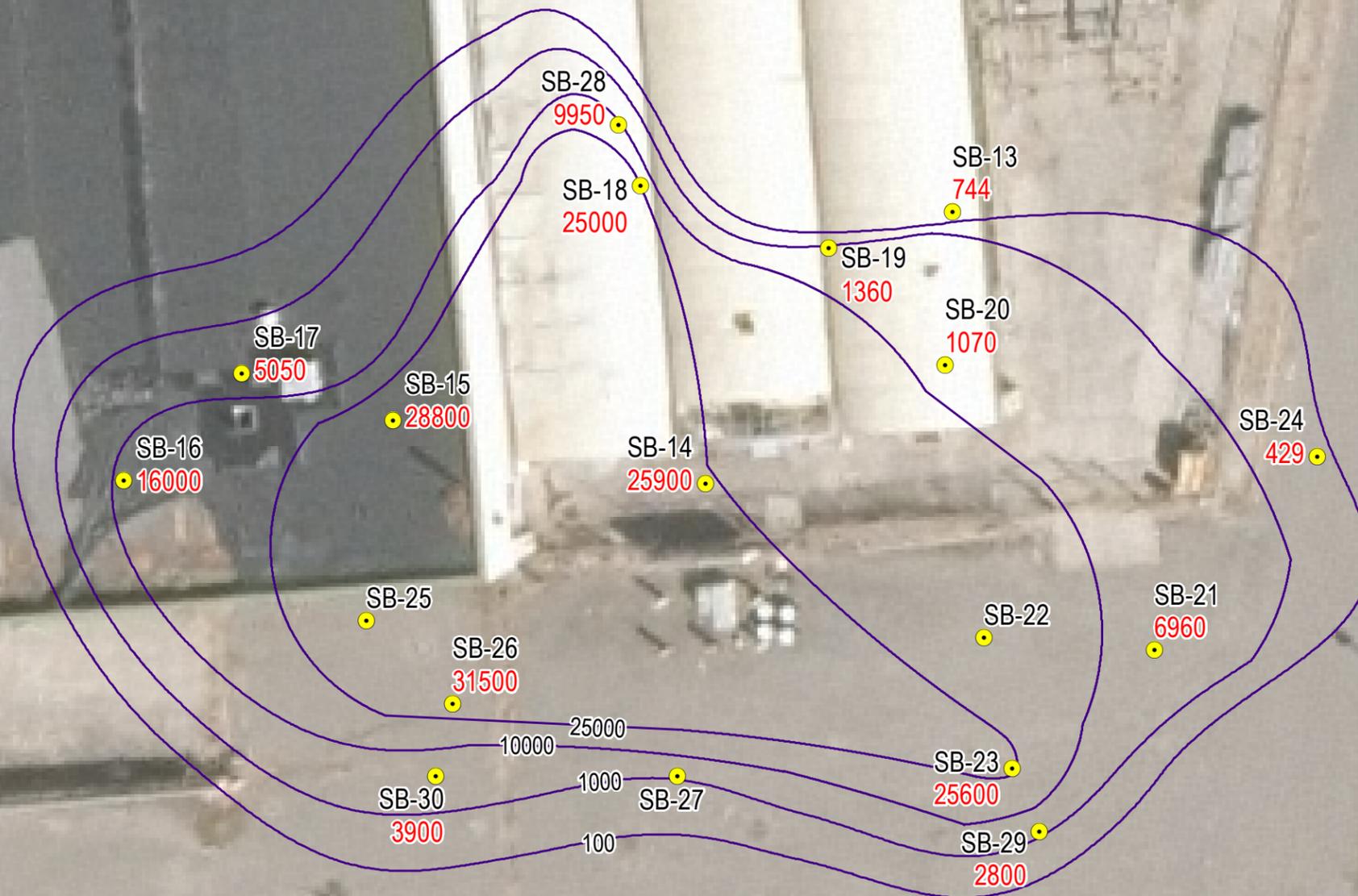
# Historic Sample Locations

Town of Greenburgh  
Spill Investigation Report

715 Dobbs Ferry Road  
Greenburgh, NY 10607

JOB NO.: 213948.03  
DRAWN BY: KCS  
DATE: May 2015

**FIGURE 3**



1:240  
1 inch = 20 feet  
0 10 20 Feet  
Check Graphic Scale Before Using

**NOTES:**  
 - Data Source: Westchester County GIS  
 - TPH: Total Petroleum Hydrocarbons  
 - TPH values shown in red are in milligrams/kilogram and can be found in Table 1  
 - TPH contours are interpolated estimations and the values shown are also in milligrams/kilogram

**Legend**

- April 2015 Spill Delineation Borings
- Approximate TPH Contours
- Property Tax Parcel

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**TPH Concentration  
 Isopleths**

Town of Greenburgh  
 Spill Investigation Report  
 715 Dobbs Ferry Road  
 Greenburgh, NY 10607

JOB NO.: 213948.03  
 DRAWN BY: KCS  
 DATE: May 2015  
**FIGURE 4**

## APPENDIX A: HISTORICAL DOCUMENTS

## APPENDIX B: SOIL BORING LOGS

WOODARD & CURRAN STANDARD - WC STD.GDT - 10/25/12 16:51 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE II\SPILL INVESTIGATION REPORT\ATTACHMENT A - BORING LOGS\FRANKS NURSERY BORING



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# WELL NUMBER Example MW

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 5/4/11 <b>COMPLETED</b> 5/4/11	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> A D & T	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> 7822DT Geoprobe	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Jordan Coleman <b>CHECKED BY</b> _____	<b>AT END OF DRILLING</b> ---
<b>NOTES</b> _____	<b>▼ AFTER DRILLING</b> 14.99 ft / Elev -14.99 ft

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0					Casing Top Elev: 0 (ft) Casing Type: PVC
0.3			Asphalt / subbase	PID = 0ppm	Roadbox Cement
2	40		Brown/grey, fine to coarse SAND, little fine to medium gravel, damp (fill)		1" Schedule 40 PVC Riser
4					Native
5.0			Brown/grey, fine to coarse SAND, little fine to medium gravel, damp (fill)	PID = 0ppm	
5.5			Dark brown/black, fine to coarse SAND (fill)		Bentonite Seal
6	50				No. 1 Sand Filter
8					
10.0			Dark brown, fine to medium SAND	PID = 0ppm	
12	80				
14					
15.0			Dark brown, fine to medium SAND	PID = 0ppm	1" Schedule 40 PVC 10 Slot Screen
16	88				
16.5			Brown, fine to coarse SAND and GRAVEL		
18					
19.0					

Refusal at 19.0 feet.  
 Bottom of borehole at 19.0 feet.



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**BORING NUMBER WC-1**  
 PAGE 1 OF 1

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.3			CONCRETE	-0.3/
0.5			Gray, medium to fine SAND	-0.5/
1.0			ASPHALT	-1.0/
2	70		Gray, coarse to fine SAND, some rock fragments and asphalt	PID = 0ppm
3.5				-3.5
4				
6			Gray, coarse to fine SAND	PID = 0ppm
7.0				-7.0
8	90		Black, medium to fine SAND, some rock, some wood, wet at 9 feet	
8.5				-8.5
9.5			Medium to coarse SAND, gravel, wood	-9.5

Bottom of borehole at 10.0 feet.



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**BORING NUMBER WC-2**  
 PAGE 1 OF 1

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.5			ASPHALT	PID = 0ppm
2	50		Coarse to fine SAND, gravel, trace wood	PID = 0ppm
4				
6			WOOD in tip of probe	PID = 0ppm
8	60		Gray, medium SAND, trace wood, wet at 8.5 feet	PID = 0ppm
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-3

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
			0.5 ASPHALT -0.5	
2			2.0 Coarse to fine SAND, gravel -2.0	PID = 0ppm
4	60		3.0 WOOD, trace sand -3.0	
6			WOOD, wet, Organic odor and feel	
8	30		6.5 -6.5	PID = 0ppm
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-4

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Feet BGS	Environmental Data
0					
1			ASPHALT	-0.8	
2			Coarse to fine SAND, gravel	-2.3	PID = 0ppm
3	70		WOOD, medium to fine SAND	-3.5	PID = 0ppm
4					
5			Coarse to fine SAND, some wood, trace brick, wet at 7.5 feet, organic odor and feel	-6.5	PID = 0ppm
6					
7			Gray, coarse SAND	-7.0	
8	50		Black (organic), SAND and SILT	-7.5	PID = 0ppm
9					
10					

Bottom of borehole at 10.0 feet.



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**BORING NUMBER WC-5**  
 PAGE 1 OF 1

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.5			ASPHALT	
2	50		Dark gray, coarse to fine SAND, trace gravel	PID = 0ppm
2.5				
4				
6			Coarse to fine SAND and WOOD in tip	PID = 0ppm
6				
8	10			
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-6

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.5			CONCRETE	
2.0			Coarse to fine SAND and GRAVEL, some wood fiber at tip.	PID = 2ppm PID = 1.8ppm
5.8			Coarse to fine SAND and GRAVEL	
7.0			Dark brown coarse to fine SAND, mostly wood in last 6 inches with strong organic odor and feel, very wet.	PID = 4.9ppm
10.5			Coarse to fine SAND and WOOD, very wet, oily feel, strong organic odor.	

Bottom of borehole at 15.0 feet.



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**BORING NUMBER WC-7**  
 PAGE 1 OF 1

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.5			ASPHALT	
2.0			Coarse to fine SAND, some gravel, some wood	PID = 0ppm
5.5			Coarse to fine SAND, wood	
6.5			Gray fine SAND and SILT	
7.0			Black, WOOD and SILT, oily feel (organic), minimal organic odor	

Bottom of borehole at 10.0 feet.



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**BORING NUMBER WC-8**  
 PAGE 1 OF 1

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.5			ASPHALT	
2			Black, fine SAND, asphalt base, brick, wood	PID = 0ppm
4	50			
6			Black, WOOD and SAND, wet, strong organic odor and feel	
8	10			
10				

Bottom of borehole at 10.0 feet.



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**BORING NUMBER WC-9**  
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<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.5			ASPHALT	
2	50		Coarse to fine SAND, gravel, wood at 4-5 feet	PID = 0ppm
2.5				
4				
5.5			Gray, SAND and SILT	PID = 0ppm
6			WOOD, organic odor and feel	
6.0				
8	20			
10				

Refusal at 10.0 feet.  
 Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-10

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
			0.5 ASPHALT	-0.5
			1.0 GRAVEL, black wood at tip	-1.0
2				
4				
20				

Bottom of borehole at 5.0 feet.

PID = 0ppm



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<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
1.0			ASPHALT MIX, gravel, medium to fine sand, wood	PID = 0ppm
2				
4				
5.5			WOOD in tip of Probe	PID = 0ppm
6				
8				
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-12

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.3			ASPHALT	
2	60		Dark gray, coarse to fine SAND	PID = 0ppm
4				
6			Coarse to fine SAND, little fine gravel, trace wood pieces	PID = 0ppm
8	20			
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-13

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.3			ASPHALT MIX	
2			Coarse to fine SAND, gravel	
2.8	60			PID = 0ppm
3.0			ASPHALT	
4				
6			Coarse to fine SAND and GRAVEL, trace wood pieces	
7.0	40			
8				
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-14

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.5			ASPHALT	
2	50		Gray, coarse to fine SAND, little gravel, trace wood pieces	PID = 0ppm
2.5				
4				
5.5			Gray, coarse to fine SAND	
6				
6.5			WOOD, wet, organic odor and feel	PID = 0ppm
8	30			
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER WC-15

<b>CLIENT</b> Frank's Nursery	<b>PROJECT NAME</b> Former Frank's Nursery, 715 Dobbs Ferry Road
<b>PROJECT NUMBER</b> 213948	<b>PROJECT LOCATION</b> Greenburgh, NY
<b>DATE STARTED</b> 9/10/12 <b>COMPLETED</b> 9/10/12	<b>GROUND ELEVATION</b> 0 ft <b>HOLE SIZE</b> 2"
<b>DRILLING CONTRACTOR</b> Eastern Enviro. Inc	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b>	<b>AT TIME OF DRILLING</b> ---
<b>LOGGED BY</b> Greg Reynolds <b>CHECKED BY</b>	<b>AT END OF DRILLING</b> ---
<b>NOTES</b>	<b>AFTER DRILLING</b> ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.5			ASPHALT	
1.5			Dark brown/gray, coarse to fine SAND	PID = 0ppm
3.0	60		Coarse to fine SAND and WOOD	
6.0			Gray, medium to fine SAND and SILT, trace gravel	PID = 0ppm
6.5			Black, WOOD	
8	30			
10				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER MW-A

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE II\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/8/13</u> <b>COMPLETED</b> <u>1/7/13</u>	<b>GROUND ELEVATION</b> <u>322.04 ft</u> <b>HOLE SIZE</b> <u>8"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>7.50 ft / Elev 314.54 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						Casing Type: Schedule 40 PVC
0.5	AS 1		PID = 0	[Concrete pattern]	Concrete/Base	
1.5			PID = 0	[Sand pattern]	Black medium grained SAND w/ some fill (wood)	
2.5			PID = 0	[Sand pattern]	Brown/gray medium grained SAND w/ crushed concrete	Sch. 40 PVC Riser Bentonite Seal
5.0			PID = 0	[No recovery]	No Recovery	
7.5	AS 2		PID = 0	[Sand pattern]	Black medium grained SAND w/ some fill ( wood, brick) Wet, slight sheen/petroleum odor	
10.0			PID = 0	[No recovery]	No Recovery	
15.0	AU 3				Black medium grained SAND w/ wood fragments	Sch. 40 PVC 10 Slot Screen Filter Pack
18.0					Black medium grained SAND w/ wood fragments	
19.0	AU 4					

Bottom of borehole at 19.0 feet.



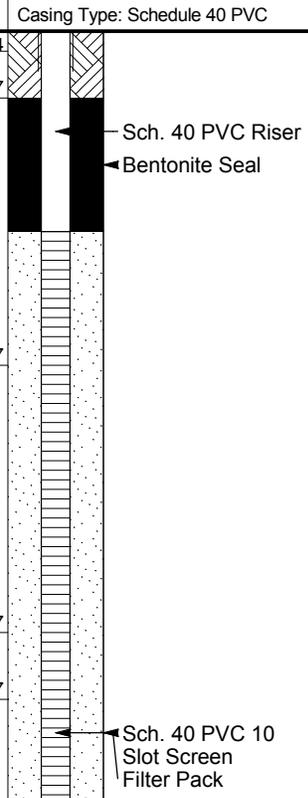
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# BORING NUMBER MW-B

ENVIRONMENTAL BH - WC STD.GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE II\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/7/13</u> <b>COMPLETED</b> <u>1/8/13</u>	<b>GROUND ELEVATION</b> <u>322.67 ft</u> <b>HOLE SIZE</b> <u>8"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>8.00 ft / Elev 314.67 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0						Casing Type: Schedule 40 PVC
0.3	AS 1	PID = 0	PID = 0	[Hatched pattern]	Asphalt/Base	322.4
1.0				[Dotted pattern]	Brown medium grained SAND, dry	321.7
5.0	AS 2	PID = 0	PID = 0	[Empty]	No Recovery	
9.0				[Empty]	No Recovery	317.7
10.0	AU 3	PID = 0	PID = 0	[Cross-hatched pattern]	Brown medium grained SAND, w/ fill (brick, wood) Moist @ 9'	313.7
19.0				[Cross-hatched pattern]	Dark Brown FILL w/ some wood fragments, brick, metal Moist	312.7
19.0					Bottom of borehole at 19.0 feet.	303.7





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**BORING NUMBER SB-1**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE I\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/17/13</u> <b>COMPLETED</b> <u>1/17/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>8.50 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0					Asphalt/base	
0.5						
2.5	AS 1		PID = 0		Brown medium grained SAND w/ little cobble, brick	
			PID = 0			
			PID = 0		Tan medium to fine grained SAND w/ cobble	
5.0	AS 2		PID = 0		No Recovery	
			PID = 0		Brown/tan medium grained SAND w/ brick, rock	
			PID = 0		Brown medium grained SAND w/ brick, rock	
			PID = 0.2		Wood Fragments	
			PID = 0		Brown fine grained silty SAND w/ little clay, brick Moist@ 8'	
7.5						
8.5					▽	
10.0						

Bottom of borehole at 10.0 feet.



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**BORING NUMBER SB-2**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE II\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/17/13</u> <b>COMPLETED</b> <u>1/17/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>10.50 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0					Asphalt/base	
0.5				0.5	Brown medium grained SAND w/ fill (brick, glass, rock)	
1.0			PID = 0	1.0	Crushed concrete	
1.5				1.5	Brown medium grained SAND w/ fill (wood, brick, concrete)	
2.5	AS 1		PID = 0	2.5		
3.5			PID = 0	3.5	No recovery	
5.0			PID = 0	5.0	Brown medium grained SAND, some silt, w/ fill (brick, wood, cobble)	
7.5	AS 2		PID = 0	7.5		
8.5			PID = 0	8.5	Gray fine grained silty SAND w/ some clay	
9.5			PID = 0	9.5	No recovery	
10.0	AS 3		PID = 0	10.0	Brown/gray fine grained SAND w/ some clay	
11.0			PID = 0	11.0	▽	

PID = 0

Bottom of borehole at 11.0 feet.



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**BORING NUMBER SB-3**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE I\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/17/13</u> <b>COMPLETED</b> <u>1/17/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>10.00 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0					Asphalt/base	
0.5					Brown medium grained SAND w/cobble	
1.0			PID = 0		Brown medium grained SAND w/ fill (brick, crushed rock)	
2.5	AS 1		PID = 0		Brown/black medium grained SAND w/ fill (brick, wood, rock)	
4.0			PID = 0			
5.0			PID = 0		Brown medium grained SAND w/ brick	
6.0			PID = 0		Brown medium grained SAND w/ little cobble	
7.3	AS 2		PID = 0		Brown/gray fine to medium grained SAND	
8.3			PID = 0		Tan fine grained SAND w/ some silt, little clay	
9.3			PID = 0		No Recovery Sleeve wet @ 10'	
10.0			PID = 0			

Bottom of borehole at 10.0 feet.



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**BORING NUMBER SB-4**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WI\PHASE I\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nusery Spill Investigation

**PROJECT NUMBER** \_\_\_\_\_ **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh NY

**DATE STARTED** 1/17/13 **COMPLETED** 1/17/13 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe  **AT TIME OF DRILLING** 7.00 ft

**LOGGED BY** Evan Trumpatori **CHECKED BY** Aaron Townsely **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0						
0.5	AS 1		PID = 0		Asphalt/base	
2.0			PID = 0		Brown/black medium grained SAND w/ fill (brick, wood, crushed rock)	
2.3			PID = 0		Crushed rock	
2.5			PID = 0		Brown medium grained SAND w/ brick, cobble	
5.0			PID = 0		No Recovery	
7.5	AS 2		PID = 0		Brown medium grained SAND w/ fill (brick, wood, crushed rock) Saturated @ 7'	
10.0			PID = 0		No Recovery	

Bottom of borehole at 10.0 feet.



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**BORING NUMBER SB-5**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WI\PHASE I\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/17/13</u> <b>COMPLETED</b> <u>1/17/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>8.50 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0						
0.5	AS 1		PID = 0		Asphalt/base	
2.0			PID = 0		Brown/gray medium grained SAND w/ crushed rock	
2.5			PID = 0		Brown medium grained SAND w/ fill (brick, wood, cobble)	
5.0	AS 2		PID = 0		No Recovery	
5.0			PID = 0		Brown medium grained SAND w/ brick, crushed rock	
7.5			PID = 0		Brown/tan medium grained SAND	
8.0			PID = 0		Brown fine grained SAND w/ some silt	
8.2			PID = 0		Crushed Rock	
8.5			PID = 0		No Recovery Sleeve wet @ 8.5'	
10.0						

Bottom of borehole at 10.0 feet.



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 709 Westchester Ave, Suite L2  
 White Plains, NY 10604  
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 Fax: 914-448-0147

**BORING NUMBER SB-6**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WI\PHASE I\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/17/13</u> <b>COMPLETED</b> <u>1/17/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>9.50 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0					Concrete/base	
0.5	AS 1		PID = 0		Brown medium grained SAND w/ fill (wood, glass, rock)	
2.0					Brown medium grained SAND w/ fill (brick, crushed concrete)	
3.5					No Recovery	
5.0	AS 1		PID = 0		Brown medium grained SAND w/ brick	
6.3					Wood Fragments	
7.0					Brown/tan medium to fine grained SAND w/ wood	
7.3					No Recovery Sleeve wet @ 9.5'	
10.0					Bottom of borehole at 10.0 feet.	



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<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/17/13</u> <b>COMPLETED</b> <u>1/17/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>10.00 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0					Concrete/base	
0.5					Gray fine grained SAND moist	
1.0			PID = 0		Crushed wood, brick	
1.5					Brown medium grained SAND w/ wood	
2.5	AS 1		PID = 0		Brown medium grained SAND w/ concrete	
3.0			PID = 0		No Recovery	
5.0			PID = 0		Brown medium grained SAND w/ fill (brick, concrete)	
6.5			PID = 0		Brown medium grained Sand w/ brick	
6.8					Crushed wood	
7.0			PID = 0		Brown medium grained SAND w/ fill (brick, wood)	
7.5	AS 2		PID = 0		Sleeve moist @ 10'	
10.0					Bottom of borehole at 10.0 feet.	



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# BORING NUMBER SB-8

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE I\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/17/13</u> <b>COMPLETED</b> <u>1/17/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>9.00 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0					Concrete/Base	
0.3			PID = 0		Brown/gray medium grained SAND w/ fill (brick, rock, wood)	
2.5	AS 1		PID = 0			
3.0			PID = 0		No Recovery	
5.0			PID = 0		Brown/gray medium grained SAND w/ little cobble	
7.0			PID = 5.2		Crushed concrete	
7.5	AS 2		PID = 0		Brown medium grained SAND w/ wood Wet @ bottom of sleeve (8-9')	
8.7			PID = 0			
10.0						

Bottom of borehole at 10.0 feet.



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**BORING NUMBER SB-9**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIPIPHASE I\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/18/13</u> <b>COMPLETED</b> <u>1/18/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>9.00 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0						
0.5	AS 1		PID = 0	0.5	Asphalt/base	
1.5			PID = 0	1.5	Brown medium grained SAND w/ little cobble	
1.8				1.8	Crushed rock	
2.5			PID = 0	2.5	Brown fine to medium grained SAND w/ little cobble, fill (brick, wood)	
2.5			PID = 0		No recovery	
5.0	AS 2		PID = 0	5.0	Brown fine to medium grained SAND w/ some silt, cobble, wood	
7.5			PID = 0			
8.0			PID = 0	8.0	Gray fine grained SAND w/ some silt, cobble, wood	
9.0			PID = 0	9.0	▽ No recovery	
10.0						

Bottom of borehole at 10.0 feet.



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**BORING NUMBER SB-10**

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE II\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nusery Spill Investigation

**PROJECT NUMBER** \_\_\_\_\_ **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh NY

**DATE STARTED** 1/18/13 **COMPLETED** 1/18/13 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** 10.00 ft

**LOGGED BY** Evan Trumpatori **CHECKED BY** Aaron Townsely **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0						
0.5	AS 1		PID = 0		Topsoil	
1.2			PID = 0		Crushed Rock	
1.8			PID = 0		Gray fine to medium grained SAND w/ some cobble	
2.5			PID = 0		Brown fine to medium grained SAND w/ fill (brick, wood)	
2.5			PID = 0		No Recovery	
5.0	AS 2		PID = 0		Brown fine to medium grained sand w/ fill (brick, wood)	
7.5			PID = 0		Sleeve wet @ 10'	
7.5			PID = 0		No Recovery	
10.0	AS 3		PID = 0		Saturated wood	
11.0			PID = 0		No recovery, entire sleeve fill with water	
15.0						

Bottom of borehole at 15.0 feet.



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# BORING NUMBER SB-11

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ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE II\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/18/13</u> <b>COMPLETED</b> <u>1/18/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>11.00 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0						
0.5	AS 1		PID = 0	0.5	Topsoil	
1.0			PID = 0	1.0	Brown fine to medium grained SAND w/ little wood	
1.3			PID = 0	1.3	Crushed brick	
1.5			PID = 0	1.5	Brown/black medium grained SAND	
2.5			PID = 0	2.5	Brown medium grained SAND w/ crushed rock	
3.0		PID = 0	3.0	Brown medium grained SAND w/ some wood		
5.0				5.0	No recovery	
7.5	AS 2		PID = 0	7.5	Brown medium grained SAND w/ some wood	
10.0			PID = 19.1	10.0		
10.0			PID = 0	10.0	Brown medium grained SAND w/ fill (brick, wood) Saturated @ 11'	
12.0			PID = 0	12.0		
12.5	AS 3		PID = 0	12.5	No recovery	
15.0				15.0		

Bottom of borehole at 15.0 feet.



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# BORING NUMBER SB-12

ENVIRONMENTAL BH - WC STD\_GDT - 2/22/13 07:35 - \\WHITEPLAINS\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\PHASE II\SITE INVESTIGATION REPORT\APPENDICES\SOIL BORING LOGS\BORING LOGS.GPJ

<b>CLIENT</b> <u>Town of Greenburgh</u>	<b>PROJECT NAME</b> <u>Frank's Nusery Spill Investigation</u>
<b>PROJECT NUMBER</b> _____	<b>PROJECT LOCATION</b> <u>715 Dobbs Ferry Road, Greenburgh NY</u>
<b>DATE STARTED</b> <u>1/18/13</u> <b>COMPLETED</b> <u>1/18/13</u>	<b>GROUND ELEVATION</b> _____ <b>HOLE SIZE</b> <u>2"</u>
<b>DRILLING CONTRACTOR</b> <u>Eastern Environmental</u>	<b>GROUND WATER LEVELS:</b>
<b>DRILLING METHOD</b> <u>GeoProbe</u>	▽ <b>AT TIME OF DRILLING</b> <u>14.00 ft</u>
<b>LOGGED BY</b> <u>Evan Trumpatori</u> <b>CHECKED BY</b> <u>Aaron Townsely</u>	<b>AT END OF DRILLING</b> <u>---</u>
<b>NOTES</b> _____	<b>AFTER DRILLING</b> <u>---</u>

DEPTH (ft)	SAMPLE TYPE	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0.0						
0.5	AS 1		PID = 0	0.5	Topsoil	
1.2			PID = 0	1.2	Brown fine to medium grained SAND w/ some silt	
1.8			PID = 0	1.8	Crushed Rock	
2.5			PID = 0	2.5	Brown fine to medium grained SAND w/ some silt	
5.0	AS 2		PID = 0	5.0	No recovery	
5.5			PID = 0	5.5	Crushed brick, borck	
7.5			PID = 0	7.5	Brown fine to medium grained SAND w/ some silt, fill (wood)	
10.0			PID = 0	7.5	No recovery	
11.0	AS 3		PID = 0	10.0	Brown medium grained SAND w/ wood	
12.5			PID = 0	11.0	No recovery	
15.0				15.0	Sleeve wet @ 14'	

Bottom of borehole at 15.0 feet.



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# BORING NUMBER SB-13

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery  
**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY  
**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"  
**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**  
**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---  
**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** Recalibrated PID after this boring. Readings may be artificially elevated **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-1-2 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0						
0.3					CONCRETE	0
0.8			SM		(SM) Brown/Gray SILTY SAND	0
1.0					ASPHALT	0
1.3					WOOD	74.5
1.8			SP		(SP) Brown/Gray medium SAND with some medium subangular Gravel. WET	55.8
2.0		40			White crushed ROCK	38.8
					No Recovery	
5.0					(SP) Brown/Gray medium SAND with some medium subangular Gravel and some Quartz. WET	105
6.0			SP			74.2
6.3					White crushed ROCK	61.5
6.5			SP		(SP) Brown/Gray medium SAND	27.7
6.8					WOOD	0
7.3		45			White crushed ROCK and medium to large GRAVEL. SATURATED at bottom of sleeve	0
					No Recovery	
10.0	AS SB-13 (9-10)				Black WOOD and BRICK. SATURATED	0
11.0					No Recovery	0
15.0		20				

Bottom of borehole at 15.0 feet.



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# BORING NUMBER SB-14

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery  
**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY  
**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"  
**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**  
**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---  
**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** Multiple attempts required because of refusals due to concrete and wood **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.3					CONCRETE	0
0.5	SP				(SP) Gray medium SAND	1.4
1.7					Dark brown medium SAND with little Silt, Wood, Brick, Asphalt, and small angular to subangular Gravel.	1.6
2.3						1.7
2.5		45			No Recovery	0.8
5.0						5.4
5.0	SP				(SP) Gray fine SAND	2.2
5.3					Black WOOD, BRICK, and medium SAND. SATURATED with free product. Odor	0.8
6.5						27.5
7.5		30			No Recovery	17
10.0	AS SB-14 (9-10)					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-15

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**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.3					0.3 CONCRETE	1
1.0			SP		(SP) Brown fine SAND	1
1.3					White and Black crushed ROCK	0.8
1.5					WOOD	0.9
2.5		30			No Recovery	
5.0					5.0 WOOD, BRICK, CRUSHED ROCK, Brown medium SAND, and 3/4" GRAVEL	
5.8					5.8 Black WOOD. SATURATED with free product.	
6.5					6.5 No Recovery	
7.5		30				
10.0	AS SB-15 (9-10)					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-16

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery  
**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY  
**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"  
**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**  
**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---  
**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** log represents multiple attempts because of refusals at 5' and 9' bgs **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0					
0.3			[Cross-hatch pattern]	CONCRETE	0
0.5			[Cross-hatch pattern]	Brown medium SAND and RUBBER	0.1
1.0			[Cross-hatch pattern]	Brown medium SAND and ASPHALT	0.2
1.3			[Cross-hatch pattern]	Gray medium SAND and WOOD, BRICK, and CERAMIC	0.2
1.5			[Cross-hatch pattern]	Light brown WOOD	0.3
2.5		30		No Recovery	
5.0			[Cross-hatch pattern]	5.0 Black WOOD and ROCK. SATURATED with free product.	
5.3			[Cross-hatch pattern]	5.3 No Recovery	13.9
7.5		5			
10.0	AS SB-16 9.5-10			Bottom of borehole at 10.0 feet.	



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# BORING NUMBER SB-17

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery  
**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY  
**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"  
**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**  
**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---  
**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** 0-5' log is from 2nd attempt due to poor recovery from 1st attempt **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.3					CONCRETE	0
0.5			SP		(SP) Brown medium SAND with little small subangular Gravel	0
1.0			SM		(SM) Brown SILTY SAND	0
1.3					Brown medium SAND and BRICK	0
1.5					Black medium SAND and WOOD	0.1
2.5		30			No Recovery	
5.0						
5.2					Slough: brown medium SAND with some medium subangular Gravel	0
5.4					Reddish brown WOOD	0
5.6					Light brown coarse SAND and Cobbles	10.7
6.3					Black WOOD. SATURATED with free product	1.4
6.5					Gray crushed ROCK. SATURATED. Saturated red crushed rock at bottom of sleeve. No oil	0.5
7.5		30			No Recovery	
10.0	AS SB-17 (9-9.5)					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-18

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.5			SP		(SP) Gray fine SAND. MOIST	0
0.8					CONCRETE	0.1
1.3			SP		(SP) Tan coarse SAND	0
1.5					ASPHALT and BRICK. WET.	1.6
2.3			GP		(GP) Dark gray medium to coarse SAND with some medium subangular Gravel and Cobbles	0
2.5		50			White crushed ROCK	0.4
					No Recovery	0
5.0						
5.3			SP		(SP) Dark gray fine SAND. SATURATED	0
5.8			GP		(GP) Dark gray and Black GRAVEL. SATURATED	0.1
6.0					White crushed ROCK	0.1
6.8			SP-SM		(SP-SM) Dark gray fine SAND with little Silt	0.2
7.0			GP		(GP) Black GRAVEL. SATURATED. Sheen. Slight odor. Wood in shoe	0.3
		40			No Recovery	8.5
10.0	AS SB-18 9.5-10					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-19

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.3					CONCRETE	0
0.5					(SP) Gray fine SAND. MOIST	0.2
0.8					ASPHALT	0
1.0					(SPG) Dark brown medium SAND with some small subangular Gravel. MOIST	0.1
1.5					CONCRETE	0.2
2.0					(GP) Gray GRAVEL. SATURATED	0.6
2.3					(GP) Black GRAVEL. WET	0
2.5		60			White and Gray crushed ROCK	0.6
3.0					No Recovery	
5.0						
5.3					(SP) Brown/Black/Gray fine SAND. SATURATED	0.1
5.8					(GP) White and Black small angular GRAVEL. SATURATED	0.4
6.0					(GP) Gray medium SAND with some Silt, Gravel, and Cobbles. WET	0.8
6.3					Black SILTY SAND with some Wood. MOIST. Slight odor	7.5
6.5	AS SB-19 (6-6.5)				Black crushed ROCK and GRAVEL	1.9
7.3		80			Gray and Black medium SAND with some crushed Rock, Gravel, Cobbles, and Wood	1.3
8.3						3.3
8.5					(GP) Black small angular GRAVEL. SATURATED	1.6
9.0					Dark brown WOOD and BRICK. SATURATED	0.9
10.0					No Recovery	

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-20

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/1/15 **COMPLETED** 4/1/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.3					CONCRETE	0
0.7					(SPG) Dark brown medium SAND with some small to medium subangular Gravel. MOIST	0.7
0.8						0
2.5		75		SPG		0.2
2.5					CONCRETE	0.7
3.3						1
3.8				SPG	(SPG) Brown/Gray medium SAND with some small subangular Gravel. Wood at bottom of sleeve	0
3.8					No Recovery	0
5.0						
5.0				SP	(SP) Dark brown fine SAND. MOIST	1.2
5.3					Brown/Black/Gray medium SAND with little Silt, Wood, and small subangular Gravel	1.5
6.0						
6.3	AS SB-20 (6-6.5)				WOOD. Slight odor	14.1
6.8					Black SILTY SAND with Wood. MOIST. Odor	2.7
6.8				SPG	(SPG) Gray/Brown medium SAND with some small rounded to angular Gravel and Cobbles. WET	0.8
7.3		45			No Recovery	
7.5						
10.0					Bottom of borehole at 10.0 feet.	



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# BORING NUMBER SB-21

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery  
**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY  
**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"  
**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**  
**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---  
**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** PID recalibrated after this boring. Readings may be elevated **AFTER DRILLING** ---

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DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0					
0.3				ASPHALT and Subbase	0
1.0				Dark brown medium SAND with crushed white Rock	20.2
1.3				Dark brown medium SAND with Wood	365
1.8				Dark brown medium SAND with Brick	284
2.5		75		Dark brown medium SAND with Wood	268
3.0				Dark brown medium SAND with Wood. WET. Odor	278
3.3				Dark brown medium to fine SAND with white crushed Rock, Brick	648
3.8				No Recovery	
5.0	AS SB-21 (3-3.5)				
5.2				Slough: ASPHALT and Brown medium SAND	374
5.7				CONCRETE	258
6.2				Dark brown medium SAND and WOOD. WET	447
6.5				Dark brown WOOD. SATURATED	413
7.5		30		No Recovery	
10.0					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-22

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery  
**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY  
**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"  
**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**  
**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---  
**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

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DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.5					ASPHALT and SUBBASE	0
1.1			SPG		(SPG) Brown GRAVELLY SAND. MOIST	0
1.3					Black SILTY SAND with Brick	0.2
1.6					Black SILTY SAND with Asphalt	
1.8					Black SILTY SAND with Wood	
2.2					CONCRETE	0
2.5		75	GW-GM		(GW-GM) Black/Brown SILTY SAND with some small rounded Gravel	1.5
3.0					Gray SILTY SAND with Wood	0.5
3.8					No Recovery	0.3
5.0						
5.3					Brown coarse SAND and BRICK. SATURATED	0
5.8					Black WOOD. SATURATED	0.6
6.8					Gray SANDY SILT. MOIST	0.6
7.4					Black WOOD. SATURATED in free product. Sheen. Odor	4.8
7.5		48			No Recovery	
10.0	AS SB-22 9.5-10					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-23

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.2				[Pattern]	ASPHALT and SUBBASE	0
0.5				[Pattern]	Brown SILTY SAND and 3/4" GRAVEL	0
1.0				[Pattern]	Brown SILTY SAND and WOOD	35
1.3				[Pattern]	Crushed ROCK and WOOD	0
1.5				[Pattern]	Dark brown medium SAND and WOOD	0.8
2.0				[Pattern]	Dark brown medium SAND and WOOD and BRICK. MOIST	0.7
2.5		40			No Recovery	
5.0						
5.2	SP			[Pattern]	(SP) Brown coarse SAND. SATURATED	0
5.6	SM			[Pattern]	(SM) Gray SILTY SAND. WET	1.5
6.0				[Pattern]	WOOD. WET	3.3
6.5				[Pattern]	Black WOOD. SATURATED. Odor. No sheen	7
7.5		30			No Recovery	
10.0	AS SB-23 9.5-10					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-24

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

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DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.2					ASPHALT and SUBBASE	0
					(SPG) Dark brown medium SAND with some small subangular Gravel	0
		75	SPG			0
2.5						0
					Dark brown medium SAND with some small subangular Gravel and little Brick. MOIST	0
					No Recovery	0
5.0						
					(SW) Dark gray medium to fine SAND with some medium to small angular to subangular Gravel. Loose	0
			SW			0
					(OH) Black organic SILT. Soft	0
					(SPG) Gray medium SAND with some medium rounded Gravel. MOIST	0
7.5	AS SB-24 (6.5-7)	60	SPG			0
					Gray medium SAND and COBBLES and WOOD. WET	0
					No Recovery	0
10.0						

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-25

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0					
0.5					ASPHALT and SUBBASE
1.0					Brown medium SAND with some medium subangular Gravel and Brick
1.5					CONCRETE
2.0					Brown medium SAND and WOOD. MOIST
2.5		40			No Recovery
5.0					
5.5			SP		(SP) Dark brown coarse SAND. SATURATED with free prodcut. Odor
6.0					Black WOOD. SATURATED with free prodcut. Odor
7.5		20			No Recovery
10.0	AS SB-25 (9-9.5)				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-26

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery  
**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY  
**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"  
**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**  
**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---  
**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---  
**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.5					ASPHALT and SUBBASE	0
1.2	SPG				(SPG) Dark brown medium SAND with some small rounded to angular Gravel and Cobbles	0
1.4					ASPHALT	0
2.5	SPG	70			(SPG) Brown medium SAND with some small to medium angular to subangular Gravel and little Silt	0
2.7					ASPHALT	11
3.2	SPG				(SPG) Brown medium to fine SAND with some small subangular Gravel. MOIST	4.3
3.5	SPG				(SPG) Dark brown medium SAND with organic matter. WET	0.4
					No Recovery	
5.0						
5.4					Dark brown medium SAND with little Wood. MOIST	1.9
5.6					BRICK	15.8
6.5					Black WOOD. SATURATED. Odor	26.7
					No Recovery	
7.5		30				
10.0	AS SB-26 9.5-10					

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-27

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0					ASPHALT and SUBBASE	0
1.0						0
1.5	SPG				(SPG) Brown medium SAND with some small angular Gravel	
2.5	SPG	66			(SPG) Dark brown medium SAND with some small angular Gravel and crushed Rock	0
3.3	GM				(GM) Dark brown SILTY SAND with some small to medium subangular Gravel. MOIST	0
5.0					No Recovery	0
5.5					Slough: ASPHALT	0
6.1	SPG				(SPG) Crushed QUARTZ and Dark brown medium SAND. MOIST	0
6.5					Black WOOD. SATURATED. Odor. Visible oil globules	2.1
7.5					No Recovery	
10.0	AS SB-27 9.5-10	30				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-28

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0					
0.3				CONCRETE	0
0.4				Gray fine SAND	0
				Brown medium SAND with some small to medium subangular Gravel and Brick	0
1.4				CONCRETE	0
2.4		70		Brown medium SAND with little Plastic	0
3.0				Brown medium SAND with some crushed Rock	0
3.5				No Recovery	0
5.0				Brown coarse SAND with some small to medium subangular Gravel. SATURATED	0
5.8				Brown medium SAND with some medium rounded Gravel	0
6.5				Black GRAVEL. SATURATED with free product. Odor	13.4
6.6				Brown WOOD. MOIST. Slight odor	0.6
7.0				Red GRAVEL and COBBLES and Crushed ROCK. SATURATED	0.2
7.5		50		No Recovery	
10.0	AS SB-28 (8-8.5)				

Bottom of borehole at 10.0 feet.



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# BORING NUMBER SB-29

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0					ASPHALT and SUBBASE	0
0.8						0
1.3			SPG		(SPG) Brown medium SAND with some small angular Gravel. MOIST	0
1.5					Black medium SAND with some small angular Gravel. Piece of felt	0
1.7					Black medium SAND with some small angular Gravel and Brick	0
2.4					Black medium SAND and WOOD and CONCRETE	0
2.5		48			No Recovery	0
5.0						
5.1					WOOD	0
5.7					ASPHALT	0
6.1					Brown WOOD. WET	
6.1					Red GRAVEL and COBBLES. SATURATED. Slight odor	9.2
7.3						0
7.4		46			Dark brown GRAVEL and WOOD. SATURATED	0
7.4					No Recovery	
10.0	AS SB-29 (8-8.5)					

Bottom of borehole at 10.0 feet.



Woodard & Curran  
 709 Westchester Ave, Suite L2  
 White Plains, NY 10604  
 Telephone: 914-448-2266

# BORING NUMBER SB-30

**CLIENT** Town of Greenburgh **PROJECT NAME** Frank's Nursery

**PROJECT NUMBER** 213948.03 **PROJECT LOCATION** 715 Dobbs Ferry Road, Greenburgh, NY

**DATE STARTED** 4/2/15 **COMPLETED** 4/2/15 **GROUND ELEVATION** \_\_\_\_\_ **HOLE SIZE** 2"

**DRILLING CONTRACTOR** Eastern Environmental **GROUND WATER LEVELS:**

**DRILLING METHOD** GeoProbe **AT TIME OF DRILLING** ---

**LOGGED BY** Kirk Silver **CHECKED BY** \_\_\_\_\_ **AT END OF DRILLING** ---

**NOTES** \_\_\_\_\_ **AFTER DRILLING** ---

GENERAL BH / TP / WELL - WC STD.GDT - 4/16/15 12:21 - \\WC\SHARED\PROJECTS\213948 TOWN OF GREENBURGH - 715 DOBBS FERRY RD\WIP\2015 SPILL DELINEATION\BORING LOGS\2015.04.01-2.BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0						
0.5					ASPHALT and SUBBASE	0
1.1			SP		(SP) Brown medium SAND with some very small angular Gravel	3.5
2.0					Crushed ROCK	12.4
2.5		40			No Recovery	
5.0						
5.3					Dark brown SILTY SAND. SATURATED with product. Odor	25.8
6.4					Black WOOD. SATURATED with product. Odor	12.5
7.5		28			No Recovery	
10.0	AS SB-30 (8.5-9)					

Bottom of borehole at 10.0 feet.

## APPENDIX C: LABORATORY REPORTS



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COMMITMENT & INTEGRITY DRIVE RESULTS