

SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT

MINUTE MAN CLEANERS 89 OCEAN AVENUE EAST ROCKAWAY, NEW YORK SITE # C 130157

SUBMITTED TO:

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
CONSERVATION
BROWNFIELD CLEANUP PROGRAM**

**URS PROJECT NO.: 38580332
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URS

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INTRODUCTION

On behalf of Ben Ley Enterprises, Inc. (Ben Ley), URS Corporation – New York (URS) is pleased to submit this Supplemental Remedial Investigation (RI) report summarizing activities performed at Minute Man Cleaners, located at 89 Ocean Avenue in East Rockaway, New York (the “Site”) under New York State’s Brownfield Cleanup Program (BCP). This Supplemental RI was performed in substantial compliance with the April 4, 2007 Supplemental Remedial Investigation Work Plan (SRIWP) prepared by URS that was approved by the New York State Department of Environmental Conservation (NYSDEC) on April 17, 2007.

Ben Ley has entered into the BCP with the NYSDEC as a participant to investigate and, where necessary, remediate contaminated soil and groundwater at the Site (Figure 1).

SUMMARY OF PREVIOUS REMEDIAL INVESTIGATION ACTIVITIES

Previously, URS completed a Remedial Investigation in two phases in the Fall of 2006. The first phase was conducted in September 2006 and included:

- A soil gas survey involving the collection of four soil vapor samples (SG-1 through SG-4);
- Completion of nine Geoprobe soil borings (B-1 through B-9) and collection of eighteen soil samples;
- Collection of nine grab groundwater samples (WS-B1 through WS-B9) from the water table (6–9 feet below grade surface (ft bgs)) in each of the above borings and one additional grab groundwater sample below the on-site semi-confining unit (22-25 ft bgs) at boring B-1 (WS-B1D).

The second phase was conducted in October/November 2006 and included:

- Collection of six sediment samples from four borings (RS-1, RS-2, RS-4 and RS-5) in the Mill River abutting the site to the east;
- Collection of three surface water samples from the Mill River (SW-1 through SW-3);
- Collection of two sediment samples from on-site dry wells DW-1 and DW-2;
- Installation of six monitoring well clusters, each composed of a shallow and deep monitoring well (MW-1S/D, MW2S/D, MW-3S/D, MW-4S/D, MW-5S/D, and MW-6S/D);
- Installation of a single shallow monitoring well (MW-7S). A soil sample was also collected during the installation of MW-7S at the depth of 4-8 ft bgs;
- Collection of water levels in the monitoring wells on November 18, 2006 at the low tidal stage and on November 21, 2006 at the high tidal stage;
- Collection of one complete round of groundwater samples over a ten-hour period from the monitoring wells at the site on November 2, 2006;

- Site survey of the monitoring well locations conducted by AK Associates of Rockville Centre, New York on November 17, 2006.

URS submitted a report entitled “Remedial Investigation Report, Minute Man Cleaners, 89 Ocean Avenue, East Rockaway, New York, Site # C 130157” dated January 15, 2007 (the “RI Report”). Subsequently, URS contacted Mr. Bob Stewart of NYSDEC on February 7, 2007 regarding initial feedback on the RI Report. Mr. Stewart indicated that additional assessment work focusing on further characterizing the sub-slab soil quality and further delineation of source area(s) was required prior to initiating Interim Remedial Measure (IRM) activities at the property. Specifically, Mr. Stewart noted that potential contamination source areas in the vicinity of the floor drain inside the building and under the floor slab in the near vicinity of the former dry cleaning machine had not been adequately delineated during previous soil and groundwater sampling activities at the site.

In response to the comments from NYSDEC, URS submitted a letter report outlining the work plan for supplemental remedial field activities dated February 27, 2007 and revised March 15, 2007 (the “SRIWP”). Subsequently, additional comments were received from Ms. Katie Comerford of the State of New York Department of Health (NYSDOH) and from the Nassau County Department of Health (NCDOH). NYSDOH requested the performance of a supplemental soil vapor investigation on the western side of Ocean Avenue near the Wendy’s restaurant and slightly further north towards an apartment complex, which exists across Atlantic Avenue (on the north side of Atlantic Avenue). Ms. Comerford requested that two soil gas points be installed along Ocean Avenue adjacent to Wendy’s and towards the apartment complex.

A final response to the comments on the SRIWP was submitted to NYSDEC on April 4, 2007. The SRIWP was approved by NYSDEC on April 17, 2007.

SUPPLEMENTAL REMEDIAL INVESTIGATION ACTIVITIES

The purpose of the Supplemental RI activities was to further define the PCE contaminant source area(s) and extent of the contamination in order to develop an IRM work plan for the contamination at the Minute Man Cleaners property. The Supplemental RI field activities were performed in accordance with the NYSDEC approved August 23, 2006 Remedial Investigation Work Plan (RIWP), the May 15, 2007 SRIWP and URS’ Site-specific Health and Safety Plan.

Soil Borings and Monitoring Well Installation

URS conducted the supplemental field activities between May 2, 2007 and May 14, 2007. Consistent with the approved SRIWP, URS advanced nine (9) additional soil borings up to 15 feet below grade at the Site using a Geoprobe[®] hydraulic direct push sampling unit. On May 2, 2007, three (3) soil borings, B-11 through B-13, were advanced inside the building using a portable Geoprobe[®] unit to further characterize the soil and source area(s) under the floor slab. These interior borings were advanced to a depth of up to approximately nine (9) ft bgs, and soil samples were collected continuously in three-foot soil samplers. Soil boring (B-11) was advanced approximately five feet southwest of the dry cleaning machine. Soil borings, B-12 and B-13, were advanced approximately five feet west and approximately 10 feet north of the machine, respectively. The sampling point locations are shown in Figure 2.

On May 3, 2007, six (6) soil borings were advanced outside the building at the site. These exterior borings were advanced to a depth of approximately 15 feet bgs, and soil was collected continuously in five-foot macrocore soil samplers. One boring, B-10, was advanced outside the southwest corner of the building. The other five exterior borings were converted to water table monitoring wells, MW-8 through MW-12. A ten-foot length of one-inch inner diameter PVC prepacked screen with 0.010-inch slot size was installed in the five monitoring wells. The screens were installed to a depth of approximately 13 ft bgs, and the wells were completed with approximately three feet of one-inch PVC casing (i.e., riser) from the top of the prepacked screen to grade. Thus, the five supplemental monitoring wells were screened across the top of the water table. Monitoring well construction details including depth of well and estimated elevation and screen elevations are provided in Table 1.

One soil sample was collected for laboratory analyses from the vadose zone in each of the nine (9) soil borings. The samples chosen for laboratory analysis were based on the presence of nuisance characteristics (i.e. staining, odors or elevated PID readings). Soil samples were submitted for analysis to Severn Trent Laboratories of Edison, New Jersey (STL), a NYSDOH ELAP-certified analytical laboratory. STL analyzed the soil samples for volatile organic compounds (VOCs) by EPA Method 8260. Laboratory analyses were conducted in accordance with USEPA SW-846 methods and NYSDEC Analytical Services Protocol (ASP) B deliverable format. As requested by NYSDEC in their comments on the SRIWP, the soil sample collected during the installation of MW-10, which is in the vicinity of former soil boring B-5, was also analyzed for semi-volatile organic compounds (SVOCs) base/neutral fraction via EPA Method 8270.

Groundwater Sampling

On May 14, 2007, one round of groundwater samples was collected from the five newly installed monitoring wells, MW-8 through MW-12. Prior to sampling the well, a Solinst water level indicator with accuracy of 0.01 feet was used to measure the depth to the water table and the total depth of the well. Subsequently, initial field indicator parameters (i.e., pH, specific conductance, temperature, dissolved oxygen, and redox potential) were measured using a Horiba U-22 water quality meter. A total of five (5) groundwater samples, one trip blank and one equipment rinse blank were collected. Groundwater

samples were submitted for analysis to STL of Edison, New Jersey (STL). STL analyzed the groundwater samples for VOCs by EPA Method 8260. Laboratory analyses were conducted in accordance with USEPA SW-846 methods and NYSDEC Analytical Services Protocol (ASP) B deliverable format. A groundwater sample for MW-10 was not analyzed for SVOCs base/neutral fraction as proposed in the SRIWP. A groundwater sample for this analysis is scheduled to be collected within the next month..

Soil Gas Collection

Two soil vapor samples, SG-4 and SG-5, were collected on May 3, 2007 in accordance with the NYSDOH Draft Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated February 2005. Temporary soil vapor probes were constructed using a Geoprobe® direct push soil sampling unit at each location. A drive point fitted with ¼-inch polyethylene tubing was driven approximately three feet below grade to a position above the shallow water table and the drive point was extracted approximately one-foot to create a sampling zone. The tubing and the probe at each location were sealed above the sampling zone with bentonite slurry or clay.

Following temporary probe installation, URS purged one to three volumes of air prior to collection of the sample at flow rates not exceeding 0.2 liters per minute. The soil gas samples were collected in laboratory-provided Summa® canisters. The laboratory provided 24-hour regulators to control the flow of air into the Summa® canisters. The laboratory indicated via telephone that the minimum collection time for sampling with 24-hour regulators is six hours; therefore, the duration of soil vapor collection at each location was six hours.

Two soil vapor samples were submitted for analysis to Severn Trent Laboratories of Edison, New Jersey (STL), a NYSDOH ELAP-certified analytical laboratory. STL analyzed the soil vapor samples for VOCs by EPA Method TO-15. Laboratory analyses were conducted in accordance with USEPA SW-846 methods and NYSDEC Analytical Services Protocol (ASP) B deliverable format.

RESULTS AND DISCUSSION

Soil Analytical Results

The laboratory results for the supplemental soil samples collected at the Site are summarized in Tables 2 and 3. Tetrachloroethene (PCE) was detected in borings B-11 (3'-5'), B-13 (3'-5') and MW-8 (5'-8') at concentrations of 27, 10 and 1.8 mg/kg, respectively, above the TAGM RSCO of 1.4 mg/kg. Lower concentrations of PCE were detected in other soil samples collected at the Site, however, none of the samples exceeded the TAGM RSCO's for PCE. MW-8 (5'-8') also had detections of trans-1,2-Dichloroethene (1.6 mg/KG) and chloroform (1.0 mg/kg) which were above TAGM RSCOs. No other exceedances of TAGM RSCOs were observed in the remaining soil samples collected.

None of the concentrations detected in the soil samples exceeded NYSDEC Remedial Program Soil Cleanup Objectives for Restricted Commercial use.

Based on soils sampling data collected during RI and Supplemental RI activities, the highest concentrations of total VOCs appear to be localized in shallow soil in the immediate vicinity of the dry cleaning machine. The highest total VOCs concentrations in soils immediately below the surface (0 to 5 ft bgs) are localized to an approximately 20 ft radius to the west of the dry cleaning machine (Figure 3). The highest total VOCs concentrations are approximately 10 to 27 mg/kg. The saturated soils below the water table (5-10 ft bgs) were also impacted with total VOCs concentrations approximately 10 to 30 mg/kg in soils to the east of the dry cleaning machine towards the canal (Figure 4). The soils to the northeast and southeast were significantly less impacted with total VOCs concentrations less than 1 mg/kg.

As discussed with NYSDEC, URS installed a boring/new well (MW-10) north of existing boring B-5 to further assess for potential petroleum contamination in addition to chlorinated solvent contamination. This was requested based on a visual observation of a sheen on the surface of the canal near B-5. The VOC soil sampling results showed no exceedances of TAGM RSCOs and the SVOC soil sampling results showed one exceedance of benzo(a)pyrene at a concentration of 0.16 mg/kg. Benzo(a)pyrene is a polycyclic aromatic hydrocarbon (PAHs). PAHs are ubiquitous in urban environments and are commonly present in areas such as parking lots and shallow fill soils such as exist at the site. The soil at this boring did not exhibit petroleum staining or odors. The sampling from MW-10 shows that there are no significant sources of petroleum hydrocarbons from this area and further assessment is not planned.

Groundwater Analytical Results

As reported in the RI Report, the Site's geology features an upper fill layer comprised of brown medium sand, trace fine gravel with occasional pieces of wood, glass, and silt layers to a depth of approximately 13' bgs. For the purposes of this discussion, this is considered the 'water table' zone. The water table is underlain by light brown medium glacial sand with trace fine gravel (shallow aquifer) to a depth of approximately 22 to 23 bgs (the 'shallow aquifer'). Underlying these formations is an approximately 1.5' thick light gray fine sandy silt semi-confining layer in turn underlain by a stiff light brown coarse sand with fine gravel (the 'deep aquifer').

The laboratory results for the groundwater samples collected from the supplemental monitoring wells at the Site are summarized in Table 4. The laboratory analyses revealed that elevated concentrations of chlorinated VOCs, including PCE, TCE, vinyl chloride, and cis-1,2-dichloroethene, were detected above NYSDEC Groundwater Quality Standards in the supplemental monitoring wells installed immediately east (MW-8 and MW-11), northeast (MW-9) and southwest (MW-12) of the building at the Site. However, no elevated concentrations of VOCs were detected above Groundwater Quality Standards in monitoring well MW-10, located approximately 40 feet south of the building.

Based on groundwater sampling data collected during RI and Supplemental RI activities, the highest concentrations (approximately 6,500 ug/l) of total VOCs appear to be localized in water table groundwater (less than 13 ft bgs) in the immediate vicinity of the dry cleaning machine (Figure 5). Downgradient monitoring wells to the immediate east are also impacted with concentrations ranging from 1,200 to 4,500 ug/l. The impacted groundwater to the east is consistent with the overall net flow direction of groundwater after accounting for tidal fluctuations, which is to the east-southeast. Total VOCs concentrations decrease significantly sidegradient of the dry cleaning machine in the north and south direction. Concentrations are less than 50 ug/L within 30 feet to the north and south of the highest concentration groundwater.

Groundwater in the shallow (13-22 ft bgs) and deep (22 – 30 ft bgs) zones of the aquifer are impacted with chlorinated VOCs but at significantly lower concentrations than the water table groundwater. Shallow and deep groundwater concentrations range from 28 to 600 ug/l (Figures 6 and 7). Note that grab water sample, WS-B1D, collected during RI activities in September 2006 had a concentration of 1,000 ug/l. However, concentrations in MW-5S and MW-5D are lower in concentration at 600 and 88 ug/l, respectively. The monitoring well groundwater results are considered more representative of groundwater conditions than the grab water sample collected previously. The total VOCs concentrations in shallow and deep groundwater do not appear to follow the same flow pattern as in the water table groundwater. The total VOCs concentrations are more uniformly distributed with localized impacts observed downgradient, sidegradient and upgradient of the dry cleaning machine.

The groundwater results are consistent with the soil sampling results in that the highest impacted monitoring wells are located in the uppermost part of the aquifer closest to the source (the dry cleaning machine) and immediately downgradient eastward towards the canal (bulkheaded Mill River).

A groundwater sample for MW-10 was not analyzed for SVOCs base/neutral fraction as proposed in the SRIWP. A groundwater sample will be collected within the month for this analysis to verify the results of soil sampling at MW-10, which indicated that there are no significant sources of petroleum hydrocarbons from this area.

Soil Vapor Analytical Results

The laboratory results of the two supplemental soil vapor samples are summarized in Table 5. The results of the TO-15 analysis revealed that PCE was non-detect for SG-4 but concentrations of PCE were detected in SG-5 across Atlantic Avenue. Although the State of New York does not have standards, criteria or guidance values for VOCs in subsurface soils, the concentrations of PCE detected in the samples ($57 \mu\text{g}/\text{m}^3$ at SG-5) did not exceed the NYSDOH Air Guidance Value of $100 \mu\text{g}/\text{m}^3$ for PCE.

Concentrations of acetone, n-heptane and toluene were detected in SG-4. Concentrations of acetone, n-hexane, 1,1,1-trichloroethane, cyclohexane, carbon tetrachloride, 2,2,4-Trimethylpentane, benzene, n-heptane, trichloroethene, toluene, tetrachloroethene and methyl butyl ketone were detected in SG-5. The concentrations of PCE detected in the samples ($57 \mu\text{g}/\text{m}^3$) and trichloroethene ($32 \mu\text{g}/\text{m}^3$) did not exceed

the NYSDOH Air Guidance Value of 100 $\mu\text{g}/\text{m}^3$ for PCE and 55 $\mu\text{g}/\text{m}^3$ for TCE. The NYSDOH has not developed Air Guidance Values for the other chemicals detected. With the exception of the chlorinated solvent detections, which were below applicable guidance values, none of the other constituents detected are compounds expected to be associated with the release of dry cleaning solvent at the Site..

CONCLUSIONS/RECOMMENDATIONS

In general, the field data collected as part of the Supplemental RI field activities was consistent with the RI field data and indicates the following:

- Chlorinated solvents are the main constituents of environmental concern for this Site with the source area being near the dry cleaning machine, as expected due to the reported spills occurring there. Results show that shallow soil and groundwater contamination is situated in the immediate vicinity of the dry cleaning machine and has behaved consistent with the reported spill event and the site's hydrogeologic conditions.
- Impacts to soil at the Site appear to be greatest in the immediate area beneath and around the dry cleaning machine. This is considered the source area for chlorinated VOC impacts. The highest total VOCs concentrations (10 to 27 mg/kg) are at shallow depths (0-5 ft bgs) and are localized to an area approximately within a 20 ft radius of the dry cleaning machine. Impacts immediately below the source were also observed with total VOC concentrations of 10 to 30 mg/kg in soils to the east of the dry cleaning machine towards the canal.
- No elevated concentrations of VOCs were detected in the soil samples collected from the vicinity of the floor drain/sanitary sewer line; therefore, it appears that potential impacts from the floor drain are minimal in nature and localized in extent.
- The groundwater sampling results are consistent with the soil sampling results in that the highest impacted monitoring wells are located in the uppermost part of the aquifer (0-13 ft bgs), the water table, closest to the source (the dry cleaning machine) and immediately downgradient towards the canal.
- Shallow and deep groundwater (15 – 30 ft bgs) are impacted with chlorinated VOCs but at significantly lower concentrations than water table groundwater. The total VOCs concentrations are more uniformly distributed with localized impacts observed downgradient, sidegradient and upgradient of the dry cleaning machine.
- The soil samples collected from MW-10 (VOCs and SVOCs) shows that there are no significant sources of petroleum hydrocarbons from this area recognizing a groundwater sample for SVOC analyses is scheduled to be collected and addressed as an addendum report..
- No significant chlorinated solvent impacts were observed in soil vapor on the Site or near adjacent property across Ocean and Atlantic Avenue. Although concentrations of PCE and TCE were detected in SG-5, the concentrations do not exceed their respective NYSDOH Air Guidance Values.
- URS did not observe DNAPL in the samples collected throughout the Site. URS concludes that the remedial investigation has defined the source area(s) and majority of the extent of the

contamination at the site which is shallow in nature and primarily localized around and immediately east of the dry cleaning machine where past spills have occurred.

URS recommends that an interim remedial measure (IRM) be immediately implemented to mitigate the shallow source area(s) on the property followed with a Remedial Action Work Plan to address post remedial monitoring, soil gas venting and additional remedial actions, if necessary, for groundwater.

TABLES

Table 1
Monitoring Well Construction
Minute Man Cleaners
89 Ocean Avenue, East Rockaway, N.Y.
URS Project # 38580332

Monitoring Well Number	Date of Installation	Total Depth (feet bgs)	Well Inner Diameter (inches)	Top PVC Pipe Elevation ^{1,2}	Top of Screen Elevation	Bottom Screen Elevation
MW-1S	10/11/06-10/13/06	22	1.625	6.91	-10.1	-15.1
MW-1D*	10/11/06-10/13/06	27	1.625	6.86*	-15.1	-20.1
MW-2S	10/11/06-10/13/06	22	1.625	7.17	-9.8	-14.8
MW-2D	10/11/06-10/13/06	30	1.625	7.08	-17.9	-22.9
MW-3S	10/11/06-10/13/06	23	1.625	6.07	-11.9	-16.9
MW-3D	10/11/06-10/13/06	29	1.625	6.15	-17.9	-22.9
MW-4S	10/11/06-10/13/06	22	1.625	5.98	-11.0	-16.0
MW-4D	10/11/06-10/13/06	28	1.625	6.07	-16.9	-21.9
MW-5S	10/11/06-10/13/06	22	1.625	6.60	-10.4	-15.4
MW-5D	10/11/06-10/13/06	27	1.625	6.35	-15.7	-20.7
MW-6S	10/11/06-10/13/06	22		5.87	-11.1	-16.1
MW-6D	10/11/06-10/13/06	30		6.09	-18.9	-23.9
MW-7S	10/11/06-10/13/06	22		6.53	-10.5	-15.5
MW-8	5/3/2007	13		6.5	3.5	-6.5
MW-9	5/3/2007	13	0.88	6.5	3.5	-6.5
MW-10	5/3/2007	13	0.88	6.1	3.1	-6.9
MW-11	5/3/2007	13		6.0	3.0	-7.0
MW-12	5/3/2007	13	1.63	7	4.0	-6.0
MW-13	6/23/2008	13	2	N/A	N/A	N/A

Notes: See Figure 2 for well locations

¹ Well elevations for MW-1S/D through MW-7S were surveyed by AK Associates, Rockville Centre, NY N.Y., Lics. # 49462, 50238.

² Well elevation have not yet been surveyed and elevations are estimated based on survey data from previously installed wells. The top of PVC pipe elevation was estimated based on the nearest monitoring well with surveyed information available. Top of screen is approximately 3 ft below top PVC pipe. Screen interval is 10 feet in length.

Wells MW-1 through MW-7 are two inch in diameter, Wells MW-8 through MW-12 are one inch in diameter

N/A = Not surveyed

 = Shading denotes well closed per NYSDEC requirements during exterior remedial excavation phase of the IRM.

* Denotes upper part of well casing bent during road construction in summer 2008. Well is still able to be sampled, but the top of pipe elevation is suspect.

Table 2
Supplemental RI Soil Sampling Results Summary - VOCs
Minute Man Cleaners
89 Ocean Avenue,
East Rockaway, N.Y.
URS Project # 38580332

Sample ID/Depth	New York TAGM	Remedial Program	B-11 (3'-5')	B-12 (3'-5')	B-13 (3'-5')	MW-10 (2'-4')	MW-8 (2'-4')	MW-6 (5'-8')	MW-11 (2'-4')	MW-9 (2'-4')	B-10 (2'-4')	MW-12 (2'-4')
Sampling Date	Cleanup Objective	Soil Cleanup Objectives	5/2/2007	5/2/2007	5/2/2007	5/3/2007	5/3/2007	5/3/2007	5/3/2007	5/3/2007	5/3/2007	5/3/2007
Matrix	Criteria	Restricted Commercial	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOLATILE ORGANIC COMPOUNDS (GC/MS)												
Chloromethane	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.2	13	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND
Chloroethane	1.9	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.1	NA	ND	ND	ND	0.0008 JB	ND	ND	0.0005 JB	ND	ND	ND
Acetone	0.2	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	2.7	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.4	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.2	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethane	0.3	500	ND	ND	ND	ND	ND	1.6	ND	ND	ND	ND
cis-1,2-Dichloroethane	NA	500	0.14 J	0.0005 J	ND	0.0052 J	0.0015 J	34	0.0058	0.0023 J	0.0018 J	0.0036 J
Chloroform	0.3	350	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND
1,2-Dichloroethane	0.1	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	0.3	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.8	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.6	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropane	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane	0.7	200	ND	ND	ND	ND	ND	ND	0.0004 J	0.0004 J	ND	ND
Dibromochloromethane	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.06	44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	1	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane	1.4	150	27	0.061	10	0.015	0.01	1.8	0.021	0.03	0.035	0.019
1,1,2,2-Tetrachloroethane	0.6	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1.5	500	ND	ND	ND	0.0005 J	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.7	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.5	390	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	NA	NA	ND	ND	ND	0.0004 J	ND	ND	ND	ND	ND	ND
Xylene (Total)	1.2	500	ND	ND	ND	0.0015 J	ND	ND	ND	ND	ND	ND
Tentatively Identified Compounds (TICs)	NA	NA	0	0	0	0	0	0	0	0	0	0

Notes:

1. ND=The compound was not detected above the reporting limit.
2. J=Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
3. B=The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the sample.
4. NA=not analyzed or not applicable.
5. Bold and highlighted values indicate NYSDEC TAGM exceedances.

B-1 denotes Geoprobe boring sample
MW-7 denotes monitoring well boring sample

Table 3
Supplemental RI Soil Sampling Results Summary - SVOCs
Minute Man Cleaners
89 Ocean Avenue,
East Rockaway, N.Y.
URS Project # 38580332

Sample ID/Depth	New York TAGM	Remedial Program	MW-10 (Z'-4)
Sampling Date	Rec. Soil	Soil Cleanup Objectives	5/3/2007
	Cleanup Objective	Restricted Commercial	
Matrix	Criteria		SOLID
Units	mg/kg	mg/kg	mg/kg
SEMI-VOLATILE COMPOUNDS (GC/MS)			
Phenol	0.03	500	ND
2-Chlorophenol	0.8	NA	ND
2-Methylphenol	0.1	NA	ND
2-Nitrophenol	0.33	NA	ND
2,4-Dimethylphenol	NA	NA	ND
2,4-Dichlorophenol	0.4	NA	ND
4-Chloro-3-methylphenol	0.24	NA	ND
2,4,6-Trichlorophenol	NA	NA	ND
2,4,5-Trichlorophenol	0.1	NA	ND
2,4-Dinitrophenol	0.2	NA	ND
4-Nitrophenol	0.1	NA	ND
4,6-Dinitro-2-methylphenol	NA	NA	ND
Pentachlorophenol	1	6.7	ND
bis(2-Chloroethyl)ether	NA	NA	ND
1,3-Dichlorobenzene	1.6	NA	ND
1,4-Dichlorobenzene	8.5	NA	ND
1,2-Dichlorobenzene	7.9	NA	ND
bis(2-chloroisopropyl)ether	NA	NA	ND
N-Nitroso-di-n-propylamine	NA	NA	ND
Hexachloroethane	NA	NA	ND
Nitrobenzene	0.2	NA	ND
Isophorone	4.4	NA	ND
bis(2-Chloroethoxy)methane	NA	NA	ND
1,2,4-Trichlorobenzene	3.4	NA	ND
Naphthalene	13	500	0.031 J
4-Chloroaniline	0.22	NA	ND
Hexachlorobutadiene	NA	NA	ND
2-Methylnaphthalene	35	NA	0.011 J
Hexachlorocyclopentadiene	NA	NA	ND
2-Chloronaphthalene	NA	NA	ND
2-Nitroaniline	0.43	NA	ND
Dimethylphthalate	2	NA	ND
Acenaphthylene	41	500	ND
2,6-Dinitrotoluene	1	NA	ND
3-Nitroaniline	0.5	NA	ND
Acenaphthene	50	500	0.024 J
Dibenzofuran	6.2	NA	0.011 J
2,4-Dinitrotoluene	NA	NA	ND
Diethylphthalate	7.1	NA	ND
4-Chlorophenyl-phenylether	NA	NA	ND
Fluorene	50	500	0.02 J
4-Nitroaniline	NA	NA	ND
N-Nitrosodiphenylamine	NA	NA	ND
4-Bromophenyl-phenylether	NA	NA	ND
Hexachlorobenzene	0.41	NA	ND
Phenanthrene	50	500	0.18 J
Anthracene	50	500	0.046 J
Carbazole	NA	NA	0.018 J
Di-n-butylphthalate	8.1	NA	ND
Fluoranthene	50	500	0.2 J
Pyrene	50	500	0.26 J
Butylbenzylphthalate	50	NA	ND
3,3'-Dichlorobenzidine	NA	NA	ND
Benzo(a)anthracene	0.22	5.6	0.12
Chrysene	0.4	56	0.16 J
bis(2-Ethylhexyl)phthalate	50	NA	0.55
Di-n-octylphthalate	50	NA	0.27 J
Benzo(b)fluoranthene	1.1	5.6	0.17
Benzo(k)fluoranthene	1.1	56	0.21
Benzo(a)pyrene	0.061	1	0.16
Indeno(1,2,3-cd)pyrene	3.2	5.6	ND
Dibenz(a,h)anthracene	0.014	0.56	ND
Benzo(g,h,i)perylene	50	500	ND
Total Confident Conc.			1.21
Total Estimated Conc. (TICs)			NAN

NA - Not applicable

NAN - Not analyzed

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria.

The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the sample. Bold and highlighted values indicate NYSDEC TAGM exceedances.

MW-10 denotes monitoring well boring sample

Table 4
Supplemental RI Ground Water Monitoring Results Summary - VOCs
Minute Man Cleaners
89 Ocean Avenue
East Rockway, N.Y.
URS Project # 38580332

Monitoring Well ID	NYSDEC	MW-8	MW-9	MW-10	MW-11	MW-12
Screen Depth	Groundwater	3'-13'	3'-13'	3'-13'	3'-13'	3'-13'
Collection Date	Quality	5/14/2007	5/14/2007	5/14/2007	5/14/2007	5/14/2007
Matrix	Standards	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Volatile Organic Compounds (EPA Method 8260)						
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND
2-Butanone	5	ND	ND	ND	ND	ND
2-Hexanone	5	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	5	ND	ND	ND	ND	ND
Acetone	5	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND
Carbon disulfide	5	ND	1.3 J	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	5	810	4 J	0.7 J	1400	25
Cis-1,3-Dichloropropene	0.4	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND
M&p-Xylenes	5	ND	ND	ND	ND	ND
Methylene chloride	5	ND	ND	ND	ND	ND
O-Xylene	5	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND
Tetrachloroethene	5	5300	27	1.9	4500	31
Toluene	5	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethene	5	ND	ND	ND	18 J	0.6 J
Trans-1,3-Dichloropropene	0.4	ND	ND	ND	ND	ND
Trichloroethene	5	46 J	1.5 J	ND	240	4.8
Vinyl chloride	2	130 J	ND	ND	340	ND

Notes:

1. Bold and highlighted values indicate NYSDEC Groundwater Criteria
2. ND = Not Detected above Reporting Limit
3. J = Indicates an estimated value when a compound is detected at less than the specified detection limit.

Table 5
Supplemental RI Soil Gas Results Summary
Minute Man Cleaners
89 Ocean Avenue, East Rockaway, N.Y.
URS Project # 38580332

Sample ID	NYSDOH Indoor Air Guidance Value	SG-5	SG-6
		5/3/07	5/3/07
Sampling Date		3 ft	3 ft
Sampling Depth (bgs)		$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$
Units			
Dichlorodifluoromethane	None	ND	ND
1,2-Dichlorotetrafluoroethane	None	ND	ND
Chloromethane	None	ND	ND
Vinyl Chloride	None	ND	ND
1,3-Butadiene	None	ND	ND
Bromomethane	None	ND	ND
Chloroethane	None	ND	ND
Bromoethene	None	ND	ND
Trichlorofluoromethane	None	ND	ND
Freon TF	None	ND	ND
1,1-Dichloroethene	None	ND	ND
Acetone	None	1000	1500
Isopropyl Alcohol	None	ND	ND
Carbon Disulfide	None	ND	ND
3-Chloropropene	None	ND	ND
Methylene Chloride	60	ND	ND
tert-Butyl Alcohol	None	ND	ND
Methyl tert-Butyl Ether	None	ND	ND
trans-1,2-Dichloroethene	None	ND	ND
n-Hexane	None	ND	1200
1,1-Dichloroethane	None	ND	ND
1,2-Dichloroethene (total)	None	ND	28
Methyl Ethyl Ketone	None	ND	ND
cis-1,2-Dichloroethene	None	ND	28
Tetrahydrofuran	None	ND	ND
Chloroform	None	ND	ND
1,1,1-Trichloroethane	None	ND	22
Cyclohexane	None	ND	1200
Carbon Tetrachloride	None	ND	ND
2,2,4-Trimethylpentane	None	ND	110
Benzene	None	ND	20
1,2-Dichloroethane	None	ND	ND
n-Heptane	None	82	390
Trichloroethene	55	ND	32
1,2-Dichloropropane	None	ND	ND
1,4-Dioxane	None	ND	ND
Bromodichloromethane	None	ND	ND
cis-1,3-Dichloropropene	None	ND	ND
Methyl Isobutyl Ketone	None	ND	ND
Toluene	None	45	57
trans-1,3-Dichloropropene	None	ND	ND
1,1,2-Trichloroethane	None	ND	ND
Tetrachloroethene	100	ND	57
Methyl Butyl Ketone	None	ND	57
Dibromochloromethane	None	ND	ND
1,2-Dibromoethane	None	ND	ND
Chlorobenzene	None	ND	ND
Ethylbenzene	None	ND	ND
Xylene (m,p)	None	ND	ND
Xylene (o)	None	ND	ND
Xylene (total)	None	ND	ND
Styrene	None	ND	ND
Bromoform	None	ND	ND
1,1,2,2-Tetrachloroethane	None	ND	ND
4-Ethyltoluene	None	ND	ND
1,3,5-Trimethylbenzene	None	ND	ND
2-Chlorotoluene	None	ND	ND
1,2,4-Trimethylbenzene	None	ND	ND
1,3-Dichlorobenzene	None	ND	ND
1,4-Dichlorobenzene	None	ND	ND
1,2-Dichlorobenzene	None	ND	ND
1,2,4-Trichlorobenzene	None	ND	ND
Hexachlorobutadiene	None	ND	ND

Notes:

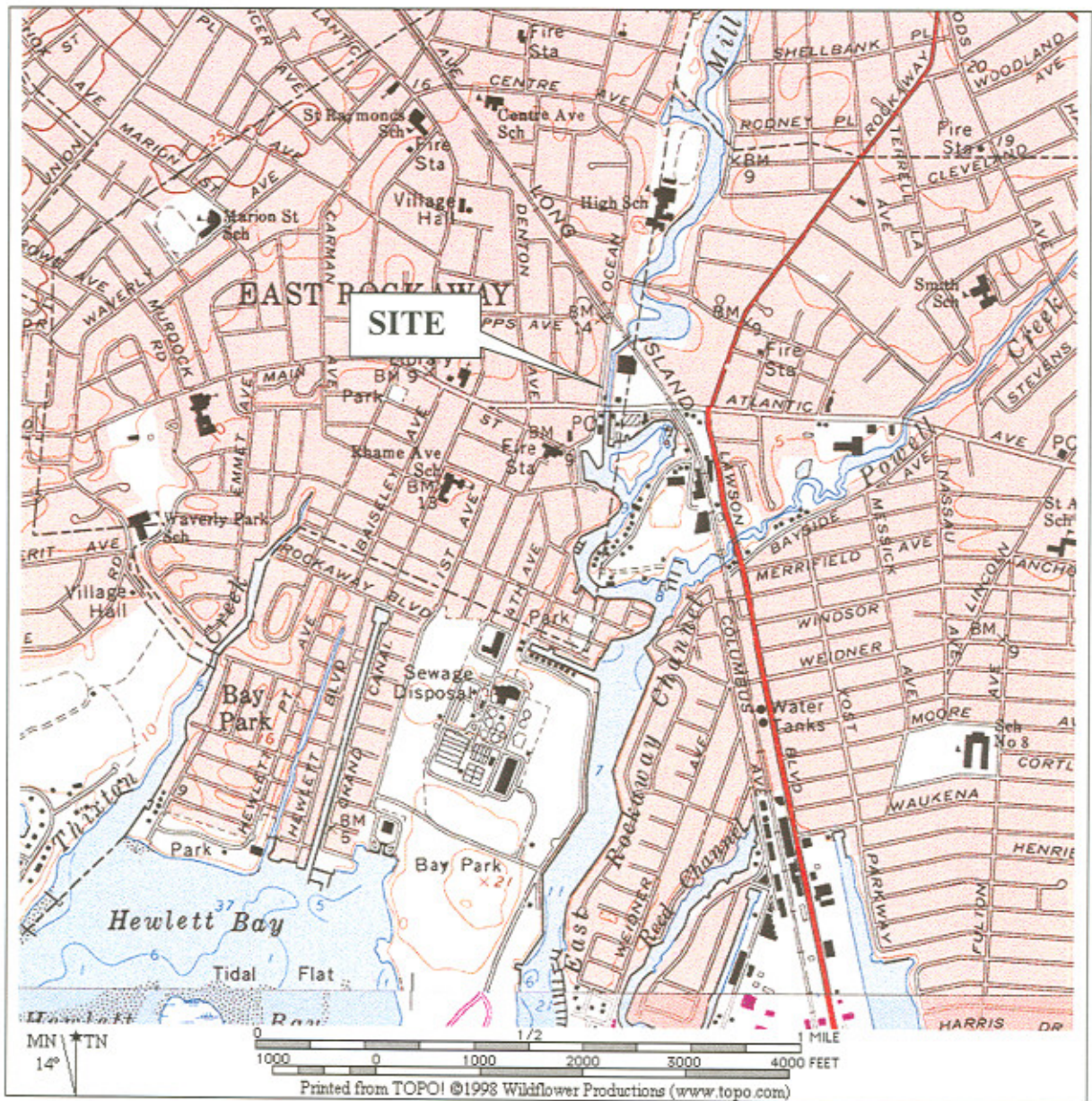
Analytical Method used for all compounds is TO-15.

$\mu\text{g}/\text{m}^3$ = micrograms/cubic meter

Table includes "J" qualified (estimated) analyses.

ND = Not detected

FIGURES



URS

Minute Man Cleaners
89 Ocean Avenue
East Rockaway, New York

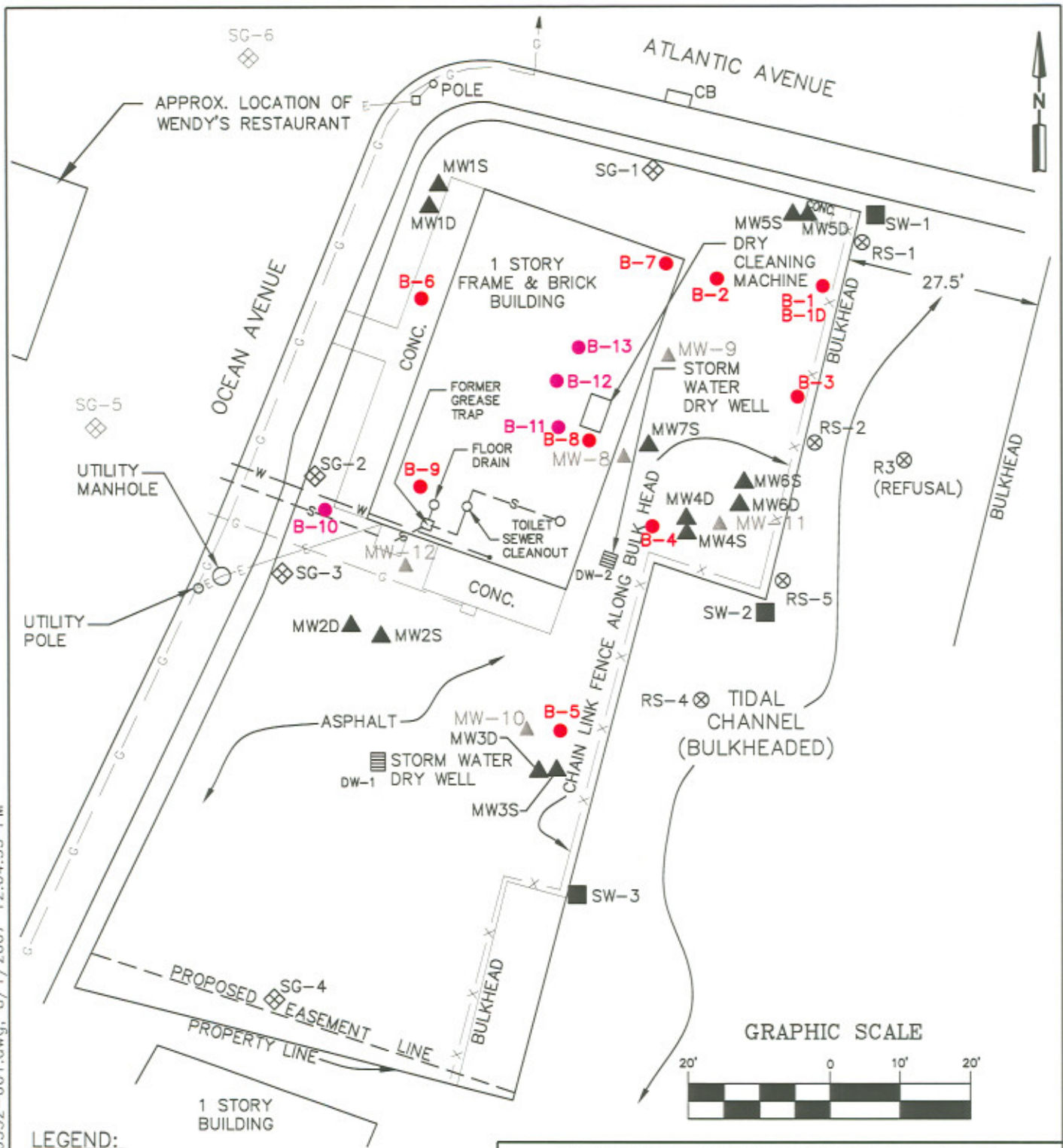
URS Corp. –
New York
5 Penn Plaza,
15th Floor
NY, NY 10001

FIGURE 1
SITE LOCATION MAP

DATE: July 27, 2007
PROJECT: 38580332

Source:
USGS Topographic Quadrangle,
Lynbrook, New York

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LEGEND:

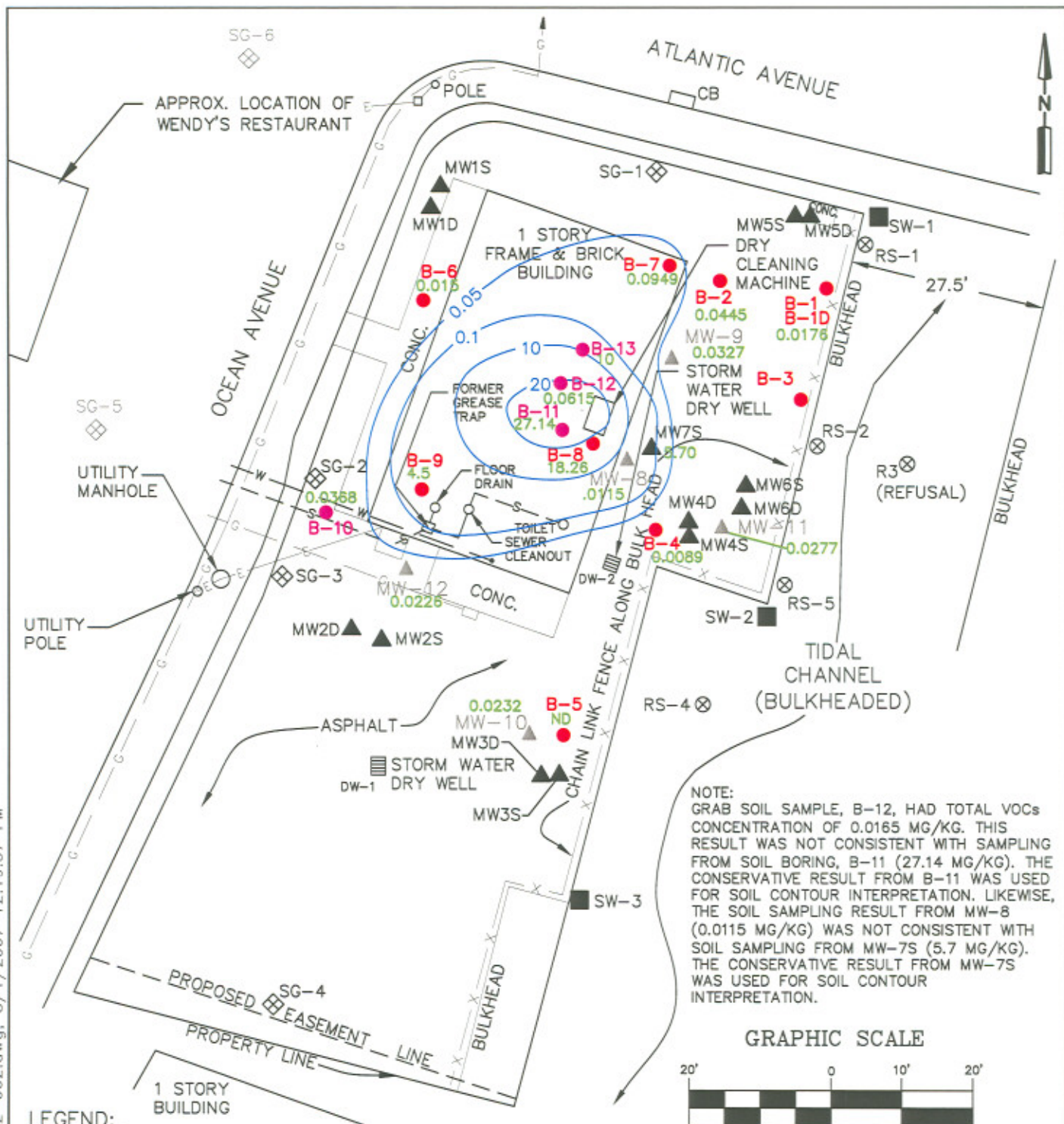
- ▲ MONITORING WELL (INSTALLED 10/11/06-10/13/06)
- ▲ MONITORING WELL (INSTALLED 5/3/07)
- SOIL BORING (INSTALLED 9/4/06-9/7/06)
- SOIL BORING (INSTALLED 5/2/07-5/3/07)
- ◇ SOIL GAS POINT (INSTALLED 9/7/06)
- ◇ SOIL GAS POINT (INSTALLED 5/3/07)
- SURFACE WATER SAMPLE
- ⊗ RIVER SEDIMENT SAMPLE LOCATION
- MH ○ MANHOLE
- ▩ DRYWELL

**MINUTE MAN CLEANERS
89 OCEAN AVENUE
EAST ROCKAWAY, NEW YORK**

**SUPPLEMENTAL REMEDIAL INVESTIGATION,
MONITORING WELL AND BORING LOCATIONS**

URS URS CORP - NEW YORK	5 PENN PLAZA, 15th FL. NEW YORK, NY, 10001 PHONE: (212) 840-0595 FAX: (212) 921-0388	DATE: 07/02/07
		JOB: 38580332
		FIGURE 2

K:\Cadd\38580332(MINUTE MAN)\80332-002.dwg, 8/1/2007 12:19:37 PM



NOTE:
 GRAB SOIL SAMPLE, B-12, HAD TOTAL VOCs CONCENTRATION OF 0.0165 MG/KG. THIS RESULT WAS NOT CONSISTENT WITH SAMPLING FROM SOIL BORING, B-11 (27.14 MG/KG). THE CONSERVATIVE RESULT FROM B-11 WAS USED FOR SOIL CONTOUR INTERPRETATION. LIKEWISE, THE SOIL SAMPLING RESULT FROM MW-8 (0.0115 MG/KG) WAS NOT CONSISTENT WITH SOIL SAMPLING FROM MW-7S (5.7 MG/KG). THE CONSERVATIVE RESULT FROM MW-7S WAS USED FOR SOIL CONTOUR INTERPRETATION.



LEGEND:

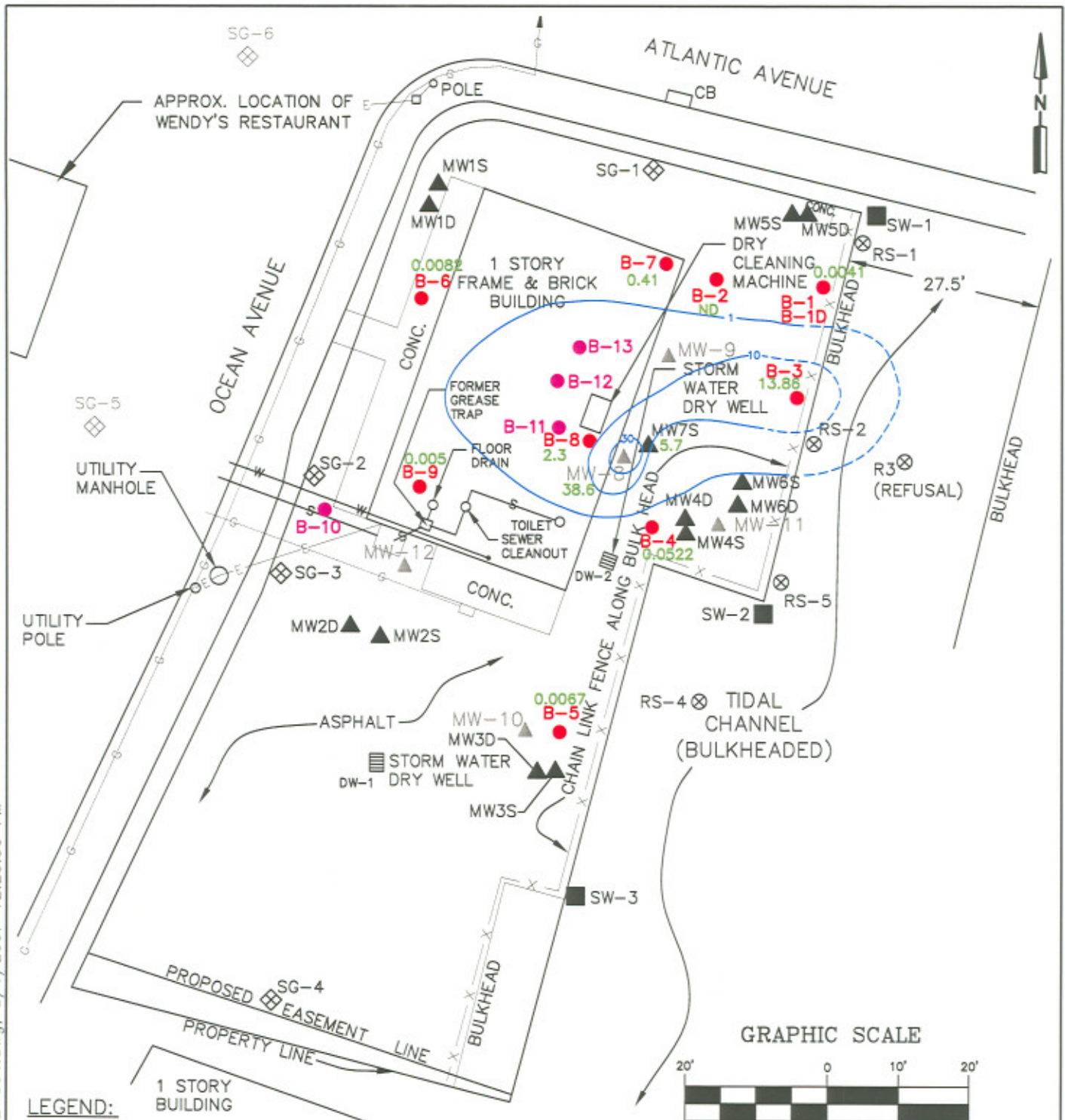
- ▲ MONITORING WELL (INSTALLED 10/11/06-10/13/06)
- ▲ MONITORING WELL (INSTALLED 5/3/07)
- SOIL BORING (INSTALLED 9/4/06-9/7/06)
- SOIL BORING (INSTALLED 5/2/07-5/3/07)
- ◇ SOIL GAS POINT (INSTALLED 9/7/06)
- ◇ SOIL GAS POINT (INSTALLED 5/3/07)
- SURFACE WATER SAMPLE
- ⊗ RIVER SEDIMENT SAMPLE LOCATION
- MH ○ MANHOLE
- ▭ DRYWELL
- 1 — TOTAL VOC CONTOUR (MG/KG)
- 0.0176 TOTAL VOC CONCENTRATION (MG/KG)

MINUTE MAN CLEANERS
89 OCEAN AVENUE
EAST ROCKAWAY, NEW YORK

SUPPLEMENTAL REMEDIAL INVESTIGATION,
SOIL QUALITY (0-5' BGS)

 URS CORP - NEW YORK	5 PENN PLAZA, 15th FL. NEW YORK, NY, 10001 PHONE: (212) 840-0695 FAX: (212) 921-0388	DATE: 07/27/07 JOB: 38580332
	FIGURE 3	

K:\Cadd\38580332(MINUTE MAN)\80332-004.dwg, 8/1/2007 12:20:50 PM



LEGEND:

- ▲ MONITORING WELL (INSTALLED 10/11/06-10/13/06)
- ▲ MONITORING WELL (INSTALLED 5/3/07)
- SOIL BORING (INSTALLED 9/4/06-9/7/06)
- SOIL BORING (INSTALLED 5/2/07-5/3/07)
- ◇ SOIL GAS POINT (INSTALLED 9/7/06)
- ◇ SOIL GAS POINT (INSTALLED 5/3/07)
- SURFACE WATER SAMPLE MAY3 2007
- ⊗ RIVER SEDIMENT SAMPLE LOCATION
- MH ○ MANHOLE
- ▭ DRYWELL
- 1 - TOTAL VOC CONTOUR (MG/KG)
- 0.41 TOTAL VOC CONCENTRATION (MG/KG)

MINUTE MAN CLEANERS
89 OCEAN AVENUE
EAST ROCKAWAY, NEW YORK

SUPPLEMENTAL REMEDIAL INVESTIGATION,
SOIL QUALITY (5-10' BGS)

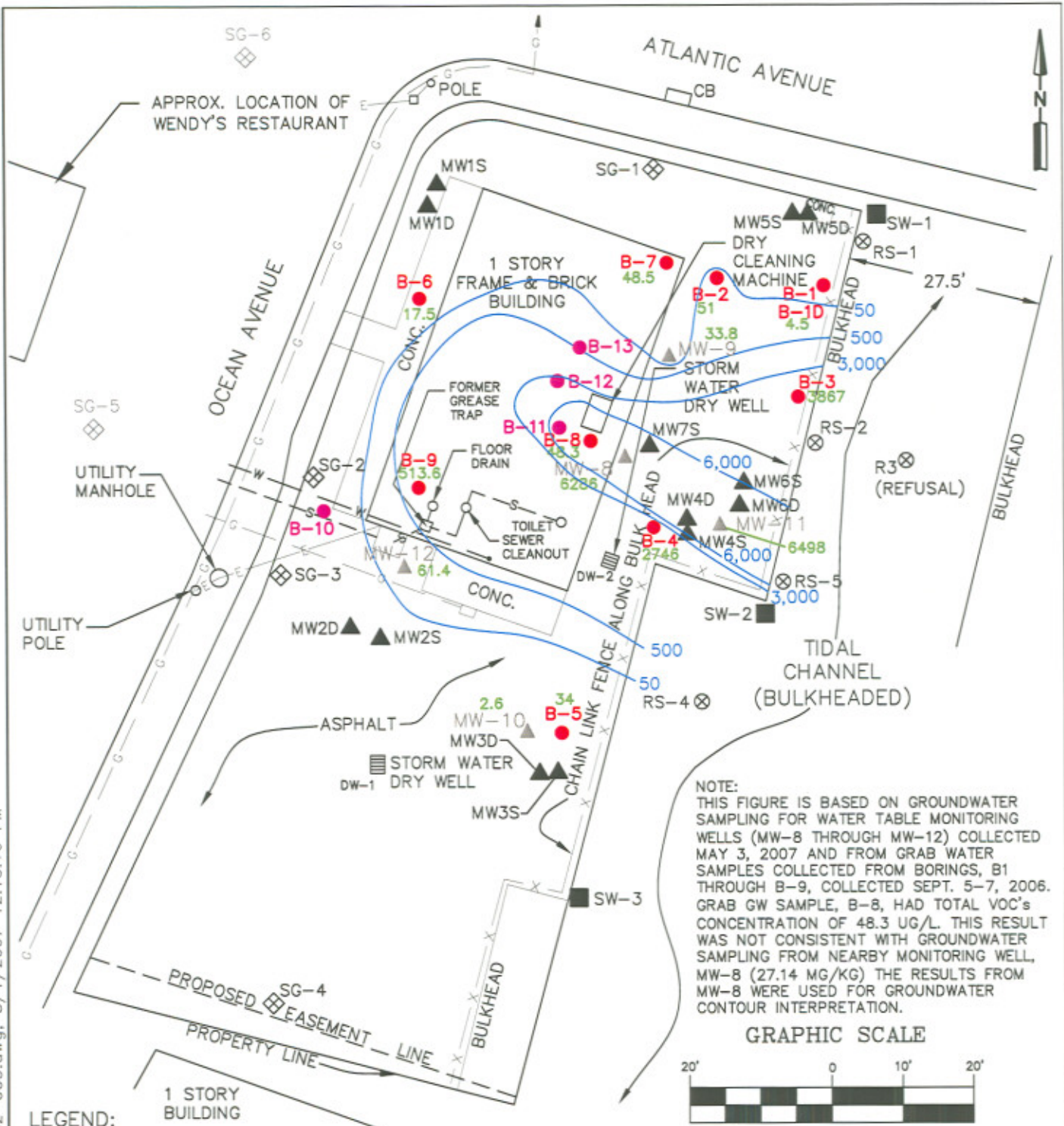
URS
 URS CORP - NEW YORK

5 PENN PLAZA, 15th FL.
 NEW YORK, NY, 10001
 PHONE: (212) 840-0595
 FAX: (212) 921-0388

DATE: 07/27/07
 JOB: 38580332

FIGURE 4

K:\Cadd\38580332(MINUTE MAN)\80332-003.dwg, 8/1/2007 12:18:10 PM



LEGEND:

- ▲ MONITORING WELL (INSTALLED 10/11/06-10/13/06)
- ▲ MONITORING WELL (INSTALLED 5/3/07)
- SOIL BORING (INSTALLED 9/4/06-9/7/06)
- SOIL BORING (INSTALLED 5/2/07-5/3/07)
- ◇ SOIL GAS POINT (INSTALLED 9/7/06)
- ◇ SOIL GAS POINT (INSTALLED 5/3/07)
- SURFACE WATER SAMPLE MAY3 2007
- ⊗ RIVER SEDIMENT SAMPLE LOCATION
- MH ○ MANHOLE
- ▭ DRYWELL
- 50— TOTAL VOC CONTOUR (UG/L)
- 34— TOTAL VOC CONCENTRATION (UG/L)

**MINUTE MAN CLEANERS
 89 OCEAN AVENUE
 EAST ROCKAWAY, NEW YORK**

**SUPPLEMENTAL REMEDIAL INVESTIGATION,
 WATER TABLE GROUND WATER QUALITY (3-13' BGS)**

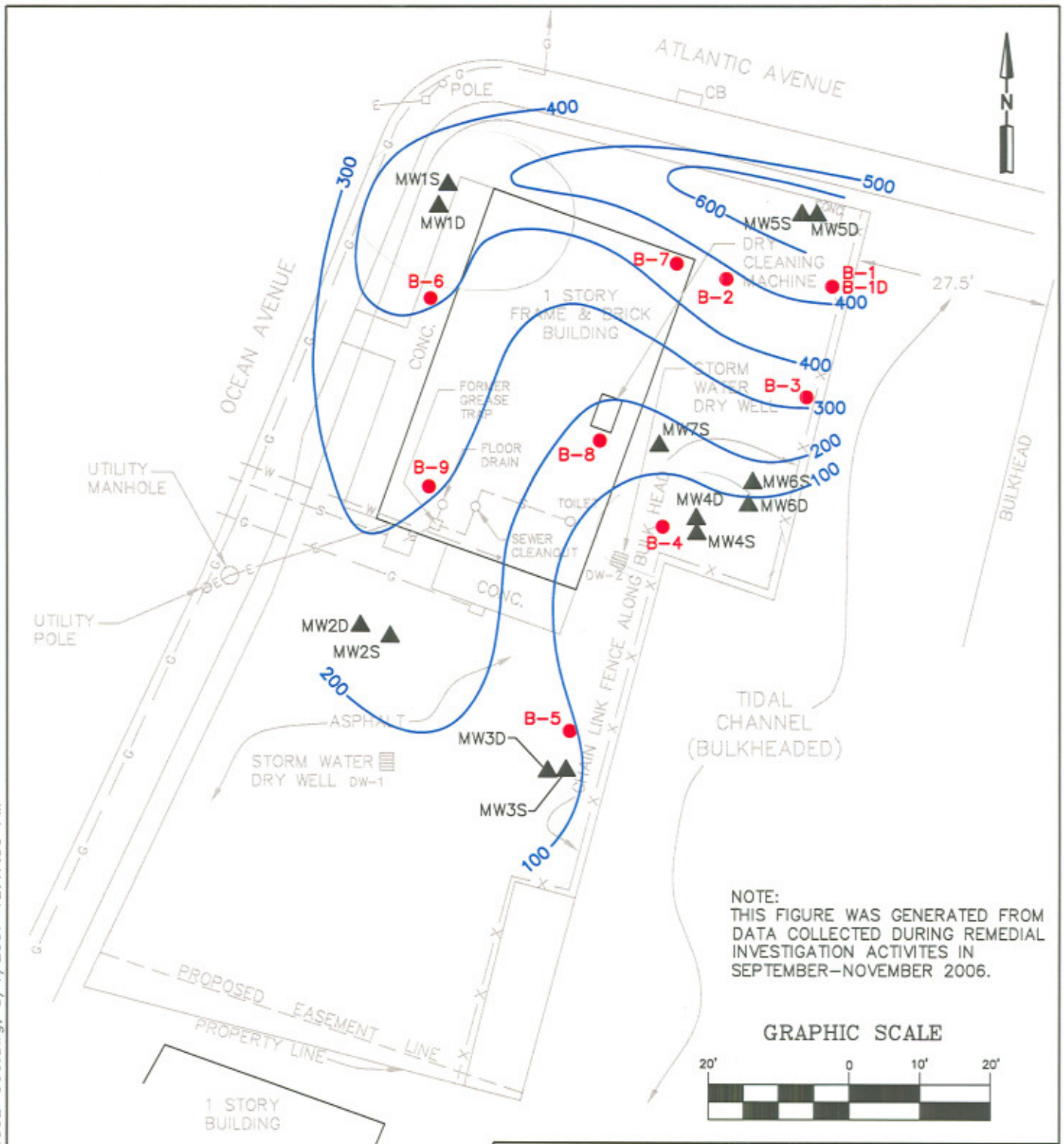
URS
 URS CORP - NEW YORK

5 PENN PLAZA, 15th FL.
 NEW YORK, NY, 10001
 PHONE: (212) 840-0595
 FAX: (212) 921-0388

DATE: 07/27/07
 JOB: 38580332

FIGURE 5

K:\Cadd\38580332(MINUTE MAN)\80332-006.dwg, 8/1/2007 12:47:36 PM



NOTE:
THIS FIGURE WAS GENERATED FROM
DATA COLLECTED DURING REMEDIAL
INVESTIGATION ACTIVITIES IN
SEPTEMBER-NOVEMBER 2006.

GRAPHIC SCALE



LEGEND:

- ▲ MONITORING WELL
- SOIL BORING
- 100— TOTAL VOC CONTOUR ($\mu\text{g}/\text{L}$)
- MH ○ MANHOLE
- ▤ DRYWELL

MINUTE MAN CLEANERS
89 OCEAN AVENUE
EAST ROCKAWAY, NEW YORK
GROUNDWATER QUALITY MONITORING
SHALLOW AQUIFER (13-22' BGS)

URS
 URS CORP - NEW YORK

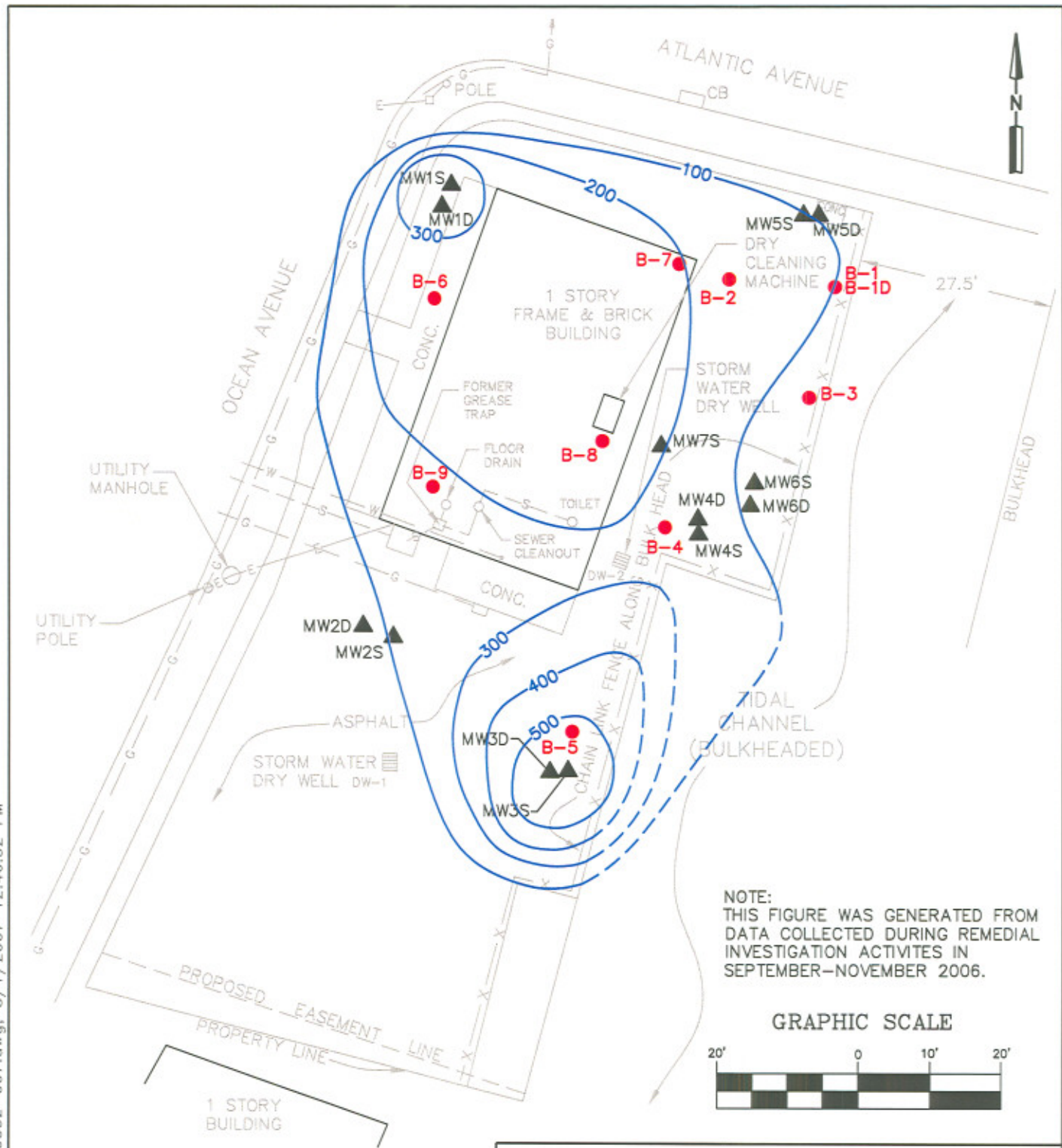
5 PENN PLAZA, 15th FL.
 NEW YORK, NY, 10001
 PHONE: (212) 840-0595
 FAX: (212) 921-0388

DATE: 07/02/07

JOB: 38580332

FIGURE 6

K:\Cadd\38580332(MINUTE MAN)\80332-007.dwg, 8/1/2007 12:46:52 PM



NOTE:
THIS FIGURE WAS GENERATED FROM
DATA COLLECTED DURING REMEDIAL
INVESTIGATION ACTIVITIES IN
SEPTEMBER-NOVEMBER 2006.

GRAPHIC SCALE



LEGEND:

- ▲ MONITORING WELL
- SOIL BORING
- 100— TOTAL VOC CONTOUR ($\mu\text{g}/\text{L}$)
- MH ○ MANHOLE
- ▤ DRYWELL

**MINUTE MAN CLEANERS
89 OCEAN AVENUE
EAST ROCKAWAY, NEW YORK
GROUNDWATER QUALITY MONITORING
DEEP AQUIFER (22-30' BGS)**

URS
URS CORP - NEW YORK

5 PENN PLAZA, 15th FL.
NEW YORK, NY, 10001
PHONE: (212) 840-0595
FAX: (212) 921-0388

DATE: 07/02/07

JOB: 38580332

FIGURE 7

APPENDIX A

Boring Logs

URS Corporation										TEST BORING LOG			
PROJECT: Minuteman Cleaners										BORING NO: B-10			
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1			
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332			
GROUNDWATER: ~5'										DRILLING METHOD: Geoprobe remote direct push unit			
CAS.										GROUND ELEVATION:			
SAMPLER										DATE STARTED: 05/03/07 9:55			
CORE										DATE FINISHED:			
TUBE										DRILLER: E. Marailis			
DATE										GEOLOGIST: M. Murphy			
TIME										REVIEWED BY:			
LEVEL													
TYPE													
TYPE													
DIA.													
WT.													
FALL													
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS		
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION	USCS	PID	Moist		
0.5	[Pattern]	1	MC			---	---	6 inchs concrete	---				
									Medium Dense	Brown sand, trace gravel, trace silt	Fill	1.3	
										Lab Sample 2-4			
5													
6													
	[Pattern]	2	MC				Medium Dense	Brown sand, trace gravel, trace silt	Fill	4.8			
6													
8													
10													
12													
14													
15													
16													
18													
20													
23													
25													
28													
30													
33													
35													
38													
40													
Comments: Boring completed at 15' bgs. Soil samples collected 2'-4'.										PROJECT NO. 38580332			
										BORING NO. B-10			

URS Corporation										TEST BORING LOG								
PROJECT: Minuteman Cleaners										BORING NO: B-11 (Inside Building)								
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1								
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332								
GROUNDWATER: ~5'										CAS.		SAMPLER	CORE	TUBE	DRILLING METHOD: Geoprobe remote direct push unit			
DATE	TIME	LEVEL	TYPE	TYPE			Macrocore	3'		GROUND ELEVATION:								
				DIA.						DATE STARTED: 05/02/07 10:55								
				WT.						DATE FINISHED:								
				FALL						DRILLER: E. Maraitis								
										GEOLOGIST: M. Murphy								
										REVIEWED BY:								
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS							
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION		USCS	PID	Moist						
0.5	[Pattern]	1	MC		75%	---	---	6" concrete		---								
						Brown	Medium Dense	Brown fine to medium sand, trace gravel, trace silt. Lab Sample 3-5		Fill	24.2							
5		2	MC				Brown	Medium Dense	Fine to medium sand, trace clayey silt		Fill	26.0						
6																		
8	3	MC				Brown	Medium Dense	Fine to medium sand, trace clayey silt		Fill	1.1	Wet						
10																		
12																		
14																		
15																		
16																		
18																		
20																		
23																		
25																		
28																		
30																		
33																		
35																		
38																		
40																		
Comments: Boring completed at 9' bgs.										PROJECT NO.		38580332						
Soil sample collected 3'-5'										BORING NO.		B-11						

URS Corporation										TEST BORING LOG								
PROJECT: Minuteman Cleaners										BORING NO: B-12 (Inside Building)								
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1								
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332								
GROUNDWATER: ~5'										CAS.		SAMPLER	CORE	TUBE	DRILLING METHOD: Geoprobe remote direct push unit			
DATE	TIME	LEVEL	TYPE	TYPE		Macrocore	3'			GROUND ELEVATION:								
				DIA.						DATE STARTED: 05/02/07 11:25								
				WT.	---					DATE FINISHED:								
				FALL	---					DRILLER: E. Maraitis								
										GEOLOGIST: M. Murphy								
										REVIEWED BY:								
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS							
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION	USCS	PID	Moist							
0.5	[Pattern]	1	MC			---	---	6" concrete	---									
							Brown	Medium Dense	Limited recovery (cobble in sampler) brown sand	Fill	2.6							
5		2	MC			Brown	Medium Dense	Brown sand, trace gravel, trace silt Lab Sample 3-5	Fill	21.7								
6																		
8		3	MC			Brown	Medium Dense	Brown sand, trace gravel, trace silt	Fill									
10																		
12																		
14																		
15																		
16																		
18																		
20																		
23																		
25																		
28																		
30																		
33																		
35																		
38																		
40																		

Comments: Boring completed at 9' bgs.		PROJECT NO.	38580332
Soil sample collected 3'-5'.		BORING NO.	B-12

URS Corporation										TEST BORING LOG			
PROJECT: Minuteman Cleaners					BORING NO: B-13 (Inside Building)								
CLIENT: Ben Ley Enterprises, Inc.					SHEET: 1								
BORING CONTRACTOR: Zebra Environmental					JOB NO.: 38580332								
GROUNDWATER: ~5'					CAS.	SAMPLER	CORE	TUBE	DRILLING METHOD: Geoprobe remote direct push unit				
DATE	TIME	LEVEL	TYPE	TYPE		Macrocore	3'		GROUND ELEVATION:				
				DIA.					DATE STARTED: 05/02/07 1230				
				WT.		---			DATE FINISHED:				
				FALL		---			DRILLER: E. Maraitis				
					GEOLOGIST: M. Murphy								
					REVIEWED BY:								
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS		
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION	USCS	PID	Moist		
0.5	[Pattern]	1	MC			---	---	6" Concrete	---				
						Brown	Medium Dense	Brown sand, trace grael, trace silt	fill	35.1			
5		2	MC			Brown	Medium Dense	Brown sand, trace grael, trace silt Lab Sample 3-5	fill				
6													
8		3	MC			Brown	Medium Dense	Brown sand, trace grael, trace silt	fill				
10													
12													
14													
15													
16													
18													
20													
23													
25													
28													
30													
33													
35													
38													
40													
Comments: Boring completed at 9' bgs. Soil sample collected 3'-5'.								PROJECT NO. 38580332					
								BORING NO. B-13					

URS Corporation										TEST BORING LOG			
PROJECT: Minuteman Cleaners										BORING NO: MW-8			
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1			
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332			
GROUNDWATER: ~5'										DRILLING METHOD: Geoprobe remote direct push unit			
CAS.										GROUND ELEVATION:			
SAMPLER										DATE STARTED: 05/03/07 1010			
CORE										DATE FINISHED:			
TUBE										DRILLER: E. Maraitis			
DATE										GEOLOGIST: M. Murphy			
TIME										REVIEWED BY:			
LEVEL													
TYPE													
TYPE													
DIA.													
WT.													
FALL													
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS		
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION	USCS	PID	Moist		
0.5	[Pattern]	1	MC			---	---						
								Brown	Medium Dense	Sand, Trace gravel Trace silt Lab Sample 2-4	fill	1.0	
5													
6		2	MC			Brown	Medium Dense	Sand, Trace gravel Trace silt Lab Sample 5-8	fill	0.7			
8													
10													
12		3	MC			Brown	Medium Dense	Sand, Trace gravel Trace silt					
14													
15													
16													
18													
20													
23													
25													
28													
30													
33													
35													
38													
40													
Comments: Boring completed at 15' bgs. Soil samples collected 2'-4' and 5'-8'.										PROJECT NO. 38580332			
										BORING NO. MW-8			

URS Corporation										TEST BORING LOG			
PROJECT: Minuteman Cleaners										BORING NO: MW-9			
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1			
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332			
GROUNDWATER: ~5'										DRILLING METHOD: Geoprobe remote direct push unit			
CAS.										GROUND ELEVATION:			
SAMPLER										DATE STARTED: 05/03/07 910			
CORE										DATE FINISHED:			
TUBE										DRILLER: E. Maraitis			
DATE										GEOLOGIST: M. Murphy			
TIME										REVIEWED BY:			
LEVEL													
TYPE													
TYPE													
DIA.													
WT.													
FALL													
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS		
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION	USCS	PID	Moist		
0.5	[Pattern]	1	MC			---	---	Trace brick	fill	0.1			
							Brown	Medium Dense				Medium sand, trace gravel	
5													
6	[Pattern]	2	MC			Brown	Medium Dense	Black clayey silt from 5 to 8 strong organic odor	fill	75.4	Wet		
8													
10													
12	[Pattern]	3				Brown	Medium Dense	Black clayey silt from 5 to 8 strong organic odor					
14													
15													
16													
18													
20													
23													
25													
28													
30													
33													
35													
38													
40													

Black w/ white dots

Comments: Boring completed at 15' bgs.
Soil samples collected 2'-4'.

PROJECT NO. 38580332
BORING NO. MW-9

URS Corporation										TEST BORING LOG									
PROJECT: Minuteman Cleaners										BORING NO: MW-10									
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1									
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332									
GROUNDWATER: ~5'										CAS.		SAMPLER		CORE		TUBE		DRILLING METHOD: Geoprobe remote direct push unit	
DATE	TIME	LEVEL	TYPE	TYPE		Macrocore	5'			GROUND ELEVATION:									
				DIA.						DATE STARTED: 05/03/07 935									
				WT.		---				DATE FINISHED:									
				FALL		---				DRILLER: E. Maraitis									
										GEOLOGIST: M. Murphy									
										REVIEWED BY:									
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS								
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION		USCS	PID	Moist							
0.5	[Pattern]	1	MC			---	---			---									
							Brown	Medium Dense	Brown and, gravel and trace silt Lab Sample 2-4		fill		1.5						
5																			
6	[Pattern]	2	MC			Brown	Medium Dense	Brown sand, gravel and trace silt				1.2							
8										fill									
10																			
12	[Pattern]	3				Brown	Medium Dense	Brown sand, gravel and trace silt											
14																			
15																			
16																			
18																			
20																			
23																			
25																			
28																			
30																			
33																			
35																			
38																			
40																			

Comments: Boring completed at 15' bgs.
Soil sample collected 2' - 4'.

PROJECT NO. 38580332
BORING NO. MW-10

URS Corporation										TEST BORING LOG			
PROJECT: Minuteman Cleaners										BORING NO: MW-11			
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1			
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332			
GROUNDWATER: ~5'										DRILLING METHOD: Geoprobe remote direct push unit			
CAS.										GROUND ELEVATION:			
SAMPLER										DATE STARTED: 05/03/07			
CORE										DATE FINISHED:			
TUBE										DRILLER: E. Maraitis			
DATE										GEOLOGIST: M. Murphy			
TIME										REVIEWED BY:			
LEVEL													
TYPE													
TYPE													
DIA.													
WT.													
FALL													
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS		
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION	USCS	PID	Moist		
0.5	[Patterned]	1	MC			---	---						
								Brown	Medium Dense	Brown and, trace gravel and trace silt Lab Sample 2-4	fill	0.0	
5													
6		2	MC			Brown	Medium Dense	Brown sand, trace gravel and trace silt	fill	0.0	Wet		
8													
10													
12		3				Brown	Medium Dense	Brown sand, trace gravel and trace silt					
14													
15													
16													
18													
20													
23													
25													
28													
30													
33													
35													
38													
40													

Comments: Boring completed at 15' bgs.
Soil samples collected 2'-4'.

PROJECT NO. 38580332
BORING NO. MW-11

URS Corporation										TEST BORING LOG			
PROJECT: Minuteman Cleaners										BORING NO: MW-12			
CLIENT: Ben Ley Enterprises, Inc.										SHEET: 1			
BORING CONTRACTOR: Zebra Environmental										JOB NO.: 38580332			
GROUNDWATER: ~5'										DRILLING METHOD: Geoprobe remote direct push unit			
CAS.										GROUND ELEVATION:			
SAMPLER										DATE STARTED: 05/03/07 1015			
CORE										DATE FINISHED:			
TUBE										DRILLER: E. Maraitis			
DATE										GEOLOGIST: M. Murphy			
TIME										REVIEWED BY:			
LEVEL													
TYPE													
TYPE													
DIA.													
WT.													
FALL													
DEPTH FEET	SAMPLE					DESCRIPTION					REMARKS		
	STRATA	NO.	TYPE	BLOWS PER 6"	REC% RQD%	COLOR	CONSIST HARD	MATERIAL DESCRIPTION	USCS	PID	Moist		
0.5	[Pattern]	1	MC			---	---	Brown sand, trace gravel, trace silt Lab sample 2-4	fill	0.7			
5								Medium Dense					
6								Medium Dense	Sand, gravel and trace silt No Peat Layer	fill	2.7		
8		2	MC										
10													
12									Sand, gravel and trace silt No Peat Layer				
14		3											
15													
16													
18													
20													
23													
25													
28													
30													
33													
35													
38													
40													

Comments: Boring completed at 15' bgs.
Soil samples collected 2'-4'.

PROJECT NO. 38580332
BORING NO. MW-12

APPENDIX B

Laboratory Data and Chain of Custody (included as CD)