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October 21, 2014

Mr. David Brownlee
Program Manager
Response and Remediation Program
Land Protection Branch
Georgia Environmental Protection Division
2 Martin Luther King, Jr. Drive, SE
Atlanta, GA 30334-9000

**CERTIFIED MAIL No. 7014 1200 0002 1896 9691
RETURN RECEIPT REQUESTED**

**Re: Semi-Annual Status Report - October 2014
Voluntary Remediation Program, including Voluntary Remediation Plan
Roswell Cleaners, HSI Site No. 10883
Roswell, Fulton County, Georgia
Tax Parcel ID No. 12-1902-0412-061-6**

AEC Report REB-2407.07

Dear Mr. Brownlee:

Atlanta Environmental Consultants (AEC), on behalf of Mr. Richard E. Bowen, Roswell Cleaners property, 1013 Alpharetta Street, Roswell, Fulton County, Georgia, is pleased to present our seventh Semi-Annual Status Report (SASR) for the above referenced facility. The Georgia Environmental Protection Division (Georgia EPD) accepted Richard E. Bowen into the Voluntary Remediation Program (VRP) by letter dated April 21, 2011. Progress of the VRP at the Roswell Cleaners property conducted during the time period between the previous SASR and this report is summarized herein. This submission is the second SASR since implementation of the recommended Monitored Natural Attenuation (MNA) program for the property containing Roswell Cleaners.

GEORGIA EPD CORRESPONDENCE

No correspondence has been received from the Georgia EPD by Mr. Richard Bowen or Atlanta Environmental Consultants (AEC) since submittal of the previous SASR and updated Conceptual Site Model (CSM).

Previous and Scheduled Submittals

- The April 21, 2012 semiannual progress report shall demonstrate horizontal delineation on the qualifying property; this task has been completed, and
- The April 21, 2013 semiannual progress report shall demonstrate complete horizontal delineation; this task has been completed, and
- The October 21, 2013 semiannual progress report shall demonstrate complete horizontal and vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions. EPD recommends that the participant finalize approval of cleanup standards for all regulated substances prior to this submittal. The Voluntary Remediation Plan and preliminary cost estimate for implementation of remediation and associated continuing actions have been completed and submitted.
- Semi-Annual sampling as proposed in our Voluntary Remediation Plan pursuant to our recommended Monitored Natural Attenuation (MNA) program will be conducted, and a SASR and updated CSM will be submitted every 6 months. This report is our second SASR submittal since SASR since implementation of the recommended MNA program.
- By April 21, 2016, a Compliance Status Report (CSR) must be submitted, including certifications.

Complete Horizontal Delineation Where Access is Available.

Horizontal and vertical delineation where access is available has been successfully completed during the Additional Assessment activities conducted in October 2013. Installation of an additional well, a deep well, down-gradient of the source well, MW-4, has demonstrated vertical delineation. The down-gradient well, MW-3, has indicated no detectable concentrations in three successive groundwater sampling events, which has demonstrated horizontal delineation. All assessment activities and sampling events have confirmed that the only significant source area onsite appears to be in the general area of MW-4, as originally identified at the inception of this investigation. A number of sampling events have clearly demonstrated that groundwater concentrations have been generally decreasing over time and groundwater concentrations are also decreasing with distance from the source area. While concentrations at the source well, MW-4, have trended upward in the two previous sampling events, most likely as a result of rising water table elevations, the decreasing trend in groundwater concentrations of PCE and its breakdown products has now resumed, as water table elevations have decreased. Since some contaminated soils remain in the area of MW-4, as discussed in the Voluntary Remediation Plan, it is believed that the previously identified unusually high water table has resulted in groundwater being in contact with normally unsaturated soils exhibiting elevated concentrations of PCE and associated contaminants. Water table elevations have more recently trended lower, and concentrations of dissolved chlorinated hydrocarbons have correspondingly decreased in MW-4, located at or near a source area.

Field data, laboratory data and evaluation of information gathered to date indicate that horizontal and vertical delineation of PCE and associated compounds reasonably attributable to activities associated with Roswell Cleaners has been successfully

delineated onsite. During the current sampling event on August 27, 2014, and previous sampling event, all detectable groundwater concentrations of EPA method 8260 analytes reasonably attributable to activities onsite have been successfully delineated onsite. Delineation where access is available is completed.

All monitoring wells onsite, including the new deep well and the existing wells, were sampled following completion of additional delineation in October 2013, March 2014 and August 2014, in order to acquire a consistent set of data across the site consisting of samples all collected on the same date during the same monitoring event. Also, in conjunction with this event, depths to groundwater in all wells onsite, old and new, were gauged, current water table elevations were calculated, and data was summarized. Details are presented in the attached Conceptual Site Model (CSM).

No concentrations of PCE or associated compounds were detected in any monitoring well onsite except in MW-4, the source well, and cis-dichloroethene (cis-DCE) and vinyl chloride (VC) in MW-2, during the current MNA event. It is likely that during the extremely high water table onsite 6 to 12 months ago, that groundwater rose into, and made contact with, soil concentrations that are normally well above the water table in the unsaturated zone. Since the nearest likely up-gradient contaminant source corresponding to MW-2 is more distant from MW-2 (likely 50+ feet) than the corresponding contaminated soil zone that impacts MW-3 (in the immediate vicinity of MW-4), the elevated dissolved concentration of vinyl chloride in MW-2 likely arrived later (during the current event) vs. elevated PCE approximately 6 months ago at MW-4. It is anticipated that this concentration in MW-2 will decrease in subsequent groundwater sampling events, as concentrations have already decreased in MW-4 (where the source area is closer to the sampling point). Field measurement data, particularly oxidation reduction potential (ORP), pH and dissolved oxygen (DO), also suggest that groundwater in MW-2 has recently passed through deeper water-bearing zones before reaching MW-2. Chlorinated compounds in MW-2 have a different chemical signature (no detectable PCE or TCE, only DCE and VC are present) from compounds detected in MW-4 and formerly in MW-3 (PCE, TCE and DCE are present; VC has never been detected). Compounds detected in MW-2 are from an offsite source or sources. While a former NAPA Auto Parts machine shop was formerly located up-gradient of MW-2, the likely deep zone migration route of water in MW-2 suggests that old PCE and/or TCE sources formerly located farther up-gradient may also have contributed to chlorinated compounds concentrations identified in MW-2.

The deep well, MW-6D, exhibited detections of chloroform at 0.044 mg/l and bromodichloromethane at 0.0056 mg/l. Neither compound is associated with dry cleaning activities nor any activities involving PCE use, storage or disposal. These compounds are both associated with public water supplies. Chloroform is typically formed in small amounts when chlorine is added to water, as for public drinking water supplies (ATSDR 1989). Bromodichloromethane is formed as a by-product when chlorine is added to drinking water (ATSDR 1989). The source area for groundwater in the vicinity of Roswell Cleaners extends approximately one mile or more toward the northwest. Numerous businesses and residences are located in the source area. Treated

public water supplies enter the ground from home and business lawn and landscaping irrigation, car washing, building exterior and driveway washing, piping leaks and other household and business uses. Note that chloroform and bromodichloromethane only appear in the deep well, MW-6D, screened from 65 to 70 feet deep; these compounds have not been detected in any other monitoring well onsite except once in MW-2 in 2008. This is consistent with the likelihood of a mostly farther uphill source, as stormwater infiltration between the predominant source areas (~0.25 to 1 mile uphill) and the site has likely pushed water from farther uphill containing these compounds deeper underground, deeper into the surficial aquifer.

Complete Horizontal Delineation Where Access is not Available.

Field data, laboratory data and evaluation of information gathered to date demonstrates that horizontal and vertical delineation of PCE and associated compounds reasonably attributable to activities associated with Roswell Cleaners has been delineated onsite. During the current and previous two sampling events, all detectable groundwater concentrations of EPA method 8260 analytes reasonably attributable to activities onsite have been completely delineated onsite. The farthest down-gradient well, MW-6, has exhibited no detectable concentrations in three consecutive groundwater sampling events.

Delineation where access is not available is completed.

Updated Conceptual Site Model

An updated Conceptual Site Model report has been prepared following completion of horizontal and vertical delineation where access is available, completion of delineation where access is not available, and the most current semi-annual monitoring event on August 27, 2014. Tables listing historical and current groundwater data and elevations, and historical and current groundwater dissolved concentrations were prepared and included. Existing figures were updated and/or new figures were revised or drafted, as appropriate, showing locations of the new monitoring wells, water table elevations, and dissolved concentrations. Water table elevation equipotential contours were developed and presented on appropriate figures in the CSM. Dissolved concentration contours were developed and are presented in the CSM.

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1989, Public Health Statement for Bromochloromethane. December 1989.

<http://www.atsdr.cdc.gov/phs/phs.asp?id=706&tid=127>

Accessed on September 17, 2014.

Agency for Toxic Substances and Disease Registry (ATSDR). 1997, Public Health Statement for Chloroform. September 1997.

<http://www.atsdr.cdc.gov/phs/phs.asp?id=51&tid=16>

Accessed on September 17, 2014.

Please do not hesitate to contact us should you have any questions.

Thank you.

Sincerely,

ATLANTA ENVIRONMENTAL CONSULTANTS


Peter T. Kallay, P.E.
Manager, Environmental Services

10/21/2014

Attachments:

- Updated Milestone Schedule
- Time Report
- Updated Conceptual Site Model Report

pc: Jessica Jewell McCarron, Georgia EPD
Richard E. Bowen
Richard A. Wingate, Esq., Hallman & Wingate LLC

PROJECTED MILESTONE SCHEDULE

**Roswell Cleaners
1013 Alpharetta Street
Roswell, Fulton County, Georgia 30075
HSI #10883**

October 20, 2014

The following presents the projected Milestone Schedule for implementation of the Voluntary Remediation Program (VRP) at property containing Roswell Cleaners (formerly Roswell Cleaners & Coin Laundry), 1013 Alpharetta Street, Roswell, Fulton County, Georgia. HSI #10883. Field data and information received was reviewed for potential revisions to the Milestone Schedule. The Milestone Schedule was updated. No recommended changes were identified. Tasks completed are identified below.

<u>Plan, Report or Action</u>	<u>Date to be Submitted</u>
Submit Preliminary Conceptual Site Model	at time of VRP Application ✓
Complete Horizontal Delineation where Access is Available	12 months after enrollment ✓
Complete Horizontal Delineation where Access is not Available	24 months ✓
Complete Vertical Delineation	30 months ✓
Final Voluntary Remediation Plan	30 months ✓
Preliminary Cost Estimate for Implementation of Remediation and Associated Actions	30 months ✓
Implement Voluntary Remediation Plan: Monitored Natural Attenuation with Semi-Annual Sampling	Every 6 months ✓ ✓ **
Submit Compliance Status Report Including Required Certifications	60 months
Semi-Annual Status Reports with Updated Conceptual Site Model	Every 6 months ✓ ✓ ✓ ✓ ✓ ✓ ✓ **

✓ Tasks completed to date

** Included in the current submittal

CONCEPTUAL SITE MODEL

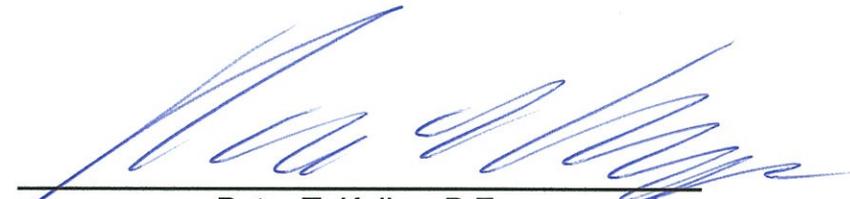
**ROSWELL CLEANERS
1013 Alpharetta Street
Roswell, Fulton County, Georgia 30075
HSI #10883**

Prepared For:

**Mr. Richard E. Bowen
811 Serramonte Drive
Marietta, Georgia 30068**

OCTOBER 2014

AEC Project Number REB-2414



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Site Description

The site, a commercial property in the City of Roswell, Fulton County Tax Parcel # 12-1902-0412-061-6, contains one single story commercial building that has historically contained a dry cleaners and a coin laundry. The building is a concrete block slab-on-grade building constructed in 1966, based on available records of the Fulton County Tax Assessor. The building is well ventilated and was specifically constructed for dry cleaning; it currently houses Roswell Cleaners. The part of the building that had formerly housed a coin laundry is vacant at this time and/or is used for storage. Available records indicate the building has been used primarily as a dry cleaners during all or most of its life history. Dry cleaners have operated at this location under the following names: Roswell Sunshine Center, Sunshine Center, Sunshine Cleaners, Roswell Sunshine Cleaners, Roswell Cleaners & Coin Laundry, and Roswell Cleaners. Figure 1 shows the site location. Figure 2 shows a site plan and possible sources of contamination that have been identified onsite and up-gradient of the site.

Site Surface and Subsurface Setting

The site is developed on fill material consisting of mostly clayey soil fill from the ground surface down to approximately 10 feet below ground surface at the front of the site gradually sloping down to approximately 15 feet deep in the rear of the property. The fill material overlies the original soil horizon. The site, including all areas with soil concentrations of volatile organic compounds (VOC), is capped with concrete or asphalt pavement in good condition, so no contact with these soils by the public will occur. Concentrations in soils are centered in the source area behind the building, on the property on which Roswell Cleaners is located. A layer of topsoil appears to be present at the depth of the original native soil surface; fill material appears to have been placed over the original topsoil layer, generally without disturbing or removing the topsoil layer. Concentrations of chlorinated hydrocarbons associated with dry cleaning activities in soils have been decreasing, and are expected to continue to decrease over time, as no new releases have occurred and natural attenuation mechanisms will likely reduce tetrachloroethene (PCE) and associated breakdown compounds concentrations over time.

No water wells or other groundwater use within a mile of the site is known or suspected, as confirmed by a water well and water resources survey conducted in conjunction with the Hazardous Site Response Act (HSRA) Notification submitted for this site, including drinking water and irrigation wells.

Environmental Assessment and Graphical 3-Dimensional Conceptual Site Model

Several phases of environmental assessment have been conducted onsite. These investigations have indicated the presence of PCE and its biodegradation products in soils and groundwater. The samples referenced in this report were collected on August 25-27, 2008, April 16-18, 2012, March 14-16, 2013, October 11-19, 2013, March 6, 2014 and August 27, 2014. Soil and groundwater samples were analyzed by Advanced Chemistry Labs, Inc., Atlanta, Georgia, a qualified analytical laboratory.

A sub-slab soil vapor sample was collected under the concrete floor slab 5 feet down-gradient of the dry cleaning machine on March 16, 2013. Sub-slab soil vapor sample analysis detected PCE

in vapor phase at 39 parts per billion by volume (ppbv) or 450 micrograms per cubic meter (ug/m³) and trichloroethene (TCE) at 4.9 ppbv or 26 ug/m³.

The highest soil concentrations identified on site collected during in the October 11, 2013 drilling of a deep soil boring for installation of a deep well were 0.011 milligrams per kilogram (mg/kg) PCE at 15 ft deep and 0.009 mg/kg TCE at 5 ft deep; cis-dichloroethene, trans-dichloroethene and vinyl chloride were not detected.

Constituent concentrations were also identified in groundwater. The highest current groundwater concentrations from samples collected on August 27, 2014 were identified as 0.028 milligrams per liter (mg/l) PCE, 0.038 mg/l TCE, 0.078 mg/l cis-DCE, all in MW-4. Cis-DCE at 0.025 mg/l and vinyl chloride at 0.010 mg/l were detected in MW-2. Chloroform at 0.044 mg/l and bromodichloromethane at 0.0056 mg/l were identified in MW-6D. No detectable concentrations of PCE, TCE or any other compound were detected in down-gradient monitoring well MW-3. Concentrations have been on a generally decreasing trend onsite since 2008. While concentrations of PCE, TCE and DCE increased during the previous two sampling events, believed to be because of unusually high water table elevations, concentrations have again resumed their downward trend.

Potentiometric maps showing groundwater flow direction are presented as Figures 7A through 7I. The attached figures, included as part of this Conceptual Site Model (CSM), show a graphical three-dimensional representation of soil and groundwater concentrations, sources and potential sources of contamination, general contaminant migration direction, receptors and pathways (Figures 4 through 10).

Vapor Intrusion Pathway

The Vapor Intrusion Pathway was investigated using sub-slab vapor sampling inside the building 5 feet downgradient of the dry cleaning machine. The sample was collected on March 16, 2013. Analysis of the vapor sample indicated the presence of PCE at 39 parts per billion by volume (ppbv) or 270 micrograms per cubic meter (ug/m³). TCE was identified at 4.9 ppbv or 26 ug/m³. TVOC was 340 ppbv or 1000 ug/m³ for TO-15 target compounds. Other compounds, including acetone, ethanol and isopropyl alcohol were also identified. TVOC is approximately on the order of 1 mg/m³, or 1 ppm by weight. This approximately correlates with the 1.7 ppm reading on a photo-ionization detector in the same sub-slab zone as the analytical sample. An exact comparison is not possible because the 1000 ug/m³ value does not include tentatively identified compounds (TICs), and there were likely other VOCs present below the detection limit. This data was previously tabulated, and is not re-presented in this report.

It was concluded that the principal source of PCE and associated compounds at this site is not from the dry cleaning machine area. Rather, the only significant source area onsite that continues to be confirmed after years of assessment activities is in the rear of the facility (in the area of MW-4 and soil boring B-7), where drums of new and spent PCE product were typically loaded and unloaded, and perhaps formerly stored. Sweepings, mop water, temporary storage of used filters and vapor phase migration along the floor and out of the building may also have contributed to soil concentrations in this area. Spent filters may have been carried out of the building and stored, and other associated PCE receiving, handling, and storage activities, have likely occurred over the years in this general area at the rear of the building near MW-4 and B-7.

The vapor intrusion pathway is incomplete because the low concentrations of PCE and other VOCs beneath a nearly foot-thick intact concrete floor do not allow any appreciable vapor concentrations to enter occupied spaces inside the building. *De minimis* concentrations of PCE that could potentially occur at or near the floor will quickly dissipate, as the building was constructed for dry cleaning and is well ventilated.

Investigation of the Dry Cleaning Machine Area

Investigation of the dry cleaning machine area was conducted using several approaches. A soil boring, completed as monitoring well MW-5, was installed hydraulically downgradient of the dry cleaning machine in April 2012. There were no detectable concentrations of any compounds in either soil or groundwater. No detectable concentrations of any VOCs in groundwater have ever been identified in MW-5 following analysis of a number of groundwater samples subsequently collected from this well. A soil boring, B-9, was installed just in front of the building at the nearest point to the dry cleaning machine. This boring indicated 0.005 mg/kg PCE and 0.052 mg/kg TCE at the 2-foot depth, 0.008 mg/kg PCE at the 10-foot depth, and 0.005 mg/kg PCE at the 15-foot depth. No DCE or VC was detected. The 2-foot depth also indicated minor concentrations of benzene, ethylbenzene and xylenes, most likely from minor fuel drips or exhaust vapors from vehicle traffic and parking by dry cleaners customers. The 15-foot depth sample indicated minor concentrations of acetone and carbon disulfide. Minor TCE in shallow soils is likely from minor vapor releases when the dry cleaning machine is opened. These minor vapor releases, which typically occur for a couple of minutes when the door of the dry cleaning machine is opened, result in low concentrations in shallow soils, at or near the detection limit for PCE. PCE at depth may also originate from the former NAPA Auto Parts store and machine shop and/or any of a number of other former businesses potentially using solvents that were formerly located hydraulically up-gradient of the site.

Sub-slab vapor sampling was also conducted near the dry cleaning machine, as described above. The sub-slab vapor sample indicated low concentrations of PCE and TCE, well under 1 ppm by both volume and weight, in vapor phase. If PCE is released to soils, it will evaporate fairly rapidly due to its high vapor pressure and low adsorption to soil (Howard 1990). The low concentrations detected in the vapor phase in the sub-slab soil sample suggest that soil concentrations would be even lower, well below the Risk Reduction Standard (RRS) proposed for soils.

Observation and evaluation of the dry cleaning machine area suggests that there is no route for PCE migration into sub-slab soils, except migration through solid concrete, which is a relatively slow process. There are no visible cracks or breaches in the concrete floor. There is no opening in the concrete floor at or near the dry cleaning machine. Mr. Bowen stated that no significant releases of PCE have occurred, to the best of his knowledge. Any minor drips of PCE were always wiped up immediately with towels, which were then promptly tossed into the dry cleaning machine to remove any PCE soaked up by the towels. All observations in the dry cleaning machine area indicate no significant concentrations of PCE in the subsurface. Only minor quantities resulting from infrequent drips of PCE slowly migrating through concrete 10 to 12 inches thick were identified. Concrete is a dense material. Although concrete is a porous material, migration through concrete is a relatively slow process. Minor concentrations likely entered soils from vapors briefly exiting the dry cleaning machine when the machine is opened,

and settling into nearby soils in minor quantities. As previously stated, the only significant concentrations of PCE and associated compounds onsite were identified in the area at the rear of the building, around MW-4 and B-7.

No significant concentrations of PCE, TCE, or degradation compounds have ever been identified in the dry cleaning machine area, utilizing several investigation techniques, including vapor phase sampling and analysis, soil sampling and analysis, and groundwater sampling and analysis. The only significant source identified onsite to date is still the originally identified area behind the building in the area of MW-4 and soil boring B-7. It is concluded, following completion of soil, sub-slab vapor and groundwater investigations in the dry cleaning machine area that there has been no significant release of PCE in the area of the dry cleaning machine.

Surface Water

Using a scaled U.S. Geological Survey (USGS) 7.5-minute series topographic map, Roswell, GA Quadrangle (Figure 1), a distance of approximately 1,800 feet is indicated in the direction of groundwater flow (east-southeast) from the source area to Hog Wallow Creek. Available data does not suggest that any concentrations exceeding applicable standards will reach Hog Wallow Creek or any other surface water body. Were any concentrations to reach Hog Wallow Creek, the most likely point, based on the groundwater flow direction determined using potentiometric contour mapping, is generally toward the east-southeast, in the predominant direction of groundwater flow. At the calculated rate of groundwater migration, ranging from 99 feet/year to 252 feet/year, average 145.6 feet/year, groundwater from the site would reach Hog Wallow Creek from 7 to 18 years, or an average of 12 years. This is the computed rate of groundwater flow and does not take into consideration any retardation or attenuation mechanisms, that would have the effect of further slowing contaminant migration velocity, and further increasing the length of time it would take dissolved VOC concentrations to reach Hog Wallow Creek, if at all. Concentrations decrease appreciably with distance from the source, and are expected to become non-detectable long before reaching Hog Wallow Creek. No other point of withdrawal between the site and Hog Wallow Creek was identified. No groundwater use between the site and Hog Wallow Creek was found; Hog Wallow Creek is the nearest point of exposure. Dissolved concentrations are projected to decrease to below applicable standards before reaching Hog Wallow Creek. Since no likelihood of contact with groundwater between the site and Hog Wallow Creek exists, and no standards will be exceeded when groundwater reaches Hog Wallow Creek, the groundwater pathway is incomplete.

Since groundwater concentrations of PCE and breakdown products reasonably attributable to activities on the Roswell Cleaners property have been successfully delineated onsite, there is essentially no likelihood of any concentrations exceeding applicable standards reaching Hog Wallow Creek.

Additional Investigations

Additional Assessment to complete horizontal delineation where access is available has been completed. MW-5 was installed hydraulically downgradient of the dry cleaning machine. Sampling of monitoring well MW-5 indicated no detectable Volatile Organic Compounds (VOC) in either soils or groundwater downgradient of the dry cleaning machine. The dry cleaning machine has reportedly always been at the same location inside the building. It was

concluded that the primary source of PCE and associated compounds onsite was not from the dry cleaning machine area. Rather, it appears to be in the vicinity of the rear of the building (near MW-4), where drums of new and spent product were typically loaded and unloaded, floor cleaning water may have been released, and vapor phase migration along the floor and out of the building has occurred, filters may have been carried out of the building and temporarily stored, and/or other associated activities involving PCE-containing materials may have occurred over the many years this dry cleaners has been in existence.

Delineation where access is available has been completed. MW-4, which is near the likely source, currently has a PCE concentration of 0.028 mg/l and TCE concentration of 0.038 mg/l. Cis-dichloroethene (DCE) was detected in MW-4 at 0.0785 mg/l and in MW-2 at 0.025 mg/l. Vinyl chloride (VC) was detected at 0.010 mg/l in MW-2. No sources of vinyl chloride or other chlorinated solvents exist onsite up-gradient of MW-2. A former NAPA Auto Parts machine shop, believed to have formerly used PCE or TCE to clean used auto parts was formerly located more than 50 feet up-gradient of MW-2. MW-3, down-gradient of MW-4, indicated no detectable concentrations of any EPA Method 8260 analytes during the most recent sampling event, and, therefore, concentrations are delineated in the down-gradient direction. No concentrations meeting or exceeding applicable standards were identified in any other wells onsite, indicating that groundwater delineation of all concentrations reasonably attributable to activities on the Roswell Cleaners property onsite has now been successfully completed.

No concentrations of PCE or associated compounds were detected in any monitoring well onsite except in MW-4, the source well, and cis-dichloroethene and vinyl chloride in MW-2, during the current MNA event. It is likely that during the extremely high water table onsite 6 to 12 months ago, that groundwater rose into, and made contact with, soil concentrations that are normally well above the water table in the unsaturated zone. Since the nearest likely up-gradient contaminant source corresponding to MW-2 is more distant from MW-2 (likely 50+ feet) than the corresponding contaminated soil zone that impacts MW-3 (in the immediate vicinity of MW-4), the elevated dissolved concentration of vinyl chloride in MW-2 likely arrived later (during the current event) vs. elevated PCE approximately 6 months ago at MW-4. It is anticipated that this concentration in MW-2 will decrease in subsequent groundwater sampling events, as concentrations have already decreased in MW-4. Field measurement data, particularly oxidation reduction potential (ORP), pH and dissolved oxygen (DO), also suggest that groundwater in MW-2 has recently passed through deeper water-bearing zones on its route to MW-2. Chlorinated compounds in MW-2 have a different chemical signature (no detectable PCE or TCE, only DCE and VC were present) from compounds detected in MW-4 and formerly in MW-3 (PCE, TCE and DCE are present; VC has never been detected). Compounds detected in MW-2 are from an offsite source or sources. While a former NAPA Auto Parts machine shop was formerly located up-gradient of MW-2, the likely deep zone migration route of water in MW-2 suggests that old PCE and/or TCE sources formerly located farther up-gradient may also have contributed to chlorinated compounds concentrations identified in MW-2.

Deep well MW-6 was completed to a depth of 70 feet; soils and groundwater were sampled and analyzed. Soils have been delineated in the source area. No soil samples collected from B-DW, the boring in which MW-6 was installed, indicated the presence of any concentrations meeting or exceeding Risk Reduction Standards (RRS) for soils. Groundwater sampling indicated no detectable concentrations of PCE or any associated compounds. Thus, groundwater delineation

has now been successfully completed onsite both horizontally and vertically. Furthermore, boring B-DW was drilled until auger refusal was encountered. Auger refusal was encountered at 71 feet, at the soil/bedrock interface. Aquifer thickness is therefore estimated to be 50 feet, as depth to bedrock and the thickness of the saturated zone have been determined.

The deep well, MW-6D, exhibited detections of chloroform at 0.044 mg/l and bromodichloromethane at 0.0056 mg/l. Neither compound is associated with dry cleaning activities nor any activities involving PCE use, storage or disposal. These compounds are both associated with public water supplies. Chloroform is typically formed in small amounts when chlorine is added to water, as for public drinking water supplies (ATSDR 1997). Bromodichloromethane is formed as a by-product when chlorine is added to drinking water (ATSDR 1989). The source area for groundwater in the vicinity of Roswell Cleaners extends approximately one mile or more toward the northwest. Numerous businesses and residences are located in the source area. Treated public water supplies enter the ground from home and business lawn irrigation, car washing, building exterior cleaning, piping leaks and other household and business uses. During recent well-above-average rainfalls, groundwater gradient magnitude likely increased, and a higher-than-average rate of groundwater flow likely flushed public water supply by-products downhill toward this area at a higher-than average rate. Note that chloroform and bromodichloromethane only appear in the deep well, MW-6D, screened from 65 to 70 feet deep; these compounds have not been detected in any other monitoring well onsite. This is consistent with the likelihood of an uphill source, as stormwater infiltration between the predominant source areas (~0.25 to 1 mile uphill) and the site has likely pushed water from farther uphill containing these compounds deeper underground, deeper into the surficial aquifer.

Variations in rainfall patterns over time result in some variability in dissolved concentrations. Water table elevations recently rose by several feet to the highest elevation ever recorded onsite since groundwater investigation commenced at this site in 2006, following several months of above-average rainfall. It is likely that the high groundwater level has resulted in groundwater contact with soils containing elevated concentrations of PCE and PCE degradation products, resulting in increased dissolution of PCE and related chlorinated hydrocarbons into groundwater. Nevertheless, the long-term trend indicates a definite decreasing trend in groundwater concentrations in all monitoring wells onsite. An apparent decreasing trend in groundwater concentrations has resumed; water table elevations are now trending toward historical average levels. Since the previous monitoring event, water table elevations have decreased by approximately one foot, and groundwater concentrations of PCE and associated compounds have resumed their downward trend.

Suspected Sources of Regulated Substances

The Subject Property has been the location of a successive series of businesses operating dry cleaners over a period of well over 40 years. All investigation findings to date indicate significant entry of PCE into the environment onsite was limited to the area of MW-4 at the rear of the building.

Additional Assessment and Risk Reduction Standards

The most current Risk Reduction Standards, rules and concentrations (or concentrations developed using a RRS Evaluation) as adopted by the Georgia Environmental Protection Division (EPD) at the time of the delineation will be utilized. Type III Risk Reduction Standards may be adopted as the applicable standard following evaluation of all data collected after delineation has been completed. In the event site-specific risk reduction standards are proposed, a point of demonstration well will be proposed, as appropriate, along with an appropriate monitoring schedule.

VOLUNTARY REMEDIATION PLAN

Site Delineation Concentration Criteria

Site delineation has been completed to Voluntary Remediation Program Type III Risk Reduction Standards. Risk Reduction Standards (RRS) proposed for groundwater are as follows, from Table 1 of Appendix III unless otherwise noted:

Constituent	Delineation of Groundwater Stds (mg/l)
Tetrachloroethene (PCE)	0.005
Trichloroethene (TCE)	0.005
Cis-Dichloroethene (cis-DCE)	0.07*
Trans-DCE	0.1
Vinyl Chloride	0.002

* Federal Maximum Contaminant Level (MCL).

Risk Reduction Standards proposed for soils are as follows, as discussed in Risk Reduction Standards guidance issued by the Georgia EPD and available on its website.

Constituent	Delineation of Soil Standards (mg/kg)
PCE	0.50
TCE	0.50
Cis-DCE	7.00
Trans-DCE	10.00

Proposed standards, when selected and finalized, shall apply to compounds reasonably associated with, or originating from, activities historically conducted onsite, as have been identified in monitoring wells MW-4 and MW-3. Compounds clearly originating from offsite

sources, based upon the preponderance of evidence, over which we have no effective control, shall not be deemed to be the responsibility of Roswell Cleaners or the Bowen property.

Proposed Engineering Controls

Engineering Controls, consisting of an asphalt cap, is the primary proposed remedy for soils until the soils located close to the building can be appropriately addressed. In the event additional delineation or investigation work suggests other points of exposure, they will be addressed as appropriate. In the event engineering controls are proposed or utilized, a long-term maintenance and monitoring plan will be included as part of the proposed engineering controls remedy.

Evaluation of Remediation Alternatives

Groundwater

A number of approaches to remediation of dry cleaning compounds in groundwater, including PCE, exist. A number of approaches were previously presented, and will not be repeated again. Monitored Natural Attenuation (MNA) has been selected as the appropriate remedy for this site.

Monitored Natural Attenuation (MNA). Monitored Natural Attenuation is an appropriate remedy when it has been demonstrated to effectively reduce concentrations. At the Subject Property, a number of years of monitoring have clearly demonstrated the ability of natural attenuation processes to decrease groundwater concentrations.

The only significant source onsite is in the vicinity of MW-4 near the rear door of the building used as a dry cleaners. Concentrations in MW-4 recently increased somewhat, most likely due to a large increase in rainfall recently. This resulted in increasing water table elevations, likely saturating several feet of contaminated soils normally above the water table that are rarely, if ever, saturated, likely dissolving PCE and daughter products that may be in those usually unsaturated soils.

MW-3, the down-gradient well, which has been trending lower in concentrations over the recent years, has now shown no detectable VOC concentrations in the three most recent groundwater sampling events.

Without a new source of PCE, TCE, etc., these and other daughter compounds are naturally in a long-term decreasing trend in concentrations due to Natural Attenuation mechanisms, notwithstanding the recent up-ticks in concentrations in MW-4 due primarily to a rising water table coming in contact with normally unsaturated contaminated soils located above average water table elevations. It is expected that once rainfall returns to average or lower ranges and the water table drops to historic average or lower levels, the decreasing trend in concentrations in the source well, MW-4, will resume.

We propose monitoring the continuing Natural Attenuation (e.g., Monitored Natural Attenuation) as concentrations are expected to continue decreasing over time (even if temporary conditions temporarily result in an up-tick in concentrations). Monitored Natural Attenuation is the selected remedy for groundwater at this site.

Soils

A number of approaches to remediation of dry cleaning compounds in soils, including PCE, exist. A number of approaches were previously presented, and will not be repeated again. Monitored Natural Attenuation (MNA) has been selected as the appropriate remedy for this site at this time.

Monitored Natural Attenuation. Monitored Natural Attenuation can be an effective remedy if soils allow enough air and vapor movement through them; e.g., the soils are relatively coarse sandy or silty soils with little fines, and the soils are open to the atmosphere. Conditions at this site (e.g., tight soils with asphalt pavement overlying the soils) do not make this the most practical or technologically effective remedy at this time, although some decrease due to various Natural Attenuation mechanisms is expected to occur, at least gradually, over the years.

Soils concentrations under asphalt and/or concrete pavement are essentially immobile, but with asphalt cover, neither is there any significant rate of downward migration. Excavation and removal offsite is the obvious remedy, eventually, but excavation cannot safely be completed now due to the proximity of the dry cleaners building onsite. This is proposed for completion in the future. At some time in the future, likely after the current building has reach end of life, soil concentrations should be re-sampled, and available options should then be re-evaluated.

GEORGIA EPD CORRESPONDENCE

No correspondence has been received by Atlanta Environmental Consultants (AEC) or by Mr. Richard Bowen since submittal of the previous Semi-Annual Status Report (SASR) and Updated Conceptual Site Model (CSM) Report.

CONCLUSIONS AND RECOMMENDATIONS

The evaluation of the assessment and monitoring conducted by Atlanta Environmental Consultants over the last 5 years at the Roswell Cleaners property has resulted in the following Conclusions and Recommendations for the Voluntary Remediation Plan:

For groundwater, Natural Attenuation has been demonstrated to successfully decrease PCE and TCE concentrations over time onsite. All indications are that Natural Attenuation has been successfully reducing concentrations onsite, as highest concentrations onsite have already decreased by nearly 99% to date. Therefore, Monitored Natural Attenuation (MNA) is the proposed remedy for groundwater concentrations of PCE and TCE.

MNA is proposed, while the presence of the building precludes excavation in this area at this time. It is proposed that excavation and offsite disposal or treatment be considered as the eventual remedy for soil concentrations of PCE and TCE. At some time in the future, likely after the current building has reach end of life, soil concentrations should be re-sampled, and available options will be re-evaluated. Because the location is close to the building onsite, excavation to a depth of 15 feet or more would potentially result in undermining the building

and/or weakening the building's foundation. Therefore, excavation and removal of soils will be deferred until such time as removal of the building is proposed.

In the interim, the asphalt surface should be sealed and maintained in good condition to preclude contact by workers employed by the dry cleaners, construction workers, or members of the general public from coming in contact with the contaminated soils. Sealing the asphalt will also prevent or minimize any downward migration of PCE and products from the soils into the groundwater zone. This will allow groundwater to naturally clean up more completely, once the source is removed, once soil removal has been completed.

CONCLUSIONS

Completion of Additional Assessment and other assessments at the Bowen property, on which Roswell Cleaners is located, 1013 Alpharetta Street, Roswell, Fulton County, Georgia 30075 suggests the following conclusions:

- Significant soil concentrations are limited to the general area behind the building around and near the location of MW-4. Soil concentrations have been effectively delineated onsite. This is the only significant source area onsite that has ever been identified.
- Groundwater concentrations have been on a long-term decreasing trend; decreasing concentrations onsite have resumed during the current sampling event, after water table elevation decreased following an approximately year-long period of unusually high water table conditions. The highest PCE concentrations onsite are nearly 99% lower than groundwater concentrations of PCE at the start of this investigation. Groundwater concentrations of PCE and products reasonably attributable to onsite activities have been delineated horizontally and vertically onsite.
- Sub-slab soil vapor was investigated by drilling through the concrete floor near the dry cleaning machine and collecting a sub-slab soil vapor sample for TO-15 analysis. The sub-slab soil sample indicated concentrations of PCE, TCE and other compounds well below 1 part per million (ppm). TCE in soil vapor was identified at 39 ppbv or 270 ug/m³. Trans-DCE and VC were not detected. The data indicate no significant vapor or soil concentrations beneath the building.
- All site assessment and delineation efforts to date continue to confirm that there is only one significant source of PCE onsite: directly behind the building in the area of MW-4 and boring B-7
- Vinyl chloride has again been detected in MW-2. This is most likely due to a former up-gradient offsite source. In particular, the recent unusually high water table likely resulted in groundwater contact contaminants in soils that are normally not in contact with groundwater. Field measurement data also suggests that groundwater may migrate at depth on its route to the area of MW-2, suggesting that chlorinated compounds detected in MW-2 may originate from any of several offsite PCE or TCE sources formerly located up-gradient of MW-2 over many years.

RECOMMENDATIONS

Completion of Additional Assessment and other assessments at the Bowen property, on which Roswell Cleaners is located, 1013 Alpharetta Street, Roswell, Fulton County, Georgia 30075 suggests the following Recommendations:

- Vertical and horizontal delineation of dissolved concentrations of PCE and products reasonably attributable to dry cleaning activities onsite has been completed onsite with only one source identified onsite, in the vicinity of MW-4. It is recommended that groundwater monitoring wells continue to be sampled every six months as part of a Monitored Natural Attenuation program. MNA is the recommended remedy to address the remaining PCE concentrations in groundwater onsite. MNA has been demonstrated to be effective in reducing dissolved concentrations at this site.
- It is recommended that soil excavation with offsite treatment and/or removal be the selected remedy for remediation of remaining soil concentrations of PCE and products in the source area behind the building. Once the building is demolished, at that time, soil concentrations should be re-sampled, and available options should then be re-evaluated. If soil concentrations still exceed then-applicable standards, excavation and disposal, and/or other appropriate options, can then be considered, evaluated and selected.
- Until the building is removed, it is recommended that the asphalt surface be sealed and maintained in good condition. This will preclude rainfall entry into the shallow subsurface, and preclude significant contaminant migration from the soils downward into the groundwater zone. This will effectively allow groundwater concentrations onsite to naturally decrease, as the onsite source would no longer be a significant source of groundwater contamination.
- Vertical and horizontal delineation of soils and groundwater from PCE and products reasonably attributable to onsite activities have been successfully completed onsite. No groundwater modeling is warranted at this time, as delineation onsite has been effectively completed. No further delineation activities onsite or offsite are required.
- Decreasing concentrations in groundwater have resumed at MW-4. Concentration of DCE and VC increased at MW-2, but this is likely temporary, due to the recently high water table elevations. It is recommended that continuing groundwater monitoring every six months be used to track dissolved concentrations in MW-2. No further conclusions or recommendations are suggested until sufficient time elapses after the recent period of unusually high rainfall and unusually high water table elevations.

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[http:// http://www.atsdr.cdc.gov/phs/phs.asp?id=706&tid=127](http://www.atsdr.cdc.gov/phs/phs.asp?id=706&tid=127)

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Accessed on September 17, 2014.

FIGURES

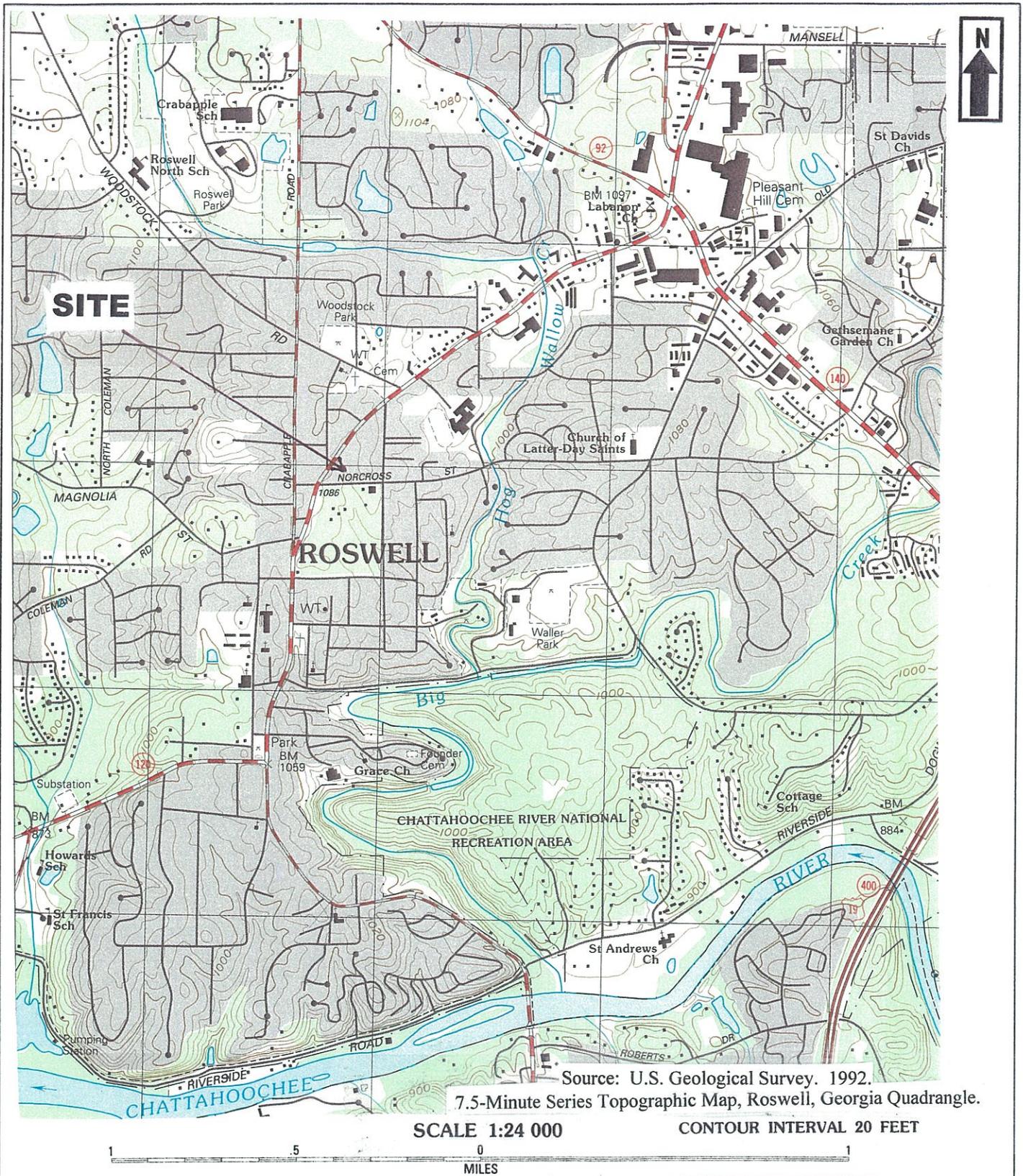


Figure 1: Site Location Map
 Roswell Cleaners and Coin Laundry
 1013 Alpharetta Street
 Roswell, Georgia 30075

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 Atlanta Environmental Consultants

Drawn By: Terri Drabek
 Checked By: Peter Kallay, P.E.

Hydraulically Upgradient
Potential VOC Sources Formerly
Located West-Northwest of Site

- Tallant Pete Motors
- Wright, Joe E
- Big E Motors
- Wright's Garage Ltd
- Genuine Parts Co.
- NAPA Auto Parts
- NAPA Auto Parts machine shop
- Auto Body Plus
- Benson Chevrolet Co.
- Capri XL Houseboats
- Simmons Engineering Co
- Marietta Poultry Equipment
- Roswell City Fire Dept

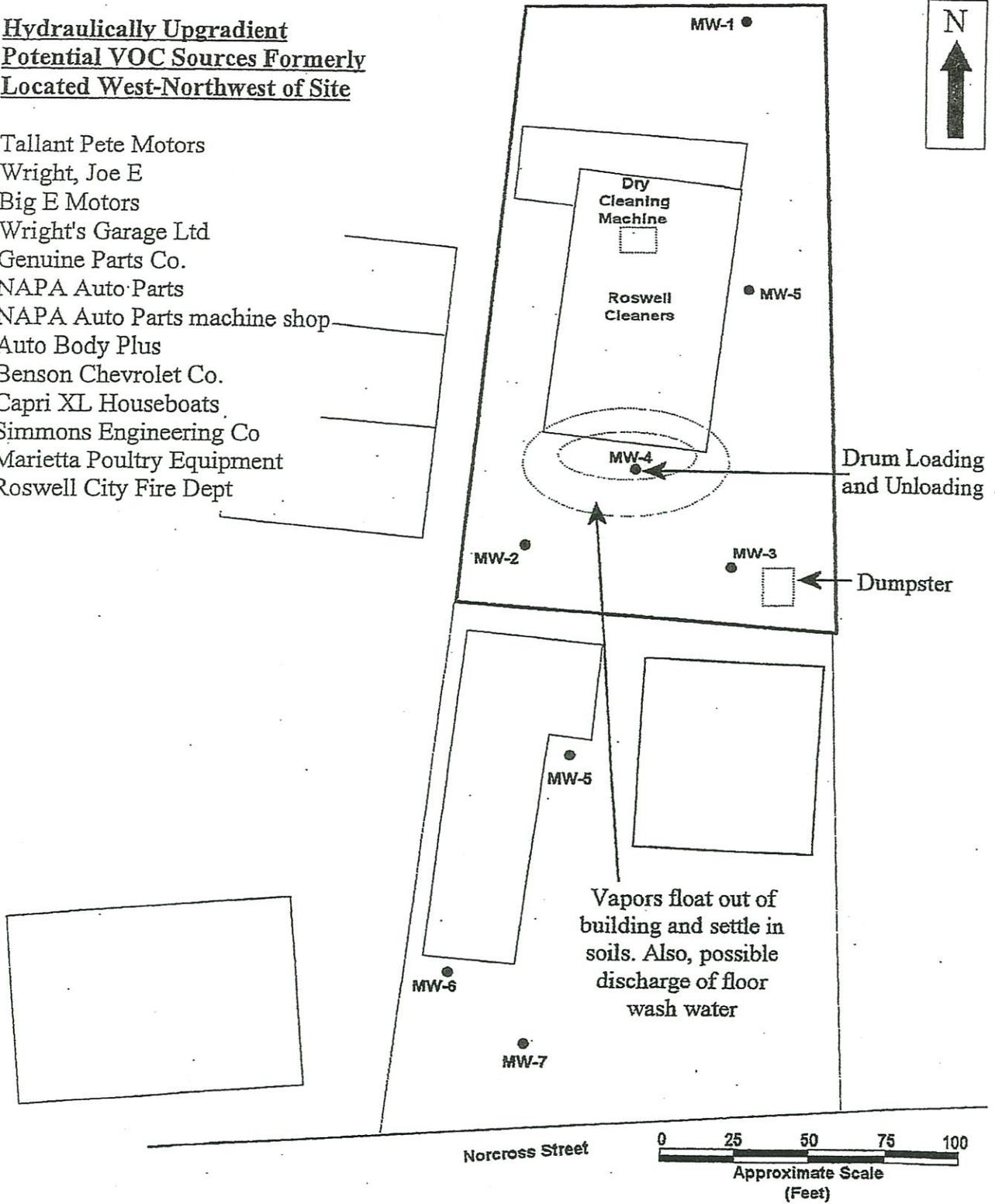


Figure 2: Site Plan Showing Possible Sources

Roswell Cleaners

1013 Alpharetta Street
 Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.



**Hydraulically Upgradient
Potential VOC Sources Formerly
Located West-Northwest of Site**

- Tallant Pete Motors
- Wright, Joe E
- Big E Motors
- Wright's Garage Ltd
- Genuine Parts Co.
- NAPA Auto Parts
- NAPA Auto Parts machine shop
- Auto Body Plus
- Benson Chevrolet Co.
- Capri XL Houseboats
- Simmons Engineering Co
- Marietta Poultry Equipment
- Roswell City Fire Dept

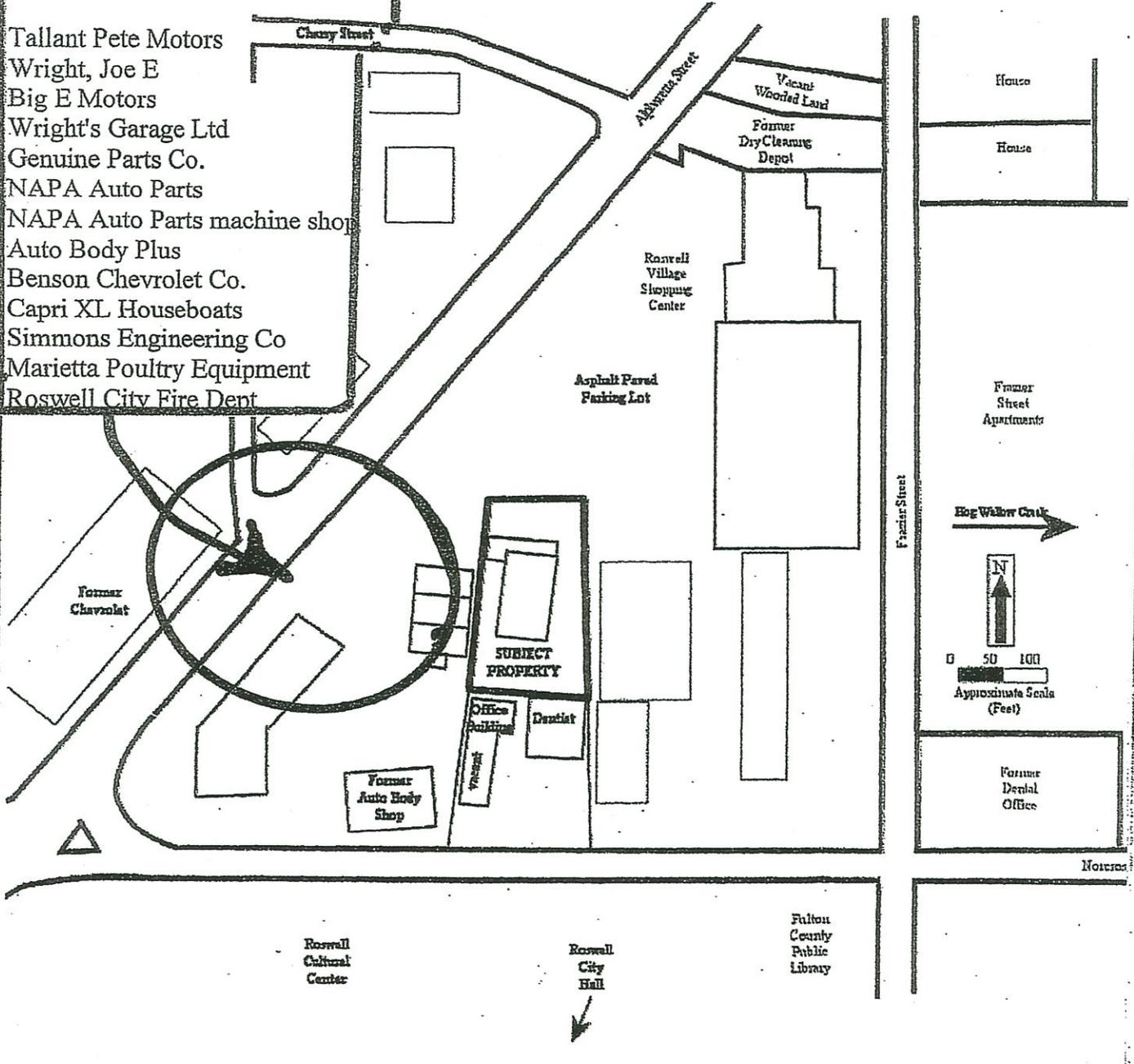


Figure 3: Site Area Plan
 Locations Of Cross-Sections
 Roswell Cleaners
 1013 Alpharetta Street
 Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek
 Checked By: Peter Kallay, P.E.

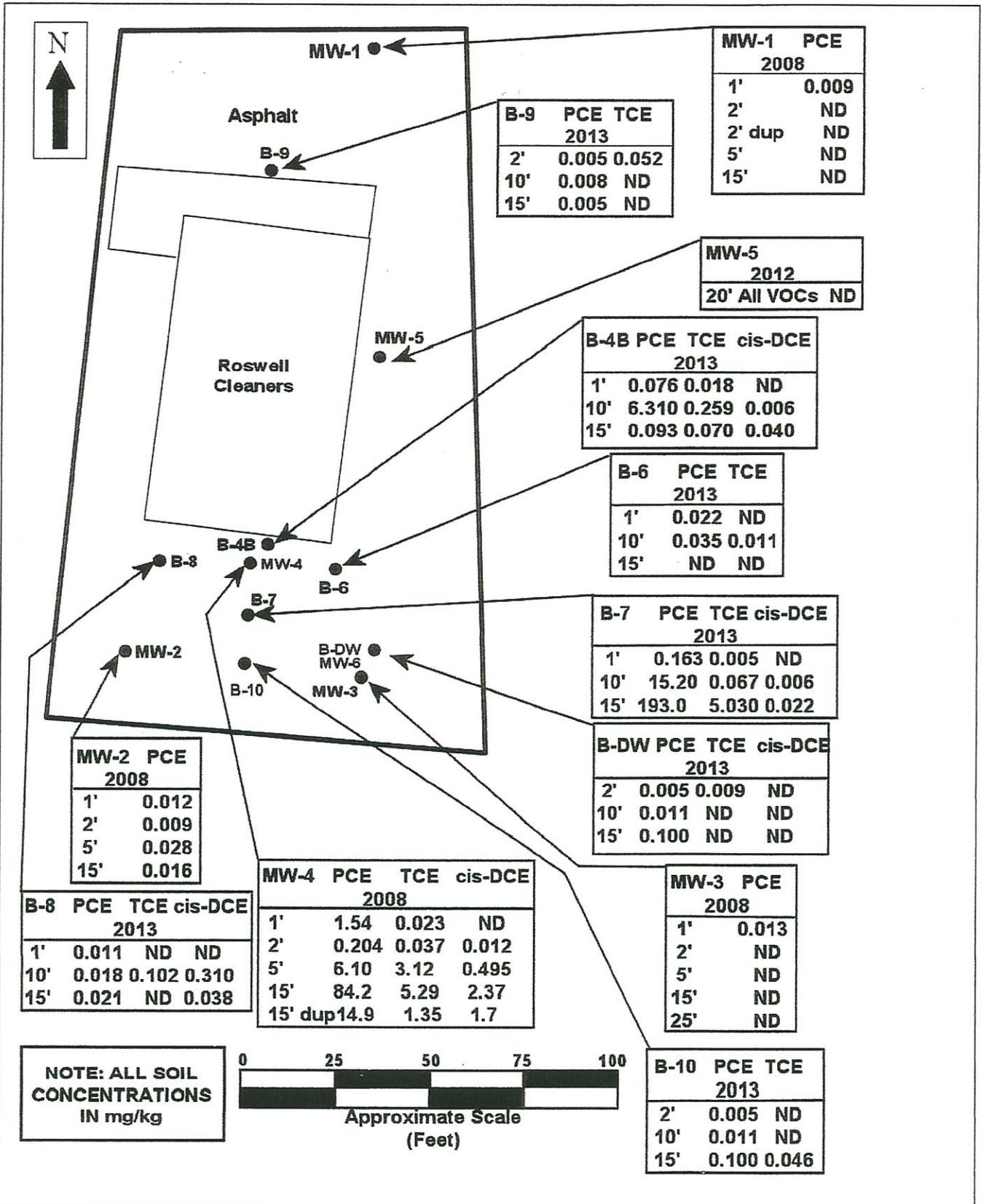


Figure 4: PCE Concentration in Soil, 2008 through 2013
 Roswell Cleaners and Coin
 Laundry
 1013 Alpharetta Street
 Roswell, Fulton County, Georgia

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 Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

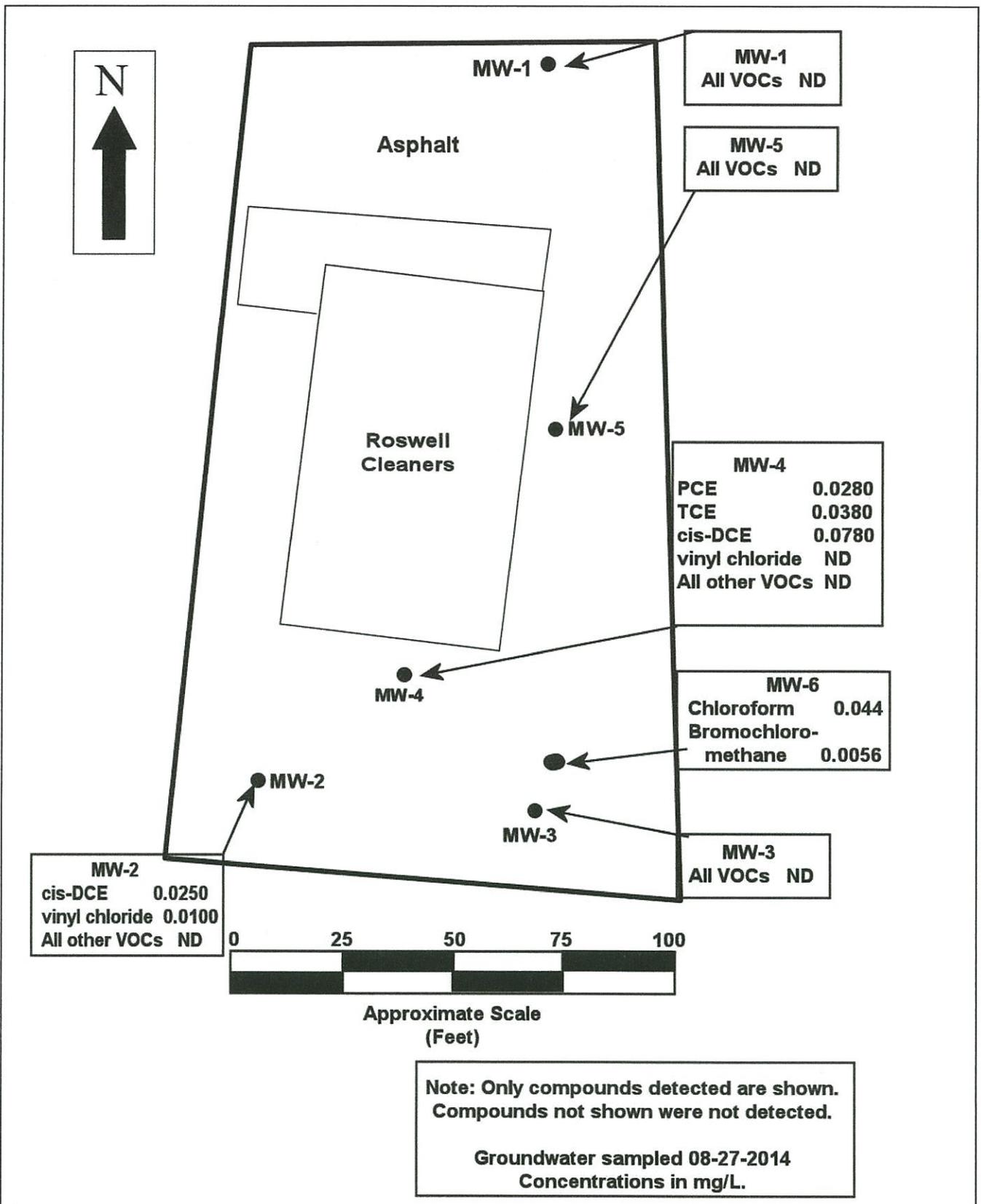


Figure 5: PCE Concentration in Groundwater, August 27, 2014
Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

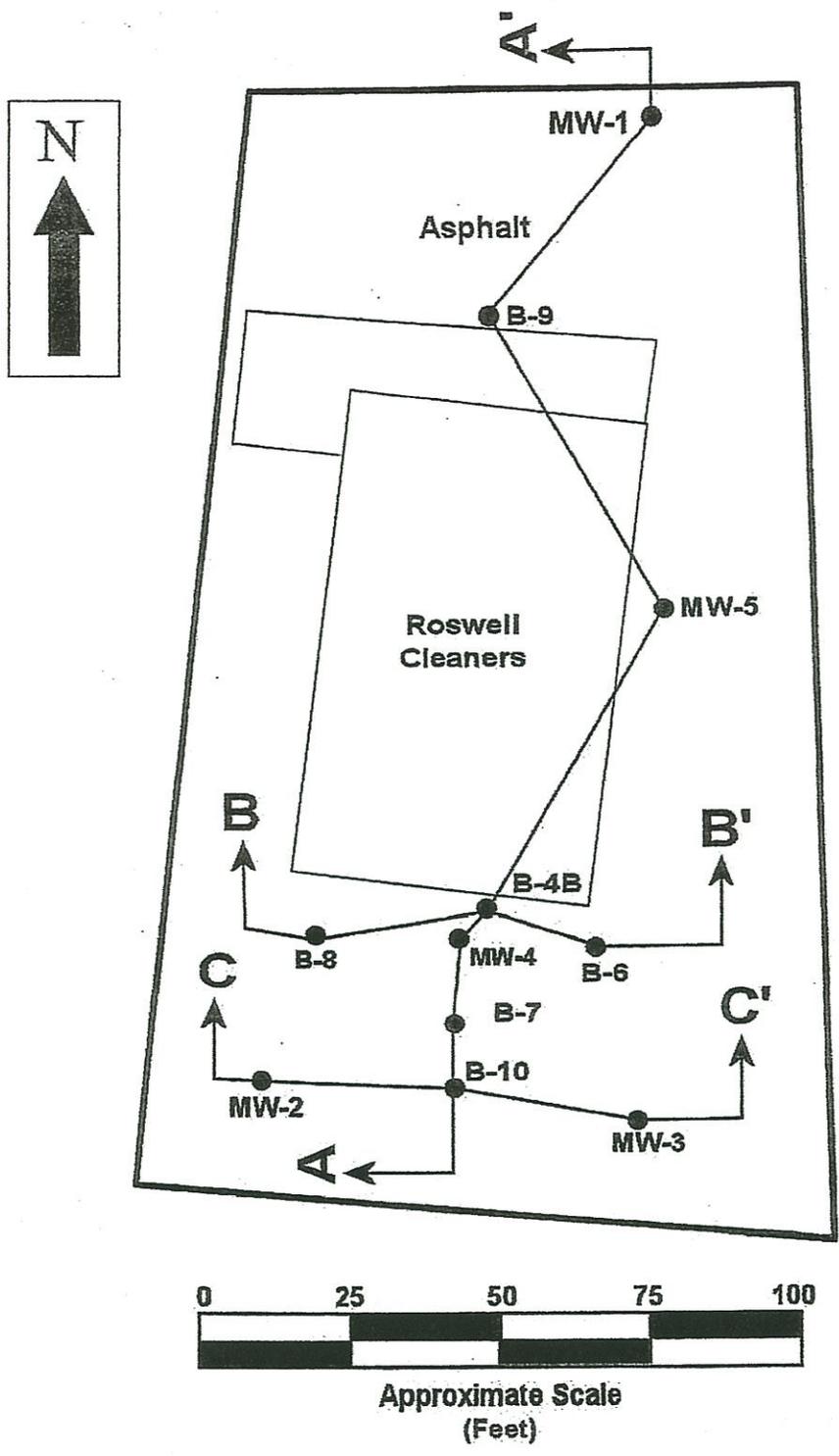


Figure 6: Cross-Section Locations
 Roswell Cleaners
 1013 Alpharetta Street
 Roswell, Fulton County, Georgia

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 Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

**Hydraulically Upgradient
Potential VOC Sources Formerly
Located West-Northwest of Site**

Tallant Pete Motors
Wright, Joe E
Big E Motors
Wright's Garage Ltd
Genuine Parts Co.
NAPA Auto Parts
NAPA Auto Parts machine shop
Auto Body Plus
Benson Chevrolet Co.
Capri XL Houseboats
Simmons Engineering Co
Marietta Poultry Equipment
Roswell City Fire Dept

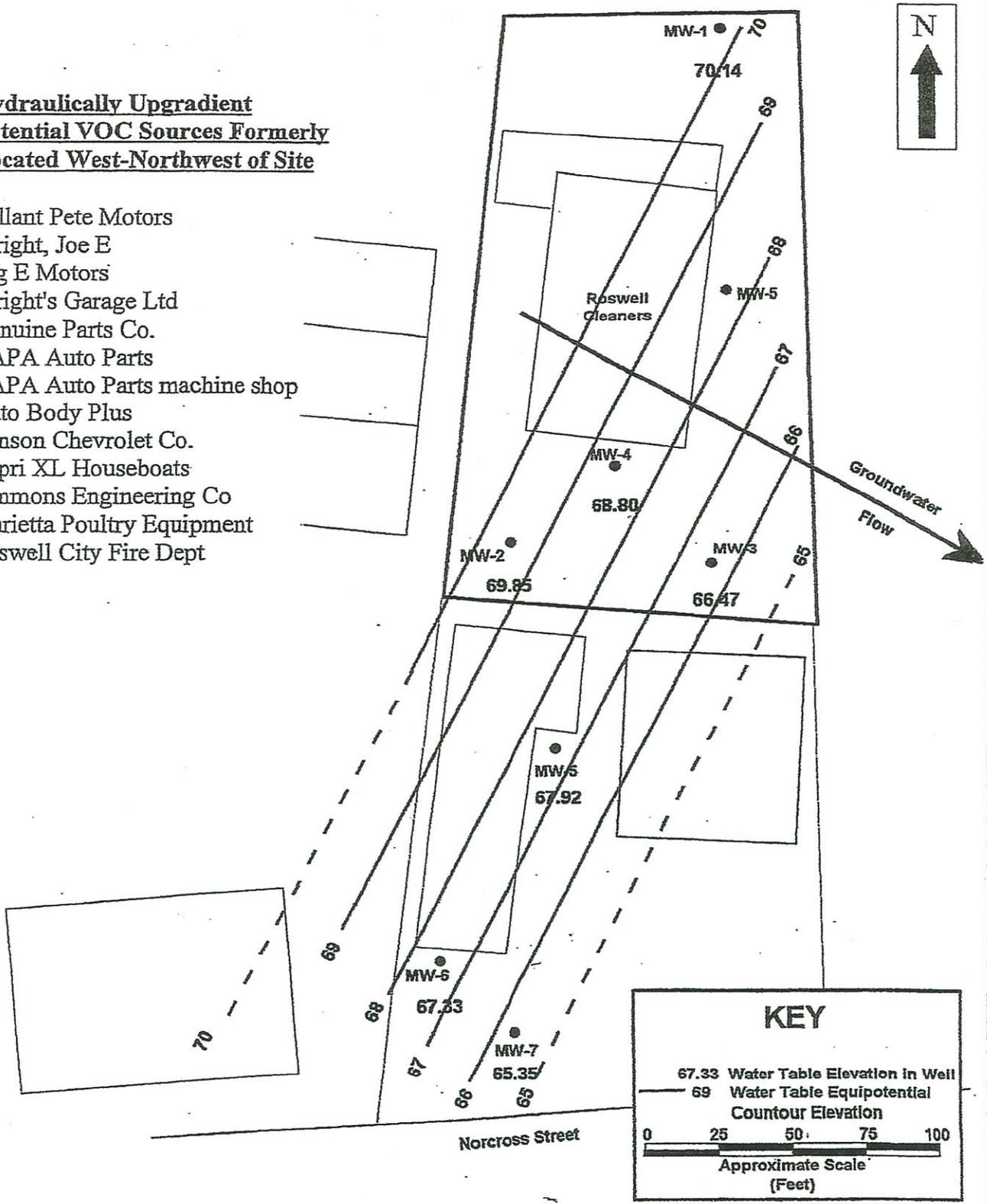


Figure 7a: Potentiometric Map, 08/27/2008

Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

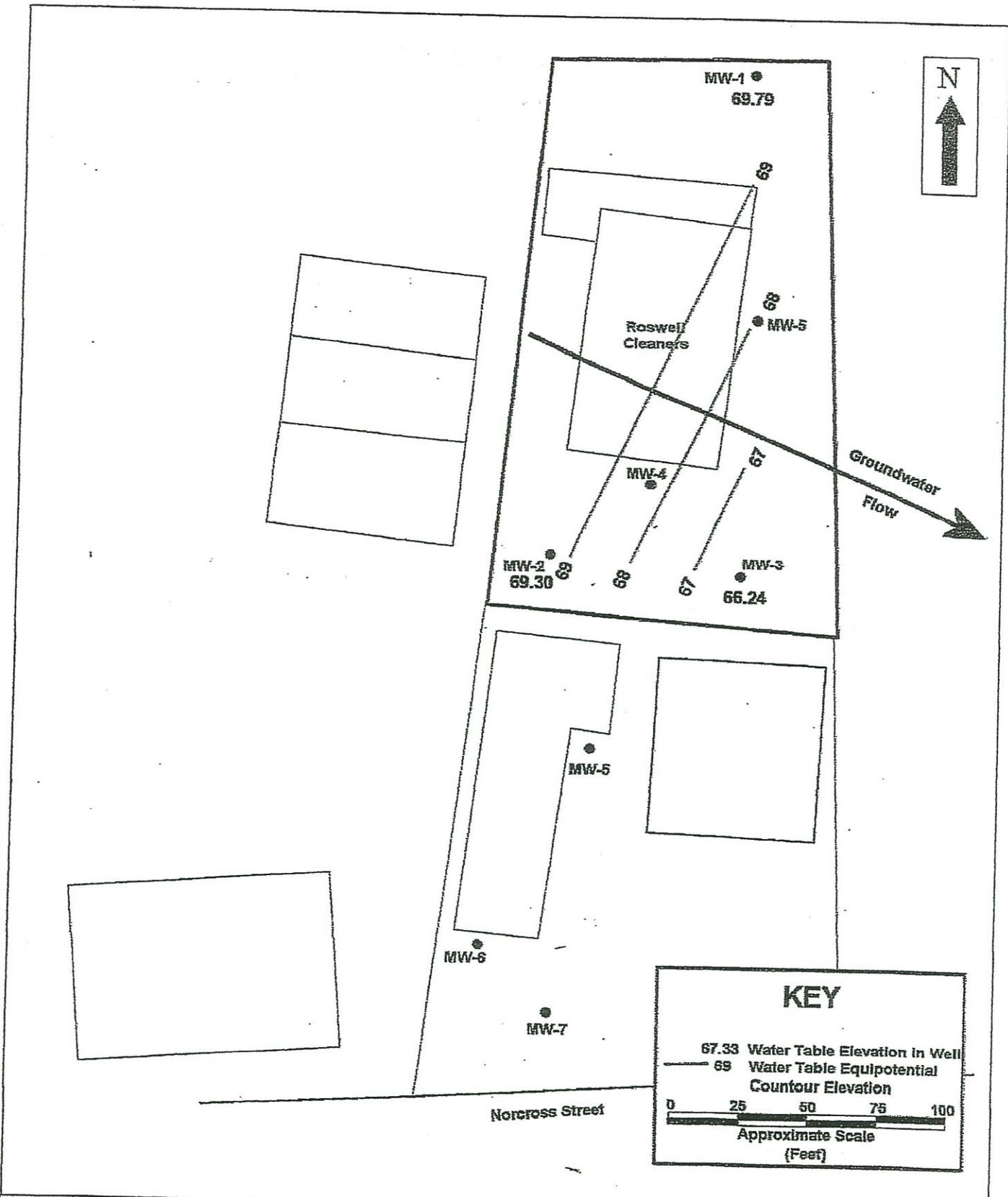


Figure 7B
Potentiometric Map, 09/28/2008

Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

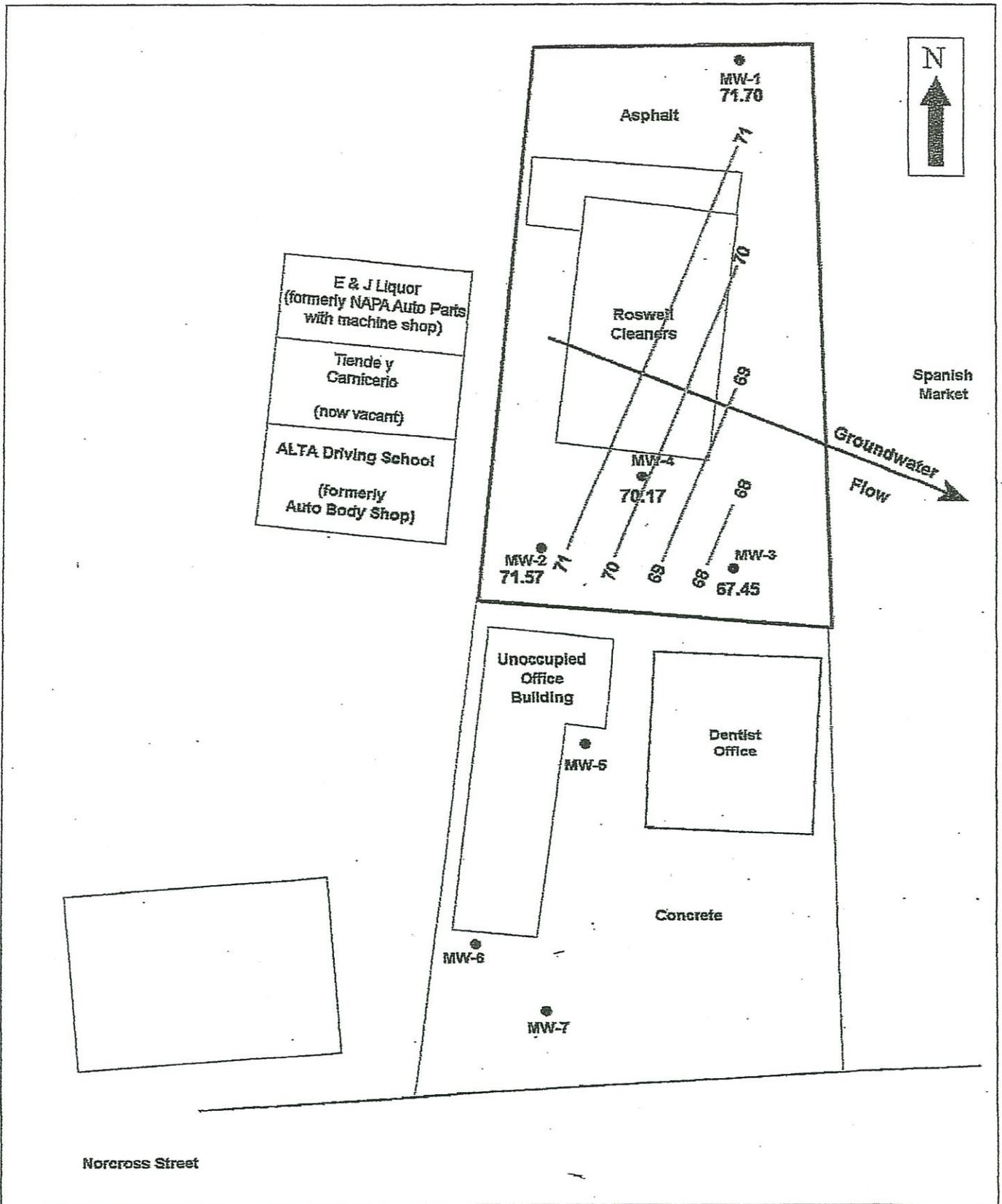


Figure 7C: Potentiometric Map, 04-16-2012

Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

acc

Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

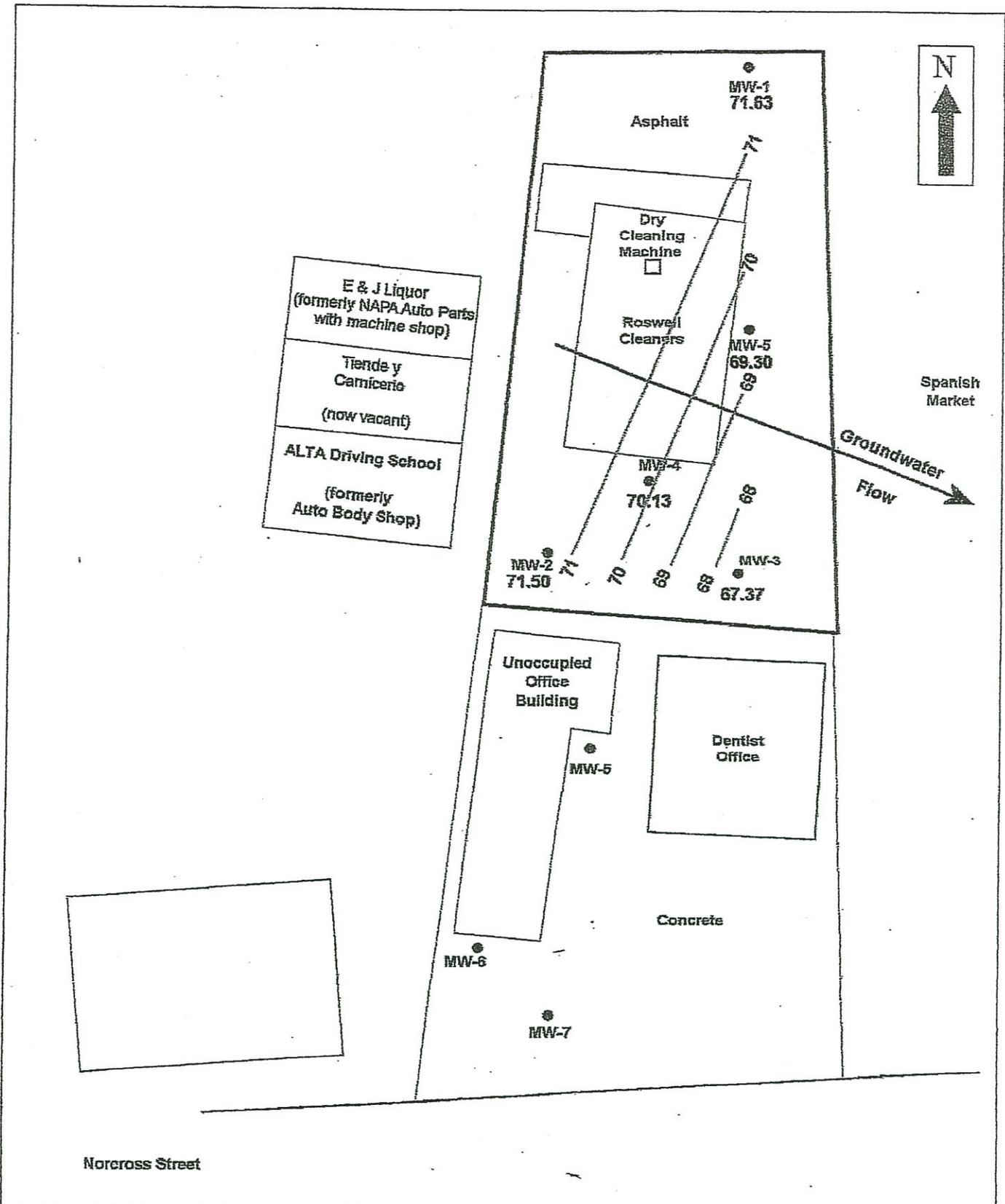


Figure 7D: Potentiometric Map, 04-18-2012

Roswell Cleaners and Coin
 Laundry
 1013 Alpharetta Street
 Roswell, Fulton County, Georgia

acc
 Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

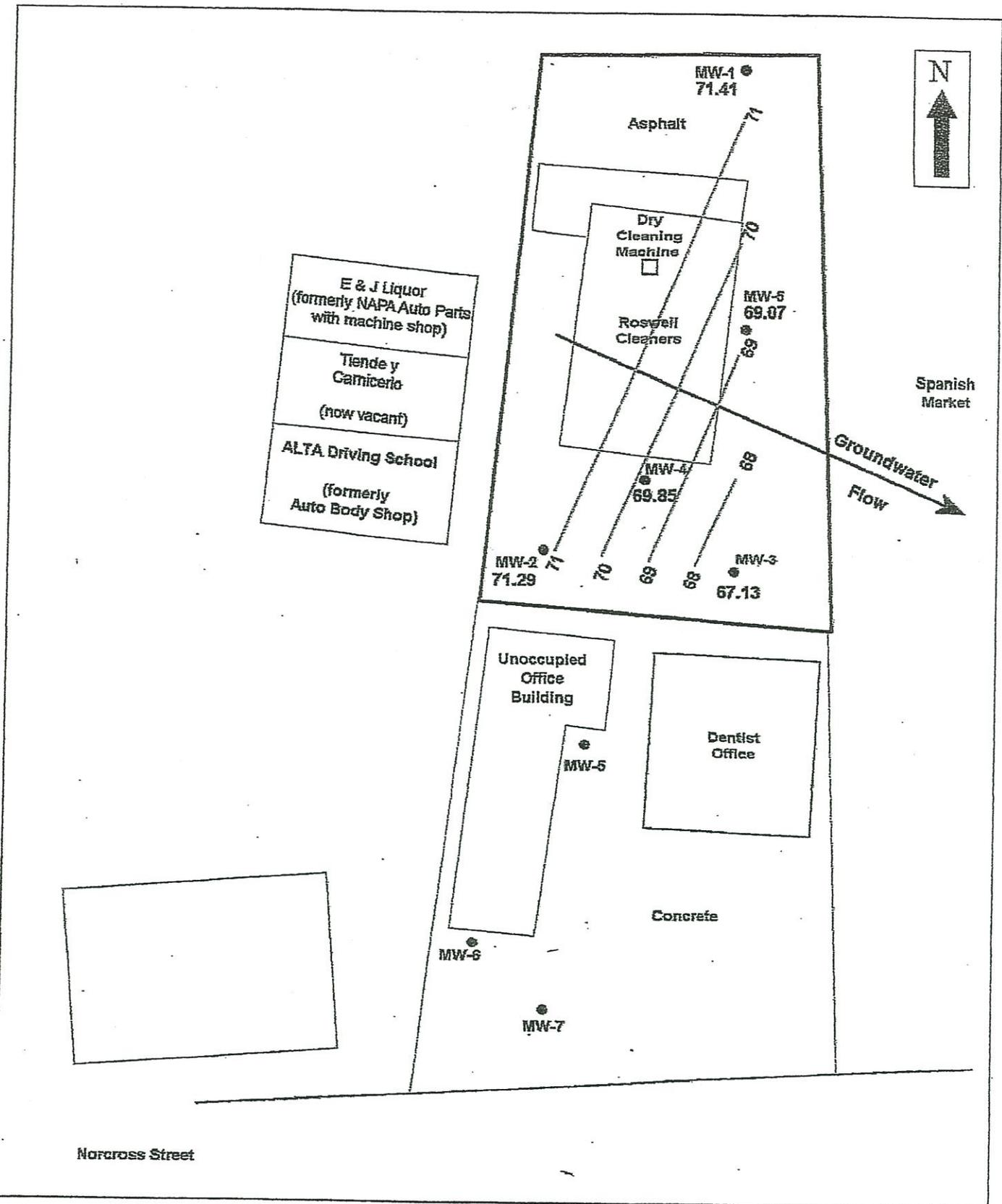


Figure 7E: Potentiometric Map, 05-16-2012

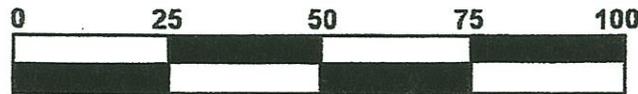
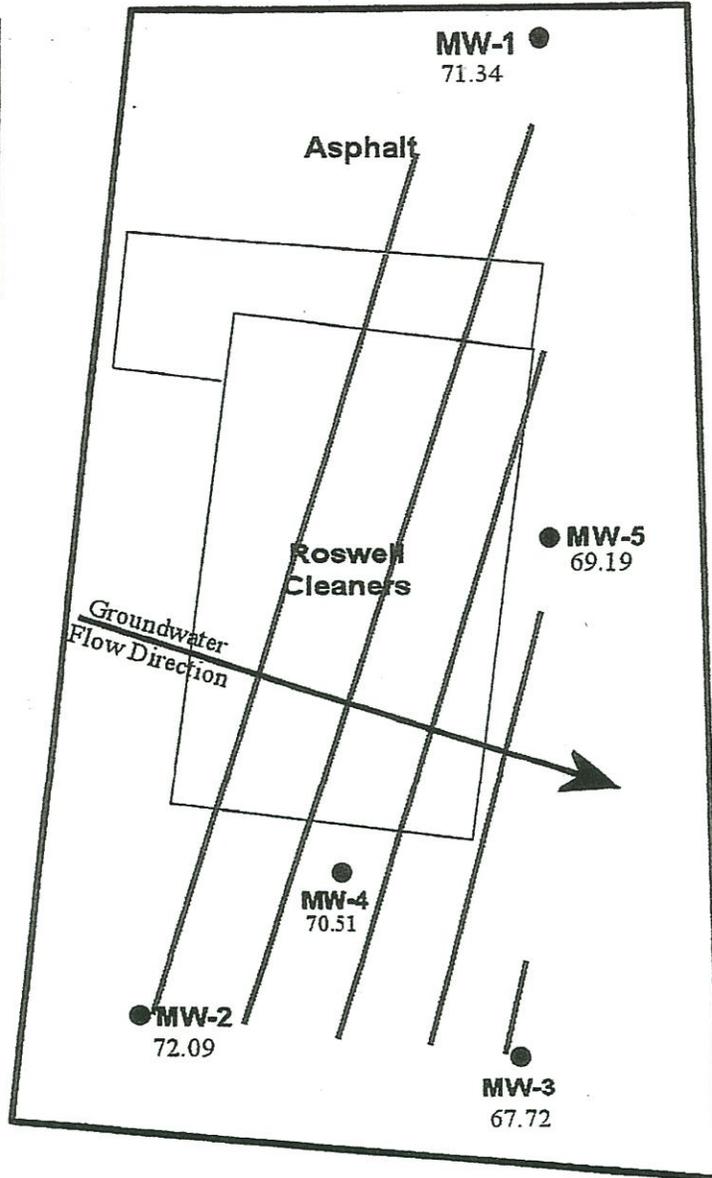
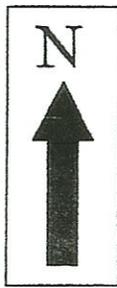
Roswell Cleaners and Coin
 Laundry
 1013 Alpharetta Street
 Roswell, Fulton County, Georgia

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Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.



Approximate Scale
(Feet)

**Groundwater Elevations
Measured March 14, 2013**

Figure 7F: Potentiometric Contours, 2013
Roswell Cleaners
1013 Alpharetta Street
Roswell, Fulton County, Georgia

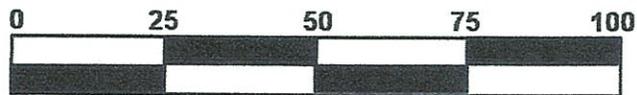
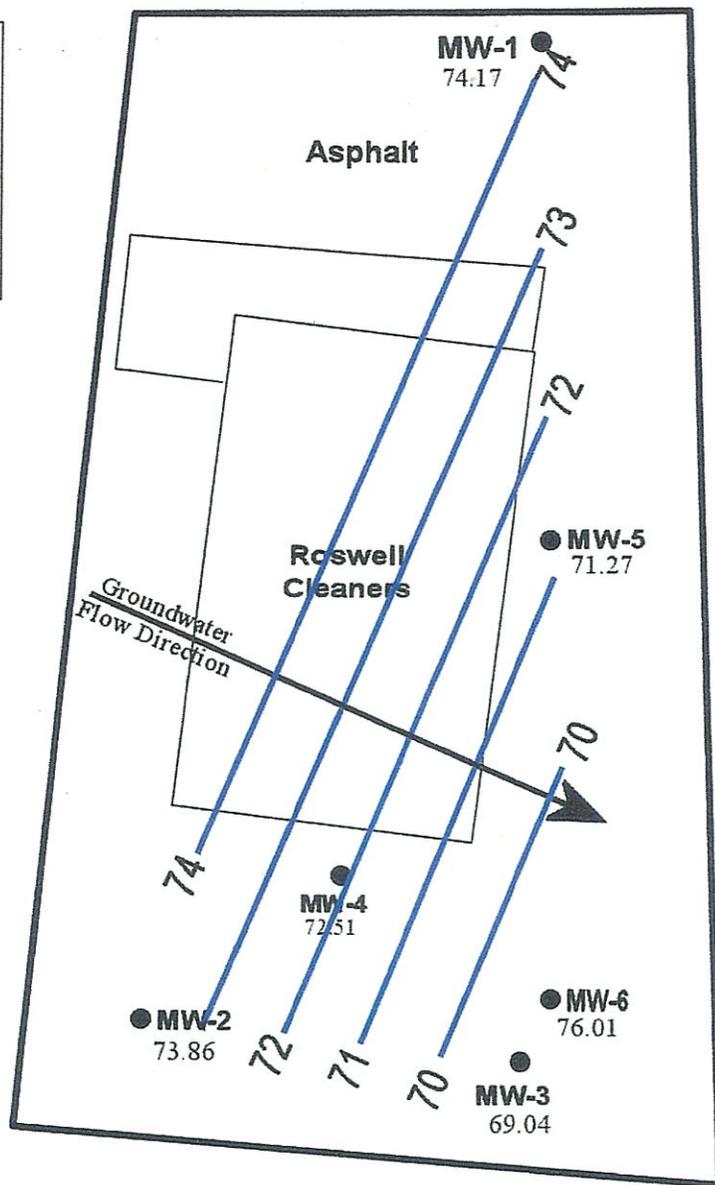
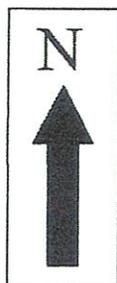
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Checked By: Peter Kallav, P.E.

Equipotential Contours are at 1-foot Intervals



Approximate Scale
(Feet)

Groundwater Elevations
Measured October 19, 2013

Note: MW-6 is a deep well and
was not used in determining groundwater contours

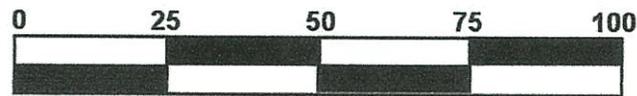
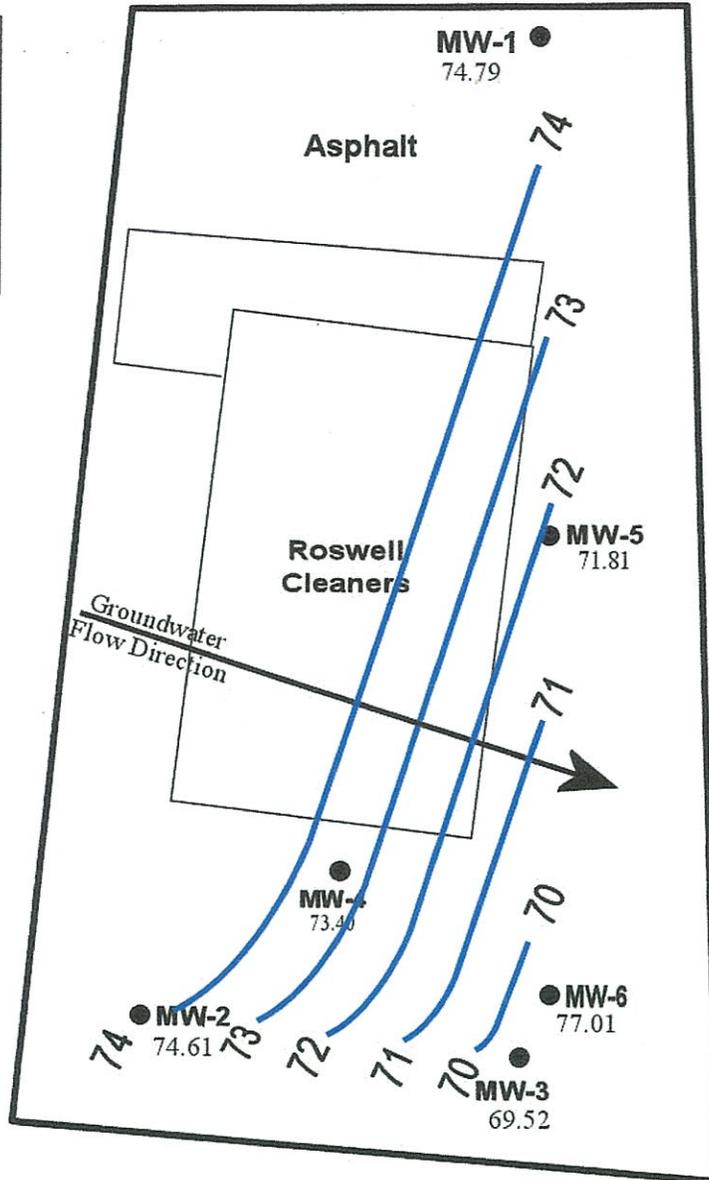
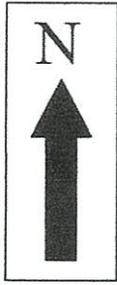
Figure 7G: Potentiometric Contours, October 2013
Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.



Approximate Scale
(Feet)

Groundwater Elevations
Measured March 6, 2014

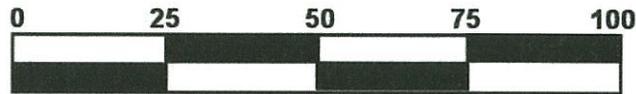
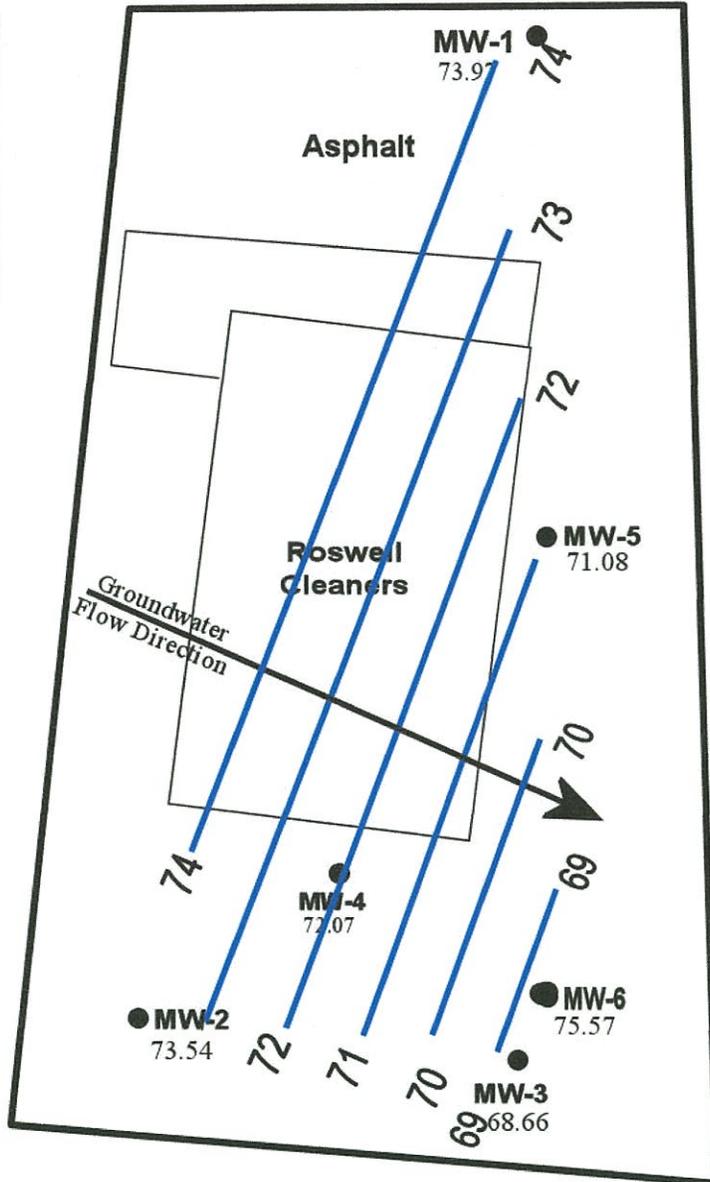
Note: MW-6 is a deep well and
was not used in determining groundwater contours

Figure 7H: Potentiometric Contours, March 6, 2014
Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.



Approximate Scale
(Feet)
Groundwater Elevations
Measured August 27, 2014

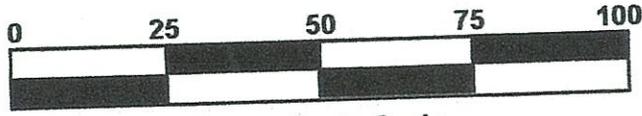
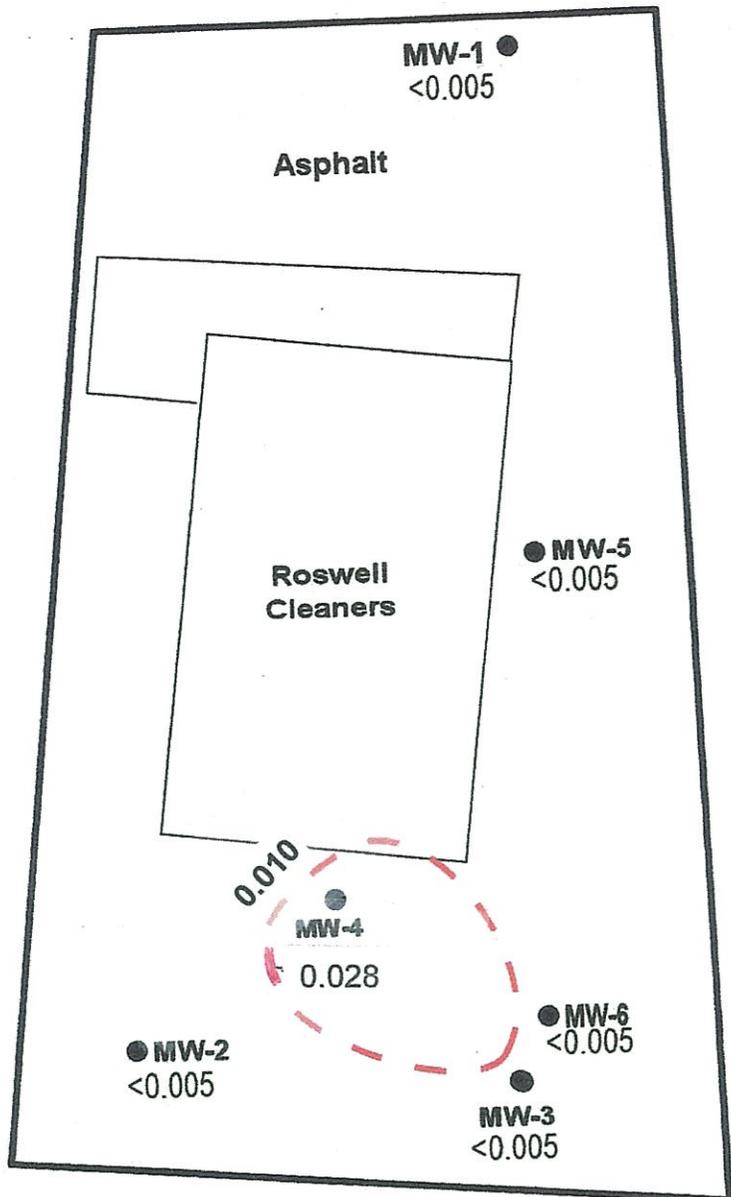
**Note: MW-6 is a deep well and
was not used in determining groundwater contours**

Figure 7I: Potentiometric Contours, August 27, 2014
Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.



Approximate Scale
(Feet)

0.01 Groundwater Isocontour for PCE (mg/L)
PCE Concentrations measured March 06, 2014

Figure 8: PCE Concentration in Groundwater, March 2014
Roswell Cleaners and Coin
Laundry
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Atlanta Environmental Consultants

Drawn By: Terri Drabek
Checked By: Peter Kallav. P.E.

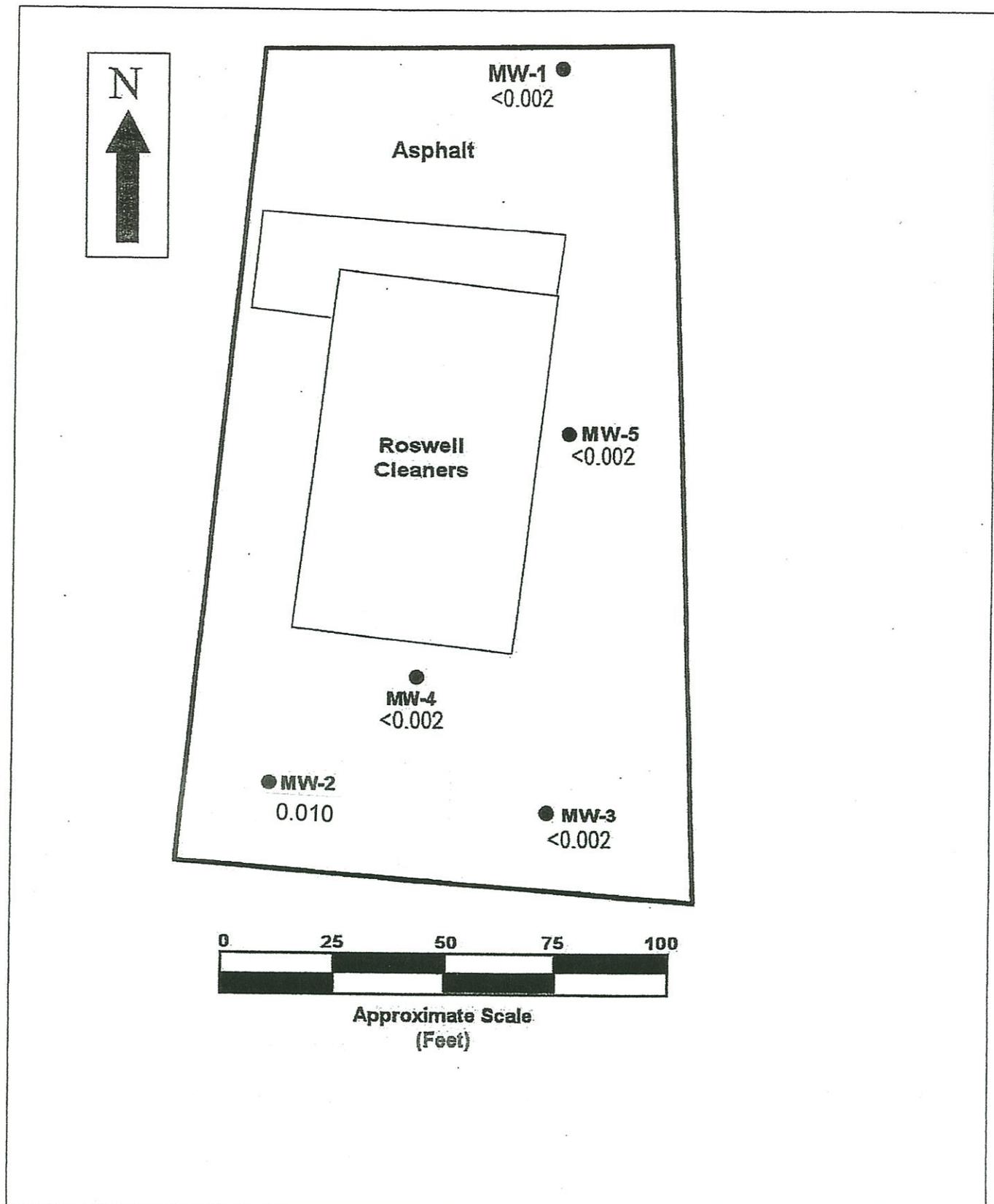


Figure 8B: Vinyl Chloride in Groundwater
 Roswell Cleaners and Coin
 Laundry
 1013 Alpharetta Street
 Roswell, Fulton County, Georgia

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Checked By: Peter Kallav. P.E.

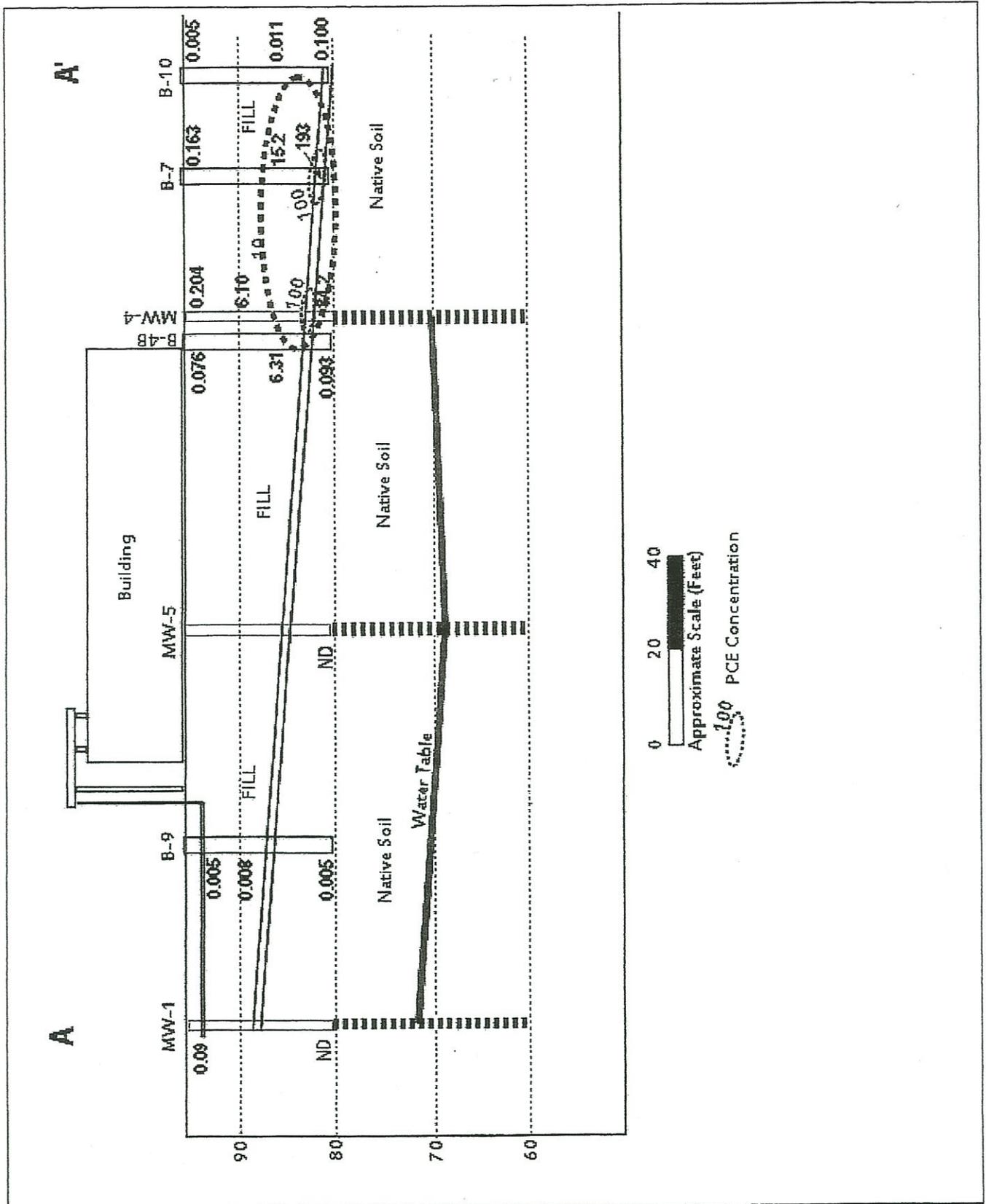


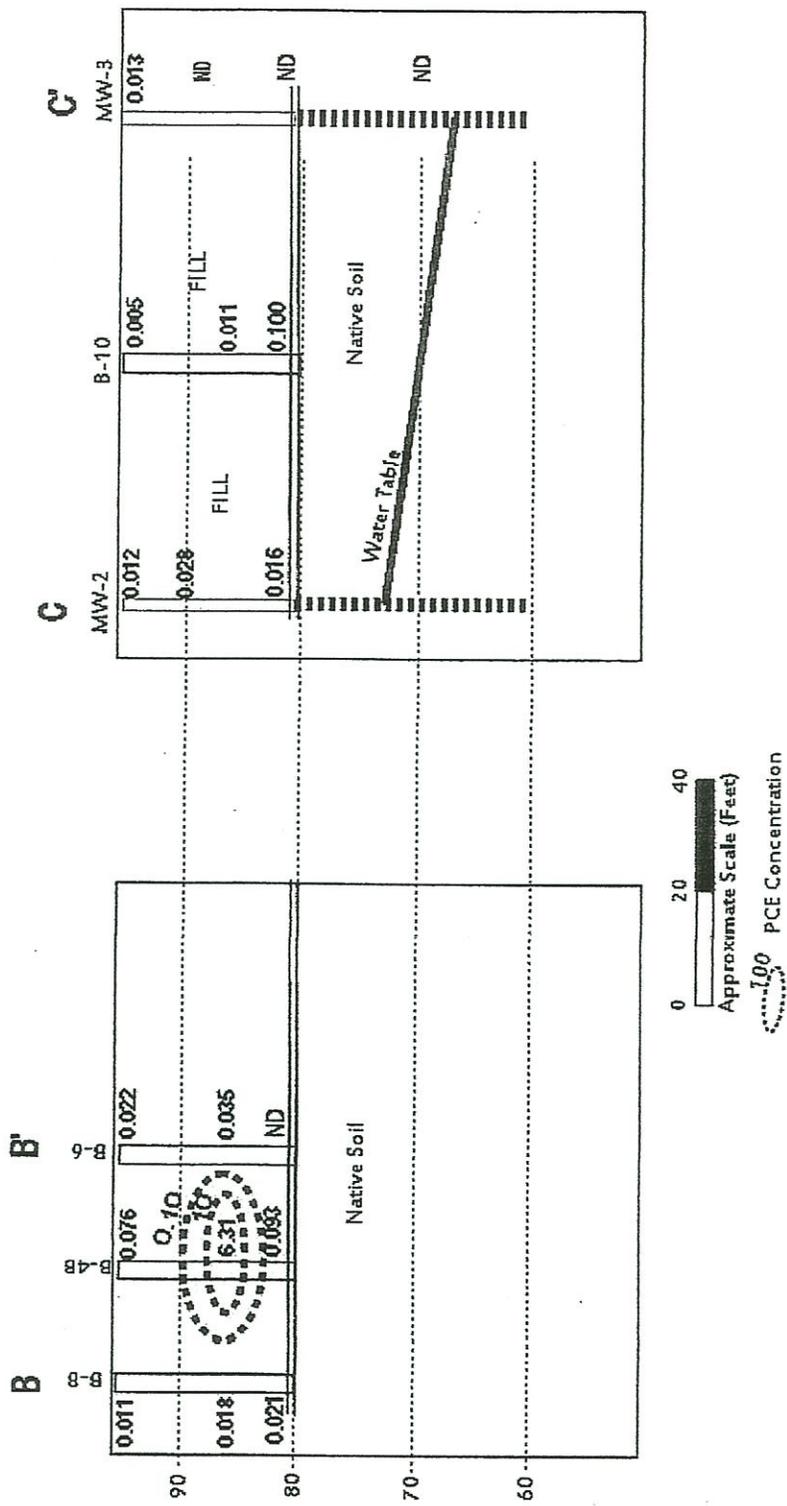
Figure 9: Cross-Section A-A'
 Roswell Cleaners
 1013 Alpharetta Street
 Roswell, Fulton County, Georgia

==== Original Topsoil Layer

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 Atlanta Environmental Consultants

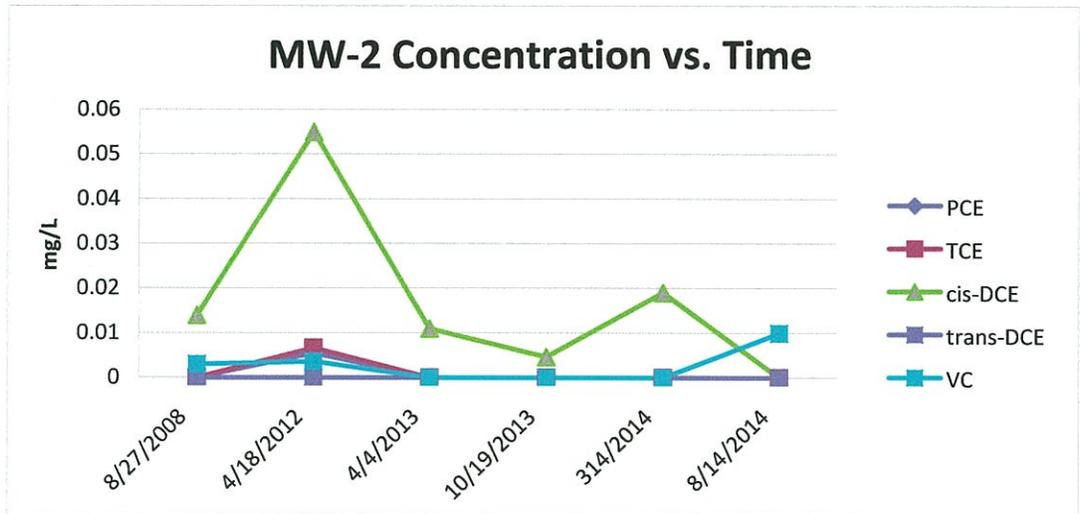
Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.



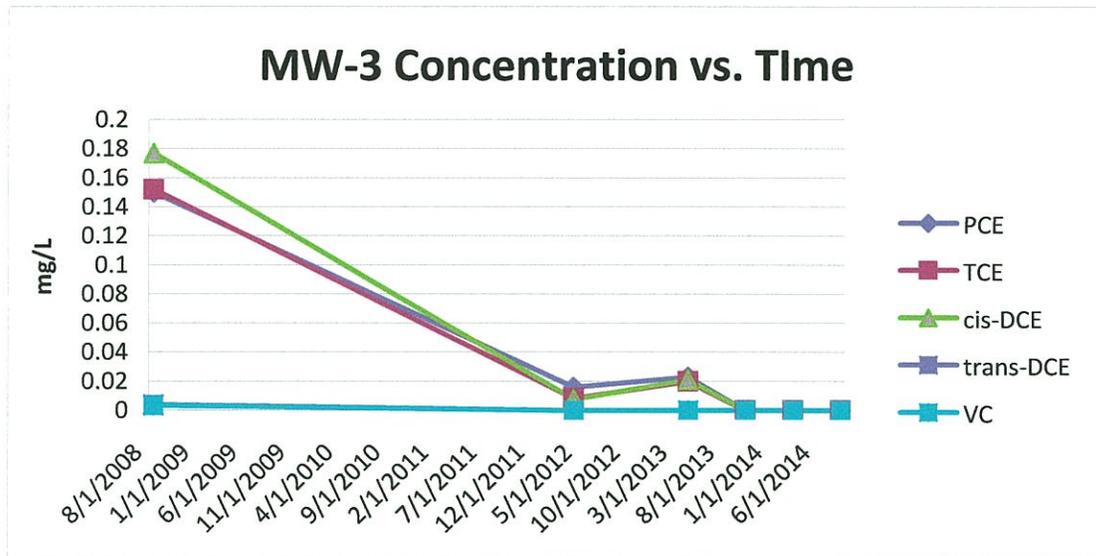
MW-2

	8/27/2008	4/18/2012	4/4/2013	10/19/2013	3/14/2014	8/14/2014
PCE	0	0.0055	0	0	0	0
TCE	0	0.0066	0	0	0	0
Cis-DCE	0.014	0.055	0.011	0.0046	0.019	0
Trans-DCE	0	0	0	0	0	0
VC	0.003	0.0036	0	0	0	0.01



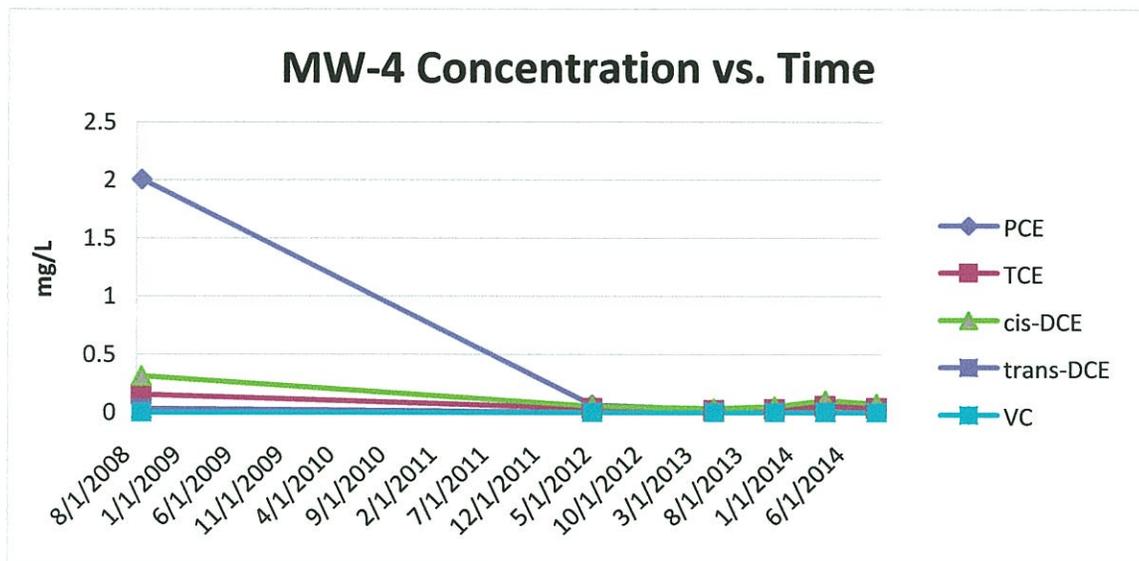
MW-3

	8/27/2008	4/18/2012	4/4/2013	10/13/2013	3/14/2014	8/14/2014
PCE	0.15	0.016	0.023	0	0	0
TCE	0.152	0.0084	0.02	0	0	0
Cis-DCE	0.177	0.0077	0.021	0	0	0
Trans-DCE	0.004	0	0	0	0	0
VC	0.0036	0	0	0	0	0



MW-4

	8/27/2008	4/18/2012	4/4/2013	10/13/2013	3/14/2014	8/14/2014
PCE	2.01	0.066	0.027	0.04	0.085	0.028
TCE	0.156	0.037	0.02	0.028	0.056	0.038
Cis-DCE	0.315	0.056	0.035	0.053	0.105	0.078
Trans-DCE	0.036	0.0031	0	0	0.0056	0
VC	0	0	0	0	0	0



TABLES

**TABLE 1. Soil Analytical Results
Roswell Cleaners
1013 Alpharetta Street, Roswell, Fulton County, Georgia 30075**

SAMPLE ID	SAMPLE Depth (feet)	SAMPLE Date	ANALYTICAL RESULTS - Milligrams Per Kilogram (mg/kg)					
			PCE	TCE	cis-DCE	trans-DCE	VC	OTHER
MW-1	1' 1'	8/25/2008	0.009	ND(.005)	ND(.005)	ND(.005)	ND(.010)	.016* (1)
MW-1	2' 2'	8/25/2008	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-1	5' 5'	8/25/2008	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-1	15' 15'	8/25/2008	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-2	1' 1'	8/25/2008	0.012	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-2	2' 2'	8/25/2008	0.009	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-2	5' 5'	8/25/2008	0.028	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-2	15' 15'	8/25/2008	0.016	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-3	1' 1'	8/25/2008	0.013	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-3	2' 2'	8/25/2008	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-3	5' 5'	8/25/2008	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-3	15' 15'	8/25/2008	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-3	25' 25'	8/25/2008	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-4	1' 1'	8/26/2008	1.540	0.023	ND(.005)	ND(.005)	ND(.010)	.005 *(2)
MW-4	2' 2'	8/26/2008	0.204	0.037	0.012	ND(.005)	ND(.010)	All ND
MW-4	5' 5'	8/26/2008	6.100	3.120	0.495	ND(.005)	ND(.010)	All ND
MW-4	15' 15'	8/26/2008	84.200	5.290	2.370	0.841	ND(.010)	* (3)
MW-1 2' Dup	2'	8/25/2008	ND(.005)	ND(.005)	0.061	ND(.005)	ND(.010)	All ND
MW-4 15' Dup	15'	8/26/2008	14.900	1.350	1.700	0.282	ND(.010)	* (4)
MW-5	20' 20'	4/16/2012	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
MW-5 Drum	Composite	4/16/2012	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
B-4B	1' 1'	3/14/2013	0.076	0.018	ND(.005)	ND(.005)	ND(.010)	All ND
B-4B	10' 10'	3/14/2013	6.310	0.259	0.006	ND(.005)	ND(.010)	* (5)
B-4B	15' 15'	3/14/2013	0.093	0.070	0.040	ND(.005)	ND(.010)	All ND
B-6	1' 1'	3/14/2013	0.022	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
B-6	10' 10'	3/14/2013	0.035	0.011	ND(.005)	ND(.005)	ND(.010)	All ND
B-6	15' 15'	3/14/2013	ND(.005)	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
B-7	1' 1'	3/14/2013	0.163	0.005	ND(.005)	ND(.005)	ND(.010)	All ND
B-7	10' 10'	3/14/2013	15.200	0.067	0.006	ND(.005)	ND(.010)	* (6)
B-7	15' 15'	3/14/2013	193.000	5.030	0.022	ND(.005)	ND(.010)	* (7)
B-8	1' 1'	3/14/2013	0.011	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
B-8	10' 10'	3/14/2013	0.018	0.102	0.310	0.035	ND(.010)	All ND
B-8	15' 15'	3/14/2013	0.021	ND(.005)	0.038	0.005	ND(.010)	All ND
B-9	2' 2'	3/14/2013	0.005	0.052	ND(.005)	ND(.005)	ND(.010)	* (8)
B-9	10' 10'	3/14/2013	0.008	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
B-9	15' 15'	3/14/2013	0.005	ND(.005)	ND(.005)	ND(.005)	ND(.010)	* (9)
B-10	2' 2'	3/14/2013	0.005	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
B-10	10' 10'	3/14/2013	0.011	ND(.005)	ND(.005)	ND(.005)	ND(.010)	All ND
B-10	15' 15'	3/14/2013	0.100	0.046	ND(.005)	ND(.005)	ND(.010)	All ND

Note: Footnotes are on the following page.

FOOTNOTES

NOTES: MW-1, MW-2, MW-3 and MW-4 sampled 8-25-08; MW-5 sampled 4-16-12
All other samples, B-6 through B-10, as well as B-4B, were sampled on March 14, 2013.
Concentrations are given in milligrams per kilogram (mg/kg).
Volatile Organic Compounds (VOC) were extracted by EPA Method 5035 and
were analyzed by EPA Method 8260B

ND = Not Detected (i.e., compound, if present, is Below Quantitation Limits)

PCE = Tetrachloroethene, also known as perchloroethylene, tetrachloroethylene, or perc

TCE = Trichloroethene, also known as trichloroethylene

DCE = Dichloroethene

VC = Vinyl Chloride

Other Compounds identified in soil analyses are as follows:

*(1) Naphthalene 0.016

*(2) Toluene 0.005

*(3) 0.010 Ethylbenzene, 0.012 1,3,5-Trimethylbenzene, 0.041 m,p-Xylene and 0.015 o-Xylene

*(4) 0.022 Ethylbenzene, 0.006 Toluene, 0.027 1,2,4-Trimethylbenzene,
0.009 1,3,5-Trimethylbenzene, 0.097 m,p-Xylene, 0.036 o-Xylene

*(5) 0.013 Ethylbenzene, 0.016 1,2,4-Trimethylbenzene, 0.005 1,3,5-Trimethylbenzene,
0.063 m,p-Xylene, and 0.023 o-Xylene

*(6) 0.010 1,2,4-Trimethylbenzene, 0.056 m,p-Xylene and 0.017 o-Xylene.

*(7) 0.21 Ethylbenzene, 0.96 m,p-Xylene and 0.21 o-Xylene.

*(8) 0.006 Ethylbenzene, 0.005 Benzene, 0.023 m,p-Xylene and 0.009 o-Xylene.

*(9) 0.185 Acetone and 0.005 Carbon disulfide

The number of decimal places are equalized to improve ease of comparisons between relative concentrations.

Number of decimal places shown do not necessarily represent number of significant digits (see lab report).

**TABLE 2. Groundwater Analytical Results
Roswell Cleaners
1013 Alpharetta Street, Roswell, Fulton County, Georgia 30075**

Groundwater samples were collected Aug 27, 2008, Apr 18, 2012, Apr 14, 2013, Oct 19, 2013, March 6, 2014, and August 27, 2014

SAMPLE ID and Approx Date	ANALYTICAL RESULTS - Milligrams Per Liter (mg/L)					
	PCE	TCE	cis-DCE	trans-DCE	VC	OTHER
MW-1 2008	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-1 2012	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-1 Mar 13	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-1 Oct 13	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-1 Mar 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-1 Aug 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-2 2008	ND (0.005)	ND (0.005)	0.0140	ND (0.005)	0.0030	*
MW-2 2012	0.0055	0.0066	0.0550	ND (0.005)	0.0036	
MW-2 Mar 13	ND (0.005)	ND (0.005)	0.0110	ND (0.005)	ND (0.002)	
MW-2 Oct 13	ND (0.005)	ND (0.005)	J 0.0046	ND (0.005)	ND (0.002)	
MW-2 Mar 14	ND (0.005)	ND (0.005)	0.0190	ND (0.005)	ND (0.002)	
MW-2 Aug 14	ND (0.005)	ND (0.005)	0.0250	ND (0.005)	0.0100	
MW-3 2008	0.1500	0.1520	0.1770	0.0040	ND (0.002)	
MW-3 2012	0.0160	0.0084	0.0077	ND (0.005)	ND (0.002)	
MW-3 Mar 13	0.0230	0.0200	0.0210	ND (0.005)	ND (0.002)	
MW-3 Oct 13	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-3 Mar 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-3 Aug 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-4 2008	2.0100	0.1560	0.3150	0.0360	ND (0.002)	
MW-4 2012	0.0660	0.0370	0.0560	0.0031	ND (0.002)	
MW-4 Mar 13	0.0270	0.0200	0.0350	ND (0.005)	ND (0.002)	
MW-4 Oct 13	0.0400	0.0280	0.0530	ND (0.005)	ND (0.002)	
MW-4 Mar 14	0.0850	0.0560	0.1050	0.0056	ND (0.002)	
MW-4 Aug 14	0.0280	0.0380	0.0780	ND (0.005)	ND (0.002)	
MW-5 2012	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-5 Apr 13	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-5 Oct 13	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-5 Mar 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-5 Aug 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-6D Oct 13	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	***
MW-6D Mar 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-6D Aug 14	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	****
MW-5 Lindsay 08	ND (0.005)	ND (0.005)	0.0050	ND (0.005)	ND (0.002)	
MW-6 Lindsay 08	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-7 Lindsay 08	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
Eqpt Blank 08	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	**
Trip Blank 08	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	

Note: Footnotes are on the following page

FOOTNOTES FOR Table 2. Groundwater Analytical Results.

Concentrations are given in milligrams per liter (mg/L)

Volatile Organic Compounds (VOC) were analyzed by EPA Method 8260B

J before the sample concentration indicates estimated concentration was > MDL, but < PQL.

ND = Not Detected (Below Quantitation Limits)

PCE = Tetrachloroethene, also known as perchloroethylene, tetrachloroethylene, or perc

TCE = Trichloroethene, also known as trichloroethylene

DCE = Dichloroethene

VC = Vinyl Chloride

A monitoring well was located on the Lindsay Property that was only sampled in 2008. This well will be referred to as MW-5 Lindsay.

A Monitoring Well was installed on the Bowen property. "MW-5" without qualifiers refers to this well

Deep Monitoring Well, MW-6, 70' deep, was installed on the Bowen Property on October 11, 2013

2008 or 08 = Sample was collected on August 27, 2008

2012 or 12 = Sample was collected on April 18, 2012

Mar 13 = Sample was collected on March 14, 2013

Oct 13 = Sample was collected on October 19, 2013

* = Chloroform 0.004 mg/l

** = Naphthalene 0.006 mg/l

*** = Chloroform detected at 0.011 mg/l

**** = Chloroform 0.044 mg/l; Bromodichloromethane 0.0056 mg/l

The number of decimal places have been equalized to improve the ease of comparisons between relative concentrations. Therefore, the number of decimal places shown do not necessarily equal the number of significant digits. See the lab report for the correct number of significant digits.

**TABLE 3. Sub-Slab Soil Vapor Analytical Results
Roswell Cleaners
1013 Alpharetta Street
Roswell, Fulton County, Georgia 30075**

SAMPLE ID	Compound	SUB-SLAB VAPOR SAMPLE ANALYTICAL RESULTS		
		parts per billion by volume(ppbv)	micrograms/cubic meter (ug/m3)	NOTES
	PRIMARY TARGET COMPOUNDS			
SSVS-1	Tetrachloroethene (PCE)	39.00	270.00	
SSVS-1	Trichloroethene (TCE)	4.90	26.00	
SSVS-1	cis-1,2-Dichloroethene	2.40	10.00	
SSVS-1	trans-1,2-Dichloroethene	ND(0.50)	ND(2.0)	not detected
SSVS-1	Vinyl Chloride	ND(0.50)	ND(1.3)	not detected
	OTHER TO-15 TARGET COMPOUNDS			
SSVS-1	Acetone	45.00	110.00	
SSVS-1	Acetonitrile	0.72	1.20	
SSVS-1	Benzene	5.90	19.00	
SSVS-1	n-Butane	1.80	4.20	
SSVS-1	2-Butanone (MEK)	2.20	6.60	
SSVS-1	Chloromethane	0.52	1.10	
SSVS-1	Ethanol	33.00	63.00	
SSVS-1	Ethyl Acetate	1.20	4.20	
SSVS-1	4-Ethyltoluene	0.54	2.70	
SSVS-1	n-Hexane	0.58	2.00	
SSVS-1	Isopropyl Alcohol	180.00	450.00	
SSVS-1	Naphthalene	0.54	2.80	
SSVS-1	Tertiary Butyl Alcohol (TBA)	8.40	25.00	
SSVS-1	Toluene	4.60	17.00	
SSVS-1	1,2,4-Trimethylbenzene	0.55	2.70	
SSVS-1	m,p Xylene	1.60	7.20	
SSVS-1	ortho Xylene	0.60	2.60	
	TENTATIVELY IDENTIFIED COMPOUNDS (TICs)			
SSVS-1	Acetaldehyde	5.50	9.90	
SSVS-1	Butanal	5.00	15.00	
SSVS-1	Difluorochloromethane	3.80	5.47	
SSVS-1	Hexanal	1.40	5.90	
SSVS-1	Limonene	5.90	33.00	
SSVS-1	Propanal,2,2-dimethyl-	2.40	8.40	
	Total Volatile Organic Compounds			
SSVS-1	TVOC TO-15 Target Compounds	340.00	1000.00	
SSVS-1	TVOC TICs only	24.00	85.00	
SSVS-1	TVOC Total of all VOCs detected	360.00	1100.00	rounded off

NOTES:

ND = Not Detected

Concentrations are given in parts per billion by volume (ppbv) and micrograms per cubic meter (ug/m3)

Compounds not detected are not listed (except primary targets). See Laboratory Analytical Report.

The number of decimal places are equalized to improve comparisons between relative concentrations.

Number of decimal places shown do not necessarily represent number of significant figures (see lab report).

**Table 4. Water Table Elevations
Roswell Cleaners
1013 Alpharetta Street
Roswell, Fulton County, Georgia**

MONITORING WELL	DATE MEASURED	TOP-OF-CASING ELEVATION (feet)	DEPTH TO WATER (feet)	WATER TABLE ELEVATION (feet)	NOTES
MW-1	8/26/2008	93.77	23.56	70.21	
MW-1	8/27/2008	93.77	23.63	70.14	
MW-1	9/28/2008	93.77	23.98	69.79	slug test date
MW-1	4/16/2012	93.77	22.07	71.70	
MW-1	4/18/2012	93.77	22.14	71.63	
MW-1	5/16/2012	93.77	22.36	71.41	
MW-1	3/14/2013	93.77	22.43	71.34	
MW-1	9/19/2013	93.77	19.60	74.17	
MW-1	3/6/2014	93.77	18.98	74.79	
MW-1	8/27/2014	93.77	19.80	73.97	
MW-2	8/26/2008	94.12	24.49	69.63	
MW-2	8/27/2008	94.12	24.27	69.85	
MW-2	9/28/2008	94.12	24.82	69.30	slug test date
MW-2	4/16/2012	94.12	22.55	71.57	
MW-2	4/18/2012	94.12	22.62	71.50	
MW-2	5/16/2012	94.12	22.83	71.29	
MW-2	3/14/2013	94.12	22.03	72.09	
MW-2	9/19/2013	94.12	20.26	73.86	
MW-2	3/6/2014	94.12	19.51	74.61	
MW-2	8/27/2014	94.12	20.58	73.54	
MW-3	8/26/2008	94.87	28.46	66.41	
MW-3	8/27/2008	94.87	28.40	66.47	
MW-3	9/28/2008	94.87	28.63	66.24	slug test date
MW-3	4/16/2012	94.87	27.42	67.45	
MW-3	4/18/2012	94.87	27.50	67.37	
MW-3	5/16/2012	94.87	27.74	67.13	
MW-3	3/14/2013	94.87	27.15	67.72	
MW-3	9/19/2013	94.87	25.83	69.04	
MW-3	3/6/2014	94.87	25.35	69.52	
MW-3	8/27/2014	94.87	26.21	68.66	
MW-4	8/26/2008	94.57	26.22	68.35	
MW-4	8/27/2008	94.57	25.77	68.80	
MW-4	4/16/2012	94.57	24.40	70.17	
MW-4	4/18/2012	94.57	24.44	70.13	
MW-4	5/16/2012	94.57	24.72	69.85	
MW-4	3/14/2013	94.57	24.06	70.51	
MW-4	9/19/2013	94.57	22.06	72.51	
MW-4	3/6/2014	94.57	21.17	73.40	
MW-4	8/27/2014	94.57	22.50	72.07	

Note: Table 4 Continued on the next page.

**Table 4. Water Table Elevations (Cont.)
Roswell Cleaners
1013 Alpharetta Street
Roswell, Fulton County, Georgia**

MONITORING WELL	DATE MEASURED	TOP-OF-CASING ELEVATION	DEPTH TO WATER	WATER TABLE ELEVATION	NOTES
		(feet)	(feet)	(feet)	
MW-5	4/18/2012	94.82	25.52	69.30	
MW-5	5/16/2012	94.82	25.75	69.07	
MW-5	3/14/2013	94.82	25.63	69.19	
MW-5	9/19/2013	94.82	23.55	71.27	
MW-5	3/6/2014	94.82	23.01	71.81	
MW-5	8/27/2014	94.82	23.74	71.08	
MW-6D	9/19/2013	95.54	19.53	76.01	deep well
MW-6D	3/6/2014	95.54	18.53	77.01	
MW-6D	8/27/2014	95.54	19.97	75.57	
MW-5 Lindsay	8/26/2008	82.92	15.22	67.70	
MW-5 Lindsay	8/27/2008	82.92	15.00	67.92	
MW-6 Lindsay	8/26/2008	81.59	14.60	66.99	
MW-6 Lindsay	8/27/2008	81.59	14.26	67.33	
MW-7 Lindsay	8/26/2008	81.18	16.00	65.18	
MW-7 Lindsay	8/27/2008	81.18	15.83	65.35	

NOTES:

1. Top of Casing Elevations are relative elevations, relative to an assumed height of instrument (H.I.) of 100.00 feet on August 26, 2008.
2. Gauging conducted on dates (and at monitoring wells) utilized for conducting slug tests is noted in the last column.
3. MW-5 and MW-6 (without notation) refers to wells on the Bowen Property. Wells denoted "Lindsay" are on the Lindsay Property. These wells have not been sampled by AEC since 2008; access has not been available.

ATTACHMENTS

WELL PURGING AND SAMPLING LOGS

WELL PURGING AND SAMPLING DATA

WELL NO: MW-4

DATE: <u>08-27-14</u>		PROJECT NAME: <u>ROSWELL COUNTRIES</u>			PROJECT NO. <u>REB-2614</u>			
WEATHER CONDITIONS: <u>PARTLY CLOUDY, WARM, CALM</u>								
WELL DIAMETER (IN.) <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> Other (specify)								
SAMPLE TYPE <input checked="" type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SURFACE WATER <input type="checkbox"/> OTHER								
WELL DEPTH (BTOC) <u>35'</u> FT.				DEPTH TO WATER BEFORE PURGE <u>22.50</u>				
HEIGHT OF COLUMN OF WATER <u>13'</u> FT.				CALCULATED ONE WELL VOLUME <u>2.2 gal.</u>				
PURGING DEVICE: <input checked="" type="checkbox"/> DEDICATED <input type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED								
SAMPLING DEVICE: <input checked="" type="checkbox"/> DEDICATED <input checked="" type="checkbox"/> DISPOSABLE <input type="checkbox"/> DECONTAMINATED								
EQUIP'T DECON: <input checked="" type="checkbox"/> TAP WATER WASH <input checked="" type="checkbox"/> ISOPROPANOL <input checked="" type="checkbox"/> ANALYTE FREE FINAL RINSE								
<input checked="" type="checkbox"/> ALCONOX WASH <input type="checkbox"/> DIST/DEION 1 RINSE <input type="checkbox"/> OTHER SOLVENT <input type="checkbox"/> DIST/DEION FINAL RINSE								
<input type="checkbox"/> LIQUINOX WASH <input type="checkbox"/> DIST/DEION 2 RINSE <input type="checkbox"/> TAP WATER FINAL RINSE <input type="checkbox"/> AIR DRY								
CONTAINER PRESERVATION: <input checked="" type="checkbox"/> LAB PRESERVED <input type="checkbox"/> FIELD PRESERVED								
WATER ANALYZER MAKE, MODEL, SERIAL NO. <u>HANNA (U53) U-5000 CNR06600</u>								
ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP <input type="checkbox"/> F <input checked="" type="checkbox"/> C	pH	SPECIFIC CONDUCT (mS/cm)	TURBIDITY (NTUs)	DISS. OXYGEN (mg/L)	WATER APPEAR. CL=CLEAR CO-CLOUDY TU=TURBID	REMARKS: ODOR COLOR PID
<u>2:06</u>	<u>INITIAL</u>	<u>24.54</u>	<u>5.29</u>	<u>0.136</u>	<u>132</u>	<u>2.68</u>	<u>CO</u>	<u>lt tan 181</u>
<u>2:09</u>	<u>1</u>	<u>23.63</u>	<u>5.19</u>	<u>0.135</u>	<u>128</u>	<u>4.94</u>	<u>CO</u>	<u>" " 184</u>
<u>2:13</u>	<u>2.5</u>	<u>23.79</u>	<u>5.18</u>	<u>0.135</u>	<u>117</u>	<u>3.25</u>	<u>CO</u>	<u>" " 194</u>
<u>2:16</u>	<u>4</u>	<u>24.80</u>	<u>4.02</u>	<u>-</u>	<u>-</u>	<u>9.813</u>	<u>CO->CL</u>	<u>" " 221</u>
<u>2:20</u>	<u>5</u>	<u>24.85</u>	<u>4.11</u>	<u>-</u>	<u>536?</u>	<u>8.03?</u>	<u>CO->CL</u>	<u>" " 204</u>
<u>2:24</u>	<u>6.5</u>	<u>24.89</u>	<u>4.14</u>	<u>-</u>	<u>4.39</u>	<u>3.17</u>	<u>CO->CL</u>	<u>" " 209</u>
DEPTH TO WATER AFTER PURGING (BTOC) <u>23.84</u> SAMPLE FILTERED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SIZE								
NOTES:								
				SAMPLE TIME: <u>2:30</u> ID# <u>MW-4</u>				
				DUPLICATE <input type="checkbox"/> TIME: ID#				
				EQUIP. BLANK <input type="checkbox"/> TIME: ID#				
PREPARED BY: <u>PETER T. KALOUY</u>								

VOLUME OF WATER IN 1 FOOT: 0.0102 Gal in 1/2 inch 0.023 Gal in 3/4 inch 0.041 Gal in 1" DIA pipe
 0.17 Gal in 2" inch 0.65 Gal in 4 inch 1.47 Gal in 6 inch DIA pipe

GROUNDWATER ANALYTICAL RESULTS

Laboratory Report

ACL Project #: 67071**Client Proj #: REB-2414 / Roswell Cleaners****Prepared For:**Atlanta Environmental Consultants
3440 Blue Springs Rd.
Suite 503
Kennesaw, GA 30144-0000**Attention:** Mr. Peter Kallay**Report Date:** 09/11/2014

This report contains 10 pages.
(including this cover page and chain of custody)



John Andros
Lab Manager



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Explanation of Symbols and Abbreviations

Listed below are common symbols and abbreviations typically used in reporting technical data:

PQL	Practical Quantitation Limit	MDL	Method Detection Limit
BQL	Below Quantitation Limit	BDL	Below Method Detection Limit
MPN	Most Probable Number	TNTC	Too Numerous To Count
NTU	Nephelometric Turbidity Units	BTU	British Thermal Units
°C	Degrees Centigrade	°F	Degrees Fahrenheit
μ mhos/cm	micromhos/cm	cfu	Colony Forming Unit
DF	Dilution Factor	meq	milliequivalents
kg	kilogram(s)	g	gram(s)
mg	milligram(s)	μ g	microgram(s)
l or L	liter(s)	ml or mL	milliliter(s)
μ l or μ L	microliter(s)	m ³	cubic meter(s)
lb	pound(s)	ft ³	cubic foot(feet)
ft	foot(feet)	su	Standard Units
<	Less than	>	Greater than

mg/L, mg/kg Units of concentration in milligrams per liter for liquids and milligrams per kilogram for solids. Also referred to as parts per million or "ppm" when the assumption is made that the specific gravity or density is one (1 g/mL).

μ g/L, μ g/kg Units of concentration in micrograms per liter for liquids and micrograms per kilogram for solids. Also referred to as parts per billion or "ppb" when the assumption is made that the specific gravity or density is one (1 g/mL).

wt % Units of concentration expressed on a weight/weight basis (e.g. grams per 100 grams).

Surrogate Compound(s) added by the laboratory for quality control monitoring.

mg/kg,dw Units of concentration in milligrams per kilogram (dry weight basis).

Data Qualifiers:

B	Analyte was also detected in the method blank
E	Estimated value - analyte was detected at concentration greater than upper calibration limit
F	Estimated value - analyte should have been tested as a field parameter
H	Estimated value - sample was analyzed beyond the accepted holding time
J	Estimated value - analyte was detected < PQL and \geq MDL
L	The batch-specific LCS and/or LCSD was not within lab control limits for this analyte
M	The batch-specific MS and/or MSD was not within lab control limits for this analyte
R	The RPD between batch-specific sample/dup or MS/MSD was not within lab control limits for this analyte
S	The surrogate recovery was not within quality control limits
Z	Laboratory specific qualifier – refer to case narrative
*	Performed in strict accordance with the procedures and controls of the ACL quality system, but not currently in the NELAC list of certified analytes/methods

Solid samples (i.e. soil, sludge, solid waste) are reported on a wet weight basis unless otherwise noted. Estimated uncertainty values are available upon request.

Representation and Limitation of Liability – The accuracy of all analytical results for samples begins as it is received by the laboratory. The integrity of the sample begins at the time it is placed in the possession of authorized ACL personnel. All other warranties, expressed or implied, are disclaimed. Liability is limited to the cost of the analysis.

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Client: Atlanta Environmental Consultants
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 Suite 503
 Kennesaw, GA 30144-0000

Client Proj #: REB-2414 / Roswell Cleaners
ACL Project #: 67071
Date Received: 08/27/2014
Date Reported: 09/11/2014

Contact: Mr. Peter Kallay

Volatile Organics (8260B)

Sample ID: MW-1

Matrix: Water

ACL Sample #: 303856

Date Sampled: 08/27/2014 11:35

Date Prepared:

Date Analyzed: 09/04/2014

Units: µg/L

Analyst: JG

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	1,3-Dichloropropane	BQL	5.0
Acrolein	BQL	50	2,2-Dichloropropane	BQL	5.0
Acrylonitrile	BQL	50	1,1-Dichloropropene	BQL	5.0
Benzene	BQL	5.0	cis-1,3-Dichloropropene	BQL	5.0
Bromobenzene	BQL	5.0	trans-1,3-Dichloropropene	BQL	5.0
Bromochloromethane	BQL	5.0	Ethylbenzene	BQL	5.0
Bromodichloromethane	BQL	5.0	Hexachlorobutadiene	BQL	5.0
Bromoform	BQL	5.0	2-Hexanone	BQL	50
Bromomethane	BQL	10	Isopropylbenzene	BQL	5.0
2-Butanone	BQL	100	p-Isopropyltoluene	BQL	5.0
n-Butylbenzene	BQL	5.0	4-Methyl-2-pentanone	BQL	50
sec-Butylbenzene	BQL	5.0	Methylene chloride	BQL	5.0
tert-Butylbenzene	BQL	5.0	Naphthalene	BQL	5.0
Carbon disulfide	BQL	5.0	n-Propylbenzene	BQL	5.0
Carbon tetrachloride	BQL	5.0	Styrene	BQL	5.0
Chlorobenzene	BQL	5.0	1,1,1,2-Tetrachloroethane	BQL	5.0
Chloroethane	BQL	10	1,1,2,2-Tetrachloroethane	BQL	5.0
2-Chloroethylvinyl ether	BQL	10	Tetrachloroethene	BQL	5.0
Chloroform	BQL	5.0	Toluene	BQL	5.0
Chloromethane	BQL	10	1,2,3-Trichlorobenzene	BQL	5.0
2-Chlorotoluene	BQL	5.0	1,2,4-Trichlorobenzene	BQL	5.0
4-Chlorotoluene	BQL	5.0	1,1,1-Trichloroethane	BQL	5.0
1,2-Dibromo-3-chloropropane	BQL	5.0	1,1,2-Trichloroethane	BQL	5.0
Dibromochloromethane	BQL	5.0	Trichloroethene	BQL	5.0
1,2-Dibromoethane	BQL	5.0	Trichlorofluoromethane	BQL	5.0
Dibromomethane	BQL	5.0	1,2,3-Trichloropropane	BQL	5.0
1,2-Dichlorobenzene	BQL	5.0	1,2,4-Trimethylbenzene	BQL	5.0
1,3-Dichlorobenzene	BQL	5.0	1,3,5-Trimethylbenzene	BQL	5.0
1,4-Dichlorobenzene	BQL	5.0	Vinyl acetate	BQL	50
Dichlorodifluoromethane	BQL	10	Vinyl chloride	BQL	2.0
1,1-Dichloroethane	BQL	5.0	m,p-Xylene	BQL	10
1,2-Dichloroethane	BQL	5.0	o-Xylene	BQL	5.0
1,1-Dichloroethene	BQL	5.0			
cis-1,2-Dichloroethene	BQL	5.0			
trans-1,2-Dichloroethene	BQL	5.0			
1,2-Dichloropropane	BQL	5.0			



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Kennesaw, GA 30144-0000

Client Proj #: REB-2414 / Roswell Cleaners
ACL Project #: 67071
Date Received: 08/27/2014
Date Reported: 09/11/2014

Contact: Mr. Peter Kallay

Volatile Organics (8260B)

Sample ID: MW-2

Matrix: Water

ACL Sample #: 303857

Date Sampled: 08/27/2014 13:30

Date Prepared:

Date Analyzed: 09/04/2014

Units: µg/L

Analyst: JG

Table with 6 columns: Analyte, Result, PQL, Analyte, Result, PQL. Lists various chemical compounds and their corresponding results and PQL values.

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Client Proj #: REB-2414 / Roswell Cleaners
ACL Project #: 67071
Date Received: 08/27/2014
Date Reported: 09/11/2014

Contact: Mr. Peter Kallay

Volatile Organics (8260B)

Sample ID: MW-3

Matrix: Water

ACL Sample #: 303858

Date Sampled: 08/27/2014 14:00

Date Prepared:

Date Analyzed: 09/04/2014

Units: µg/L

Analyst: JG

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	1,3-Dichloropropane	BQL	5.0
Acrolein	BQL	50	2,2-Dichloropropane	BQL	5.0
Acrylonitrile	BQL	50	1,1-Dichloropropene	BQL	5.0
Benzene	BQL	5.0	cis-1,3-Dichloropropene	BQL	5.0
Bromobenzene	BQL	5.0	trans-1,3-Dichloropropene	BQL	5.0
Bromochloromethane	BQL	5.0	Ethylbenzene	BQL	5.0
Bromodichloromethane	BQL	5.0	Hexachlorobutadiene	BQL	5.0
Bromoform	BQL	5.0	2-Hexanone	BQL	50
Bromomethane	BQL	10	Isopropylbenzene	BQL	5.0
2-Butanone	BQL	100	p-Isopropyltoluene	BQL	5.0
n-Butylbenzene	BQL	5.0	4-Methyl-2-pentanone	BQL	50
sec-Butylbenzene	BQL	5.0	Methylene chloride	BQL	5.0
tert-Butylbenzene	BQL	5.0	Naphthalene	BQL	5.0
Carbon disulfide	BQL	5.0	n-Propylbenzene	BQL	5.0
Carbon tetrachloride	BQL	5.0	Styrene	BQL	5.0
Chlorobenzene	BQL	5.0	1,1,1,2-Tetrachloroethane	BQL	5.0
Chloroethane	BQL	10	1,1,2,2-Tetrachloroethane	BQL	5.0
2-Chloroethylvinyl ether	BQL	10	Tetrachloroethene	BQL	5.0
Chloroform	BQL	5.0	Toluene	BQL	5.0
Chloromethane	BQL	10	1,2,3-Trichlorobenzene	BQL	5.0
2-Chlorotoluene	BQL	5.0	1,2,4-Trichlorobenzene	BQL	5.0
4-Chlorotoluene	BQL	5.0	1,1,1-Trichloroethane	BQL	5.0
1,2-Dibromo-3-chloropropane	BQL	5.0	1,1,2-Trichloroethane	BQL	5.0
Dibromochloromethane	BQL	5.0	Trichloroethene	BQL	5.0
1,2-Dibromoethane	BQL	5.0	Trichlorofluoromethane	BQL	5.0
Dibromomethane	BQL	5.0	1,2,3-Trichloropropane	BQL	5.0
1,2-Dichlorobenzene	BQL	5.0	1,2,4-Trimethylbenzene	BQL	5.0
1,3-Dichlorobenzene	BQL	5.0	1,3,5-Trimethylbenzene	BQL	5.0
1,4-Dichlorobenzene	BQL	5.0	Vinyl acetate	BQL	50
Dichlorodifluoromethane	BQL	10	Vinyl chloride	BQL	2.0
1,1-Dichloroethane	BQL	5.0	m,p-Xylene	BQL	10
1,2-Dichloroethane	BQL	5.0	o-Xylene	BQL	5.0
1,1-Dichloroethene	BQL	5.0			
cis-1,2-Dichloroethene	BQL	5.0			
trans-1,2-Dichloroethene	BQL	5.0			
1,2-Dichloropropane	BQL	5.0			

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Client: Atlanta Environmental Consultants
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Client Proj #: REB-2414 / Roswell Cleaners
ACL Project #: 67071
Date Received: 08/27/2014
Date Reported: 09/11/2014

Contact: Mr. Peter Kallay

Volatile Organics (8260B)

Sample ID: MW-4

Matrix: Water

ACL Sample #: 303859

Date Sampled: 08/27/2014 14:30

Date Prepared:

Date Analyzed: 09/04/2014

Units: µg/L

Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	1,3-Dichloropropane	BQL	5.0
Acrolein	BQL	50	2,2-Dichloropropane	BQL	5.0
Acrylonitrile	BQL	50	1,1-Dichloropropene	BQL	5.0
Benzene	BQL	5.0	cis-1,3-Dichloropropene	BQL	5.0
Bromobenzene	BQL	5.0	trans-1,3-Dichloropropene	BQL	5.0
Bromochloromethane	BQL	5.0	Ethylbenzene	BQL	5.0
Bromodichloromethane	BQL	5.0	Hexachlorobutadiene	BQL	5.0
Bromoform	BQL	5.0	2-Hexanone	BQL	50
Bromomethane	BQL	10	Isopropylbenzene	BQL	5.0
2-Butanone	BQL	100	p-Isopropyltoluene	BQL	5.0
n-Butylbenzene	BQL	5.0	4-Methyl-2-pentanone	BQL	50
sec-Butylbenzene	BQL	5.0	Methylene chloride	BQL	5.0
tert-Butylbenzene	BQL	5.0	Naphthalene	BQL	5.0
Carbon disulfide	BQL	5.0	n-Propylbenzene	BQL	5.0
Carbon tetrachloride	BQL	5.0	Styrene	BQL	5.0
Chlorobenzene	BQL	5.0	1,1,1,2-Tetrachloroethane	BQL	5.0
Chloroethane	BQL	10	1,1,2,2-Tetrachloroethane	BQL	5.0
2-Chloroethylvinyl ether	BQL	10	Tetrachloroethene	28	5.0
Chloroform	BQL	5.0	Toluene	BQL	5.0
Chloromethane	BQL	10	1,2,3-Trichlorobenzene	BQL	5.0
2-Chlorotoluene	BQL	5.0	1,2,4-Trichlorobenzene	BQL	5.0
4-Chlorotoluene	BQL	5.0	1,1,1-Trichloroethane	BQL	5.0
1,2-Dibromo-3-chloropropane	BQL	5.0	1,1,2-Trichloroethane	BQL	5.0
Dibromochloromethane	BQL	5.0	Trichloroethene	38	5.0
1,2-Dibromoethane	BQL	5.0	Trichlorofluoromethane	BQL	5.0
Dibromomethane	BQL	5.0	1,2,3-Trichloropropane	BQL	5.0
1,2-Dichlorobenzene	BQL	5.0	1,2,4-Trimethylbenzene	BQL	5.0
1,3-Dichlorobenzene	BQL	5.0	1,3,5-Trimethylbenzene	BQL	5.0
1,4-Dichlorobenzene	BQL	5.0	Vinyl acetate	BQL	50
Dichlorodifluoromethane	BQL	10	Vinyl chloride	BQL	2.0
1,1-Dichloroethane	BQL	5.0	m,p-Xylene	BQL	10
1,2-Dichloroethane	BQL	5.0	o-Xylene	BQL	5.0
1,1-Dichloroethene	BQL	5.0			
cis-1,2-Dichloroethene	78	5.0			
trans-1,2-Dichloroethene	BQL	5.0			
1,2-Dichloropropane	BQL	5.0			

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Client: Atlanta Environmental Consultants
 3440 Blue Springs Rd.
 Suite 503
 Kennesaw, GA 30144-0000

Client Proj #: REB-2414 / Roswell Cleaners
ACL Project #: 67071
Date Received: 08/27/2014
Date Reported: 09/11/2014

Contact: Mr. Peter Kallay

Volatile Organics (8260B)

Sample ID: MW-5

Matrix: Water

ACL Sample #: 303860

Date Sampled: 08/27/2014 12:05

Date Prepared:

Date Analyzed: 09/04/2014

Units: µg/L

Analyst: JG

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	1,3-Dichloropropane	BQL	5.0
Acrolein	BQL	50	2,2-Dichloropropane	BQL	5.0
Acrylonitrile	BQL	50	1,1-Dichloropropene	BQL	5.0
Benzene	BQL	5.0	cis-1,3-Dichloropropene	BQL	5.0
Bromobenzene	BQL	5.0	trans-1,3-Dichloropropene	BQL	5.0
Bromochloromethane	BQL	5.0	Ethylbenzene	BQL	5.0
Bromodichloromethane	BQL	5.0	Hexachlorobutadiene	BQL	5.0
Bromoform	BQL	5.0	2-Hexanone	BQL	50
Bromomethane	BQL	10	Isopropylbenzene	BQL	5.0
2-Butanone	BQL	100	p-Isopropyltoluene	BQL	5.0
n-Butylbenzene	BQL	5.0	4-Methyl-2-pentanone	BQL	50
sec-Butylbenzene	BQL	5.0	Methylene chloride	BQL	5.0
tert-Butylbenzene	BQL	5.0	Naphthalene	BQL	5.0
Carbon disulfide	BQL	5.0	n-Propylbenzene	BQL	5.0
Carbon tetrachloride	BQL	5.0	Styrene	BQL	5.0
Chlorobenzene	BQL	5.0	1,1,1,2-Tetrachloroethane	BQL	5.0
Chloroethane	BQL	10	1,1,2,2-Tetrachloroethane	BQL	5.0
2-Chloroethylvinyl ether	BQL	10	Tetrachloroethene	BQL	5.0
Chloroform	BQL	5.0	Toluene	BQL	5.0
Chloromethane	BQL	10	1,2,3-Trichlorobenzene	BQL	5.0
2-Chlorotoluene	BQL	5.0	1,2,4-Trichlorobenzene	BQL	5.0
4-Chlorotoluene	BQL	5.0	1,1,1-Trichloroethane	BQL	5.0
1,2-Dibromo-3-chloropropane	BQL	5.0	1,1,2-Trichloroethane	BQL	5.0
Dibromochloromethane	BQL	5.0	Trichloroethene	BQL	5.0
1,2-Dibromoethane	BQL	5.0	Trichlorofluoromethane	BQL	5.0
Dibromomethane	BQL	5.0	1,2,3-Trichloropropane	BQL	5.0
1,2-Dichlorobenzene	BQL	5.0	1,2,4-Trimethylbenzene	BQL	5.0
1,3-Dichlorobenzene	BQL	5.0	1,3,5-Trimethylbenzene	BQL	5.0
1,4-Dichlorobenzene	BQL	5.0	Vinyl acetate	BQL	50
Dichlorodifluoromethane	BQL	10	Vinyl chloride	BQL	2.0
1,1-Dichloroethane	BQL	5.0	m,p-Xylene	BQL	10
1,2-Dichloroethane	BQL	5.0	o-Xylene	BQL	5.0
1,1-Dichloroethene	BQL	5.0			
cis-1,2-Dichloroethene	BQL	5.0			
trans-1,2-Dichloroethene	BQL	5.0			
1,2-Dichloropropane	BQL	5.0			

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Client Proj #: REB-2414 / Roswell Cleaners
ACL Project #: 67071
Date Received: 08/27/2014
Date Reported: 09/11/2014

Contact: Mr. Peter Kallay

Volatile Organics (8260B)

Sample ID: MW-6D

Matrix: Water

ACL Sample #: 303861

Date Sampled: 08/27/2014 13:15

Date Prepared:

Date Analyzed: 09/04/2014

Units: µg/L

Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	1,3-Dichloropropane	BQL	5.0
Acrolein	BQL	50	2,2-Dichloropropane	BQL	5.0
Acrylonitrile	BQL	50	1,1-Dichloropropene	BQL	5.0
Benzene	BQL	5.0	cis-1,3-Dichloropropene	BQL	5.0
Bromobenzene	BQL	5.0	trans-1,3-Dichloropropene	BQL	5.0
Bromochloromethane	BQL	5.0	Ethylbenzene	BQL	5.0
Bromodichloromethane	5.6	5.0	Hexachlorobutadiene	BQL	5.0
Bromoform	BQL	5.0	2-Hexanone	BQL	50
Bromomethane	BQL	10	Isopropylbenzene	BQL	5.0
2-Butanone	BQL	100	p-Isopropyltoluene	BQL	5.0
n-Butylbenzene	BQL	5.0	4-Methyl-2-pentanone	BQL	50
sec-Butylbenzene	BQL	5.0	Methylene chloride	BQL	5.0
tert-Butylbenzene	BQL	5.0	Naphthalene	BQL	5.0
Carbon disulfide	BQL	5.0	n-Propylbenzene	BQL	5.0
Carbon tetrachloride	BQL	5.0	Styrene	BQL	5.0
Chlorobenzene	BQL	5.0	1,1,1,2-Tetrachloroethane	BQL	5.0
Chloroethane	BQL	10	1,1,2,2-Tetrachloroethane	BQL	5.0
2-Chloroethylvinyl ether	BQL	10	Tetrachloroethene	BQL	5.0
Chloroform	44	5.0	Toluene	BQL	5.0
Chloromethane	BQL	10	1,2,3-Trichlorobenzene	BQL	5.0
2-Chlorotoluene	BQL	5.0	1,2,4-Trichlorobenzene	BQL	5.0
4-Chlorotoluene	BQL	5.0	1,1,1-Trichloroethane	BQL	5.0
1,2-Dibromo-3-chloropropane	BQL	5.0	1,1,2-Trichloroethane	BQL	5.0
Dibromochloromethane	BQL	5.0	Trichloroethene	BQL	5.0
1,2-Dibromoethane	BQL	5.0	Trichlorofluoromethane	BQL	5.0
Dibromomethane	BQL	5.0	1,2,3-Trichloropropane	BQL	5.0
1,2-Dichlorobenzene	BQL	5.0	1,2,4-Trimethylbenzene	BQL	5.0
1,3-Dichlorobenzene	BQL	5.0	1,3,5-Trimethylbenzene	BQL	5.0
1,4-Dichlorobenzene	BQL	5.0	Vinyl acetate	BQL	50
Dichlorodifluoromethane	BQL	10	Vinyl chloride	BQL	2.0
1,1-Dichloroethane	BQL	5.0	m,p-Xylene	BQL	10
1,2-Dichloroethane	BQL	5.0	o-Xylene	BQL	5.0
1,1-Dichloroethene	BQL	5.0			
cis-1,2-Dichloroethene	BQL	5.0			
trans-1,2-Dichloroethene	BQL	5.0			
1,2-Dichloropropane	BQL	5.0			



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Sample Log-in Checklist

Client Name: Atlanta Environmental Consultants

ACL Project Number: 67071

Cooler Check

Ice Present? Yes No
Temperature 4 °C

Evidence Tape Present? Yes No
Evidence Tape Intact? Yes No

For coolers with a temperature greater than 6°C or with a damaged evidence seal, the bottles affected are identified below.

Chain-of-Custody Form Included? Yes No
Field Sampling Sheet Included? Yes No

Cooler Shipping and Receipt

Shipping Method: Delivered by Customer

Tracking Number:

Receipt Date: 8/27/2014

Receipt Time: 4:44 PM

Bottle Check

Acid Preserved Sample (pH Check): pH<2? Yes
(pH for VO vials to be checked upon analysis)

Base Preserved Samples (pH Check): pH>12? N/A

Chlorine Check (Positive, Negative, N/A): N/A

Condition of Containers:

Evidence Tape Present on Bottles? Yes No
Evidence Tape Intact? Yes No
Loose Caps? Yes No
Broken Bottles? Yes No

Cooler Unpacked/Checked By: JA

Logged In By: JA

Log-in Date: 8/27/2014

Comments (if any):



ADVANCED CHEMISTRY LABS, INC.

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Company Name: **ATLANTA ENVIRONMENTAL CONSULTANTS**
 Phone #: **770-529-0986**
 Fax #: **678-569-2419**
 Site Location: **ROSWELL, GA**
 Project #: **REB-2414 (RC)**
 Project Name: **ROSWELL CEMETERY**
 Sampler Name (Print): **Peter F. Kelley**

CHAIN-OF-CUSTODY RECORD

Address: **3440 BLUE SPRINGS RD. STE 583 KENNESAW, GA 30144**
 Project Manager: **PETER T. KELLEY**

ANALYSIS REQUEST

Field Sample ID	# of Containers	Matrix			Method Preserved					Sampling		Remarks				
		Water	Soil	Air	Sludge	Product	Other	HCl	NaHSO ₄	HNO ₃	NaOH		None	Date	Time	Grab
MW-1	2	✓										8/27	11:30	✓		
MW-2	2	✓											1:30	✓		
MW-3	2	✓											2:00	✓		
MW-4	2	✓											2:30	✓		
MW-5	2	✓											12:05	✓		
MW-6	2	✓											1:15	✓		

Special Detection Limits: _____
 Special Reporting Requirements: _____
 Lab Use Only: _____
 ACL Project #: **67071**
 Cooler Temp. **4** °C
 Received by: _____
 Date: **08/27/14** Time: **4:44**
 Relinquished by Sampler: _____
 Relinquished by: _____
 Date: **08/27/14** Time: **16:44**
 Relinquished by: _____

Special Handling: ACL Contract Quote # P.O. Normal
 TAT: Next Bus. Day 2nd Bus. Day 3rd Bus. Day Normal
 QA/QC Level: Level 1 Level 2 Other

CUSTODY RECORD

Received by Laboratory: *John Andros*