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April 22, 2013

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

Via Fedex
Tracking Number 8020 2912 3177

Re: Semi-Annual Status Report - April 2013
Voluntary Remediation Program
Roswell Cleaners, HSI Site No. 10883
Roswell, Fulton County, Georgia
Tax Parcel ID No. 12-1902-0412-061-6

AEC Report REB-2407.04

Dear Mr. Williams:

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 fourth 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) in a letter dated April 21, 2011. Initiating, planning, preparation, and progress of the VRP at the Roswell Cleaners property conducted during the time period between the previous SASR and this report can be summarized as follows:

CORRESPONDENCE WITH THE GEORGIA EPD

Letter Dated August 28, 2012; received via email on January 22, 2013

A letter dated August 28, 2012 was received via email on January 22, 2013. On August 29, 2012, AEC received an envelope addressed to AEC, but containing a letter completely unrelated to Roswell Cleaners or any AEC project; the letter was addressed to JEEBA, LLC c/o Harry Patel, 4126 Hwy 42 S., Locust Grove, GA. Not having received

the letter intended for AEC, and having no knowledge regarding who at the Georgia EPD wished to correspond with AEC, we were completely unaware of the existence of the letter dated August 28, 2012. AEC prepared the October 2012 Semi-Annual Status Report submittal accordingly.

1) **The following items are missing from the subject semi-annual status report:**
   a) **An updated milestone schedule, describing implementation of the VIRP during the preceding semi-annual period. A Gantt chart format is preferred for presentation of the updated milestone schedule.**

   Pursuant to item #5 of the current VRP Application Form and Checklist, the above-referenced items must be included in each semi-annual report submitted to the director by the VRP participant. Please ensure that said items are included in all semi-annual progress reports submitted in the future.

The updated milestone schedule was apparently inadvertently omitted from the copy of the semi-annual progress report forwarded to the Georgia EPD. AEC will check to be sure that items required are included in future submittals. Your preference is noted.

2) **Pursuant to item #5.a. of the current VRP Application Form and Checklist, within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment. EPD does not concur that horizontal delineation where access is available has been achieved at this 12-month milestone. It has been stated several times in past correspondence that "Active remediation of soils will be considered if it is determined that the proposed remedy [an asphalt cap] is not protective of human health and the environment." However, only one additional soil sample has been collected on site since 2008, and this was from the boring during the installation of groundwater monitoring well MW-5 in April 2012, which is downgradient from the location of the dry cleaning machine. Soils in the area of MW-4 (out the back door/drum loading and unloading), and more importantly, in the area of the dry cleaning machine inside the building, have not been investigated, as was indicated to be an item in previous correspondence. Also, it is discussed that "low concentrations of PCE, TCE, DCE and VC detected in MW-2 are not a result of activities on the Roswell Cleaners site." Since no further soil or groundwater investigation has taken place in between locations MW-4 and MW-2, it is difficult to support this assumption.**

Additional delineation of soils has been substantially completed, as indicated in the included Figures and Tables. AEC believes that chlorinated hydrocarbons identified in MW-2 are entirely or largely from contaminants released over the years by one or more historical hydraulically up-gradient sources. AEC has presented information indicating that a large number of sources or potential historical sources of chlorinated hydrocarbons directly or approximately hydraulically upgradient of the area of MW-2. MW-2 has a different chemical signature than MW-4 and MW-3. MW-4 and MW-3 indicated higher

concentrations of PCE. No VC has ever been detected in either MW-4 or MW-3, or any other monitoring well at the Roswell Cleaners property. MW-2 shows a much more highly degraded mix of chlorinated hydrocarbons, and has historically had detectable vinyl chloride (VC) concentrations. The most recent sample indicated no detectable tetrachloroethene (PCE), no detectable trichloroethene (TCE), and no VC were detected in MW-2 in the current sampling event. Only cis-dichloroethene (DCE) was detected in MW-2. Current, as well as historical, analytical results from MW-2 indicated a much more degraded mix of chlorinated solvents than has ever been observed in MW-4 or MW-3 or any other monitoring well onsite. Firms and entities historically located hydraulically upgradient from the area of Roswell Cleaners, and, in particular, the southwest corner of the property, monitored by MW-2, include the following: Pete Tallant Motors, Wright, Joe E. (believed to be an automotive repair shop), Big E Motors, Wright's Garage Ltd., Genuine Parts Co., NAPA Auto Parts, NAPA Auto Parts machine shop, Auto Body Plus, Benson Chevrolet Company, Capri XL Houseboats, Simmons Engineering Co., Marietta Poultry Equipment, and Roswell City Fire Department. Many of these former entities were in existence at earlier dates than Roswell Cleaners. This is consistent with MW-2 indicating a much more highly degraded mix of chlorinated hydrocarbons than any monitoring wells believed to represent contaminants originating onsite (e.g., MW-4 and MW-3). However, all compounds in MW-2 were either non-detectable or within Risk Reduction Standards. MW-2 now, in fact, effectively provides groundwater delineation onsite.

AEC has been assessing and delineating soils and groundwater for a number of years. All investigations, including the present scope of work, clearly demonstrate that there is only one significant source area onsite, behind the building in the area of MW-4 and nearby soil boring B-7. Investigation has also demonstrated that concentrations in groundwater are decreasing over time, and concentrations also decrease with distance from the source. AEC recommends another sampling event to continue to document these patterns and trends before finalizing any determinations regarding the groundwater monitoring network.

3) **Pursuant to item #6 of the current VRP Application Form and Checklist, a signed and sealed Georgia Professional Engineer (PE/Professional Geologist (PG) Certification statement, along with supporting documentation referenced in the statement, including a monthly summary of hours, must be provided. The certification statement was included with the progress report, but the summary of hours was not.**

The monthly summary of hours was apparently inadvertently omitted from the copy of the semi-annual progress report forwarded to the Georgia EPD. AEC will check to be sure that items required, including the summary of hours, are included.

Updated Conceptual Site Model:

4) **In accordance with Section 12-8-108(1) of the VRPA, horizontal and vertical delineation in groundwater must be completed. Groundwater modeling cannot**

be used to establish delineation. Permanent monitoring wells must be installed and sampled in accordance with established guidance to satisfy delineation requirements. Analytical data from groundwater samples collected at MW-2 in April 2012 resulted in concentrations of regulated substances greater than the proposed delineation standards; therefore, MW-2 cannot be used to demonstrate delineation.

On March 14, 2013, all groundwater monitoring wells located onsite were re-sampled, including MW-2. Results from MW-2 indicated no detectable concentrations of VC present. No regulated substances exceeding proposed delineation standards were identified in MW-2. Therefore, MW-2 does not exhibit any groundwater concentrations requiring further delineation. MW-2 now, in fact, effectively demonstrates groundwater delineation onsite toward the southwest.

5) **In accordance with Section 12-8-108(4) of the VRPA, groundwater monitoring must be conducted at a point of demonstration (POD) well to demonstrate that groundwater concentrations are protective of any established downgradient point of exposure.**

A point of demonstration well will be evaluated for need and location and will be addressed as appropriate.

6) **In accordance with Section 12-8-108(7) of the VRPA, fate and transport modeling will be required to show compliance with site-specific cleanup standards.**

Fate and transport modeling will be evaluated and conducted as appropriate.

7) **In reference to contamination at MW-2, there is insufficient data to show whether or not offsite sources are contributing to the release.**

AEC has presented information indicating that a large number of potential historical sources that are likely or possible sources of chlorinated hydrocarbons directly or approximately hydraulically upgradient of the area of MW-2. Firms and entities historically located hydraulically upgradient from the area of Roswell Cleaners, particularly the corner of the property represented by MW-2, include: Pete Tallant Motors, Wright, Joe E. (believed to be an automotive repair shop), Big E Motors, Wright's Garage Ltd., Genuine Parts Co., NAPA Auto Parts, NAPA Auto Parts machine shop, Auto Body Plus, Benson Chevrolet Company, Capri XL Houseboats, Simmons Engineering Co., Marietta Poultry Equipment, and Roswell City Fire Department. Many of these former entities were in existence at earlier dates than Roswell Cleaners. This is consistent with MW-2 indicating a more highly degraded mix of chlorinated hydrocarbons than any monitoring wells believed to represent contaminants likely originating onsite (e.g., MW-4 and MW-3). It is AEC's professional opinion that at least some of the chorinated solvents identified in MW-2 may have originated from former hydraulically upgradient offsite sources.

Nevertheless, the most recent groundwater sampling event conducted on March 14, 2013 indicated no concentrations in MW-2 exceeding applicable groundwater standards. Whether some or all (or none) of the concentrations identified in MW-2 are from offsite sources, all concentrations identified in MW-2 now meet all applicable standards. Whether some or all (or none) of the concentration in MW-2 is from offsite source(s), MW-2 now effectively demonstrates delineation onsite in this direction.

Groundwater Fate and Transport Modeling:

8) **Page 4 of the Conceptual Site Model states Bioscreen was used for groundwater modeling. Documentation of the model was not presented in the submittal. Please note EPD requires the following for groundwater model review:**

   a. **A summary table of all model input and calibration parameters and their respective sources and/or bibliographical references must be submitted. A summary table must also be submitted for each model run;**
   b. **Figures and cross-sections necessary to justify model input parameters must be submitted;**
   c. **A model sensitivity analysis will be required. A summary table of sensitivity analysis parameters will be required showing input values, the source of the input values, the model output concentrations downgradient of the source, and the percent change in the concentration as the target input parameters are varied (i.e., high or 1.5x baseline, low or 0.5x baseline). To demonstrate the model's sensitivity analysis spider diagram by plotting percent change from baseline for all sensitivity parameters on the x-axis and the resulting downgradient concentrations when each parameter is perturned on the y-axis. The steeper the slope of the line, the more sensitive the model is to that parameter.**
   d. **Paper copies of data input and output model worksheets must be submitted.**
   e. **EPD will require projecting the calibrated model forward in time to estimate the maximum distance the plume is expected to travel. Epd will also require the model to continue being projected forward in time to estimate when the plume retreats. Concentration vs. distance plots should be generated to compare model prediction with field data; and**
   f. **Please note the hydraulic gradient value used for fate and transport modeling must be an average of historical gradient data collected at the site.**

AEC is currently evaluating your comments and will address them with appropriate responses when modeling will be conducted, completed and documented.

9) **EPD noted an incorrect conversion factor (Eq. 9) was used on the Detailed Calculations page. Eq. 9 converts the hydraulic conductivity value (K) from ft/sec to ft/day. The conversion factor of 1440 min/day was used. The correct conversion factor for ft/sec to ft/day is 86400 sec/day. Please revise.**

AEC has reviewed the referenced calculations and equation, and has made corrections, revisions and changes as appropriate.

10) Using the hydraulic conductivities (ft/sec) and other parameter values provided on the Detailed Calculations page, EPD calculates an average seepage velocity of approximately 748 ft/year, which is not appropriate for the geology of the area. Hydraulic conductivity and seepage velocity must be reevaluated for this site. EPD recommends using an Rc value of 0.083. EPD also noted the boring logs show the borehole diameter is 6.25 inches resulting in an Rw of 0.25'. However, page 5 of the Response to Comments states the borehole diameter is 6.5 inches and the Rw value used was 0.27.

AEC has reviewed the calculations and parameter values. While the augers' [original] outer diameter was stated to be 6.25 inches, auger diameter can vary when auger flights are serviced (e.g., a bead is added) vs, when they get worn down. Furthermore, the augers sometimes wobble as they are advanced and, therefore, may drill a slightly larger diameter hole than the actual outer diameter of the augers. In any event, the difference between Rw = 0.26 or 0.27 is a difference of less than 4%. AEC has revised the discrepancy and is now using a consistent value of 6.25 inches for borehole diameter.

11) According to page 5 of the Response to Comments, depth to bedrock is unknown therefore effective aquifer thickness was estimated to be 20'. As vertical delineation data are acquired at the site, the hydraulic conductivity and seepage velocity may have to be revised to reflect new site-specific information.

We acknowledge the uncertainty at this time. The 20' effective aquifer thickness was simply a consensus estimate based on incomplete information available, and does not constitute a specific, field-measured parameter value. When AEC identifies a field determined value for aquifer thickness, that value will be used.

12) The effective porosity value used was 0.35. This value is typically for coarse sand. Based on the boring logs, a more appropriate effective porosity for Piedmont soils ranges from 0.15-0.20.

We will reevaluate porosity and adjust the value as appropriate based on your comments and the results of our review.

Site Delineation Concentrations:

13) The Risk Reduction Standards presented for soil in the text are not RRS, but notification concentrations for regulated substances.

The Risk Reduction Standards (RRS) for soils have been revised to conform to Type III Risk Reduction Standards.

14) The text under "Additional Investigations" on page 3 states: "Completion of horizontal delineation where access is not available is proposed in 24 months." To be clear, horizontal delineation where access is not available should be completed within 24 months after enrollment.

AEC has made continuing efforts to delineate concentrations at this site. Please note that all of the years of assessments and investigations have determined only one significant source of PCE onsite, behind the building. Groundwater concentrations have decreased over time and also with distance from the source. Delineation onsite has been substantially completed. Therefore, AEC recommends that one more groundwater monitoring event be conducted before making a final determination regarding need for additional groundwater monitoring wells, if any.

Figures/Logs:

15) Units for groundwater analytical results are not indicated in Figure 5.

Units were inadvertently omitted from Figure 5. The omission was corrected.

16) Figure 8a: The PCE iso-concentration line should include concentrations detected at MW-2. A "not detected" line is not appropriate.

It is the professional opinion of Mr. Kallay, P.E. that concentrations identified in MW-2 have a different chemical signature that at MW-3 and MW-4 (e.g., compounds at MW-2 are much more highly weathered and degraded). Numerous historical sources formerly located hydraulically upgradient are likely sources of some or all of the concentrations at MW-2, and, therefore, represent a different plume than the onsite source plume. The most recent groundwater analytical results indicate no PCE was detected in MW-2. The incorrect "not detected" line has been removed.

17) Figures 9 and 10: The text on the cross-sections is small and difficult to read. Also, the iso-concentration lines are drawn incorrectly.

The figures have been redrafted for improved readability. As new data has been developed during recent investigations, the iso-concentration lines were also be redrawn to reflect the additional delineation data developed during this work phase.

18) The boring log and well construction diagram for groundwater well MW-5 Bowen must be submitted with the next progress report.

The boring log and well completion diagram are provided in an attachment to the report.

19) Groundwater sampling logs for the April 2012 sampling event and for all future groundwater sampling events must be submitted.

The groundwater sampling logs requested are provided in an attachment to the report.

If you have any questions regarding the above comments, please contact Jessica McCarron at (404) 657-0485. The next semi-annual report is due by October 21, 2012. Please provide responses to the above comments in a response-to-comment format in said progress report.

Although your letter has a date of August 28, 2012, Neither AEC nor Mr. Richard Bowen received the letter dated August 28, 2012 until January 22, 2013, when it was received as an email attachment. On August 29, 2012, an envelope addressed to AEC was received. The mailing label addressed to AEC was pasted on top of another mailing label on the envelope. The envelope contained a letter addressed to JEEBA, LLC c/o Harry Patel, 4126 Hwy 42 S., Locust Grove, GA. Once it became apparent that the letter's contents were not intended for Mr. Kallay or anyone at AEC, the letter was forwarded to the intended recipient of the letter with a note indicating the letter was delivered to us by mistake. It is beyond our resources to query all persons throughout EPD to determine who, if anyone, had attempted to correspond with Mr. Kallay and/or AEC. A method of delivering correspondence that provides a means of verifying that delivery to the intended recipient was successfully completed (e.g., Certified Mail) was not used. Neither Mr. Bowen nor AEC can be responsible for responding to correspondence not received and not known to exist. Therefore, we are responding to the August 28, 2012 letter at this time.

Letter Dated December 17, 2012; received via email on January 22, 2013

The cover letter from AEC states that no other correspondence has been received from EPD, but EPD sent a detailed comment letter dated August 28, 2012 regarding deficiencies in the second progress report in regards to issues with the conceptual site model, groundwater fate and transport modeling, slug testing, and site delineation concentrations. None of these comments were addressed in the third progress report, and it is clear that no further investigation has taken place since the previous report. At this time, the Roswell Cleaners VRP site is out of compliance with its schedule under the Act.

Although these letters were dated August 28, 2012 and December 17, 2012, neither AEC nor Mr. Richard Bowen received either of these letters until they were received on January 22, 2013 as an email attachment. See description above for a description of mis-addressed mail and mail addressed to AEC, but containing correspondence intended for others. A method of delivering correspondence that provides a means of verifying that delivery to the intended recipient was successfully completed was not used. Mr. Kallay and Mr. Bowen cannot be responsible for responding to correspondence not received. Therefore, we are responding to this letter at this time. The Roswell Cleaners site cannot be expected to comply with correspondence not received and not known to exist. The correspondence upon which the statement "Roswell Cleaners VRP site is out of compliance with its schedule under the Act" is based on was never timely received, certainly not by the date this statement was made. To state that it is "out of compliance" without verifying that correspondence upon which this statement is based is not

appropriate. Neither Peter Kallay, AEC or Mr. Bowen received either the August 28, 2012 or December 17, 2012 letters in 2012. AEC has received several letters from the Georgia EPD containing AEC's address on the outside of the envelope, sometimes pasted over another address label with a different address, and containing correspondence addressed to others inside the envelope; not intended for Peter Kallay or AEC. This suggests a quality control issue with mailings, specifically, a significant rate of mis-addressed correspondences. It is Mr. Kallay's professional opinion that this recurring issue makes it essential to use a delivery method that provides a means of verifying that delivery to the intended recipient was successfully completed (e.g., Certified Mail). At the very least, some effort should be made to determine whether correspondence sent was received by the intended recipient before stating that "the site is out of compliance".

As stated in Comment #2 in our August 28, 2012 letter, EPD does not concur that horizontal delineation where access is available has been achieved at the 12-month milestone. Soils in the source area (out the back door/drum loading and unloading), and more importantly, in the area of the dry cleaning machine inside the building, have not been investigated, as was indicated to be an action item in past correspondence.

AEC has conducted a soil investigation in the source area and has identified the center of the source area in soils at approximately 15 feet south of MW-4. AEC has investigated the area of the dry cleaning machine via a number of approaches. MW-5 was installed directly down gradient of the dry cleaning machine. No detectable concentrations of any compound in soil or groundwater were ever identified at this location. Soil boring B-9 was installed directly in front of the building near the dry cleaning machine. PCE was barely detectable at 0.005 mg/kg at the 2-foot and 15-foot depths; 0.008 mg/kg at the 10-foot depth. TCE was 0.052 mg/kg at the 2-foot depth and non-detectable at other depths. A sub-slab soil vapor sample was collected inside the building and indicated PCE at 39 ppbv and 270 ug/m3 and TCE at 4.9 ppbv and 26 ug/m3. The dry cleaners has also been screened with a Mini-RAE photo-ionization detector (PID) capable of detecting chlorinated solvents. The readings inside the building are almost uniformly zero, except for a few seconds (or a couple of minutes on a calm day) immediately after the dry cleaning machine is opened, when readings may very briefly reading 1 or 2 ppm before dissipating and returning to zero. The PID showed a reading of 1.7 in the sub-slab opening after the analytical sample was collected. These additional investigative efforts, as all investigative efforts to date, confirm that only one significant source exists onsite, located south of and outside the back of the building around MW-4 and B-7.

As stated in Comment #4 in our August 28, 2012 letter, groundwater modeling cannot be used to establish delineation. Permanent monitoring wells must be installed and sampled in accordance with established guidance to satisfy delineation requirements. Analytical data from groundwater samples collected at MW-2 in April 2012 resulted in concentrations of regulated substances greater than the proposed delineation standards; therefore, MW-2 cannot be used to demonstrate delineation. Furthermore, it is discussed that "low concentrations of PCE, TCE, DCE and VC are not the result of activities on the Roswell Cleaners site". Since no

further soil or groundwater investigation has taken place in between locations MW-4 and MW-2, there is insufficient data to support this conclusion.

In the most recent sampling event, no PCE, TCE or VC was detected in MW-2. Only cis-DCE at 0.011 mg/L was detected. Thus, MW-2 can now be effectively used to demonstrate delineation.

Complete Horizontal Delineation Where Access is Available.

Completion of horizontal delineation where access is available has been completed during the Additional Assessment activities conducted in April 2012. Installation of an additional well near one possible source location, the dry cleaning machine, confirms that the only source onsite appears to be in the general area of MW-4, as previously identified. A number of sampling events have demonstrated that groundwater concentrations are decreasing over time and groundwater concentrations also decrease with distance from the source. AEC has recommended that one more groundwater monitoring event be conducted before making any final determinations regarding need for additional groundwater monitoring wells.

All monitoring wells onsite, including the new well and the existing wells, were sampled following completion of additional delineation, 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, depth to groundwater in all wells, old and new, was gauged, current water table elevations were calculated, and data was developed for presentation (see below).

Complete Horizontal Delineation Where Access is not Available.

Field data, laboratory data and evaluation of information gathered to date suggests that horizontal delineation of PCE and associated compounds reasonably attributable to activities associated with Roswell Cleaners has been effectively substantially delineated onsite. Concentrations identified during the recent event were evaluated using groundwater modeling. Modeling suggests that concentrations equaling or exceeding applicable standards are substantially delineated onsite. Furthermore, a number of sampling events have demonstrated that groundwater concentrations are decreasing over time and groundwater concentrations also decrease with distance from the source. No further horizontal delineation where access is not available is warranted based on currently available data until monitoring wells will be sampled again to further confirm decreasing concentration over time, as well as with distance from the source. AEC recommends one re-sampling before re-evaluating the need for additional groundwater monitoring wells, if any.

Updated Conceptual Site Model

An updated Conceptual Site Model report has been prepared following completion of horizontal delineation where access is available in April 2012. 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. Dissolved concentration contours were developed and presented. The report presents appropriate conclusions and recommendations.

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 04/22/13

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

AEC Proj. No. REB-2407
Client Richard Bowen
Client/File No. HSI Site No. 10883

Atlanta Environmental Consultants
TIME REPORT

Site Loc 1013 Alpharetta St., Roswell, GA
Signature
Time Period 2012 Project Hours - VRP - Sheet 2
Date April 17, 2013

DATE	HOURS	ACTIVITY DESCRIPTION
1/22	0.40	Receive email from Jessica McCarron with copies of two letters attached. Review. Copy to Richard Bowen and Richard Wingate.
1/26	0.60	Discuss contents of letters and recommendations with Richard Bowen at a meeting.
1/28	0.50	Start drafting a response to the letters and the fact that they were not received until January 22, 2013 via email.
1/29	0.40	Discuss review of contents of letters with Richard Bowen and recommendations.
2/6	0.60	Communications and email correspondence with Mr. Wingate: appropriate response to letters not received until this year.
2/9	0.50	Take Semi-Annual Status Report to Copy Shop to prepare PDF file and email to Jessica McCarron.
3/11	1.00	Meeting with Mr. Bowen: Proposal for additional soil, groundwater and sub-slab vapor assessment. Call utilities locators.
3/12	0.90	Prepare for field work. Confirm driller schedule. Utility location. Planning soil boring locations. Order sample kit.
3/13	1.00	Assemble field equipment, supplies and files. Load in truck. Confirm everyone's schedules.
3/14	8.00	Field day. Drill soil borings. Screen and select soil samples. Purge wells, collect data and groundwater samples.
3/15	1.50	Take soil, groundwater samples to ACL Labs. Discuss analysis with John Andros. Prep for field. Organize field notes.
3/16	3.50	Prep for field, mobilize. Rent Hammer Drill. Drill hole in Concrete. Collect sub-slab vapor sample. Ship Fedex to EMSL Lab.
3/18	1.60	Start drafting Semi-Annual Status Report and Updated Conceptual Site Model.
3/19	0.50	Communications and correspondence with EMSL Lab: discuss analysis details.
3/20	0.40	Further communications with EMSL lab regarding analysis and information for analysis.
4/3	0.30	Communications and correspondence with Mr. Wingate and ACL Labs: Details of analysis.
4/4	0.60	Receive, review sub-slab vapor analytical report. Discuss with Mr. Bowen.
4/8	0.50	Draft response to August 28, 2012 and December 17, 2012 letters received in 2013 in comment and response format.
4/10	1.10	Receive and review soil and groundwater analytical data. Evaluate and tabulate. Start sketching Figures.
4/12	1.20	Planning and preparation for meeting at the Georgia EPD. Assemble Draft SASR and CSM, Figures and Tables.
4/15	3.40	Meet Mr. Bowen and Mr. Wingate. Attend Georgia EPD meeting. Discuss topics at meeting. Continue drafting reports.
4/16	1.10	Review and revise reports, tables and Figures. Provide Drafts to Professional reviewers. Start report production.

REV: 01/22/11 29.60

PROJECTED MILESTONE SCHEDULE

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

April 15, 2013

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 noted.

Plan, Report or Action	Date to be Submitted
Submit Preliminary Conceptual Site Model	at time of VRP Application *
Complete Horizontal Delineation where Access is Available	12 months after enrollment * [1]
Complete Horizontal Delineation where Access is not Available	24 months * [1]
Complete Vertical Delineation	30 months
Final Voluntary Remediation Plan	30 months
Preliminary Cost Estimate for Implementation of Remediation and Associated Actions	30 months
Submit Compliance Status Report Including Required Certifications	60 months
Semi-Annual Status Reports with Updated Conceptual Site Model	Every 6 months * * * *

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* Tasks completed to date

[1] These tasks are substantially completed. Completion is anticipated by the next Milestone

** 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

APRIL 2013

AEC Project Number REB-2411

4/22/13

Peter T. Kallay, P.E.

aec

Atlanta Environmental Consultants
3440 Blue Springs Road, Suite 503
Kennesaw, Georgia 30144

Phone (678) 738-7004
Fax (678) 569-2419

Registered Professional Engineer Certification

I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et. seq.). I am a professional engineer/professional who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary and Investigation Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name Peter T. Kallay, P.E.

Signature _____

Date 4/22/13

Georgia Stamp or Seal

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 concrete block slab-on-grade building constructed in 1966, based on available records of the Fulton County Tax Assessor. The building currently houses Roswell Cleaners. Part of the building that had formerly housed a coin laundry is vacant at this time. Available records indicate the building has been used primarily as a dry cleaners during all or most of its life history. It has operated under the names Roswell Sunshine Center, Sunshine Center, Sunshine Cleaners (or 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.

Site Surface and Subsurface Setting

The site is developed on fill material consisting of fill approximately 10 feet below ground surface in the front of the site gradually sloping down to 15 feet deep in the rear, overlying 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, before filling grading and development. Concentrations in soils are expected to decrease over time, as no new releases have occurred and natural attenuation mechanisms will reduce 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 sources/water resources survey conducted in conjunction with 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 tetrachloroethene (PCE) and its biodegradation products in soils and groundwater. The samples analyzed referenced in this report were collected on August 25-27, 2008, April 16-18, 2012 and March 14-16, 2013. 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 on March 16, 2013 and analyzed by EMSL Analytical, Inc., a qualified analytical laboratory. The highest soil concentrations identified onsite in the March 16, 2013 sampling event were 193 milligrams per kilogram (mg/kg) PCE, 5.03 mg/kg trichloroethene (TCE), 0.31 mg/kg cis-dichloroethene (cis-DCE), and 0.04 trans-dichloroethene (trans-DCE). PCE and TCE were in a sample collected in soil boring B-7 at 15 feet deep. Cis-DCE was collected from B-8 at the 10-foot depth and trans-DCE was collected from B-4B at the 15-foot depth. A sub-slab soil vapor sample collected under the concrete floor slab 5 feet downgradient from the dry cleaning machine on March 16, 2013 detected PCE in vapor phase at 39 parts per billion by volume (ppbv) or 450 micrograms per cubic meter (ug/m3) and TCE at 4.9 ppbv or 26 ug/m3.

Concentrations were also identified in groundwater. The highest current ground-water concentrations from samples collected March 14, 2013 were identified as 0.027 milligrams per liter (mg/l) PCE, 0.020 mg/l TCE, and 0.035 mg/l cis-DCE, all in MW-4. No trans-DCE or vinyl chloride (VC) was detected in any groundwater sample during this event. Concentrations have generally decreased since the 2008 and 2012 groundwater sampling events. A slight increase in concentrations

was noted in MW-3, the downgradient well, PCE 0.023 mg/l, TCE 0.20 mg/l and cis-DCE, 0.021 mg/l, possibly due to a substantial increase in rainfall amounts over the last few months. The higher rainfall rate results in a higher water table, increased groundwater flow rates, and steeper groundwater gradient, so higher concentrations in the vicinity of MW-4 have been pushed toward MW-3. PCE concentrations decreased at MW-4. Average PCE and TCE concentrations in the two wells in which PCE and TCE were detected, MW-4 and MW-3, have decreased.

Potentiometric maps showing groundwater flow direction are presented as Figures 7a through 7f. 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 dry cleaning machine has reportedly always been at the same location inside the building. A laboratory-cleaned and evacuated, specially prepared 1.4-liter sampling canister was obtained from EMSL Analytical, Inc. The canister, regulator and sampling tubing provided were unpacked and assembled for sampling. A hole was drilled in the concrete floor and a few inches into the soil below using a hammer drill in order to collect a sub-slab soil vapor sample. The sampling tube was extended through the hole into the air space below the concrete slab. The annular space around the tubing was loosely filled with CETCO Super Gel-X extra high yield drilling fluid, supplied as bagged bentonite in a dry powder form. The bentonite-filled annular space was hydrated with clean tap water until the bentonite powder was fully saturated and had a gel-like consistency with no visible void spaces. Then, the regulator was attached to the canister, and sampling began. The canister was delivered with -27" Hg pressure (e.g., a vacuum). Sample collection lasted 17 minutes, during which sub-slab soil gas was drawn into the canister by vacuum in the canister. Canister pressure was -6"Hg upon completion of sampling. The canister and regulator were repackaged in the packaging provided by the laboratory and shipped to EMSL Analytical, Inc. in Cinnaminson, New Jersey via Fedex. The sample was analyzed by EPA Method TO-15, including for Total Volatile Organic Compounds (TVOC).

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. Table 3 summarizes the results. 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 VOCs present below the detection limit.

It was concluded that the principal source of PCE and associated compounds onsite is not from the area around the dry cleaning machine. Rather, the only source that continues to be confirmed is in the rear of the facility (in the area of MW-4 and the soil boring B-7), where drums of new and spent PCE product were typically loaded and unloaded, and perhaps formerly stored. Sweepings, mop water, used filter temporary storage 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, may have occurred over the years in this general area at the rear of the building near MW-4 and B-7.

Investigation of the area of the Dry Cleaning Machine Area

Investigation of the area of the dry cleaning machine 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. 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/l PCE and 0.052 mg/l TCE at the 2-foot depth, 0.008 mg/l PCE at the 10-foot depth, and 0.005 mg/l 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, likely from minor fuel drips or vapors from cars parking there. 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 upgradient of the site.

Sub-slab vapor sampling was also conducted near the dry cleaning machine, as described above. The sub-slab vapor sample indicates low concentrations of PCE and TCE, well under 1ppm by either volume or 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). Thus, the low concentration detected in vapor form in the sub-slab soil sample suggests that soil concentrations would be even lower, well below the Risk Reduction Standard (RRS) proposed for soils.

Observation and evaluation of the area of the dry cleaning machine suggests that there is no route for PCE migration into sub-slab soils, except migration through solid concrete, a relatively slow process. There are no visible cracks or breaches in the concrete floor. No opening in the concrete floor exists 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 with towels, which were then promptly tossed back into the dry cleaning machine to remove the 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 entered from infrequent drips slowly migrating through concrete 10 to 12 inches thick. Concrete is a dense material. Although porous, migration through concrete is relatively slow. Minor concentrations also entered the soil from vapors briefly exiting the dry cleaning machine when the machine is opened, and settling into nearby soils in minor quantities. As previously stated, significant concentrations of PCE and associated compounds have only been identified in the area at the rear of the building, around MW-4 and B-7.

Once again, no significant concentrations of PCE, TCE, or degradation compounds were identified in the dry cleaning machine area, utilizing several investigation techniques, including vapor sampling, soil sampling and groundwater sampling. The only significant source identified onsite to date is still the previously identified area behind the building in the area of MW-4 and soil boring B-7.

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 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 in the 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 the 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.

Additional Investigations

Additional Assessment to complete horizontal delineation where access is available has been essentially completed. MW-5 [Bowen] has been 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 this potential source (the dry cleaning machine). The dry cleaning machine has reportedly always been at the same location inside the building. It was concluded that the source of PCE and associated compounds onsite was not from the area of the dry cleaning machine. 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, filters may have been carried out of the building and temporarily stored, and/or other associated activities, may have occurred over the years this dry cleaners has been in existence.

Delineation where access is available has been, for all practical purposes, been completed. Considering both the decrease in concentrations over time (long-term, PCE down 98% in MW-4 and down 85% since 2008 in MW-3 and decrease in concentrations in the down-gradient direction, delineation is expected to be fully completed onsite within the near future). MW-4 is the source well for PCE likely to have resulted from activities on this site. MW-4 currently has a PCE concentration of 0.027 mg/l. MW-3 is down-gradient and exhibits a current concentration of 0.023 mg/l PCE. Concentrations have decreased substantially. The relatively close concentrations in MW-4 and MW-3 are temporary and atypical due to well above average rainfall in the least several months, possibly resulting in temporarily more rapid migration of concentrations from MW-4 toward MW-3.

Many potential historical sources of PCE, TCE and associated solvents have formerly existed offsite, hydraulically up-gradient of MW-2, including the former Genuine Auto Parts, NAPA Auto Parts, NAPA Auto Parts machine shop, Auto Body Plus (the location at 1007 Alpharetta Street), Tallant Pete Motors, Big E Motors, Alfa Driving School, Wright, Joe E (believed to have been an automotive business), Capri XL Houseboats, Benson Chevrolet, Marietta Poultry Equipment, Simmons Engineering Co., Wright's Garage Ltd. and possibly others. Many of these sources pre-date Roswell Cleaners. Note that the chemical signature of groundwater in MW-2 indicates a much more highly degraded mix of chlorinated solvents than the onsite source at MW-4, suggesting the age of the source of concentrations at MW-2 is most likely significantly older than the onsite source at MW-4. MW-4 exhibits PCE at the highest concentration of all chlorinated hydrocarbons; no

detectable vinyl chloride is present, suggesting a relatively less weathered, less degraded, and likely relatively more recent source. MW-2, in the most recent sampling event, shows no detectable PCE, no detectable TCE, and no detectable vinyl chloride (VC). Only cis-DCE at 0.011 mg/l was detected. This, and previous sampling results suggest a much more weathered, much more degraded mix of chlorinated solvents, and likely relatively older source. (The term "relative" is important here; no significant release is known to have occurred onsite in this area. It is believed that the dry cleaning facility onsite has been in compliance with rules and regulations as they have existed over the life of this facility. Thus, onsite releases, if any, were likely to have occurred largely in the 1960s and 1970s, prior to the advent of regulation of PCE. Offsite sources that may be potential sources of VOCs identified in MW-2 were likely older still. Some of the potential offsite sources upgradient of MW-2 date back to the 1950s and possibly earlier).

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. Dry cleaners, including Roswell Cleaners, most commonly use PCE as a dry cleaning solvent. Regulation of purchase, storage, use, handling, accumulation of spent PCE and disposal of PCE was non-existent to very limited until 1981, in comparison to current regulations. In general, care in preventing or minimizing drips, spills or releases was less stringent during the earlier years of dry cleaning businesses at this location (as well as other dry cleaners, in general) compared to more recent years. To the best of our knowledge, dry cleaners operators followed rules in existence at any given point in time. PCE may have entered the environment during delivery and handling of containers (e.g., drums and buckets), pouring PCE into dry cleaning machines, draining spent PCE, changes of and temporary storage of spent filters, sweeping and mopping of floors. PCE may have entered the environment from vaporization, drips and spills, PCE-containing filters, rags, mops, mop water, etc that may have been disposed, spent PCE handling, etc. following common practices and rules, nonexistent, limited, and more regulated, as may have existed over the years of operation of this dry cleaners. All investigation findings to date indicate significant entry into the environment onsite was limited to the area of MW-4 at the rear of the building.

Preliminary evaluation of applicable approaches to remediation of the site suggests the following. Soils are not subject to contact with any populations (except trained workers on rare occasions such as utility workers, foundation workers and the like). In order to preclude contact with existing concentrations, the soils will remain capped with asphalt pavement, which will be sealed, maintained and kept in good repair as required to provide an effective cap. Workers, on rare occasions if and when subsurface work may be required, should be appropriately notified regarding the existence of PCE and related compounds and provided with appropriate health and safety information, safe work practices and equipment to minimize exposure in accordance with applicable rules. No utility or subsurface work is planned or proposed. Soils in areas where concentrations exceed Notification Concentrations (NC) will be re-sampled as appropriate to determine then-current concentrations prior to final determination of the disposition of this site. In the event soils to the maximum depth of utilities, foundations and/or other structures onsite meet applicable standards, no further action is proposed. In the event soils exceed standards (including site-specific utility and construction worker cleanup standards) and significant work onsite occurs or is proposed, remediation of soils may be considered and may be implemented. Nevertheless, in accordance with Section 391-3-19-.07(10) of the Rules for Hazardous Site Response, site-specific utility and construction worker cleanup standards will be calculated and compared to soil and groundwater concentrations. In the event any subsurface work is required, the contractor shall be required to have trained workers or be supervised by a qualified health and safety officer and use barricades, construction fencing or other appropriate means to preclude entry into the excavation and surrounding exclusion zone by unqualified and/or unauthorized persons.

Groundwater will not come into contact with any populations, except qualified and appropriately trained and equipped environmental consultants. Groundwater will be sampled in reasonable proximity to the time of selection of the most appropriate remedy. The most current Risk Reduction Standards (RRS), rules and concentrations (or concentrations developed using a RRS Evaluation) as adopted by the Georgia Environmental Protection Division (EPD) at the time of this determination will be utilized. The most appropriate remedy for a commercial setting with no receptors or completed pathways within 1,800 feet of the site will be then selected and implemented. Environmental consultants and well drillers constructing or sampling wells shall be Hazardous Waste Operations (HAZWOPER) trained with up-to-date annual refresher training, and shall be familiar with all safe practices. An appropriate Site Specific Health and Safety Plan shall be maintained, updated, provided to each worker and reviewed in a health and safety meeting prior to beginning work. Available data does not suggest that any concentrations exceeding applicable standards will reach Hog Wallow Creek. A scaled U. S. Geological Survey (USGS) topographic map, Roswell Quadrangle, indicated a distance of approximately 1,800 feet in the east-southeast groundwater flow direction indicated by our calculations and shown on the potentiometric map included in this document. At the calculated rate of groundwater migration, ranging from 99 feet/year to 252 feet/year, averaging 145.6 feet/year determined using slug tests, groundwater from the site would reach Hog Wall Creek from 7 to 18 years, an average of 12 years. Natural attenuation mechanisms further increase time to reach the creek. Furthermore, concentrations are decreasing onsite and concentrations decrease with distance from the source via a number of natural attenuation mechanisms. At the likely rate of natural attenuation, concentrations will not likely exceed drinking water standards nor in-steam water quality standards by the time groundwater from the site reaches Hog Wallow Creek. No other point of withdrawal between the site and Hog Wallow Creek has been identified or is known to exist.

Additional Assessment and Risk Reduction Standards

The source appears to be in the area of, and limited to, the general area of, MW-4. Specifically, the highest PCE concentrations in soils were identified at the 15-foot depth in soil boring B-7, 18 feet south of MW-4, where 193 mg/l PCE was detected. Soil concentrations of PCE and its biodegradation products are non-detectable or very low in all other soil samples outside of this immediate area, that were collected in soil borings installed since 2008. Groundwater will be delineated to appropriate concentrations representative of appropriate standards for commercial property with no receptors or completed pathways within 1,800 feet of the site. 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.

Site Delineation Concentration Criteria

Site delineation will be 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. 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.

GEORGIA EPD CORRESPONDENCE

Response to Letter Dated April 21, 2011

Comment 1. Several different proposed corrective action methods for soil are discussed. An asphalt cap is mentioned; however, the CSM also states that "soils in areas where concentrations exceed notification concentrations (NC) will be resampled" and "remediation of soils will be considered." Soil in the source area must be horizontally and vertically delineated.

Soils in the source area have been horizontally and vertically delineated to the designated delineation standard according to the milestone schedule, for all practical purposes. Only one single significant source has been identified onsite after a number of years of assessment and delineation activities onsite. Concentrations outside the source area continue to decrease over time, as well with distance from the source area.

An asphalt cap is the proposed primary remedy, along with any necessary institutional controls, if any. Soils 15 feet deep, not far behind the building's footprint, will be best left in place at this time to preclude any potential undermining of the building or building's foundation. At some future time, when the building has reached the end of its life cycle, or razing the building is proposed in preparation for other development or other plans, soil treatment or removal can be pursued. Once the lot is cleared, excavating and transporting the soil to be treated or disposed as appropriate, can easily be accomplished. Once contaminated soil is removed, the area should be back-filled with clean fill.

Comment 2. If controls are used to limit exposure, then a Uniform Environmental Covenant will be needed to maintain the existing cap and to document that construction and utility workers must be notified that protective measures are necessary during any work where soil contamination will be encountered.

In the event the final remedy for the facility involves engineering controls consisting of an asphalt cap, an approved environmental covenant, specifying that the existing cap will be maintained and documenting that construction and utility workers must be notified that protective measures are necessary during any work where soil contamination will be encountered, conforming to O.C.G.A. 44-16-1 et seq., will be implemented for the impacted property.

Groundwater

Comment 3. EPD cannot verify the estimate that groundwater will not reach Hog Wallow Creek for 59 to 254 years because those calculations have not been provided and no groundwater modeling or slug test data was presented. An appropriate point of demonstration well and groundwater fate and transport model must be used for verification.

Slug test data and calculations supporting the estimated time of travel to Hog Wallow Creek have been provided to the Georgia EPD. Values for parameters in the calculations have been reviewed and revised. See the attached Slug Test Evaluations in the Appendices.

Semi-Annual Status Report - October 2011

Complete Horizontal Delineation Where Access is Available.

Completion of horizontal delineation where access is available has been completed, for all practical purposes. Only one single significant source has been identified onsite after a number of years of assessment and delineation activities onsite, including soil delineation, groundwater delineation and investigation of sub-slab soil vapors. Concentrations outside the source area continue to decrease over time, as well with distance from the source area.

Updated Conceptual Site Model

The Georgia EPD requested verification of our travel time range estimate of compounds identified onsite from the site to Hog Wallow Creek. Slug test data and calculations supporting the estimated time of travel from the site to Hog Wallow Creek have been prepared and have been submitted to the Georgia EPD to be incorporated in the Conceptual Site Model (CSM) for this site. An appropriate point of demonstration well and groundwater fate and transport model will be used for verification in the event horizontal delineation has not been completed. A revised calculation showing the estimated route of travel has been provided to the Georgia EPD. The CSM is hereby revised and updated with the addition of these calculations and map, and the proposed point of demonstration well and groundwater fate and transport model.

Additional revisions and updates will be made to the CSM as the implementation of the VRP progresses through scopes of work and activities listed in the Milestone Schedule.

Semi-Annual Status Report - April 2011

First Semi-Annual Progress Report

1) **The following items are missing from the subject semi-annual progress report:**

   a. **EPD requires that in future submissions, the CSM is updated in its entirety as opposed to adding addendums. This way it is clear how the new data has been integrated into the CSM; and**

   b. **A updated milestone schedule, describing implementation of the VIRP during the proceeding semi-annual period. A Gantt chart format is preferred for presentation of the updated milestone schedule.**

Pursuant to Item #5 of the current VRP Application Form and Checklist, the above-referenced items must be included in each semi-annual status report submitted to the director by the VRP participant. Please ensure that said items are included in all semi-annual progress reports submitted in the future.

Atlanta Environmental Consultants has updated the CSM and incorporated comments and responses into the CSM. An updated milestone schedule is provided. Your preference has been noted.

2) **Pursuant to Item #6 of the current VRP Form Application Form and Checklist, a signed and sealed Georgia Professional Engineer (PE)/Professional Geologist (PG) Certification statement, along with the supporting documentation referenced in the statement, must be provided with each future submittal as follows:**

I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et. seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists

and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary and Investigation Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Atlanta Environmental Consultants has provided the requested Certification Statement, which is included on a separate Certification page in this CSM.

Response to Comment I (Soil Delineation):

3) **Please note that the next progress report, which must demonstrate horizontal delineation of soil and groundwater contamination on the qualifying property, must include a statement regarding the delineation criteria chosen to be applied to soil and groundwater contamination on the qualifying property and a table summarizing the actual delineation standards proposed. Conclusions regarding the adequacy of delineation of contamination at the qualifying property cannot be made without said information.**

Atlanta Environmental Consultants has provided a statement regarding the delineation criteria chosen and tables in the Site Delineation Concentration Data section presenting and summarizing the delineation standards proposed, above.

Responses to Comment 3 (Groundwater):

4) **EPD has reviewed the calculation of estimated migration time from the Roswell Cleaners property to Hog Wallow Creek. These calculations will need to be revised to reflect revisions in slug test calculations and resulting groundwater velocity values. Additional, fate and transport modeling of VOC-impacted groundwater must be completed to demonstrate no human or environmental receptors will be impacted by this release.**

5) **Additional information must be submitted regarding slug tests, including:**

   a. **Time vs. head plots with straight-line match for slug tests performed in monitoring wells MW-1, MW-2 and MW-3;**
   b. **Clarification on the calculation of Rw for all wells in which slug tests were conducted, including boring logs. According to the Parameter Values table, slug**

test input values Rc and Rw are both 0.083 feet. The Rc value cannot be equal to the Rw value;

c. **Clarification of the determination of slug test parameters Re (effective radius) and D (effective aquifer thickness); and**
d. **EPD noted that the slug test evaluation was collected on September 28, 2008. Values used for calculating gradient (dh/dl) must correlate with the date of the slug test evaluation. These data must be submitted.**

Information requested follows:

Time vs. head plots are provided, attached.

The calculation of Rw is as follows: The wells are 2-inch diameter wells in 6.25-inch diameter boreholes, or 0.52 ft diameter. The sand pack in the borehole is uniform clean sand that has significantly higher permeability than the formation. Thus, Rw = 0.5 * diameter = 0.26 ft. Conversion of one inch to feet yields. The value used for Rc, as recommended by the EPD, per your recent correspondence, 0.083 ft, has been used.

Effective aquifer thickness was estimated based on available information. Monitoring wells currently onsite penetrate the saturated zone in the general range of 10 feet, plus or minus, depending on the specific well and the water table elevation. As no bedrock was encountered during borings for any of the monitoring wells, depth to bedrock is unknown. Our estimate is that bedrock is perhaps another 10 feet, plus or minus, below the depth of the existing wells, or a total of approximately 20 feet of unconsolidated saturated zone. We are now using 20 feet as our estimated, or effective, aquifer thickness. This may be revised as additional information becomes available as our investigation progresses.

A Figure presenting groundwater elevations and gradient on the date of the slug tests has been prepared and is presented in this report as Figure 7B. The groundwater gradient was recalculated and found to be 0.48 ft/ft using the potentiometric based on depth to water measurements taken on September 28, 2008 (Figure 7B).

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:

- Additional delineation of soil concentrations was conducted with the installation of six soil borings to improve delineation and definition of current locations and concentrations of chlorinated hydrocarbons associated with dry cleaning activities onsite. Five borings were located in the area at the rear of the building where the source area had previously been identified. The highest PCE concentration found was 193 mg/l at the 15-foot depth in B-7, 18 feet south of MW-4. Boring B-7 appeared to be the locus of the area of soil contamination; other borings effectively delineated this area. One boring was located in front of the building near the dry cleaning machine, and had barely detectable PCE concentrations ranging from 0.005 mg/kg to 0.008 mg/kg.

- Groundwater sampling of all monitoring wells on the Bowen Property indicated that PCE and PCE degradation compound concentrations have generally decreased in concentration since previously sampled. The area affected by PCE and products reasonably believed to have originated from site activities (MW-4 and MW-3) has been delineated, for all practical purposes. The only significant onsite source appears to be in the general area of MW-4 and soil boring MW-7. No PCE, TCE or VC was detected in MW-2; cis-DCE was present at 0.011 mg/l. MW-2 is now an effective delineation well. Groundwater concentrations continue to decrease over time and with distance from the source area.

- 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. This suggests that soil concentrations of TCE is quite low. TCE and cis-DCE were present at much lower concentrations. Trans-DCE and VC were not detected.

- 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. Minor concentrations elsewhere onsite are either the result of minor emission of PCE vapors for a brief time after the door of the dry cleaning machine is opened, and a number of businesses hydraulically upgradient from the site from the 1950s (and possibly earlier) to more recent years, at least some of which appear to have been likely users of PCE and/or TCE. Highest concentrations of PCE and TCE in soils is at the 15-foot depth at which fill overlies the original soil horizon. The original topsoil layer appears to be present and have higher clay content than soils above or below this depth. This has resulted in higher concentrations of PCE being present. Concentrations in soil and groundwater away from the source decrease with distance.

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:

- Horizontal delineation has been effectively completed, for all practical purposes, with only one source identified onsite, in the vicinity of MW-4. It is recommended that groundwater monitoring wells be re-sampled in conjunction with vertical delineation efforts, and the need for additional groundwater monitoring, if any, be re-evaluated after this sampling event.

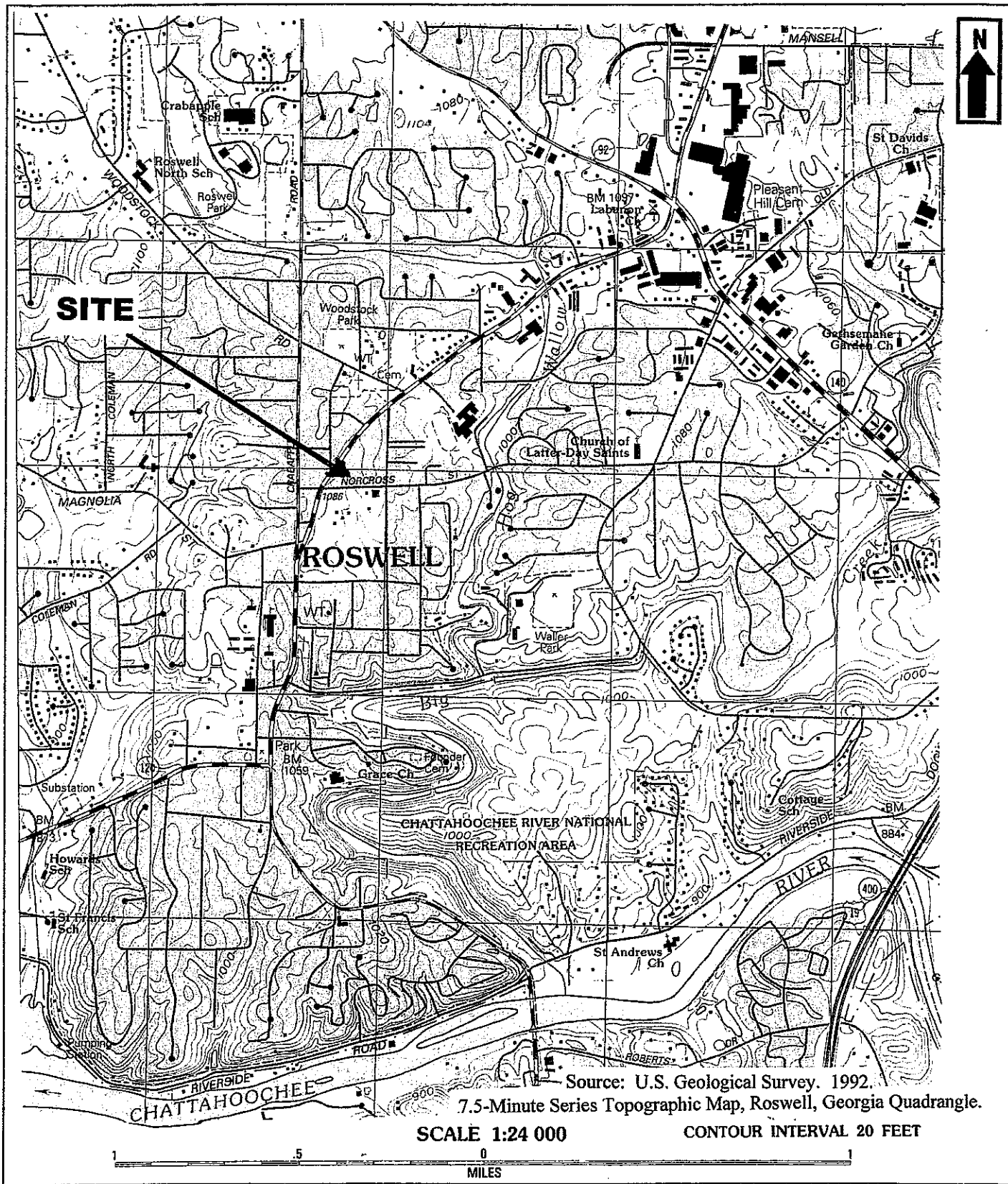
- It is recommended that site investigation in accordance with the Voluntary Remediation Program (VRP) continue in accordance with the attached Milestone Schedule.

- PCE and TCE concentrations continue to generally decrease in groundwater onsite. Vinyl chloride was not detected in any monitoring well, soil or vapor sample. At the rate of decrease observed, it is recommended that one more round of groundwater sampling be conducted at the time vertical delineation is completed to assist in finalizing conclusions regarding completion of delineation.

REFERENCES

Howard, P.H., Editor. 1990. Handbook of Environmental Fate and Exposure Data for Organic Chemicals. Volume II. Solvents. Lewis Publishers, Chelsea, Michigan.

FIGURES



Source: U.S. Geological Survey. 1992.
7.5-Minute Series Topographic Map, Roswell, Georgia Quadrangle.

SCALE 1:24 000 CONTOUR INTERVAL 20 FEET

1 .5 0 1
MILES

Figure 1: Site Location Map

Roswell Cleaners
1013 Alpharetta Street
Roswell, Georgia 30075

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Drawn By: Terri Drabek

Checked By: Peter Kallay, P.E.

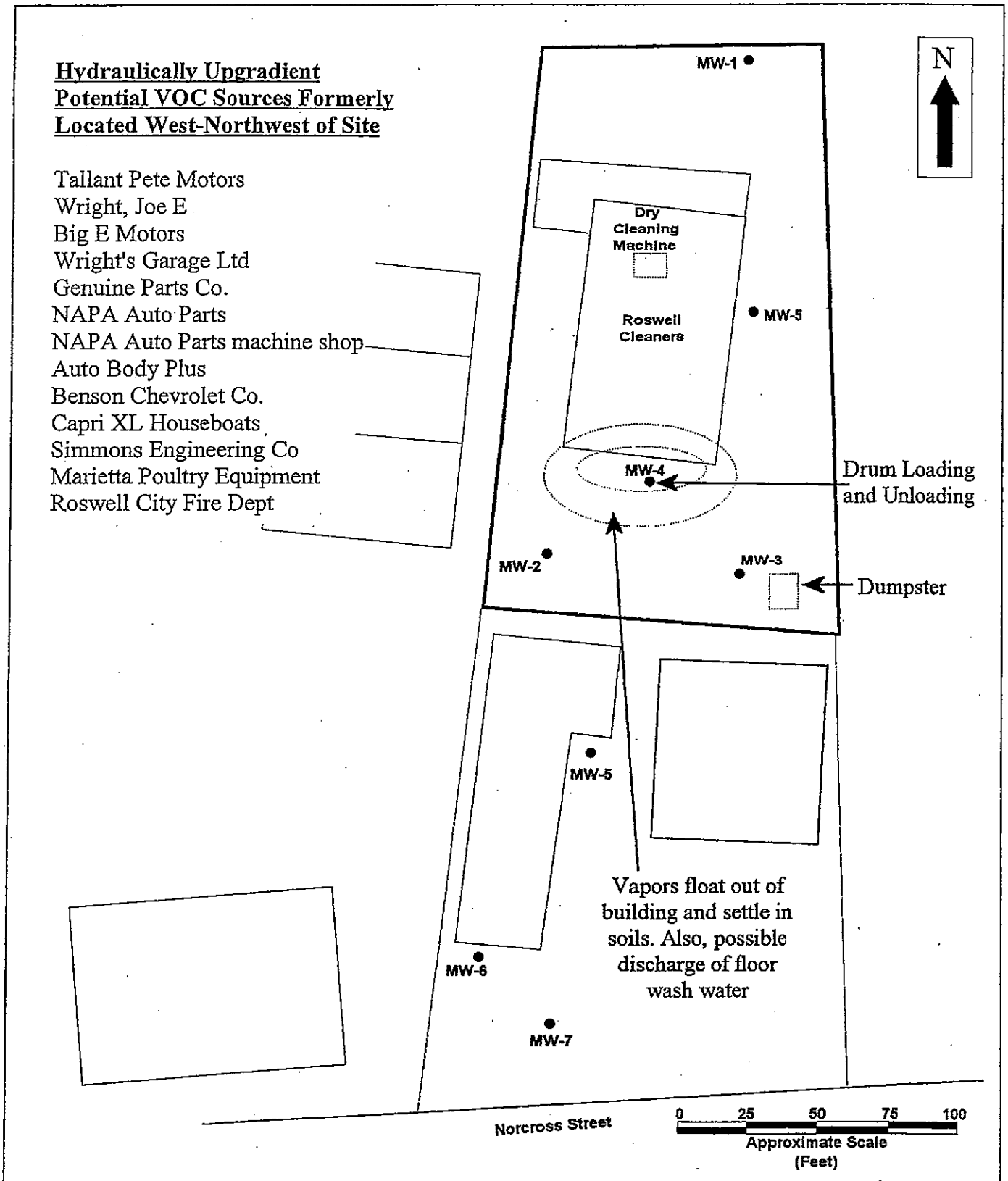

Figure 2: Site Plan Showing Possible Sources

Roswell Cleaners

1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Checked By: Peter Kallav, P.E.

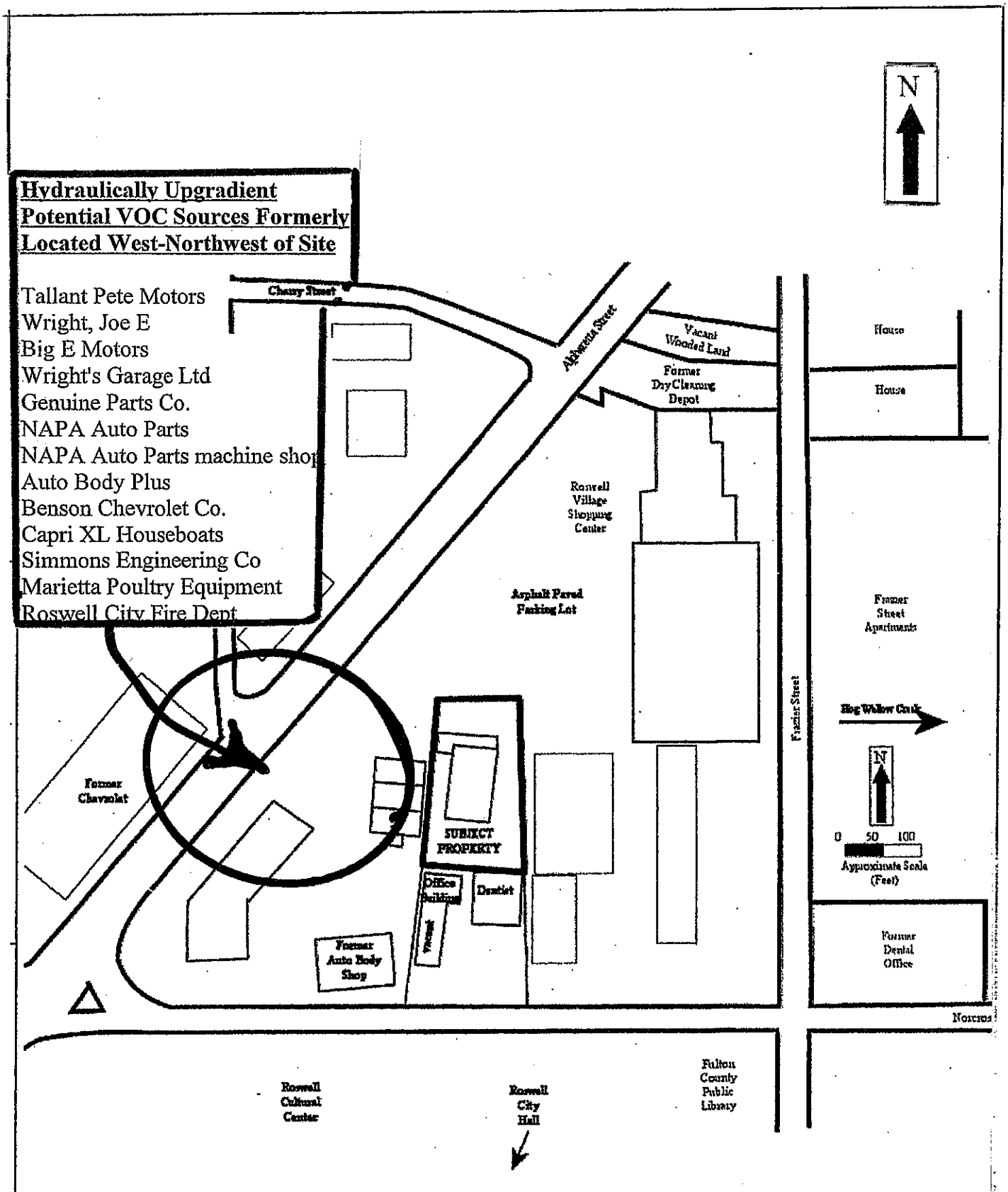

Figure 3: Site Area Plan
Locations Of Cross-Sections
Roswell Cleaners

1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Checked By: Peter Kallay, P.E.

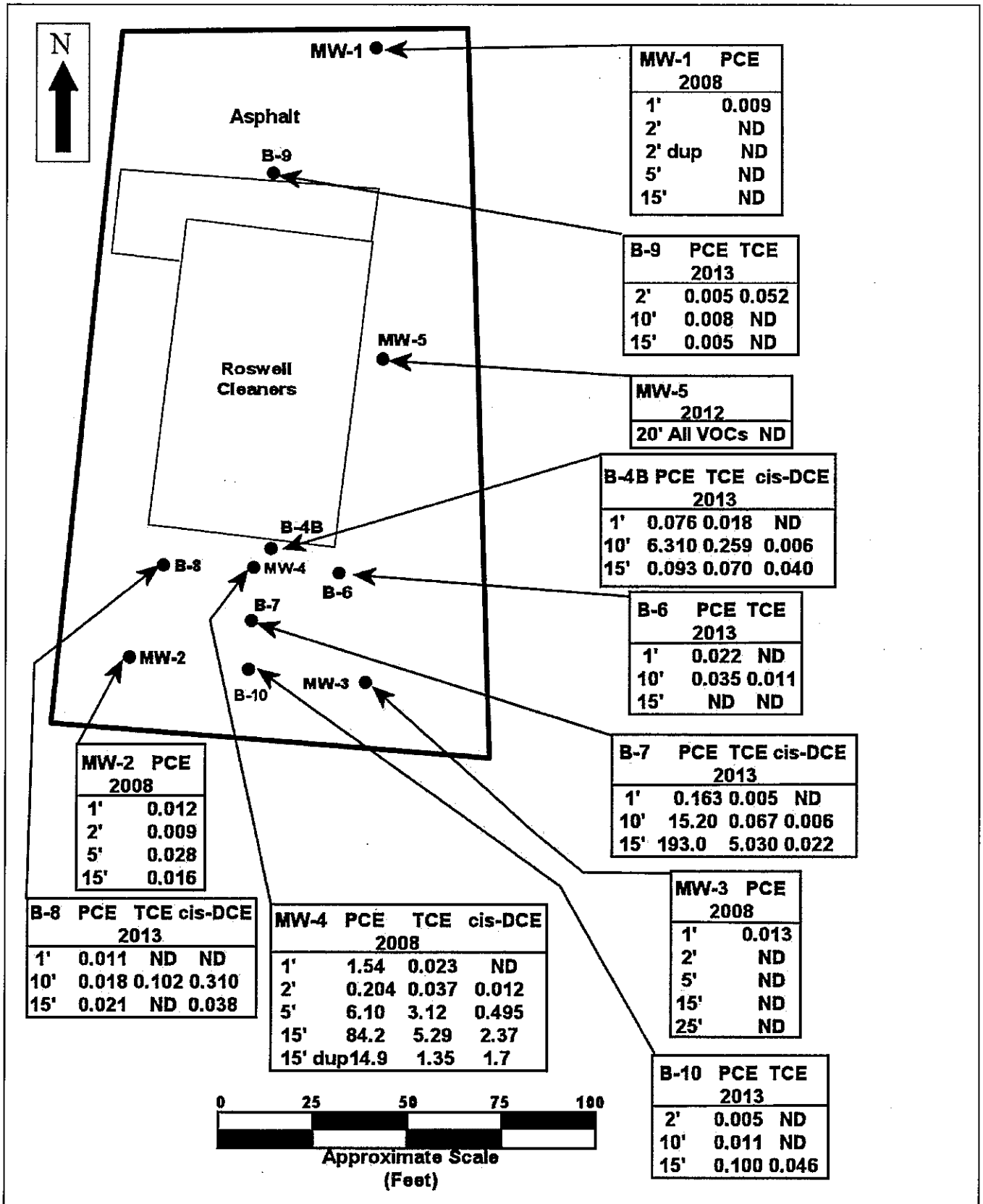

Figure 4: PCE Concentration in Soil, 2008 through 2013
Roswell Cleaners Concentrations in mg/kg
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Drawn By: Terri Drabek

Checked By: Peter Kallay, P.E.

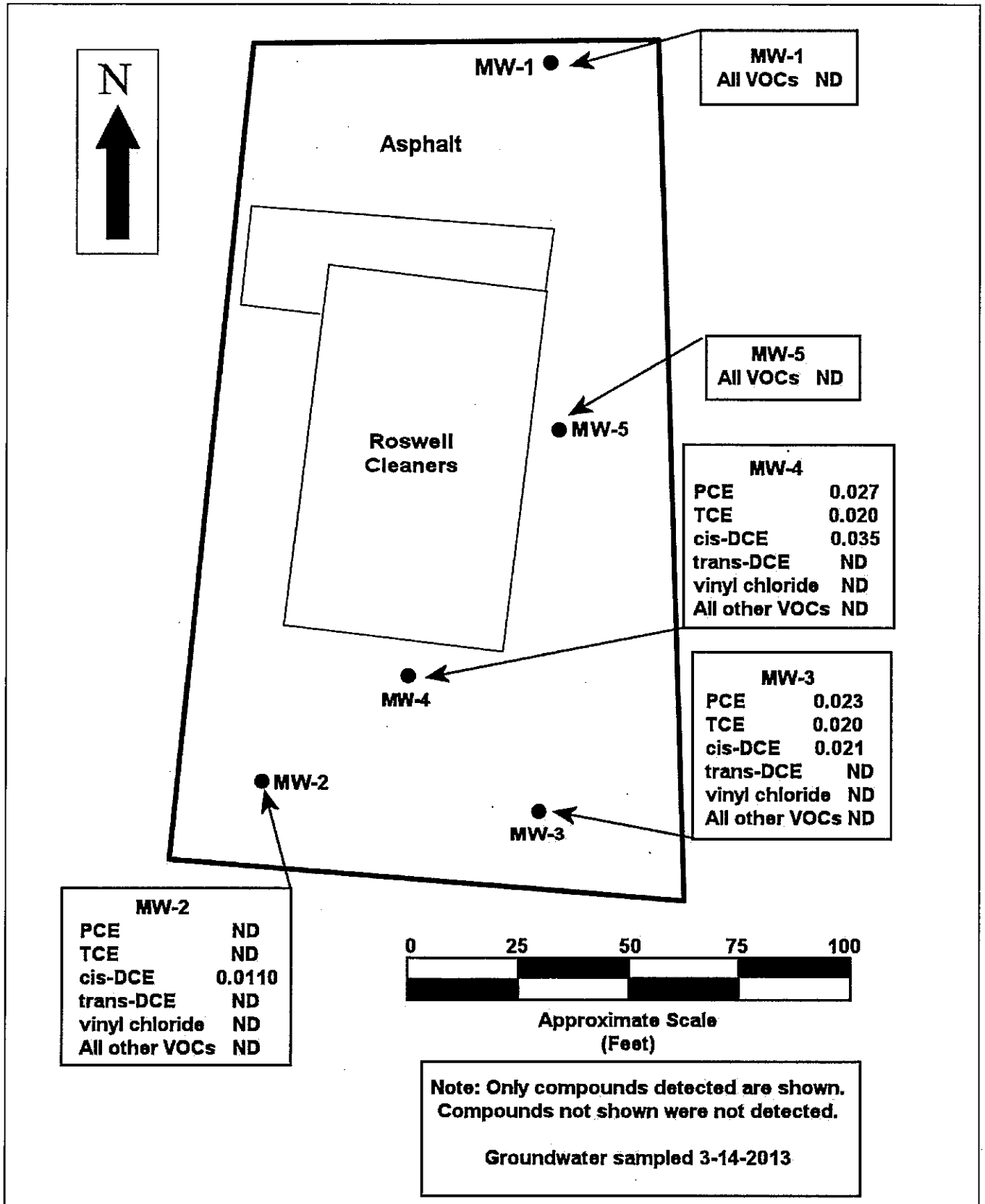

Figure 5: PCE Concentration in Groundwater, 2013
Roswell Cleaners Concentrations in mg/l
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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Drawn By: Terri Drabek

Checked By: Peter Kallay, P.E.

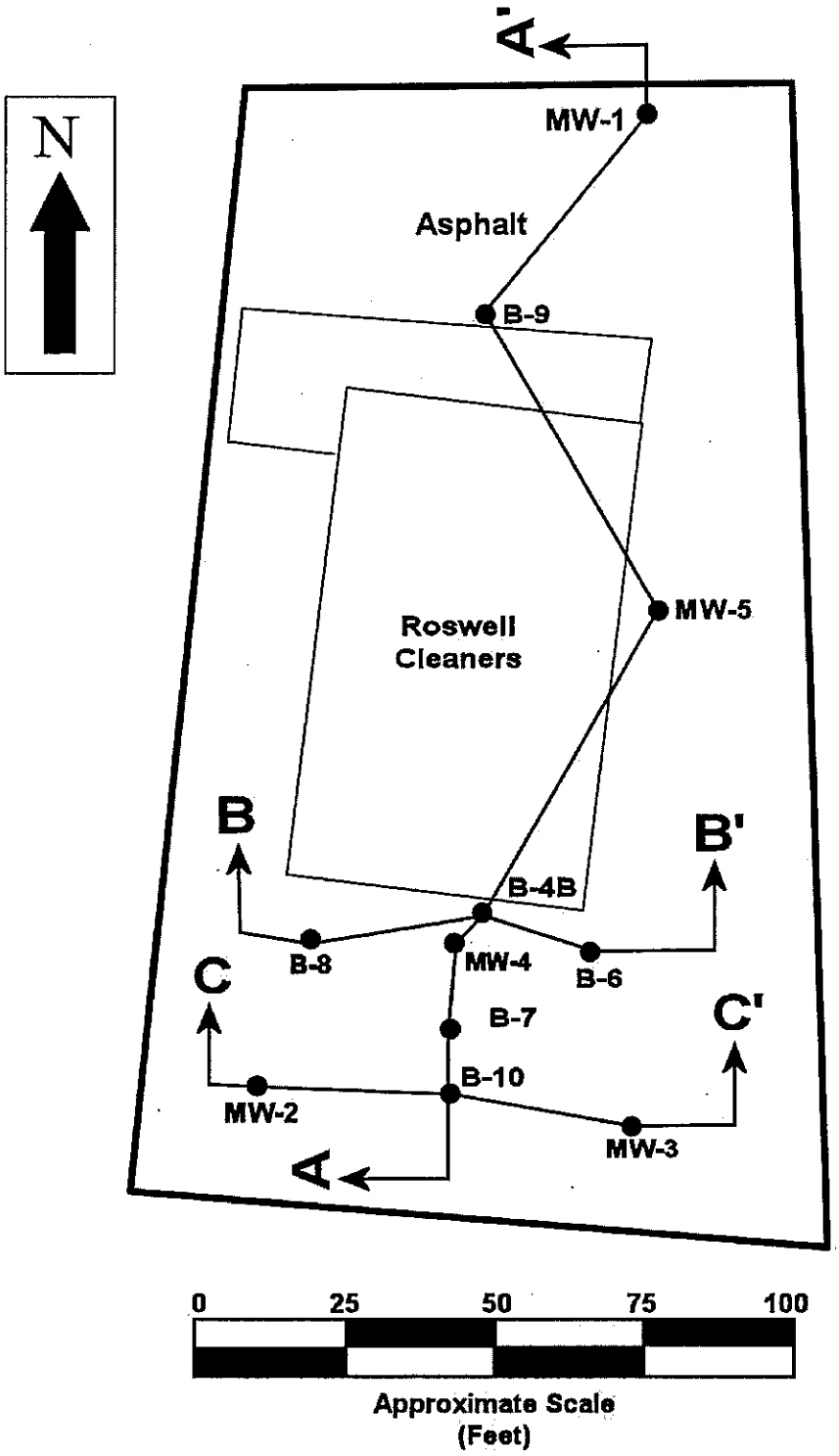

Figure 6: Cross-Section Locations
Roswell Cleaners
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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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

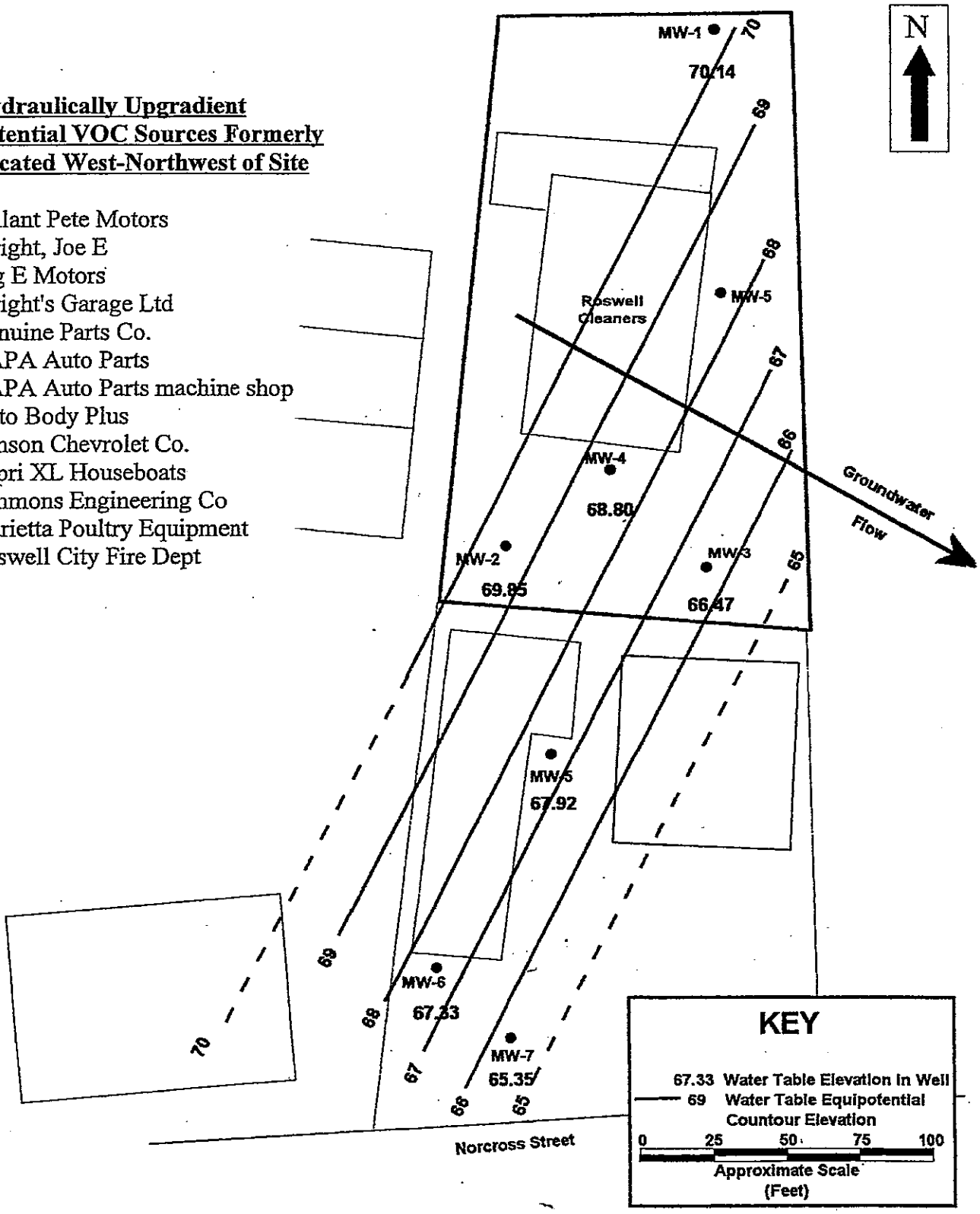

Figure 7a: Potentiometric Map, 08/27/2008

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

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Checked By: Peter Kallav, P.E.

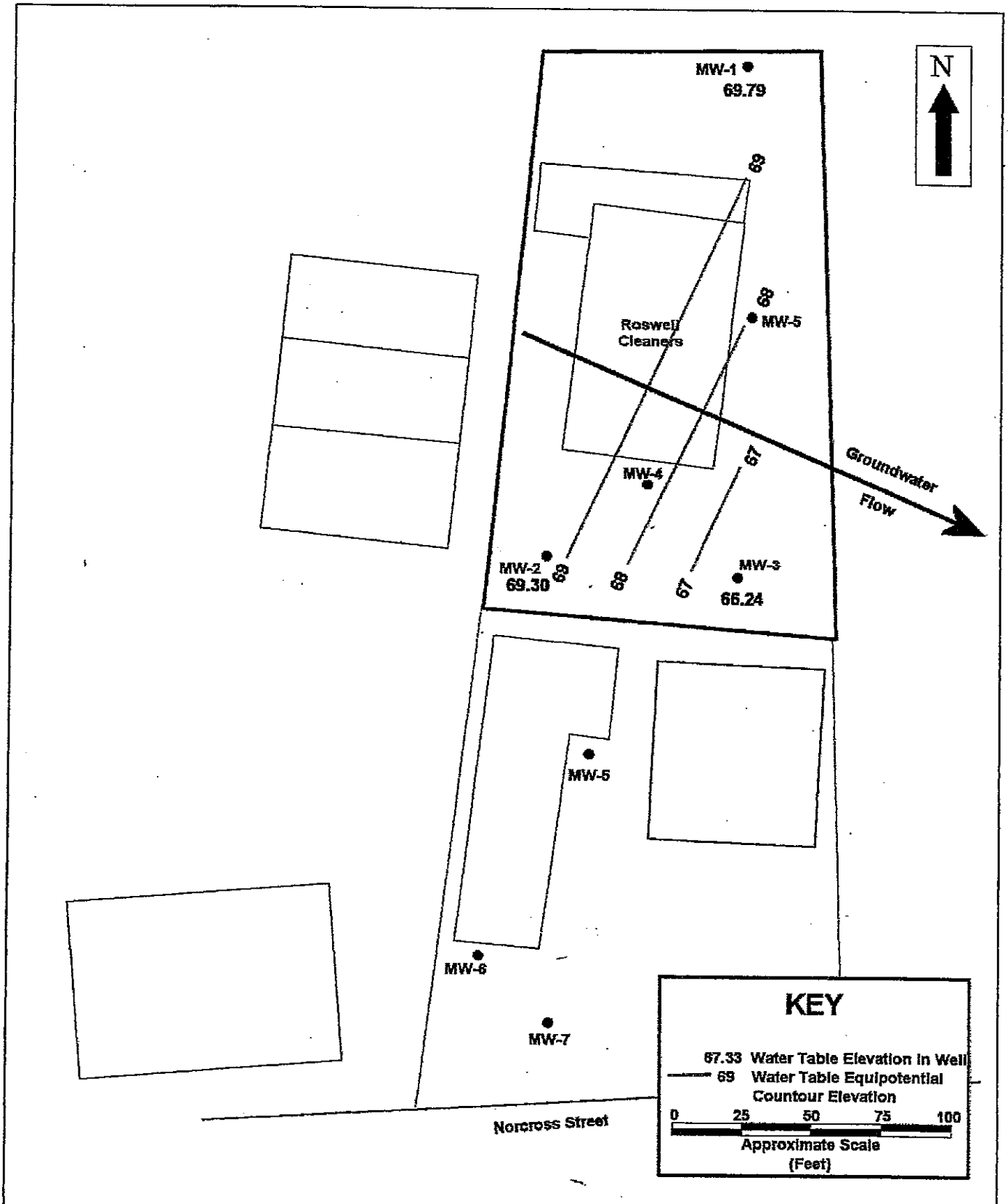

Figure 7B
Potentiometric Map, 09/28/2008

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

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Drawn By: Terri Drabek

Checked By: Peter Kallay, P.E.

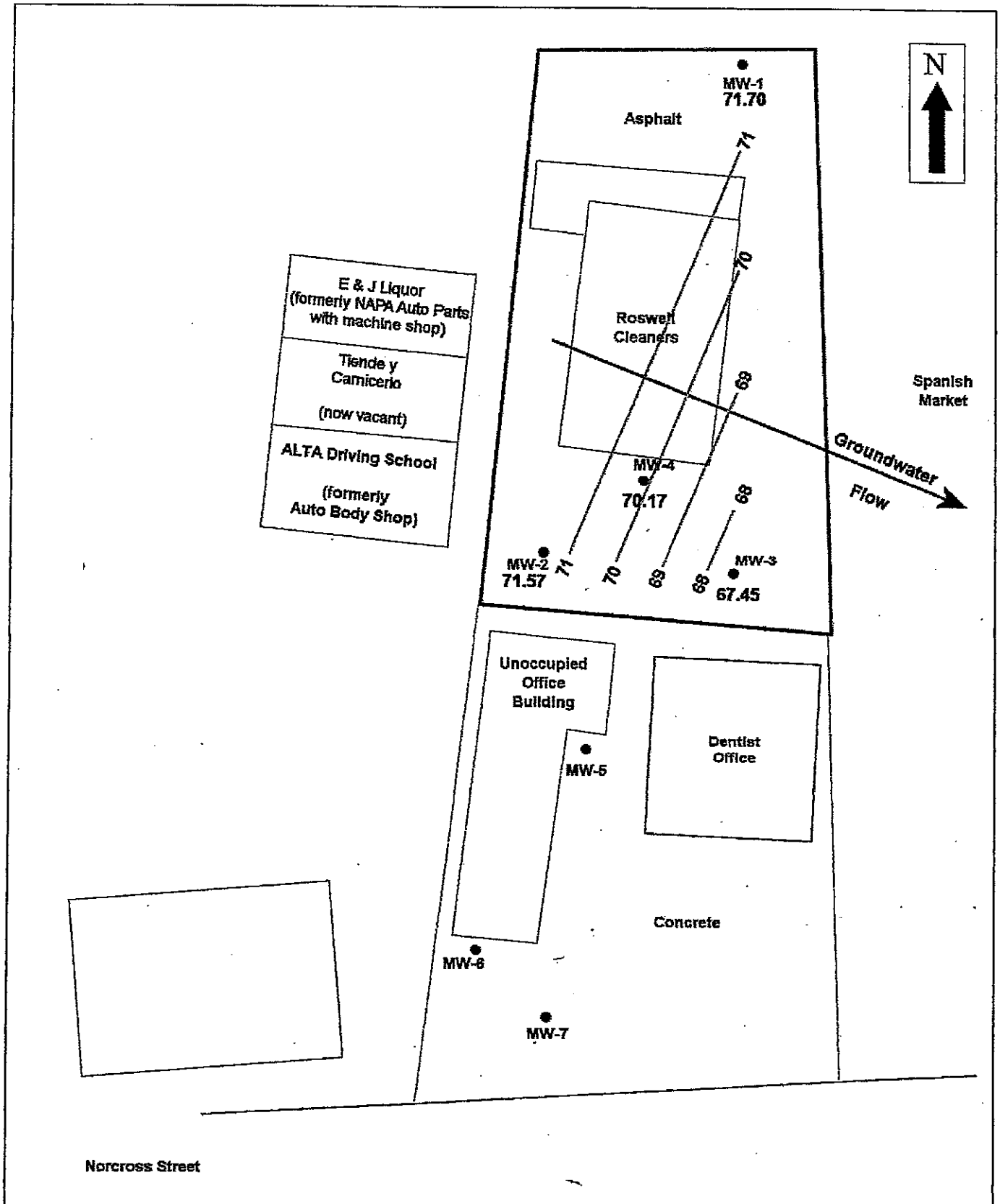

Figure 7C: Potentiometric Map, 04-16-2012

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.

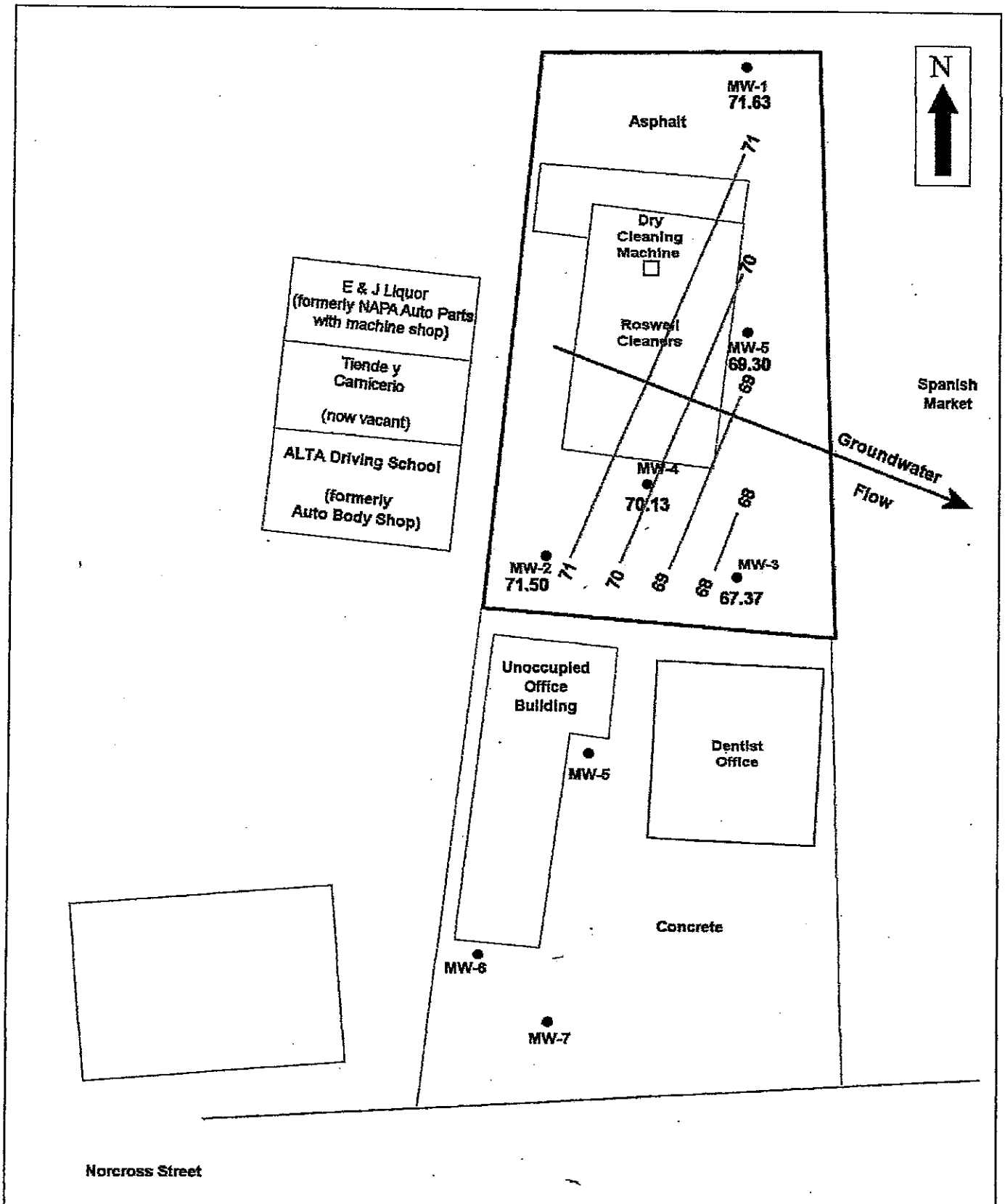

Figure 7D: Potentiometric Map, 04-18-2012

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

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Drawn By: Terri Drabek

Checked By: Peter Kallay, P.E.

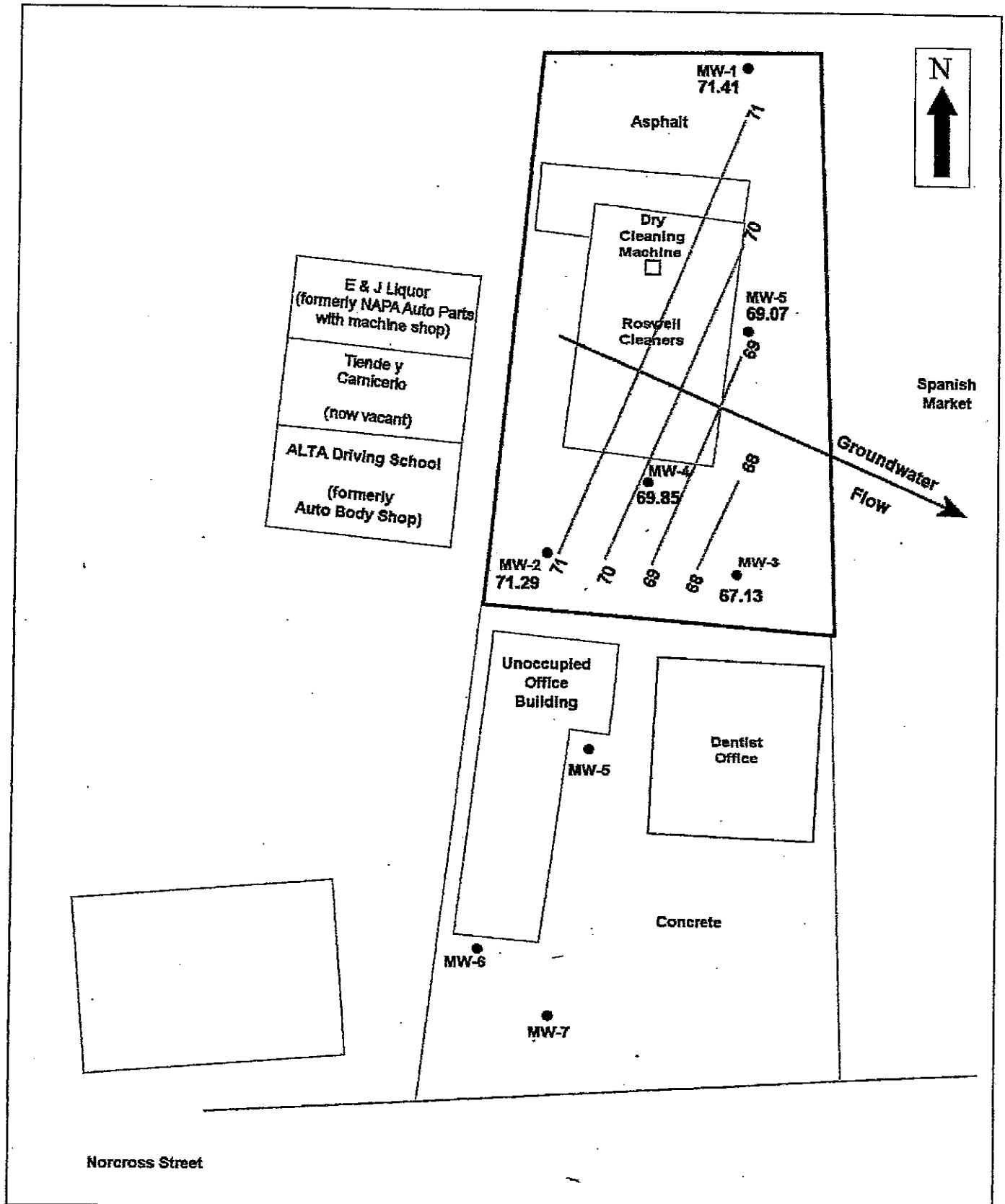

Figure 7E: Potentiometric Map, 05-16-2012

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

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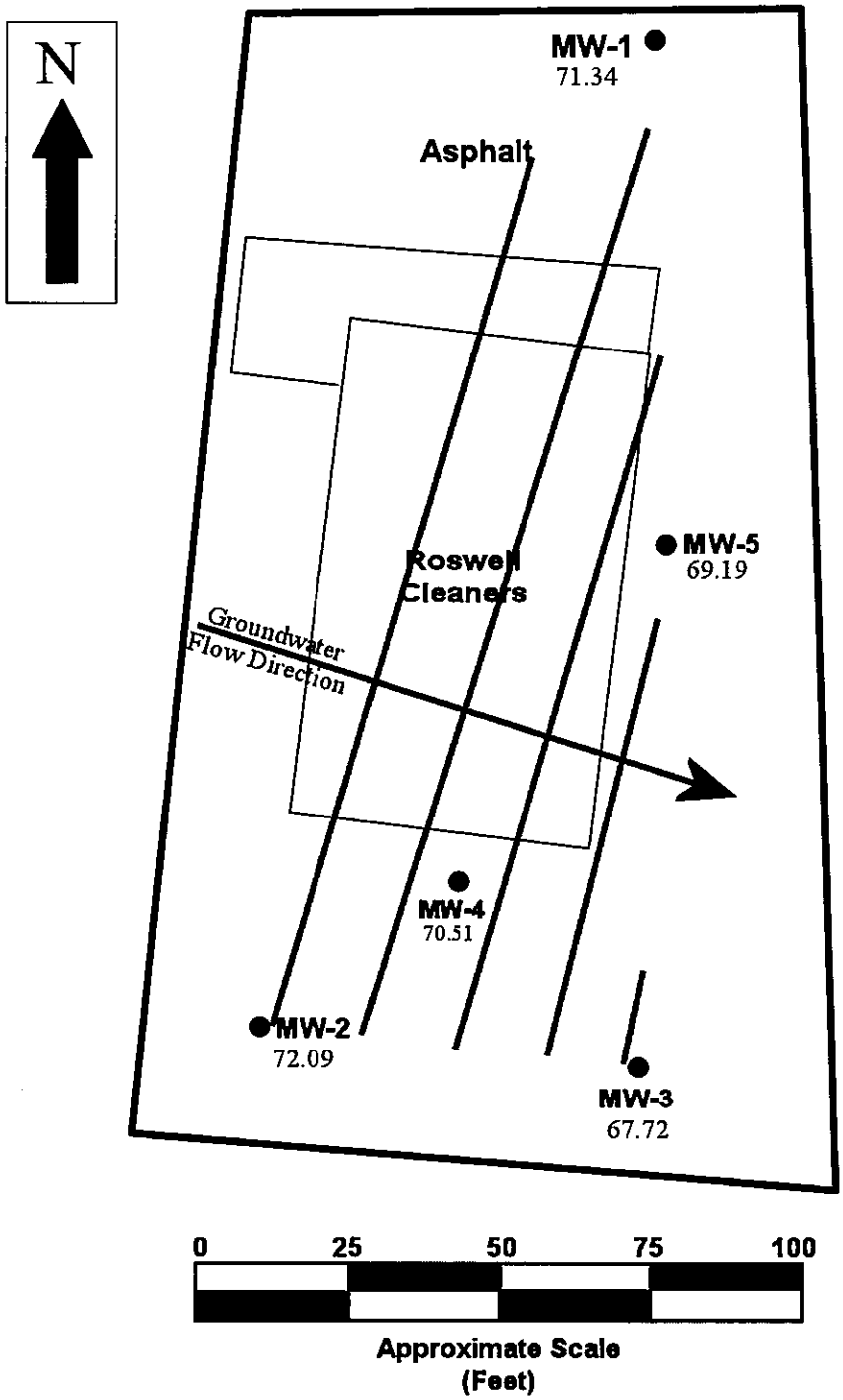
Atlanta Environmental Consultants

Drawn By: Terri Drabek

Checked By: Peter Kallay, P.E.



Groundwater Elevations
Measured March 14, 2013

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

Equipotential Contours are at l-foot Intervals

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Checked By: Peter Kallay, P.E.

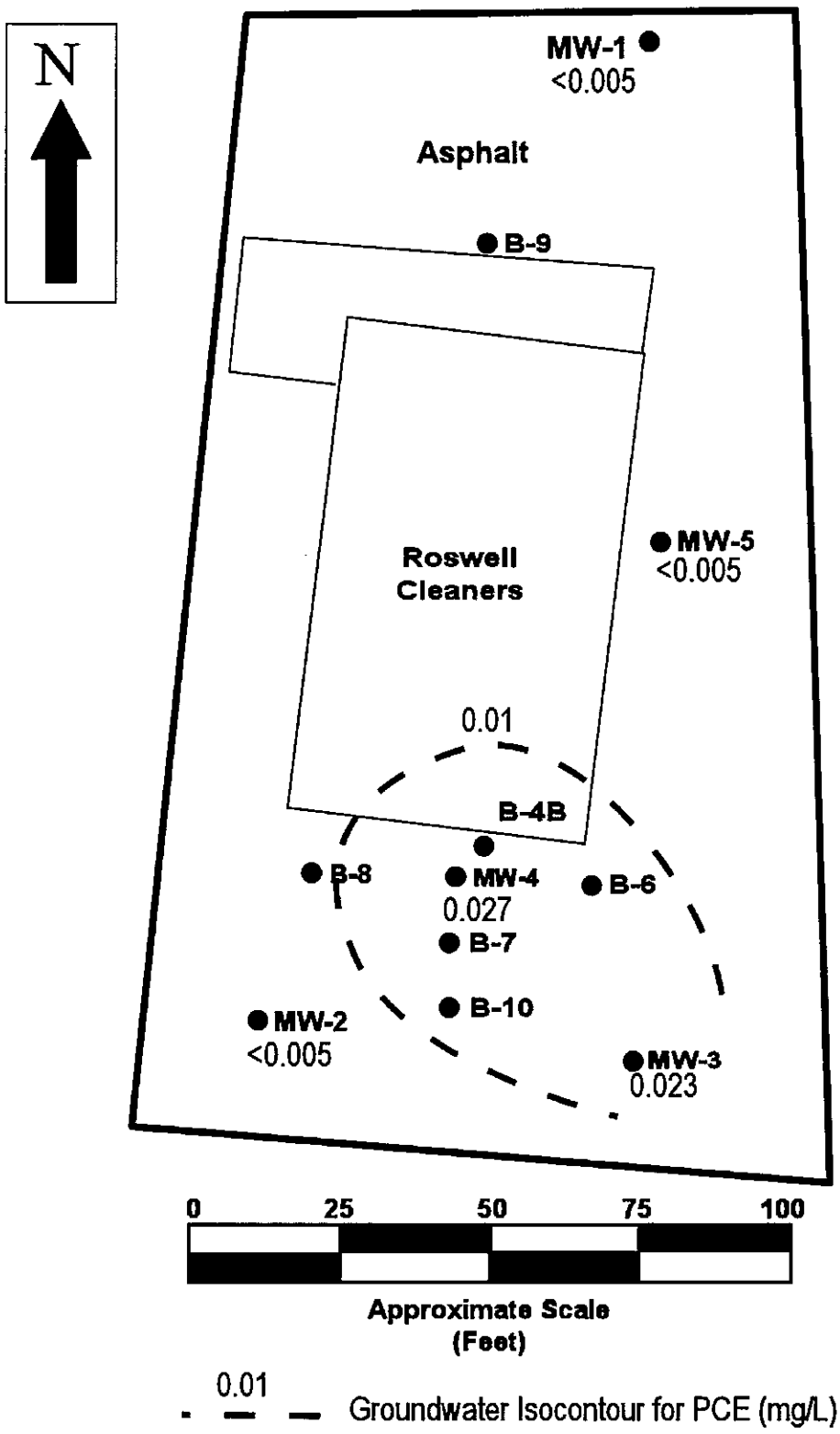

Figure 8: PCE Concentration in Groundwater, 2013
Roswell Cleaners Concentrations in mg/l
1013 Alpharetta Street
Roswell, Fulton County, Georgia

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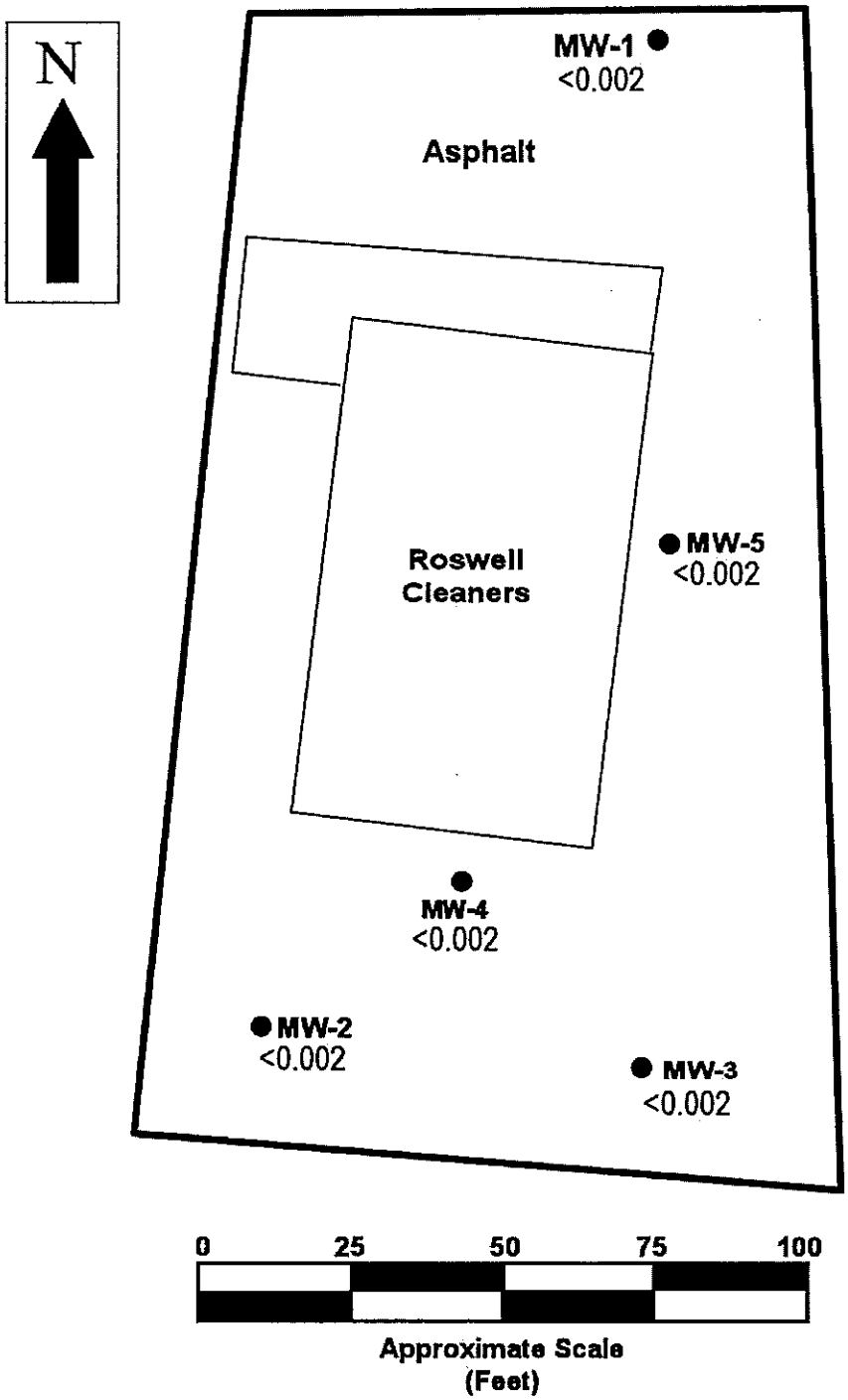
Checked By: Peter Kallav, P.E.



Vinyl Chloride Concentrations measured April 14, 2013

Figure 8B: Vinyl Chloride in Groundwater, 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.

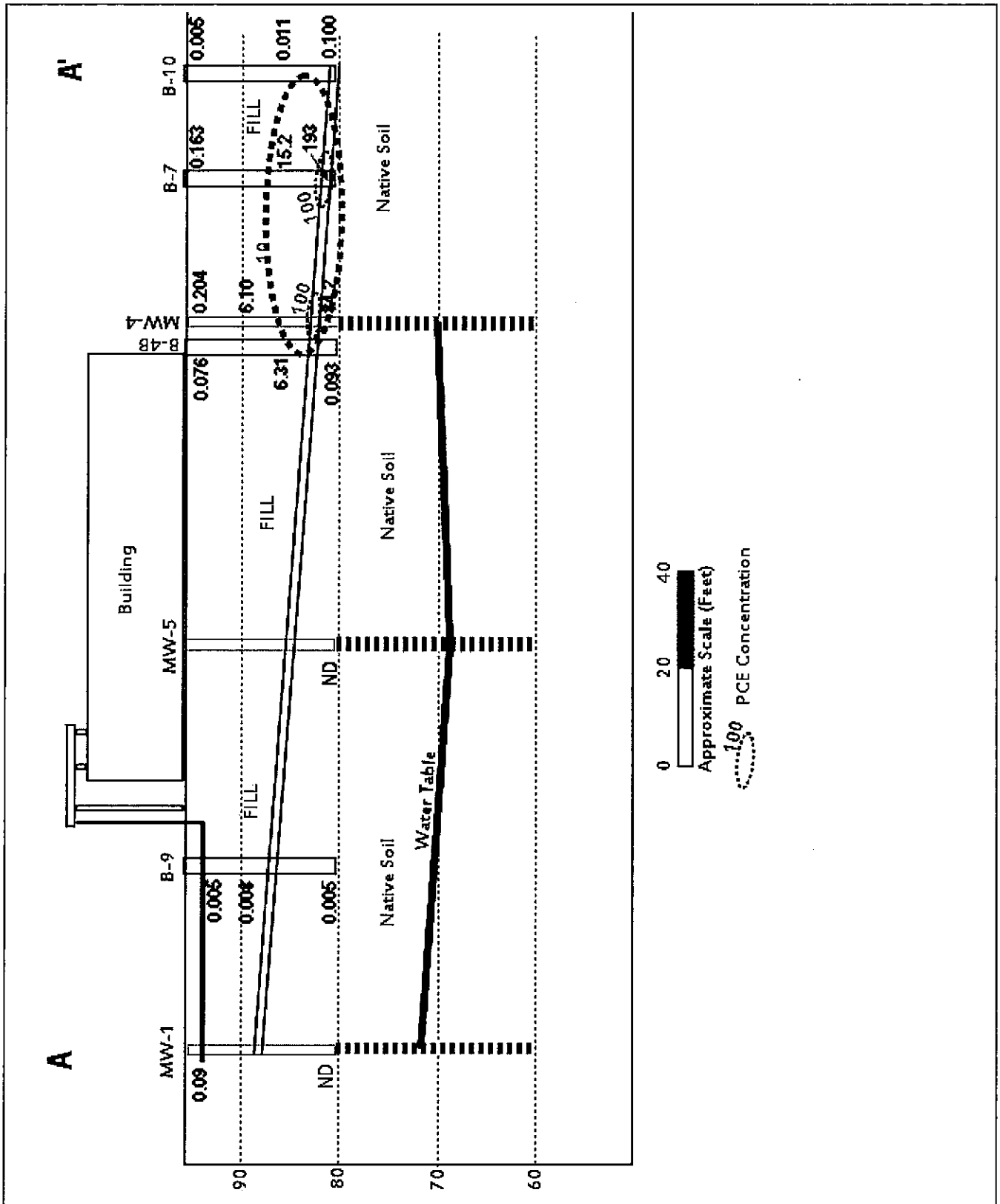

Figure 9: Cross-Section A-A'
Roswell Cleaners
1013 Alpharetta Street
Roswell, Fulton County, Georgia

Concentrations in mg/kg

===== Original Topsoil Layer

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Drawn By: Terri Drabek

Checked By: Peter Kallav, P.E.

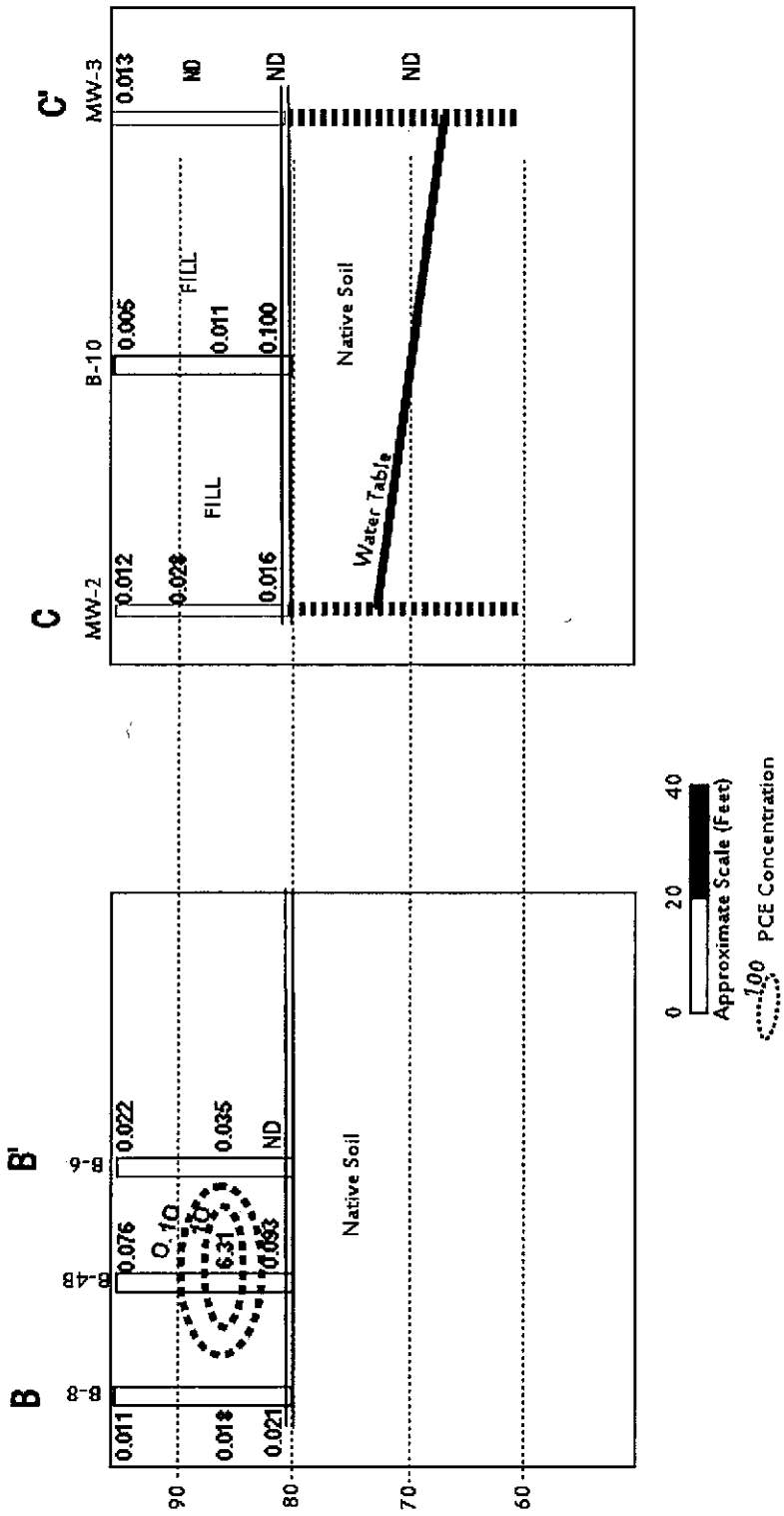

Figure 10: Cross-Section B-B' and C-C'
Roswell Cleaners Concentrations in mg/kg
1013 Alpharetta Street
Roswell, Fulton County, Georgia

====== = Original Topsoil Layer

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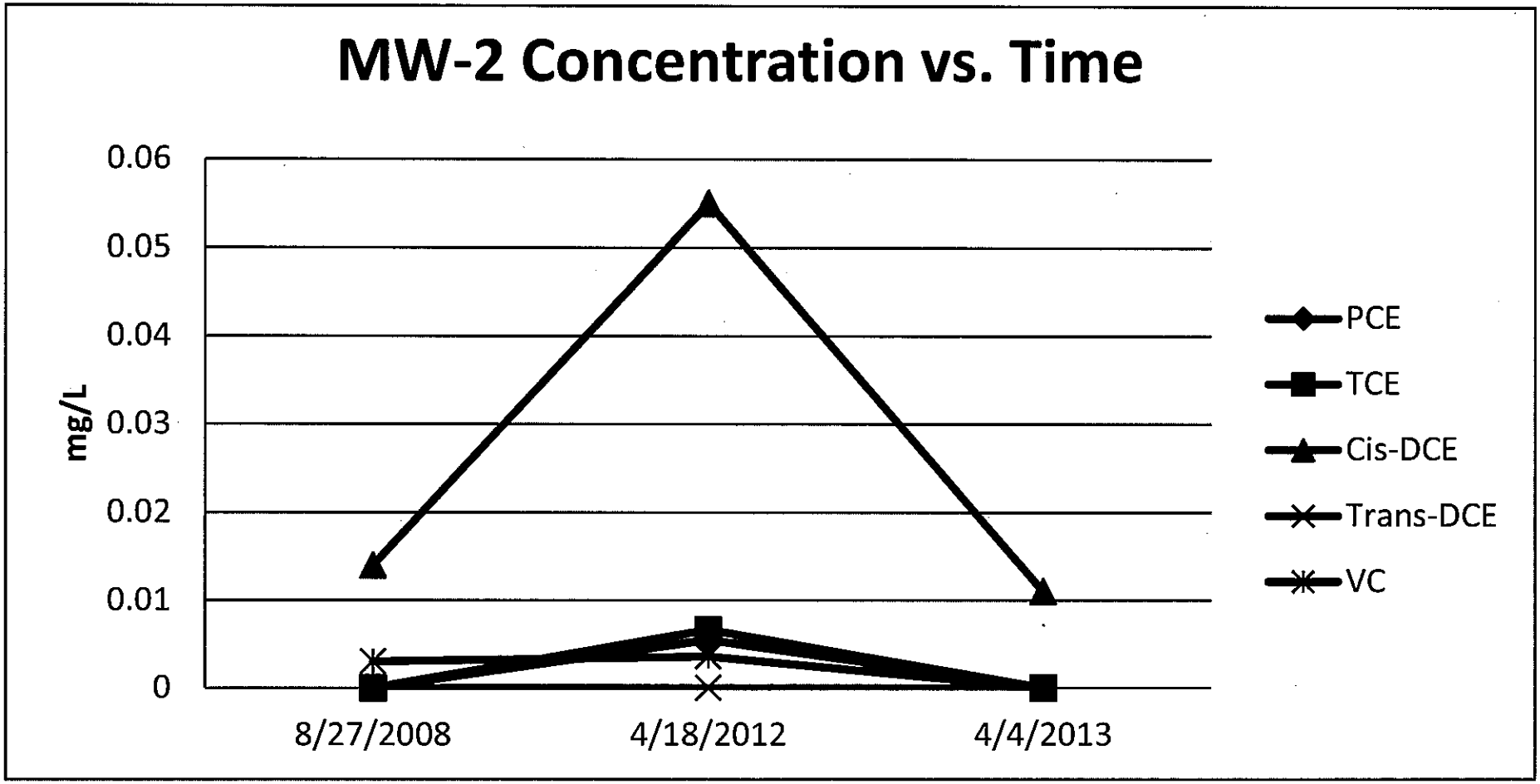
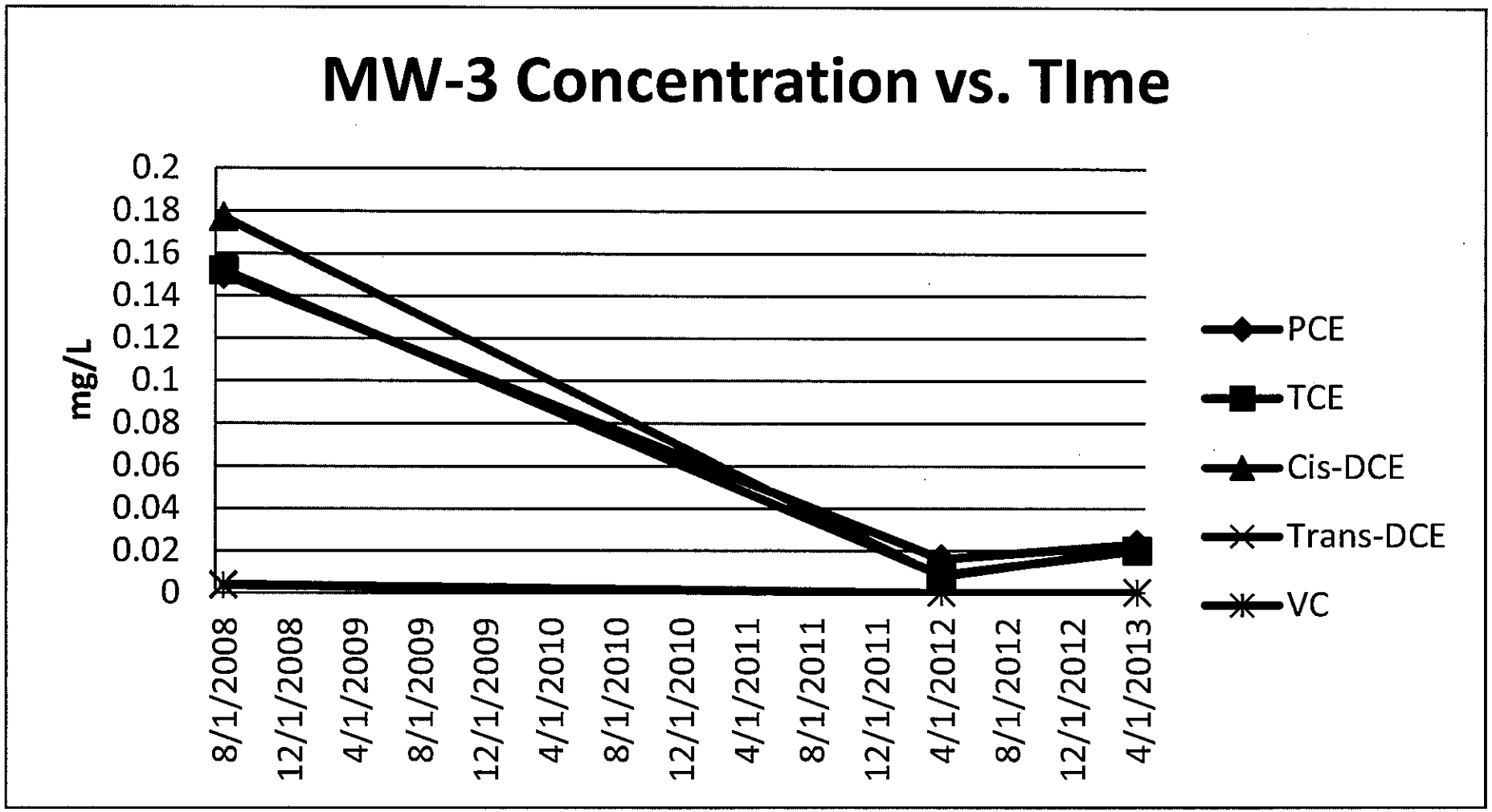
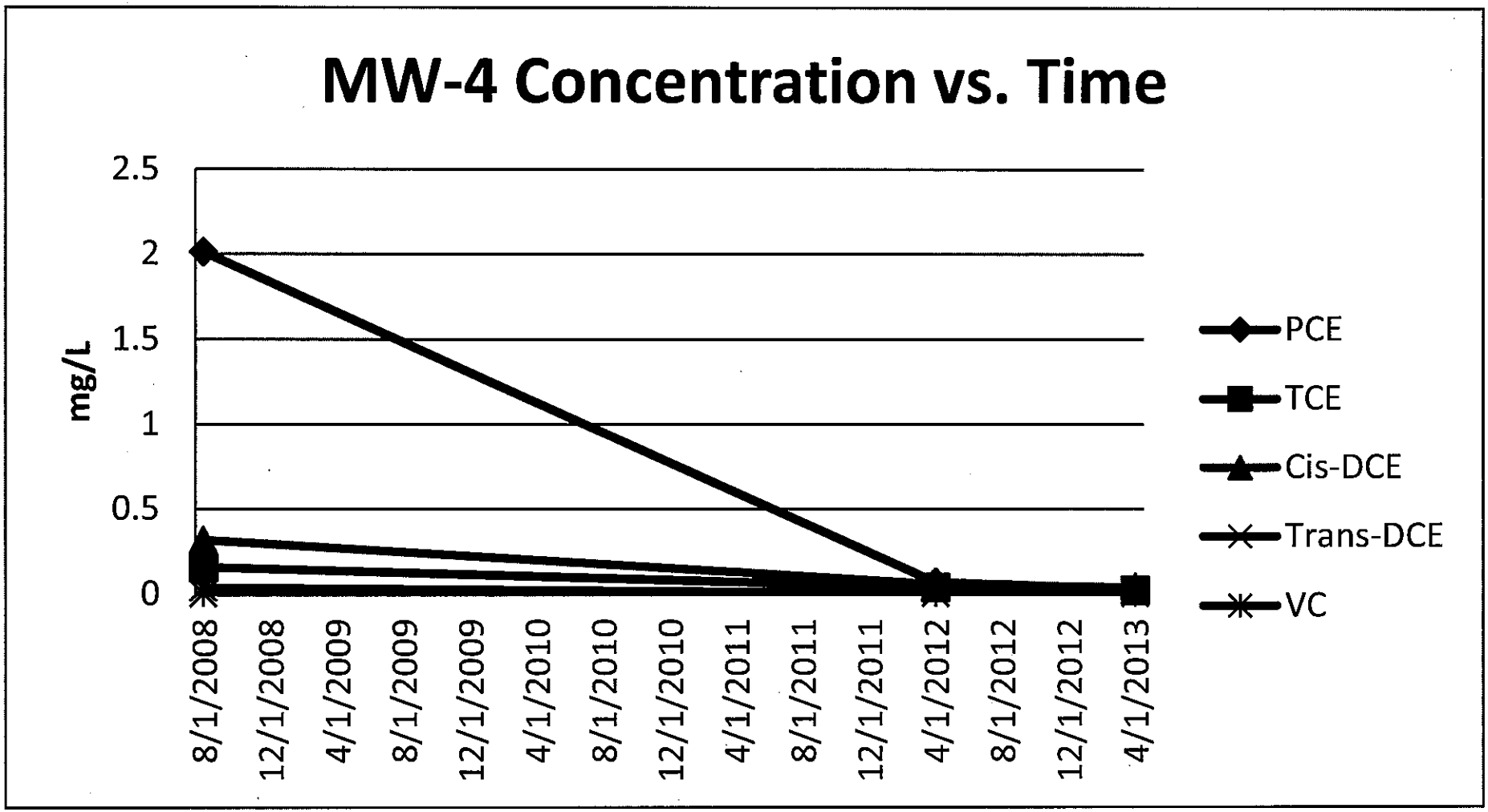
Drawn By: Terri Drabek

Checked By: Peter Kallay, P.E.


MW-2 Concentration vs. Time
0.06
0.05
0.04
0.03
0.02
0.01
0
mg/L
8/27/2008
4/18/2012
4/4/2013
PCE
TCE
Cis-DCE
Trans-DCE
VC


MW-3 Concentration vs. TIme
mg/L
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
8/1/2008
12/1/2008
4/1/2009
8/1/2009
12/1/2009
4/1/2010
8/1/2010
12/1/2010
4/1/2011
8/1/2011
12/1/2011
4/1/2012
8/1/2012
12/1/2012
4/1/2013
PCE
TCE
Cis-DCE
Trans-DCE
VC


MW-4 Concentration vs. Time
mg/L
2.5
2
1.5
1
0.5
0
8/1/2008
12/1/2008
4/1/2009
8/1/2009
12/1/2009
4/1/2010
8/1/2010
12/1/2010
4/1/2011
8/1/2011
12/1/2011
4/1/2012
8/1/2012
12/1/2012
4/1/2013
PCE
TCE
Cis-DCE
Trans-DCE
VC

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'Du	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 0-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 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 on August 27, 2008, April 18, 2012 and April 14, 2013

SAMPLE ID	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 2013	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 2013	ND (0.005)	ND (0.005)	0.0110	ND (0.005)	ND (0.002)	
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 2013	0.0230	0.0200	0.0210	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 2013	0.0270	0.0200	0.0350	ND (0.005)	ND (0.002)	
MW-5 Bowen 12	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.002)	
MW-5 Bowen 13	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)	

NOTES:

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

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

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

Lindsay = Sample was collected on Lindsay Property; Bowen - Sample was collected on Bowen Property.

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

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

2013 or 13 = Sample was collected on March 14, 2013

* = Chloroform 0.004 mg/l

** = Naphthalene 0.006 mg/l

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 digits (see lab rpt).

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	DEPTH TO WATER	WATER TABLE ELEVATION	NOTES
		(feet)	(feet)	(feet)	
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-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-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-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-5 Bowen	4/18/2012	94.82	25.52	69.30	
MW-5 Bowen	5/16/2012	94.82	25.75	69.07	
MW-5 Bowen	3/14/2013	94.82	25.63	69.19	
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.

ATTACHMENTS

SOIL BORING LOGS

aec SOIL BORING LOG

Atlanta Environmental Consultants

Field Rep. Peter T. Kallay, P.E.
Project No. REB-2401, 1013 Alpharetta St., Roswell, GA
Driller Betts Environmental Recovery

Boring No. MW-5
Date April 16, 2012
Crew Jason Allwood, Paul Summers, Sam Conner

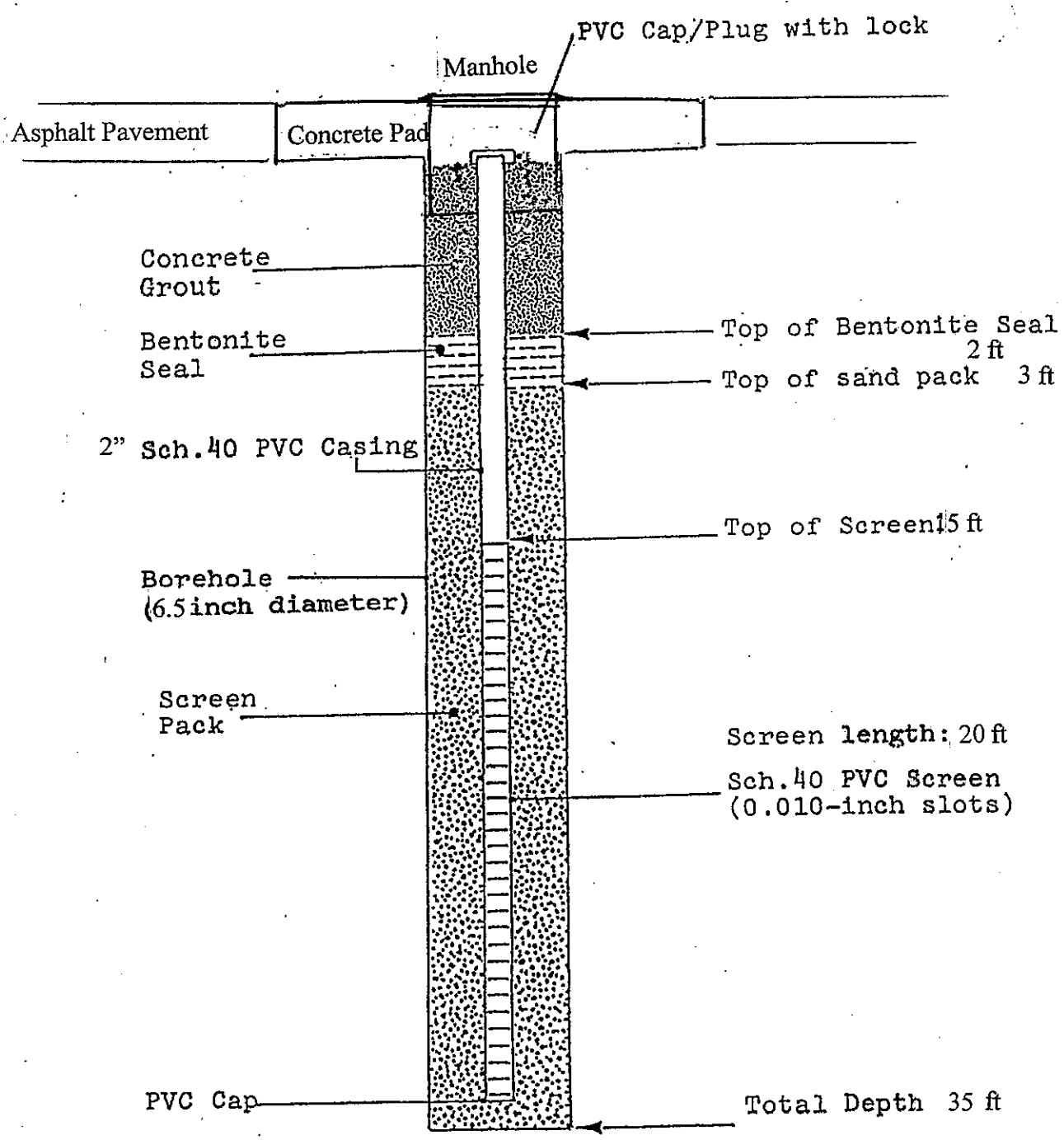
Depth From	Depth To	Soil Description	Time	Type	1st 6"	2nd 6"	3rd 6"	Recovery	PID/FID
0	0.25	Surface: Asphalt Pavement	2:50						
0.25	1	Red-brown sandy SILT; damp, no odor. FILL	2:55	CUT					0.2
		(Rig Shut down. Pin was bad. Replacement pin was procured and installed)							
5	6	Red-brown with tan streaks sandy SILT with some clay, some mica, moist, no odor. FILL	5:40	SPT	1	2	5		1.2
10	11	Same as above. FILL. Underlain by white and tan silty SAND with a few black specks. Sand has mixed grain sizes, some mica, moist, no odor	5:50	SPT	15	29	30		0.3
15	16	White and tan horizontally stratified SILT, very micaceous, underlain by brown, beige and lt grey 1-2" layers of silty SAND, micaceous of varying grain sizes. Moist. No odor.	6:05	SPT	7	7	8		0.4
20	21	Tan, beige, lt brown fine SILT, horizontally stratified with some mica. Moist, slight undetermined odor.	6:15	SPT	7	8	8		1.1
25	26	Grey, black and tan fine SILT, micaceous, horizontally stratified at 20 deg. Dip. Wet. no odor.	6:20	SPT	6	12	22		0.1
30	31	White, tan, silver, black and grey mottled SILT with some mica. Various colors predominate every few inches. Horizontally stratified with 20 deg. Dip. Wet, saturated. No odor.	6:35	SPT	12	9	10		0.3
		BORING TERMINATED at 35 feet							

Method: Hollow-Stem Augers
Auger [X] Size 6 1/4 OD
Wash [ ] Size _____ OD
Core [ ] Size _____ OD
Casing Size: 2"
Undisturbed SPT _____
Water Loss _____ Gallons

Weather Cloudy, warm, breezy
Standby Time _____
Water Level 26 feet
Borehole Depth 35 feet
Date Completed 0/16/2012

MONITORING WELL SCHEMATIC DIAGRAM

MONITORING WELL SCHEMATIC DIAGRAM



All Depths referenced from Ground Surface

Not to scale

aec Atlanta Environmental Consultants	Drawn By: Ever Guillen Checked By: Peter Kallay, P.E.	Schematic Diagram of Monitoring Well MW-5

WEL PURGING AND SAMPLING LOGS

WELL PURGING AND SAMPLING DATA

WELL NO: MW-1

DATE: 4-18-12	PROJECT NAME: Roswell Cleaners AEA	PROJECT NO. REB-2409

WEATHER CONDITIONS: Cloudy, overcast, light rain on and off

WELL DIAMETER (IN.) ☐ 1 ☑ 2 ☐ 4 ☐ 6 ☐ Other (specify)

SAMPLE TYPE ☑ GROUNDWATER ☐ WASTEWATER ☐ SURFACE WATER ☐ OTHER

WELL DEPTH (BTOC)	35 FT.	DEPTH TO WATER BEFORE PURGE	22.14
HEIGHT OF COLUMN OF WATER	13 FT	CALCULATED ONE WELL VOLUME	2.2

PURGING DEVICE: Bailer ☑ DEDICATED ☑ DISPOSABLE ☐ DECONTAMINATED

SAMPLING DEVICE: Bailer ☑ DEDICATED ☑ DISPOSABLE ☐ DECONTAMINATED

EQUIP'T DECON: ☑ TAP WATER WASH ☑ ISOPROPANOL ☑ ANALYTE FREE FINAL RINSE

☐ ALCONOX WASH ☐ DIST/DEION 1 RINSE ☐ OTHER SOLVENT ☐ DIST/DEION FINAL RINSE

☐ LIQUINOX WASH ☐ DIST/DEION 2 RINSE ☑ TAP WATER FINAL RINSE ☐ AIR DRY

CONTAINER PRESERVATION: ☑ LAB PRESERVED ☐ FIELD PRESERVED

WATER ANALYZER MAKE, MODEL, SERIAL NO. Horiba U-53 S/N U37BXX80R

ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP ☐ F ☑ C	pH	SPECIFIC CONDUCT (mS/cm)	TURBIDITY (NTUs)	DISS. OXYGEN (mg/L)	WATER APPEAR CL=CLEAR CO-CLOUDY TU=TURBID	REMARKS: ODOR COLOR PID
2:50	INITIAL	21.87	4.96	124	834	4.91	CL	Clear - No odor
2:55	0.5	21.66	4.93	124	351	5.39	CO	Light brown " "
2:59	1	21.46	4.86	121	526	4.84	CO	" " "
3:04	3	21.35	4.86	121	675	6.57	CO-TU	" " "
3:08	4.5	21.29	4.98	120	931	6.90	CO-TU	" " "

DEPTH TO WATER AFTER PURGING (BTOC) 25.12 SAMPLE FILTERED ☐ YES ☑ NO SIZE

NOTES:

SAMPLE TIME: 3:10 ID# MW-1

DUPLICATE ☐ TIME: ID#

EQUIP. BLANK ☐ TIME: ID#

PREPARED BY:

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

WELL PURGING AND SAMPLING DATA

WELL NO: MW-2

DATE: 4-18-12	PROJECT NAME: Roswell Cleaners ACA	PROJECT NO. ROS-2409

WEATHER CONDITIONS: Cloudy, overcast, light rain on and off

WELL DIAMETER (IN.) ☐ 1 ☑ 2 ☐ 4 ☐ 6 ☐ Other (specify)

SAMPLE TYPE ☑ GROUNDWATER ☐ WASTEWATER ☐ SURFACE WATER ☐ OTHER

WELL DEPTH (BTOC) 35 FT. | DEPTH TO WATER BEFORE PURGE 22.62

HEIGHT OF COLUMN OF WATER 13. FT | CALCULATED ONE WELL VOLUME 2.2

PURGING DEVICE: Bailer ☑ DEDICATED ☑ DISPOSABLE ☐ DECONTAMINATED

SAMPLING DEVICE: Bailer ☑ DEDICATED ☑ DISPOSABLE ☐ DECONTAMINATED

EQUIP'T DECON: ☑ TAP WATER WASH ☑ ISOPROPANOL ☑ ANALYTE FREE FINAL RINSE

☐ ALCONOX WASH ☐ DIST/DEION 1 RINSE ☐ OTHER SOLVENT ☐ DIST/DEION FINAL RINSE

☐ LIQUINOX WASH ☐ DIST/DEION 2 RINSE ☑ TAP WATER FINAL RINSE ☐ AIR DRY

CONTAINER PRESERVATION: ☑ LAB PRESERVED ☐ FIELD PRESERVED

WATER ANALYZER MAKE, MODEL, SERIAL NO. Horiba U-53 S/N U37BXX8OR

ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP ☐ F ☑ C	pH	SPECIFIC CONDUCT (mS/cm)	TURBIDITY (NTUs)	DISS. OXYGEN (mg/L)	WATER APPEAR CL=CLEAR CO-CLOUDY TU=TURBID	REMARKS: ODOR COLOR PID
3:46	INITIAL	19.68	5.61	113	192	13.19	CL	Clear, No odor
3:52	2	19.62	5.58	131	>1000	14.38	TU	Lt. brown, turbid
3:57	3.5	19.68	5.56	94	>1000	12.03	TU	Red-brown "
4:00	4.5	19.69	5.51	114	912	16.05	TU	Red. Brown "
4:02	5.5	19.70	5.49	115	767	15.97	CO-TU	" " "

DEPTH TO WATER AFTER PURGING (BTOC) 24.07 | SAMPLE FILTERED ☐ YES ☑ NO SIZE

NOTES:

SAMPLE TIME: 4:05 ID# MW-2

DUPLICATE ☐ TIME: ID#

EQUIP. BLANK ☐ TIME: ID#

PREPARED BY:

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

WELL PURGING AND SAMPLING DATA

WELL NO: MW-3

DATE: 4-18-12	PROJECT NAME: Roswell Cleaners AEA	PROJECT NO. AEB-2409

WEATHER CONDITIONS: Cloudy, overcast, light rain on and off

WELL DIAMETER (IN.) ☐ 1 ☑ 2 ☐ 4 ☐ 6 ☐ Other (specify)

SAMPLE TYPE ☑ GROUNDWATER ☐ WASTEWATER ☐ SURFACE WATER ☐ OTHER

WELL DEPTH (BTOC) 35 FT.	DEPTH TO WATER BEFORE PURGE 27.50
HEIGHT OF COLUMN OF WATER 7.50 FT	CALCULATED ONE WELL VOLUME 1.3

PURGING DEVICE: Bailer ☑ DEDICATED ☑ DISPOSABLE ☐ DECONTAMINATED

SAMPLING DEVICE: Bailer ☑ DEDICATED ☑ DISPOSABLE ☐ DECONTAMINATED

EQUIP'T DECON: ☑ TAP WATER WASH ☑ ISOPROPANOL ☑ ANALYTE FREE FINAL RINSE

☐ ALCONOX WASH ☐ DIST/DEION 1 RINSE ☐ OTHER SOLVENT ☐ DIST/DEION FINAL RINSE

☐ LIQUINOX WASH ☐ DIST/DEION 2 RINSE ☑ TAP WATER FINAL RINSE ☐ AIR DRY

CONTAINER PRESERVATION: ☑ LAB PRESERVED ☐ FIELD PRESERVED

WATER ANALYZER MAKE, MODEL, SERIAL NO. Horiba U-53 S/N U37BXX8OR

ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP ☐ F ☑ C	pH	SPECIFIC CONDUCT (mS/cm)	TURBIDITY (NTUs)	DISS. OXYGEN (mg/L)	WATER APPEAR CL=CLEAR CO-CLOUDY TU=TURBID	REMARKS: ODOR COLOR PID
4:33	INITIAL	19.78	5.43	107	481	10.10	CL	Clear No Odor
4:40	2.5	19.97	5.12	103	>1000	5.21	CO-TU	Lt brn, Turbid
4:46	3.5	19.98	5.03	103	>1,000	5.73	TU	Lt brn "
4:49	4.5	19.97	4.97	102	>1,000	6.28	TU	Lt brn "

DEPTH TO WATER AFTER PURGING (BTOC) 28.15 SAMPLE FILTERED ☐ YES ☑ NO SIZE

NOTES:

SAMPLE TIME: 4:55 ID# MW-3

DUPLICATE ☐ TIME: ID#

EQUIP. BLANK ☐ TIME: ID#

PREPARED BY:

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

WELL PURGING AND SAMPLING DATA

WELL NO: MW-4

DATE: 4-18-12	PROJECT NAME: Roswell Cleaners AEA	PROJECT NO. AEB-2409

WEATHER CONDITIONS: Cloudy, overcast, light rain on and off

WELL DIAMETER (IN.) ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ Other (specify)

SAMPLE TYPE ☒ GROUNDWATER ☐ WASTEWATER ☐ SURFACE WATER ☐ OTHER

WELL DEPTH (BTOC) 35 FT.	DEPTH TO WATER BEFORE PURGE 24.44
HEIGHT OF COLUMN OF WATER 10 FT	CALCULATED ONE WELL VOLUME 1.8

PURGING DEVICE: Baiker ☒ DEDICATED ☒ DISPOSABLE ☐ DECONTAMINATED

SAMPLING DEVICE: Baiker ☒ DEDICATED ☒ DISPOSABLE ☐ DECONTAMINATED

EQUIP'T DECON: ☒ TAP WATER WASH ☒ ISOPROPANOL ☒ ANALYTE FREE FINAL RINSE

☐ ALCONOX WASH ☐ DIST/DEION 1 RINSE ☐ OTHER SOLVENT ☐ DIST/DEION FINAL RINSE

☐ LIQUINOX WASH ☐ DIST/DEION 2 RINSE ☒ TAP WATER FINAL RINSE ☐ AIR DRY

CONTAINER PRESERVATION: ☒ LAB PRESERVED ☐ FIELD PRESERVED

WATER ANALYZER MAKE, MODEL, SERIAL NO. Horiba U-53 S/N U3TBXX8OR

ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP ☐ F ☒ C	pH	SPECIFIC CONDUCT (mS/cm)	TURBIDITY (NTUs)	DISS. OXYGEN (mg/L)	WATER APPEAR CL=CLEAR CO-CLOUDY TU=TURBID	REMARKS: ODOR COLOR PID
5:00	INITIAL	20.25	4.92	107	320	6.42	CL	Clear, slt odor
5:10	2.5	20.50	4.95	114	>1000	6.84	TU	Lt brown
5:13	3.5	20.56	4.82	112	>1000	7.13	TU	" " "
5:16	4.0	20.67	4.86	112	>1000	7.39	TU	" " "
5:18	4.5	20.71	4.83	111	>1000	8.17	TU	" " "
5:22	5.0	20.75	4.83	111	>1000	9.07	TU	a little more turbid

DEPTH TO WATER AFTER PURGING (BTOC) 26.12 SAMPLE FILTERED ☐ YES ☒ NO SIZE ____

NOTES:

SAMPLE TIME: 5:30 ID# MW-4

DUPLICATE ☐ TIME: ID#

EQUIP. BLANK ☐ TIME: ID#

PREPARED BY:

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

WELL PURGING AND SAMPLING DATA

WELL NO: MW-5

DATE: 4-18-12	PROJECT NAME: Roswell Cleaners AEA	PROJECT NO. REB-2409

WEATHER CONDITIONS: Cloudy, overcast, light rain on and off

WELL DIAMETER (IN.) ☐ 1 ☒ 2 ☐ 4 ☐ 6 ☐ Other (specify)

SAMPLE TYPE ☒ GROUNDWATER ☐ WASTEWATER ☐ SURFACE WATER ☐ OTHER

WELL DEPTH (BTOC)	35 FT.	DEPTH TO WATER BEFORE PURGE	25.52
HEIGHT OF COLUMN OF WATER	9.5 FT	CALCULATED ONE WELL VOLUME	1.6

PURGING DEVICE: Bailer ☒ DEDICATED ☒ DISPOSABLE ☐ DECONTAMINATED

SAMPLING DEVICE: Bailer ☒ DEDICATED ☒ DISPOSABLE ☐ DECONTAMINATED

EQUIP'T DECON: ☒ TAP WATER WASH ☒ ISOPROPANOL ☒ ANALYTE FREE FINAL RINSE

☐ ALCONOX WASH ☐ DIST/DEION 1 RINSE ☐ OTHER SOLVENT ☐ DIST/DEION FINAL RINSE

☐ LIQUINOX WASH ☐ DIST/DEION 2 RINSE ☒ TAP WATER FINAL RINSE ☐ AIR DRY

CONTAINER PRESERVATION: ☒ LAB PRESERVED ☐ FIELD PRESERVED

WATER ANALYZER MAKE, MODEL, SERIAL NO. Horiba U-53 S/N U3TBXX8OR

ACTUAL TIME (MIN)	CUMUL. VOLUME PURGED (GAL)	TEMP ☐ F ☒ C	pH	SPECIFIC CONDUCT (mS/cm)	TURBIDITY (NTUs)	DISS. OXYGEN (mg/L)	WATER APPEAR CL=CLEAR CO-CLOUDY TU=TURBID	REMARKS: ODOR COLOR PID
3:16	INITIAL	21.09	5.13	152	280	6.77	CL	Clear no odor
3:20	2	20.89	5.36	173	1.95	7.97	CL-CO	V. lt brown "
3:23	3	20.79	5.44	170	218	8.04	CL-CO	V lt brown "
3.26	4	20.68	5.46	168	166	8.40	CL-CO	" " "

DEPTH TO WATER AFTER PURGING (BTOC) 28.53 SAMPLE FILTERED ☐ YES ☒ NO SIZE

NOTES:

SAMPLE TIME: 3:30 ID# MW-5

DUPLICATE ☐ TIME: ID#

EQUIP. BLANK ☐ TIME: ID#

PREPARED BY:

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

SLUG TEST EVALUATIONS

SLUG TESTS EVALUATION

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

Raw Data Collected in the Field 09-28-08

WELL	TIME H:MM:SS	Elapsed Time(min)	D.T.W. (feet)	Drawdown (feet)	% Recovery	% Drawdown
		min:sec				
MW-1						
Static Depth to Water 23.98 Feet. Test Started: 2:26 P.M.						
	2:26:00	0:00	24.48	0.50	0%	100%
	2:26:20	0:20	24.40	0.42	16%	84%
	2:26:40	0:40	24.32	0.34	32%	68%
	2:27:00	1:00	24.30	0.32	36%	64%
	2:28:00	2:00	24.28	0.30	40%	60%
	2:28:30	2:30	24.26	0.28	44%	56%
	2:29:00	3:00	24.24	0.26	48%	52%
	2:29:30	3:30	24.22	0.24	52%	48%
	2:30:00	4:00	24.21	0.23	54%	46%
	2:31:00	5:00	24.20	0.22	56%	44%
	2:32:00	6:00	24.19	0.21	58%	42%
	2:33:00	7:00	24.18	0.20	60%	40%
	2:34:00	8:00	24.17	0.19	62%	38%
	2:35:00	9:00	24.15	0.17	66%	34%
	2:36:00	10:00	24.14	0.16	68%	32%
	2:37:00	11:00	24.13	0.15	70%	30%
	2:38:00	12:00	24.12	0.14	72%	28%
	2:39:00	13:00	24.11	0.13	74%	26%
	2:40:00	14:00	24.10	0.12	76%	24%
	2:41:00	15:00	24.09	0.11	78%	22%
	2:43:00	17:00	24.08	0.10	80%	20%
	3:00:00	34.00	24.04	0.06	88%	12%
	3:26:00	60.00	23.99	0.01	98%	2%

WELL	TIME H:MM:SS	Elapsed Time(min)	D.T.W. (feet)	Drawdown (feet)	% Recovery	% Drawdown
MW-2						
Static Depth to Water 24.82 Feet. Test Started: 3:04 P.M.						
	3:04:00	0:00	25.15	0.33	0%	100%
	3:04:20	0:20	25.12	0.30	9%	91%
	3:04:40	0:40	25.10	0.28	15%	85%
	3:05:00	1:00	25.09	0.27	18%	82%
	3:06:00	2:00	25.07	0.25	24%	76%
	3:07:00	3:00	25.05	0.23	30%	70%
	3:08:00	4:00	25.03	0.21	36%	64%
	3:09:00	5:00	25.01	0.19	42%	58%
	3:10:00	6:00	25.00	0.18	45%	55%
	3:11:00	7:00	24.99	0.17	48%	52%
	3:15:00	11:00	24.97	0.15	55%	45%
	3:19:00	15:00	24.95	0.13	61%	39%
	3:22:00	18:00	24.92	0.10	70%	30%
	3:25:00	21:00	24.89	0.07	79%	21%
	3:51:00	47.00	24.86	0.04	88%	12%
	4:10:00	66.00	24.85	0.03	91%	9%

WELL	TIME H:MM:SS	Elapsed Time(min)	D.T.W. (feet)	Drawdown (feet)	% Recovery	% Drawdown
MW-3						
Static Depth to Water 28.63 Feet. Test Started: 3:32 P.M.						
	3:32:20	0:00	28.91	0.28	0%	100%
	3:32:20	0:20	28.89	0.26	7%	93%
	3:33:00	1:00	28.88	0.25	11%	89%
	3:33:30	1:30	28.86	0.23	18%	82%
	3:34:00	2:00	28.85	0.22	21%	79%
	3:34:30	2:30	28.84	0.21	25%	75%
	3:35:00	3:00	28.83	0.20	29%	71%
	3:36:00	4:00	28.82	0.19	32%	68%
	3:38:00	6:00	28.81	0.18	36%	64%
	3:40:00	8:00	28.80	0.17	39%	61%
	3:44:00	12:00	28.77	0.14	50%	50%
	3:48:00	16:00	28.74	0.11	61%	39%
	3:54:00	22:00	28.73	0.10	64%	36%
	4:07:00	35.00	28.69	0.06	79%	21%
	4:21:00	49.00	28.65	0.02	93%	7%

Analysis Method: Bouwer & Rice, 1976.

Parameter Values: Raw Data and Basic Calculations						
Parameter		MW-1	Units	MW-2		MW-3
Well Diameter		0.167	feet	0.167		0.167
Borehole Diameter		0.52	feet	0.52		0.52
Rc	eff well radius	0.083	feet	0.083		0.083
Well Depth		35	feet	35		35
Static D.T.W.		23.98	feet	24.82		28.63
H		11.02	feet	10.18		6.37
L		20	feet	20		20
Rw	well rad (undist aq)	0.26	feet	0.26		0.26
L/Rw		76.92		76.92		76.92
A		2.95		2.80		2.20
B		0.55		0.50		0.45
C		1.00		0.90		0.65
Yo		0.50	feet	0.33		0.28
Yt		0.19	feet	0.12		0.10
ln(Yo/Yt)		0.97		1.01		1.03
t		8	minutes	16		19
Re	eff radius (diss Y)	1.452	feet	1.317		1.106
ln(Re/Rw)		2.799		2.664		2.453
ln(H/Rw)		3.747		3.667		3.199
D	eff aquifer thick.	20	feet	20		20
	(assumed)					
S		0.20		0.20		0.20
n		0.35		0.35		0.35
dh/dl		0.048	ft/ft	0.048		0.048
V		0.691	feet/day	0.3438		0.2713

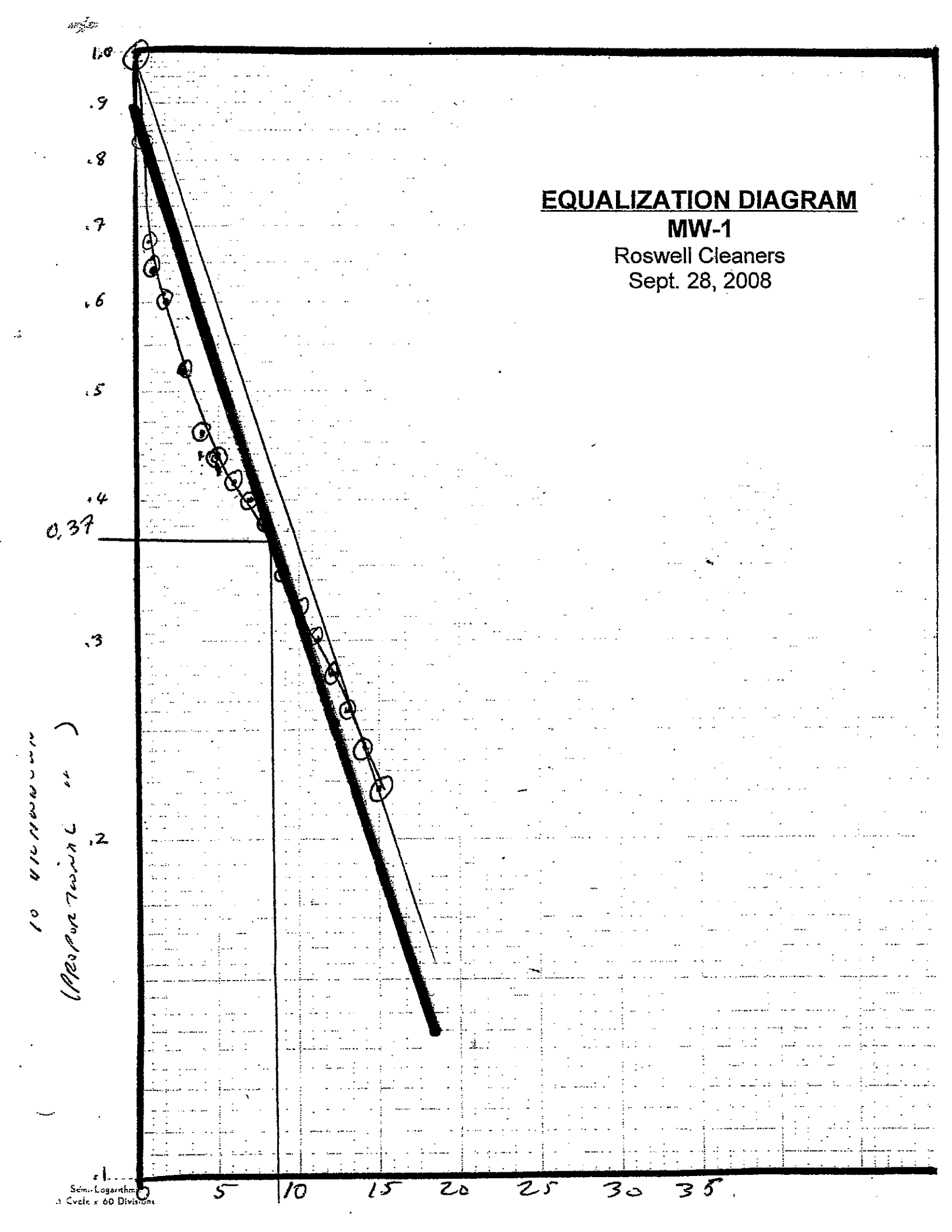
Reference: 1976. Bouwer, H. and R. C. Rice. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells. Water Resources Research V. 12 No. 3 pp. 423-429. June 1976. American Geophysical Union (AGU), Washington, DC

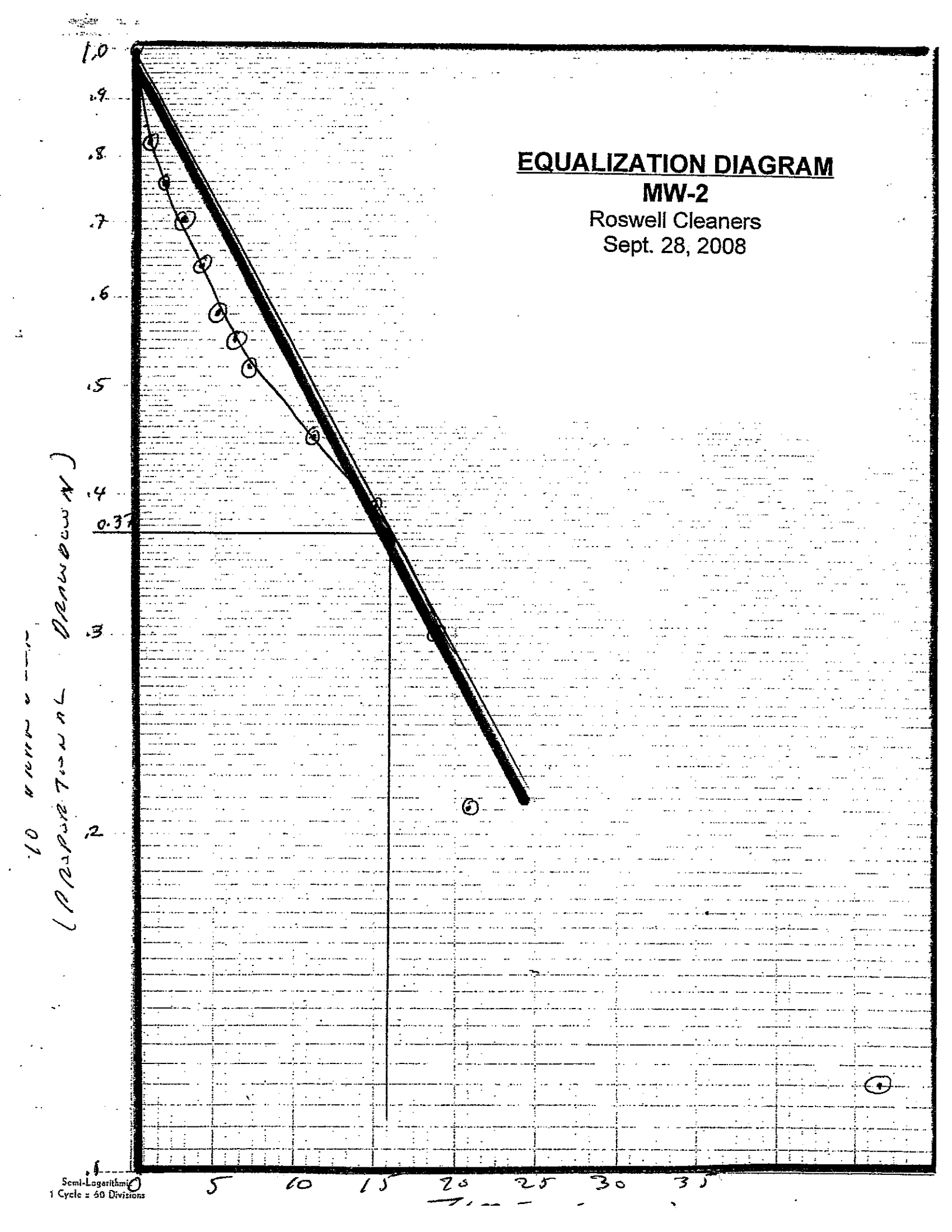
Detailed Calculations

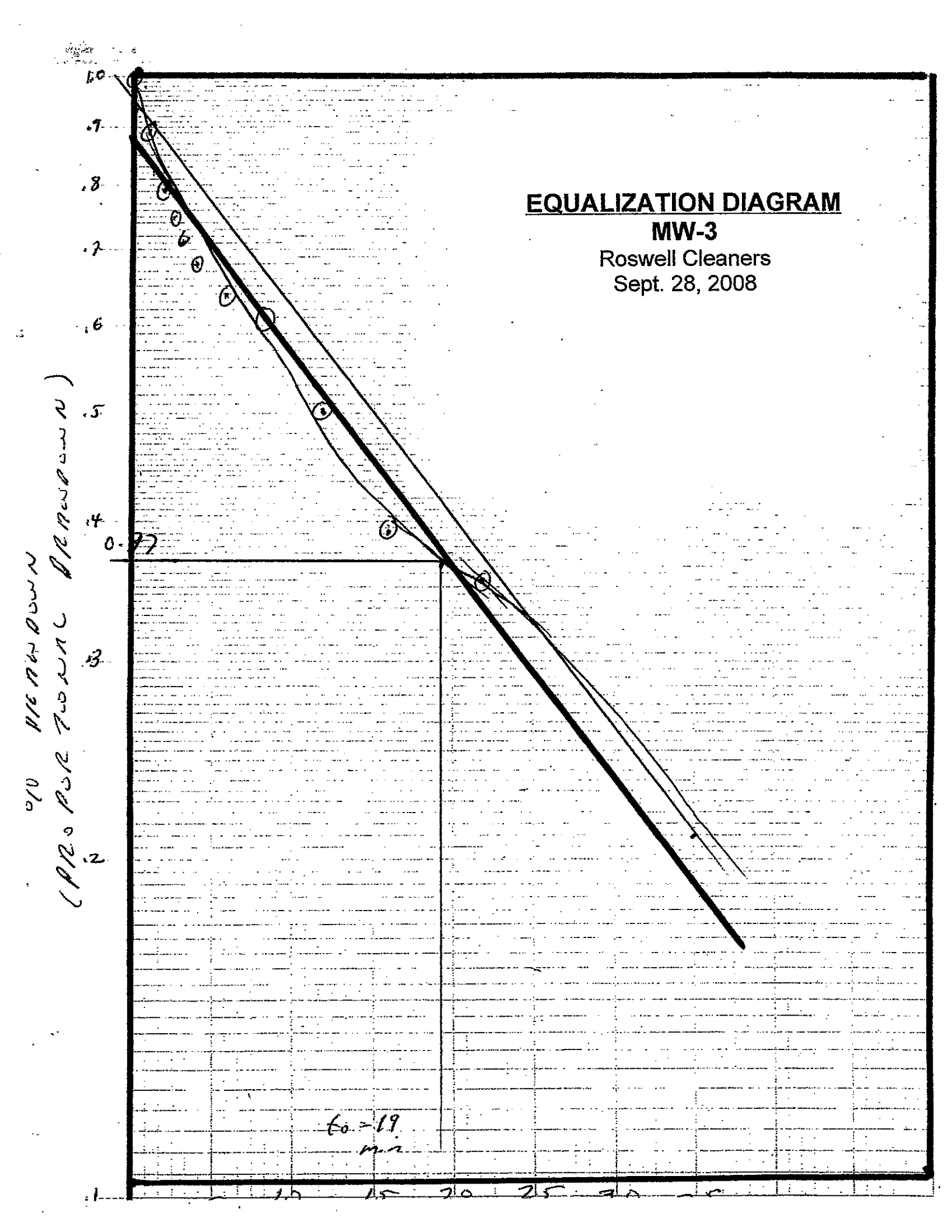
Parameter /Formula	MW-1	MW-2	MW-3	Eq #
$\frac{1}{t}\ \frac{\ln (Yo)}{Yt}$	0.120948	0.063225	0.05419	Eq (1)
$\frac{\ln(D - H)}{Rw}$	3.542074	8.786235	10.0472	Eq (2)
$\frac{A + B \ln [(D - H)/Rw]}{L/Rw}$	0.063676	0.0754	0.0637	Eq (4)
$\frac{1.1}{\ln(H/Rw)}$	0.293585	0.299932	0.343893	Eq (5)
$\ln \frac{(Re)}{Rw}$	2.799075	2.664308	2.45343	Eq (6)
$\frac{Rc * Rc \ln(Re/Rw)}{2 L}$	0.000482	0.000459	0.0004	Eq (7)
K = (Eq 1) (Eq 7)	5.83E-05 feet/sec	2.90E-05 feet/sec	2.29E-05 feet/sec	Eq (8)
Kd = K * 86400	5.04 feet/day	2.51 feet/day	1.98 feet/day	Eq (9)
Kg = Kd * 7.48	37.68 gpd/ft2	18.75 gpd/ft2	14.80 gpd/ft2	Eq (10)
T = Kg * D	753.6 gpd/ft	375.0 gpd/ft	296.0 gpd/ft	Eq (11)
$V = \frac{Kd * dh}{n\ \ dl}$	0.691 feet/day	0.3438 feet/day	0.2713 feet/day	Eq (12)
Vy = V * 365	252.17 feet/year	125.47 feet/year	99.03 feet/year	Eq (13)

Average groundwater flow velocity = (product of 3 Vy values) ** 1/3

145.60
feet per year


EQUALIZATION DIAGRAM
MW-1
Roswell Cleaners
Sept. 28, 2008
1.0
.9
.8
.7
.6
.5
.4
0.37
.3
.2
.1
0
5
10
15
20
25
30
35


EQUALIZATION DIAGRAM
MW-2
Roswell Cleaners
Sept. 28, 2008
1.0
.9
.8
.7
.6
.5
.4
0.37
.3
.2
.1
0
5
10
15
20
25
30
35
Semi-Logarithmic
1 Cycle = 60 Divisions


EQUALIZATION DIAGRAM
MW-3
Roswell Cleaners
Sept. 28, 2008
1.0
.9
.8
.7
.6
.5
.4
.3
.2
.1
0.77
to = 19 min
5
10
15
20
25

SOIL ANALYTICAL RESULTS

ACL

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Laboratory Report

ACL Project #: 64933

Client Proj #: REB-2411 / Roswell Cleaners

Prepared For:

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

Attention: Mr. Peter Kallay

Report Date: 04/03/2013

This report contains 23 pages.
(including this cover page and chain of custody)

John Andros
Technical Director

ACCREDITED IN ACCORDANCE WITH nelac

Advanced Chemistry Labs is a woman-owned, small business concern.

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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
µmhos/cm	micromhos/cm	cfu	Colony Forming Unit
DF	Dilution Factor	meq	milliequivalents
kg	kilogram(s)	g	gram(s)
mg	milligram(s)	µg	microgram(s)
l or L	liter(s)	ml or mL	milliliter(s)
µl or µL	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).

µg/L, µg/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 ≥ 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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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-4B-1'
ACL Sample #: 297682
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 14:50
Date Prepared: 03/14/2013
Date Analyzed: 03/20/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.076	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.018	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-4B-10'
ACL Sample #: 297683
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 15:20
Date Prepared: 03/14/2013
Date Analyzed: 03/20/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	0.013	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	0.008	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	6.31	0.125
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.259	0.125
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	0.016	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	0.005	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	0.063	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	0.023	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	0.006	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-4B-15'
ACL Sample #: 297684
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 15:35
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.093	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.070	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	0.040	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-6-1'
ACL Sample #: 297685
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 10:10
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.022	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-6-10'
ACL Sample #: 297686
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 10:30
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.035	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.011	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-6-15'
ACL Sample #: 297687
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 10:40
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	BQL	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-7-2'
ACL Sample #: 297688
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 11:00
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.163	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.005	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-7-10'
ACL Sample #: 297689
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 11:10
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	0.010	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	15.2	0.500
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.067	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	0.010	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	0.056	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	0.017	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	0.006	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-7-15'
ACL Sample #: 297690
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 11:15
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	5.0	1,3-Dichloropropane	BQL	0.25
Acrolein	BQL	2.5	2,2-Dichloropropane	BQL	0.25
Acrylonitrile	BQL	2.5	1,1-Dichloropropene	BQL	0.25
Benzene	BQL	0.25	cis-1,3-Dichloropropene	BQL	0.25
Bromobenzene	BQL	0.25	trans-1,3-Dichloropropene	BQL	0.25
Bromochloromethane	BQL	0.25	Ethylbenzene	0.21 J	0.25
Bromodichloromethane	BQL	0.25	Hexachlorobutadiene	BQL	0.25
Bromoform	BQL	0.25	2-Hexanone	BQL	2.5
Bromomethane	BQL	0.50	Isopropylbenzene	BQL	0.25
2-Butanone	BQL	5.0	p-Isopropyltoluene	BQL	0.25
n-Butylbenzene	BQL	0.25	4-Methyl-2-pentanone	BQL	2.5
sec-Butylbenzene	BQL	0.25	Methylene chloride	BQL	0.25
tert-Butylbenzene	BQL	0.25	Naphthalene	BQL	0.25
Carbon disulfide	BQL	0.25	n-Propylbenzene	BQL	0.25
Carbon tetrachloride	BQL	0.25	Styrene	BQL	0.25
Chlorobenzene	BQL	0.25	1,1,1,2-Tetrachloroethane	BQL	0.25
Chloroethane	BQL	0.50	1,1,2,2-Tetrachloroethane	BQL	0.25
2-Chloroethylvinyl ether	BQL	0.50	Tetrachloroethene	193	5.0
Chloroform	BQL	0.25	Toluene	BQL	0.25
Chloromethane	BQL	0.50	1,2,3-Trichlorobenzene	BQL	0.25
2-Chlorotoluene	BQL	0.25	1,2,4-Trichlorobenzene	BQL	0.25
4-Chlorotoluene	BQL	0.25	1,1,1-Trichloroethane	BQL	0.25
1,2-Dibromo-3-chloropropane	BQL	0.25	1,1,2-Trichloroethane	BQL	0.25
Dibromochloromethane	BQL	0.25	Trichloroethene	5.03	0.25
1,2-Dibromoethane	BQL	0.25	Trichlorofluoromethane	BQL	0.25
Dibromomethane	BQL	0.25	1,2,3-Trichloropropane	BQL	0.25
1,2-Dichlorobenzene	BQL	0.25	1,2,4-Trimethylbenzene	BQL	0.25
1,3-Dichlorobenzene	BQL	0.25	1,3,5-Trimethylbenzene	BQL	0.25
1,4-Dichlorobenzene	BQL	0.25	Vinyl acetate	BQL	2.5
Dichlorodifluoromethane	BQL	0.50	Vinyl chloride	BQL	0.50
1,1-Dichloroethane	BQL	0.25	m,p-Xylene	0.95	0.50
1,2-Dichloroethane	BQL	0.25	o-Xylene	0.21 J	0.25
1,1-Dichloroethene	BQL	0.25			
cis-1,2-Dichloroethene	0.22 J	0.25			
trans-1,2-Dichloroethene	BQL	0.25			
1,2-Dichloropropane	BQL	0.25			

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Client: Atlanta Environmental Consultants
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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-8-1'
ACL Sample #: 297691
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 12:00
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.011	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-8-10'
ACL Sample #: 297692
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 12:20
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.018	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.102	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	0.310	0.005			
trans-1,2-Dichloroethene	0.035	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-8-15'
ACL Sample #: 297693
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 12:30
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.021	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	0.038	0.005			
trans-1,2-Dichloroethene	0.005	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-9-2'

ACL Sample #: 297694

Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 13:20
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	0.005	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	0.006	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.005	0.005
Chloroform	BQL	0.005	Toluene	0.052	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	0.005	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	0.023	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	0.009	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-9-10'
ACL Sample #: 297695
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 13:35
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.008	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-9-15'
ACL Sample #: 297696
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 13:45
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	0.185	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	0.005	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.005	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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www.acl-labs.com

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

Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-10-2'
ACL Sample #: 297697
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 14:00
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.005	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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

Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-10-10'
ACL Sample #: 297698
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 14:35
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.011	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	BQL	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	BQL	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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

Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64933
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (5035/8260B)

Sample ID: B-10-15'
ACL Sample #: 297699
Units: mg/kg

Matrix: Soil
Date Sampled: 03/14/2013 14:45
Date Prepared: 03/14/2013
Date Analyzed: 03/21/2013
Analyst: JG

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	0.100	1,3-Dichloropropane	BQL	0.005
Acrolein	BQL	0.050	2,2-Dichloropropane	BQL	0.005
Acrylonitrile	BQL	0.050	1,1-Dichloropropene	BQL	0.005
Benzene	BQL	0.005	cis-1,3-Dichloropropene	BQL	0.005
Bromobenzene	BQL	0.005	trans-1,3-Dichloropropene	BQL	0.005
Bromochloromethane	BQL	0.005	Ethylbenzene	BQL	0.005
Bromodichloromethane	BQL	0.005	Hexachlorobutadiene	BQL	0.005
Bromoform	BQL	0.005	2-Hexanone	BQL	0.050
Bromomethane	BQL	0.010	Isopropylbenzene	BQL	0.005
2-Butanone	BQL	0.100	p-Isopropyltoluene	BQL	0.005
n-Butylbenzene	BQL	0.005	4-Methyl-2-pentanone	BQL	0.050
sec-Butylbenzene	BQL	0.005	Methylene chloride	BQL	0.005
tert-Butylbenzene	BQL	0.005	Naphthalene	BQL	0.005
Carbon disulfide	BQL	0.005	n-Propylbenzene	BQL	0.005
Carbon tetrachloride	BQL	0.005	Styrene	BQL	0.005
Chlorobenzene	BQL	0.005	1,1,1,2-Tetrachloroethane	BQL	0.005
Chloroethane	BQL	0.010	1,1,2,2-Tetrachloroethane	BQL	0.005
2-Chloroethylvinyl ether	BQL	0.010	Tetrachloroethene	0.100	0.005
Chloroform	BQL	0.005	Toluene	BQL	0.005
Chloromethane	BQL	0.010	1,2,3-Trichlorobenzene	BQL	0.005
2-Chlorotoluene	BQL	0.005	1,2,4-Trichlorobenzene	BQL	0.005
4-Chlorotoluene	BQL	0.005	1,1,1-Trichloroethane	BQL	0.005
1,2-Dibromo-3-chloropropane	BQL	0.005	1,1,2-Trichloroethane	BQL	0.005
Dibromochloromethane	BQL	0.005	Trichloroethene	0.046	0.005
1,2-Dibromoethane	BQL	0.005	Trichlorofluoromethane	BQL	0.005
Dibromomethane	BQL	0.005	1,2,3-Trichloropropane	BQL	0.005
1,2-Dichlorobenzene	BQL	0.005	1,2,4-Trimethylbenzene	BQL	0.005
1,3-Dichlorobenzene	BQL	0.005	1,3,5-Trimethylbenzene	BQL	0.005
1,4-Dichlorobenzene	BQL	0.005	Vinyl acetate	BQL	0.050
Dichlorodifluoromethane	BQL	0.010	Vinyl chloride	BQL	0.010
1,1-Dichloroethane	BQL	0.005	m,p-Xylene	BQL	0.010
1,2-Dichloroethane	BQL	0.005	o-Xylene	BQL	0.005
1,1-Dichloroethene	BQL	0.005			
cis-1,2-Dichloroethene	0.061	0.005			
trans-1,2-Dichloroethene	BQL	0.005			
1,2-Dichloropropane	BQL	0.005			

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Sample Log-in Checklist

Client Name: Atlanta Environmental Consultants

ACL Project Number: **64933**

Cooler Check

	Yes	No
Ice Present?	☑	☐
Temperature	4 °C	

	Yes	No
Evidence Tape Present?	☐	☑
Evidence Tape Intact?	☐	☑

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

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

Cooler Shipping and Receipt

Shipping Method: Delivered by Customer

Tracking Number:

Receipt Date: 3/15/2013

Receipt Time: 11:55 AM

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:

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

Cooler Unpacked/Checked By: JA **Logged In By:** JA **Log-in Date:** 3/15/2013

Comments (if any):

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CHAIN-OF-CUSTODY RECORD

Company Name: ATLANTA ENVIRON. CONSULTANTS	Phone #: 678-738-7004
Address: 3440 BLUE SPRINGS RD #503 KENNESAW. GA 30144	Fax #: 678-569-2414
Project Manager: PETER T. KALLAY	Site Location: 1073 ALPHARETTA ST ROSWELL, GA
I attest that the proper field sampling procedures were used during the collection of these samples.	Project #: RCB-2611
Sampler Name (Print): PETER T. KALLAY	Project Name: ROSWELL CEMETERY AMENITY (RCA)

ANALYSIS REQUEST

SD 3's / 8260

Field Sample ID	# of Containers	Matrix: Water	Soil	Air	Sludge	Product	Other	Method Preserved: HCl	$NaHSO_4$	H_2SO_4	HNO_3	NaOH	None	Sampling: Date	Time	Grab	Comp	Remarks
B-4B - 1'	4		✓				✓		✓					3/14/13	2:50	✓	✓	
B-4B - 10'	4		✓				✓		✓						3:20	✓	✓	
B-4B - 15'	4		✓				✓		✓						3:35	✓	✓	HOT SAMPLE
B-6 - 1'	4		✓				✓		✓						10:10	✓	✓	
B-6 - 10'	4		✓				✓		✓						10:30	✓	✓	
B-6 - 15'	4		✓				✓		✓						10:40	✓	✓	
B-7 - 2'	4		✓				✓		✓						11:00	✓	✓	
B-7 - 10'	4		✓				✓		✓						11:10	✓	✓	
B-7 - 15'	4		✓				✓		✓						11:15	✓	✓	HOT SAMPLE

Special Detection Limits: GA EPD

Remarks:

TAT: Next Bus. Day ☐ 2nd Bus. Day ☐ 3rd Bus. Day ☐ Normal ☑

Special Handling: ACL Contract ____ Quote # ____ P.O. ✓

Special Reporting Requirements: Fax ☑

Lab Use Only: ACL Project #: 64933

Cooler Temp: 4 °C

QA/QC Level: Level 1 ☐ Level 2 ☐ Other ☐ ____

CUSTODY RECORD

Relinquished by Sampler:	Date: 03/15/13	Time: 11:55	Received by:	
Relinquished by:	Date:	Time:	Received by:	
Relinquished by:	Date: 3/15/13	Time: 11:55	Received by Laboratory: John Andros	

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CHAIN-OF-CUSTODY RECORD

Company Name: ATLANTA ENVIRONMENTAL CONSULTANTS	Phone #: 678-738-7004 Fax #: 678-569-5619
Address: 3640 BLUE SPRINGS RD STE 503 KENNESAW, GA 30144	Site Location: 1013 ALPHARETTA ST. ROSWELL, GA
Project Manager:	Project #: REB-2411 Project Name: ROSWELL CLEANERS PROPERTY (RCP)
I attest that the proper field sampling procedures were used during the collection of these samples.	Sampler Name (Print): PETER T. KELLY

ANALYSIS REQUEST

Field Sample ID	# of Containers	Matrix: Water	Soil	Air	Sludge	Product	Other	Method Preserved: HCl	$NaHSO_4$	H_2SO_4	HNO_3	NaOH	None	Sampling: Date	Time	Grab	Comp	5035/8260	Remarks
B-8 - 1'	4		✓						✓					3/14/13	12:00	✓		✓	
B-8 - 10'	4		✓						✓						12:20	✓		✓	
B-8 - 15'	4		✓						✓						12:30	✓		✓	
B-9 - 2'	4		✓						✓						1:20	✓		✓	
B-9 - 10'	4		✓						✓						1:35	✓		✓	
B-9 - 15'	4		✓						✓						1:45	✓		✓	
B-10 - 2'	4		✓						✓						2:00	✓		✓	
B-10 - 10'	4		✓						✓						2:35	✓		✓	
B-10 - 15'	4		✓						✓						2:45	✓		✓	
														↓					

Special Detection Limits: GA EPD

Remarks:

TAT: Next Bus. Day ☐ 2nd Bus. Day ☐ 3rd Bus. Day ☐ Normal ☑

Special Handling: ACL Contract ____ Quote # ____ P.O. ____

Special Reporting Requirements: Fax ☑

Lab Use Only: ACL Project #: 64933

Cooler Temp.: 4 °C

QA/QC Level: Level 1 ☐ Level 2 ☐ Other ☐ ____

CUSTODY RECORD

	Date	Time	
Relinquished by Sampler:	3/15/13	11:55	Received by:
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date: 3/15/13	Time: 11:55	Received by Laboratory: John Anderson

GROUNDWATER ANALYTICAL RESULTS

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Laboratory Report

ACL Project #: 64932

Client Proj #: REB-2411 / Roswell Cleaners

Prepared For:

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

Attention: Mr. Peter Kallay

Report Date: 04/03/2013

This report contains 9 pages.
(including this cover page and chain of custody)

John Andros
Technical Director

ACCREDITED IN ACCORDANCE WITH nelac

Advanced Chemistry Labs is a woman-owned, small business concern.

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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
µmhos/cm	micromhos/cm	cfu	Colony Forming Unit
DF	Dilution Factor	meq	milliequivalents
kg	kilogram(s)	g	gram(s)
mg	milligram(s)	µg	microgram(s)
l or L	liter(s)	ml or mL	milliliter(s)
µl or µL	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).
µg/L, µg/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 ≥ 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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Kennesaw, GA 30144-0000

Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64932
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (8260B)

Sample ID: MW-1
ACL Sample #: 297677
Units: µg/L

Matrix: Water
Date Sampled: 03/14/2013 16:20
Date Prepared:
Date Analyzed: 03/20/2013
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	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
3440 Blue Springs Rd.
Suite 503
Kennesaw, GA 30144-0000

Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64932
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (8260B)

Sample ID: MW-2
ACL Sample #: 297678
Units: µg/L

Matrix: Water
Date Sampled: 03/14/2013 16:45
Date Prepared:
Date Analyzed: 03/20/2013
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	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	11	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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Suite 503
Kennesaw, GA 30144-0000

Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64932
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (8260B)

Sample ID: MW-3
ACL Sample #: 297679
Units: µg/L

Matrix: Water
Date Sampled: 03/14/2013 17:00
Date Prepared:
Date Analyzed: 03/20/2013
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	23	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	20	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	21	5.0			
trans-1,2-Dichloroethene	BQL	5.0			
1,2-Dichloropropane	BQL	5.0			

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Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64932
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (8260B)

Sample ID: MW-4
ACL Sample #: 297680
Units: µg/L

Matrix: Water
Date Sampled: 03/14/2013 17:25
Date Prepared:
Date Analyzed: 03/20/2013
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	27	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	20	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	35	5.0			
trans-1,2-Dichloroethene	BQL	5.0			
1,2-Dichloropropane	BQL	5.0			

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Suite 503
Kennesaw, GA 30144-0000

Contact: Mr. Peter Kallay

Client Proj #: REB-2411 / Roswell Cleaners
ACL Project #: 64932
Date Received: 03/15/2013
Date Reported: 04/03/2013

Volatile Organics (8260B)

Sample ID: MW-5
ACL Sample #: 297681
Units: µg/L

Matrix: Water
Date Sampled: 03/14/2013 17:55
Date Prepared:
Date Analyzed: 03/20/2013
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	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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Sample Log-in Checklist

Client Name: Atlanta Environmental Consultants

ACL Project Number: **64932**

Cooler Check

	Yes	No		Yes	No
Ice Present?	☑	☐	Evidence Tape Present?	☐	☑
Temperature	3 °C		Evidence Tape Intact?	☐	☑

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

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

Cooler Shipping and Receipt

Shipping Method: Delivered by Customer

Tracking Number:

Receipt Date: 3/15/2013

Receipt Time: 11:55 AM

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:

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

Cooler Unpacked/Checked By: JA **Logged In By:** JA **Log-in Date:** 3/15/2013

Comments (if any):

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CHAIN-OF-CUSTODY RECORD

Company Name: ATLANTA ENVIRON. CONSULTANTS	Phone #: 678-738-7004 Fax #: 678-569-2419
Address: 2440 BLUE SPRINGS RD STE 503 KENNESAW, GA 30144	Site Location: 1073 ALPHARETTA ST. ROSWELL, GA. 30144
Project Manager: PETER T. KALLAY	Project #: RE3-2411 ROSWELL CLEANERS Project Name: PROPERTY (ACP)
I attest that the proper field sampling procedures were used during the collection of these samples.	Sampler Name (Print): PETER T. KALLAY

ANALYSIS REQUEST

Field Sample ID	# of Containers	Matrix: Water	Soil	Air	Sludge	Product	Other	Method Preserved: HCl	$NaHSO_4$	H_2SO_4	HNO_3	NaOH	None	Sampling: Date	Time	Grab	Comp	8260	Remarks
MW-1	2	✓						✓						3/14/13	4:20	✓		✓	
MW-2	2	✓						✓							4:45	✓		✓	
MW-3	2	✓						✓							5:00	✓		✓	
MW-4	2	✓						✓							5:25	✓		✓	
MW-5	2	✓						✓							5:55	✓		✓	

Special Detection Limits: GA EPD

Remarks:

TAT: Next Bus. Day ☐ 2nd Bus. Day ☐ 3rd Bus. Day ☐ Normal ☑

Special Handling: ACL Contract ____ Quote # ____ P.O. ____

QA/QC Level: Level 1 ☐ Level 2 ☐ Other ☐ ____

Special Reporting Requirements: Fax ☑

Lab Use Only: ACL Project #: 64932

Cooler Temp.: 3 °C

CUSTODY RECORD					
	Relinquished by Sampler:	Date: 03/15/13	Time: 11:50	Received by:	
	Relinquished by:	Date:	Time:	Received by:	
	Relinquished by:	Date: 03/15/13	Time: 11:55	Received by Laboratory:	

SUB-SLAB VAPOR ANALYTICAL RESULTS

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax:(856)858-4800/ (856)858-4571
http://www.emsl.com mhowley@emsl.com

EMSL Order: **491300252**
CustomerID: **ATEC62**
Customer PO: **CC auth 055448**
ProjectID:

Attn: **Peter T. Kallay**
Atlanta Environmental Consultants
3440 Blue Springs Rd. Ste 503
Kennesaw, GA 30144
Project: **Roswell Cleaners Prop.**

Phone: 770-529-0388
Fax: 678-569-2419
Received: 3/19/2013
Report Date: 4/1/2013

Laboratory Report

Lab Sample Number	Client Sample Identification	Start Collection Date	Start Collection Time
491300252-0001	SSVS-1	3/16/2013	13:03

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and electronic data has been authorized by the laboratory manager or his/her designee, as verified by the following signature.

Initial Report Date: **4/1/2013**
Amended Report Date:

Approved EMSL Signatory
Marjorie Howley, TO-15 Laboratory Manager

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax:(856)858-4800/ (856)858-4571
http://www.emsl.com mhowley@emsl.com

EMSL Order: 491300252
EMSL Sample ID: 491300252-1
Received Date: 03/19/2013
Report Date: 04/01/2013

Project: Roswell Cleaners Prop.
Client Sample ID: SSVS-1

Sampling Date: 03/16/2013
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Target Compound Results Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3
Propylene	115-07-1	58.08	ND	1.0		ND	2.4
Freon 12(Dichlorodifluoromethane)	75-71-8	120.9	ND	0.50		ND	2.5
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.9	ND	0.50		ND	3.5
Chloromethane	74-87-3	50.49	0.52	0.50		1.1	1.0
n-Butane	106-97-8	58.12	1.8	0.50		4.2	1.2
Vinyl chloride	75-01-4	62.50	ND	0.50		ND	1.3
1,3-Butadiene	106-99-0	54.09	ND	0.50		ND	1.1
Bromomethane	74-83-9	94.94	ND	0.50		ND	1.9
Chloroethane	75-00-3	64.52	ND	0.50		ND	1.3
Ethanol	64-17-5	46.07	33	0.50		63	0.94
Bromoethene(Vinyl bromide)	593-60-2	106.9	ND	0.50		ND	2.2
Freon 11(Trichlorofluoromethane)	75-69-4	137.4	ND	0.50		ND	2.8
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	180	5.0	D	450	12
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.4	ND	0.50		ND	3.8
Acetone	67-64-1	58.08	45	5.0	D	110	12
1,1-Dichloroethene	75-35-4	96.94	ND	0.50		ND	2.0
Acetonitrile	75-05-8	41.00	0.72	0.50		1.2	0.84
Tertiary butyl alcohol(TBA)	75-65-0	74.12	8.4	0.50		25	1.5
Bromoethane(Ethyl bromide)	74-96-4	108.0	ND	0.50		ND	2.2
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND	0.50		ND	1.6
Carbon disulfide	75-15-0	76.14	ND	0.50		ND	1.6
Methylene chloride	75-09-2	84.94	ND	0.50		ND	1.7
Acrylonitrile	107-13-1	53.00	ND	0.50		ND	1.1
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND	0.50		ND	1.8
trans-1,2-Dichloroethene	156-60-5	96.94	ND	0.50		ND	2.0
n-Hexane	110-54-3	86.17	0.58	0.50		2.0	1.8
1,1-Dichloroethane	75-34-3	98.96	ND	0.50		ND	2.0
Vinyl acetate	108-05-4	86.00	ND	0.50		ND	1.8
2-Butanone(MEK)	78-93-3	72.10	2.2	0.50		6.6	1.5
cis-1,2-Dichloroethene	156-59-2	96.94	2.4	0.50		10	2.0
Ethyl acetate	141-78-6	88.10	1.2	0.50		4.2	1.8

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EMSL Order: 491300252
EMSL Sample ID: 491300252-1
Received Date: 03/19/2013
Report Date: 04/01/2013

Project: Roswell Cleaners Prop.
Client Sample ID: SSVS-1

Sampling Date: 03/16/2013
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Target Compound Results Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3
Chloroform	67-66-3	119.4	ND	0.50		ND	2.4
Tetrahydrofuran	109-99-9	72.11	ND	0.50		ND	1.5
1,1,1-Trichloroethane	71-55-6	133.4	ND	0.50		ND	2.7
Cyclohexane	110-82-7	84.16	ND	0.50		ND	1.7
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.2	ND	0.50		ND	2.3
Carbon tetrachloride	56-23-5	153.8	ND	0.50		ND	3.1
n-Heptane	142-82-5	100.2	ND	0.50		ND	2.0
1,2-Dichloroethane	107-06-2	98.96	ND	0.50		ND	2.0
Benzene	71-43-2	78.11	5.9	0.50		19	1.6
Trichloroethene	79-01-6	131.4	4.9	0.50		26	2.7
1,2-Dichloropropane	78-87-5	113.0	ND	0.50		ND	2.3
Methyl Methacrylate	80-62-6	100.12	ND	0.50		ND	2.0
Bromodichloromethane	75-27-4	163.8	ND	0.50		ND	3.3
1,4-Dioxane	123-91-1	88.12	ND	0.50		ND	1.8
4-Methyl-2-pentanone(MIBK)	108-10-1	100.2	ND	0.50		ND	2.0
cis-1,3-Dichloropropene	10061-01-5	111.0	ND	0.50		ND	2.3
Toluene	108-88-3	92.14	4.6	0.50		17	1.9
trans-1,3-Dichloropropene	10061-02-6	111.0	ND	0.50		ND	2.3
1,1,2-Trichloroethane	79-00-5	133.4	ND	0.50		ND	2.7
2-Hexanone(MBK)	591-78-6	100.1	ND	0.50		ND	2.0
Tetrachloroethene	127-18-4	165.8	39	5.0	D	270	34
Dibromochloromethane	124-48-1	208.3	ND	0.50		ND	4.3
1,2-Dibromoethane	106-93-4	187.8	ND	0.50		ND	3.8
Chlorobenzene	108-90-7	112.6	ND	0.50		ND	2.3
Ethylbenzene	100-41-4	106.2	ND	0.50		ND	2.2
Xylene (p,m)	1330-20-7	106.2	1.6	1.0		7.2	4.3
Xylene (Ortho)	95-47-6	106.2	0.60	0.50		2.6	2.2
Styrene	100-42-5	104.1	ND	0.50		ND	2.1
Isopropylbenzene (cumene)	98-82-8	120.19	ND	0.50		ND	2.5
Bromoform	75-25-2	252.8	ND	0.50		ND	5.2
1,1,2,2-Tetrachloroethane	79-34-5	167.9	ND	0.50		ND	3.4

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EMSL Order: 491300252
EMSL Sample ID: 491300252-1
Received Date: 03/19/2013
Report Date: 04/01/2013

Project: Roswell Cleaners Prop.
Client Sample ID: SSVS-1

Sampling Date: 03/16/2013
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Target Compound Results Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Target Compounds	CAS#	MW	Result ppbv	RL ppbv	Q	Result ug/m3	RL ug/m3
4-Ethyltoluene	622-96-8	120.2	0.54	0.50		2.7	2.5
1,3,5-Trimethylbenzene	108-67-8	120.2	ND	0.50		ND	2.5
2-Chlorotoluene	95-49-8	126.6	ND	0.50		ND	2.6
1,2,4-Trimethylbenzene	95-63-6	120.2	0.55	0.50		2.7	2.5
1,3-Dichlorobenzene	541-73-1	147.0	ND	0.50		ND	3.0
1,4-Dichlorobenzene	106-46-7	147.0	ND	0.50		ND	3.0
Benzyl chloride	100-44-7	126.0	ND	0.50		ND	2.6
1,2-Dichlorobenzene	95-50-1	147.0	ND	0.50		ND	3.0
1,2,4-Trichlorobenzene	120-82-1	181.5	ND	0.50		ND	3.7
Hexachloro-1,3-butadiene	87-68-3	260.8	ND	0.50		ND	5.3
Naphthalene	91-20-3	128.17	0.54	0.50		2.8	2.6

ND = Non Detect

Surrogate	Result	Spike	Recovery
4-Bromofluorobenzene	10.2	10	102%

Qualifier Definitions

B = Compound also found in method blank.
E= Estimated concentration exceeding upper calibration range.
D= Result reported from diluted analysis.

NJDEP Certification #: 03036

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EMSL Order: 491300252
EMSL Sample ID: 491300252-1
Received Date: 03/19/2013
Report Date: 04/02/2013

Project: Roswell Cleaners Prop.
Client Sample ID: SSVS-1

Sampling Date: 03/16/2013
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Tentatively Identified Compound Results Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Tentatively Identified Compounds	CAS#	MW(1)	Result ppbv	Q	Result ug/m3	Retention Time
Difluorochloromethane	000075-45-6	86	3.8	JN	13	5.47
Acetaldehyde	000075-07-0	44	5.5	JN	9.9	6.88
Propanal, 2,2-dimethyl-	000630-19-3	86	2.4	JN	8.4	13.54
Butanal	000123-72-8	72	5	JN	15	13.76
Hexanal	000066-25-1	100	1.4	JN	5.9	20.86
Limonene	000138-86-3	136	5.9	JN	33	26.94

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.

B = Compound also found in method blank.

J= Estimated value based on a 1:1 response to internal standard.

N= Presumptive evidence of compound based on library match.

NJDEP Certification #: 03036

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EMSL Order: 491300252
EMSL Sample ID: 491300252-1
Received Date: 03/19/2013
Report Date: 04/02/2013

Project: Roswell Cleaners Prop.
Client Sample ID: SSVS-1

Sampling Date: 41349
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Total Volatile Organic Compound (TVOC) Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

HITs Summary Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Comment
Chloromethane	74-87-3	50.49	**0.52**		**1.1**	
n-Butane	106-97-8	58.12	**1.8**		**4.2**	
Ethanol	64-17-5	46.07	**33**		**63**	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	**180**	D	**450**	
Acetone	67-64-1	58.08	**45**	D	**110**	
Acetonitrile	75-05-8	41.00	**0.72**		**1.2**	
Tertiary butyl alcohol(TBA)	75-65-0	74.1	**8.4**		**25**	
n-Hexane	110-54-3	86.17	**0.58**		**2.0**	
2-Butanone(MEK)	78-93-3	72.10	**2.2**		**6.6**	
cis-1,2-Dichloroethene	156-59-2	96.94	**2.4**		**10**	
Ethyl acetate	141-78-6	88.10	**1.2**		**4.2**	
Benzene	71-43-2	78.11	**5.9**		**19**	
Trichloroethene	79-01-6	131.4	**4.9**		**26**	
Toluene	108-88-3	92.14	**4.6**		**17**	
Tetrachloroethene	127-18-4	165.80	**39**	D	**270**	
Xylene (p,m)	1330-20-7	106.20	**1.6**		**7.2**	
Xylene (Ortho)	95-47-6	106.20	**0.60**		**2.6**	
4-Ethyltoluene	622-96-8	120.20	**0.54**		**2.7**	
1,2,4-Trimethylbenzene	95-63-6	120.2	**0.55**		**2.7**	
Naphthalene	91-20-3	128.17	**0.54**		**2.8**	
				Target TVOCs:	**340**	ppbv
					1000	ug/m3

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

HITs Summary Tentatively Identified Compounds	CAS#	MW (1)	Result ppbv	Q	Result ug/m3	Comments
Difluorochloromethane	000075-45-6	86	**3.8**	JN	**13**	

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EMSL Sample ID: 491300252-1
Received Date: 03/19/2013
Report Date: 04/02/2013

Project: Roswell Cleaners Prop.
Client Sample ID: SSVS-1

Sampling Date: 41349
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Total Volatile Organic Compound (TVOC) Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Acetaldehyde	000075-07-0	44	**5.5**	JN	**9.9**	
Propanal, 2,2-dimethyl-	000630-19-3	86	**2.4**	JN	**8.4**	
Butanal	000123-72-8	72	**5**	JN	**15**	
Hexanal	000066-25-1	100	**1.4**	JN	**5.9**	
Limonene	000138-86-3	136	**5.9**	JN	**33**	
				TIC TVOCs:	**24**	**ppbv**
					85	**ug/m3**

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.
B = Compound also found in method blank.
J= Estimated value based on a 1:1 response to internal standard.
N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs):	**360**	**ppbv**
	1100	**ug/m3**

NJDEP Certification #: 03036

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Client Sample ID: SSVS-1

Sampling Date: 41349
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Total Volatile Organic Compound (TVOC) Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

HITs Summary Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Comment
Chloromethane	74-87-3	50.49	**0.52**		**1.1**	
n-Butane	106-97-8	58.12	**1.8**		**4.2**	
Ethanol	64-17-5	46.07	**33**		**63**	
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	**180**	D	**450**	
Acetone	67-64-1	58.08	**45**	D	**110**	
Acetonitrile	75-05-8	41.00	**0.72**		**1.2**	
Tertiary butyl alcohol(TBA)	75-65-0	74.1	**8.4**		**25**	
n-Hexane	110-54-3	86.17	**0.58**		**2.0**	
2-Butanone(MEK)	78-93-3	72.10	**2.2**		**6.6**	
cis-1,2-Dichloroethene	156-59-2	96.94	**2.4**		**10**	
Ethyl acetate	141-78-6	88.10	**1.2**		**4.2**	
Benzene	71-43-2	78.11	**5.9**		**19**	
Trichloroethene	79-01-6	131.4	**4.9**		**26**	
Toluene	108-88-3	92.14	**4.6**		**17**	
Tetrachloroethene	127-18-4	165.80	**39**	D	**270**	
Xylene (p,m)	1330-20-7	106.20	**1.6**		**7.2**	
Xylene (Ortho)	95-47-6	106.20	**0.60**		**2.6**	
4-Ethyltoluene	622-96-8	120.20	**0.54**		**2.7**	
1,2,4-Trimethylbenzene	95-63-6	120.2	**0.55**		**2.7**	
Naphthalene	91-20-3	128.17	**0.54**		**2.8**	
				Target TVOCs:	**340**	ppbv
					1000	ug/m3

Qualifier Definitions

B = Compound also found in method blank.

E= Estimated concentration exceeding upper calibration range.

D= Result reported from diluted analysis.

HITs Summary Tentatively Identified Compounds	CAS#	MW (1)	Result ppbv	Q	Result ug/m3	Comments
Difluorochloromethane	000075-45-6	86	**3.8**	JN	**13**	

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Received Date: 03/19/2013
Report Date: 04/02/2013

Project: Roswell Cleaners Prop.
Client Sample ID: SSVS-1

Sampling Date: 41349
Canister ID: HD2161

Lab File ID: J5823.D
Sample Vol(ml): 250
Dilution Factor: 1
Dilution #1:J5803.D, 03/27/2013, DF: 10

Analysis Date: 03/30/2013
Instrument ID: 5972J
Analyst Initials: MTH

Total Volatile Organic Compound (TVOC) Summary

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Acetaldehyde	000075-07-0	44	**5.5**	JN	**9.9**	
Propanal, 2,2-dimethyl-	000630-19-3	86	**2.4**	JN	**8.4**	
Butanal	000123-72-8	72	**5**	JN	**15**	
Hexanal	000066-25-1	100	**1.4**	JN	**5.9**	
Limonene	000138-86-3	136	**5.9**	JN	**33**	
				TIC TVOCs:	**24**	**ppbv**
					85	**ug/m3**

Qualifier Definitions

(1) = If unknown, MW is assigned as equivalent Toluene (92) for ug/m3 conversion purposes.
B = Compound also found in method blank.
J= Estimated value based on a 1:1 response to internal standard.
N= Presumptive evidence of compound based on library match.

Total Volatile Organic Compounds (TVOCs):	**360**	**ppbv**
	1100	**ug/m3**

NJDEP Certification #: 03036

USEPA TO-15

External Chain of Custody/ Field Test Data Sheet

EMSL Analytical, Inc.
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Ph. (800) 220-3675
Fax (856) 786-0327

EMSL ANALYTICAL, INC. LABORATORY • PRODUCTS • TRAINING

EMSL Order Number (Lab Use Only): 491306252

Report To Contact Name:	Peter T. Kilroy	**Bill To Company:**	Atlanta Environmental Group	**Sampled By (Sign):**	
Company Name:	Atlanta Environmental	**Attention To:**	Peter T. Kilroy	**Sampled By (Name):**	Peter T. Kilroy
Address 1:	3440 Blue Springs Rd	**Address 1:**	3440 Blue Springs Rd	**Total # of Samples:**	1
Address 2:	Suite 303	**Address 2:**	Ste 303	**Date Shipped:**	03-16-2013
Phone No.:	678 738-7004	**Fax:** 678 569-2419	**Phone No.:** 678 738-7004	**Fax:** 678 569-2419	**Sample Collection Zip Code:**	30075
Email Results To:	AtlantaEnviro@cs.com	**Project Name:**	Roswell Cleaners prop.	**Purchase Order:**	REB 241.03

Turnaround Time (in Business Days): ☑ 10 Day Standard ☐ 5 Day ☐ 4 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day ☐ Other

Reporting Format: ☑ Results Only (Standard Lab Report) ☑ Full Deliverables (Surcharge may apply) No fax/email 3/20/13 ☐ Other

EMSL Sample Identifier

Field Use - All Information Required! / **Lab Use Only**

Client Field Sample Identification	Sampling Start Information: Start Date	Start Time (24 hr clock)	Start Canister Pressure ("Hg)	Start Interior Temp. (F)	Sampling Stop Information: Stop Date	Stop Time (24 hr clock)	Stop Canister Pressure ("Hg)	Stop Interior Temp. (F)	Canister Information: Canister ID	Size (L)	Can Cert Batch ID	Outgoing Pressure ("Hg)	Incoming Pressure ("Hg)	Flow Contoller: Reg. ID	Cal Flow (ml/min)	Analysis: USEPA TO-15	NJDEP LLTO-15	LIBRARY SEARCH	Other (Specify)	Matrix: Indoor/ Ambient Air	Soil Gas - Sub Slab	Landfill/ Vent
SSVS-1	3/16/13	13:03	-27.0	73	3/16/13	13:20	-6.	74	HD2161	1.4	H0129	-30.0	-5.5	7289051	80.51	✓					✓	

RECEIVED 2013 MAR 19 PM 12:55 SAMPLE RECEIVING

Comments:

Lab Canister Certification
Analyst Signature (TO-15):

Relinquished by:	Date/ Time	Received by:	Date/ Time	Affixed Seal #	Reason for Exchange (circle appropriate)
	3/13/13 1535		3/14/13 10:51	330	Shipping Courier Receiving Sampling Other:
	3/16/13 11:25		3/16/13 2:45	330-331	Shipping Courier Receiving Sampling Other:
	3/16/13 3:25	C.Allen FX	3/19/13 9:30	331	Shipping Courier Receiving Sampling Other:
C.Allen FX	3/19/13 9:30		3/20/13 10:45		Shipping Courier Receiving Sampling Other:
					Shipping Courier Receiving Sampling Other:

RECEIVED
EMSL
CINNAMINSON, NJ
MAR 19 2012

TO-15 Sample Information

Please fill out this worksheet in addition to the Chain of Custody form. This information helps us to best analyze your samples and achieve requested TAT

Company:	Atlanta Environmental Consultants
Contact Person:	Peter T. Kelley
Name:	Peter T. Kelley, P.E.
E-mail:	Atlanta Enviro @ cs.com
Additional E-mail:	pckelley97@earthlink.net
Telephone #:	678-738-7004 **Fax:** 678-564-2419

Do you want your results emailed? [✓] YES [ ] NO cell: 404-944-6731

Library Search requested: [ ] YES [✓] NO

A library search will identify up to 20 of the largest, non-target peaks that are not part of the standard TO-15 list of 74 compounds. If you are performing an Indoor Air Quality or odor investigation the library search is recommended. If you will need help interpreting your report the library search is REQUIRED.

Sample Type:

[ ] Indoor Air Quality (Home/Office) [ ] Vent Gas [ ] Soil Gas
[ ] IAQ (Industrial) [ ] Other: _____

Description of sample (Important for the lab to achieve your requested turnaround time):

Sub-Slab sample taken under concrete floor of a dry cleaners

Are there any special detection limits, specific set of compounds, or any other specifics you need in your report?

Target Compounds: PCE
TCE
DCE
VC

[ ] Permissable Exposure Limits [ ] NO
[✓] TVOC
[ ] Other (Please list or attach separate sheet)

Do you need any additional analysis on the canister sample? (additional charges will apply) NO

Draeger CMS Analyzer:
CO ; CO_2 ; SO_2 ; EtO ; NH3 ; Cl_2 ; H_2S ; NO_2 ; NOx ; O_2 ; Pet. Hydrocarbs ; Phosgene ; Phosphene

US EPA TO-3:
C_1-C_6 hydrocarbons ; Methane only

ASTM-D5504:
Sulfur Scan (H_2S, COS, MeSH, EtSH, DMS) ; H_2S only

Sample Retention Policy: All canisters are guaranteed to be retained for one day after results are reported. Please review your results promptly to ensure that your project scope is fully addressed. Cans may be retained for a longer period of time but arrangements to hold your cans must be made through your customer account representative quickly. Thank you.