

Voluntary Compliance Status Report (VCSR)

Submitted under Georgia's Voluntary Remediation Program (VRP) Act

Former Dickies Industrial Services College Park, Georgia HSI Site No. 10127

March 30, 2011



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CERTIFICATION OF COMPLIANCE WITH RISK REDUCTION STANDARDS

I certify under penalty of law that this report and all attachments were prepared under my direction in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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.

Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that:

The following tax parcels are in compliance with Type 1 Risk Reduction Standards for soil:

Tax Parcel ID No.

130036LL1349

Tax Parcel ID No.

130036LL1414

The following parcels are in compliance with the Type 3/Type 4 Risk Reduction Standards for soil:

Tax Parcel ID No.

130036LL1463

Tax Parcel ID No.

130036LL1356

These tax parcels are shown in the Tax Parcel Map located in Appendix A. The property owners' contact information is provided in Appendix B.

Certified By: 100m B. Saoure

Date: 3/30/11

Attorney for Dickies Industrial Services, Inc.

GROUND WATER SCIENTIST STATEMENT

I certify that I am a qualified ground water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in ground water hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding ground water monitoring and contaminant fate and transport.

I further certify that this Voluntary Compliance Status Report for Hazardous Site Inventory Site No. 10127 was prepared by me and appropriate qualified subordinates working under my direction.

A summary of the hours spent by the Professional Engineer's firm is provided in Appendix C, in order to comply with Voluntary Remediation Plan Act.

Shanna Thompson, P.E.

Georgia License No. PE031306

Date

1.0 INTRODUCTION

1.1 OVERVIEW

Environmental Resources Management (ERM) has prepared this Voluntary Compliance Status Report (VCSR) on behalf of Dickies Industrial Services, Inc ("DISI"). The VCSR is prepared for the former DISI facility (the "facility" or "the Site"), which is currently listed on the Georgia Hazardous Site Inventory (HSI #10127) as a result of previous releases of hazardous substances. The Site is located at 2411 Sullivan Road in College Park, Georgia (see Figure 1). Figure 2, which is a plan view of the facility, shows the building and the former location of the dry cleaning operations. The building is currently utilized by DISI as warehouse/distribution space. No dry cleaning activities currently take place at the facility.

Four (4) parcels comprise the Site and are in the VRP due to the presence of regulated substances in soil. Three (3) of the parcels are located on Sullivan Road in College Park, a suburb of Atlanta, Georgia (see Figure 1) and are owned by DISI. They include approximately 2.25 acres. A single story building having approximately 40,000 square feet of floor space occupies this area of the facility. A dry cleaning operation was formerly located at the northern end of the building. The fourth parcel is on the west, east and north of the DISI parcels and contains a 60-feet wide ingress and egress easement used by DISI. The fourth parcel is owned by Coca-Cola Refreshments USA, Inc. ("CCR"). CCR has given Dickies express permission to enter the CCR property to perform corrective action pursuant to a December 1, 2010 Access Agreement between CCR and DISI. The original VRP application included only two of these parcels, and the other two parcels were added to the VRP via correspondence from Joan Sasine of Bryan Cave to EPD dated February 3, 2011.

Other properties near the facility that exhibit concentrations of regulated substances in ground water include Puja Partners, LLC, Sears Roebuck & Company, Blount Construction Company, and a CSX Railroad right-ofway located on CCR's property.

1.2 CHEMICALS OF INTEREST

Tetrachloroethene (PCE) and its degradation products are the chemicals of interest at the DISI facility. This determination is based upon the facility's history as an industrial dry-cleaning site and sampling and analysis work that dates as far back as 1987. Regulated constituents found in soil include the following: tetrachloroethene, trichloroethene, cis-1,2-dichloroethene and trans-1,2-dichloroethene.

Regulated constituents found in ground water include the following: tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene 1,1-dichloroethene and vinyl chloride. Beginning in 2009 the analysis suite also included 1,4-dioxane, per a request from the EPD. 1,4-dioxane has not been detected in soil or ground water samples. At one point, chloroform was detected in ground water samples; however this was determined to not be attributable to releases from the DISI Site.

Over the course of correspondence between consultants and the EPD, a set of RRS was approved to guide remediation efforts at this Site. A copy of pertinent information and a table of the approved RRS are provided in Appendix D.

1.3 HSI SITE STATUS

This Site was placed on Georgia's Hazardous Sites Inventory (HSI) in 1994 because of the Reportable Quantities Screening Method (RQSM) On-Site Exposure Pathway score exceeded the threshold of 20. This Site did not score high enough on the RQSM calculations to be listed on the HSI for the Ground Water Pathway.

This Site was accepted into Georgia's Voluntary Remediation Program on November 15, 2010.

1.4 PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide final resolution of soil contamination and to certify compliance with the applicable RRS within the framework of Georgia's Voluntary Remediation Program. Excavation activities were performed to remove, transport and dispose of the soils that contained constituents above the applicable RRS. This document will provide the summary of activities conducted to demonstrate compliance with the applicable RRS.

1.5 ORGANIZATION

This Voluntary Compliance Status Report presents a discussion of the regulatory status and Certification of Compliance with Risk Reduction Standards for HSI Site 10127, via the Voluntary Remediation Program Act, as follows:

- Section 2 presents a discussion of the Site location and potential sources of regulated compounds;
- Section 3 presents a summary of previous investigations and the contaminants of concern identified at the Site;
- Section 4 presents a series of soil delineation maps;
- Section 5 presents a summary of ground water conditions.
- Section 6 describes the corrective action activities that have already been performed at this site, including soil vapor extraction, soil excavation, and ground water treatment via air sparging, chemical oxidation, and enhanced passive remediation;
- Section 7 presents the results of soil sampling performed to document compliance with the Site specific RRS in soil.
- Section 8 presents a discussion of RRS and Site compliance.
- Section 9 describes the responsible party that has been performing investigation since 1987 and remediation since 1999.
- Section 10 describes the public notice provided by DISI.
- Section 11 describes the continuing actions that will be in place pending approval of this VCSR.

2.0 SITE BACKGROUND & CONCEPTUAL SITE MODEL

2.1 LOCATION AND DESCRIPTION

The location of the Site is provided on Figure 1. A tax parcel location map showing the four parcels in the VRP is included in Appendix A. The Site is located at 2411 Sullivan Road in College Park, Fulton County, Georgia. The area near the Site includes commercial and industrial properties.

2.2 POTENTIAL SOURCES OF REGULATED MATERIALS

The facility building was constructed in 1969 and operated as an industrial laundry from 1970 to 1984. Operations at the plant from 1970 to 1984 included the use of PCE and associated distillation equipment for recovery and recycling of this material. Residual PCE and degradation products (i.e., trichloroethylene (TCE) and 1,2-dichloroethylene (1,2-DCE)) in subsurface soils (the "source area") were the result of unknown PCE releases on-Site. Descriptions of select equipment and processes are included below. The location of dry cleaning process activities is shown in Figure 2.

Pretreatment of wastewater generated by the on-Site laundering process consisted of settling out solids, grease and other materials in an underground wastewater settling tank (a.k.a. sewer tank). The pretreated wastewater was monitored and discharged into the public sewer in accordance with a permit from the city of College Park. The approximate location of the sewer tank is shown on Figure 2. This sewer tank was excavated and removed during the 2010 soil excavation activities.

From approximately 1980 to 1984, a 500-gallon above ground tank was located indoors and used to collect still bottoms and spent dry cleaning fluids. Contents of the tank were removed on an as-needed basis by reclaiming contractors. The approximate location of this tank is shown on Figure 2.

Empty 55-gallon drums, which previously contained dry-cleaning related fluids and laundry detergents, were temporarily staged adjacent to the northwest corner of the building for transport off-Site. The approximate location of the drum storage was just north of the former sewer tank.

2.3 SITE DESCRIPTION

This section of the VCSR provides a description of the properties which are a part of the Site, including the address and location of such property, its legal description, and the property owner name, address and telephone number, as required by Section 391-3-19-.06(3)(b)(5) of the Rules. As defined by Section 391-3-19-02(2), the Site means that portion of the owner's contiguous property and any other owner's property affected by a release exceeding a reportable quantity.

The following properties are enrolled in the VRP:

- Dickies Industrial Services, Inc. (Tax Parcels 130036LL1463, 130036LL1456, and 130036LL1349,
- Coca-Cola Refreshments USA, Inc. (Tax Parcel 130036LL1414

A map of the tax parcels is provided in Appendix A. The property owners' names, addresses and telephone numbers are included in Appendix B.

2.4 RISK REDUCTION STANDARDS

A summary of cleanup standards to be used for this Site in the Voluntary Remediation Program is provided in Appendix D.

The soil cleanup standards that will be used for this Site will be the RRS currently used in the HSRA program. The RRS that are guiding corrective action for soils were approved in EPD correspondence dated October 12, 2005. For the compounds of interest at this Site the surface and subsurface RRS were calculated to be equal, so only a single soil RRS is listed in Appendix D.

Ground water cleanup standards are not included for this site, since ground water cleanup is not required per Section 12-8-107(g)(2) of the VRP Act, which states:

"The participant shall not be required to perform corrective action or to certify compliance for ground water if the voluntary remediation property was listed on the inventory as a result of a release to soil exceeding a reportable quantity for soil but was not listed on the inventory as a result of a release to ground water exceeding a reportable quantity, and

if the participant further demonstrates to the director at the time of enrollment that a release exceeding a reportable quantity for ground water does not exist at the voluntary remediation property; and the ground water protection requirements for soils shall be based on protection of the established point of exposure for ground water as provided under this part... "

2.5 CONCEPTUAL SITE MODEL

The Conceptual Site Model provides an assessment of exposure pathways to human and environmental receptors that may have been or could be potentially exposed regulated chemical from a release at the facility. The building at the facility is currently occupied and is used as warehouse/distribution space. The area surrounding the facility is used for commercial activities. The following sections discuss the details of the Conceptual Site Model, as organized by the exposure pathway: soil exposure, ground water exposure, surface water exposure, and vapor exposure.

Although the release details are not known, the soil investigation data show that the regulated compounds were most likely released from former dry cleaning operations on the north end of the building.

2.5.1 Assessment of The Soil Exposure Pathway

The soil pathway is a pathway that could potentially be completed by industrial workers at the facility; however, investigation and remediation activities have brought the Site soils to levels that do not pose unacceptable risk. Soil remediation has been performed such that there are no longer soils that exceed the Type 3/4 RRS. The Type 3/4 RRS are calculated in a manner that considers protection of direct soil exposure and the soil to ground water pathway. Thus, the soils remaining on Site do not pose an unacceptable risk to human health or the environment.

2.5.2 Assessment Of The Ground Water Exposure Pathway

Because the facility and surrounding area are served by a municipal water supply system, ground water is not being used for human consumption. Therefore, the human exposure to contaminated ground water is not currently an exposure pathway. A map of the potential ground water

receptors within three miles of the Site is provided in Figure 3. This Receptor Map shows that no ground water receptors were located in the downgradient direction within three miles of the Site. This fact is important when considering this Site relative to Section 107(g)(2) of the VRP Act.

2.5.3 Assessment Of The Surface Water Exposure Pathway

Surface water cleanup standards were not calculated because the surface water pathway was determined to be incomplete, due to the fact that:

- (1) Soils formerly above RRS have been remediated.
- (2) There are not surface water bodies within the vicinity of the soil remediation effort.

The facility and adjacent properties are not shown as wetlands on the National Wetlands Inventory maps prepared by the U.S. Fish and Wildlife Service. With the exception of some wet-weather ditches and other manmade depressions, no wetland-like areas are present on the Site. No perennial streams or other surface water bodies have been observed on or near the facility. A map showing the location of the nearest surface water feature is provided as Figure 4.

2.5.4 Assessment of the Vapor Intrusion Exposure Pathway

Potential human receptor groups in the area include facility workers located on the properties that exhibit concentrations of volatile organic compounds (VOCs) in ground water samples.

2.5.4.1 Initial Vapor Intrusion Assessment

The vapor intrusion assessment for this Site is based on OSWER guidance (EPA, 2002), which provides a three-tiered approach to determine if there is a completed vapor intrusion pathway that causes unacceptable risk levels.

TIER 1 (Primary Screening) has three basic questions designed to screen out sites at which vapor intrusion pathway does not ordinarily need further consideration. For the subject Site:

• Chemicals of sufficient volatility and toxicity are known to be present in the subsurface (e.g. PCE and it's degradation products) and

• Buildings are located near the subsurface contaminants (e.g. DISI facility).

Since the above information does not indicate an incomplete vapor intrusion pathway, the assessment is carried forward to TIER 2.

TIER 2 (Secondary Screening) has two multipart questions which are structured to use existing data to assess the vapor intrusion pathway. For the subject Site:

- Indoor air data are not currently available,
- There is confirmed contamination (i.e. source of vapors) in the unsaturated zone, and
- measured ground water concentrations for select compounds exceed ground water target levels at a risk of 10-5 (Georgia's acceptable risk level).

Furthermore, ground water concentrations of select compounds exceed target concentrations by more than a factor of 50. Therefore, based on screening presented in the TIER 1 and TIER 2 assessments, Site-specific evaluations were conducted at the subject site.

TIER 3 calls for a site-specific evaluation of the vapor intrusion pathway beyond secondary screening using (1) collection of soil gas samples and/or (2) computer modeling. During 2010, both of these site specific evaluation methods were used to assess the level of risk posed to human receptors by vapor intrusion from the ground water plume.

2.5.4.2 Soil Gas Sampling

Subslab soil gas samples were collected from three locations beneath the DISI facility. Subslab soil gas probes were collected from immediately below the facility's concrete slab. Soil gas probes were installed beneath the slab by installing a 1" diameter boring in the slab. The soil gas probes were constructed of a 1.5" ceramic tip connected to 0.125" OD Nylaflow® tubing and completed with a gas-tight Swagelok nut and cap. After placing the tip and tubing into the boring, clean silica sand was used to fill the annular space around the tip to a height of 0.5" above the tip. Following emplacement of the silica sand filter pack, approximately 1" of hydrated granular bentonite was placed in the annular space around the probe. The vapor probe was completed to the surface with hydrated hydraulic cement. Vapor probe design and locations are described in Appendix E.

After allowing the hydraulic cement to set (~15 minutes), the vapor probe was enclosed with a shroud that was pressurized with helium. The vapor probe was connected to a gas-tight Nylaflow tube which exited the shroud and connected to a peristaltic pump. The peristaltic pump was switched on and allowed to pump >3 well volumes from the vapor probe. After purging at least 3 well volumes, a helium detector was used to confirm the absence of helium in the effluent vapor stream. In order to confirm that the shroud was filled with helium, the helium detector was connected to a valved port open to the inside of the shroud. Any vapor probes that allowed helium to enter the sample stream were replaced with new equipment.

Vapor samples were collected using 200 mL/min flow regulators in 6 liter batch certified-clean summa canisters. The samples were analyzed by AirToxics Laboratory using EPA method TO-15 for tetrachloroethene, associated daughter products, and 1,4-dioxane. The laboratory reports from this soil vapor sampling event are provided in Appendix F. Results from the three vapor samples, shown in the table below, along with site-specific lithologic information were used as inputs to the Johnson and Ettinger model to further evaluate the vapor intrusion pathway.

Table - Subslab vapor data summary

	V-1	V-2	V-3	V-3 dup
Compound	(ppbv)	(ppbv)	(ppbv)	(ppbv)
Vinyl Chloride	< 0.72	< 0.72	< 0.78	< 0.78
cis-1,2-Dichloroethene	< 0.72	< 0.72	< 0.78	< 0.78
Trichloroethene	< 0.72	1.5	1.6	1.5
Tetrachloroethene	3.6	6.0	35	33
trans-1,2-Dichloroethene	< 0.72	< 0.73	< 0.78	< 0.78
1,4-Dioxane	<2.9	<2.9	<3.1	<3.1

Bold concentrations are greater than the "Target Shallow Soil Gas Concentration Corresponding to Target Indoor Air Concentration Where the Soil Gas to Indoor Air Attenuation Factor=0.1" values given in OSWER, 2002 at the 10-5 risk level.

2.5.4.3 Vapor Intrusion Modeling

Since select compound concentrations were greater than screening levels given in OSWER¹, 2002 (i.e. the bold data in the table above), the Johnson and Ettinger ²model was used to determine concentrations of regulated

EPA, 2002. OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Ground water and Soils Subsurface Vapor Intrusion Guidance. November 2002. EPA530-D-02-004.

Johnson, P.C., and R.A. Ettinger. 1991. Heuristic model for predicting the intrusion rate of contaminant vapors in buildings. Environ. Sci. Technol. 25: 1445-1452.

compounds representing an unacceptable risk. The Johnson and Ettinger (1991) model is a one-dimensional analytical solution to convective and diffusive vapor transport into indoor spaces.

Modeling to Assess Vapor Intrusion Risk input parameters used in the tetrachloroethene (PCE) and trichloroethene (TCE) soil gas screening models and output from the models are shown in Appendix G. Input parameters given in Appendix G represent either default parameters suggested by the model or Site-specific parameters (e.g. LF, LS, TS, and lithology). PCE and TCE were the only compounds detected above laboratory detection limits in the vapor samples, thus they are the only compounds carried forward in the vapor intrusion assessment.

Boring logs for borings installed in the vicinity of the vapor probes indicate the subsurface lithology to be sandy clay or a clayey sand. Since a clayey sand would likely have a higher permeability and therefore represent a "worst-case" scenario, the soil classification system (SCS) classification of sandy loam (SL) was used to represent subsurface lithology.

Results from the Johnson and Ettinger (1991) model indicate that the incremental risk from vapor intrusion to indoor air for carcinogenic effects at the DISI facility is 1.9×10^{-7} , which is orders of magnitude less than the 1×10^{-5} risk level allowed. Furthermore, the hazard quotient from vapor intrusion to indoor air for noncarcinogenic effects is 1.2×10^{-4} .

Similarly, results from the Johnson and Ettinger (1991) model for TCE indicate that the incremental risk from vapor intrusion to indoor air for carcinogenic effects at the DISI facility is 1.3×10^{-7} , which is orders of magnitude less than the 1×10^{-5} risk level allowed. Furthermore, the hazard quotient from vapor intrusion to indoor air for noncarcinogenic effects from TCE is 6.7×10^{-5} .

2.5.4.4 *Vapor Intrusion Conclusions*

Based on results presented above, measured soil gas concentrations do not represent unacceptable risks due to the vapor intrusion pathway in this industrial setting.

This section of the VCSR provides a summary of previous Site investigations. The previous Site investigations were performed in a stepwise approach that occurred over the past 24 years. In order to convey the results of multiple years of data collection, the discussion has been arranged to follow the timeline of the major submittals to the EPD regarding investigation and remediation activities at this HSI Site. This timeline is as follows:

- Investigation Prior to the Compliance Status Report (1987 2001)
- Investigation Performed During Corrective Action (2001 2010)
- Soil Removal Report (Dec 2010)

The Site investigation and delineation results from each period are summarized below.

3.1 INVESTIGATION PRIOR TO THE INITIAL COMPLIANCE STATUS REPORT (1987-2001)

The original CSR effort was for the purpose of delineating the extent of contamination, as described in a series of CSR submittals to the EPD from 1998 through August 15, 2000. The CSR was approved by the EPD on February 14, 2001. The original CSR compiled data collected by the previous consultants, along with data collected by ERM, in order to show site delineation. A summary of the investigations conducted by the various consultants is provided in the list below.

- Atlanta Testing & Engineering, Inc. (AT&E) Beginning 1987
 - Performed an assessment of the former Eastern Foods property (now CCR)
 - o Installed one monitoring well
- Hill-Fister Engineers, Inc. Beginning 1987
 - Installed three monitoring wells
 - Collected two soil samples

- Camp Dresser & McKee (CDM) Beginning 1990
 - o Performed a Phase I Environmental Assessment
 - o Performed a Phase II Environmental Assessment
 - Installed seven soil borings
 - Installed eight monitor wells (MW-1 through MW-8)
 Collected soil gas samples and ground water samples using soil probe techniques
 - Collected and analyzed numerous soil samples and ground water samples for VOCs, and
 - Measured water levels and conducted hydraulic conductivity tests to evaluate ground water occurrence and movement.
- Law Associates, Inc. (Law) Beginning 1991
 - Performed a Phase II Assessment at the Mini Storage property west of the facility (this parcel is currently owned by Puja Properties).
 - o Installed three monitoring wells
- RMT Beginning 1993
 - Installed 10 ground water monitoring wells (MW-3A, MW-9, MW-9A, MW-10, MW-10A, MW-11, MW-12, MW13, MW-13A, and MW-14)
 - o Collected and analyzed ground water samples,
 - Measured water levels and conducted hydraulic conductivity tests to evaluate ground water occurrence and movement, and
 - o Surveyed monitoring wells.
- Atlanta Environmental Management Beginning 1998
 - Installed eight borings by using direct push technology (DPT),
 - Collected numerous soil and ground water samples from DPT borings,
 - Collected ground water samples from existing monitoring wells, and
 - Analyzed soil and ground water samples for VOCs
- ERM Beginning 1998
 - o Installed 30 soil borings using direct push technology (DPT),
 - Sampled ground water at 17 locations both on and off-Site using DPT methods,
 - o Installed ground water monitoring wells and
 - o Conducted ground water elevation monitoring.

The results of these efforts were included in the 1998 – 2000 CSR and CSR Addenda.

3.2 INVESTIGATION PERFORMED DURING CORRECTIVE ACTION (2001-2010)

A Corrective Action Plan (CAP) was prepared and submitted to the EPD on June 13, 2001 and approved on June 28, 2002. A brief CAP Addendum was submitted on April 19, 2004 and approved by the EPD on June 18, 2004. A CAP Addendum was also submitted to EPD in 2009. EPD did not officially respond to this addendum, because the Site entered the VRP prior to the CAP Addendum review by the EPD.

3.2.1 Soil Sampling to Monitor Corrective Action Progress

Soil sampling was performed during the construction of the remediation system in 2003 and then annually thereafter as a provision of the CAP approval. During this time soils from both inside and outside the building were sampled and analyzed for VOCs. Since these locations were used to assess progress in VOC remediation, many locations were re-sampled on an annual basis. Since soil borings cannot technically be collected from the exact location on multiple locations, each year's data was collected from within two feet of a permanent identifying marker. Details on sampling methods and laboratory reports were included with reports submitted to the EPD between 2003 and 2010. Results of final soil samples from each location are included in Table 1.

3.2.2 Ground Water Sampling to Monitor Corrective Action

Each Annual Report included ground water monitoring data from the well network that was established as of 2002. The Annual Reports also included copies of the field parameter measurements for the sampling events that were performed using low flow sampling methods.

3.3 INVESTIGATION PERFORMED SINCE THE 2010 VRP SUBMITTAL TO THE EPD (2010-2011)

3.3.1 Soil Investigation

In order to fully delineate the contaminants of concern in soil to the west of the source areas, three additional boring locations were installed on the western CCR property boundary (SB-A, SB-B, and SB-C). Sampling depths were selected to provide information to fill in data gaps needed to complete delineation. The boring logs and laboratory reports from this soil investigation are provided Appendix H. Data are summarized in Table 1 and shown on the soil delineation figures. These borings provided sufficient information to complete the delineation within the CCR property and without having to access the Puja property for soil sampling.

3.3.2 Ground Water Investigation

One additional monitoring well, MW-39, was installed in 2011. This well was installed in response to EPD's November 15, 2010 correspondence. This well was screened in the most likely depth to find regulated substances based on the results for tetrachloroethene at nearby wells (MW-13, MW-13A, and MW-32). EPD requested that this well be installed to better understand the southwest edge of the regulated substances in ground water. The boring log and well construction diagram are provided in Appendix I. This well was successful in providing delineation in the southwest direction, as discussed in the ground water summary in Section 5 of this report.

4.0 SOIL DELINEATION SUMMARY

The figures referenced in this section provide a visual representation of the soil investigations that have been performed in a step-wise approach over the past two decades. In order to convey the results of multiple years of data collection, the soils sample locations on the following set of figures are coded with a red symbol and text if they exceed the delineation concentrations:

- Figure 5 Soil Delineation Map: Tetrachloroethene in Soil (1990-2010)
- Figure 6 Soil Delineation Map: Trichloroethene in Soil (1990-2010)
- Figure 7 Soil Delineation Map: 1,1-Dichloroethene in Soil (1990-2010)
- Figure 8 Soil Delineation Map: Cis-1,2-Dichloroethene in Soil (1990-2010)
- Figure 9 Soil Delineation Map: Trans-1,2-Dichloroethene in Soil (1990-2010)
- Figure 10 Soil Delineation Map: Vinyl Chloride in Soil (1990-2010)
- Figure 11 Soil Delineation Map: 1,4-Dioxane in Soil (1990-2010)

A soil delineation boundary is shown on these figures in order to show that delineation in all directions has been achieved and that only four tax parcels had to be investigated in order to find those boundaries (three DISI parcels and one parcel belonging to CCR). This section provides a discussion of (1) the general approach used to evaluate ground water contamination, (2) the analytical parameters selected and rationale for selection, (3) sampling locations, (4) sampling and analytical procedures, (5) statistical procedures used to evaluate data, (6) procedures used to establish background concentrations, and (7) the results of the assessment activities as required by Section 391-3-19-.06(3)(b)(2) of the Rules. Ground water investigations were completed by ERM between 1998 and 2010, which includes monitoring prior to and during remediation activities. During this work, the following tasks were completed:

- Geologic logs, construction records, and historical ground water elevation data were reviewed to determine/clarify the direction of ground water movement at the facility and surrounding properties.
- Ground water elevation monitoring was conducted at selected wells to determine/clarify the direction of ground water movement.
- Ground water monitoring wells were installed to monitor ground water quality and elevations in the saprolite aquifer. The locations of these wells are included on Figure 12.

5.1 AREAS INVESTIGATED

The ground water investigation network was setup up prior to the 2003 remediation construction effort. These wells were monitored quarterly for two years, and most wells have been monitored annually throughout the seven year ground water remediation period. The well construction details have been submitted with previous CSR/CAP documents, and a summary of monitoring well construction information is provided in Table 2.

In addition to the monitoring well network used throughout remediation, one additional well was installed in 2011. This well, MW-39, was successful in providing delineation in the southwest direction, since the

analytical results were below detection limits. The analytical data report is provided in Appendix J.

5.2 GENERAL APPROACH

The general approach to ground water monitoring has been annual monitoring for the purpose of monitoring the plume size and plume stability, and remediation progress. In addition, some monitoring wells, air sparge wells, injection wells, and passive soil vapor extraction wells were sampled intermittently for the sake of monitoring remediation progress in specific areas of ground water remediation activity. Results of the ground water monitoring activities have been reported to the EPD on an annual basis in the form of Annual Progress Reports. These data were also used over the course of the seven-year remediation period to adapt remediation systems to address the higher concentration areas of the ground water plume.

5.3 ANALYTICAL PARAMETERS SELECTED AND RATIONALE FOR SELECTION

The ground water quality data indicate that PCE and its associated degradation products are the predominant VOCs present in the saprolite aquifer at the facility and neighboring properties.

5.4 METHODS USED TO CHARACTERIZE GEOLOGY AND HYDROGEOLOGY

5.4.1 Subsurface Geology

Hollow-stem-auger drilling, rock coring, and DPT methods were employed during the ground water investigations. Table 2 presents a summary of monitoring well construction details. Boring logs for well installations have been submitted to the EPD throughout the investigation and remediation process. According to boring logs prepared during investigation over the past 24 years, the facility is underlain by saprolite of varying thickness, then hard granite gneiss and a mica schist.

5.4.2 Ground Water Gradients, Flow Rates, and Flow Direction

Ground water gradients and flow directions at the facility were determined from potentiometric surface maps, such as the one created with the October 2010 water level monitoring data (Figure 13). The water level measurements and potentiometric surface calculations are shown in

Table 3. The general direction of ground water flow is to the east, with a small component of flow to the northeast and to the north.

5.4.3 Hydraulic Conductivity And Other Hydrogeologic Characteristics

The general direction of ground water flow is to the east/slight northeast, at an estimated rate of 39 to 67 feet per year. As documented in the 2001 CAP, horizontal hydraulic gradients for the facility and nearby properties estimated from the water table contours range from 0.002 to 0.008. Based on these data and an assumed porosity of 0.2 and gradient of 0.005, the ground water flow at the site is estimated to be in the range of 39 to 67 feet per year.

5.5 GROUND WATER SAMPLING LOCATIONS AND DEPTHS

Ground water sampling locations are shown on Figure 12, and the well construction details for the monitoring wells are provided in Table 2.

5.5.1 Saprolite Aquifer Monitoring Well Installation & Construction Methods

Hollow-stem-auger drilling methods were utilized to advance boreholes for the monitoring wells. During the drilling, soil samples were collected and logged. Subsequent to completing a borehole to the desired depth, the well casing and screen were placed inside the hollow-stem-augers. The casing and screen are 2-inch diameter, schedule 40 PVC having threaded joints. The well screen length varies as described in Table 2.

Subsequent to placing the well screen and casing inside the hollow-stemaugers, a filter pack of washed silica sand was placed in the well annulus from the bottom of the borehole to approximately 2-to-4 feet above the top of the screen. The hollow-stem-augers were slowly withdrawn from the borehole as the sand was placed. A layer of bentonite pellets was place on top of the sand pack. The remainder of the annular space was filled to ground surface with a cement-bentonite grout mixture. Each well was completed at the ground surface by installing either a flush-mount, bolt-down cover or a stand-up protective metal casing. A concrete pad was poured around each well and the each well's cap was equipped with a lock.

5.5.2 Bedrock Aquifer Well Installation And Construction Methods

Hollow-stem-auger drilling methods were used to advance a borehole to the point of auger refusal, approximately 82 feet below grade. At this depth, temporary steel casing was set and rock coring activities were

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initiated using a nominal 4-inch diameter core barrel. Initially, 10 feet of rock were cored to ensure that competent bedrock had been encountered. At this point, rock-coring activities were stopped and the borehole was reamed to nominal diameter of 10 inches to an approximate depth of 92 feet below grade. Six-inch diameter, schedule 40 PVC casing was then set in the borehole and grouted into place. The annular space around the casing was filled with a 95 percent cement-5 percent bentonite grout. The grout was placed using the tremie method and allowed to cure for 24 hours.

Once the grout had cured, the PVC casing was flushed with potable water. Rock coring activities were resumed. A qualified geologist examined each rock core. In addition to describing the rock type, the cores were examined for evidence of secondary porosity, such as fractures or structural features and oxidation zones.

The bedrock well at the facility was completed as on open hole well to a depth of 132 feet below grade. As such, no additional casing or screen were installed. The well was completed by installing a bolt-down, flushmount cover and a concrete pad at the ground surface.

5.5.3 Well Development Procedures

The saprolite aquifer wells were developed using bailing and pumping methods. In the case of bailing, disposable polyethylene bailers equipped with new nylon rope were used. Other wells were developed by pneumatic pump. During the development, the temperature, specific conductivity, ph, and turbidity of the purged water was monitored.

The bedrock well was developed by over pumping with a 2-inch diameter electric submersible pump. During development, the temperature, specific conductance, pH, and turbidity of the development water were monitored.

5.6 GROUND WATER SAMPLING PROCEDURES

5.6.1 Monitoring Well Ground Water Elevations And Measurements

Before ground water samples were collected, the depth to ground water and total depth were measured for each monitoring well. These measurements were collected using the following procedure.

1. The lock and locking cap covering the well were removed.

- 2. Sufficient time was allowed for the water level in each well to stabilize.
- 3. A clean electronic water level probe was lowered to the water surface.
- 4. The distance from the reference point to the water surface was recorded to the nearest 0.01 foot.
- 5. The probe was lowered to the bottom of the monitoring well.
- 6. The distance from the reference point to the bottom of the well was recorded to the nearest 0.01 foot.
- 7. The probe was removed from the well and cleaned.

Results from the most recent potentiometric surface mapping event, October 2010, are provided in Table 3 and Figure 13.

5.6.2 Sample Handling and Preservation Techniques

5.6.2.1 Sample Identification

Ground water samples were identified by the monitoring location from which they were collected. For example, the ground water sample collected from MW-20 was identified as MW-20.

5.6.2.2 Sample Preservation and Holding Times

The samples were acidified in the field using hydrochloric acid to a pH of less than 2. Subsequent to being collected, they were placed in ice-filled coolers. They were delivered to a NELAC accredited laboratory by ERM personnel or by courier. The samples were analyzed within 14 days of their collection.

5.6.2.3 Equipment Decontamination Procedures

In between each sampling interval and location where a re-useable discrete interval ground water sampler was used, the units were thoroughly decontaminated.

5.6.2.4 Sample Chain of Custody Procedures

The field team member who collected the samples retained sample custody in the field. Chain of custody forms were completed by this individual prior to surrendering possession of the samples. The chain of custody records were maintained to document the delivery of the ground water samples to the subcontracted laboratory.

5.6.2.5 Trip Blanks

Trip blanks were typically included with VOC sample deliveries to the laboratory.

5.7 ANALYTICAL PROCEDURES

5.7.1 Field Analytical Techniques

Temperature, specific conductance, pH, and turbidity were measured in the field as the ground water samples were collected. These measurements for the most recent annual ground water sampling event (October 2010) are included in Appendix K.

5.7.2 Laboratory Analytical Techniques

The ground water samples and associated trip blanks were analyzed for VOCs by method 8260B. Analyses were conducted by ASI and AES laboratories, which are both located in the metro Atlanta area.

5.8 METHODS USED TO DETERMINE BACKGROUND GROUND WATER QUALITY

The VOCs monitored at the facility typically do not occur naturally in ground water. Therefore, no efforts to establish background concentrations of these constituents in the ground water at the facility were undertaken.

5.9 RESULTS OF GROUND WATER EVALUATION

5.9.1 PHYSIOGRAPHY AND DRAINAGE

The facility is located in the Greenville Slope District of the Piedmont Physiographic Province (Clark and Zia, 1976). This area is characterized by rolling topography that decreases gradually in elevation from 1,000 feet in the northeast to 600 feet in the southwest. Relief varies from 150 to 200

feet in the east to 100 to 150 feet in the west. All streams in this district eventually flow to the Gulf of Mexico.

Ground surface elevations at the facility range from approximately 1,020 feet to 1,000 feet. The ground surface slopes generally from southwest to northeast, in the direction of an unnamed tributary of the Flint River. Ditches at the facility convey surface water drainage generally to the north.

5.9.2 Geology and Hydrogeology

5.9.2.1 Regional

Soils in the Piedmont Physiographic Province are typically silt and clayrich materials that formed from the in-place weathering of the underlying crystalline bedrock. The specific character of soils in the Piedmont is dependent on the nature of the rock from which they weathered. The percentage of sand-sized particles comprising the soils, however, typically tends to increase with depth. As such, while silt and clay-sized materials are predominant at shallow depths, sand-sized materials are predominant at greater depths. Because of its greater permeability, the deeper, more coarse-grained zone can serve as a preferential pathway for contaminant migration.

Regionally, the area near the facility is underlain by a complex of late Precambrian to early Paleozoic rocks referred to as the Atlanta Group (McConnell and Abrams, 1984). More specifically, the facility is underlain by the Tar Creek Member of the Clarkston Formation. The Clarkston Formation is composed of sillimanite-garnet-quartz-plagioclase-biotite-muscovite schist interlayered with hornblende-plagioclase amphibolite.

The occurrence and movement of ground water in the area of the facility is within two separate but interconnected water-bearing zones. These include a shallow water-bearing zone located within the soils, and a deeper water-bearing zone located in the bedrock. The shallow water-bearing zone is referred to as the saprolite aquifer. The deeper water-bearing zone is referred to as the bedrock aquifer.

Ground water in the saprolite aquifer occurs in the interstitial pore spaces between individual grains comprising the soil and is typically under water table (i.e., unconfined) conditions. The direction of ground water movement in the saprolite aquifer typically approximates the land surface topography, with the direction of movement being from upland areas to nearby drainage features (i.e., creeks, rivers, etc.). As a result, ground

water flow systems within the saprolite aquifer typically consist of numerous small ground water basins corresponding to local drainage patterns (Cressler, et. al., 1983). Based on a review of ground surface topography, the direction of ground water movement in the saprolite aquifer at the facility is expected to be towards the northeast. The unnamed tributary of the Flint River is located approximately 1,500 feet northeast of the facility is expected to be the ground water discharge point for the saprolite aquifer.

Ground water in the bedrock aquifer is located in the fractures and other structural features of the rock. Ground water movement within this zone is controlled by the distribution and degree of interconnection of rock discontinuities. Consequently, the direction of ground water movement within the bedrock is more difficult to predict. Discharge points for ground water in the bedrock aquifer, however, will be associated with the major streams in the area. These include the Flint River located approximately 3.2 miles east of the facility. Recharge of the bedrock aquifer typically occurs as the result of the downward movement of ground water through the overlying soils.

5.9.2.2 Local

Geologic logs for wells and soil borings installed during previous investigations at the facility were submitted with previous CSR and CAP documents. A geologic cross-section along the ground water flow path was prepared. The location of the cross section is along the ground water flow path, as shown in Figures 12 and 13.

Bedrock has been observed at the facility at depths ranging from 27 feet below grade at MW-4 near the southern edge of the DISI facility, to 82 feet below grade at well MW-18D located near the center of the facility. Rock underlying the facility consists of pegmatite, biotite-muscovite schist and biotite – gneiss with garnet. Well MW-18D was installed into the bedrock aquifer by ERM. It is completed to a depth of 132 feet below grade. That portion of the well from 92 to 132 feet is an open hole within the bedrock. Fractures are present throughout this open hole interval. They are more concentrated, however, from 92 to 97 feet below grade. The ground water quality sample collected from MW-18D is representative of the full open hole interval of the well.

Ground water elevation monitoring conducted by ERM indicates that the water table at the facility is located at depths ranging from approximately 8 to 25 feet below grade. Locations associated with the greatest depths to ground water are associated with topographically higher areas in the

southern portion of the facility. In most other areas of the facility, the water table is located less than 10 feet below grade.

5.10 GROUND WATER QUALITY

A summary of the ground water samples results is presented in Table 4, and the full laboratory data reports for this event are provided in Appendix L. The sampling locations associated with these samples are shown on Figure 12. The following series of ground water figures shows the status of the compounds historically detected at this site, as well as the degradation products of the released compounds.

- Figure 14 Tetrachloroethene in Ground Water
- Figure 15 Trichloroethene in Ground Water
- Figure 16 1,1-dichloroethene in Ground Water
- Figure 17 Cis-1,2-dichloroethene in Ground Water
- Figure 18 Trans-1,2-dichloroethene in Ground Water
- Figure 19 Vinyl Chloride in Ground Water
- Figure 20 1,4-Dioxane in Ground Water
- Figure 21 Cross Section I-I' with October 2010 Ground Water Data

As expected, the highest concentrations of these VOCs are present in proximity to the location of the former sewer tank and former outdoor drum storage area, which were located to the northwest of the DISI building.

A Corrective Action Plan (CAP) was prepared and submitted to the EPD on June 13, 2001 and approved on June 28, 2002. A brief CAP Addendum was submitted on April 19, 2004 and approved by the EPD on June 18, 2004. A CAP Addendum was also submitted to EPD in 2009. EPD did not officially respond to this addendum, because the Site entered the VRP prior to the CAP Addendum review by the EPD.

Corrective Action commenced at this facility when a soil vapor extraction (SVE) system was installed in the source area to treat soil under the building footprint. Ground water remediation in the source area on the DISI property began on May 15, 2003 when an air sparging (AS) system and a chemical oxidation system went on line. In September 2004, a system of injection wells was installed to deliver chemicals for enhancing natural attenuation of VOCs. This system of wells was installed in the dilute, downgradient area of the ground water plume.

6.1 SOIL CORRECTIVE ACTION VIA SOIL VAPOR EXTRACTION ('99-'09)

Soil remediation was performed using soil vapor extraction (SVE) from 1999 - 2009. The active SVE system included a network of 21 soil vapor extraction wells that were installed in the unsaturated zone under the warehouse floor in 1999 and seven new active SVE wells that were installed in 2008 to address the soil in areas beneath the warehouse and to the northwest of the warehouse.

Soil sampling performed between 2003 and 2007 showed recalcitrant areas that were not being treated to low enough levels using the SVE system. Soil sampling was conducted in May 2009 for analysis of VOCs in order to better delineate the effectiveness of operations at reducing the soil areas that remain above RRS. A majority of the soil samples were below RRS, but a few recalcitrant areas were located. These results have guided the recommendation for selective soil excavation that was proposed in the 2009 Corrective Action Plan Addendum.

The SVE system was removed prior to the 2010 soil excavation activities, since the soil excavation was designed to bring soils into compliance, thus negating the need for further soil vapor extraction.

6.2 SOIL EXCAVATION (2010)

Excavation design was presented in the April 2010 Voluntary Remediation Plan submitted to the EPD. Excavation was designed to remove the areas that exceeded the applicable RRS, based on additional sampling events performed in 2009 and 2010. The soil excavation design figure is provided in Figure 22. Soil excavation was completed and soil confirmation sampling results show that further remediation is not needed to meet the Type 3/4 RRS, as discussed in detail in Section 7 of this report.

6.3 GROUND WATER CORRECTIVE ACTION (2003 – 2010)

Ground water corrective action has been performed, as described in the Annual Reports on Corrective Action Progress that have been submitted to the EPD in 2004, 2005, 2006, 2007, 2008, and 2009. A combination of remedial technologies was used to address concentrations of tetrachloroethene and its degradation products that exceeded the risk reduction standards (RRS).

An air sparge (AS) system, passive soil vapor extraction system (SVE), and in-situ chemical oxidation system (ISCO) began operations on May 15, 2003. These systems are located within the DISI property boundary. The AS and ISCO systems were operational and discussed in annual reports to the EPD between 2003 and 2009.

An enhanced natural attenuation (a.k.a. enhanced passive remediation) system was installed in September 2004 to address VOC concentrations in the downgradient, dilute portions of the ground water plume beyond the DISI property boundary. This system of injection wells is located on the CCR property. The location, construction, and performance were monitored and assessed in reports submitted to the EPD between 2004 and 2009.

7.0 EVALUATION OF POST-REMEDIATION SOIL CONDITIONS

7.1 PURPOSE OF SOIL EXCAVATION AND CONFIRMATION SAMPLING

Following the removal of soils as shown in the design drawing (Figure 22) soil samples were collected from the base and sidewalls of each excavation to confirm that:

- soil exceeding RRS for PCE and its degradation products was removed and
- compliance with RRS was achieved.

Detailed information about the sampling methods and results were presented in the December 2010 Soil Removal Report, as well as copies of the laboratory data reports and soil disposal manifests. Soil laboratory analytical results are summarized in Table 1.

7.2 SOIL RISK REDUCTION STANDARDS

The soil cleanup standards that will be used for this site will be the risk RRS currently used in the HSRA program. The RRS that are guiding corrective action for soils were approved in EPD correspondence dated October 12, 2005. For the compounds of interest at this site the surface and subsurface standards were calculated to be equal, so only a single soil RRS is listed in Appendix D.

7.3 SAMPLING AND ANALYTICAL PROCEDURES

7.3.1 Sampling Methods

Soil samples were collected from the base and sidewalls of each excavation using a stainless steel sampling spoon. Samples collected below a depth of 4-feet bgs were collected from the excavator bucket because entering excavations of depths greater than 4-feet requires that a confined space entry permit be prepared per ERM's health and safety policies. All sampling equipment was decontaminated prior to use at different locations in accordance with specifications outlined in the FSAP.

7.3.2 Sample Handling and Preservation Techniques

Following collection, soil samples were labeled with a unique sample I.D., date and time of analyses, sampler's initials and analyses requested. Samples were then placed into a cooler and maintained in a secure location pending transport to the analytical laboratory.

7.3.3 Chain-Of-Custody Procedures

Chain-of-Custody documentation was employed throughout the sampling event. Upon completion of sample collection, the sample I.D., date and time of collection, sampler's initials, analyses requested and turnaround time requested were logged on a chain-of-custody form. The form was kept with the sample team leader until the samples were relinquished to the laboratory. Upon relinquishment, the sample team leader and receiver of the samples signed the chain-of-custody form and the sample team leader kept one copy of the form.

7.3.4 Laboratory Analytical Techniques

Excavation confirmation samples were analyzed via EPA Method 8260 on a 24-hour turnaround time basis. Analytical results are summarized in Table 1 and analytical reports were provided with the December 2010 Soil Removal Report.

7.4 COMPLIANCE WITH RISK REDUCTION STANDARDS

Final confirmation sample locations are presented in Figures 23 to 29. Confirmation samples that did not pass RRS criterion are not shown on the figures because the soil associated with failed samples has been excavated. However, these samples are included in the soil data summary table. Confirmation sampling for each area is described below.

A series of maps was created to show the locations and analytical data from the soil samples collected from the base and sidewalls of each excavation area. The excavation confirmation sample locations and results are shown in plan view on Figures 23–29. Figures 23–29 show the analytical data in plan view for tetrachloroethene, trichloroethene, 1,1-diochloroethene, cis-1,2-diochloroethene, trans1,2-diochloroethene, vinyl chloride, and 1,4-dioxane, respectively.

A cross-section location map is shown on Figure 30, and vertical cross-sections of the excavation areas and sampling results are shown on Figures 31–37. Figures 31–37 show the analytical data in cross-section view for tetrachloroethene, trichloroethene, 1,1-diochloroethene, cis-1,2-diochloroethene, trans1,2-diochloroethene, vinyl chloride, and 1,4-dioxane, respectively.

The excavation areas were described in full detail in the December 2010 Soil Removal Report, and they are summarized below:

- Soil in Area A was excavated to a depth of 9 feet below the concrete surface, which extended approximately 1 foot into the ground water table. The planned excavation area was expanded to the south and east based on confirmation sampling results. The final surface area of this excavation was 21 ft x 25 ft.
- Soil in Area B was excavated to a depth of 4 feet below the grassy surface north of the building. The planned excavation area was expanded based on confirmation sampling results as follows: 2 feet to the north and 2 feet to the east. The final surface area of this excavation was 17 ft x 22 ft.
- Soil in Area C was excavated to a depth of 6 feet below the grassy surface north of the building. The planned excavation area was expanded based on confirmation sampling results as follows: 2 feet to the north and 2 feet to the east. The final surface area of this excavation was 7 ft x 12 ft.
- Soil in Area D was excavated to a depth of 2 feet below the concrete floor of the warehouse building. The planned excavation area was expanded based on confirmation sampling results as follows: 10 feet to the west, 4 feet to the south, and 1 foot to the east. The final surface area of this area is irregular, but is 21 ft x 14 ft at its largest dimensions, as shown in Figure 22.
- Soil in Area E was excavated to a depth of 4 feet below the concrete warehouse floor. Area E was split into three smaller sections for the purpose of collecting confirmation samples. Each of the three section began with a surface area of 25' by 35.' The three sections of Area E are:
 - Area EN, which is the northern third of Area E. Soil in Area EN was excavated to a depth of 4 feet below the concrete

floor of the warehouse building. The final surface area of this excavation was the same as the design surface area, 25 ft \times 35 ft.

- Area EM, which is the middle third of Area E. Soil in Area EM was excavated to a depth of 4 feet below the concrete floor of the warehouse building. The planned excavation area was expanded based on confirmation sampling results by 1 foot in depth and also by 4 feet on the east wall. The final surface area of this excavation was 29 ft x 35 ft x five feet deep., and
- Area ES, which is the southern third of Area E. Soil in Area ES was excavated to a depth of 4 feet below the concrete floor of the warehouse building. The planned excavation area was expanded based on confirmation sampling results as follows: 8 feet to the west, 6 feet to the south, and 3 feet to the east. The final surface area of this area is irregular, but is 46 ft x 31 ft at its largest dimensions, as shown in Figure 22.
- Soil in Area F was excavated to depth 6 feet below the concrete floor of the warehouse. The excavation area is shown in plan view on Figure 22. Area F was a deeper excavation spot that was located within a larger, shallower excavation area (Area E). Thus, Area F was actually a 2-foot deep excavation from 4 ft bgs to 6 ft bgs. The final surface area of this excavation was the same as the design surface area, 10 ft x 20 ft.
- Area G was excavated to a depth of 4 feet below the concrete floor of the warehouse. The excavation area is shown in plan view on Figure 22. The final surface area of this excavation was the same as the design surface area, 10 ft x 10 ft.

Excavation confirmation samples from the sidewalls and the base achieved results below RRS, as shown in Figures 23 – 37 and in the analytical data summary provided in Table 1.

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This section presents a summary of the RRS compliance status for HSI Site #10127.

8.1 SOILS

A summary of the soil samples, including the post-excavation confirmation samples collected in June 2010, are presented in Table 1. Also included in Table 1 are the respective RRS.

Based on a review of data presented in Sections 3, 4, and 5 of this document, it is determined that the four (4) Tax Parcels in the VRP are in compliance with the applicable RRS for soils. Specifically,

- Two (2) Tax Parcels in the VRP (130036LL1463 and 130036LL1356) are in compliance with the Type 3/4 RRS.
- Two (2) Parcels in the VRP (130036LL1349 and Tax Parcel 130036LL1414) are in compliance with the Type 1/2 RRS for soil.

8.2 GROUND WATER

Neither corrective action nor certification of compliance for ground water is required at this site pursuant to O.C.G.A. 12-8-107(g)(2). The site was listed on the HSI as a result of a release to soil exceeding a reportable quantity but was not listed on the inventory as a result of a release to ground water exceeding a reportable quantity. A release exceeding a reportable quantity for ground water also did not exist at the time the site was enrolled in the VRP. In addition, the establishment of the soil RRS took into account the ground water protection requirements. The ground water at the site has already been monitored for in excess of five (5) years. In addition, the soil vapor sampling conducted from soils over the most concentrated portion of the ground water plume, as discussed in Section 4, did not exceed established risk levels.

9.0 RESPONSIBLE PARTIES

This section of the CSR provides, as required by Section 391-3-19-.06(3)(b)(6) of the Rules, the name, address and telephone number of any other person who may be a responsible party for the Site, and a description of the type and amount of regulated substances such party may have contributed to a release. The party responsible for the release is Dickies Industrial Services, Inc., the owner and former operator of the facility.

10.0 PUBLIC NOTICE

As required by the Georgia Rules for the Voluntary Remediation Program, a Public Notice will be published in the Fulton County Daily Report and the Atlanta Journal Constitution indicating that the public may submit comments to EPD on the VCSR within thirty (30) days. A notice of the VCSR availability for review will also be sent to Zachary Williams, Fulton County Manager and Jack P. Longino, Mayor of College Park.

In addition, a copy of the VCSR will be sent to the following adjacent and nearby property owners:

- 1) Coca Cola Refreshments USA, Inc.,
- 2) Puja Partners, LLC,
- 3) Sears Roebuck & Company, and
- 4) Blount Construction Company, Inc.

11.0 CONTINUING ACTIONS TO MAINTAIN COMPLIANCE WITH TYPE 3/4 RISK REDUCTION STANDARDS

To assure continued compliance with the Type 3/4 Risk Reduction Standards for soil, the owner of the DISI property will implement a Plan to Maintain Compliance, including but not limited to submittal of an annual written report and certification to EPD. The Plan and draft Certification are attached as Appendix M.



Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample	Depth of Sample	Name of Organization that			nes this n sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
			Collected Sample					RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	d - Chemicals Not Detected	l Above Soil NC
CP-SB-4	Sep-90	4-6	CDM	1	of	1	CP-BH-4-03	170	< 60	NA	NA	NA	NA	NA
CP-SB-5	Sep-90	6-8	CDM	1	of	1	CP-BH-5-04	<60	< 60	NA	NA	NA	NA	NA
CP-SB-7	Sep-90	6-8	CDM	1	of	1	CP-BH-7-04	150	< 60	NA	NA	NA	NA	NA
CP-MW-1	Oct-90	5-7	CDM	1	of	1	CP-MW1	470	310	NA	<130	<60	NA	<60
	Aug-92	3.5-5	RMT				RMT-MW10A	54.8	NA	<5.0	<10.0	<5.0	NA	<5.0
RMT-MW10-A	Aug-92	8.5-10	RMT	1	of	1	RMT-MW10A	27.7	NA	<5.0	<10.0	<5.0	NA	<5.0
	Aug-92	10-11.5	RMT				RMT-MW10A	53.2	NA	<5.0	<10.0	<5.0	NA	<5.0
	Sep-92	3.5-5	RMT				RMT-MW3A	<200	<200	<200 ^A	NA	NA	NA	NA
RMT-MW-3A	Sep-92	5-6.5	RMT	1	of	1	RMT-MW3A	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	6.5-8	RMT				RMT-MW3A	<200	<200	<200 ^A	NA	NA	NA	NA
RMT-SB-1	Sep-92	3.5-5	RMT	1	of	1	RMT-SB1	<200	<200	<200 ^A	NA	NA	NA	NA
14,11 35 1	Sep-92	6.5-7.5	RMT	•			RMT-SB1	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	2-3.5	RMT				RMT-SB2	<200	<200	200 ^A	NA	NA	NA	NA
RMT-SB-2	Sep-92	3.5-5	RMT	1	of	1	RMT-SB2	<200	<200	340 ^A	NA	NA	NA	NA
	Sep-92	5-6.5	RMT				RMT-SB2	<200	<200	250 ^A	NA	NA	NA	NA
RMT-SB-4	Sep-92	5-6.5	RMT	1	of	1	RMT-SB4	8	<2.5	5.1 ^A	<1.2	NA	NA	<1.2
RMT-SB-6	Sep-92	3.5-5	RMT	1	of	1	RMT-SB6	<200	<200	490 ^A	NA	NA	NA	NA
	Sep-92	6.5-8	RMT				RMT-SB6	430	340	4800 ^A	<130	NA	NA	<130
	Sep-92	2-3.5	RMT				RMT-SB10	230	<200	<200 ^A	NA	NA	NA	NA
RMT-SB-10	Sep-92	3.5-5	RMT	1	of	1	RMT-SB10	220	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	5-6.5	RMT				RMT-SB10	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	8.5-10	RMT				RMT-SB12	<2.3	<2.3	<2.3 ^A	<1.2	NA	NA	<1.2
RMT-SB-12	Sep-92	13.5-15	RMT	1	of	1	RMT-SB12	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	18.5-20	RMT				RMT-SB12	<200	<200	<200 ^A	NA	NA	NA	NA
	Apr-98	1-2	AEM				AEM-GP-2/1-2	270	21	8.2	< 2.0	< 5.0	NA	< 5.0
AEM-GP2	Apr-98	3-4	AEM	1	of	1	AEM-GP-2/3-4	400	160	110	< 10.0	< 25.0	NA	<25.0
177.6.075	Apr-98	1-2	AEM	_			AEM-GP-5/1-2	37	< 5.0	< 5.0	< 2.0	< 5.0	NA	< 5.0
AEM-GP5	Apr-98	6-7	AEM	1	of	1	AEM-GP-5/6-7	150	< 5.0	<1 0.0	< 4.0	< 10.0	NA	<10.0
	Apr-98	11-12	AEM				AEM-GP-7/11-12	40	< 5.0	< 5.0	< 2.0	< 5.0	NA	< 5.0
AEM-GP7	Apr-98	16-17	AEM	1	of	1	AEM-GP-7/16-17	140	< 5.0	< 5.0	< 2.0	< 5.0	NA	< 5.0
	Apr-98	6-7	AEM				AEM-GP-7/6-7	44	< 5.0	7	< 2.0	< 5.0	NA	< 5.0
A FN (CDO	Apr-98	11-12	AEM	1		4	AEM-GP-8/11-12	220	12	17	< 2.0	< 5.0	NA	< 5.0
AEM-GP8	Apr-98	6-7	AEM	1	of	1	AEM-GP-8/6-7	60	< 5.0	17	< 2.0	< 5.0	NA	< 5.0
GP-1B	Aug-99	6-8	ERM	1	of	1	ERM-GP1B-6-8	67	< 10.0	< 10.0	< 21.0	< 10.0	NA	NR
GP-1C		8-10	ERM	1	of	1	ERM-GP1C-8-10	37	< 8.6	< 8.6	< 17.0	< 8.6	NA NA	NR
GP-1D	Aug-99 Aug-99	0-2	ERM	1	of	1	ERM-GP-1D-0-2	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-1E	Aug-99 Aug-99	0-2	ERM	1	of	1	ERM-GP-1E-0-2	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-2D	Aug-99 Aug-99	0-2	ERM	1	of	1	ERM-GP-1E-0-2 ERM-GP-2D-0-2	140	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-2E	Aug-99	4-6	ERM	1	of	1	ERM-GP-2E-4-6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-3B	Aug-99	4-6	ERM	1	of	1	ERM-GP3B-4-6	110	28	< 11.0	< 22.0	< 11.0	NA NA	NR
GP-3C	Aug-99	6-8	ERM	1	of	1	ERM-GP3C-6-8	46	16	< 6.4	< 13.0	< 6.4	NA NA	NR
GP-3D	Aug-99	4-6	ERM	1	of		ERM-GP-3D-4-6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-3E	Aug-99	6-8	ERM	1	of	1	ERM-GP-3E-6-8	5.2	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-4B	Aug-99	4-6	ERM	1	of	1	ERM-GP4B-4-6	< 6.8	< 6.8	< 6.8	< 14.0	< 6.8	NA	NR
GP-4C	Aug-99	6-8	ERM	1	of		ERM-GP4C-6-8	49	< 14.0	< 14.0	< 28.0	< 14.0	NA	NR
ERM-SB1	Aug-99	4	ERM	1	of		ERMSB-1-4	< 6.0	< 6.8	< 6.8	< 14.0	< 6.8	NA NA	< 6.8
	C //	•				-	ERMSB-2-4	0.0	0.0	0.0	11.0	0.0	- 11.1	

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Pate of Sample	Depth of Sample	Name of Organization that	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene	
			Collected Sample			RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	ed - Chemicals Not Detected Above Soil NC		
ERM-SB3	Aug-99	4	ERM	1 of 1	ERMSB-3-4	27	< 6.3	< 6.3	< 13.0	< 6.3	NA	< 6.3	
ERM-SB4	Aug-99	4	ERM	1 of 1	ERMSB-4-4	120	< 5.8	< 5.8	< 12.0	< 5.8	NA	< 5.8	
ERM-SB5	Aug-99	4	ERM	1 of 1	ERMSB-5-4	< 5.7	< 5.6	< 5.6	< 11.0	< 5.6	NA	< 5.6	
ERM-SB6	Aug-99	4	ERM	1 of 1	ERMSB-6-4	< 6.1	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB7	Aug-99	8	ERM	1 of 1	ERMSB-7-8	< 6.8	< 6.5	< 6.5	< 13.0	< 6.5	NA	< 6.5	
ERM-SB8	Aug-99	4	ERM	1 of 1	ERMSB-8-4	< 6.3	< 6.1	< 6.1	< 12.0	< 6.1	NA	< 6.1	
ERM-SB9	Aug-99	8	ERM	1 of 1	ERMSB-9-8	< 6.1	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB10	Aug-99	8	ERM	1 of 1	ERMSB-10-8	< 6.4	< 6.3	< 6.3	< 13.0	< 6.3	NA	< 6.3	
ERM-SB11	Aug-99	8	ERM	1 of 1	ERMSB-11-8	< 6.7	< 7.1	< 7.1	< 14.0	< 7.1	NA	< 7.1	
ERM-SB12	Aug-99	8	ERM	1 of 1	ERMSB-12-8	100	12	120	< 13.0	< 6.3	NA	< 6.3	
ERM-SB13	Aug-99	4	ERM	1 of 1	ERMSB-13-4	< 5.9	< 5.6	< 5.6	< 11.0	< 5.6	NA	< 5.6	
ERM-SB14	Aug-99	8	ERM	1 of 1	ERMSB-14-8	< 6.0	< 5.9	< 5.9	< 12.0	< 5.9	NA	< 5.9	
ERM-SB15	Aug-99	4	ERM	1 of 1	ERMSB-15-4	< 6.3	< 6.1	< 6.1	< 12.0	< 6.1	NA	< 6.1	
ERM-SB16	Aug-99	4	ERM	1 of 1	ERMSB-16-4	15	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB17	Aug-99	8	ERM	1 of 1	ERMSB-17-8	41	< 6.3	< 6.3	< 13.0	< 6.3	NA	< 6.3	
ERM-SB18	Aug-99	8	ERM	1 of 1	ERMSB-18-8	< 7.1	< 6.4	< 6.4	< 13.0	< 6.4	NA	< 6.4	
ERM-SB19	Aug-99	4	ERM	1 of 1	ERMSB-19-4	< 6.1	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB20	Aug-99	8	ERM	1 of 1	ERMSB-20-8	50	8.9	20	< 13.0	< 6.7	NA	< 6.7	
ERM-SB21	Aug-99	4	ERM	1 of 1	ERMSB-21-4	< 5.7	< 5.9	< 5.9	< 12.0	< 5.9	NA	< 5.9	
ERM-SB22	Aug-99	8	ERM	1 of 1	ERMSB-22-8	71	7	34	< 14.0	< 6.8	NA	< 6.8	
ERM-SB23	Aug-99	8	ERM	1 of 1	ERMSB-23-8	60	11	90	< 14.0	< 7.2	NA	< 7.2	
ERM-SB24	Aug-99	4	ERM	1 of 1	ERMSB-24-4	< 5.9	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB25A	Aug-99	4	ERM	1 of 1	ERMSB-25A-4	< 5.9	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB32	Aug-99	4	ERM	1 of 1	ERMSB-32-4	< 6.0	< 5.9	< 5.9	< 12.0	< 5.9	NA	< 5.9	
ERM-SB33	Aug-99	4	ERM	1 of 1	ERMSB-33-4	8.2	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB34	Aug-99	4	ERM	1 of 1	ERMSB-34-4	< 5.9	< 5.2	< 5.2	< 10.0	< 5.2	NA	< 5.2	
ERM-SB35	Aug-99	8	ERM	1 of 1	ERMSB-35-8	< 6.7	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB36	Aug-99	8	ERM	1 of 1	ERMSB-36-8	< 25.0	< 6.7	< 6.7	< 13.0	< 6.7	NA	< 6.7	
ERM-SB40	Aug-99	4	ERM	1 of 1	ERMSB-40-4	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	NA	< 5.0	
ERM-SB39	Aug-99	4	ERM	1 of 1	ERMSB-39-4	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	NA	< 5.0	
ERM - SVE PILOT TRENCH WEST	Aug-99	4	ERM	1 of 1	SVE PILOT TRENCH WEST	370	75	270	< 5.0	< 5.0	NA	< 5.0	
	A 01	2-4'	ERM		GP-5F	6.	12.	53.	< 5.	< 5.	NA	< 5.	
GP-5F	Apr-01 Apr-01	6-8'	ERM	1 of 1	GP-5F	< 5.	< 5.	< 5.	< 5.	< 5.	NA NA	< 5.	
GI-51	Apr-01	10-12'	ERM	d 1 01 1 F	GP-5F	< 5.	< 5.	< 5.	< 5.	< 5.	NA NA	< 5.	
	Ap1-01	10-12	EKIVI		Gi -3i	\ 3.	\ 5.	\ 5.	\ 3.	\ 3.	IVA	\ 3.	
GP-AS-41	Jan-03	2-4	ERM	1 of 1	AS-41	280.	< 5.8	< 5.8	< 12.	< 5.8	NA	< 5.8	
GP-5D	Jan-03	2-4'	ERM	2 of 2	GP-5D (and GP-5DR)	280,000.	62.	< 5.7	< 11.	< 5.7	NA	< 5.7	
CP-SB-6	Jan-03	6-8	ERM	2 of 2	CP-SB6	510.	400.	550.	43.	< 6.3	NA	< 6.3	
RMT-SB-3	Jan-03	6.5-8	ERM	2 of 2	RMT-SB3	430.	100.	< 6.3	77.	< 6.3	NA	< 6.3	
RMT-SB-5	Jan-03	6.5-8	ERM	2 of 2	RMT-SB5	210.	31.	49.	< 13.	< 6.5	NA	< 6.5	
RMT-SB-7	Jan-03	6.5-8	ERM	2 of 2	RMT-SB7	110.	23.	140.	< 13.	< 6.4	NA	< 6.4	
RMT-SB-8	Jan-03	3.5-5	ERM	2 of 2	RMT-SB8	< 5.9	< 5.9	< 5.9	< 12.	< 5.9	NA	< 5.9	
RMT-SB-9	Jan-03	2.5-3	ERM	2 of 2	RMT-SB9	130.	< 5.6	< 5.6	< 11.	< 5.6	NA	< 5.6	
RMT-SB-11	Jan-03	3.5-5	ERM	2 of 2	RMT-SB11	57.	< 5.8	< 5.8	< 12.	< 5.8	NA	< 5.8	
AEM-GP1	Jan-03	3-4	ERM	2 of 2	AEM-GP1	6.9	< 5.5	< 5.5	< 11.	< 5.5	NA	< 5.5	
	Apr-05	2-4'	ERM		GP-4A	10.	< 1.8	< 1.8	< 1.8	< 1.8	NA	< 1.8	
GP-4A	Apr-05	4-6'	ERM	3 of 3	GP-4A	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	NA	< 1.9	
GI -4A	Apr-05	6-8'	ERM	3 01 3	GP-4A	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	NA	< 2.3	
	Apr-05	8-10'	ERM	Ī	GP-4A	3.	< 2.	< 2.	< 2.	< 2.	NA	< 2.	

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample	Depth of Sample	Name of Organization that Collected Sample	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
						RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	- Chemicals Not Detected	l Above Soil NC
	Apr-06	2-4'	ERM		AS-42	< 28.	< 28.	< 28.	< 28.	< 28.	NA	< 28.
	Apr-06	4-6'	ERM		AS-42	< 31.	< 31.	< 31.	< 31.	< 31.	NA	< 31.
GP-AS-42	Apr-06	6-8'	ERM	1 of 1	AS-42	< 31.	< 31.	< 31.	< 31.	< 31.	NA	< 31.
	Apr-06	8-10'	ERM		AS-42	< 28.	< 28.	< 28.	< 28.	< 28.	NA	< 28.
	Apr-06	10-12'	ERM		AS-42	< 35.	< 35.	< 35.	< 35.	< 35.	NA	< 35.
AG 45	. 07		EDIA		CD AC 45	470	44	27	. 0.6		374	
AS-17 GP-AS-20	Apr-07	5-7' 13-15'	ERM ERM	4 of 4	GP-AS-17	470 < 5.5	14 < 5.5	27 < 5.5	< 9.6 < 11.	< 4.8 < 5.5	NA NA	< 4.8 < 5.5
GP-AS-20 GP-AS-28	Apr-07 Apr-07	12-14'	ERM	4 of 4 4 of 4	GP-AS-20 GP-AS-28	< 6.5	< 6.5	< 6.5	< 11.	< 6.5	NA NA	< 6.5
GP-AS-8	Apr-07	12-14'	ERM	4 of 4	GP-AS-8	< 5.6	< 5.6	< 5.6	< 11.	< 5.6	NA NA	< 5.6
GP-SVE-17	Apr-07	6-8'	ERM	4 of 4	GP-SVE-17	230	< 4.9	< 4.9	< 9.8	< 4.9	NA NA	< 4.9
GP-SVE-21	Apr-07	12-14'	ERM	4 of 4	GP-SVE-21	< 5.3	< 5.3	< 5.3	< 11.	< 5.3	NA	< 5.3
GP-SVE-8	Apr-07	12-14'	ERM	4 of 4	GP-SVE-8	26	< 6.8	< 6.8	< 14.	< 6.8	NA	< 6.8
GI SVE S	Apr-07	2-4'	ERM	1 01 1	GP-SVE-34	260.	120.	< 4.6	< 9.2	< 4.6	NA	< 4.6
on o :	Apr-07	4-6'	ERM	1 , , ⊢	GP-SVE-34	340.	39.	< 4.2	< 8.5	< 4.2	NA	< 4.2
GP-SVE-34	Apr-07	6-8'	ERM	1 of 1	GP-SVE-34	5.8	< 5.3	< 5.3	< 11.	< 5.3	NA	< 5.3
	Apr-07	8-10'	ERM		GP-SVE-34	9.9	< 5.	< 5.	< 10.	< 5.	NA	< 5.
	M 00		ED3.6		IIA 4 (0!)				40.2		N.T.4	
HA-1	May-09	3	ERM	1 of 1	HA-1 (3')	<4.6	<4.6	<4.6	<9.2	<4.6	NA NA	<4.6
	May-09	6	ERM	<u> </u>	HA-1 (6')	47	<5.6	<5.6	<11	<5.6	NA NA	<5.6
HA-2	May-09	3	ERM ERM	1 of 1	HA-2(3') HA-2(6')	170	5.6 <5.6	35 <5.6	<10	<5.2 <5.6	NA NA	<5.2 <5.6
	May-09 May-09	<u>6</u> 3	ERM		HA-3(3')	65 24	<5.6 <6.4	<5.6 <6.4	<11 <13	<5.6 <6.4	NA NA	<5.6 <6.4
HA-3	May-09	6	ERM	1 of 1	HA-3(6')	15	<5.2	<5.2	<10	<5.2	NA NA	<5.2
	May-09	3	ERM		HA-4(3')	130	<5.0	<5.0	<10	<5.0	NA NA	<5.0
HA-4	May-09	6	ERM	1 of 1	HA-4(6')	290	10	27	<9.9	<5.0	NA NA	<5.0
HA-9	May-09	3	ERM	1 of 1	HA-9(3')	17	21	5.3	<9.2	<4.6	<460	<4.6
HA-10	May-09	5	ERM	1 of 1	HA-10(5')	29	<4.8	<4.8	<9.7	<4.8	<480	<4.8
HA-11	May-09	5	ERM	1 of 1	HA-11(5')	31	<4.2	<4.2	<8.5	<4.2	<420	<4.2
HA-12	May-09	5	ERM	1 of 1	12	950	<300	<300	<600	<300	<30000	<300
HA-13	May-09	3	ERM	1 of 1	HA-13(3')	42	18	<5.4	<11	<5.4	<540	<5.4
HA-14	May-09	3	ERM	1 of 1	HA-14(3')	32	91	59	<9.9	<5.0	<500	<5.0
HA-15	May-09	5	ERM	1 of 1	HA-15(5')	5.6	<5.2	<5.2	<10	<5.2	<520	<5.2
HA-16	May-09	5	ERM	6 of 6	HA-16(5')	<4.7	<4.7	<4.7	<9.3	<4.7	<470	<4.7
HA-17	May-09	5	ERM	1 of 1	17	<5	<5	<5	<10	<5	<100	<5
HA-18	May-09	3	ERM	1 of 1	HA-18(3')	85	7.4	<5.4	<11	<5.4	<540	<5.4
HA-20	May-09	5	ERM	1 of 1	HA-20(5')	<5.2	<5.2	<5.2	<12	<5.8	<580	<5.8
HA-21	May-09	3	ERM	1 of 1	HA-21(3')	230	<5.6	<5.6	<11	<5.6	< 560	<5.6
HA-22	May-09	3	ERM	1 of 1	HA-22(3')	23	<5.6	<5.6	<11	<5.6	<560	<5.6
HA-24	May-09	5	ERM	1 of 1	HA-24(5')	<4.4	100	180	<8.8	61	<440	<4.4
HA-25	May-09	3	ERM	1 of 1	HA-25(3')	85	<4.6	<4.6	<9.2	<4.6	<460	<4.6
HA-26	May-09	3	ERM	1 of 1	HA-26(3')	20	<5.5	<5.5	<11	<5.5	<550	<5.5
HA-27	May-09	5	ERM	1 of 1	HA-27(5')	12	<5.6	<5.6	<11	<5.6	<560	<5.6
HA-28	May-09 May-09	5 5	ERM ERM	1 of 1 1 of 1	28 29	14	<4.6	<4.6 <5.2	<9.2	<4.6	<460 <520	<4.6
HA-29	iviay-09	<u>ə</u>	EKIVI	1 of 1	27	<5.2	<5.2	\3. 2	<10	<5.2	\ 320	<5.2
CP 100	Jan-10	4	ERM	1 (1	GP-100(4')	150	<4.9	<4.9	<9.8	<4.9	<150	<4.9
GP-100	Jan-10	7	ERM	1 of 1	GP-100(7')	8.4	<5.6	<5.6	<11	<5.6	<170	<5.6
CD 101	Jan-10	3	ERM	1 of 1	GP-101(3')	8200	<230	<230	<470	<230	<7000	<230
GP-101	Jan-10	8	ERM	1 of 1	GP-101(8')	40	<6.2	<6.2	<12	<6.2	<180	<6.2
GP-102	Jan-10	3	ERM	1 of 1	GP-102(3')	170	<4.5	<4.5	<9	<4.5	<130	<4.5
O1 -102	Jan-10	8	ERM	1 01 1	GP-102(8")	<5.6	<5.6	<5.6	<11	<5.6	<170	<5.6
GP-103	Jan-10	3	ERM	1 of 1	GP-103(3')	1800	<4.3	<4.3	<8.6	<4.3	<130	<4.3
G1 -100	Jan-10	8	ERM	1 01 1	GP-103(8')	65	<5.8	<5.8	<12	<5.8	<170	<5.8
GP-104	Jan-10	3	ERM	1 of 1	GP-104(3')	120	<6.4	<6.4	<13	<6.4	<190	<6.4
O1 -101	Jan-10	8	ERM	1 01 1	GP-104(8')	47	<6.0	<6.0	<12	<6.0	<180	<6.0
HA-19	Jan-10	2.5	ERM	2 of 2	HA-19(2.5')	82000	1200	<240	<470	<240	<7100	<240
11117	Jan-10	5	ERM	_	HA-19(5')	47	9.9	<5.7	<11	<5.7	<170	<5.7

Table 1
Soil Analytical Data
Former Dickies Industrial Services, Inc.
HSI Site No. 10127
ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample	Depth of Sample	Name of Organization that Collected Sample	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
			Confected Sample			RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	l - Chemicals Not Detected	ł Above Soil NC
HA-30	Jan-10	3	ERM	1 of 1	HA-30(3')	43000	1700	38	<9.7	<4.9	<150	<4.9
11A-30	Jan-10	5	ERM	1 01 1	HA-30(5')	53000	5700	16	<11	<5.4	<160	<5.4
HA-31	Jan-10	3	ERM	1 of 1	HA-31(3')	100000	600	<260	<520	<260	<7800	<260
11A-31	Jan-10	5	ERM	1 01 1	HA-31(5')	48000	1100	<270	<550	<270	<8200	<270
HA-32	Jan-10	3	ERM	1 of 1	HA-32(3')	30000	49	<4.8	<9.7	<4.8	<150	<4.8
11A-32	Jan-10	5	ERM	1 01 1	HA-32(5')	660	8.1	<4.6	<9.1	<4.6	<140	<4.6
GP-1A	Jan-10	7	ERM	2 of 2	GP-1A(7')	9.4	<5.0	<5.0	<10	<5.0	<150	<5.0
GI-IA	Jan-10	10	ERM	2 01 2	GP-1A(10')	24	<6.2	<6.2	<12	<6.2	<190	<6.2
GP-2A	Jan-10	3	ERM	2 of 2	GP-2A(3')	25000	<240	<240	<470	<240	<7100	<240
GF-ZA	Jan-10	10	ERM	2 01 2	GP-2A(10')	610	<5.8	<5.8	<12	<5.8	<170	<5.8
GP-3A	Jan-10	5	ERM	2 of 2	GP-3A(5')	30	<5.4	<5.4	<11	<5.4	<160	<5.4
CD 2B	Jan-10	2	ERM	2 of 2	GP-2B(2')	66000	52	<4.9	<9.7	<4.9	<150	<4.9
GP-2B	Jan-10	5	ERM	2 of 2	GP-2B(5)	14	<4.9	<4.9	<9.8	<4.9	<150	<4.9
GP-2C	Jan-10	1	ERM	2 of 2	GP-2C(1')	910	270	<4.5	<9.0	<4.5	<140	<4.5
AEM-GP4	Jan-10	1.5	ERM	2 of 2	AEM-GP-4(1.5)	160	7.6	<4.8	<9.6	<4.8	<140	<4.8
AEMITAC	Jan-10	4.5	ERM	2 of 2	AEM-HA6(4.5')	69	<6	<6	<12	<6.0	<180	<6.0
AEM-HA6	Jan-10	7	ERM	2 of 2	AEM-HA6(7')	13	<4.9	<4.9	<9.8	<4.9	<150	<4.9
1	Jan-10	3	ERM		HA-23(3')	1100	67	<5.0	<9.9	<5.0	<150	<5.0
HA-23	Jan-10	7	ERM	2 of 2	HA-23(7')	89	15	<5.6	<11	<5.6	<170	<5.6
1	Jan-10	10	ERM	1	HA-23(10')	39	<5.5	<5.5	<11	<5.5	<160	<5.5
GP-AS-23	Jan-10	5	ERM	6 of 6	GP-AS-23(5')	89	<4.6	<4.6	<9.3	<4.6	<140	<4.6
GP-5GR	Jan-10	3	ERM	7 of 7	GP-5GR(3')	6600	13	<5.2	<10	<5.2	<160	<5.2
CD FDD	Jan-10	3	ERM		GP-5D(3')	39000	<250	<250	<500	<250	<7500	<250
GP-5DR	Jan-10	11	ERM	5 of 5	GP-5D(11')	620	<6.6	<6.6	<13	<6.6	<200	<6.6
GP-5E	Jan-10	3	ERM	3 of 3	GP-5E(3')	74	13	<4.8	<9.5	<4.8	140	<4.8
GP-5H	Jan-10	3	ERM	4 of 4	GP-5H(3')	61000	2300	<210	<430	<210	<6400	<210
GD 46.00	Jan-10	3	ERM		GP-AS-39(3')	2000	<5.9	<5.9	<12	<5.9	<180	<5.9
GP-AS-39	Jan-10	11	ERM	6 of 6	GP-AS-39(11')	530	<5.8	<5.8	<12	<5.8	<170	<5.8
GP-AS-40	Jan-10	3	ERM	4 of 4	GP-AS-40(3')	1500	10	<4.5	<9.0	<4.5	<130	<4.5
AEM-GP-3	Jan-10	3	ERM	6 of 6	AEM-GP-3(3')	12000	3100	34	<9.7	<4.9	<150	<4.9
	, .											
AREA A NORTHWALL 3'	6/14/10	North Wall - 3' bgs	ERM	1 of 1	AREA A NORTHWALL 3'	460	<180	<180	<360	<180	< 5400	<180
AREA A NORTHWALL 6'	6/14/10	North Wall - 6' bgs	ERM	1 of 1	AREA A NORTHWALL 6'	140	<4.4	<4.4	<8.7	<4.4	<130	<4.4
AREA A SOUTHWALL 3'	6/14/10	South Wall - 3' bgs	ERM	1 of 1	AREA A SOUTHWALL 3'	450	<200	<200	<400	<200	< 5900	<200
AREA A SOUTHWALL 6'+6'	6/22/10	South Wall - 6' bgs	ERM	1 of 1	AREA A SOUTHWALL 6'+6'	790	21	19	<10.0	<5.1	<150	<5.1
AREA A EASTWALL 3'	6/14/10	East Wall - 3' bgs	ERM	1 of 1	AREA A EASTWALL 3'	170	<4.5	17	<9.0	<4.5	<130	<4.5
AREA A EASTWALL 6'+2'	6/18/10	East Wall - 6' bgs	ERM	1 of 1	AREA A EASTWALL 6'+2'	300	<4.3	14	<8.6	<4.3	<130	<4.3
AREA A WESTWALL 3'	6/14/10	West Wall - 3' bgs	ERM	1 of 1	AREA A WESTWALL 3'	75	<3.3	9	<6.5	<3.3	<98	<3.3
AREA A WESTWALL 6'	6/14/10	West Wall - 6' bgs	ERM	1 of 1	AREA A WESTWALL 6'	140	4.4	19	<7.8	<3.9	<120	<3.9
AREA B WEST WALL SURFACE	6/3/10	West Wall	ERM	1 of 1	AREA B WEST WALL SUR	710	<3.4	<3.4	<6.9	<3.4	<100	<3.4
AREA B EAST WALL 2'	6/7/10	East Wall	ERM	1 of 1	AREA B EAST WALL 2'	30	<3.1	<3.1	<6.3	<3.1	<94	<3.1
AREA B NORTHWALL	6/7/10	North Wall	ERM	1 of 1	AREA B NORTHWALL	110	<3.4	<3.4	<6.7	<3.4	<100	<3.4
AREA B BOTTOM SURFACE	6/4/10	Bottom	ERM	1 of 1	AREA B BOTTOM SUR	81.4	<2.7	<2.7	<5.4	<2.7	<80	<2.7
AREA C NORTHWALL	6/7/10	North Wall	ERM	1 of 1	AREA C NORTHWALL	19	<4.5	<4.5	<8.9	<4.5	<130	<4.5
AREA C EAST WALL SURFACE	6/3/10	East Wall	ERM	1 of 1	AREA C EAST WALL SUR	34	<4.3	<4.3	<8.7	<4.3	<130	<4.3
AREA C WEST WALL SURFACE	6/3/10	West Wall	ERM	1 of 1	AREA C WEST WALL SUR	94	<2.6	<2.6	<5.2	<2.6	<77	<2.6
AREA C BOTTOM SURFACE	6/4/10	Bottom	ERM	1 of 1	AREA C BOTTOM SUR	63	<3.4	<3.4	<6.7	<3.4	00</td <td><3.4</td>	<3.4
AREA D SOUTH WALL 4'	6/1/10	South Wall	ERM	1 of 1	AREA D SOUTH WALL 4'	500	4.5	<3.0	<6.0	<3.0	<90	<3.0
AREA D WESTWALL 10'	6/9/10	West Wall	ERM	1 of 1	AREA D WESTWALL 10'	570	23	<5.7	<11	<5.7	<170	<5.7
AREA D WESTWALL 1'	5/21/10	East Wall	ERM	1 of 1	AREA D WESTWALL 10 AREA D EASTWALL 1'	500	14	<3.7	<7.4	<3.7	<110	<3.7
					AREA D EASTWALL I	590	<3.5	<3.5	<7.4	<3.5	<110	<3.5
AREA D BOTTOM SURFACE	5/10/10								~/.U		SIIU	~3.3
AREA D BOTTOM SURFACE	5/19/10	Base South Wall - West Side	ERM ERM	1 of 1								<11
AREA D BOTTOM SURFACE AREA ES SOUTHWALL W-1' AREA ES SOUTH WALL E-6'	5/19/10 5/21/10 6/7/10	South Wall - West Side South Wall - East Side	ERM ERM ERM	1 of 1 1 of 1 1 of 1	AREA ES SOUTHWALL W-1' AREA ES SOUTH WALL E-6'	290 27	39 17	<4.4 <3.3	<8.8 <6.7	<4.4 <3.3	<130 <110	<4.4 <3.3

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample	Depth of Sample	Name of Organization that Collected Sample	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
			Concercu Sumpre			RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	d - Chemicals Not Detected	l Above Soil NC
AREA ES WESTWALL N-8	6/9/10	West Wall - northern part	ERM	1 of 1	AREA ES WESTWALL N-8	430	330	<3.0	<6.1	<3.0	<91	<3.0
AREA ES EASTWALL 3'	6/3/10	East Wall	ERM	1 of 1	AREA ES EASTWALL 3'	750	<3.5	<3.5	<7	<3.5	<110	<3.5
AREA ES BOTTOM SURFACE	5/20/10	Base	ERM	1 of 1	AREA ES BOTTOM SUR	12	<3.3	<3.3	<6.6	<3.3	<100	NR
AREA EM WEST WALL SURFACE	5/25/10	West Wall	ERM	1 of 1	AREA EM WEST WALL SUR	85	<6.2	<6.2	<12	<6.2	<190	<6.2
AREA EM EAST WALL 4'	6/3/10	East Wall	ERM	1 of 1	AREA EM EAST WALL 4'	36	<2.9	<2.9	<5.8	<2.9	<87	<2.9
AREA EM BOTTOM 1'	5/25/10	Base	ERM	1 of 1	AREA EM BOTTOM 1'	790	<3.2	<3.2	<6.4	<3.2	<96	<3.2
AREA EN WEST WALL SURFACE	5/21/10	West Wall	ERM	1 of 1	AREA EN WEST WALL SUR	17	37	<3.2	<6.3	<3.2	<95	<3.2
AREA EN NORTHWALL W-S	5/21/10	North Wall - West Side	ERM	1 of 1	AREA EN NORTHWALL W-S	24	10	<3.4	<6.9	<3.4	<100	<3.4
AREA EN NORTHWALL E-SU	5/21/10	North Wall - East Side	ERM	1 of 1	AREA EN NORTHWALL E-SU	78	14	<4.0	<8.1	<4.0	<120	<4.0
AREA EN EASTWALL 1'	5/24/10	East Wall	ERM	1 of 1	AREA EN EASTWALL 1'	790	<3.3	<3.3	<6.6	<3.3	<98	<3.3
AREA EN BOTTOM SURFACE	5/21/10	Base	ERM	1 of 1	AREA EN BOTTOM SUR	69	4.8	<3.7	<7.4	<3.7	<110	<3.7
AREA F NORTH WALL SURFACE	5/26/10	North Wall	ERM	1 of 1	AREA F NORTH WALL SUR	11	<4.0	<4.0	<7.9	<4.0	<120	<4.0
AREA F WEST WALL SURFACE	5/26/10	West Wall	ERM	1 of 1	AREA F WEST WALL SUR	50	<3.4	<3.4	<6.9	<3.4	<100	<3.4
AREA F SOUTH WALL SURFACE	5/26/10	South Wall	ERM	1 of 1	AREA F SOUTH WALL SUR	170	13	<3.4	<6.8	<3.4	<100	<3.4
AREA F EAST WALL SURFACE	5/26/10	East Wall	ERM	1 of 1	AREA F EAST WALL SUR	63	6.1	<3.5	<7.0	<3.5	<110	<3.5
AREA F BOTTOM SURFACE	5/26/10	Base	ERM	1 of 1	AREA F BOTTOM SUR	20	<4.4	<4.4	<8.8	<4.4	<130	<4.4
AREA G WEST WALL SURFACE	5/20/10	West Wall	ERM	1 of 1	AREA G WEST WALL SUR	87	<3.8	<3.8	<7.6	<3.8	<110	<3.8
AREA "G" SOUTHWALL SURFACE	5/19/10	South Wall	ERM	1 of 1	AREA "G" SOUTHWALL SUR	45	<4.3	<4.3	<8.6	<4.3	<130	<4.3
AREA "G" EASTWALL SURFACE 2'	5/19/10	East Wall	ERM	1 of 1	AREA "G" EASTWALL SUR 2'	37	<4.7	<4.7	<9.4	<4.7	<140	<4.7
AREA "G" BOTTOM SURFACE 4'	5/19/10	Base	ERM	1 of 1	AREA "G" BOTTOM SUR 4'	620	<3.4	<3.4	<6.8	<3.4	<100	<3.4
ERM-SB-A	9/23/10	4	ERM	1 of 1	ERM-SB-A-4	<6	<6	<6	<12	<6	<180	<6
	9/23/10	8	ERM	- 01 1	ERM-SB-A-8	<5.6	<5.6	<5.6	<11	<5.6	<170	<5.6
ERM-SB-B	9/23/10	8	ERM	1 1	ERM-SB-B-8	<4.9	<4.9	<4.9	<9	<4.9	<150	<4.9
ERM-SB-C	9/23/10	4	ERM	1 1	ERM-SB-C-4	6	<5	<5	<10	<5	<150	<5

NOTES:

A Reported as 1,2-Dichloroethene, total
NA = Not Analyzed
NS = Not Sampled
Highlighted Cells > RRS (these samples > RRS have since been remediated)

Table 2 Monitoring Well Construction Details Former Dickies Industrial Services, Inc. HSI Site No. 10127

Land Surface Elevation (ft-msl) (8) (ft bg) (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft	,		
CDM WELLS	nate Aquifer Zone	ne Property	Comment
		·	
CP-MW-1 1013.04 1014.29 2 Flush Mount 20 13.1 5 15 5-20 2"/PVC 16 10/16/90 2204298.28 1319058.	8.15 Shallow	DISI	Well was raised 10 1/8 inches (0.843 ft) on 3/15/04 during well pad repairs. TOC values in this table has been changed to reflect this.
CP-MW-2 1013.04 1012.85 2 Flush Mount 27 7 20 7-27 2"/PVC 17 10/17/90 2204248.04 1319062.	2.43 Shallow	DISI	
CP-MW-3 1013.41 1013.12 2 Flush Mount 27 7 20 7-27 2"/PVC NA 10/19/90 2/11/03 2204242.69 1318973.	3.46 Shallow	DISI	
CP-MW-4 1023.73 1023.46 13 Flush Mount 27 17 10 17-27 2"/PVC NA 10/18/90 2/11/03 2204289.32 1319068.		DISI	
CP-MW-5 1014.72 1017.04 12 2.5 31 16 15 16-31 2"/PVC NA 3/11/91 2/14/00 2204264.93 1319256.		CCE	Closed 2/14/00 for CCE construction
CP-MW-6 1012.92 1012.73 30 Flush Mount 45 34 10 34-44 2"/PVC NA 3/12/91 12/1/03 2204241.80 1319062.	2.64 Deep	DISI	Closed by ERM/Kilman team on 12/1/2003.
CP-MW-7 1013.76 1013.60 5 Flush Mount 24 9 15 9-24 2"/PVC NA 3/13/91 04/07/03 2204202.46 1319120.	0.90 Shallow	CCE	Closed 4/7/2003 due to proximity to AS well and screened depth
CP-MW-8 1013.35 1013.21 6 Flush Mount 55 10 40 10-50 4"/PVC 30 3/14/91 2204267.17 1319062.	2.70 Deep	DISI	
Hill-Fister Engineers, Inc.			
EF-MW-1 14 2.83 30.5 20.5 10 20.5-30.5 2"/PVC NA 9/25/87 2/14/00	Shallow	CCE	Closed 2/14/00 for CCE construction
EF-MW-2 1012.75 1014.77 2.5 2.5 15 5 10 5-15 2'/PVC NA 9/25/87 12/1/03 2204339.31 1319194.	4.95 Shallow	DISI	Closed by ERM/Kilman team on 12/1/2003.
EF-MW-3 1011.89 1013.60 2 1.58 18 8 10 8-18 2"/PVC NA 9/25/87 2/14/00 2204399.76 1319329.	9.27 Shallow	CCE	Closed 2/14/00 for CCE construction
A.T.&E. Consultants, Inc.	•	•	
EF-MW-4 1012.63 1014.11 2.5 1.5 18.5 8.5 10 8.5-18.5 2"/PVC 14 6/26/87 2204289.32 1319068.	8.64 Shallow	DISI	
RMT Wells	o.o1 Shahow	Digi	
	T.00	Diet	
MW-3A 1013.02 1013.26 34.5 Flush Mount 72 47 5 47-52 2"/PVC NA 9/9/92 2/11/03 2204242.21 1318967. MW-9 1014.06 1016.90 1 Yes 15 16.12 3.5 10 3.5-13.5 2"/PVC 10.5 8/26/92 204248.6 1319198		DISI	
1011.00 1011.00 1 101.00 1 101.00 1 101.00 10		DISI	D AC 10 II 4/2002
MW-9A 1013.94 1016.65 31 Yes 41.5 16.91 36.5 5 36.5-41.5 2"/PVC NA 8/27/92 4/2/03 2204275.39 1319198.		DISI	Became AS-13 well, 4/2003
MW-10 1015.08 1018.08 5 Yes 20 17.82 8.5 10 8.5-18.5 2"/PVC 16 8/26/92 2204399.40 1319053. MW-10A 1012.83 1015.78 43 Yes 54.5 15.5 47.8 5 47.8-52.8 2"/PVC 51 8/31/92 2204399.56 1319061.		DISI	
MW-10A 1012.65 1015.76 45 168 54.5 15.5 47.8 5 47.8-52.8 2/1 VC 51 8/31/92 2/14/00 2204207.52 1319289. MW-11 1014.87 1017.60 2 Yes 15 5 10 5-15 2"/PVC NA 9/1/92 2/14/00 2204207.52 1319289.		CCE	Closed 2/14/00 for CCE construction
MW-12 1013.39 1013.25 2 Yes 15 12.42 5 10 5-15 2"/PVC 10 9/1/92 Converted to SVE-4 2204200.51 1319062.		CCE	Became SVE-4 well during construction, 4/2003. New TOC was not surveyed - do not use for GW potentiometric surface maps
MW-13 1013.99 1013.50 2 Flush Mount 15 17.08 5 10 5-15 2"/PVC ₁₃ 9/1/92 2204193.30 1318955.		CCE	WELL TOC WAS LOWERED ON 1/13/06. Lowered by 3.39 feet
MW-13A 1013.96 1013.56 62 Flush Mount 72 17.25 65 5 65-70 2"/PVC 70 9/2/92 2204193.62 1318950.		CCE	WELL TOC WAS LOWERED ON 1/13/06 by 3.39 feet
MW-14 1014.21 1017.28 2 Flush Mount 17.5 5 10 5-15 2"/pvc 13 9/4/92 2204203.00 1319204.	4.37 Shallow	CCE	
ERM Wells			
MW-9B 1014.20 1016.81 2 2.43 16 6 10 6-16 2"/PVC NA 3/12/1999 12/1/03 2204290.25 1319199		DISI	Closed by ERM/Kilman team on 12/1/2003.
MW-9C 1013.99 1016.84 Ground Surface 2.57 15 5 10 5-15 2"/PVC NA 3/12/1999 12/1/03 2204304.93 1319198. MW-15 1023.85 1023.67 56 Flush Mount 70 60 10 60-70 2'/PVC NA 9/30/1998 2/11/03 2203929.63 1318697.		DISI SEARS	Closed by ERM/Kilman team on 12/1/2003.
MW-16 1023.66 1023.42 15 Flush Mount 29 19 10 19-29 2"/PVC NA 10/1/1998 2/11/03 2203934.11 1318699.		SEARS	
MW-17 1027.23 1029.41 14 2.03 29 18 10 18-28 2"/PVC NA 10/1/1998 2/14/00 2204536.09 1318692.		CCE	Closed 2/14/00 for CCE construction
MW-18D 1013.40 1013.97 No Seal Flush Mount 132 12.38 92 Open Borehole Borehole 6"/PVC 110 10/29/1998 2204306.25 1319064.	4.42 Deep	DISI	Rock Well. Well was raised 9 1/2 inches (0.791 ft) on 4/7/04 during well pad repairs. TOC value in this table has been changed to reflect this.
MW-19 1022.68 1022.36 57 Flush Mount 75 24.36 65 10 65-75 2"/PVC 70 11/24/1998 2204931.78 1318964.	4.69 Deep	CCE	
MW-20 1022.68 1022.45 17.5 Flush Mount 33 25.02 23 10 23-33 2"/PVC 28 11/24/1998 2204937.2 1319213.		CCE	
MW-21 1031.18 1030.74 29 Flush Mount 51 30.56 40 10 40.50 2"/PVC NA 11/30/1998 6/2/2003 2203447.33 1319249.		DOVER	
MW-22 1031.17 1030.86 20 Flush Mount 35 30.55 24.6 10 24.6 34.6 2"/PVC NA 12/1/1998 6/2/2003 2203450.5 1319237. MW-23 1008.84 1011.02 46 2.18 62 52 10 52-62 2"/PVC NA 3/9/1999 9/12/2002 2204687.09 1320542.		DOVER CCE/STEVENSO	NI
MW-23 1008.84 1011.02 46 2.18 62 52 10 52-62 2-/PVC NA 3/9/1999 9/12/2002 2204687.09 1320342. MW-24 1009.09 1011.16 3 1.84 19 8 10 8-18 2"/PVC NA 3/10/1999 9/12/2002 2204687.51 1320535.		CCE/STEVENSO	
MW-25 1023.12 1022.82 30 Flush Mount 34 30.95 34 10 34-44 2"/PVC 39 3/10/1999 2205501.13 1319122.		CCE	
MW-26 1006.71 1009.31 14** 2.35 35.5 35.5 10 35.5-45.5 2"/PVC NA 5/5/1999 9/12/2002 2204825.51 1320916.		CCE/STEVENSO	N-
MW-27 1006.92 1009.16 Surface 1.49 23 10 10 8-18 2"/PVC NA 5/5/1999 9/12/2002 2204819.98 1320911.		CCE/STEVENSO	N
MW-28 NS NS Surface NS 22 2 10 22-32 2"/PVC NA 8/12/1999 2/14/00 NS NS	Shallow Shallow	CCE	Closed 2/14/00 for CCE construction

WD Well construction.XLS- printed on 3/25/2011

Table 2 Monitoring Well Construction Details Former Dickies Industrial Services, Inc. HSI Site No. 10127

Well No.	Land Surface Elevation (ft-msl)	TOC Elevation (ft-msl) (8)	Top of Bentonite Seal (ft bg)	Casing† Stick-up (TOC to Pad) (ft)	Total Boring Depth (ft bg)	Depth to Water Below TOC	Casing Length (ft)	Screen Length (ft)	Screen Interval (ft-bg)	Casing/ Screen Material diameter	Depth of PDE Placement (ft-bTOC)	Date Completed	Date Closed	Easterly Coordinate	Northerly Coordinate	Aquifer Zone	Property	Comment
MW-28R	1009.56	1009.53	19	Flush Mount	33	11.37	13	10	23-33	2"/PVC	18	9/6/2002		2204564.88	1319752.56	Shallow	CCE	
MW-29	1005.87	1009.31	20.5	3.44	35		25	10	25-35	2"/PV€	NA	7/10/2000	2/14/00	2204858.07	1319936.85	Shallow	CCE	Temporary. May have been destroyed during construction
MW-29R	1010.21	1010.07	20.8	Flush Mount	35	14	25	10	25-35	2"/PVC	30	9/5/2002		2204845.17	1319887.15	Shallow	CCE	no standard penetration test performed
MW-30	1022.85	1026.11	16	3.26	35		21	10	21-31	2"/PVC	NA	7/10/2000	12/1/2003	2204120.19	1319794.83	Shallow	CCE	Closed by ERM/Kilman team on 12/1/2003.
MW-31	1017.75	1017.38	35***	Flush Mount	63.5		53.5	10	53.5-63.5	2"/PVC	59	7/13/2000		2204050.47	1318808.45	Deep	SMITH	Closed by ERM/Betts Env. team in Dec. 2007
MW-32	1019.76	1019.19	Surface	Flush Mount	20	17.92	10	10	10-20	2"/PVC	15	7/12/2000		2203979.36	1319176.24	Shallow	PUJA	
MW-33	1030.14	1029.73	18	Flush Mount	33	29.24	23	10	23-33	2"/PVC	28	7/11/2000		2203686.27	1319238.93	Shallow	DOVER	
MW-34	1015.39	1015.4	25	Flush Mount	40	14.53	30	10	30-40	2"/PVC	35	9/4/2002		2204190.55	1318812.74	Deep	DISI	
MW-35	1022.71	1022.55	20.5	Flush Mount	35	22.32	25	10	25-35	2"/PVC	30	9/5/2002		2204556.04	1318845.61	Shallow	CCE	no lithologies taken
MW-35A	1022.74	1022.57	36	Flush Mount	50	22.32	40	10	40-50	2"/PVC	45	9/5/2002		2204558.69	1318845.34	Deep	CCE	<u> </u>
MW-36	1015.31	1015.16	7.6	Flush Mount	22	14.6	12	10	12-22	2"/PVC	17	9/5/2002		2204239.23	1319377.7	Shallow	CCE	
MW-37	1013.92	1013.49	21	Flush Mount	35	13.47	25	10	25-35	2"/PVC	30	9/6/2002		2204382.5	1319345.81	Shallow	CCE	no lithologies taken
MW-37A	1013.98	1013.69	36	Flush Mount	50	13.19	40	10	40-50	2"/PVC	45	9/6/2002		2204386.36	1319345.75	Deep	CCE	
MW-38	1018.5	1018.4	19.8	Flush Mount	35	18.83	25	10	25-35	2"/PVC	30	9/4/2002		2204597.63	1319050.56	Shallow	CCE	no lithologies taken
MW-38A	1018.5	1018.31	35.8	Flush Mount	49	18.73	39	10	39-49	2"/PVC	44	9/4/2002		2204597.78	1319048.11	Shallow	CCE	
MW-39	NS	NS	13	Flush Mount	25		15	10	15-25	2"/PVC	NA	2/18/2011		NS	NS	Shallow	PUJA	

NOTES

Ground surface elevations and top-of-casing elevations surveyed on September 15, 1998

Depths to ground water collected in September 2002

Well coordinates surveyed on September 15, 1998

ft bg = feet below ground

ft msl = feet above mean sea level

ft btoc = feet below top of casing

NA = Not Available NS = Not surveyed

Note: FF of Bldg. 1019.5

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ENVIRONMENTAL RESOURCES MANAGEMENT

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^{* =} Surface casing set to 92 feet bg., well is bedrock, open borehole well.

^{** =} Top of Bentonite seal should be at about 31.5 feet bg., some cave-in occurred when augers were pulled.

^{*** =} Top of Bentonite seal should be at about 48 feet bg., some cave-in occurred when augers were pulled.

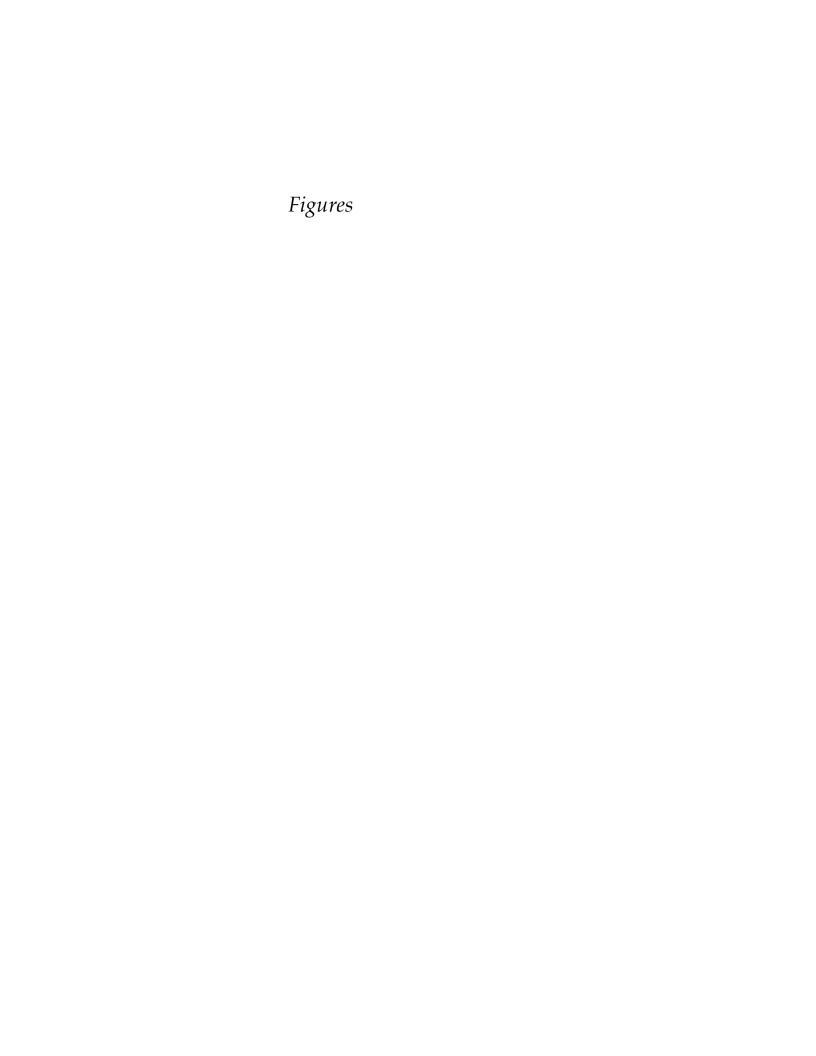
Table 3 Ground Water Elevation Data Former Dickies Industrial Services, Inc. HSI Site No. 10127

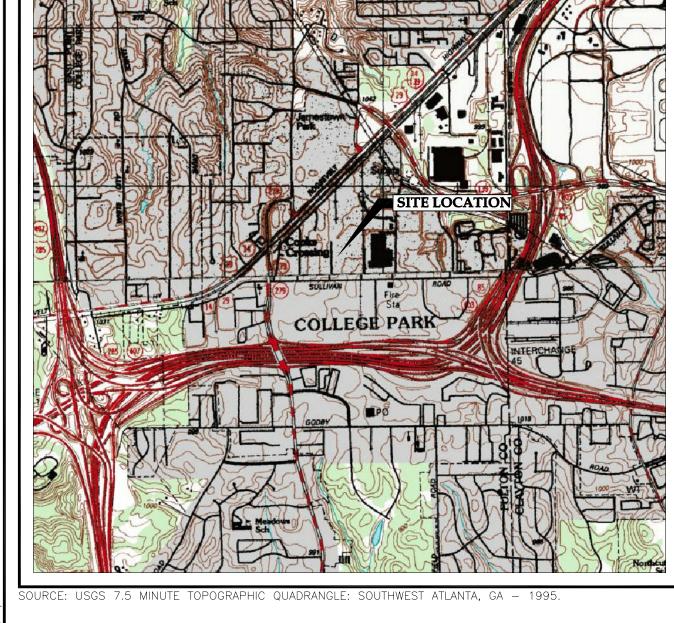
		October	3, 2005	October	11, 2006	October	10, 2007	October	6, 2008	October :	20, 2009	October 11, 2010	
Well ID	TOC ELEV	Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation								
MW-1	1014.29	9.53	1004.76	12.50	1001.79	14.10	1000.19	14.15	1000.14	10.35	1003.94	11.40	1002.89
MW-2	1012.85	5.11	1007.74	9.80	1003.05	12.21	1000.64	12.86	999.99	9.58	1003.27	8.90	1003.95
MW-4	1014.11	8.94	1005.17	10.60	1003.51	13.10	1001.01	13.67	1000.44	10.00	1004.11	9.60	1004.51
MW-8	1013.21	8.14	1005.07	9.90	1003.31	11.38	1001.83	13.12	1000.09	9.83	1003.38	9.30	1003.91
MW-9	1016.90	12.22	1004.68	13.90	1003.00	16.05	1000.85	16.44	1000.46	13.35	1003.55	12.91	1003.99
MW-10	1018.08	13.53	1004.55	15.50	1002.58	17.90	1000.18	18.11	999.97	14.48	1003.60	14.74	1003.34
MW-10A	1015.78	11.42	1004.36	13.10	1002.68	15.58	1000.20	15.88	999.90	12.68	1003.10	12.40	1003.38
MW-12	1013.25	13.23	1000.02	13.40	999.85	15.37	997.88	15.95	997.30	13.18	1000.07	12.18	1001.07
MW-13	1013.50	12.72	1004.17	10.80	1002.70	12.90	1000.60	13.46	1000.04	10.73	1002.77	9.77	1003.73
MW-13A	1013.56	NM	NM	10.80	1002.76	12.94	1000.62	13.50	1000.06	10.78	1002.78	9.77	1003.79
MW-14	1017.28	11.97	1005.31	13.80	1003.48	15.89	1001.39	16.45	1000.83	13.64	1003.64	12.72	1004.56
MW-18D	1013.97	5.92	1008.05	10.80	1003.17	12.19	1001.78	13.46	1000.51	10.80	1003.17	9.96	1004.01
MW-19	1022.36	19.50	1002.86	20.96	1001.40	21.46	1000.90	23.92	998.44	21.66	1000.70	20.64	1001.72
MW-20	1022.45	21.02	1001.43	22.31	1000.14	24.11	998.34	24.79	997.66	23.08	999.37	22.63	999.82
MW-25	1022.82	25.59	997.23	27.30	995.52	28.85	993.97	29.50	993.32	27.85	994.97	26.48	996.34
MW-28R	1009.53	NM	NM	10.45	999.08	11.56	997.97	17.75	991.78	14.65	994.88	13.95	995.58
MW-29R	1010.07	10.92	999.15	12.54	997.53	13.29	996.78	14.32	995.75	10.70	999.37	11.79	998.28
MW-32	1019.19	17.20	1001.99	16.09	1003.10	16.78	1002.41	18.80	1000.39	15.91	1003.28	14.91	1004.28
MW-33	1029.73	25.30	1004.43	27.20	1002.53	29.24	1000.49	29.55	1000.18	27.34	1002.39	25.77	1003.96
MW-34	1015.40	NM	NM	11.90	1003.50	14.23	1001.17	14.92	1000.48	12.23	1003.17	11.12	1004.28
MW-35	1022.55	NM	NM	19.16	1003.39	21.31	1001.24	22.30	1000.25	20.79	1001.76	18.86	1003.69
MW-35A	1022.57	NM	NM	19.15	1003.42	21.31	1001.26	22.30	1000.27	20.80	1001.77	18.82	1003.75
MW-36	1015.16	NM	NM	12.22	1002.94	14.30	1000.86	14.90	1000.26	11.90	1003.26	11.19	1003.97
MW-37	1013.49	NM	NM	10.94	1002.55	13.31	1000.18	13.80	999.69	10.64	1002.85	10.20	1003.29
MW-37A	1013.69	9.34	1004.35	10.96	1002.73	13.15	1000.54	13.75	999.94	10.85	1002.84	10.05	1003.64
MW-38	1018.40	14.53	1003.87	15.70	1002.70	17.91	1000.49	19.65	998.75	16.76	1001.64	15.30	1003.10
MW-38A	1018.31	14.50	1003.81	15.70	1002.61	17.93	1000.38	18.92	999.39	16.64	1001.67	15.25	1003.06

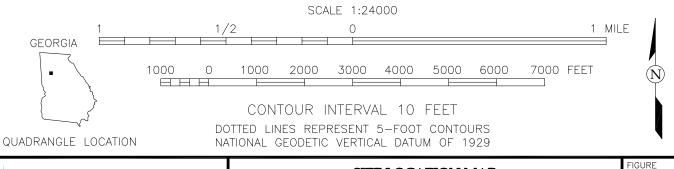
Table 4
VOCs in Ground Water Monitoring Wells
Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/L

Existing Well ID	Date Installed	Date Sampled	Detected Compound (ug/L)										
Existing Well ID	Date Histalieu	Date Sampled	PCE	TCE	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,4-Dioxane				
MW-1	10/16/1990	10/20/2010	20,000	400	< 5	1,300	20	11	< 150				
MW-2	10/17/1990	10/20/2010	64	9.2	< 5	23	< 5	< 2	< 150				
MW-4	6/26/1987	10/20/2010	1700	49	< 5	190	< 5	< 2	< 150				
MW-8	3/14/1991	10/23/2009	< 2	< 2	< 2	< 2	< 2	< 2	< 500				
MW-9	8/26/1992	10/21/2010	20	< 5	< 5	< 5	< 5	< 2	< 150				
MW-9A (converted to AS-13 4/2/03)	8/27/1992	9/10/2002	350	19	< 2	53	< 2	< 2	NA				
MW-10	8/26/1992	10/20/2010	210	11	< 5	14	< 5	< 2	< 150				
MW-10A	8/31/1992	10/20/2010	1,100	98	< 5	270	< 5	< 2	< 150				
MW-12 (converted to SVE-4 4/2/03)	9/1/1992	10/18/2010	22	< 5	< 5	23	< 5	< 2	< 150				
MW-13	9/1/1992	10/19/2010	120	10	< 5	6.6	< 5	< 2	< 150				
MW-13A	9/2/1992	10/19/2010	18	< 5	< 5	< 5	< 5	< 2	< 150				
MW-14	9/4/1992	10/19/2010	10	< 5	< 5	< 5	< 5	< 2	< 150				
MW-18D	10/29/1998	10/19/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-19	11/24/1998	10/14/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-20	11/24/1998	10/14/2010	74	9.7	< 5	400	< 5	< 2	< 150				
MW-21 (closed 6/2/2003)	11/30/1998	3/3/2003	< 2	< 2	< 2	< 2	< 2	< 2	NA				
MW-22 (closed 6/2/2003)	12/1/1998	9/4/2002	< 2	< 2	< 2	< 2	< 2	< 2	NA				
MW-25	3/10/1999	10/14/2010	110	6.2	< 5	23	< 5	< 2	< 150				
MW-28/28R	9/6/2002	10/21/2010	< 5	< 5	< 5	16	< 5	3.1	< 150				
MW-29/29R	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-32	7/12/2000	10/18/2010	100	5.6	< 5	20	< 5	< 2	< 150				
MW-33	7/11/2000	10/18/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-34	9/4/2002	10/19/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-35	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-35A	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-36	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-37	9/6/2002	10/21/2010	22	< 5	< 5	7.8	< 5	< 2	< 150				
MW-37A	9/6/2002	10/15/2010	< 5	< 5	< 5	110	< 5	2.6	< 150				
MW-38	9/4/2002	10/18/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150				
MW-38A	9/4/2002	10/18/2010	< 5	< 5	8.6	3,800	< 5	13	< 150				
MW-39	2/18/2011	2/23/2011	< 5	< 5	< 5	< 5	< 5	< 2	< 150				

NA = Not Analyzed



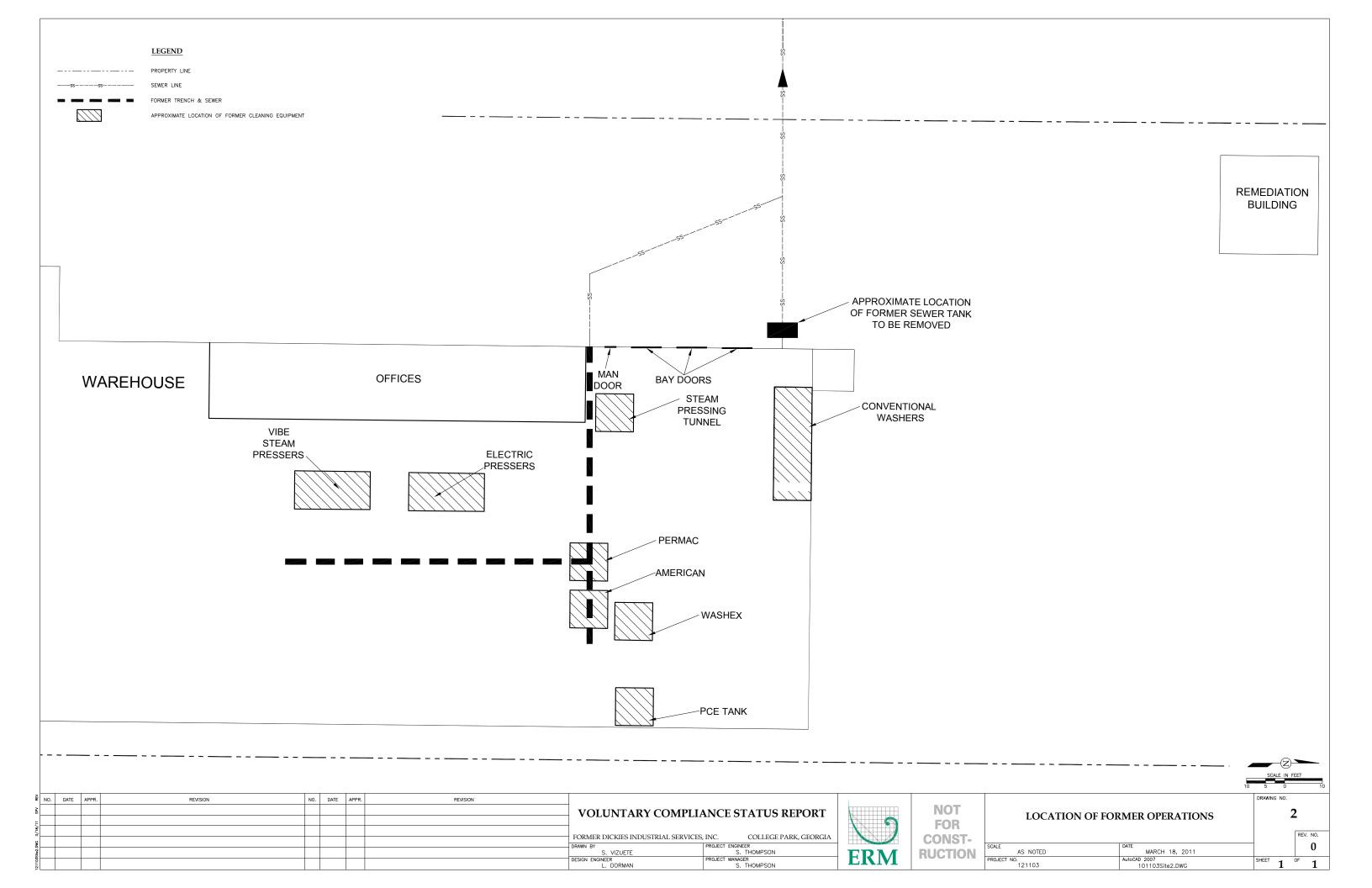


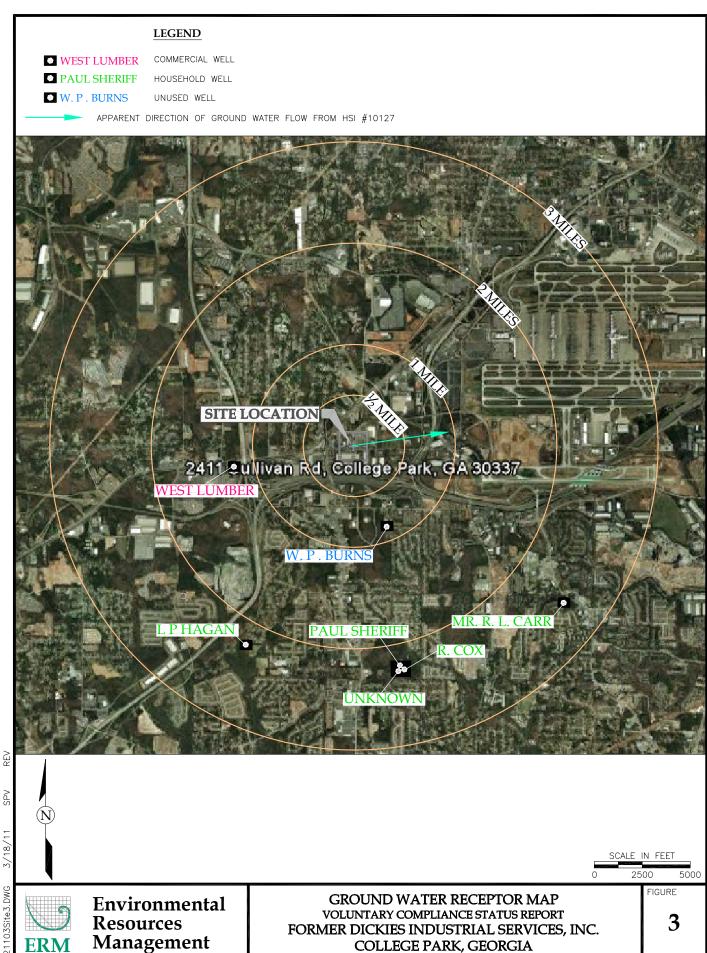


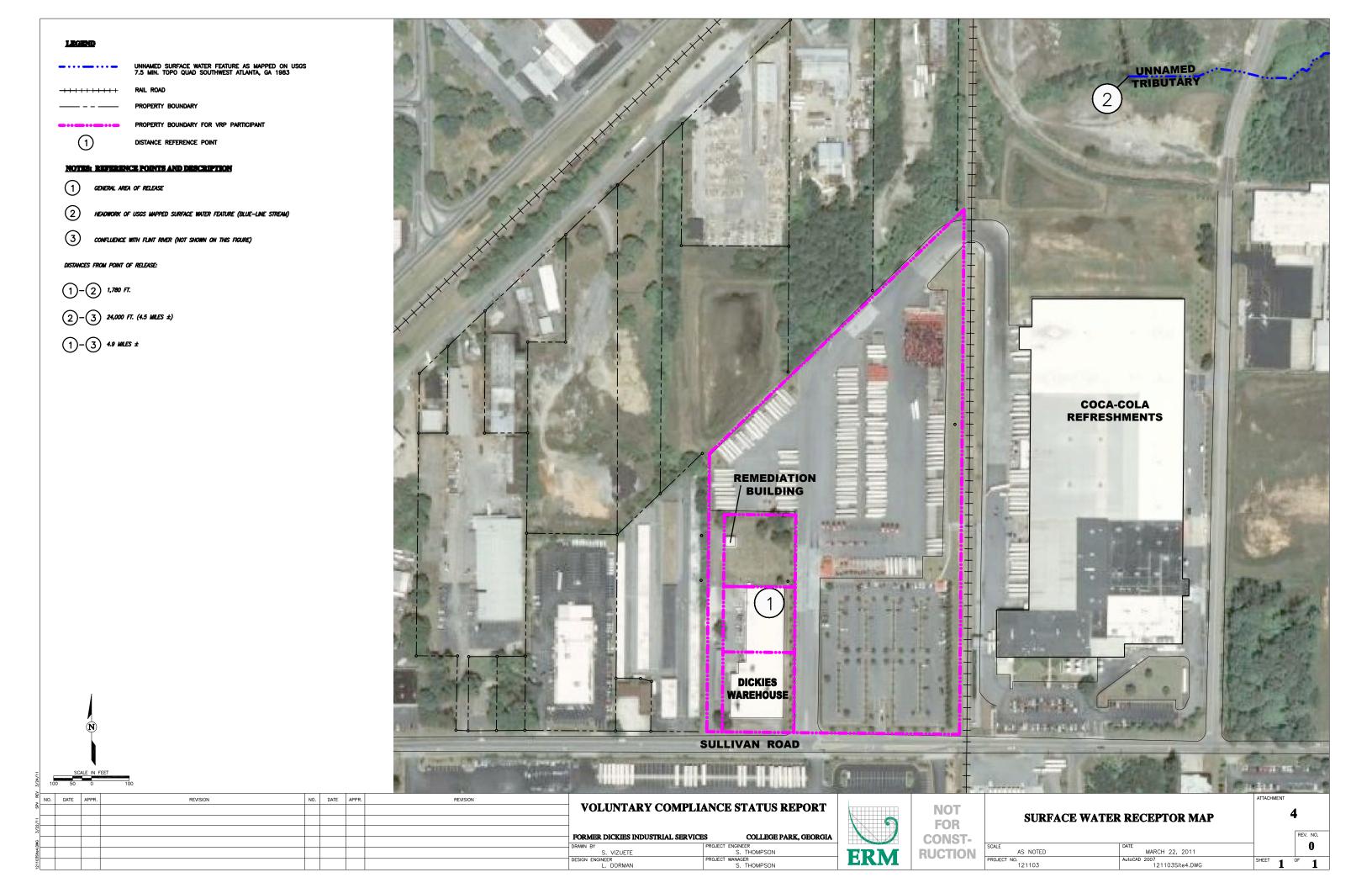
ERM

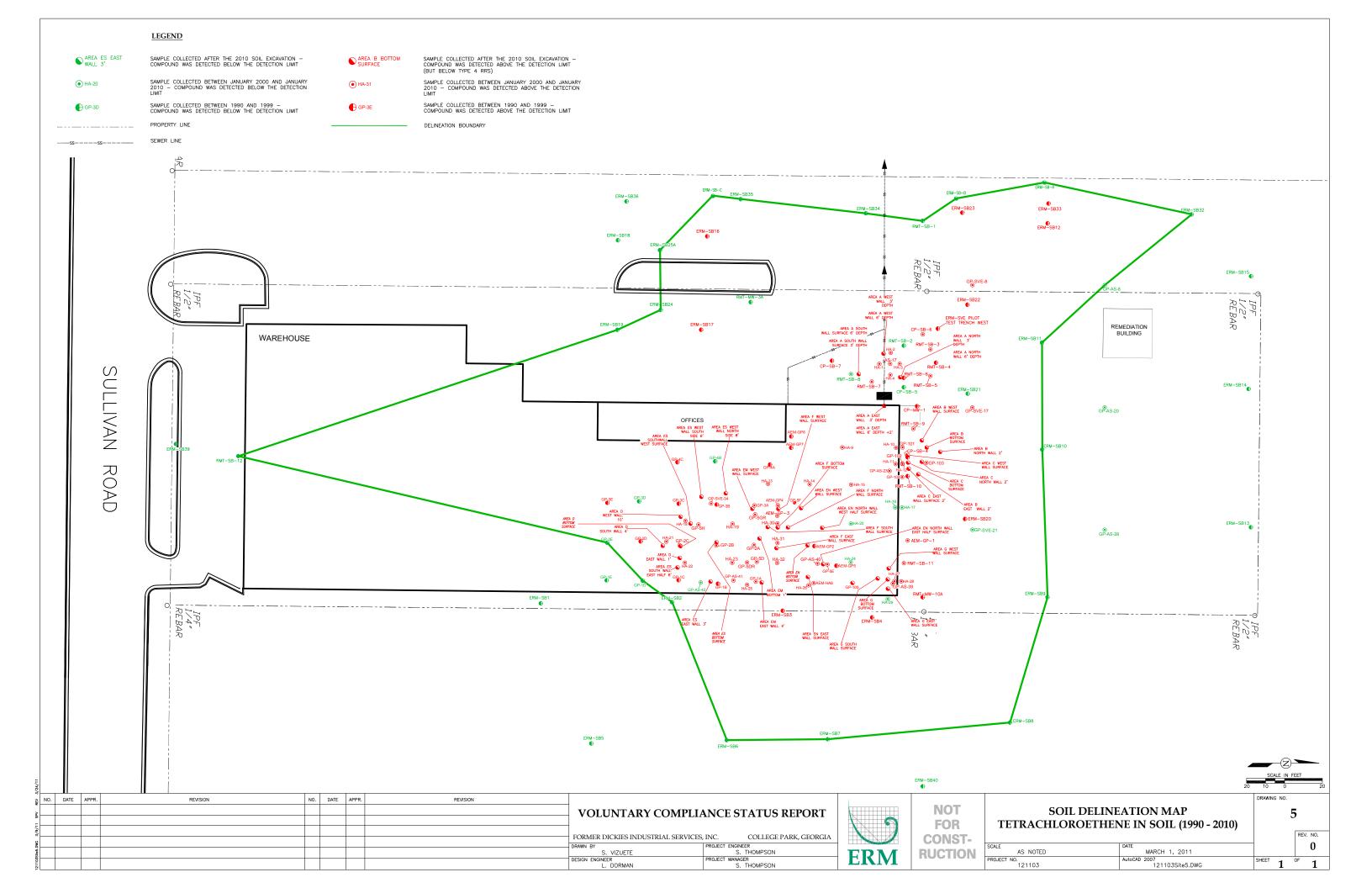
Environmental Resources Management SITE LOCATION MAP
VOLUNTARY COMPLIANCE STATUS REPORT
FORMER DICKIES INDUSTRIAL SERVICES, INC.
COLLEGE PARK, GEORGIA

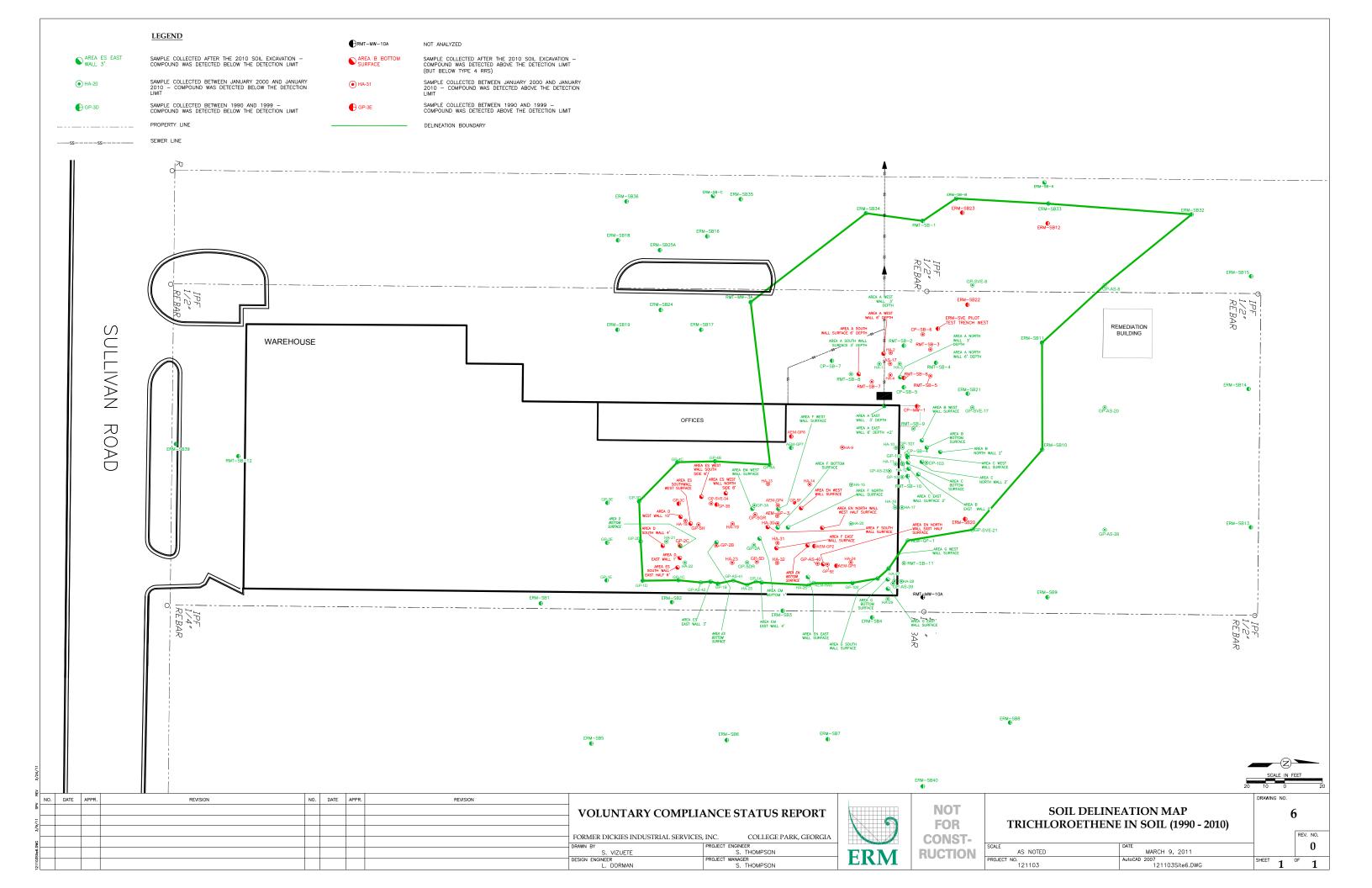
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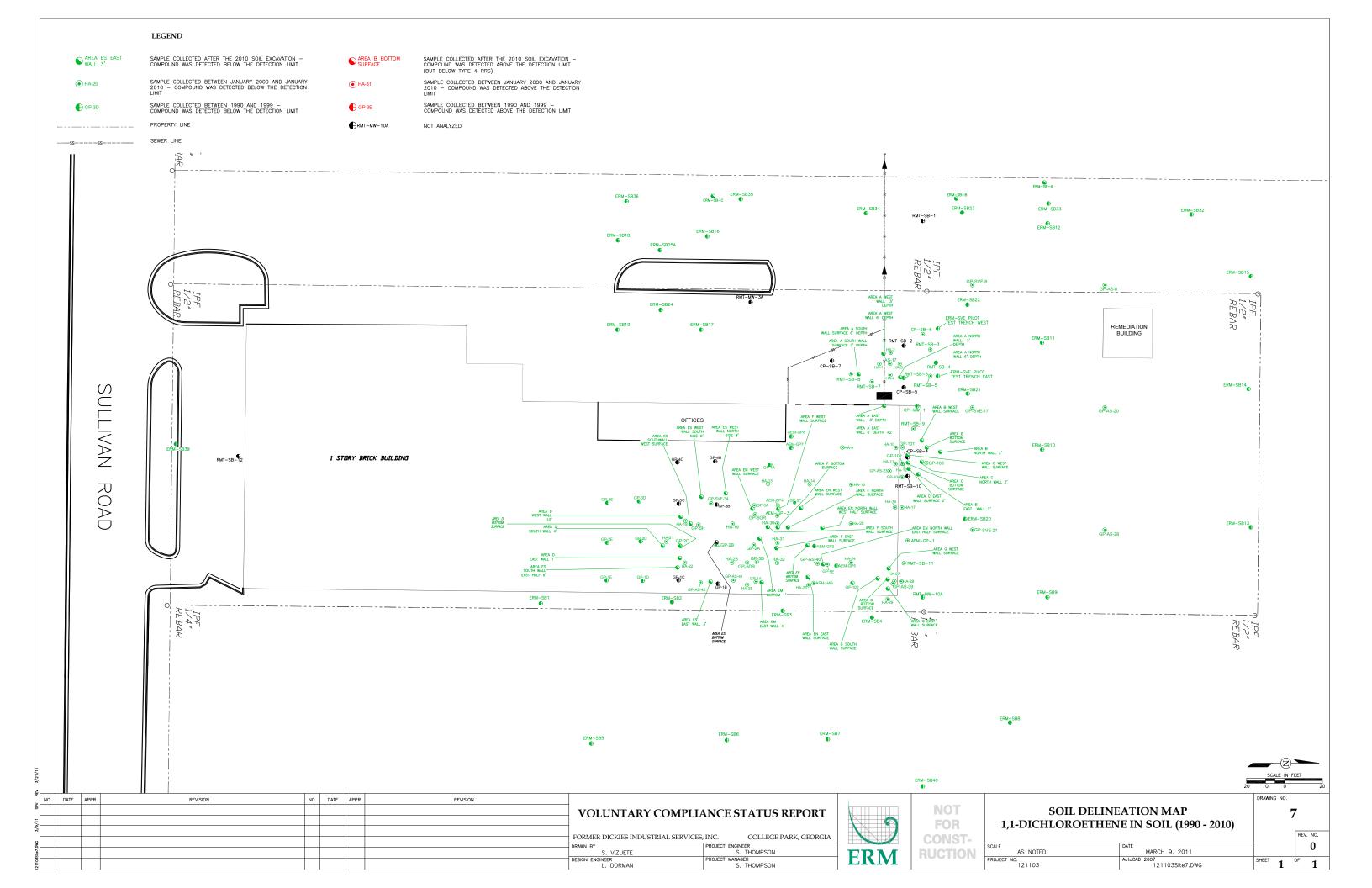


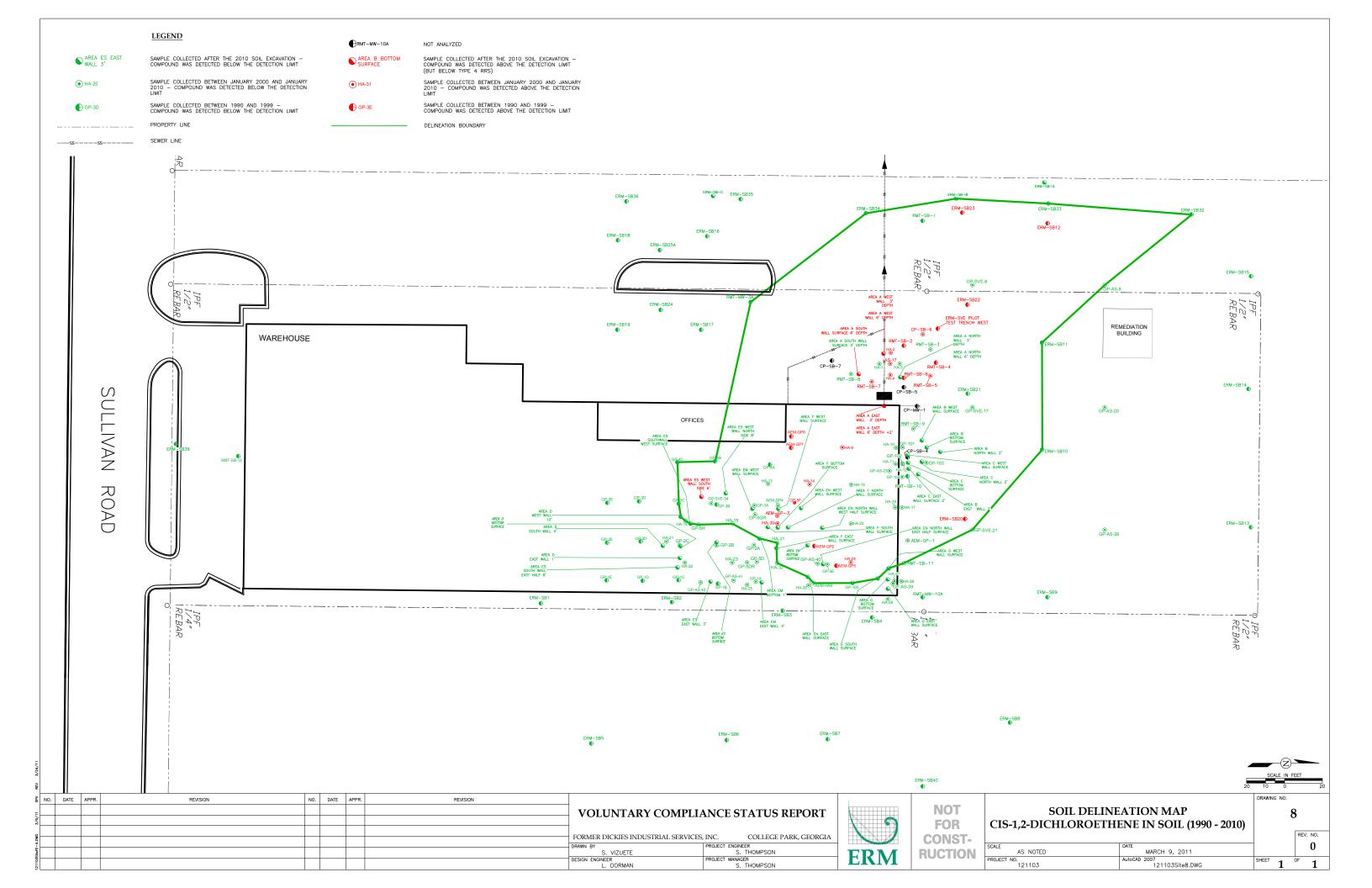


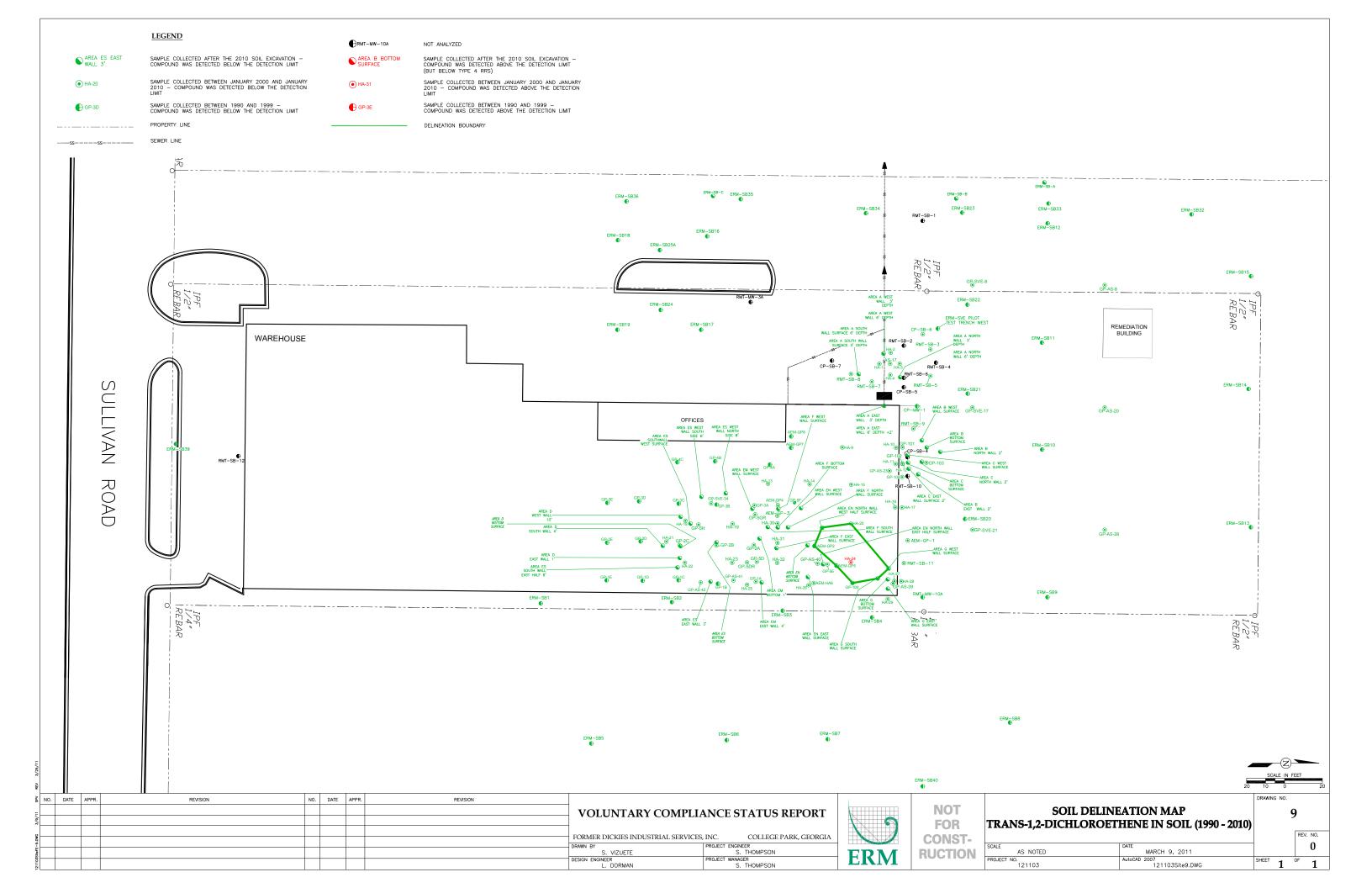


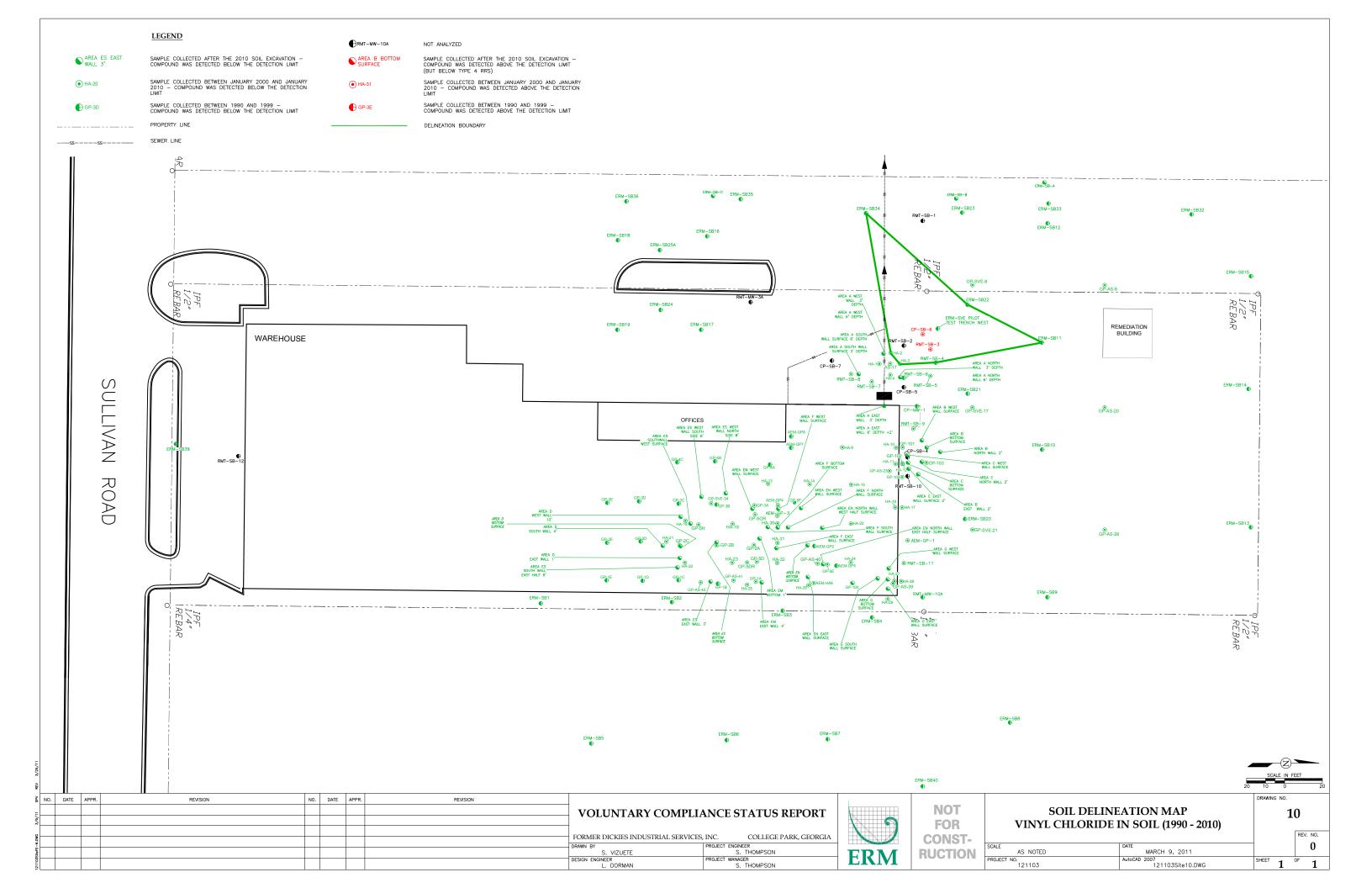


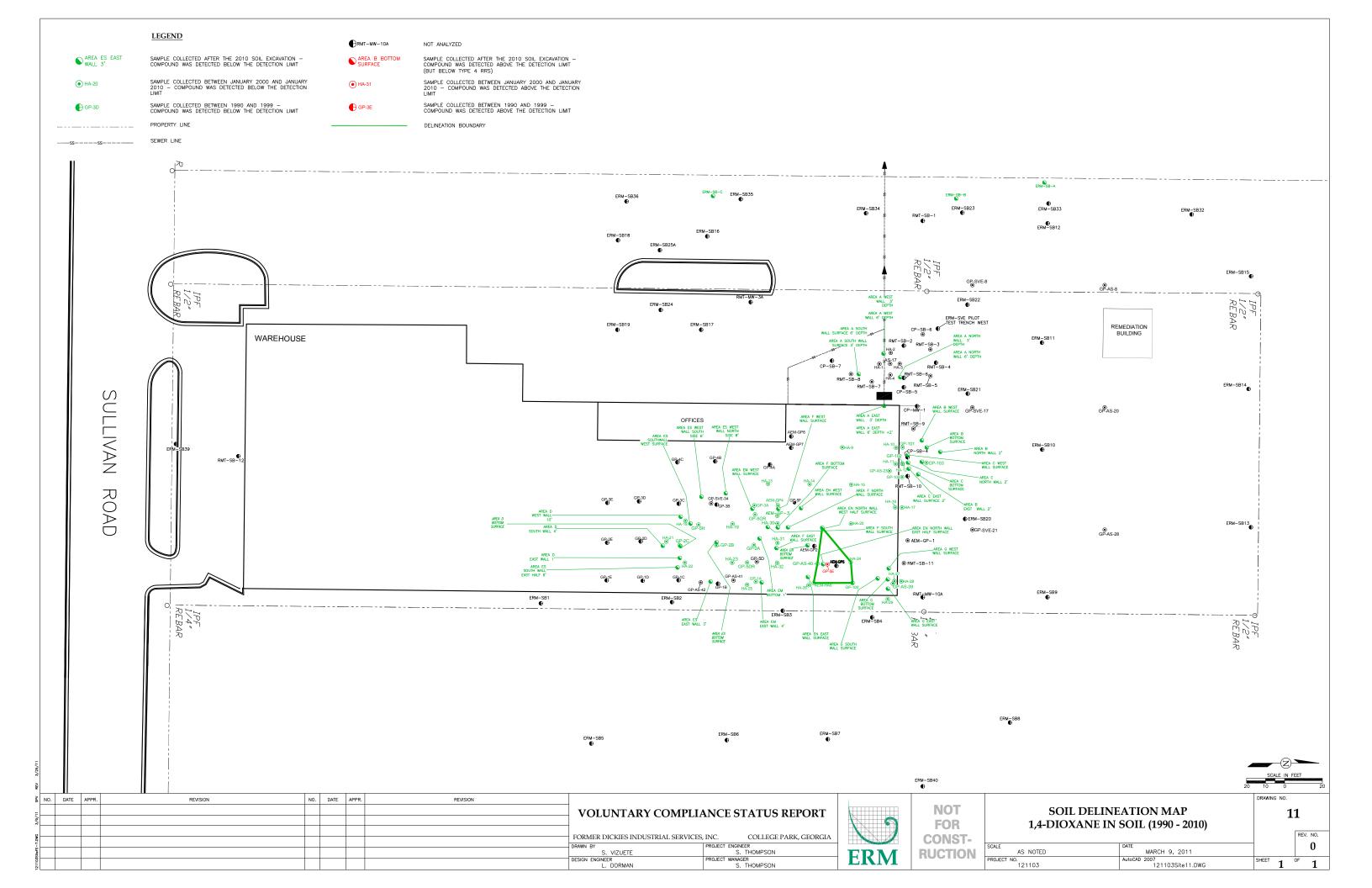


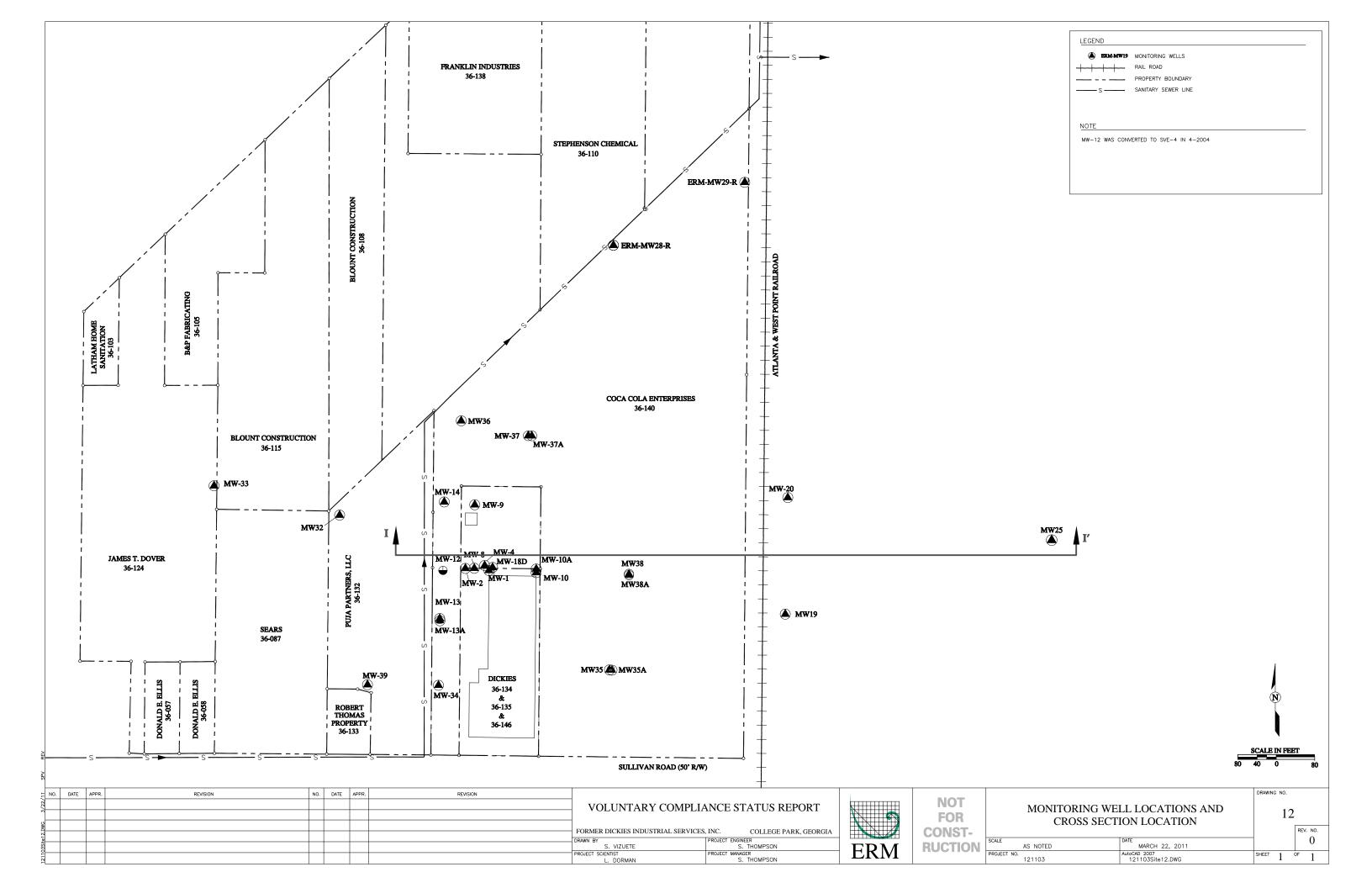


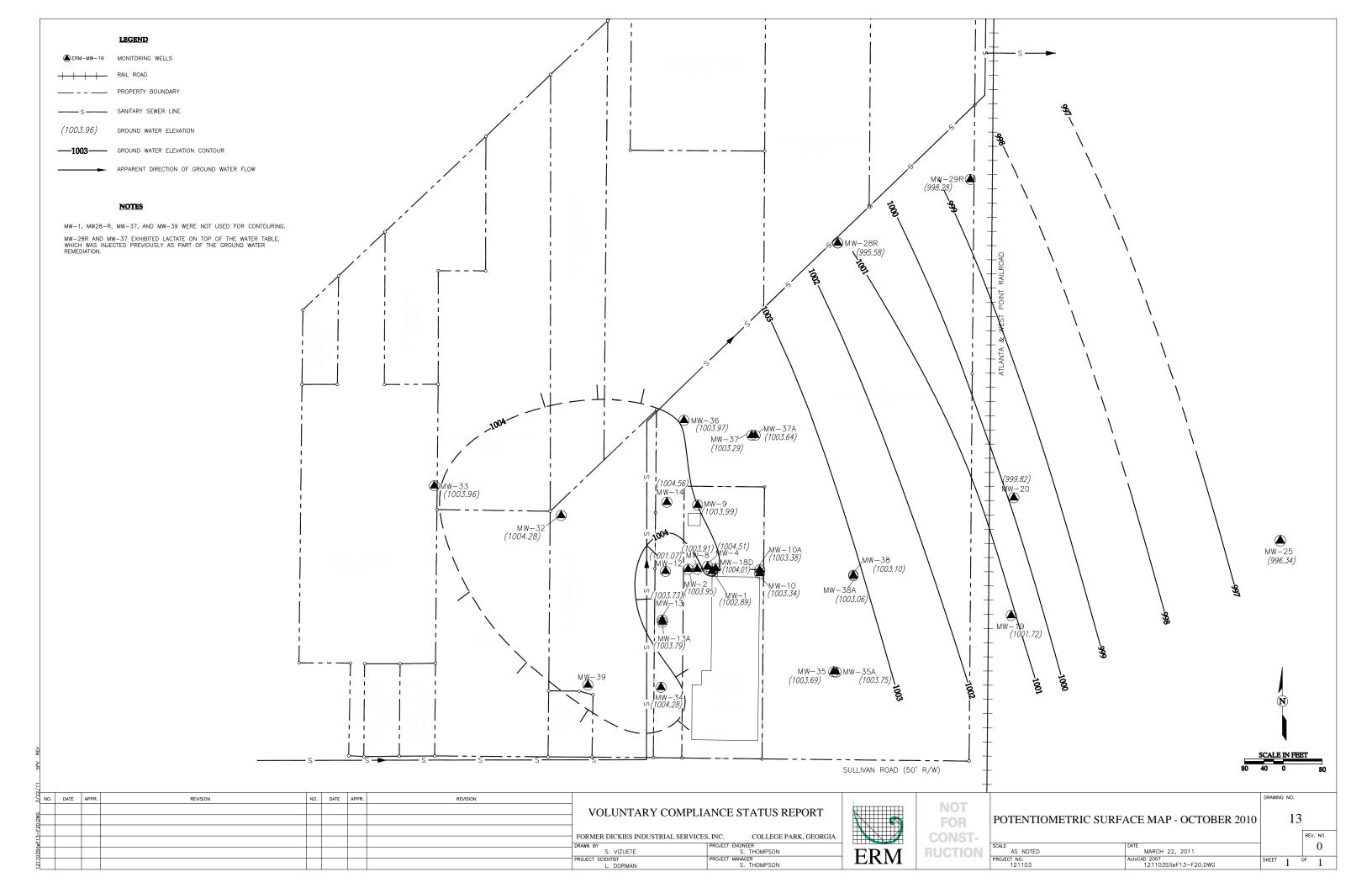


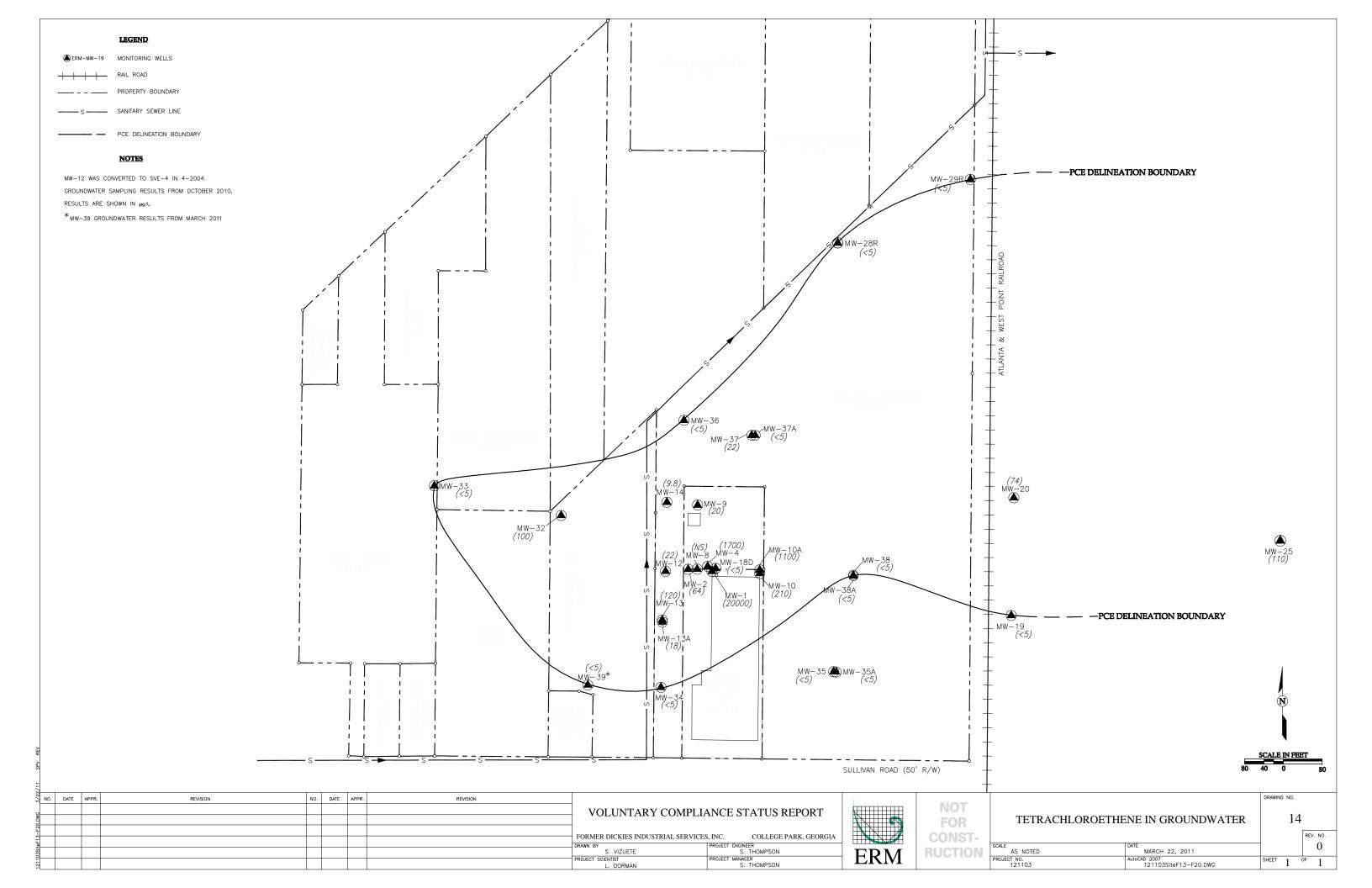


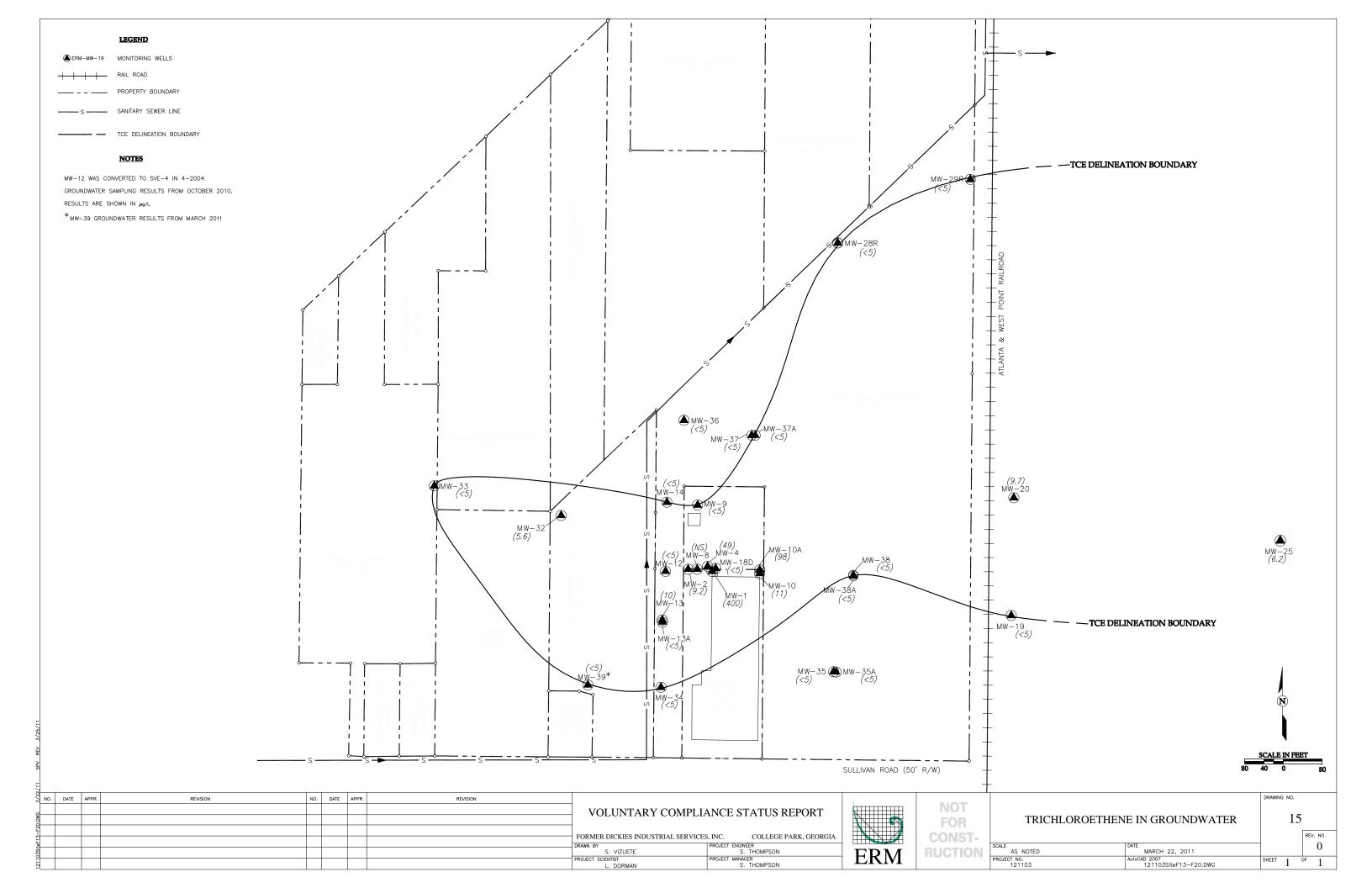


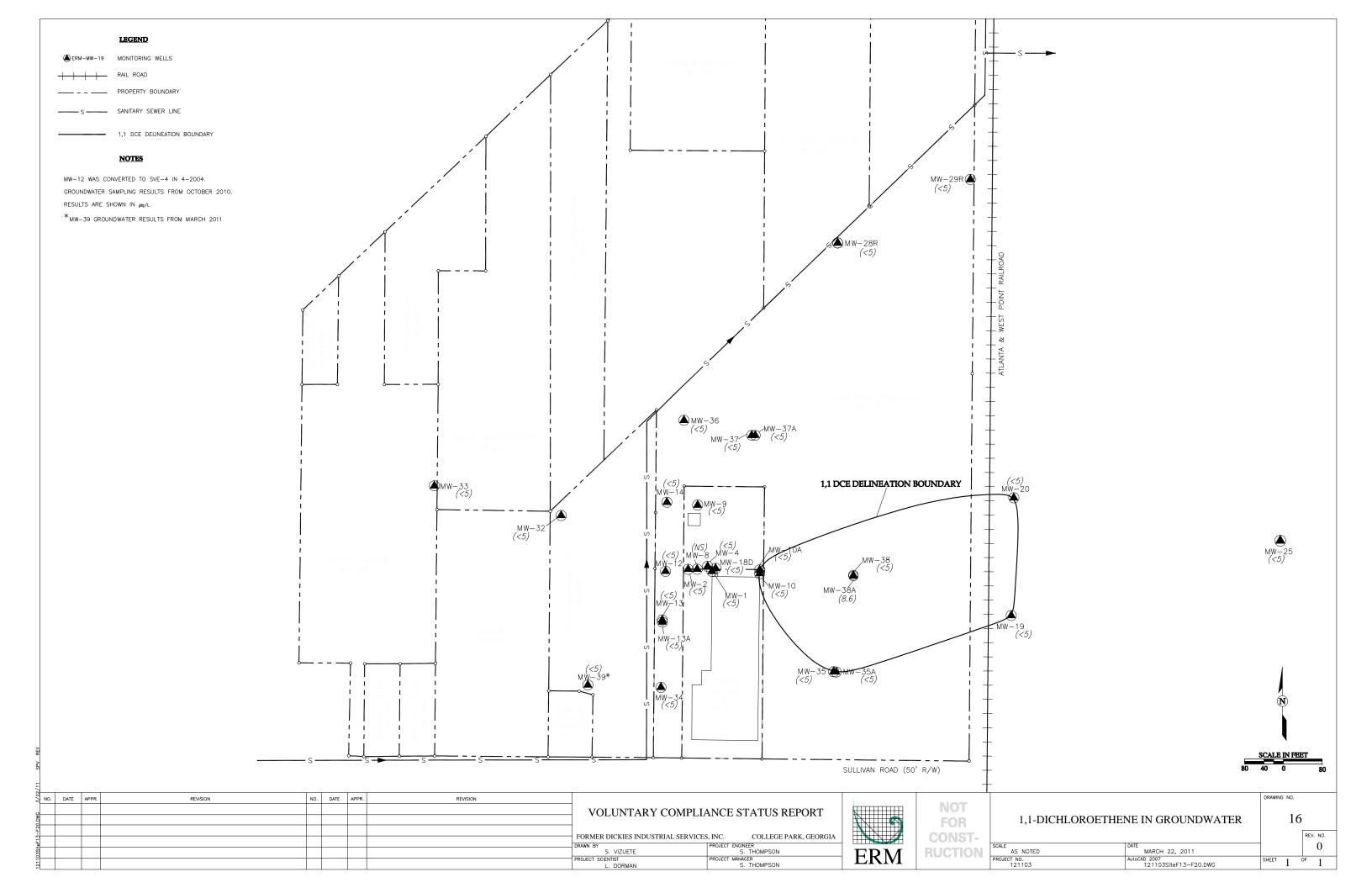


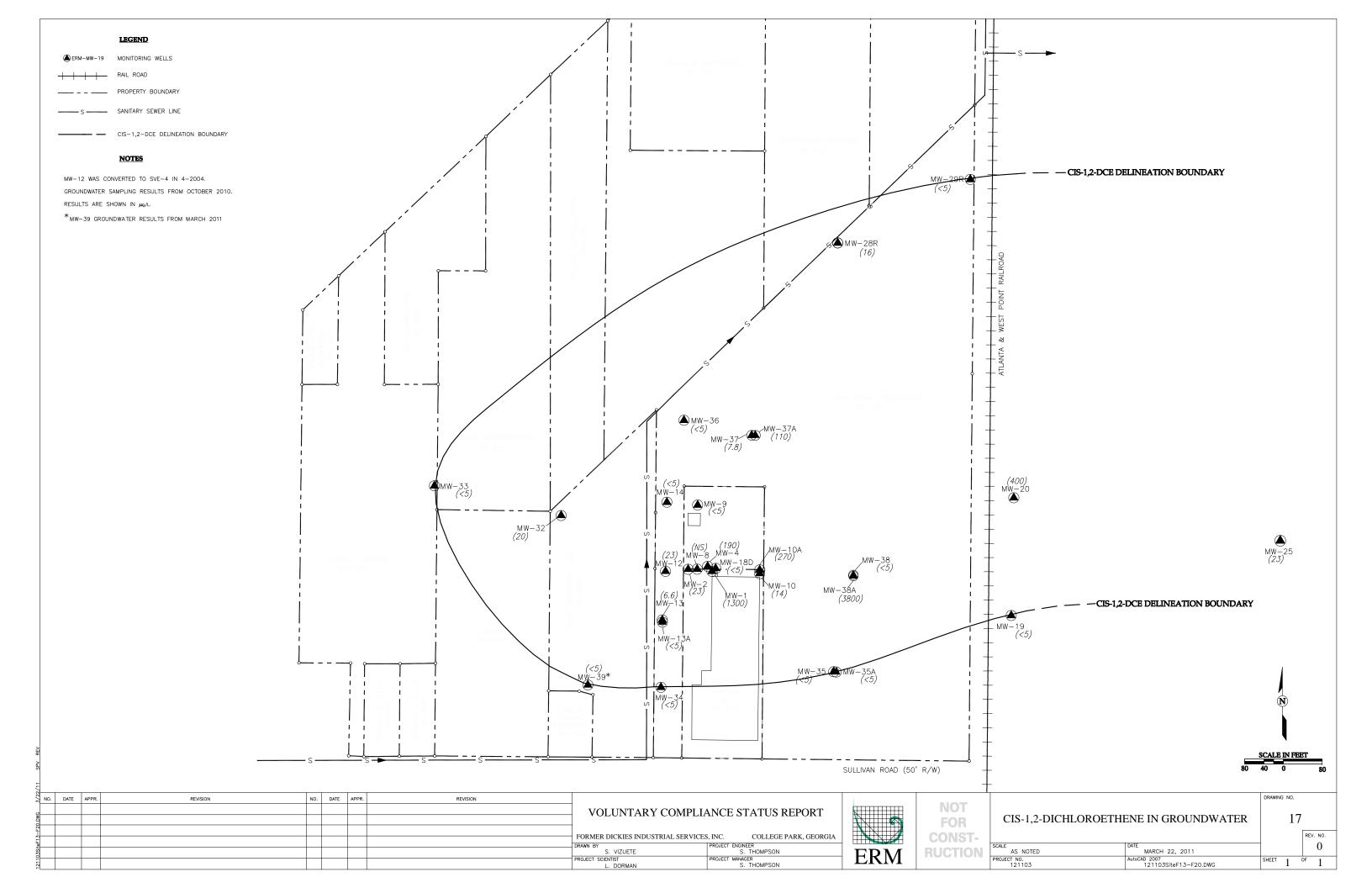


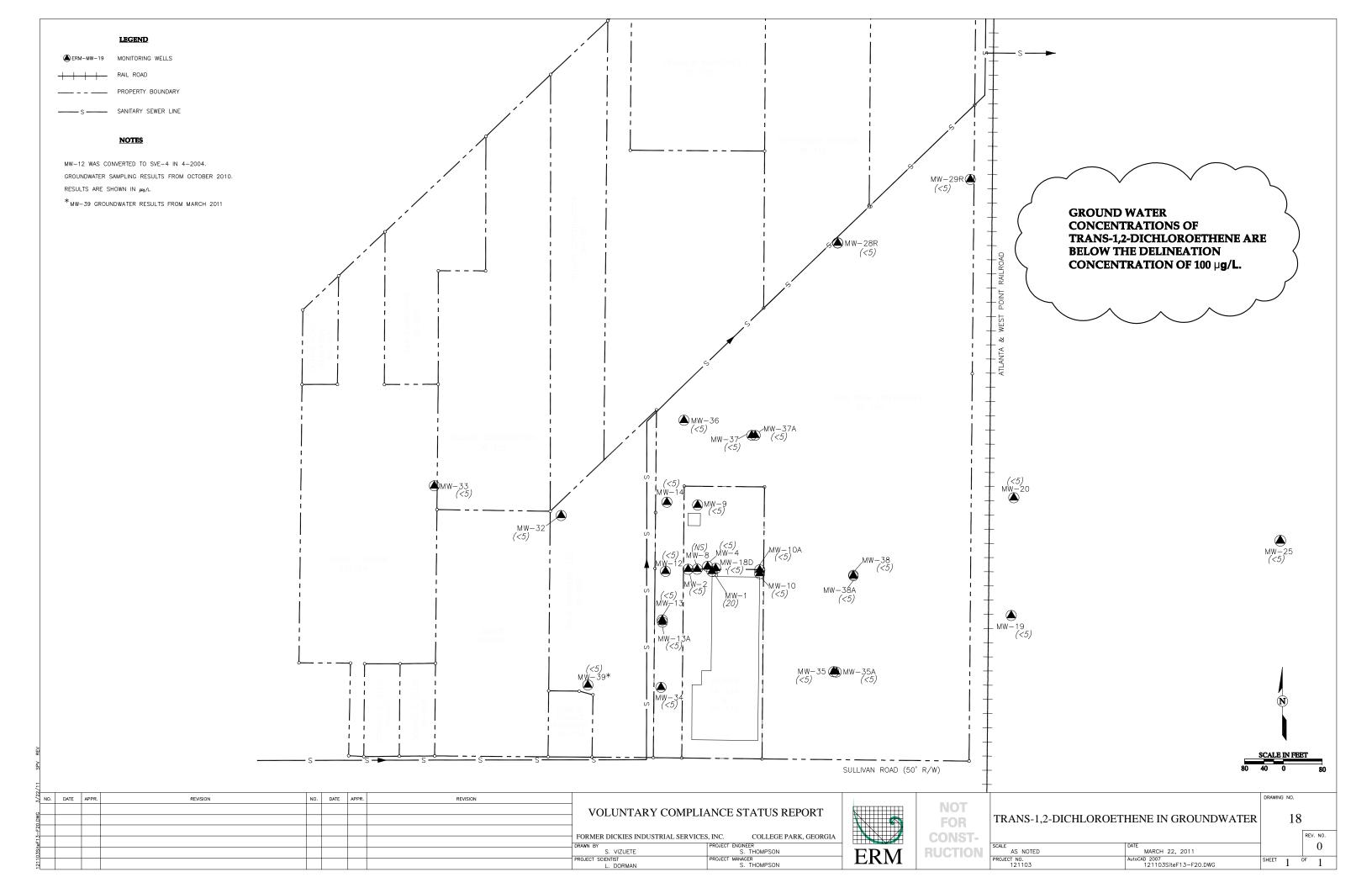


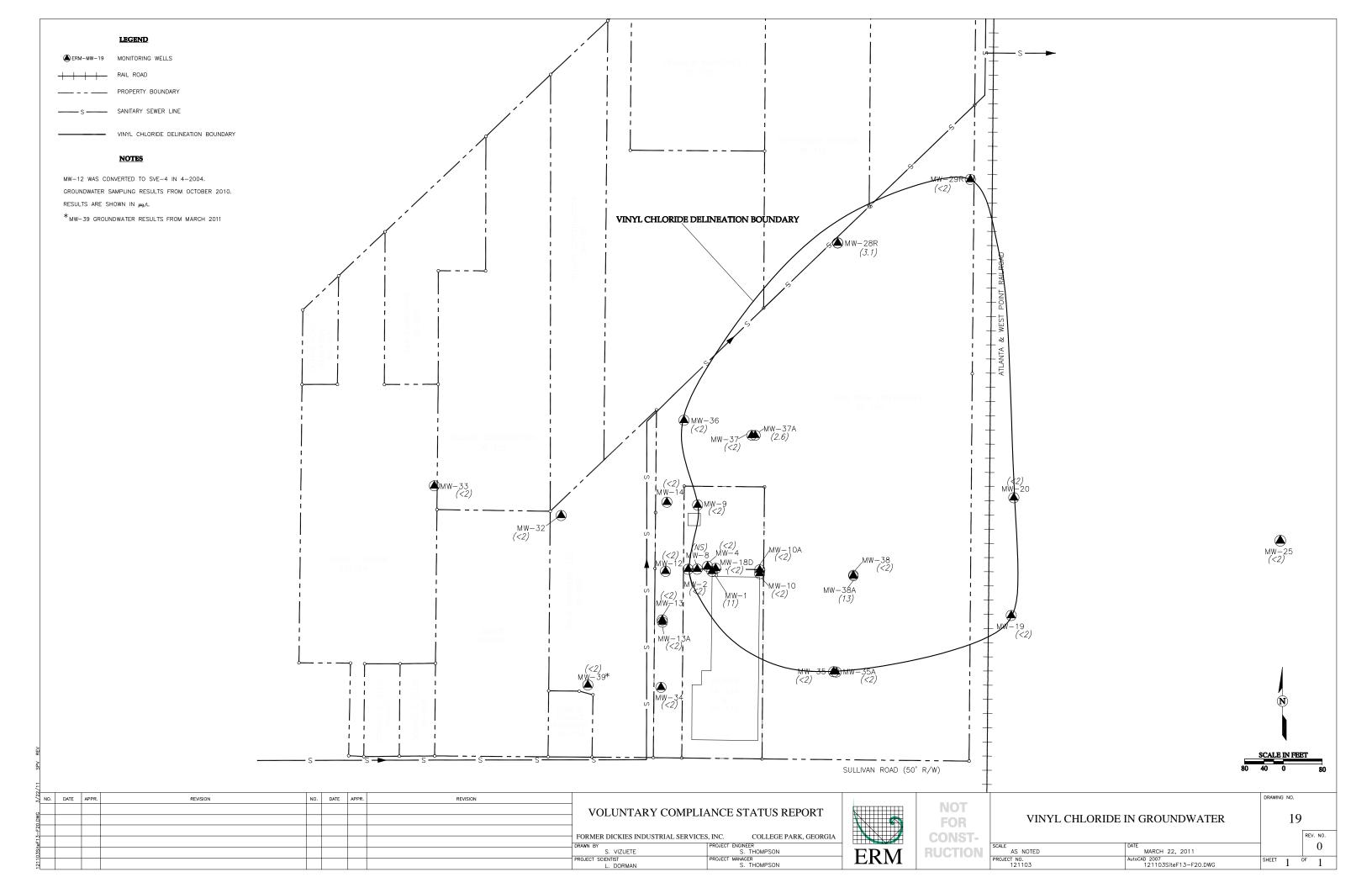


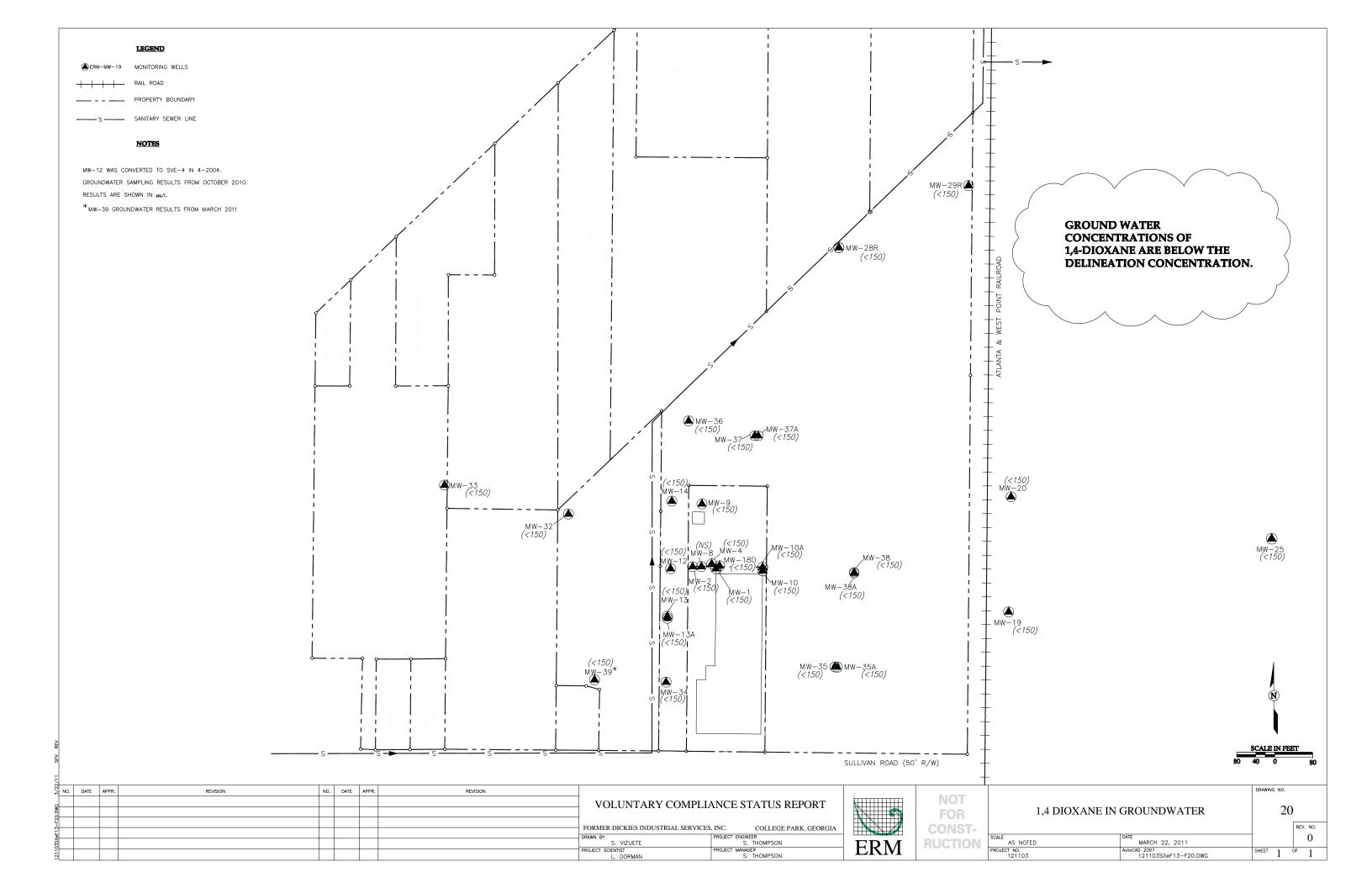


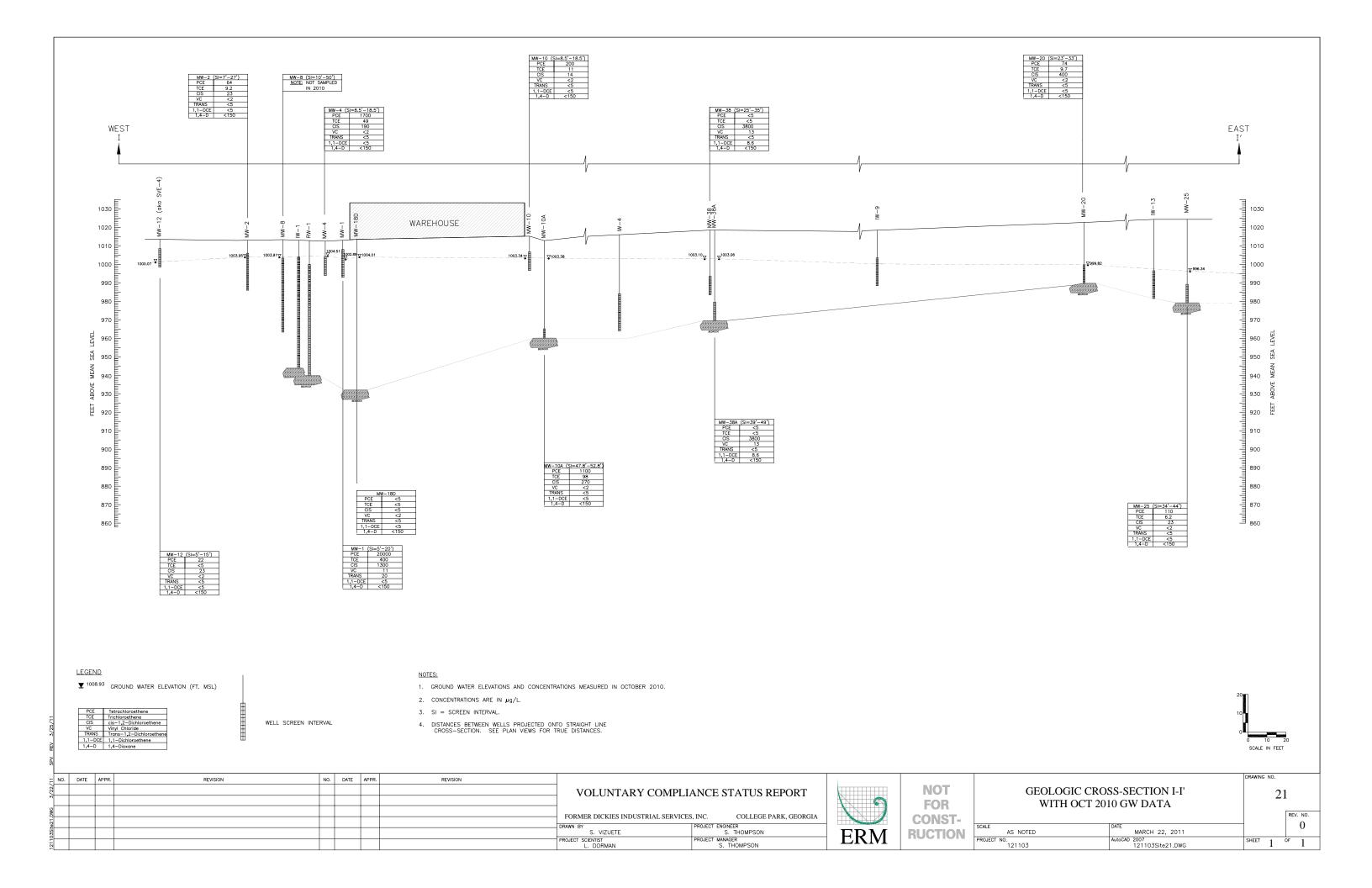


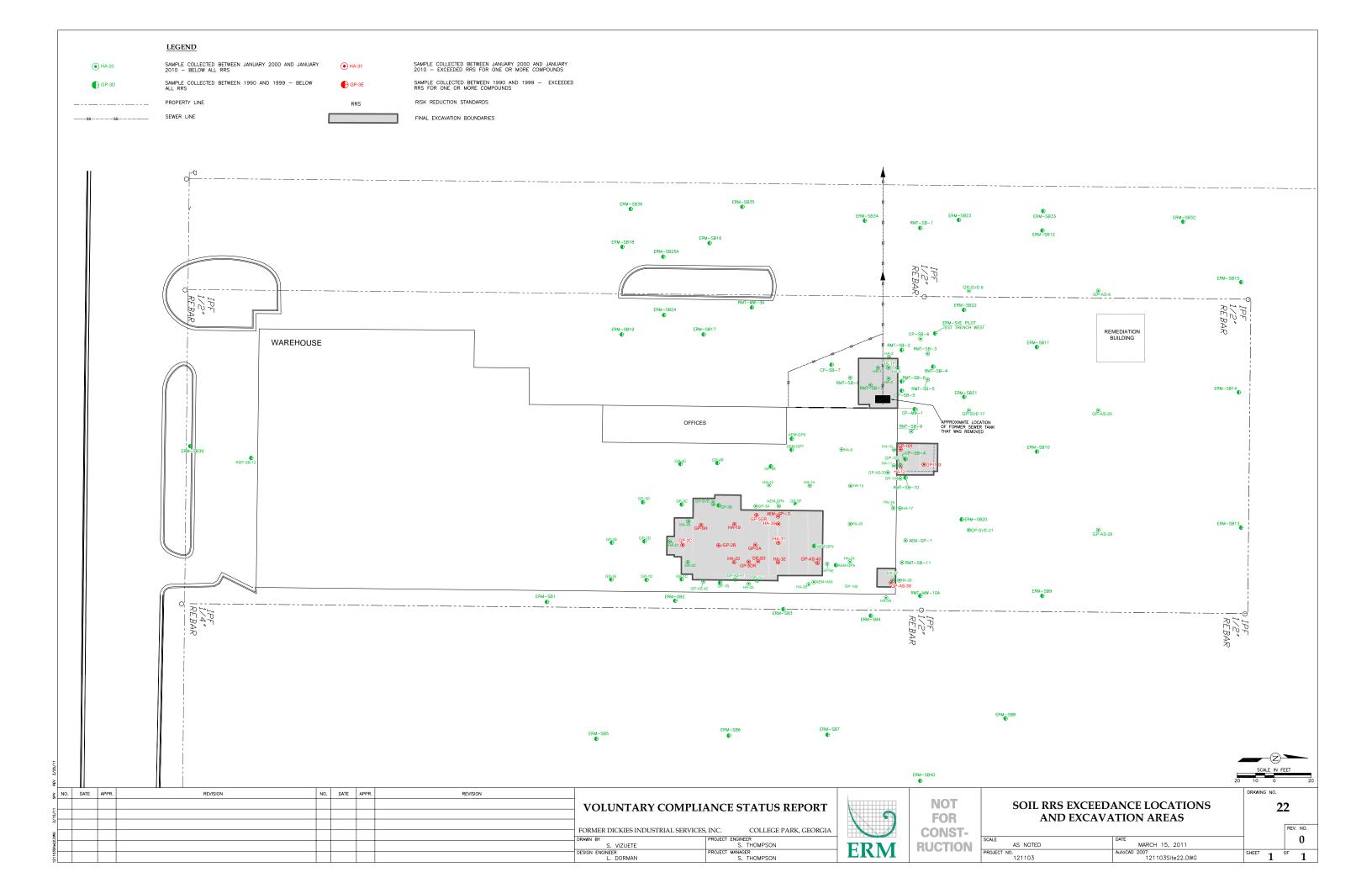


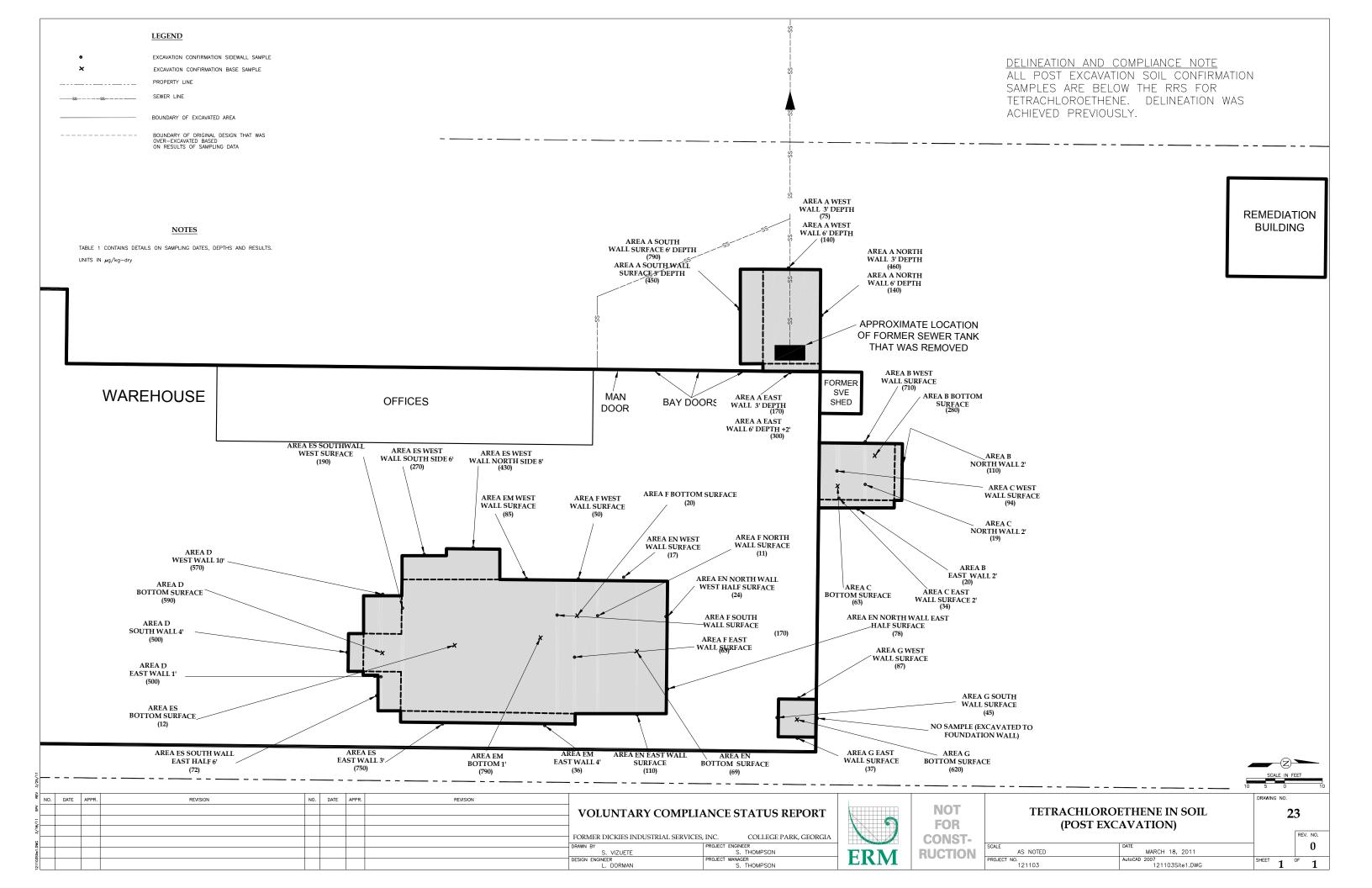


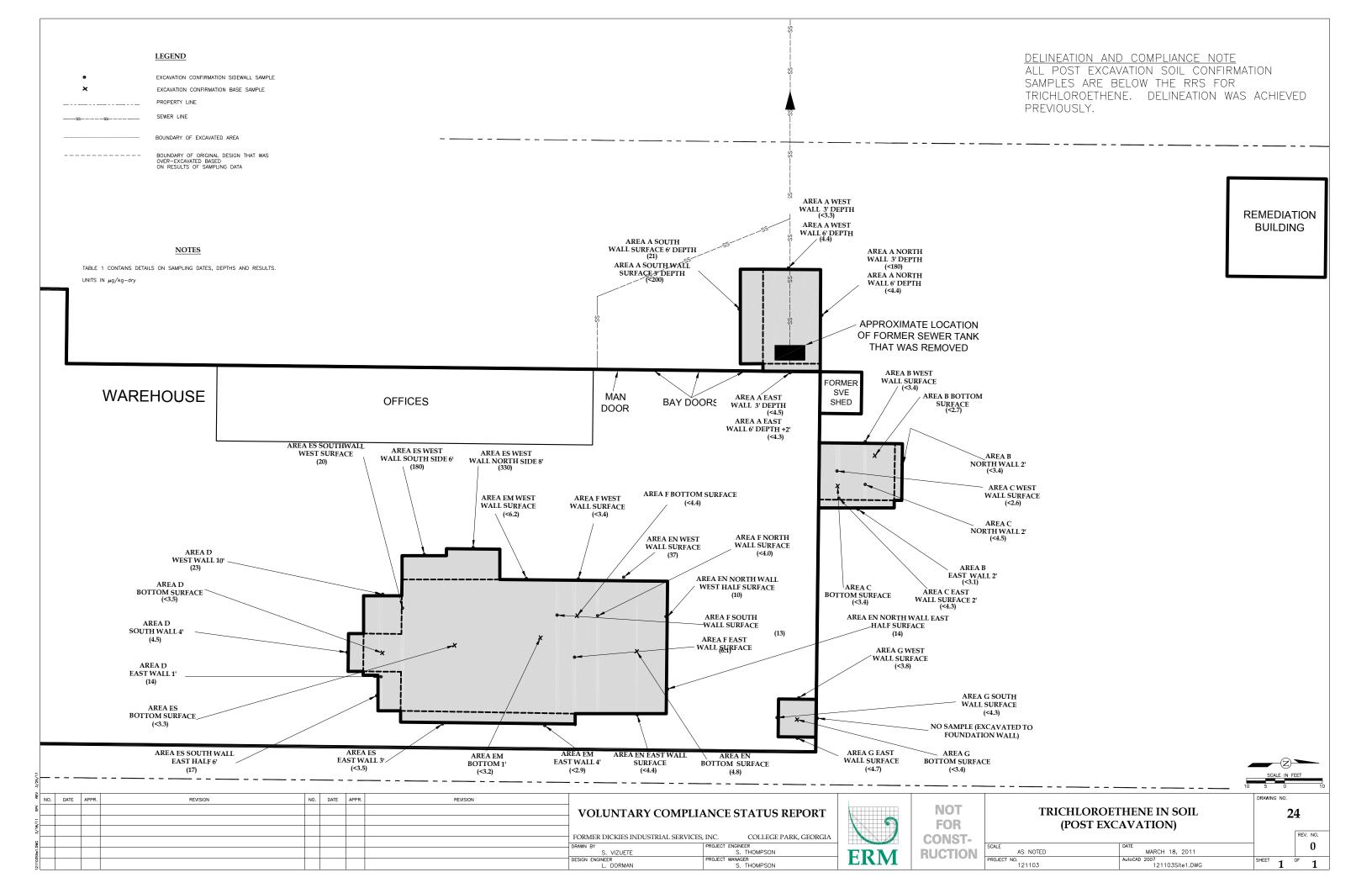


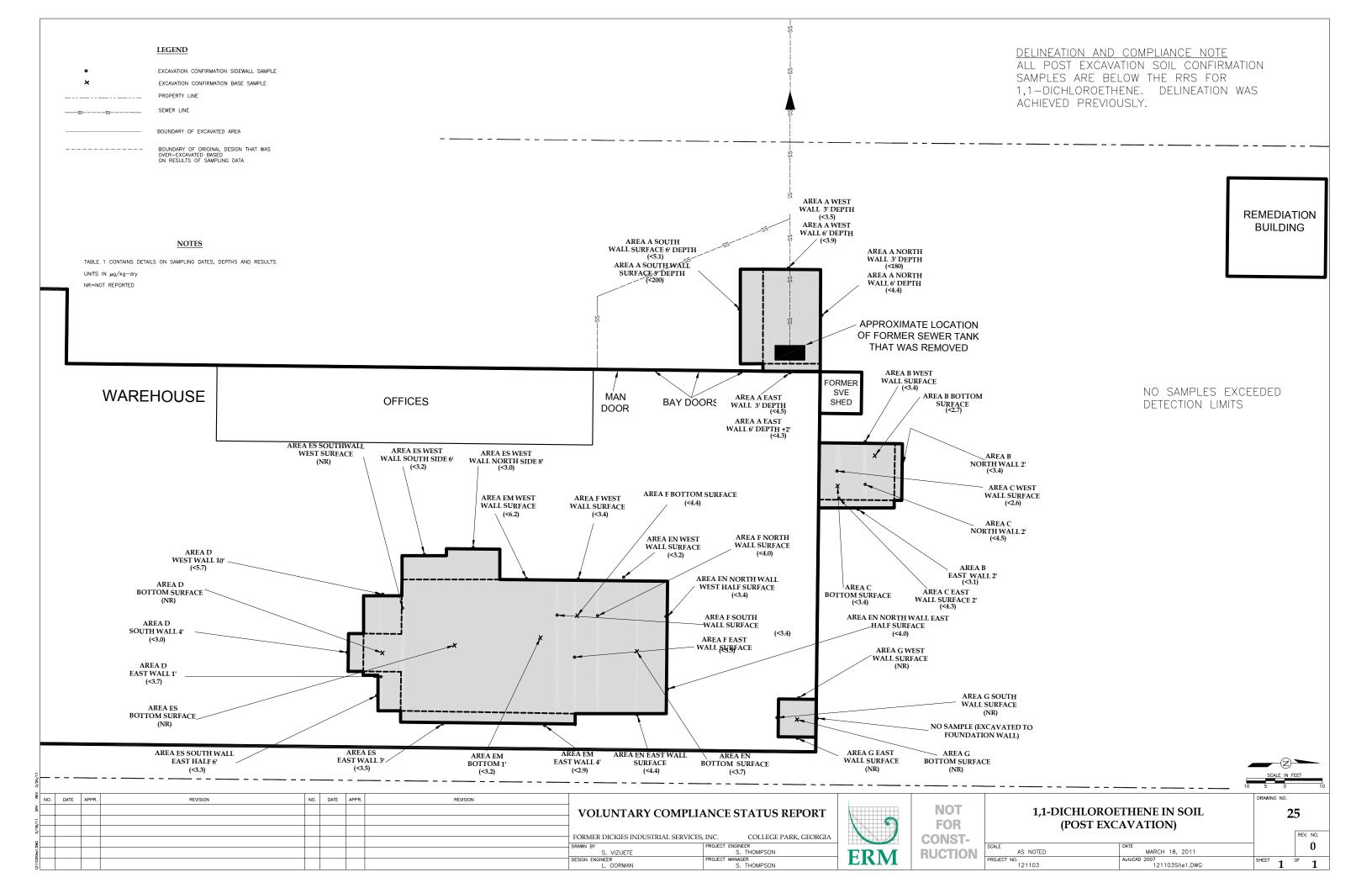


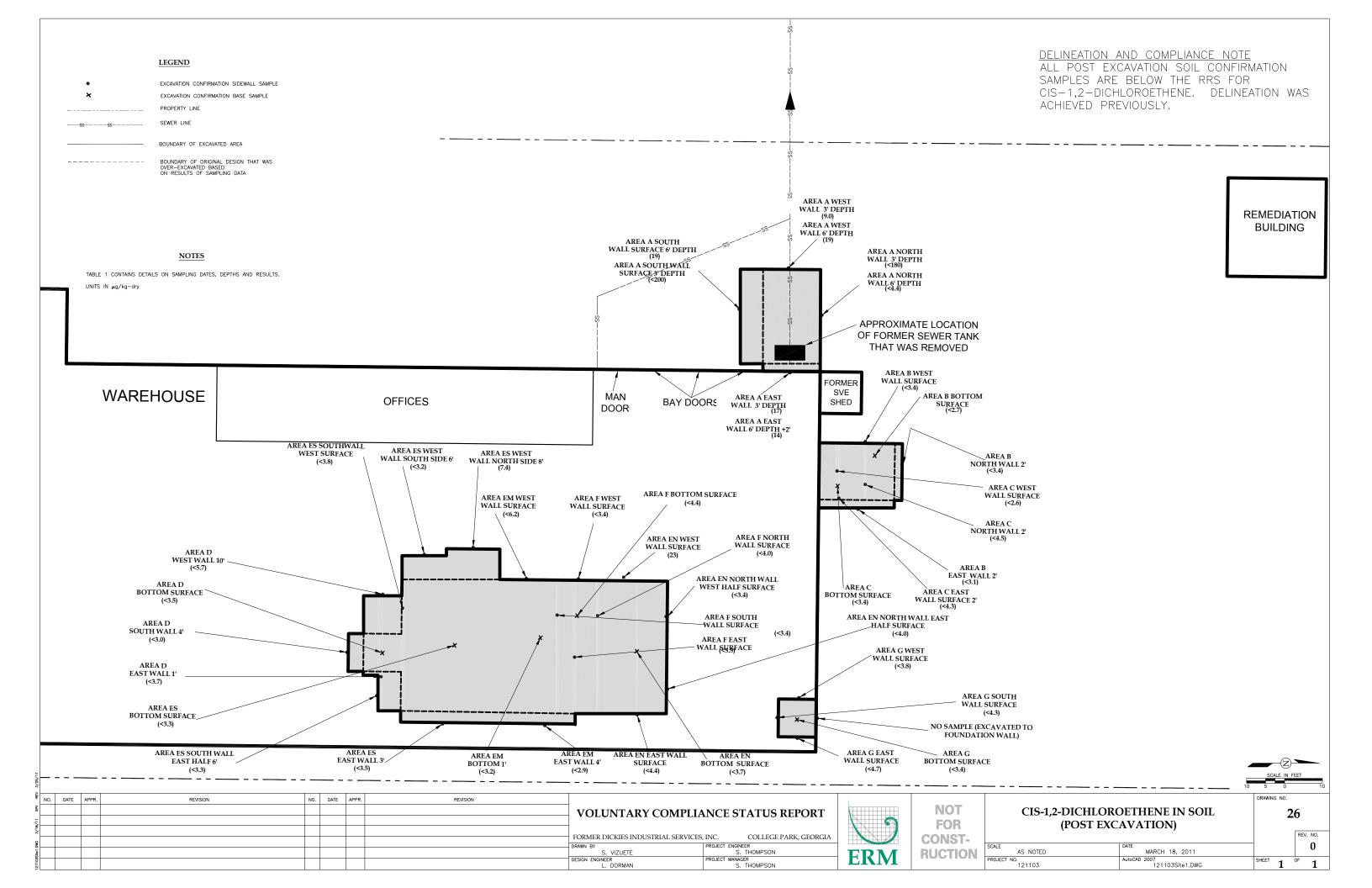


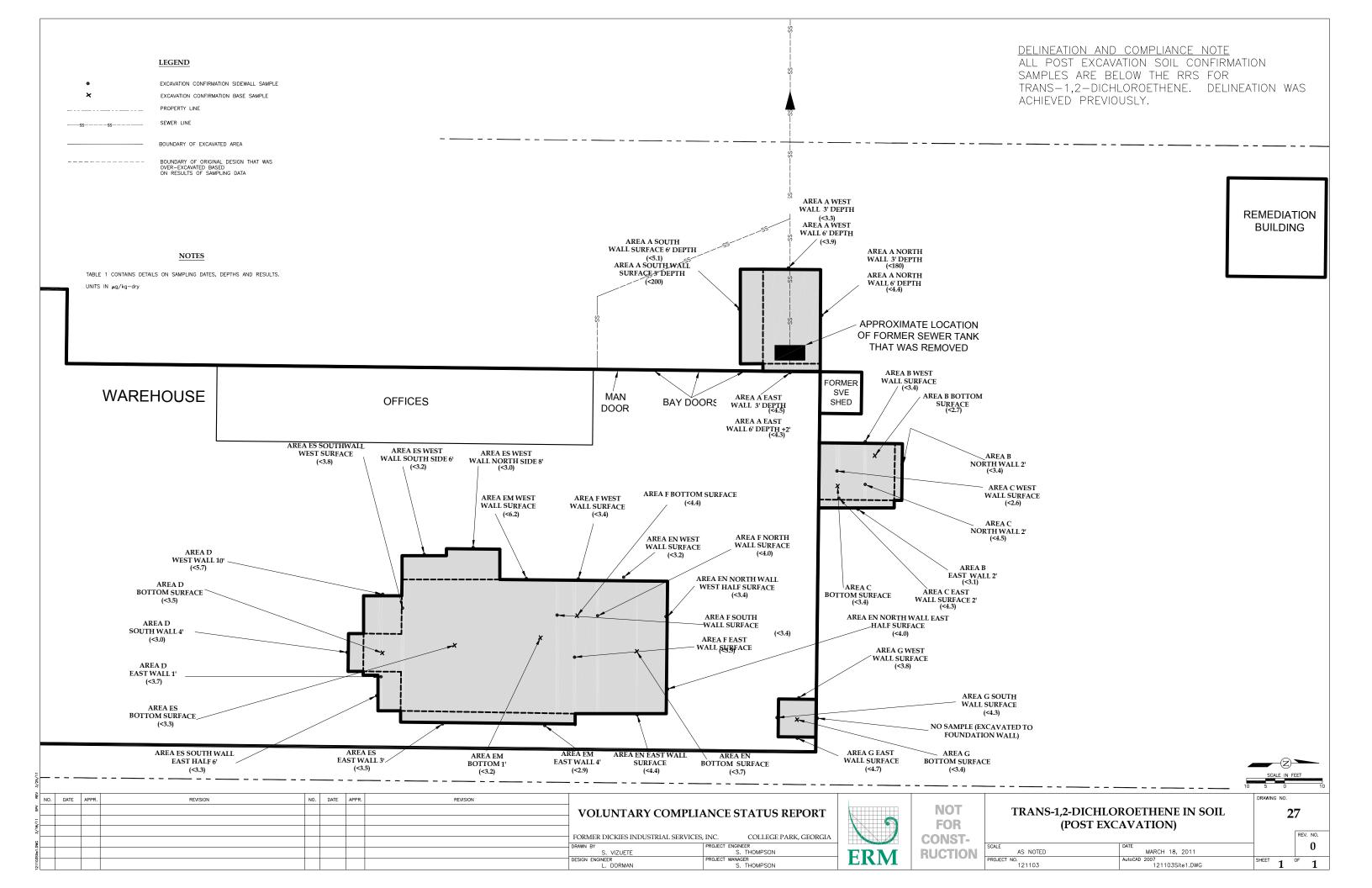


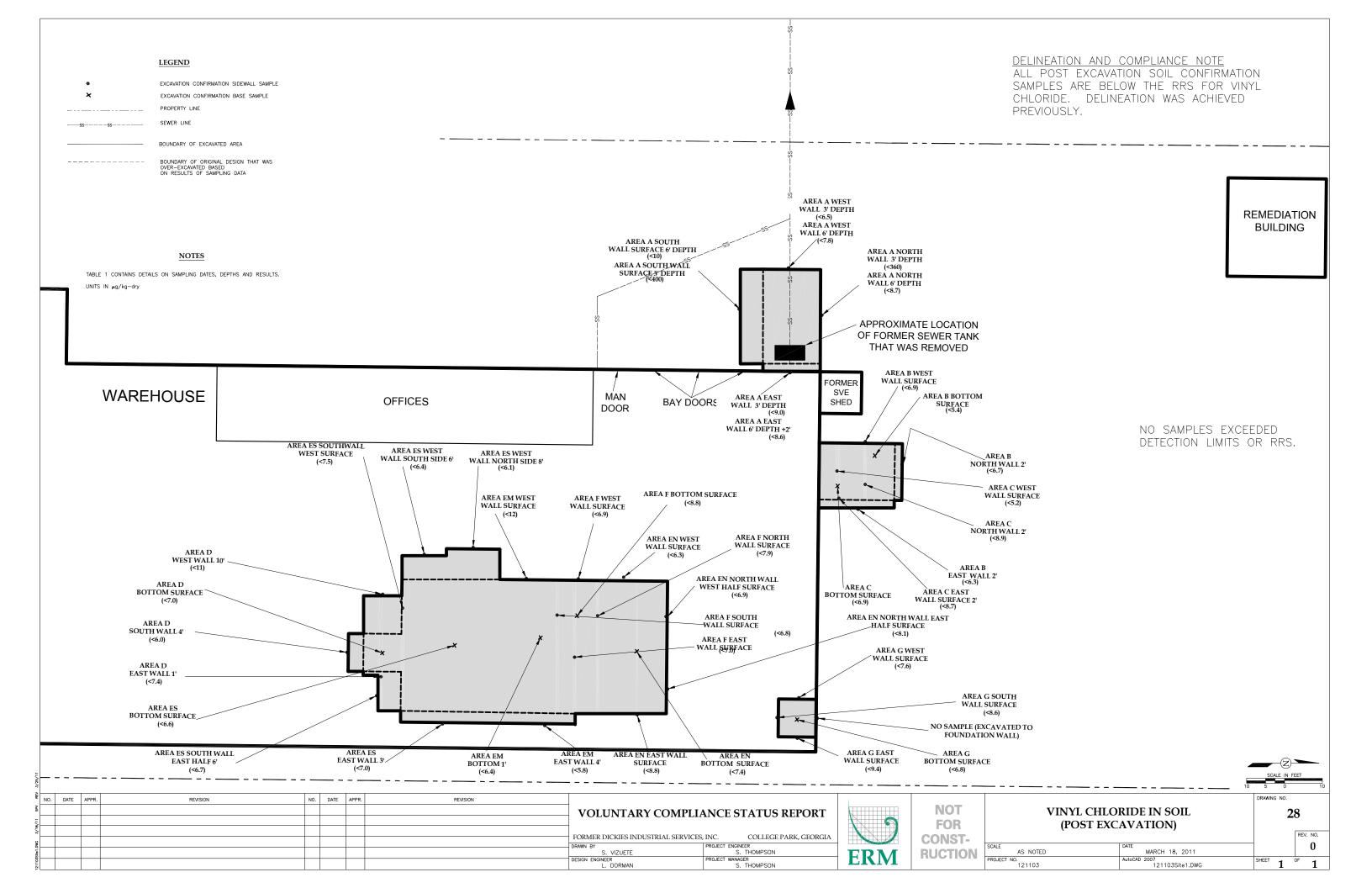


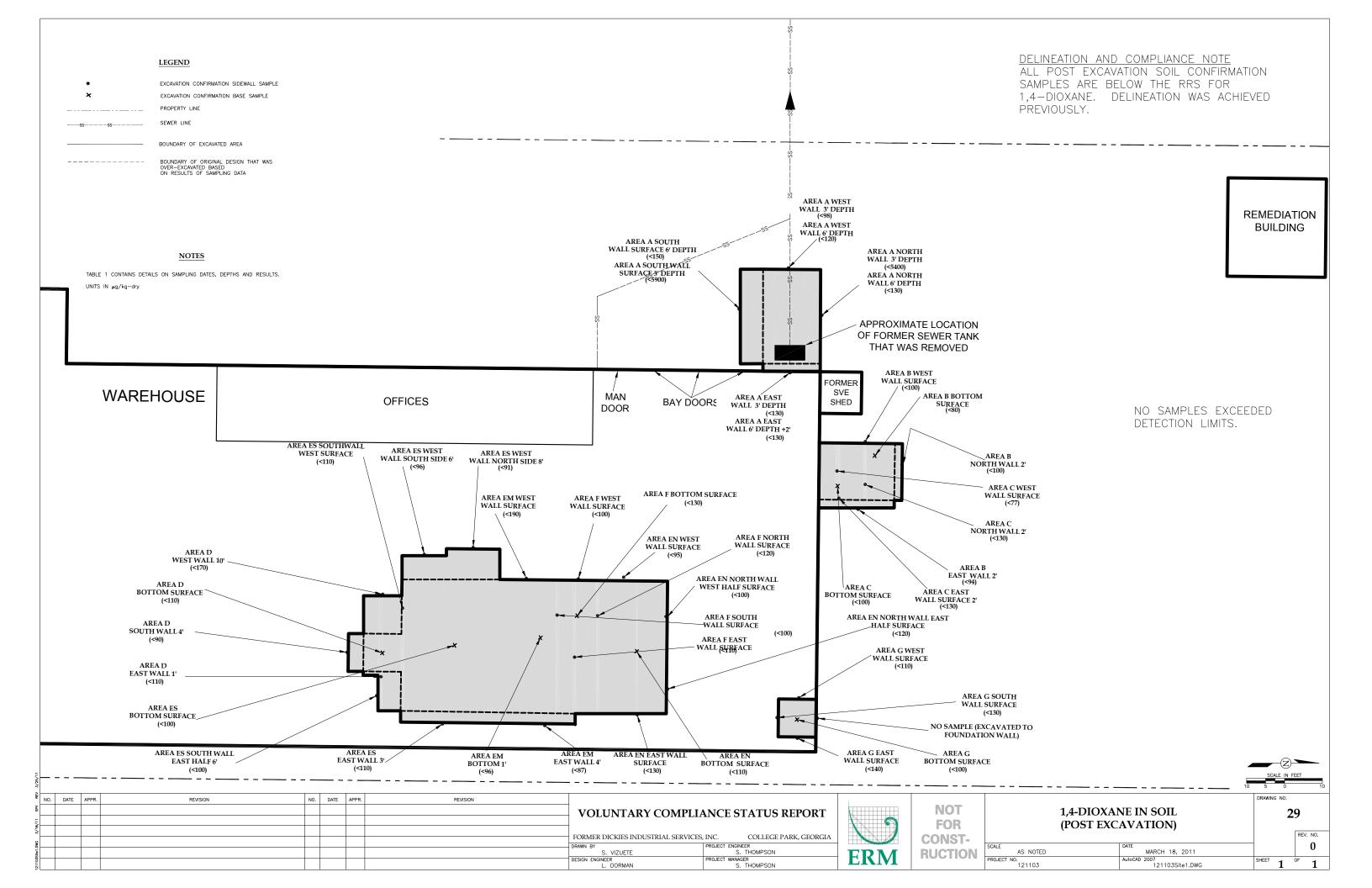


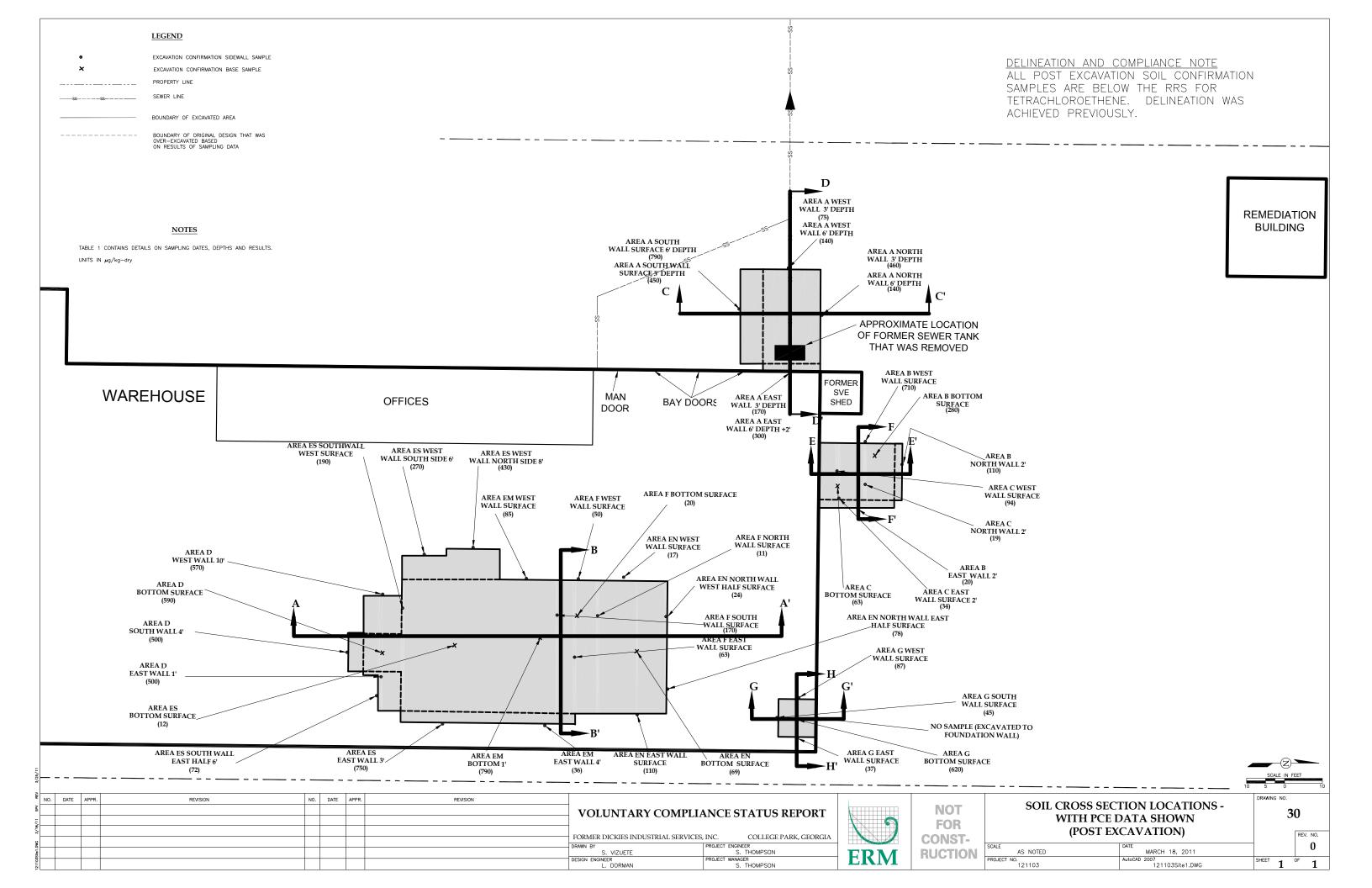


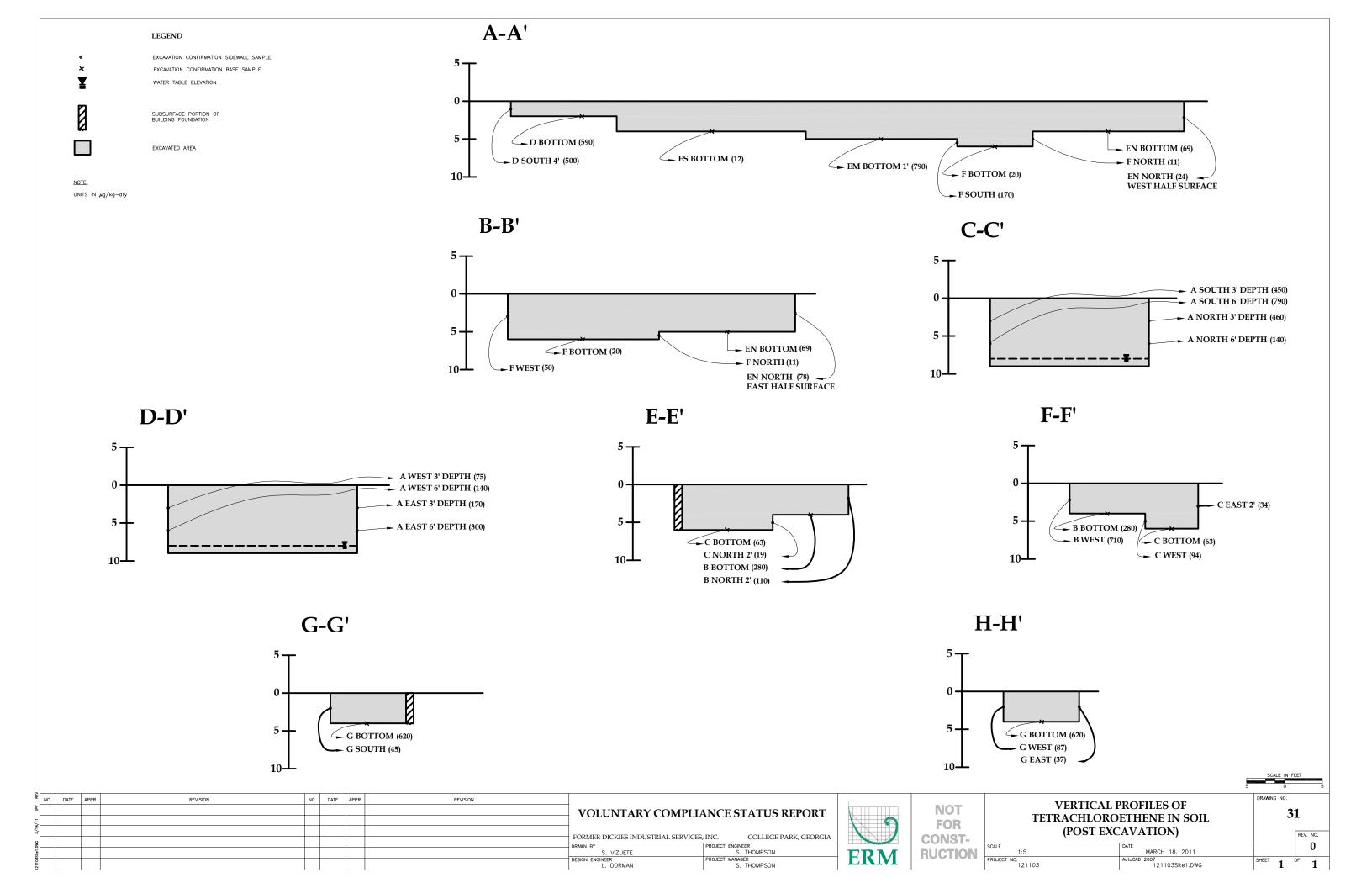


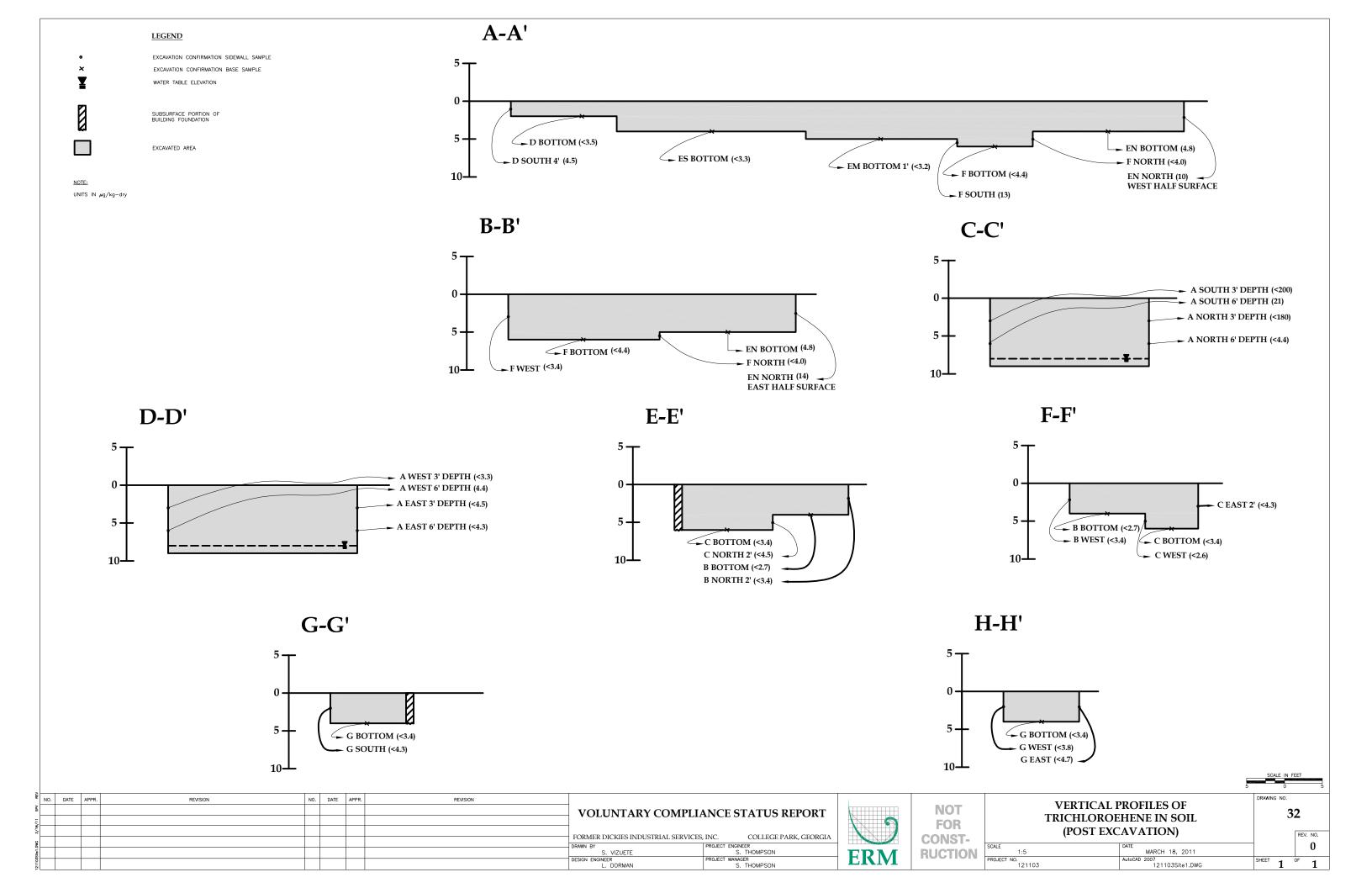


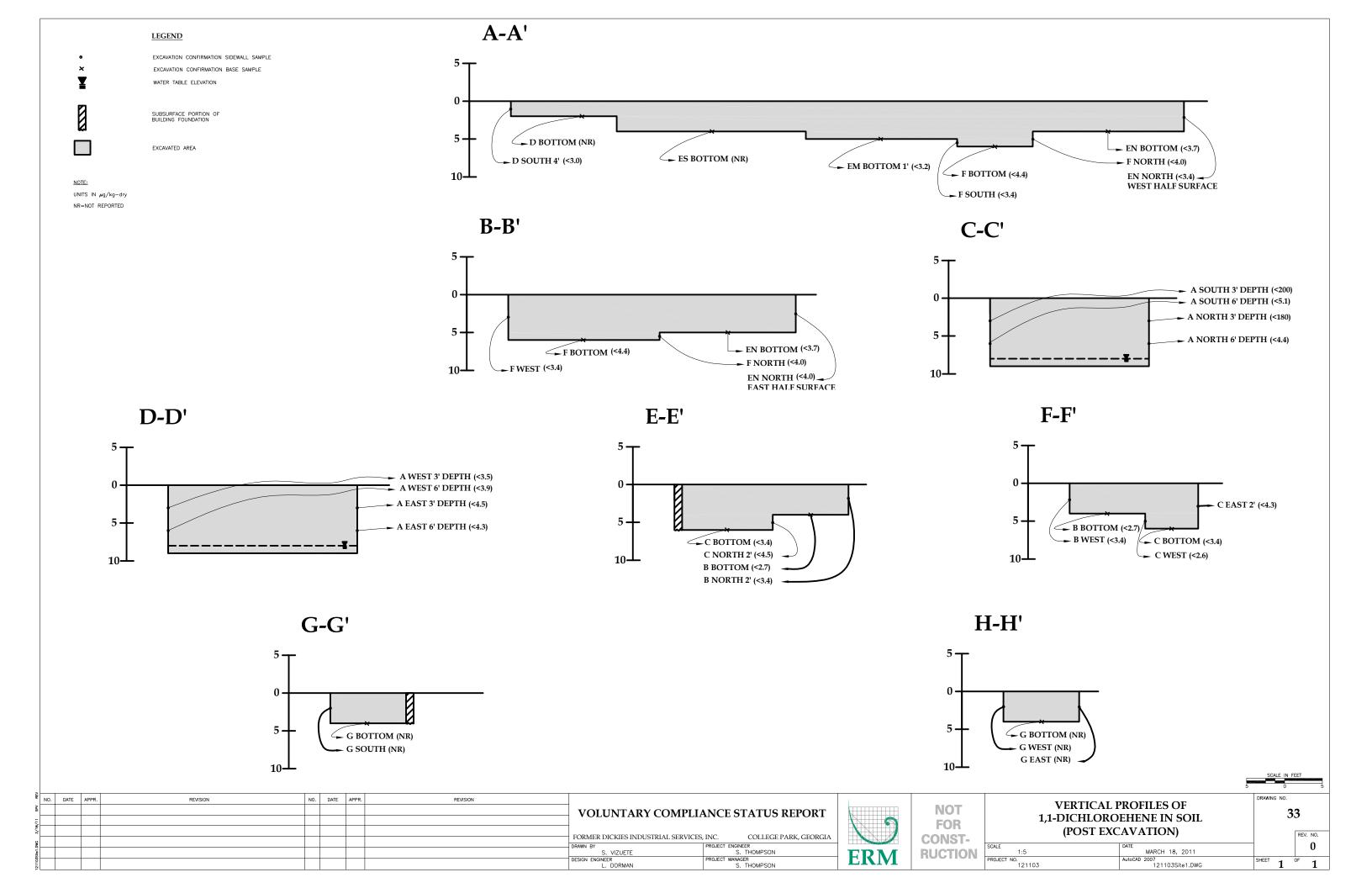


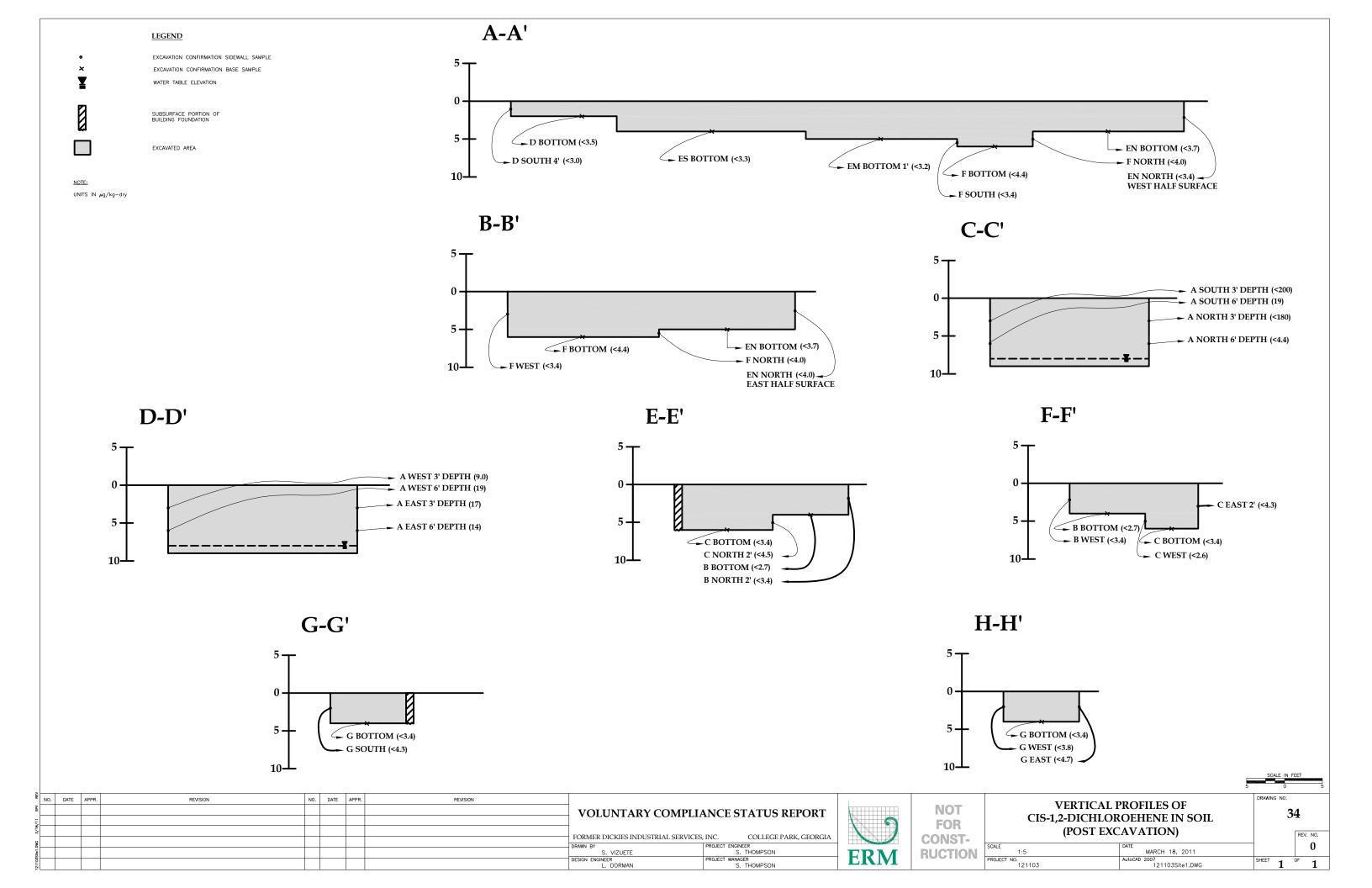


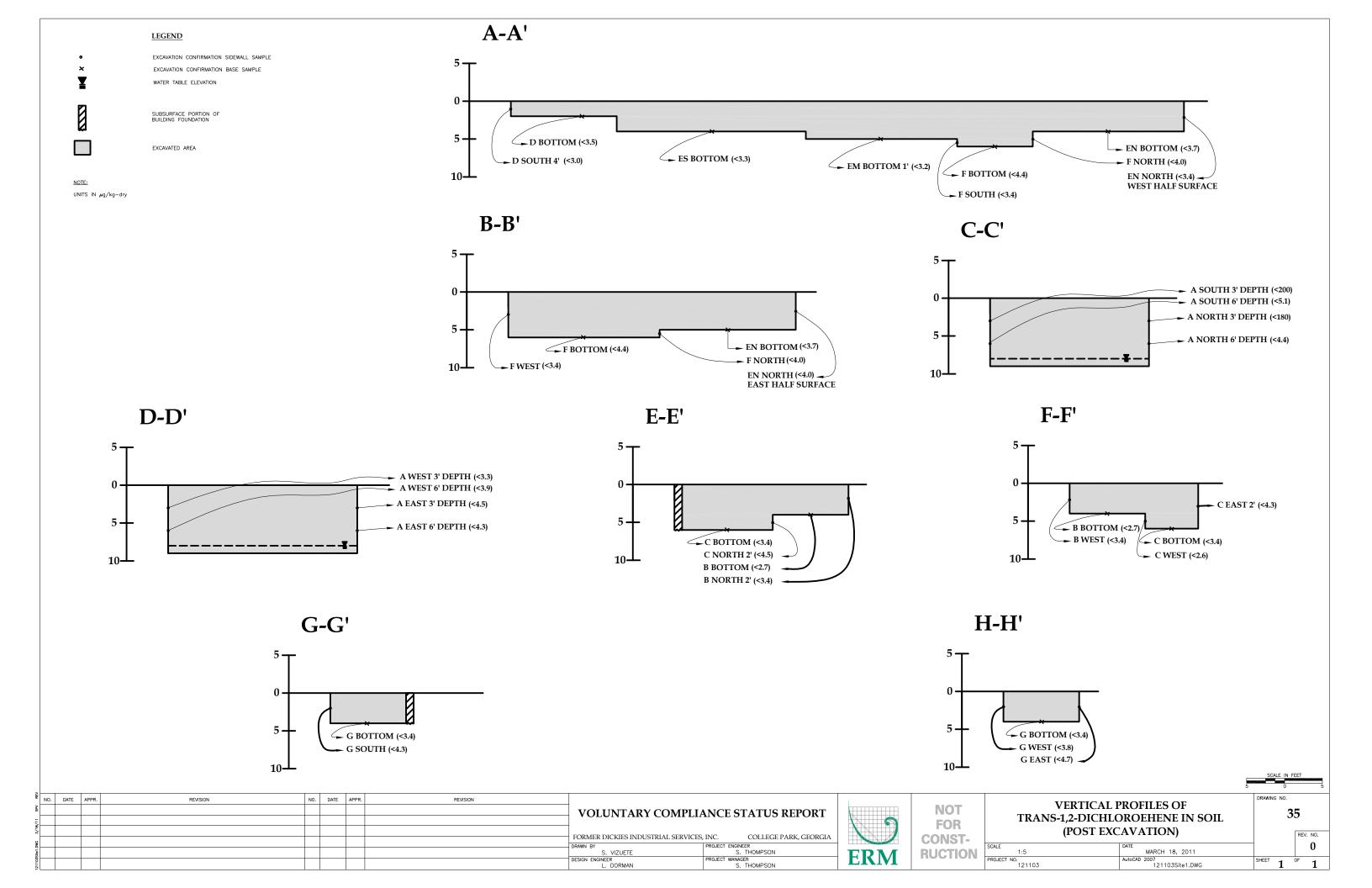


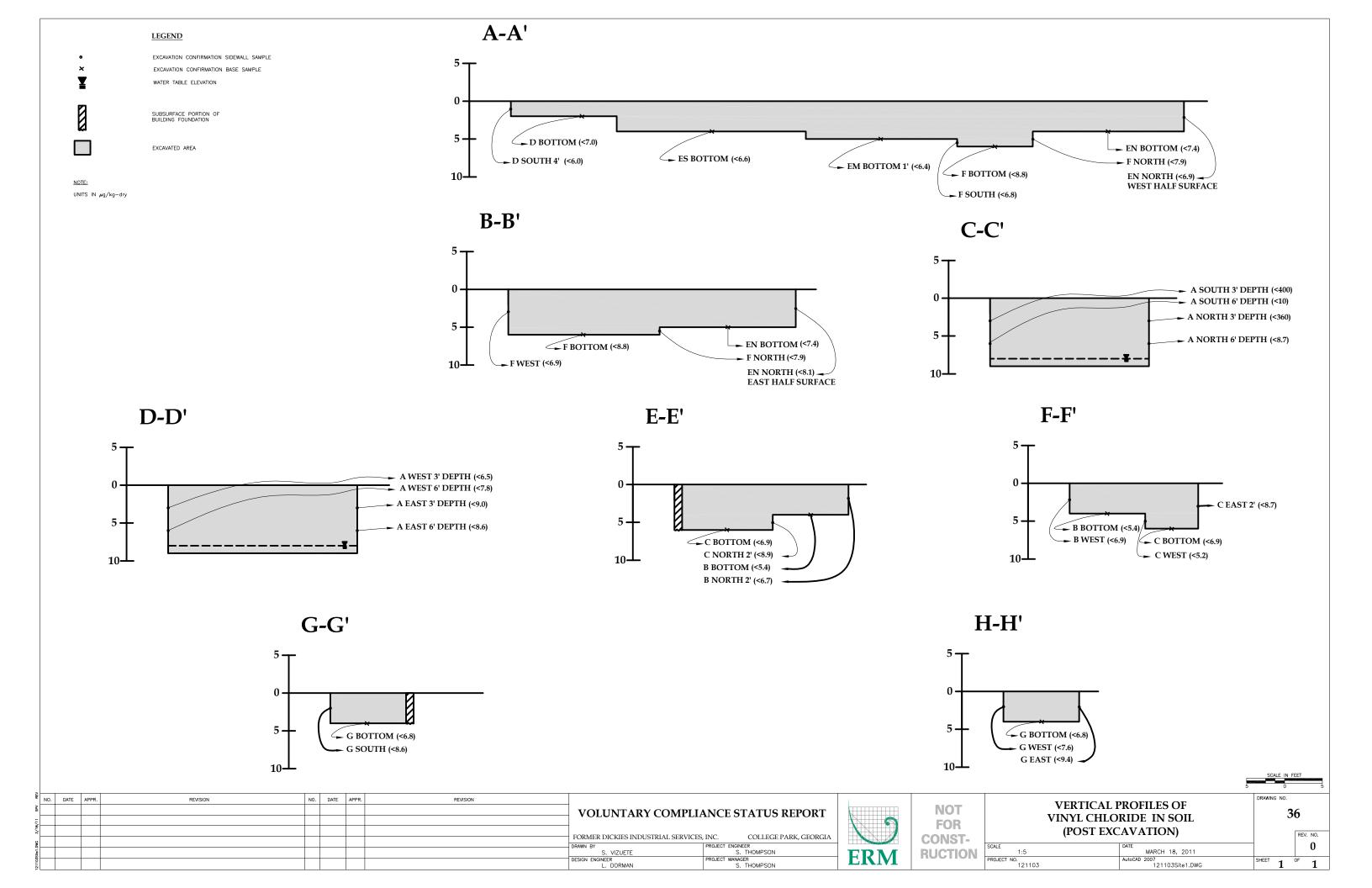


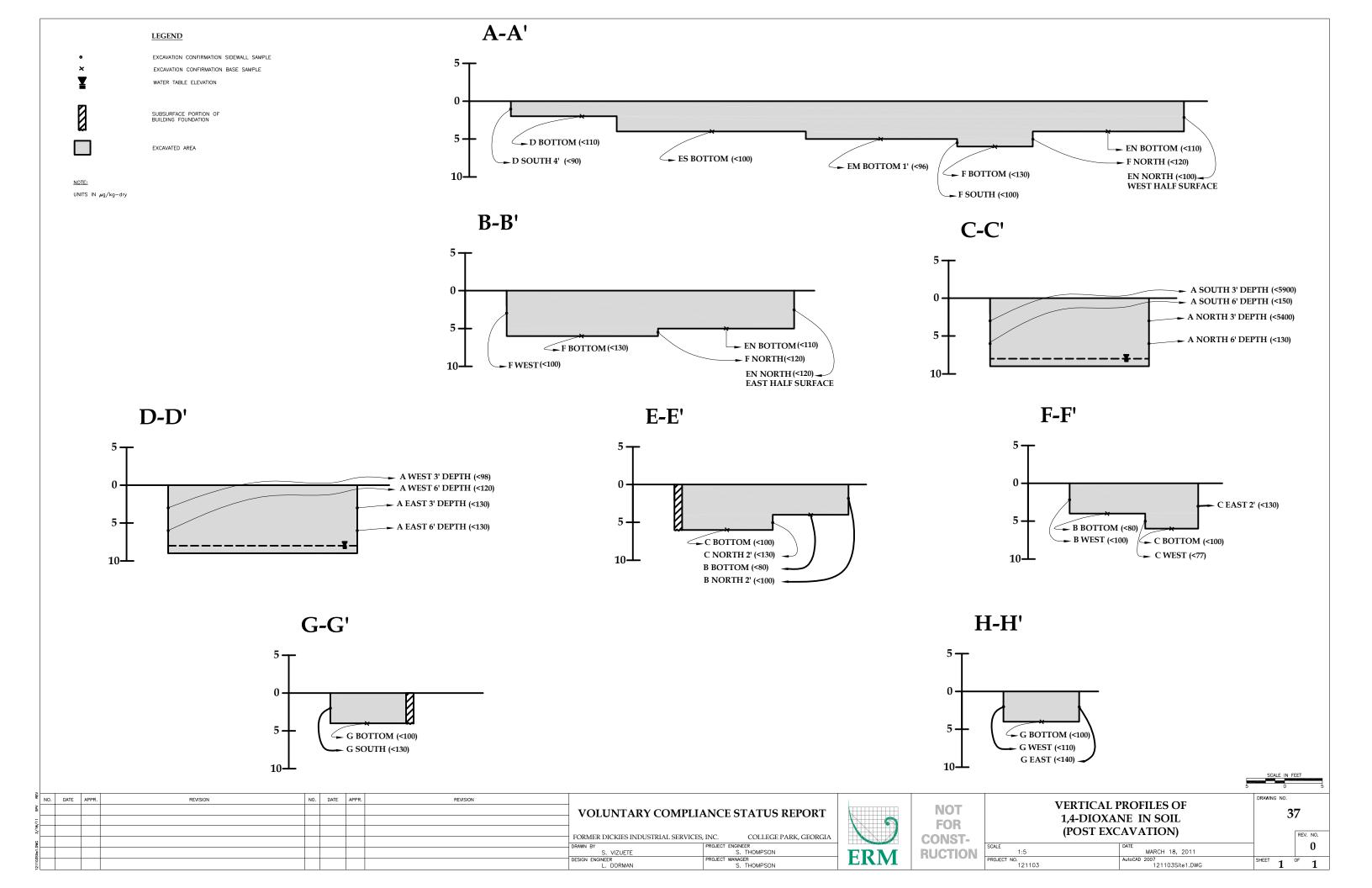






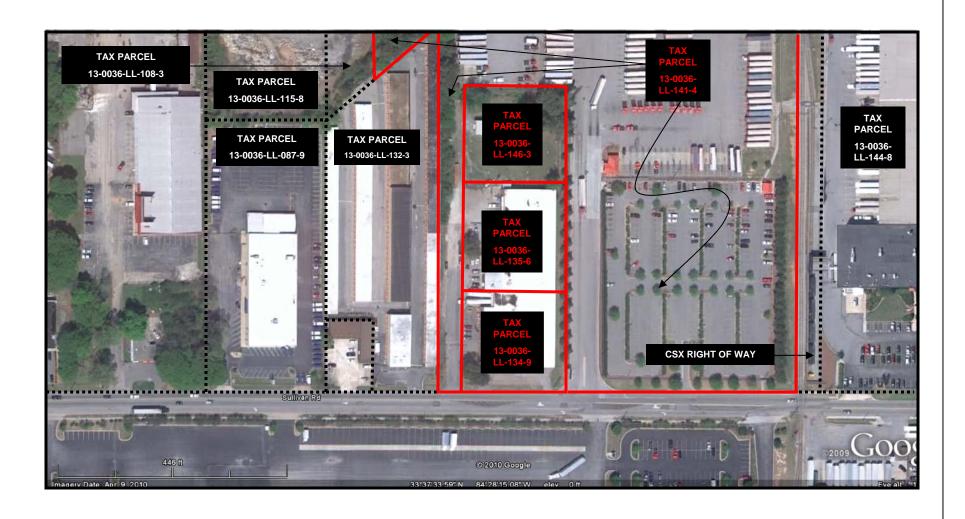






Appendix A

Tax Parcel Map



LEGEND

VRP Tax Parcels

.....

Other Nearby Tax Parcels



TAX PARCEL MAP
VOLUNTARY COMPLIANCE STATUS REPORT
FORMER DICKIES INDUSTRIAL SERVICES, INC.
COLLEGE PARK, GEORGIA

APPENDIX



Appendix B

Property Owner Information

APPENDIX B VRP TAX PARCEL DETAILS VOLUNTARY SOMPLIANCE STATUS REPORT

Tax Parcel ID	Owner	Physical Address	Contact Person	
130036LL1414	Coca-Cola Refreshments	Sullivan Road	Reginald E. Prime Coca-Cola Refreshments P.O. Box 723040 Atlanta, GA 33139-0040 (770) 989-3144	
130036LL1463		2411 Sullivan Road	Joan B. Sasine, Esq. Bryan Cave	
130036LL1356	Dickies Industrial Services, Inc.		One Atlantic Center Fourteenth Floor 1201 West Peachtree Street, NW	
130036LL1349			Atlanta, GA 30309-3488 (404) 572-6647	

Appendix C

Summary of Hours – for VRP

Appendix C Documentation of Work Performed by the Professional Engineer Since the Previous VRP Submittal

Dickies Industrial Services, Inc. HSI # 10127 College Park, Georgia

Month	Number of Hours Invoiced by Shanna Thompson, P.E.		Additional of the mode by the manual monipolity in the		
May-10	89	hours	Oversee Soil Removal and Confirmation Sampling		
Jun-10	86	hours	Oversee Soil Removal and Confirmation Sampling		
Jul-10	35	hours	Data Management from Soil Removal Activities - Backfill, Cleaning, Documentation		
Aug-10	66	hours	Draft Voluntary Compliance Status Report		
Sep-10	38	hours	Oversee final soil delineation samples and survey / VCSR Revisions		
Oct-10	30	hours	Oversee Annual Ground Water Sampling Event and Vapor Intrusion Assessment		
Nov-10	16	hours	Oversee Vapor Intrusion Assessment		
Dec-10	27	hours	Prepare Soil Removal Report		
Jan-11	13	hours	Finalize Vapor Intrusion Assessment		
Feb-11	21	hours	Oversee Additional Well Installation and Sampling / VCSR Modifications		
Mar-11	66	hours	Completion and Distribution of VCSR		

Appendix D

RRS Approval Information

Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, SE, Suite East 1462, Atlanta, Georgia 30334
Chris Clark, Commissioner
Environmental Protection Division
F. Allen Barnes, Director
Hazardous Waste Management Branch
404 657 8600

MEMORANDUM

TO:

Jacki Scarbary, Environmental Specialist

Hazardous Sites Response Program

FROM:

Greg Gilmore, Geologist &

Hazardous Sites Response Program

THROUGH:

Antonia Beavers, Acting Unit Coordinator

Hazardous Sites Response Program

DATE:

February 23, 2010

RE:

Dickies Industrial Services

Email from Joan Sasine regarding Leaching Calculations

HSI# 10127

Discussion:

I have reviewed the above referenced document and offer the following comments:

Comments:

1. EPD concurs that the Soil Screening Level (SSL) value 0.877 mg/kg calculated using a default Dilution Attenuation Factor (DAF) of 20 has been shown to be protective of groundwater. This value is based on total and SPLP concentrations used to calculate a site-specific K_d value. Please continue the excavation as planned.

Notes to CO:

I cannot find out who originally calculated the site-specific Kd value in the past. I do not think that we can go back and recalculate a value that has already been determined to be protective of groundwater at the site. Since we have already approved this number in the letter dated October 12, 2005 then we should use the value provided by EPD. If the consultant would like to change the number you can have them resubmit calculations for review and at that time we can reevaluate the Total vs. SPLP data to determine if a new number is warranted.

From:

"Sasine, Joan" < Joan.Sasine@BryanCave.com>

To:

1

"jacki.scarbary@dnr.state.ga.us" <jacki.scarbary@dnr.state.ga.us>, "'s...

CC:

'Antonia Beavers' <Antonia.Beavers@dnr.state.ga.us>

Date:

11:48 AM 1/22/10

Subject:

Dickies Industrial Services HSI Site

Attachments:

bc.jpg; 2nd Report Response.pdf

Attached is a 10/12/05 letter from EPD discussing the RRS for PCE. It states on page 2 that the Kd is 8.5L/kg; the DAF is 20; and the SSL is .877mg/kg. I just want to be sure, before we begin excavating, that the Type 4 RRS for PCE approved by EPD is .877 mg/kg. I would appreciate your confirmation. Thanks so much, Joan.

[http://www.ecave.net/marketing/sigs/WDC901/bc.jpg] Joan B. Sasine Partner

One Atlantic Center | Fourteenth Floor | 1201 West Peachtree Street, NW | Atlanta, GA 30309-3488 t: 404.572.6647 | f: 404.572.6999 | e: joan.sasine@bryancave.com<mailto:joan.sasine@bryancave.com>

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Georgia Department of Natural Resources

2 Martin Luther King Jr. Drive, S.E., Suite 1462 East, Atlanta, Georgia 30334 Noel Holcomb, Commissioner Environmental Protection Division Carol A. Couch, Ph.D., Director 404/657-8600

October 12, 2005

CERTIFIED MAIL Return Receipt Requested

Mr. Jack D. Riggenbach ERM-EnvironClean, LLC 300 Chastain Center Blvd., Suite 375 Kennesaw, GA 30144

Re:

Second Annual Report on Effectiveness of Corrective Action dated June 30, 2005

Your Letter dated January 7, 2005 Former Dickies Industrial Services Site College Park, Georgia, HSI# 10127

Dear Mr. Riggenbach:

The Georgia Environmental Protection Division (EPD) has received and reviewed your letter dated January 7, 2005 regarding Soil-Water Partition Equation/calculation of SSLs and Type 4 Risk Reduction Standard (RRS) for soil and groundwater and your Second Annual Report on Effectiveness of Corrective Action (Report) dated June 30, 2005 for Former Dickies Industrial Services site. EPD provides the following comments on your Report and issues regarding Soil-Water Partition Equation/calculation of SSLs and Type 4 RRS for soil and groundwater.

Report

EPD concurs with your Conclusions and Recommendations except your proposed change for soil and groundwater sampling activities.

Soil: Please keep AS-23, AS-31, AS-39, and GP-5G as soil sampling locations, as your proposed Type 4 RRS value for tetrachloroethene has not been approved by EPD.

Groundwater: Please monitor MW-34 annually instead of biannually to better monitor the movement/change of the contamination plume.

Kd and Soil Screening Level (SSL) Calculations

In reviewing your totals vs. SPLP data in your April 15, 2004 letter for the calculation of a site-specific K_d value of tetrachloroethene, you included data sets with total concentrations outside one order of magnitude of your current calculated soil screening level (SSL) (4 mg/kg) and your previously calculated SSL (29.9 mg/kg). Since the relationship between total concentrations and SPLP data is not linear, results outside an order of magnitude of the calculated SSL will yield inaccurate results.

Williamson-Dickie Manufacturing Company October 12, 2005 Page 2

EPD has calculated a site-specific K_d value based on your total concentrations and SPLP concentrations for the site. Based on the site-specific data, the appropriate K_d value is 8.5 L/kg. Using a dilution attenuation factor (DAF) of 20, the SSL that is protective of groundwater is 0.877 mg/kg.

Type 4 RRS for Soil and Groundwater

The Type 4 risk reduction standards (RRSs) for chemicals in groundwater obtained by using a K factor of 0.25 L/m³ and presented in Table 2-3 of the Report, are correct except for trichloroethene. The correct Type 4 RRS for trichloroethene in groundwater should be 0.0012 mg/L instead of 0.012 mg/L on Table 2-3.

The value given for trichloroethene, calculated from RAGS equation 6, is incorrect. This value resulted from the use of a Target Risk (TR) of 10^{-4} instead of 10^{-5} . The correct value for trichloroethene should be 1.33 mg/kg instead of 1.33E+01 mg/kg on Table 2-7.

If you have any questions regarding this matter, please contact Mr. Yue Han at 404-657-8600.

Sincerely,

Alexandra Y. Cleary

Unit Coordinator

Hazardous Sites Response Program

AYC/yh

cc: Joan Sasine File: HSI# 10127

Table 1-2

Risk Reduction Standards for Soil

Former Dickies Industrial Services, Inc.

HSI Site No. 10127 mg/kg

	Type 3	(mg/kg)	Type 4 (mg/kg)	
Chemical	Surface Soils	Soils >2' Below Surface	Surface Soils	Soils >2' Below Surface
1,1-dichloroethene	0.7	0.7	NC	NC
cis-1,2-dichlorothene	0.5	0.5	18.9	18.9
Tetrachloroethene	0.5	0.5	.877*	.877*
Trichloroethene	0.5	0.5	0.36	0.36
Vinyl Chloride (adult)	0.2	0.2	0.03	0.03

Concentration to which site will be certified

Source: ERM letter submittal to EPD on January 7, 2005

 $^{^{\}ast}$ RRS was modified to be in compliance with the EPD letter to ERM dated October 12, 2005.

Appendix E

Vapor Intrusion Assessment – Vapor Probe Design and Locations

<u>App E - 2010 Vapor Intrusion Assessment Photo Log - HSI 10127</u>



Photo 1

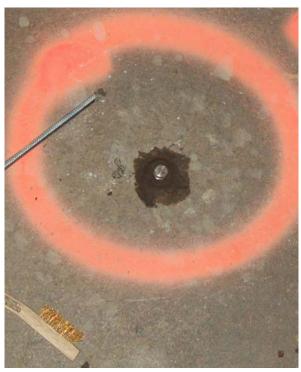


Photo 2

App E - 2010 Vapor Intrusion Assessment Photo Log - HSI 10127



Photo 3

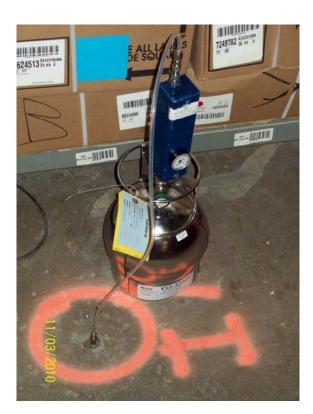
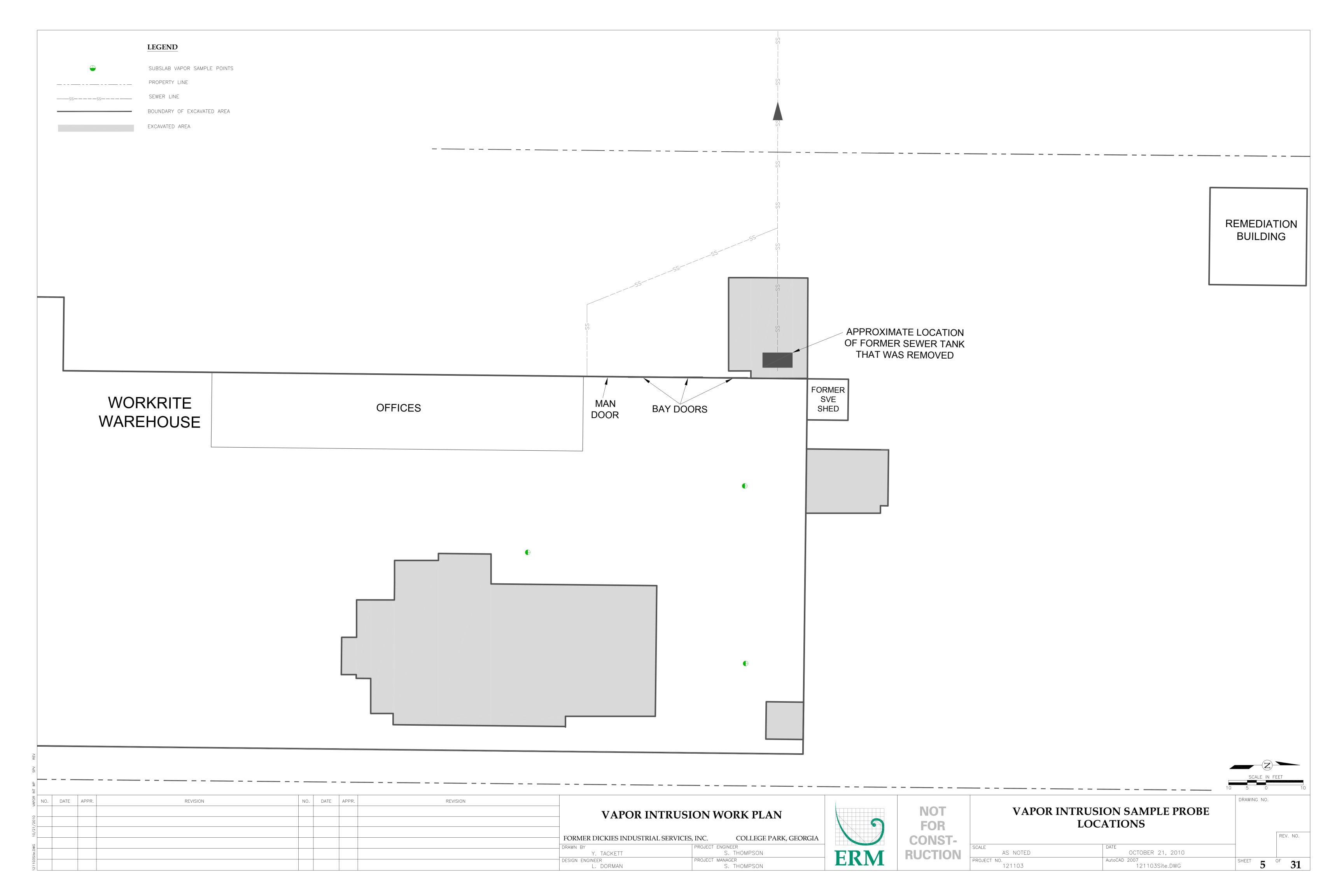


Photo 4



Appendix F

Vapor Intrusion Assessment – Laboratory Analytical Data Reports



11/16/2010 Mr. Lane Dorman ERM-Southeast 300 Chastain Center Blvd. Suite 375

Kennesaw GA 30144

Project Name: Project #:

Workorder #: 1011158

Dear Mr. Lane Dorman

The following report includes the data for the above referenced project for sample(s) received on 11/5/2010 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager



WORK ORDER #: 1011158

Work Order Summary

CLIENT: Mr. Lane Dorman BILL TO: Mr. Lane Dorman

ERM-Southeast ERM-Southeast

300 Chastain Center Blvd. Suite 375 300 Chastain Center Blvd. Suite 375

Kennesaw, GA 30144 Kennesaw, GA 30144

PHONE: 770-590-8383 **P.O.** #

FAX: 770-423-2151 PROJECT #

DATE RECEIVED: 11/05/2010 CONTACT: Ausha Scott

DATE COMPLETED: 11/12/2010

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	V-1	Modified TO-15	2.0 "Hg	5 psi
02A	V-2	Modified TO-15	2.0 "Hg	5 psi
03A	V-3	Modified TO-15	4.0 "Hg	5 psi
04A	V-3 dup	Modified TO-15	4.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Sinda d. Fruman

DATE: <u>11/16/10</u>

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP - AI 30763, NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020



LABORATORY NARRATIVE EPA Method TO-15 ERM-Southeast Workorder# 1011158

Four 6 Liter Summa Canister samples were received on November 05, 2010. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample V-3 did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

The Chain of Custody (COC) information for sample V-2 did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: V-1 Lab ID#: 1011158-01A

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Tetrachloroethene	0.72	3.6	4.9	24

Client Sample ID: V-2 Lab ID#: 1011158-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Trichloroethene	0.72	1.5	3.9	8.1	
Tetrachloroethene	0.72	6.0	4.9	40	

Client Sample ID: V-3 Lab ID#: 1011158-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.78	1.6	4.2	8.8
Tetrachloroethene	0.78	35	5.2	240

Client Sample ID: V-3 dup

Lab ID#: 1011158-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.78	1.5	4.2	8.3
Tetrachloroethene	0.78	33	5.2	230



Client Sample ID: V-1 Lab ID#: 1011158-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111012	Date of Collection: 11/2/10 1:18:00 PM
Dil. Factor:	1.44	Date of Analysis: 11/10/10 01:16 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
Trichloroethene	0.72	Not Detected	3.9	Not Detected
Tetrachloroethene	0.72	3.6	4.9	24
trans-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
1,4-Dioxane	2.9	Not Detected	10	Not Detected

•	0/ 5	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: V-2 Lab ID#: 1011158-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111013	Date of Collection: 11/2/10 1:37:00 PM
Dil. Factor:	1.44	Date of Analysis: 11/10/10 01:52 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
Trichloroethene	0.72	1.5	3.9	8.1
Tetrachloroethene	0.72	6.0	4.9	40
trans-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
1,4-Dioxane	2.9	Not Detected	10	Not Detected

0	0/ 0	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: V-3 Lab ID#: 1011158-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111014	Date of Collection: 11/2/10 2:17:00 PM
Dil. Factor:	1.55	Date of Analysis: 11/10/10 02:31 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.78	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Trichloroethene	0.78	1.6	4.2	8.8
Tetrachloroethene	0.78	35	5.2	240
trans-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
1,4-Dioxane	3.1	Not Detected	11	Not Detected

_		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: V-3 dup Lab ID#: 1011158-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111015	Date of Collection: 11/2/10 2:17:00 PM
Dil. Factor:	1.55	Date of Analysis: 11/10/10 03:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.78	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Trichloroethene	0.78	1.5	4.2	8.3
Tetrachloroethene	0.78	33	5.2	230
trans-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
1,4-Dioxane	3.1	Not Detected	11	Not Detected

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: Lab Blank Lab ID#: 1011158-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111005a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/10/10 08:31 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1.4-Dioxane	2.0	Not Detected	7.2	Not Detected

Surrogates	%Recovery	Method Limits	
Juitogales	/orcecovery	Lillits	
1,2-Dichloroethane-d4	94	70-130	
Toluene-d8	99	70-130	
4-Bromofluorobenzene	98	70-130	



Client Sample ID: CCV Lab ID#: 1011158-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/10/10 07:20 AM

Compound	%Recovery
Vinyl Chloride	87
cis-1,2-Dichloroethene	93
Trichloroethene	84
Tetrachloroethene	85
trans-1,2-Dichloroethene	90
1,4-Dioxane	94

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: LCS Lab ID#: 1011158-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/10/10 07:41 AM

Compound	%Recovery
Vinyl Chloride	93
cis-1,2-Dichloroethene	94
Trichloroethene	90
Tetrachloroethene	91
trans-1,2-Dichloroethene	91
1.4-Dioxane	103

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: LCSD Lab ID#: 1011158-07AA

MODIFIED EPA METHOD TO-15 GC/MS

ı			
	File Name:	d111004	Date of Collection: NA
	Dil. Factor:	1.00	Date of Analysis: 11/10/10 08:00 AM

Compound	%Recovery
Vinyl Chloride	90
cis-1,2-Dichloroethene	96
Trichloroethene	88
Tetrachloroethene	91
trans-1,2-Dichloroethene	91
1,4-Dioxane	98

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130



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180 BLUE RAVINE ROAD, SUITE B (916) 985-1000 FAX (916) 985-1020 FOLSOM, CA 95630-4719

Page _

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Only Fedy	Lab Shipper Name Air Bill #	Relinquished by: (signature) Date/Time Reco	Relinquished by: (signature) Date/Time	HelizapyShep by: (signature) Date/Time Hecc 11/3/10 1730 F.				0.763 7/4	ONA V-3 duo	03 V-W	02A V-2	0/A \(\sigma - 1\)	Lab I.D. Field Sample I.D. (Location)		Phone 770-590-5383 Fax	tarn Couts City To	Company Fig. W. Sign) Canal Company Fig. W. Co	Project Manager Shanna Thompson
7		Received by: (signature)	Received by: (signature)	Fed Ex					34447	5588	1337	5% t.S	Can *			GAZIP 30	Transport	
2 5	Temp (°C)	90	_	11/3/10	200				11/2/10	OIR/III	11/2/10	11/2/10	of Collection	Date	Projec	Project #	P.O. #	Proje
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Yes No		<u>0</u>		Analyze	N .				TO-15 Mod	TO-15 Mad	TO-15 Mad	TO-15 Med	Analyses Requested			- Control of the Cont		
o (None	Custody Seals Intact?		trans, a DOE, VO, 1,7-10 oxane						22	8	30	SIR	sted Initial	Cani	specify	Rush	Normal	Turn Around
10	Work () (0)	CE	and the second s				45	3.5	ಬ	W	Final	ster Pres		Pressu	Date:	garanti (Filia)
1011158	Work Order#	The state of the s	J-1- Dioxane	FOT PCE, TCE, CISTANA									Receipt Final	Canister Pressure/Vacuum	N ₂ He	Pressurization Gas:		Lab Use Only Pressurized by:

Appendix G

Vapor Intrusion Assessment – Modeling Input and Output

DATA ENTRY SHEET

GW-SCREEN Version 3.1; 02/04	CALCULATE RISK-E	BASED GROUNDW YES	ATER CONCENT	RATION (enter "X" in "YE	ES" box)		
Reset to Defaults	CALCULATE INCRE (enter "X" in "YES" b			OUNDWATER CONCEN	ITRATION		
		YES	X				
	ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C _W (µg/L)	C	Chemical	=		
	127184	1.10E+02	Tetrac	chloroethylene	I		
MORE	ENTER Depth	ENTER	ENTER	ENTER			
<u> </u>	below grade to bottom of enclosed space floor, L _F (cm)	Depth below grade to water table, L _{WT} (cm)	SCS soil type directly above water table	Average soil/ groundwater temperature, T _S (°C)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q _{soil} (L/m)		
	200	807.72	SI	18.3333	= 7		
MORE ↓	ENTER Vadose zone SCS Soil type (used to estimate Soil vapor permeability)	OR •	ENTER User-defined vandose zone soil vapor permeability, k _v (cm²)	ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm³)	ENTER Vadose zone soil total porosity, n ^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^{\vee} (cm³/cm³)
	SI			SI	1.35	0.489	0.167
MORE ↓	ENTER Target risk for carcinogens, TR (unitless) 1.0E-06	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT _C (yrs)	ENTER Averaging time for noncarcinogens, AT _{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	
END	groundwater c						

RESU	I TC	CL		- $-$
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RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (µg/L)	
NA	NA	NA	2.00E+05	NA	

Incremental	Hazard
risk from	quotient
vapor	from vapor
intrusion to	intrusion to
indoor air,	indoor air,
carcinogen	noncarcinogen
(unitless)	(unitless)
7.0E-06	4.6E-03

MESSAGE SUMMARY BELOW:

END

1 of 1

DATA ENTRY SHEET

GW-SCREEN Version 3.1; 02/04	CALCULATE RISK-E	BASED GROUNDW	ATER CONCENT	RATION (enter "X" in "YE	S" box)		
		YES					
Reset to Defaults	CALCULATE INCRE (enter "X" in "YES" be			OUNDWATER CONCENT	TRATION		
		YES	X				
	ENTER	ENTER Initial					
	Chemical	groundwater					
	CAS No. (numbers only,	conc., C _W					
	no dashes)	(μg/L)	(Chemical	=		
	79016	6.20E+00	Trich	nloroethylene	I		
MORE	ENTER Depth	ENTER	ENTER	ENTER			
₩	below grade to bottom	Depth		Average soil/		ENTER Average vapor	
	of enclosed	below grade	SCS	groundwater		flow rate into bldg.	
	space floor,	to water table,	soil type	temperature,		ave blank to calcula	te)
	L _F	L _{WT}	directly above	T _S		Q _{soil}	
	(cm)	(cm)	water table	(°C)	= :	(L/m)	
	200	807.72	SI	18.3333			
MORE 🖖							
<u> </u>	ENTER		ENTER				
	Vadose zone SCS		User-defined vandose zone	ENTER Vadose zone	ENTER Vadose zone	ENTER Vadose zone	ENTER Vadose zone
	soil type		soil vapor	SCS	soil dry	soil total	soil water-filled
	(used to estimate	OR	permeability,	soil type	bulk density,	porosity,	porosity,
	soil vapor		k_v	Lookup Soil	$\rho_b^{\ \ V}$	n ^V	$\theta_{\mathbf{w}}^{\ \ V}$
	permeability)		(cm ²)	Parameters	(g/cm ³)	(unitless)	(cm ³ /cm ³)
	SI			SI	1.35	0.489	0.167
MORE							
•	ENTER Target	ENTER Target hazard	ENTER Averaging	ENTER Averaging	ENTER	ENTER	
	risk for	quotient for	time for	time for	Exposure	Exposure	
	carcinogens,	noncarcinogens,	carcinogens,	noncarcinogens,	duration,	frequency,	
	TR	THQ	AT _C	AT _{NC}	ED	EF	
	(unitless)	(unitless)	(yrs)	(yrs)	(yrs)	(days/yr)	
	1.0E-06	1	70	30	30	350	
	Used to calcula groundwater co						

END

FSI	ш.	TΟ	SI	н	F	F٦	Г

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Hazard

quotient from vapor

intrusion to indoor air,

noncarcinogen

(unitless)

2.4E-03

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)		Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)
					•	
NA	NA	NA	1.47E+06	NA		4.6E-06

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

END

1 of 1

Appendix H

Soil Analytical Data – Additional 2010 Samples to Delineate West Boundary

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



October 01, 2010

Shanna Thompson ERM-Southeast 300 Chastain Center Blvd, Suite 375 Kennesaw GA 30144

TEL: (770) 590-8383 FAX: (770) 590-9164

RE: Williamson Dickie

Dear Shanna Thompson: Order No: 1009I42

Analytical Environmental Services, Inc. received 5 samples on September 24, 2010 11:05 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- -NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Brian Rohr

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

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	ma 1 (4 a 2 77	Kenne Su FAX CON	astain (1 W, GA) 190-0 Jong Ta	30	144		826015 (Shorth)			979	Dams 12-6 CE	11.00.000			www.aesatlanta.com to check on the status of	rs
	(110) 590 -8385	(//»	160-6	<u> [[b]</u>			3		-PCE	1-2	3	ĺŝ	3		your results, place bottle orders, etc.	ıtaine
SAMPL	(770) 590 -8383 EDBY: Joe Tan	SIGNATURE:	Jong Ta	<u>^</u>			50.00	77	7-1	9-21-B	¥ ;	ع ۓ			orders, etc.	No # of Containers
	•	SAN	1PLED			es)	8	9/			43					# 0N
#	SAMPLE ID			Q.	Composite	Matrix (See codes)	-77		J. c40.		ERVAT:	ION (Se	e codes)	111	REMARKS	
		DATE	TIME	Grab	Cor	Mat (See	5/4	<i>†</i>	MA							
1	ERM-SB-A-4	9/23/10	1055	レ		50	M									4
2	ERM-SB-A-8		1105			1										
3	ERM-SB-B-8		1015													
4	ERM-SB-A-8 ERM-SB-B-8 ERM-SB-C-4	I J	0930	U		V	V									
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Or	Aux Tan 9/23/10 1300	1:	Ź		9.2	2:05	PROJ	ECT NAI	ME:	ぴかっ	0	iuk	-		Total # of Containers	16
3:	QUISHED BY DATE/TIME 2/23/10 1300 9-24-17	2: 10 3:	afi 9/2	24/12			PROJ SITE	ECT #: ADDRE:	ss: 2	+11	Sull	iva	n kul	· ,	Turnaround Time Request Standard 5 Business Days 2 Business Day Rush Next Business Day Rush	
SPECL	AL INSTRUCTIONS/COMMENTS:	OUT 9 /	SHIPMENT	METHO VIA:	OD		1114	ICE TO: IFFEREN				• • •	ניקיייי	-07V	Same Day Rush (auth req.) Other	
		1	/ NT FedEx UI EYHOUND 01	VIA: PS MAI I'HER	IL COU	RIER	QUO	 ГЕ #:				PC)#:		STATE PROGRAM (if any): E-mail? Y N; Fax? Y N DATA PACKAGE: I II III	IV
	LES RECEIVED AFTER 3PM OR SATURDAY ARE CONS						F NO		IARKE	D ON C	COC AI	ES WIL	L PROCE	ED AS STANDARD		

Client: ERM-SoutheastProject: Williamson Dickie

Lab ID: 1009I42

Case Narrative

Date:

1-Oct-10

Sample Receiving Nonconformance:

A Trip Blank was provided but not listed on the Chain of Custody. The trip blank was analyzed at no cost to the client.

Client: ERM-Southeast Client Sample ID: ERM-SB-A-4

Project: Williamson Dickie Collection Date: 9/23/2010 10:55:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-001 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW	5035)			
1,4-Dioxane	BRL	180		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Vinyl chloride	BRL	12		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
1,1-Dichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
trans-1,2-Dichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
cis-1,2-Dichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Trichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Tetrachloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Surr: 4-Bromofluorobenzene	94.6	58.2-140		%REC	135698	1	09/29/2010 17:53	GK
Surr: Dibromofluoromethane	102	71.1-132		%REC	135698	1	09/29/2010 17:53	GK
Surr: Toluene-d8	96.2	77.6-119		%REC	135698	1	09/29/2010 17:53	GK
PERCENT MOISTURE D2216								
Percent Moisture	14.1	0		wt%	R181271	1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client: ERM-Southeast Client Sample ID: ERM-SB-A-8

Project: Williamson Dickie Collection Date: 9/23/2010 11:05:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-002 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW	5035)			
1,4-Dioxane	BRL	170		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Vinyl chloride	BRL	11		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
1,1-Dichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
trans-1,2-Dichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
cis-1,2-Dichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Trichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Tetrachloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Surr: 4-Bromofluorobenzene	92.5	58.2-140		%REC	135698	1	09/29/2010 19:17	GK
Surr: Dibromofluoromethane	101	71.1-132		%REC	135698	1	09/29/2010 19:17	GK
Surr: Toluene-d8	96.3	77.6-119		%REC	135698	1	09/29/2010 19:17	GK
PERCENT MOISTURE D2216								
Percent Moisture	16.5	0		wt%	R181271	1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client: ERM-Southeast Client Sample ID: ERM-SB-B-8

Project: Williamson Dickie Collection Date: 9/23/2010 10:15:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-003 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW:	5035)			
1,4-Dioxane	BRL	150		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Vinyl chloride	BRL	9.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
1,1-Dichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
trans-1,2-Dichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
cis-1,2-Dichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Trichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Tetrachloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Surr: 4-Bromofluorobenzene	93.3	58.2-140		%REC	135698	1	09/29/2010 19:48	GK
Surr: Dibromofluoromethane	102	71.1-132		%REC	135698	1	09/29/2010 19:48	GK
Surr: Toluene-d8	96.1	77.6-119		%REC	135698	1	09/29/2010 19:48	GK
PERCENT MOISTURE D2216								
Percent Moisture	16.5	0		wt%	R181271	1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client: ERM-Southeast Client Sample ID: ERM-SB-C-4

Project: Williamson Dickie Collection Date: 9/23/2010 9:30:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-004 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW:	5035)			
1,4-Dioxane	BRL	150		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Vinyl chloride	BRL	10		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
1,1-Dichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Trichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Tetrachloroethene	6.0	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Surr: 4-Bromofluorobenzene	88.8	58.2-140		%REC	135698	1	09/29/2010 20:18	GK
Surr: Dibromofluoromethane	102	71.1-132		%REC	135698	1	09/29/2010 20:18	GK
Surr: Toluene-d8	95.6	77.6-119		%REC	135698	1	09/29/2010 20:18	GK
PERCENT MOISTURE D2216								
Percent Moisture	13.8	0		wt%	R181271	. 1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client:ERM-SoutheastClient Sample ID:TRIP BLANKProject:Williamson DickieCollection Date:9/24/2010Lab ID:1009I42-005Matrix:Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	135636	1	09/28/2010 16:12	GK
Vinyl chloride	BRL	2.0		ug/L	135636	1	09/28/2010 16:12	GK
1,1-Dichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
Trichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
Tetrachloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
Surr: 4-Bromofluorobenzene	89.6	60.1-127		%REC	135636	1	09/28/2010 16:12	GK
Surr: Dibromofluoromethane	107	79.6-126		%REC	135636	1	09/28/2010 16:12	GK
Surr: Toluene-d8	96.3	78-116		%REC	135636	1	09/28/2010 16:12	GK

Date:

1-Oct-10

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Less than Result value

Sample/Cooler Receipt Checklist

Client ERM		Work Order	1009I42
Checklist completed by Signature Date	9/24	/	
Carrier name: FedEx UPS Courier Client US	Mail Other	Γ	
Shipping container/cooler in good condition?	Yes _	No	Not Present
Custody seals intact on shipping container/cooler?	Yes	No	Not Present
Custody seals intact on sample bottles?	Yes	No	Not Present
Container/Temp Blank temperature in compliance? (4°C±2)*	Yes _	No ·	
Cooler #1 3.4° Cooler #2 Cooler #3	_ Cooler #4 _	Coo	ler#5 Cooler #6
Chain of custody present?	Yes _ $ u$	No	
Chain of custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample labels?	Yes _	No	
Samples in proper container/bottle?	Yes _	No	
Sample containers intact?	Yes _	No	
Sufficient sample volume for indicated test?	Yes _	No	
All samples received within holding time?	Yes	No	
Was TAT marked on the COC?	Yes _	No	
Proceed with Standard TAT as per project history?	Yes	No	Not Applicable
Water - VOA vials have zero headspace? No VOA vials su	bmitted	Yes _	No
Water - pH acceptable upon receipt?	Yes _	No	Not Applicable
Adjusted?		•	
Sample Condition: Good Other(Explain)			
(For diffusive samples or AIHA lead) Is a known blank includ	ed? Yes	_ N	

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

^{*} Samples do not have to comply with the given range for certain parameters.

Client: ERM-Southeast

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

10 of 13

ERM-Southeast
Williamson Dickie

ANALYTICAL QC SUMMARY REPORT

Workorder: 1009I42

Project Name:

BatchID: 135636

R RPD outside limits due to matrix

Date:

1-Oct-10

Sample ID: MB-135636 SampleType: MBLK	Client ID: TestCode: Vol	atile Organic Compo	unds by GC/MS	SW8260B	Un Bat	its: ug/L chID: 135636		Date: 09/28 lysis Date: 09/28		Run No: 181090 Seq No: 3768672
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
eis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
rans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Γrichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	45.59	0	50	0	91.2	60.1	127	0	0	0
Surr: Dibromofluoromethane	51.15	0	50	0	102	79.6	126	0	0	0
Surr: Toluene-d8	47.30	0	50	0	94.6	78	116	0	0	0
Sample ID: LCS-135636	Client ID:				Un	its: ug/L	Prep	Date: 09/28	/2010	Run No: 181090
SampleType: LCS	TestCode: Vol	atile Organic Compo	unds by GC/MS	SW8260B	Bat	chID: 135636	Ana	lysis Date: 09/28	/2010	Seq No: 3768671
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	52.40	5.0	50	0	105	61.4	146	0	0	0
Γrichloroethene	44.89	5.0	50	0	89.8	74.4	130	0	0	0
Surr: 4-Bromofluorobenzene	47.77	0	50	0	95.5	60.1	127	0	0	0
Surr: Dibromofluoromethane	52.95	0	50	0	106	79.6	126	0	0	0
Surr: Toluene-d8	50.17	0	50	0	100	78	116	0	0	0
Sample ID: 1009J06-001AMS SampleType: MS	Client ID: TestCode: Vol	atile Organic Compo	unds by GC/MS	SW8260B	Un: Bat	its: ug/L chID: 135636		Date: 09/28 lysis Date: 09/28		Run No: 181090 Seq No: 3768674
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	66.95	5.0	50	0	134	48.8	172	0	0	0
Γrichloroethene	80.75	5.0	50	26.55	108	70.3	140	0	0	0
Surr: 4-Bromofluorobenzene	43.35	0	50	0	86.7	60.1	127	0	0	0
Qualifiers: > Greater than Result va	lue		< Less	than Result value			В	Analyte detected in the asso	ociated method	blank
BRL Below reporting limit			E Estim	ated (value above quantit	ation range)		Н	Holding times for preparati	on or analysis e	xceeded

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

1-Oct-10

Project Name: Williamson Dickie Workorder: 1009I42

BatchID: 135636

Sample ID: 1009J06-001AMS SampleType: MS	Client ID: TestCode: Vo	Uni Bat	its: ug/L chID: 135636		Date: 09/28 lysis Date: 09/28		Run No: 181090 Seq No: 3768674			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	50.80	0	50	0	102	79.6	126	0	0	0
Surr: Toluene-d8	47.68	0	50	0	95.4	78	116	0	0	0
Sample ID: 1009J06-001AMSD SampleType: MSD	Client ID: TestCode: Vo	olatile Organic Compo	Uni Bat	its: ug/L chID: 135636		Date: 09/28 lysis Date: 09/28		Run No: 181090 Seq No: 3768675		
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	71.19	5.0	50	0	142	48.8	172	66.95	6.14	21.6
Trichloroethene	77.48	5.0	50	26.55	102	70.3	140	80.75	4.13	20.3
Surr: 4-Bromofluorobenzene	43.92	0	50	0	87.8	60.1	127	43.35	0	0
Surr: Dibromofluoromethane	51.69	0	50	0	103	79.6	126	50.80	0	0
Surr: Toluene-d8	46.19	0	50	0	92.4	78	116	47.68	0	0

Qualifiers: Greater than Result value

> BRL Below reporting limit

Rpt Lim Reporting Limit

Estimated value detected below Reporting Limit

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

E Estimated (value above quantitation range)

Less than Result value

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

nalytical Environmental Services, Inc

Date: 1-Oct-10

Client: ERM-Southeast
Project Name: Williamson Dickie

outheast ANALYTICAL QC SUMMARY REPORT son Dickie

Workorder: 1009I42 **BatchID:** 135698

Sample ID: MB-135698 SampleType: MBLK	Client ID: TestCode: Vol	atile Organic Compo	unds by GC/MS	SW8260B	Uni Bat	its: ug/Kg chID: 135698		Date: 09/29 lysis Date: 09/29		Run No: 181182 Seq No: 3770484
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
ris-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
rans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	10	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	46.81	0	50	0	93.6	58.2	140	0	0	0
Surr: Dibromofluoromethane	49.27	0	50	0	98.5	71.1	132	0	0	0
Surr: Toluene-d8	46.46	0	50	0	92.9	77.6	119	0	0	0
Sample ID: LCS-135698	Client ID:				Uni	its: ug/Kg	Prep	Date: 09/29	/2010	Run No: 181182
SampleType: LCS	TestCode: Vol	atile Organic Compo	unds by GC/MS	SW8260B	Bat	chID: 135698	Ana	lysis Date: 09/29	/2010	Seq No: 3770485
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qua
1,1-Dichloroethene	57.82	5.0	50	0	116	66.1	158	0	0	0
Trichloroethene	48.48	5.0	50	0	97	74.5	137	0	0	0
Surr: 4-Bromofluorobenzene	47.13	0	50	0	94.3	58.2	140	0	0	0
Surr: Dibromofluoromethane	46.84	0	50	0	93.7	71.1	132	0	0	0
Surr: Toluene-d8	45.41	0	50	0	90.8	77.6	119	0	0	0
Sample ID: 1009E63-009AMS SampleType: MS	Client ID: TestCode: Vol	atile Organic Compo	unds by GC/MS	SW8260B	Uni Bat	its: ug/Kg-c chID: 135698		Date: 09/29 lysis Date: 09/29		Run No: 181182 Seq No: 3770487
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qua
,1-Dichloroethene	61.87	5.8	58.29	0	106	60.6	160	0	0	0
Trichloroethene	55.51	5.8	58.29	0	95.2	70.3	147	0	0	0
Surr: 4-Bromofluorobenzene	53.44	0	58.29	0	91.7	58.2	140	0	0	0
Qualifiers: > Greater than Result val	ue		< Less	than Result value			В	Analyte detected in the asso	ociated method b	olank

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

N Analyte not NELAC certified

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

12 of 13

BRL

Below reporting limit

Rpt Lim Reporting Limit

Estimated value detected below Reporting Limit

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

1-Oct-10

Project Name: Williamson Dickie Workorder: 1009I42

BatchID: 135698

Sample ID: 1009E63-009AMS SampleType: MS	Client ID: TestCode: V	Volatile Organic Compou	ands by GC/MS	SW8260B	Uni Bat	ts: ug/Kg-d chID: 135698			9/2010 9/2010	Run No: 181182 Seq No: 3770487
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	56.74	0	58.29	0	97.3	71.1	132	0	0	0
Surr: Toluene-d8	54.50	0	58.29	0	93.5	77.6	119	0	0	0
Sample ID: 1009E63-009AMSD SampleType: MSD	Client ID: TestCode:	olatile Organic Compou	ands by GC/MS	SW8260B	Uni Bat	ts: ug/Kg-d chID: 135698	-	lysis Date: 09/2	9/2010 9/2010	Run No: 181182 Seq No: 3770488
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	63.69	5.8	58.29	0	109	60.6	160	61.87	2.9	30.9
Trichloroethene	54.15	5.8	58.29	0	92.9	70.3	147	55.51	2.47	28
Surr: 4-Bromofluorobenzene	50.88	0	58.29	0	87.3	58.2	140	53.44	0	0
Surr: Dibromofluoromethane	57.17	0	58.29	0	98.1	71.1	132	56.74	0	0
Surr: Toluene-d8	56.07	0	58.29	0	96.2	77.6	119	54.50	0	0

Qualifiers: Greater than Result value

> BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

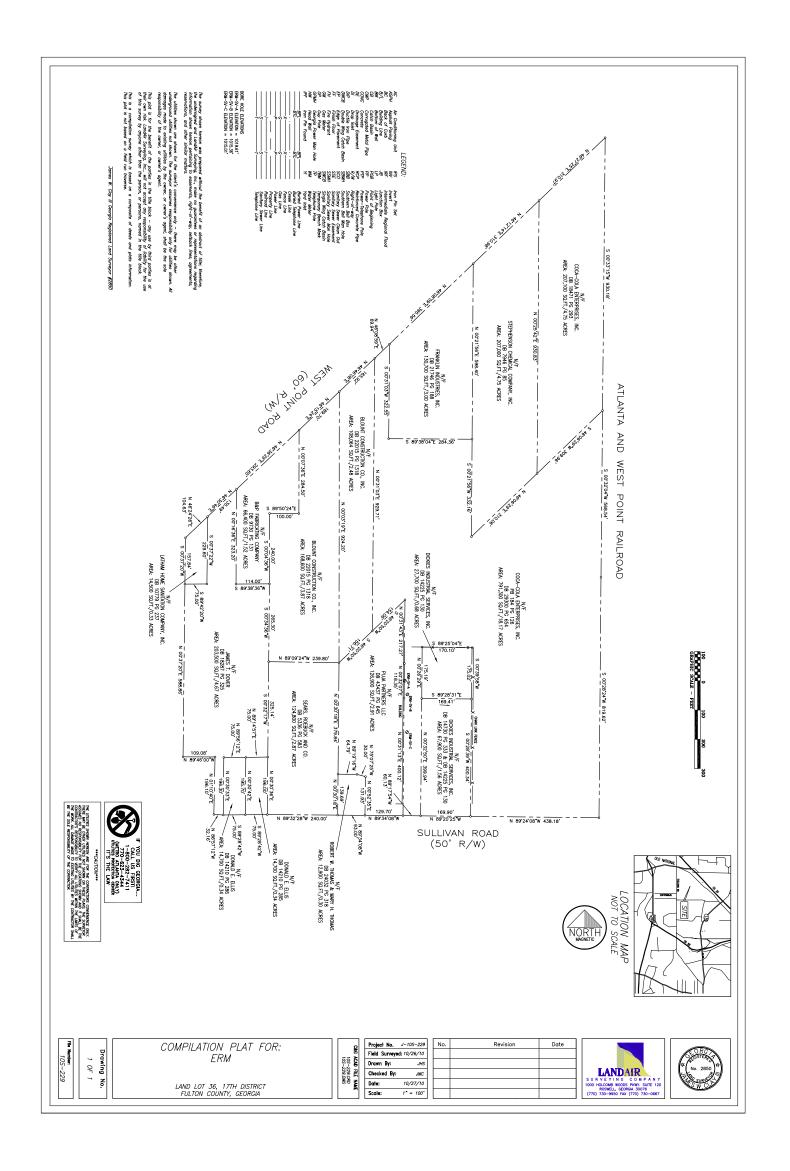
N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

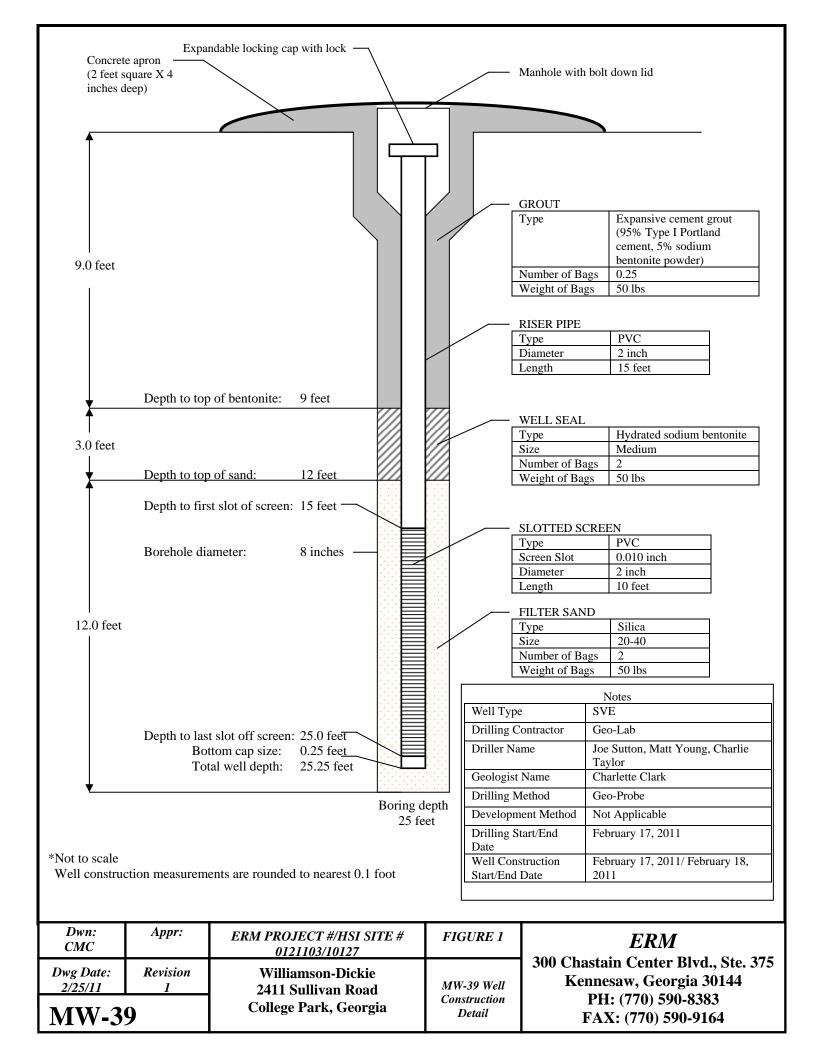
H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix



Appendix I

MW-39 Boring Log and Well Construction Diagram



100						
		Environmental				SOIL BORING # MW-39
						PROJECT NUMBER: 0121103
FR	M.	Resources Management				LOCATION: College Park, Georgia
DATE DRILLED						DRILLING COMPANY: EM-Services
START TIME:			10:00			DRILLERS NAME(S): Joe Sutton, Matt Young, Charlie Taylor
STOP TIME:			11:30			DRILL RIG/METHOD: Geo-Probe
COMPI	LETION	DEPTH:	25 ft bgs			SAMPLING METHOD: NA
		R LEVEL:				FIELD SCREENING EQUIPMENT:
BORIN	G DIAMI	ETER:	8" Nominal			LOGGED BY: C. Clark
WELL SCREEN LENGTH: 10 ft						Page 1 of 1
WELL			BLOW	INCHES	PID	
DETAIL	DEPTH	USCS	COUNTS	RECOVERED	(ppm)	DESCRIPTION
	-					
NIA	- -		NIA	NIA	NΙΔ	
NA	0 _		NA	NA	NA	Hand Auger to 6 ft below ground surface (bgs)- asphalt layer
						from 0-1 ft. Then reddish brown sandy CLAY
	† 					
	FΞ					
	- 4 -					
		CL		NIA	40	
NA	6-	CL	NA	NA	48	
	L					Reddish-orange CLAY with some silt, medium stiff, dry. Transitions
						to tan soft clay, slightly moist at 11 ft with trace mica
	8 =					
	= =					
	-10 -	CI		NIA	00	
NA		CL	NA	NA	60	
	12					Tan, soft, silty CLAY to 14 ft then reddish brown soft, silty clay
	- '2 -					
	-					
	14-					
	\vdash					
	16					
NA	t_ ∵	CL	NA	NA	60	
	- -					Moist, micaceous silt with trace CLAY. Very soft. Transitions to
	18 _					red and white, then at 20 ft becomes red sitly CLAY, soft, moist
<u> </u>	├					micaceous and red from 20 ft to 22 ft bgs
	-20					milicaceous and red from 20 ft to 22 ft bgs
NA	t	CL	NA	NA	60	
	- 22 -					SAA except wet. Red and white silty, micaceous CLAY. Very soft
	 					,
	24					
	 -26					
NA	├	CL	NA	NA	60	
	F =					Boring terminated at 27 ft bgs
						č č

Appendix J

Ground Water Analytical Data - MW-39





ERM	Client:		MSTN -				0121	103	Sampling Date: 2/23/11
	Site/Location:	2411 S	ulivan	ea.	College	Park	CA		Sampler's Name: Amy GINSUOM
Well Volume d = well diameter	Well ID: Total Depth (ft) ¹ : Depth to Water (ft): Well Diameter (in): e (gal) = 0,041d ² h: r (inches) h = length	14.13 21 11.9 th of water column	I (feet)	Pump Start/: Pur Total F	ump Type/Model: Tubing Material: Intake Depth (ft): Stop Purge Time: ge Rate (L/min) ² : turge Volume (L): ck all that apply):	+8f18 15' 10:00 0.1 4.0	И	□ vacuum jug	Sample Collection Time: 10:50 Sample Purge Rate (L/min) ³ : 0:1 Sample ID: MW-34 QA/QC Collected? USS QA/QC I.D. DUP Laboratory Analyses: VULS EDGO
TTON CONGLEC	- gaine	.0-	- Gamp	iilig Mediod (C)ie	ск ан шагарруу.			vacuum jug arge (all analytes)	
Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)		Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:10 10:15 10:20 10:35 10:35 10:40	19.98 20.10 20.13 19.80 20.39 20.39	1074 1079 1071 1070 1070 1070	6.01 5.39 5.60 5.60 5.40 5.43 5.40	5.06 5.00 4.90 4.90 4.90 4.90	331.5 330.7 337.1 244.2 349.3 251.4 334.4	4.61 5.26 5.97 3.60 2.96 2.98	1 2,0 2,5 3,0 3,5 4,0	14.42 14.45 14.47 14.49 14.50 14.51	Clearing prior, 100 milling Clearing ador, 100 milling SAA SAA SAA
Stabilizing Criteria ⁵	*/- 1°C	+/- 3%	+/- 10% (see note below) ⁷	+/- 9.1 unit	+/- 10 mV (see note. below) ³	+/- 10% or	(see note	(see note	

Criteria* 1°C 3% below) 0.1 unit below)* 10 N°Criteria* 1°C 3% below) 0.1 unit below)* 10 N°Criteria* 1°C 3% below) 0.1 unit below)* 10 N°Criteria* 1°C 3% below 1°C 3% below

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



February 28, 2011

Shanna Thompson ERM-Southeast 300 Chastain Center Blvd, Suite 375 Kennesaw GA 30144

TEL: (770) 590-8383 FAX: (770) 590-9164

RE: Williamson-Dickie

Dear Shanna Thompson: Order No: 1102J35

Analytical Environmental Services, Inc. received 3 samples on February 23, 2011 12:35 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- -NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Brian Rohr

Project Manager

CHAIN OF CUSTODY

3 785 Presidential Parkway, Atlanta GA 30340-3704

AES TEL:: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

Work Order: 1102135

Date: 2723111 Page 1 of 1

COMPANY: ERM Southeast	ADDRESS:	nastain	Cin ic	Y RII	id.			Α	NALYS	IS REQU	JESTED			Visit our website	
	Ste 375 Kenveso	nastain W ₁ 6A	304	14		0968								www.aesatlanta.com to check on the status of	
PHONE: 770-590-9383	FAX:			•		8								your results, place bottle	tainers
SAMPLED BY AMY GYISUOLD	SIGNATURE	y Yw	mile	1		[3								orders, etc.	# of Container
# SAMPLE ID		APLED	` `	1 1	(es)	707					Щ				% W
" SAMPLE ID			Grab	Composite	Matrix (See codes)	H	_	P	RESERV	ATION (S	See codes)	$\neg \neg$		REMARKS	
, MW-39	2/2/11	10:50	V	0	6W	X	+	\vdash	+	\vdash	++	$\dashv \dashv$	+	REPORT 24 HV TA	$\overline{}$
2 DILP 3 TPIP Blank	2/23/11		V		GW	X		П						Standard TAT	
3 Trip Blank	203/11														
4			<u> </u>									$\dashv \dashv$			
5		 	 	\vdash		\sqcup				-	\dashv	\dashv			
7	 			\vdash		┝┤	-	-	+	-	++	$\dashv \dashv$			
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14 DATE/TIME	DEGEN ED D	<u></u>	ĻĻ	<u> </u>										D. D. C. L.	
1:	1: L	12	9/9	3/11	DATE/TIME	PROJEC	CT NAM		ROJECT	INFOR	MATION_			RECEIPT	
any Dissured 2/3/11 1235	760			7/7		W	Miar	nov	<u>1- D</u>	ICKLE	7			Total # of Containers	
. J	2:			12	135	PROJEC	CT #: (1121	03	11. 1/01	2 101			Turnaround Time Request	
3:	3:					SITE A	DDRESS	Coll	POP	nnyar Davr	n pal homp			O Standard 5 Business Days O 2 Business Day Rush	
						SEND I	EPORT	то: 5	ndnn	a T	homp	M		Neut Dusings Day Puch	
REDOYT MULLI-DELICIST 2-TOF	OUT /	SHIPMENT	METHO VIA:	DD		INVOIO (IF DIF	E TO: FERENT	FROM A	ABOVE)		1			Same Day Rush (auth req.) Other	
trans-1,2-DCE, PLE. TUE, VINUI	IN	>	VIA:						,					STATE PROGRAM (if any):	
chloride and IA-Dioxne	CLIEN	FedEx UP	S MAII	L COUR	IER	OLIOTE								E-mail? Y/N; Fax? Y/N	IV
REPOYT MY: 1,1 - DE, CIST, 2DE TRANS-1,2-DCE, PCE, TCE, VINY) CHOVIDE AND IA-DIOXONE CAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIGNABLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION	DERED AS RE	CEIVED ON THE	HE NEXT	T BUSINE	ESS DAY; II	F NO TA	T IS MA	RKED	ON COC	AES WI	LL PROCE	ED AS STA	NDARD 7	DATA PACKAGE: I II III TAT.	1 7

Client: ERM-Southeast Client Sample ID: MW-39

Project Name: Williamson-Dickie Collection Date: 2/23/2011 10:50:00 AM

Date:

28-Feb-11

Lab ID: 1102J35-001 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	142561	1	02/24/2011 11:27	SB
Vinyl chloride	BRL	2.0		ug/L	142561	1	02/24/2011 11:27	SB
1,1-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
Trichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
Tetrachloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
Surr: 4-Bromofluorobenzene	90.5	64.7-130		%REC	142561	1	02/24/2011 11:27	SB
Surr: Dibromofluoromethane	90.9	80.7-129		%REC	142561	1	02/24/2011 11:27	SB
Surr: Toluene-d8	90.4	71.1-120		%REC	142561	1	02/24/2011 11:27	SB

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Client:ERM-SoutheastClient Sample ID:DUPProject Name:Williamson-DickieCollection Date:2/23/2011Lab ID:1102J35-002Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	142561	1	02/24/2011 11:55	SB
Vinyl chloride	BRL	2.0		ug/L	142561	1	02/24/2011 11:55	SB
1,1-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
Trichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
Tetrachloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
Surr: 4-Bromofluorobenzene	90.3	64.7-130		%REC	142561	1	02/24/2011 11:55	SB
Surr: Dibromofluoromethane	92.3	80.7-129		%REC	142561	1	02/24/2011 11:55	SB
Surr: Toluene-d8	89.1	71.1-120		%REC	142561	1	02/24/2011 11:55	SB

Date:

28-Feb-11

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Client:ERM-SoutheastClient Sample ID:TRIP BLANKProject Name:Williamson-DickieCollection Date:2/23/2011Lab ID:1102J35-003Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	V5030B)			
1,4-Dioxane	BRL	150		ug/L	142561	1	02/24/2011 10:58	SB
Vinyl chloride	BRL	2.0		ug/L	142561	1	02/24/2011 10:58	SB
1,1-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
Trichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
Tetrachloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
Surr: 4-Bromofluorobenzene	92.5	64.7-130		%REC	142561	1	02/24/2011 10:58	SB
Surr: Dibromofluoromethane	89.2	80.7-129		%REC	142561	1	02/24/2011 10:58	SB
Surr: Toluene-d8	90.4	71.1-120		%REC	142561	1	02/24/2011 10:58	SB

Date:

28-Feb-11

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Sample/Cooler Receipt Checklist

Client ERM		Work Orde	r Number	1102	135
Checklist completed by Signature Date	2-23-	11_			
Carrier name: FedEx UPS Courier Client U	S Mail Othe	r	_		
Shipping container/cooler in good condition?	Yes 🗹	No	Not Present	t	
Custody seals intact on shipping container/cooler?	Yes	No	Not Present	<u></u>	
Custody seals intact on sample bottles?	Yes	No	Not Present	_	
Container/Temp Blank temperature in compliance? (4°C±2)*	Yes V	No			
Cooler #1 Cooler #2 Cooler #3	Cooler #4 _	Cod	oler#5	Cooler #6	
Chain of custody present?	Yes	No			
Chain of custody signed when relinquished and received?	Yes	No			
Chain of custody agrees with sample labels?	Yes	No _			
Samples in proper container/bottle?	Yes _	No _			
Sample containers intact?	Yes 🗸	No _			
Sufficient sample volume for indicated test?	Yes _	No			
All samples received within holding time?	Yes 🗸	No			
Was TAT marked on the COC?	Yes _	No			
Proceed with Standard TAT as per project history?	Yes	No _	Not Applic	cable	
Water - VOA vials have zero headspace? No VOA vials so	ubmitted	Yes 👱	No _	_	
Water - pH acceptable upon receipt?	Yes _	No	Not Applie	cable	
Adjusted?	Che	cked by			
Sample Condition: Good Other(Explain)					
(For diffusive samples or AIHA lead) Is a known blank include	ded? Yes		V		

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

^{*} Samples do not have to comply with the given range for certain parameters.

Client: ERM-Southeast

ERM-Southeast
Williamson-Dickie

ANALYTICAL QC SUMMARY REPORT

Workorder: 1102J35

Project Name:

BatchID: 142561

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

28-Feb-11

Date:

Sample ID: MB-142561 SampleType: MBLK	Client ID: TestCode: Vo	olatile Organic Compo	unds by GC/MS	SW8260B	Un Ba	its: ug/L tchID: 142561		Date: 02/24 lysis Date: 02/24		Run No: 191162 Seq No: 3988922
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	44.37	0	50	0	88.7	64.7	130	0	0	0
Surr: Dibromofluoromethane	48.25	0	50	0	96.5	80.7	129	0	0	0
Surr: Toluene-d8	44.59	0	50	0	89.2	71.1	120	0	0	0
Sample ID: LCS-142561	Client ID:				Un	its: ug/L	Prep	Date: 02/24	/2011	Run No: 191162
SampleType: LCS	TestCode: Vo	olatile Organic Compo	unds by GC/MS	SW8260B	Bat	tchID: 142561	Ana	lysis Date: 02/24	/2011	Seq No: 3988913
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	39.63	5.0	50	0	79.3	60	140	0	0	0
Trichloroethene	50.57	5.0	50	0	101	70	130	0	0	0
Surr: 4-Bromofluorobenzene	50.45	0	50	0	101	64.7	130	0	0	0
Surr: Dibromofluoromethane	46.87	0	50	0	93.7	80.7	129	0	0	0
Surr: Toluene-d8	47.41	0	50	0	94.8	71.1	120	0	0	0
Sample ID: 1102I46-003AMS SampleType: MS	Client ID: TestCode: Vo	olatile Organic Compo	unds by GC/MS	SW8260B	Un Ba	its: ug/L tchID: 142561		Date: 02/24 lysis Date: 02/24		Run No: 191162 Seq No: 3989705
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	43.77	5.0	50	0	87.5	46.2	183	0	0	0
Trichloroethene	50.35	5.0	50	0	101	70.5	149	0	0	0
Surr: 4-Bromofluorobenzene	45.41	0	50	0	90.8	64.7	130	0	0	0
Qualifiers: > Greater than Result va	alue		< Less	than Result value			В	Analyte detected in the ass	ociated method	blank
DDI DI C F S										

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

N Analyte not NELAC certified

7 of 8

Below reporting limit

Rpt Lim Reporting Limit

Estimated value detected below Reporting Limit

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

28-Feb-11

BatchID: 142561

Project Name: Williamson-Dickie

Workorder: 1102J35

Sample ID: 1102I46-003AMS SampleType: MS	Client ID: TestCode:	Volatile Organic Compou	ands by GC/MS	SW8260B	Uni Bat	ts: ug/L chID: 142561		Date: 02/2 4 lysis Date: 02/2 4	4/2011 4/2011	Run No: 191162 Seq No: 3989705
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	45.02	0	50	0	90	80.7	129	0	0	0
Surr: Toluene-d8	43.63	0	50	0	87.3	71.1	120	0	0	0
Sample ID: 1102146-003AMSD SampleType: MSD	Client ID: TestCode:	Volatile Organic Compou	ands by GC/MS	SW8260B	Uni Bat	ts: ug/L chID: 142561		Date: 02/2 4 lysis Date: 02/2 4	4/2011 4/2011	Run No: 191162 Seq No: 3989842
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	45.78	5.0	50	0	91.6	46.2	183	43.77	4.49	20
Trichloroethene	50.76	5.0	50	0	102	70.5	149	50.35	0.811	20
Surr: 4-Bromofluorobenzene	43.10	0	50	0	86.2	64.7	130	45.41	0	0
Surr: Dibromofluoromethane	44.14	0	50	0	88.3	80.7	129	45.02	0	0
Surr: Toluene-d8	43.59	0	50	0	87.2	71.1	120	43.63	0	0

Qualifiers: Greater than Result value

> BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Appendix K

Ground Water Sampling Logs – October 2010

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							-1	1 2 DCE	41.1														
Sampling Date: 70 - 20 - 70	Sampler's Name: Charlette Clarl	Sample Collection Times $/405$	Sample Purge Rate (L/min) ³ : NA	Sample 1D: NW - 10 - 20 (0 1020 -0)	QA/QC Callected? //O	QAQCID.	Laboratory Analyses: TCE, PCE, VC , 1 , 1 DCE	ump head discharge (Inorganics including cyanide)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	6.3	lowered owner rate to . 2	0					Samole time 1405						
/03		à						U vacuum jug (SVOCs)	H ₂ O Depth	15.25	15.25	15.25	15.25	15.35	15.35								
Project No.: #0121/03		ふしもっこ	LDPE		O		٧,	no dischare	Purge Volume (L)	Start	1.5	2.5	3.5	4.5	5,5								
Project No.:		Peristo	14" L	1,11	1330	0.2	12 2	Geoda straw (V	Turbidity (NTUs)	61	13	0.75	0,80	0.54	14.0								
		Pump Type/Model: Peristaltic	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply):	ORP (mV)	500	108.0	10/.1	102,5	1031	103.5								
Dickie	¥	Pur	5	Pump Ir	Start/St	Purg	Total Pu	ng Method (chec	PH (SU)	04,40	324	3,42	3.40	5.38	3.35								
nson -	0 K						et)		DO (mg/L)	4.93	202.17	4,28	4,21	4.31	4,33								
Williamson - Dickie	SiterLocation: (D)/Page Pork	Well ID: MW-10	30	15.35	: :	,	f water column (fe	nerds leck	Spec. Cond. (mS/cm)	6.079	0.080	0.078	0.077	0.077	0.076								
Client:	Site/Location:	Well ID:	Total Depth (ft) 1:	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = 0.041d²h:	thes) h = length of	- 7	Temp.	18,95	18.77	18,78	18.80		91.81								
ERM			Ē	Dep	Wel	Weil Volume (g	d = well diameter (inches) h = length of water column (feet)	Well Condition: 400 d	Time	1330	1335	1340	5481	1350	13551	e e							

++- 10% or <10 NTUs

(see note below)*

(see note below)*

(

ERM.

Sampling Date: 10-20-10 Sampler's Name: Chock+4ft Clock	ime: /365	in) ³ : NA	Sample ID: MW - 104 - 2010 020 - 0/	Mo Mo	DAVOCID. THE MA	Laboratory Analyses: JCC, R. C., VC. 1., DC C. 1., 2. OCE	□ pump head discharge (Inorganics including cyanide) (++ ans + c i S)	
	Sample Collection Time:	Sample Purge Rate (L/min) ³ :	Sampl	QA/QC Collected?	QA/QC	Laboratory Analy	☐ vacuum jug (SVOCs) ☐ pump he	
Project No.: 01.21 (0.3)	Pump TypeModel: Ren Stal H'C	Tubing Material: 1/2, LDPL	Pump Intake Depth (II): 1906 5 0	Start/Stop Purge Time: 1,335	Purge Rate (L/min) ² : 0, 7	olume (L): 4.0 cc 3.5		(contract line) considerable armine amine solitorial
Client: Williamsen - Dickie StierLocation: Coilege Porte, CA	1	Tubin Tubin		Start/Stop Pi	Purge Rat	column (feet) Total Purge Volume (L):	Well Condition: 106d 10ed 5 10 14m 10 Lagraphing Method (check all that apply); Gooda straw (VOCs)	
ERM Client: W	Well ID: MW-10 A	Total Depth (ft) ¹ :	Depth to Water (ft): 13. (Well Diameter (in):	Well Volume (gal) = 0.041d ² h;	d = well diameter (inches) h = length of water column (feet)	Well Condition: 10ed , needs	

Spec. Cond. DO (mg/L)
F. 55.
0.00 6.47 66.4
3.09 6.09
6.17
8.49 6.21 58.
+/- 10% +/- 10 mV (see note +/- (see note

Criteria* 1*C 37% below; 100 miles program and sampling to relate resuspending fines that may be resulting on the well bashon.

(3) - Sampling the bot of from the resuspending fines that may be resulting on the well bashon.

(3) - Sampling the bot of from the resuspending fines that may be resulting on the well bashon.

(4) - Sampling the bot of from the resuspending that the relationship to the resuspending the second course of the resuspending that the resuspending that the resuspending that the relationship to the relationship to the relationship to the relationship to the relationship freedom.

(6) - For both and additional certainship of the Chromothod was reading all Sadarad Opening President.

(7) - Order is not sustainable for the relationship subject of the relationship freedom.

(8) - Order is not sustainable for the relationship subject of the relationship freedom.

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10-20-10 Sample Collection Time: 10 05 Duge Sample Purge Rate (L/min)³: NA Sampling Date: QA/QC I.D. QA/QC Collected? Project No.: 0(21103 Pump Type/Model: Pcn'5-tylhic 0,2 10 1 LPDE 0530 , 5 Start/Stop Purge Time: Tubing Material: Total Purge Volume (L): Pump Intake Depth (II): Purge Rate (L/min)²: Client: Williamson - Dickie Site/Location: College Park 000 10.0e d = well diameter (inches) h = length of water column (feet) Well ID: MW-Total Depth (ft)1: Well Diameter (in): Depth to Water (ft): Well Volume (gal) = $0.041d^2h$:

Sample 10: MW- | -20101021-C| Samplers Name: Charlete Char Laboratory Analyses: VCC SC see Chaulm

			_	_	_	_		_		_	_	_	_	_		_	_	_	_	_		_		_	_
SVOCs) pump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)	Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)				1.0 al				Collect Samo 4 p 1005															
U vacuum jug (ge (all analytes)	H ₂ O Depth	11.09	00.11	11.30	11.34	11.35	11.37	11.40	85															thee note
(OCs)	e = pump dischar	Purge Volume (L)	Start	7.0	0, 5	3.0	4.0	5.0	6.0																(see note
Soda straw (V	☐ Bladder pump	Turbidity (NTUs)	12	11	0	5.5	6.7	5.0	4,0																+/- 10% or
k all that apply):		ORP (mV)	77.6	85.9	77.4	3.96	82.1	85.9	86.8																+/- 10 mV (see note
ng Method (chec	بانار	Hd (DS)	5.63	4,88	5.13	5.15	5.02	49.4	4.84																*
	-	DO (mg/L)	10.65	10.33	10.07	10.25	10.03	19.77	16.60	9															+/- 10% (see note
POIT 12	12/2/21	Spec. Cond. (mS/cm)	1510	5,195	0.196	951.0	0.197	0.197	951.0																*
		Temp.	-			30.39	18,05	20.73	20.19																*
Well Condition:		Тіте	0260	0935	0460	2460	0550	5550	1000																Stabilizing
	hod (check all that apply): 🖅 Soda straw (VOCs) 🔝 vacuum jug (SVOCs)	POIT Sampling Method (check all that apply): Maroda straw (VOCs)	DO 14 TO Sampling Method (check all that apply): 4-80da straw (VOCs) U vacuum jug (SVOCs Conf. O. V.	DO 11 DO 12 Do 11 DO 12 DO 1	Control Cont	Control Cont	Control Dol 1 15 15 15 15 15 15 15	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Do 1 1 2 Sampling Method (check all that apply); LFGods straw (VOCs) Locate Lo	Conference Double Double	Creek DOIT Sampling Method (check all that apply): 456ds straw (VOCs) Juracum ing (SVOCs) Creek Cr	Control Cont	Conference DOIT Sampling Method (check all that apply); Mode Durbour Durbo	Control Cont	70. 20.01 10.05 10.00 10

(i) - Front unequare spath is believe or well until after progregs and stranging to notice researchesing time that may be research on the went contain.

(ii) - Front greate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less than the sampling cate to be interested to be contained to the cate of th

ERM

Client: Williams	W; 11/6 2500 - DX (1/7) Project No.: 0 (21103	Sampling Date: 10 20-10
Well ID: MW-4	Pump TypeModel: Ters Sta (17)	Sample Collection Time: 0990 S
Total Depth (ft) ¹ : 186	Tubing Material: 6 CAPE	Sample Purge Rate (L/min) ³ : NA
Depth to Water (ft): 9.89	Pump Intake Depth (tt): 73	Sample ID: M.W - 4 - 201010 21 - 0 1
Well Diameter (in):	Start/Stop Purge Time: 09 25 / 09 0	
Well Volume (gal) = 0.041d ² h:	Purge Rate (L/min)?: 0 . 1 ng L/m/ly	QA/QCI.D. NA
d = well diameter (inches) h = length of water column (feet)	Total Purge Volume (L);	Laboratory Analyses: VOCS 200 Chrim
Well Condition: april needs botts	Sampling Method (check all that apply); K soda straw (VOCs)	
	(applicate list) correspond amiss = amiss replace	

Water Prokish/ Puple hour cleaved with first reading 0.250 min Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.) Ctill about 10. Water clear, no parameters stable, Turbidily bowered giving rate to oil and min sediment. Just slight tick - Z 10.45 10.45 10,45 10.45 H₂O Depth 10.45 10,45 10,3 (see note below)* 2.89 GG. Purge Volume (I.) 5thrt 1,25 2,50 2.0 (see note below)* 4.0 6.0 7.0 3.0 +/- 10% or <10 NTUs Turbidity (NTUs) 37. 25 30 35 72 28 62.6 23.96 78.1 258 6se note below)* 84.7 ORP (mV) 5.33 5.53 5.38 6.0 2,19 10.59 PH (SU) 7.09 75.9 04.2 6.06 DO (mg/L) 5.97 6.30 +/- 10% (see note below)⁷ 6.34 0.165 0-166 0.165 Spec. Cand. (mS/cm) 5-1107 71.25 0.167 0.167 21.16 21.06 21.03 30.09 Temp. 21.01 31.04 08.35 3830 0260

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							(A DCE	C'S 12 DCE	12 DCF		
10-20-10	Charling Plank	5011	NA	Sample ID: MV-2-2010 10,00 21 - 01	IVo	MA	NUOCS (PCE, TCE, UC, 1, DOE	\Box pump head discharge (Inorganics including cyanide)	1/225	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	
Sampling Date:	Sampler's Name:	Sample Collection Time:	Sample Purge Rate (L/min)³: IU∆	Sample ID:	QA/QC Collected? (\$\int_0\$)	QA/QC I.D.	Laboratory Analyses:		☐ Bailer (only used if necessary)	Notes (Water clarity, odor,	
60								☐ vacuum jug (SVOCs)	ge (all analytes)	H ₂ O Depth	
Project No.: 012/103		145	LOPE	2	0/1100	`હ		VOCs)	☐ Bladder pump = pump discharge (all analytes)	Purge Volume H ₂ O Depth	
Project No.:		Perst	18	-	1040	Õ	7	U coda straw (☐ Bladder purr	Turbidity	
		Pump Type/Model:	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply): Lucoda straw (VOCs)		ORP (mV)	
		۵		Pump	Start/	Pur	Total P	ing Method (che		Hq (SU)	
a - Dickie	Perli	7					(lee)	Sampl		DO (mg/L)	İ
Olient: Williamston - Dickit	Colles	MW-2	52	9.25	<u>ر</u>		of water column (f	3 beits		Spec Cond. (mS/cm)	
Client:	Site/Location:	Well ID:	Total Depth (ft)1:	Depth to Water (ft): 9, 35	Well Diameter (in):	Well Volume (gal) = 0.041d ² h ₁	nches) h = length	Well Condition: accd 1 00 beits	,	Temp.	Í
ERM				ď	*	Well Volume	d = well diameter (inches) h = length of water column (feel)	Well Condition:		Time	

, 10		_		_			_		_			_				_	
□ Bailer (only used if necessary)	Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)	lowered rate to 0.2 Umin	water clear, no odor				collected Samole										
je (all analytes)	H ₂ O Depth	826	8,5	5,5	5.6	8.5											(see note
☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Start	/	Ü	m	7											(see note
☐ Bladder pump	Turbidity	4.5	32	1.3	7.5	0.51											+/- 10% or
	ORP (mV)	5.711	59.7	57.1	8.48	53.8											+/- 10 mV (see note helmu)"
	Hd (US)	600	3.48	41.9	6.31	6.33											* to
	DO (mg/L)	6.43	3.13	2.21	1.97	1.84											++-10% (See note helow)
	Spec. Cond. (m5/cm)	001.0	0.100	650.0	0.098	0.058											† £
2	Temp.	33.31			22.95												7.4
	Time	0401	1045		1055		1105										Stabilizing Criteria ⁶

Criteria 1°C 3% below) 0.1 unit below) (10 Do not measure depth to bettom of well units store purging and sampling to ordere resupending time that not be recting on the recti below).

(3) - Sampling rate to be 0.25 ipm or less
 (4) - Field environment many environments to be accounted a summer 2 to 5 months.

(4) - Cristal parameter intersocientation to effect a centre of 3 to 3 th interess.
(5) - Solbilization enhance based on three most recent consecutive measurements.

(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep through (7) - DO is not a stabilization criterion for the Groundwater sampling. SESD Sundard Operating Procedure.

) - DO is not a stabilization enterion for the "Groundwater sampling" SESD Standard Operating Procedure) - ORP is not a stabilization enterion for the "Groundwater sampling" SESD Standard Operating Procedure

(8.1)

10-19-10	Charlette Clank	1430	NA	Sample ID: MW-187-20101019 - 0/	No	NA	VOCS (see chain)
Sampling Date:	Sampler's Name:	Sample Collection Time:	Sample Purge Rate (L/min) ³ :	Sample ID:	QA/QC Collected?	QA/QC I.D.	Laboratory Analyses: VO (
Project No.: \$012,1103		Pump Type/Model: Ports 16	Tubing Material: 2, " LDPE	Pump Intake Depth (ft):	Start/Stop Purge Time: 1400 / 1430	Purge Rate (L/min) ² :	Total Purge Volume (L):
Williamson-Dickie	College Park, GA	WELLID: MW-718D	13 P	10.5°	w. 6 Mehres Str		column (feet)
ERM Client:	Site/Location:	Well ID:	Total Depth (ft) ¹ :	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = 0,041d ² h;	d = well diameter (inches) h = length of water o

VOCs) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	8.250 pure rate, water clouds, no oder	7	Somered Sur rate to 0.150	0 1			Collected samole								
□ vacuum jug (SVOCs)	e (all analytes)	H ₂ O Depth	10.51	10.80	11.04	11.19	17.31	11.35	11.37								(see note
	☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Start	0.1	0.0	3.0	4.0	0.8	0.0								(See note
Soda straw (V	☐ Bladder pump	Turbidity (NTUs)	25	22	20	15	01	16	.00 .03								+ 10% or
all that apply);		ORP (mV)	147,5	69.5	8.50	6.65	58.2	56.7	54.6								4/- 10 mV (see note
Sampling Method (check all that apply); El-Yoda straw (VOCs)		Hd (DS)	26.3	6.09	60.9	01 9	01.9	1.12	6.15								*
Sampli		DO (mg/L)	10.7	88.0	0.80	0.86	0.88	68.0	0.86								+/- 10% (see note
beits		Spec. Cond. (mS/cm)	(2)10	0.123	0.123	0.133	781.0	124 O	481.0								\$ }
ON / post		Temp.	31.13	30 95	95'08	21.07	_		21.30								4 5
Well Condition: 400d / NO 60145	J)	Time	. 00h/æ	504/	1410	1415	1430	1425	1430								Stabilizing

Criteria* 1*C 3% below 70 units to the control of t

ERM

Sampler's Name: Charlette (lark	Sample Callection Time: +++5 140	Sample 10: MW-34-2010 10:8-0	DAVOGILD. 1614	Laboratory Analyses: VOCS (see chain)	OCs) Doump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
Project No.: 0 (2(10 ⁷)	Pump Type/Model: Rostaltic	17.	Purge Rate (L/min) ² : 0.3	Total Purge Volume (L):	Sampling Method (check all that apply): 🗗 50da straw (VOCs)	☐ Bladder pump = pump discharge (all analytes)
SlielLocation: College Park, 6,4	Well ID: MXX - 3 Y Pumi	Depth to Water (ft): 11.30 Pump Int. Well Diameter (in): 2. Start/Stot		d = well diameter (inches) h = length of water column (feet) Total Purg		
ERM site	Total E	Depth to Well Dian	Well Volume (gal) = $0.041d^2h$:	d = well diameter (inches)	Well Condition: Soud	0

below this rate

- pump shots off 20 re rest 2 0.350, lowered to 0.2 Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.) 073 Q. Samole clear, no oddr collected 50.05 Vater introl 12.48 13.13 1245 (all and... 2.50 (see note below)* Purge Volume (L) (see note below)* 5.0 され 3,0 4.0 0. 30 -4- 10% or <10 NTUs Turbidity (NTUs) 0.01 と,0 3.0 30 0 5.0 59.1 575 +/- 10 mV (see note below)" 60.7 ORP (mV) 5,65 5.56 5,45 5.84 Hq (SU) (52) 1.36 1.67 1.47 DO (mg/L) +/- 10% (see note below)^T 3.09 6.3 0.069 0.065 0.075 23,40 0.067 23.57 0.068 Spec. Cond. (mS/cm) 23.60 24.31 23.13 24.86 Temp. 011 1115 1130 135 3 135

MW -L3 A Pump TypeModel: Te c. Staffht Sample Purp TypeModel: Te c. Staffht Sample Purp TypeModel: C. Sample Purp Pump Intake Depth (II): C. Sample Purp Pump Intake Depth (II): C. Sample Purp Pump Pump Time: C. Sample Purp Pump Pump Pump Pump Pump Pump Pump Pum	Client: Willta	Williamson-Dickle College Park, Gak	Kie	Project No.: 012(103	601	Sampling Date: Sampler's Name:	Sampling Date: 16 - 19 - 10 Sampler's Name: Clark
1); 73. Tubing Material: 14 to 15 Sample Purge Report (1); 63 to 14 to 25 to 14 to 25 to 14 to 25 to 14 to 25 to 2	Well ID:		Pump Type/Model:			Sample Collection Time:	Oho!
11); 9,15 Pump Intake Depth (II): 63-1 Start/Stop Purge Time: 10,30 1 (410	pth (ft) ¹ :	73	Tubing Material:	* 72	3dO7	Sample Purge Rate (L/min) ³ :	NA
7): Start/Stop Purge Time: 10.30 / 1 (40 0.2) Purge Rate (L/min)?: Start Stop Purge Rate (L/min)?: Total Purge Volume (L): A 1 Labc Sampling Method (check all that apply): (A soda straw (VOCs) D vacuum jug (SVOCs)	aler (ft);	9,95	Pump Intake Depth (ft):			Sample ID:	MW-134-70101019-01
9h; Purge Rate (L'min)?: 6.7 gith of water column (feet) Total Purge Volume (L): H Labo Sampling Method (check all that apply): G/Soda straw (VOCs) U vacuum jug (SVOCs)	eter (in);	-CK	Start/Stop Purge Time:			QA/QC Collected?	NO
gth of water column (feet) Total Purge Volume (L): Labo Sampling Method (check all that apply): (A Soda straw (VOCs)	$Iell\ Volume\ (gal) = 0.041d^2h$:	2	Purge Rate (L/min) ² :	6.3		QA/QC I.D.	
Sampling Method (check all that apply); Proda straw (VOCs)	= length of v	water column (feet)	Total Purge Volume (L):	4		Laboratory Analyses:	V0Cs
	PO	Sampling Me	ethod (check all that apply):	Soda straw (VOCs)	uscuum jug (SVO		scharge (Inorganics including cyanide)

		_		_	_	1	T	_	_	 _	T	Т	T	Ť	1	ì	_				
Notes (Water clarity, odor, purge rate, issues with pump/well/weather/ote.)	3.350 rate (water clear)	lovered since care to 0.2 Care	strys owns ny p		domos barellos alato lisa															~	
H ₂ O Depth	2°	10.85	11. 601	11.07	11.25																See note
Purge Volume	start	0.1	0.6	6.6	0.4																(see note
Turbidity	-, 00	2.5	1.7	<i>(</i> :	0		7.2														+/- 10% or
ORP (mV)	107.0	8.19	59.3	55.3	59.4																+/- 10 mV (see note
PH (SU)	083	200	7.14	7.14	7.13																+
DO (mg/L)	6.93	5.09	5.16																		+/- 10% (see note
Spec. Cond. (mS/cm)	691.0			461.0	0.173																‡
Temp.	3189	59	8	21.12		-															**
Time	200	380		55.0	GH G																abilizing

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Sampler's Name: Charlette Clark Sample Collection Time: 1005 Sample Purge Rate (Umin)* N/A Sample Purge Rate (Umin)* N/A OAVOC Collected? NA OAVOC LO. NA	Laboratory Analyses: □ pump head diss	Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)	water clear, no odar rate 0.25			The state of the s	Collected sample @ 1005	N.							
63	□ vacuum jug (SVOCs)	H ₂ O Depth (ft)	10.29	10.35	10,39	10.40									
Project No. 0/21/03 Peristaltic Yy" LDPE 13 5940 //00	Food a straw (VOCs) are vacuum jug	Purge Volume (L)	Start	2.50	3.75	5.0									
Perise 100.	E soda straw ()	Turbidity (NTUs)	2.3	0.6	0.50	0.45									
Pump TyperModel: Pect No.: Tubing Material: V.L.' Tubing Material: V.L.' Start/Stop Purge Time: O940 Pump Rate (L/min)?: 6.2 T.	Total Purge Volume (L): od (check all that apply):	ORP (mV)	77.3	0.69	683	68,5									
Gy A Pumpi Start/S Start/S Pumpi Pumpi Pumpi	Total Purge Volume (L): Sampling Method (check all that apply): Beader pump = pur	Hd (SU)	4.53	4:40	4.43	442									
MW-13 Park, GA A MW-13 Park, GA A 15 Pump Pump Pump Pump Pump		DO (mg/L)	1717.0 0	980	60:0	61.0									
	of water column (for	Spec. Cond. (mS/cm)	3 0.04	3.049	0.050	0.049									
Client: Site Location: Site Location: Well ID: Total Depth (ft): Depth to Water (ft): Well Diameter (in): Well Volume (raal) = 0.0410 ² h:	ches) h = length o	Temp.	27	32.45		33,56									
ERM T T T Dee Well Volume (C	d = well diameter (inches) h = length of water column (feet) Well Condition: QCCC	Time	0	0945											

(see note below)*

(see note below)*

+/- 10% or <10 NTUs

College Part, G. L Site/Location:

Willyamsen - Dichie

Project No.: 0(2/103

10-19-10 Sampling Date:

Sampler's Name: Charlette Clark 0915 Sample Collection Time:

> Peristaltic Y." LOPE

Pump Type/Model: Tubing Material:

17.5

Total Depth (ft)1: Depth to Water (ft):

Well ID: MW -14

2821

Sample Purge Rate (L/min)³: NA

Sample ID: MW - 14(-2010 1019-01

ΝS ₹2 * QA/QC Collected? QA/QC I.D.

Start/Stop Purge Time: 08:30 | 8905

Pump Intake Depth (ft):

Purge Rate (L/min)²: 0.25

Total Purge Volume (L):

d = well diameter (inches) h = length of water column (feet)

37.5

Well Volume (gal) = 0.041d²h:___ Well Diameter (in):

Laboratory Analyses: VOC 5 (See Chain

U pump head discharge (Inorganics including cyanide)

songe volume Er accorded

* Reallolate

Bailer (only used if necessary) uscuum jug (SVOCs) ☐ Bladder pump = pump Sampling Method (check all that apply): Losoda straw (VOCs) Well Condition: 560d

	weather/etc3	200								9								
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	woter cloudy, no color somethe cate	2.0							Stabilization reached sampled								
e (all analytes)	H,O Depth	10,61	10061	13.01	12.01	13,01	13.01	13.01	13,01								Charle make	below)*
! Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Steen	1.25	3.8	3.75	N, O,	6.25	7.50	8.25								Franchis	below)*
☐ Bladder pump	Turbidity	06	20	20		23.	2,0	0.1	0.5									44- 107- or
-	ORP (mV)	4.74	127.9	101.1	95.5	97.3	506	85.8	823								Vm 01-/+	below)"
	Hq (US)	4.89	4.15	3.47	40.4	3.96	4.09	4.13	4.29								,	0.1 unit
	DO (mg/L)	3.57	1.55	1.25	30.1	1.03	10.	1.03	E0.1								+/- 10%.	pelow)
	Spec. Cond. (mS/cm)	0.020	0.020	0.019	6,0,9	6.00	6.0.0	910.0	6,0,0								4	Criteria 1"C 3" below] 0.1 unit below" <
	Temp.		19.65	19.97	20.0H	20.12	Soils	20,17	30,08								*	1,0
	Time	0 695	0835	0840	5480	0520	Sale Ditte	606	3060								Stabilizine	Criteria

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Sampling Date: (O - / & · / C	Sample Collection Time: C92C	Sample Purge Rate (L/min)³:	Sample 10: MW-38 -2010 10 18 -01 6	QA/QC Collected? Yes	angold.	Laboratory Analyses: VOC 5	s) 🗀 pump head discharge (Inorganics including cyanide)	Bailer (only lised if necessary)
Project No.: 0 1 2 1 0 3	Pump Type Model: Peristaltic	Tubing Material: 74^{11} LO7E Se	Pump Intake Depth (It):	Start/Stop Purge Time: 6850 / 6975	Purge Rate (L/min)²: O. /	Total Purge Volume (L):	Sampling Method (check all that apply); [Decda straw (VOCs) accuum jug (SVOCs)	Bladder or an an discharge (all analytes)
Stellocation: Cullege Park, GA	Well ID: MW - 38 Pu	38 35	15.4	B				-
ERM Stelo	8	Total Depth (ft):	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = $0.041 d^2 h$:	d = well diameter (inches) h = length of water column (teet)	Well Condition:	?

☐ Bailer (only used if necessary)	Notes (Water clarity, adur, purge rate, issues with pump/well/weather/etc.)	Water clear, no oder 0.3 ml/min	Townsend ourse rate.	n 4 s			Sample collected 0920							e2		
(all analytes)	H ₂ O Depth	15.50	15,55	15.51	15.59	15.60										(see note below)*
☐ Bladder pump = pump discharge (all analytes)	Purge Volume	Start	1.5		3.5	3.0										(see note
] Bladder pump	Turbidity	0.95	0.95	25.0	San	960										++- 10% or <10 NTUs
	ORP (mV)	224.3		7.055	213,9	-	-					(+/- 10 mV (sec note below)*
	Hd (US)	3.15	4.70	4.70		19.4	e									++- 0.1 unit
	DO (mg/L)	3.87	116	90.4		1.78										+/- 10% (see note below)?
	Spec. Cond. (mS/cm)	0.023	0.018 2	0.018	810.0	10.0										44.
	Temp.	H1.74	19.61	19.68	-	_	_									*/- 1°C
	Time	0880	0855		5030	0110										Stabilizing Criteria*

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Sampling Date: 10 · 18 - 10 Sampler's Name: Charle fite Clark	Sample Collection Time: 162.5	Sample 10: 19W - 36 4 - 20 10 18		Laboratory Analyses: VCK-5 Dett (hours)	SVOCs) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	lowered port 10th emoting flow cell				lowered care					Collected Semply @ 1025	203						
63					☐ vacuum jug (SVOCs)	ge (all analytes)	H ₂ O Depth	15.50	15.80	18.81	15.81	15.82	18.81	15.81	15.8/	18.81								
Project No.: 0/2//03	Pristaltic Yu" LOPE	77,		5	VOCs)	☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Start	1.0	1.5	u Ó	3.5	2.75	3,00	3,35	3,50								
Project No.:	Peris Yy	197, CH	0 1	3.5	Soda straw (☐ Bladder pum	Turbidity	017	33	30	20	15	8/	12	10	9.5								
	Pump Type/Model: Tubing Material:	Pump Intake Depth (ft): Start/Stop Puma Time	Purge Rate (L/min) ² :	Fotal Purge Volume (L):	k all that apply):		ORP (mV)	187.3	189.0	189.1	189.5	189.0	185.3	189,5	184.2	1925								
Rack, GA	. Pa	Pump It	Purg	Total Pu	Sampling Method (check all that apply): 🖼 Soda straw (VOCs)		Hq (US)	5.57	6.45	6.46	6.47	94.5	6.44	6.46	6.43	6.43								
E Park	38 A			eet)	Samp		DO (mg/L)	38.8	€8.0	0.67	14.0	6.23	0.24	0.25	021	0,19								
College	MW -	15,32	6	of water column (Spec, Cond. (mS/cm)	350.0	0,537	0,580	0.593	600,0	063	6.624	0.675	0.626								
Client: Site/Location:	Well ID: Total Depth (tt) ¹ :	Depth to Water (ft):	Well Volume (gal) = 0,041d²h;	ches) h = length	3000)	Temp.	19.03	20.62	30.58			36.39	3038	76,06	20.23								
ERM	-	Dei	Well Volume	d = well diameter (inches) h = langth of water column (feet)	Well Condition:		Time	0530	0535	0340	2460	0550	0955	1000	5001	1010								
				U			$\overline{}$			_	_	$\overline{}$	-	_		-	_	_			_	$\overline{}$	_	_

(see note below)*

(see note below)*

+/- 10% or <10 NTUs

+/- 10 mV (see note below)*

+/- 10% (see note below)?

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Sampling Date: 10 - 12 - 10 Sampler's Name: Chark	Sample Collection Time: 430 (1/30		QA/QC Collected? A/e	QA/QCI,D. NA	Laboratory Analyses: VOCS * ORG. Chain) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
1) CK i.e. Project No.: 6/2/103	Pump Type/Model: $\overline{Q_{PC}}$, $> + c \sqrt{+c}$	K-17' 6.5	Start/Stop Purge Time: 10 45 / 1110	Purge Rate (L/min) ² : 6,2	Total Purge Volume (L):	Sampling Method (check all that apply): A soda straw (VOCs)	☐ Biadder pump = pump discharge (all analytes)
ERM client (1) illiamson Dickie stelloozion: College Park, Cy	Well ID: MUJ 33	Depth to Water (tt): 15.09	Well Diameter (in):	Well Volume (gal) = 0.041d²h:	= well diameter (inches) h = length of water column (feet)	Well Condition: accd	

☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/retc.)	water 17ht brown, cloudy, turbid	Gen without purse cleared up after	0					Stable Sample collected @ 1120									
je (all analytes)	H ₂ O Depth	15.2		15.31	15.28	15.25	15.35	57.51	3								(see note	below)*
= pump discharg	Purge Volume (L)	Stut		8	3	4	5	7	9								(See note	below)*
Ē	Turbidity (NTUs)	28		12/	8,8	8.7	4.0	1.0									+/- 10% or	<10 NTUs
	ORP (mV)	133,3		89,5	80.7	77.7	78.7	1.66									++- 10 mV (see note	below)"
	hd (SU)	573		5.39	5.38	5.31	5.25	5.17									*	0.1 unit
	DO (mg/L)	5.38		P. 6.4	45.0	44.0	6.4.2	0.40		1.							+/- 10% (see note	pelow)
	Spec. Cond. (mS/cm)	6.15Y		6,103	0.102	(A.101	0.100	0,099									*	3%
	Temp.	53.15		72.61	10.	50.00	לכינג										*	1°C
	Time	1045	550	1050	1055	1100	105	0111									Stabilizing	Criteria
			Dompes YSI	720 0012											1,		ю	

Sampling Date: $\frac{7O-78-1}{Cho_{r}}$ (2 the $2h_{r}$ length of $2h_{r}$ length $2h_{r}$ lengt	Sample Collection Time: /320	Sample Purge Rate (L/min) ³ :	Sample ID: MW-33 - 2 C, 0 (0 (% - 0)	QA/QC Collected? $\lambda \epsilon$	ONOC ID, N.A	Laboratory Analyses: VOC'S (620 C) (QLIN)	SVOCs) Upump head discharge (Inorganics including cyanide)	
Sickie Project No.: 6121 1 03	Pump Type/Model: Ter/5 tel/th	Tubing Material: ゲゲートのグ	Pump Intake Depth (ft):	Start/Stop Purge Time: 1940/1905	Purge Rate (L/min) ² : O , A	Total Purge Volume (L):	Sampling Method (check all that apply): 🗗 Soda straw (VOCs)	(analysis and conference of the control of the cont
ERM Clent: Williamsen-Dickie Shelocation: College Park, GA	Well ID: MW-33	Total Depth (ft) : 33	Depth to Water (ft): 25.50	Well Diameter (in):	Well Volume (gal) = 0,041d ² h:	= well diameter (inches) h = length of water column (feet)	Well Condition:	

											Ī							
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	Lyche Chody O.2 mila		water clear				well stuble collected samoles po	1320									
je (all analytes)	H ₂ O Depth (ft)	26.0	26.C	260	26.0	0.98	26.0											below)*
☐ Biadder pump = pump discharge (all analytes)	Purge Volume	おけ	1.0	0.0	0.0		0										. Section 1	below)*
☐ Bladder pump	Turbidity	(30)		4.1	1.6	0.1	1-1										-	44- 10% or
İ	ORP (mV)	1202	101.1	5 811	130.4	1310	130.0										+4-10 mV	below)" 0.1 unit below)"
	PH (SU)	6.31	4.31	3.58	3,74	3.34	333)										0.1 unit
	DO (mg/L)	15.14	14.5	572	5.65	5,53	5.71										+/-10%	pelow)
	Spec. Cond. (mS/cm)	6.037	0,000		0.039	0.038	0.438											3%
	Temp.	21.50	19.50	19.57	19.51	19,50	19.57										1/4	1,0
	Time	ch8/	(345	1350	1255	1300	1305										Stabilizing	Criteria* 1°C 3%

Parge rate measure depth is believe if well until stop purply, and simpling to reduce resuspending free that may be resting on the well bodons.
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ERM

Sampling Date: 10-18-70	Sampler's Name: ringlette clark	Sample Collection Time: $I \sim U \sim U$	Sample Purge Rate (L/min) ³ : NJ A	Sample 10: MW-12-2010 10 8-0	QA/QC Collected? NC	GADGID, 174	Laboratory Analyses: VOCS (LARL Chair)	Cs) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
Project No.: 6 (2(/ 6)		Bustaltic	14" LDPE	141	1350/1415	0.0 + 0.2	8.35	Skoda straw (VOCs) □ vacuum jug (SVOCs)	☐ Bladder pump = pump discharge (all analytes)
Williamson Dichie	1016, 614	Pump Type/Model:	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply): 🖂 coda straw (VOCs)	
ERM Client: William	Site/Location: (Il care 10	Well D: MW-12	Total Depth (ft) ¹ :	Depth to Water (ft): 12.65	Well Diameter (in):	Well Volume (gal) = $0.041 d^2 h$:	d = well diameter (inches) h = length of water column (feet)	Well Condition:	

re Temp.	Spec. Cond. (mS/cm)	DO (mg/L)	ht (SU)	(mV)	Turbidity	Purge Volume (L)	H ₂ O Depth	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
				i Q				
50 0553110	3 0.039	0.05	4.87	01.1	63	5+2-4	13.65	Courty P. Withel Duras
35.	- Fo							
355 21.67	0.037	3.76	4.89	107.6	27	7.5	12-21	clear rute 0.3 my min
400 21.70	0.036	086	4.35	87. b	25	3.0	12.84	
405 B1.52	0.036	14.0	D. 6	157,5	23	4.35	12.89	11/20 00 odor 0.25 21/m.
410 31.55	0.036	0,3%	1.85	1539	25	5.25		low of 0.2
405 A1, SD	0,036	0, 43	1.52	1477	26			
410 21.52	O.036	0.40	7.85	146.7	ũ	7.25	12.79	
415 21.68	950.0	Ø.Ч/	1.82	9.44.1	9.1	8.25	12.79	
<u> </u>								Stable Collected Sample 1420
Stabilizing +/- Criteria* 1*C	\$ 8 5	+/- 10% (see note below)*	+/- 0.1 unit	+/-10 mV (see note below)*	+/- 10% or	(see note	(see note	
noc on undap a	til after purging and sam	pling to enduce avangeand	oding fines that may be	may be resume on the well had	Total	, and a	Carona Carona	

Client: Williamson Dickic

ERM

College Park, GA

Site/Location:

Project No.: 4858C

801210B

10-15-10 C. Clark Sampling Date: Sampler's Name:

1415

Sample Collection Time:	Sample Purge Rate (L/min) ³ : N.A	Sample ID: MW -35 - 2010[015 0	QA/QC Collected? \\\\ \\ \\ \\	ON/OCLD. /(M)	Laboratory Analyses: VOCS 9260	s) Upump head discharge (Inorganics including cyanide)
Pump Type/Model: P2019ta/fil		27'	1830/1355	0.1	000	Svocs) accuum jug (SVOCs)
Pump Type/Model:	Tubing Material:	7. / 2 Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min)²:	Total Purge Volume (L):	Sampling Method (check all Ihat apply): Uedda straw (VOCs)
Well 10: MW-35	Total Depth (ft)!: 74	Depth to Water (It): 1925 19.12	Well Diameter (in):	Well Volume (gal) = 0,041d ² h:	d = well diameter (inches) h = length of water column (feet)	Well Condition:

Dedda straw (VOCs)	Sampling Method (check all that apply): Qedda straw (VOCs) Diadder pump = pum Diadder pump = pum Sub ORP Turbidity Pump W.12 SH ORP ORP Str	Samy (ms/tu) (mg/tu) (0.53) (0.53)	Well Condition: Temp. Spr (**) 23、73、 33、79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
--------------------	--	------------------------------------	---

Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)	21.					Stabilization reached somple time 1415									
H,O Depth	P1 25 19	19.10	19.10	19,10	01.51										(see note below)*
Purge Volume (L)	Start	s,	1.0	1.5	2.0										(see note below)*
Turbidity (NTUs)	18		6.7	1.4	0.1										+/- 10% or <10 NTUs
ORP (mV)	0, T, 0	7 45	53.	537	57.9										+/- 10 mV (see note below)*
Hq (US)	でしか	4.68	4.65	4,63	4 53										+/+ 0.1 smit
DO (mg/L)	0.53	V. 74-5	36	27	12.0	A									+/- 10% (see note below)?
Spec. Cond. (mS/cm)	750.0			00.00											***
Temp.	33,30	-		100	23 75										
Time	1330						ます								Stabilizing Criteria*

ERM

6011210

Sampler's Name: Clark Sampling Date:

Sample Collection Time:

οN Sample ID: MW QA/QC Collected? Sample Purge Rate (L/min)³:

Laboratory Analyses: VOCS

NA

☐ pump head discharge (Inorganics including cyanide)

Project No.: 1605 W.C. Groot

M. LOPE 1350/1310 Pump Type/Model: Peristal hic 6.0 Tubing Material: Pump Intake Depth (ft): Start/Stop Purge Time: Purge Rate (L/min)²: Total Purge Volume (L):___ Site/Location: Callete P. K & A Client Williamson Didite

Well ID: MW -354

Total Depth (ft) : Depth to Water (ft): Well Diameter (in):

uscuum jug (SVOCs) ☐ Bladder pump = pump discharge (all analytes) Sampling Method (check all that apply): ID soda straw (VOCs)

d = well diameter (inches) h = length of water column (feet)

Well Condition: Good

☐ Bailer (only used if necessary)

				_	_			_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	yaterclear, no odor						Samole Fine 1330								-13									
ge (all analytes)	H ₂ O Depth (ft)	19.29	19,33	19.43	19,50	19.95																			(see note below)*
☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Stirt	1.0	3.0	3.0	1,0																			(see note below)*
☐ Bladder pump	Turbidity	14.8	1.39	1.97	1.51	1.25	8.0																	100000000000000000000000000000000000000	+/- 10% or <10 NTUs
	ORP (mV)	84, 8	63.5	65.7	1 ho)	4.89																		Vm 01-/+	(see note below)*
	Hd (SU)	5.03	5.34	4,52	i, 69	_																			4/- 0.1 unit
	DO (mg/L)	526	4.14	3.93	3.85	4	4.05																	+/- 10%	below)
	Spec. Cond. (mS/cm)	540.0	0.043	5.043	C+0.0	0.042																			* %
	Temp.	23.74		W. C.C.	_	1	-																		
	Time	1350	1255	/300	1305														, t			4		A STATISTICAL AND A STATISTICA	Stabilizing +/- Criteria 1°C

(II) - Do not measure depth to beliation of well will have purpose and sampling to reduce resuspending fines that may be resting on the well beliation.

(I) - Singer in the bold 5 pin or less.

(I) - Singer in the bold 5 pin or less.

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(I) - Singer in well at a singer in well developes to the resuspension between the bold 5 pin or less. Programming Fineston in the procedure.

(I) - ORP is not a stabilization retrievin for the Coundriester sampling SESS standard Operating Fineston.

0121103

Project No. 100590

OHEN: Williamsen - Dirkie

Site/Location:

MW-297

Well ID:

35 12.00

Total Depth (ft)1:

Depth to Water (ft):

Well Volume (gal) = $0.041d^2h$: Well Diameter (in):

Sampling Date: 16 -15-10

Sampler's Name:

LDPE 名がなんだ これ Pump Type/Model: Tubing Material: Pump Intake Depth (ft):

Sample Purge Rate (Umin)*: NA Sample ID: MW-24R-2010 1015 -01

120 1230

Sample Collection Time:

\$ Laboratory Analyses: VCS QA/QC Collected? NS QA/QCI,D. (3.15 0 Start/Stop Purge Time: //45/ Purge Rate (L/min)*:0.25 Total Purge Volume (L):

. COUNTY				Delice of the property of the		A DOOR OF THE PARTY OF THE PART	2000		
well collulion.	283			Carle of the control	Code min in a				
							Andrew discharge	to (all applicable)	Bailar (only used if persecent)
						T placer purit	piagner britis = britis niscilarde (a	ge (all allalytes)	Dalles (cit) date (cit)
1.00	The same	Cure Court	5	75"	OND	Torkidite	Pure Volume	H.O Deoth	otes (Water clarity, odor, burge rate, issues with pump/well/weather/etc.)
200	CHID.	Spec Cond.	3		777			-	

Notes (Water darity, odor, punge rate, issues with pump/well/weather/etc.)	e350 werelecting oder, browder	is! " lawared punge rate 0,2	a))						Sam de cullected P. 1250							
H ₂ O Depth	12.65	13,52	14.28	14.20	14.25	14.27	14.27	70 97								(see note below)*
Purge Volume (L)	Stear		2	3	h	'n	9									(See note below)*
Turbidity (NTUs)	3.92	4.01	3.00	1.02	001	1.00	2001	0 H. 1								+/- 10% or
ORP (mV)	68.2	0.8%	67.7	65.6	585	59.7	6.0.3									+/- 10 mV (see note below)*
Hq (SU)	5.16	187	60	4.76	5.19	5.13	5.11									** 44 0.1 umit
DO (mg/L)	2.5		1.97	1.22	6.39	0.35	. ic. o	8								+/- 10% (see note helow)?
Spec Cond. (mS/cm)	P.C J.O	1500	0.030	0.030	160.0	160.0	260.0									* #
Temp.	33.510			-		H17. 1.2	21.39									\$ \$
Time	1145			(200)	1205											Stabilizing

Project No

ລ			
	1	K	
	1	Ĭ	
	3	\$	1

Sampling Date: 10 - 15 --1C Sampler's Name: C. Charle

Client: Williamson Dicking

Site/Location:

Pensita (+)C

Pump Type/Model:

Well D. MW-36

Total Depth (ft) :_

Start/Stop Purge Time: 1050 / 11 15 6

Pump Intake Depth (ft):

11.5

Purge Rate (L/min)²:

Well Volume (gal) = 0.041d²h:

Well Diameter (in): Depth to Water (ft):

Sample 10: MW-36-2001015-01

Sample Purge Rate (L/min)³:

Sample Collection Time:

QA/QC LD.

QA/QCI.D.

1130

S. S.

pump head discharge (Inorganics including cyanide) Laboratory Analyses: 100 1826 C uscuum jug (SVOCs) Sampling Method (check all that apply): Er soda straw (VOCs) Total Purge Volume (L): d = well diameter (inches) h = length of water column (feet) Well Condition: Apoch

ss) Bailer (only used if necessary)	Notes (Water darity, odor, purge rate, issues with pump/w
ie (all analytes)	H ₂ O Depth
oumo = pumo discharo	Purge Volume (L)
adder	Turbidity
	ORP (mV)
	Hq (SU)
-	DO (mg/L)
	Spec. Cond. (mS/cm)
}	Temp.

Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	witer (100,000 odor	6.3 allen				3	Jame 10 time 1,30								
H ₂ O Depth	11.51	18.58	11,59	11.60	11.68	1971									(see note
Purge Volume	Stant	1.0	3.0	3,0	4.0	5.0									(see note
Turbidity	P1. 4	2.26	7.1	1,64	1.40	1.25									*/- 10% or
ORP (mV)	50.7	52.1	55. i	57.4	61.2	63.8									+/- 10 mV (sec note below)*
Hq (SU)	49.4	4,49	_		4.75	4.19									*/* 0.1 unit
DO (mg/L)	180	0.73	76 0.59	0.31	0.27	12.3									+/- 10% (see note below)*
Spec. Cond. (mS/cm)	0,080	2	0.000	0,065	0.065										\$ K
Temp.	81.03		_		1.2	20.05									*** 11,C
Time	1050														Stabilizing Criteria ⁵

						purg ret		•	2011	\$	X	4								
65 Sampling Date: 10-75-10. Sampler's Name: 2. Clork	Sample Collection Time: 1035 Sample Purge Rate (L/min) ³ : NA	QA/QC Collected? N B QA/QC LD. IN A	Laboratory Analyses: VOC 5 (See choin)		☐ Bailer (only used if necessary) Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	, water clear, thursd	heart of to a		Afismall particles visible, nor	1000 red 168 to 6:55		Tucked, to still byok from	200	Q:	1035 10/16-15 Samole	1 1				
4017107				U vacuum jug (SVOCs)	H,O Depth	11.20	777	11.60	11.50	11.77		134	1,25						open only	Dec note
78577	*17	1 1015		/OCs)	Bladder pump = pump discharge (all analytes) Turbidity Purge Volume H ₂ O Depth (NTUs) III)	Start	5,0	1.50	000	17/4	475	4.75	5,00						of the state	isce note
Project No.:	200 22	0.20	20	Sampling Method (check all that apply): [4] soda straw (VOCs)	Eladder pump	-	26.5	29.5	27.4	20.7	76.7	265	25.1		0	1				+/- 10 - 01
	Pump Type/Modet: Tubing Material: Pump Intake Depth (#):	Start/Stop Purge Time:	Total Purge Volume (L):	k all that apply):	ORP (mV)		27.0	27.6	28.8	140	23.2	23.5	32.5						V# 01-/+	Dec note
SA SA	Pun	Start/Si Purg	Total Pu	ng Method (chec	hd (US)	5.96	559			7 67	5.03	16.5	5.91							-/+
Manson - Del	374		el)	Sampli	DO (mg/L)	2.57	0,59	0.39	0.32	0000	1010	0.15	21.0						***************************************	Dec note
3 4	MW 2 50'	٠, 1	of water column (fe		Spec. Cond. (mS/cm)	0.420	0.622		0110		19 610		000						Į,	-/+
Client: Site/Location:	Well ID:	Well Diameter (in): Well Volume (aal) = 0.041 d ² h:	ches) h = length o		Temp.	31.65	21.90	\mathbf{T}	36		31 05	3 8							5	*
ERM	T. Dept	well Volume (a	d = well diameter (inches) h = length of water column (feel)	Well Condition:	Time	0930	0935				0001								1	Stabilizing

Celteria 1°C 3% below? 40 In the bottom is well will altre particula and simplified to reduce consequently fines that may be resting on the well bottom.

(1) - Down measure depth is bottom in seed until after particula and sampling the reduce consequently fines that may be resting on the well bottom.

(3) - Sampling calle to be US from cleas.

(3) - Sampling calle to be US from cleas.

(3) - Sampling calle to be US from cleas.

(3) - Sampling calle to be US from cleas.

(3) - Sampling calle to be US from cleas.

(3) - Sampling calle to be US from cleas.

(4) - Sampling called to be US from the measurements.

(5) - Sampling called to be US from the performance of the US from the particular called the US from the Performance of the particular called the US from the Performance of the performance of the US from th

Project No.:

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2	1	1
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Ollent: Willtamson - Drokie Site/Location: College Park, CA

ERM

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33	1
2110	588
80	2

Sampling Date: 10 - 14 - 10

Sampler's Name: (horlette Clork しょうかん 1510 Sample Collection Time: Sample Purge Rate (L/min)3:

Pump Type/Model: Peristaltic

Well ID: MW -(9

21:10 Š

Total Depth (ft)¹: Depth to Water (ft): Well Diameter (in): Well Volume (gal) = $0.041d^2h$:

Sample ID: MW - 19-20101015 - 0 QA/QC Collected? No

VOC S XX QA/QC LD.

☐ pump head discharge (Inorganics including cyanide)

Laboratory Analyses: Start/Stop Purge Time: +4-12-40 1440/1500 Tubing Material: 1/4" LDPE Sampling Method (check all that apply): 🗗 soda straw (VOCs) Total Purge Volume (L):_ Pump Intake Depth (ft): Purge Rate (L/min)²:

uacuum jug (SVOCs)

d = well diameter (inches) h = length of water column (feet)

Well Condition: 200

☐ Bailer (only used if necessary) ☐ Bladder pump = pump discharge (all analytes)

							_	Г	П	T	Т	Т	1			
Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	Odec					Sample Fine 4520-1612 1510	1 20 Served 1 251.00-									
H ₂ O Depth	21,15	21,78	21.34	21,34	21.34											
Purge Volume (L)	Start) •	5.	0.3	3.											
Turbidity	3,2	1.2	1,49	1.25	(, (S											
ORP (mV)	55.3	53.0	52.8	51.7	533											
Hd (SU)	6.31	41.9	6.14	6.13	6.12											
DO (mg/L)	3.69	5,47	62'0	o.as	0.22											
Spec. Cond. (mS/cm)		0.073	0.072	120.0	170.0											
Temp.	40.00 OE.12	20.89 0.073	20.70 0.072	20.76	13.05											
Time	7540	1945	1580	1545	0091	_										
	0440	1455	352	1455	000			-	•			1:				

** Stabilizing Criteria⁸

(see note

(see note below)*

+/- 10% or <10 NTUs

+/-10 mV (see note below)*

++ 0.1 unit

+/- 10% (see note below)⁷

* in

(i) - Fings rate to be 4.5 given or iso.

(i) - Standard to the beta 15 given or iso.

(i) - Standard to the beta 15 given or iso.

(i) - Standard to the beta 15 given or iso.

(ii) - Standard to the transfer of the transf

	6	7	1	7
1		Z	6	
	Z	1	G	3

Oct. 14, 2010 Charlette Clark	(430	MA	Sample ID: MW - 20-2010 1014-01	No	NA	VOCS	☐ pump head discharge (Inorganics including cyanide)	ed if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
Sampling Date:	Sample Collection Time:	Sample Purge Rate (L/min) ³ :	Sample ID:	QA/QC Collected?	QA/QC I.D.	Laboratory Analyses: VOCS		☐ Bailer (only used if necessary)	Notes (Water clarity, odor,
0121103	4-					ī	☐ vacuum jug (SVOCs)	ge (all analytes)	H,O Depth
Project No.: De CE	Pump Type/Model: Peristaltic Pump	LDPE	35,	1340 /1415		ن	VOCs)	☐ Bladder pump = pump discharge (all analytes)	Turbidity Purge Volume H ₂ O Depth
Project No.:	Perista	7	-	1340	.O.	7	Soda straw (☐ Bladder pum	Turbidity
	пр Туре/Model:_	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply): [2-soda straw (VOCs)		ORP
SCK PE	Pul		Pump Ir	Start/SI	Purg	Total Pu	ng Method (chec		Hq
Park, GA	٥		7			a()	Sampli		8
William Coilege T	MW-2	33	23.6	, C	a	of water column (fee			Spec. Cond.
Client: Site/Location:	Well ID:	Total Depth (ft)1:	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = 0.041d²h:	nches) h = length	pod)	Temp.
ERM		•	Dei	We	Well Volume (d = well diameter (inches) h = length of water column (feet)	Well Condition:		Time

Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)		water clear no oder									Semple time 1430							
H,O Depth	an	33.68	11:00	22.72	22.72	22.72	22.72	22.74	22.74	22.74								(see note
Purge Volume	3	Start	.5,	0.1	1.5	2.0	5.8	3.0	3.5	0.4								(see note
Turbidity		3.81	3.50	A.54	1.87	1.84	1.S2	1.07	1.25	- 08								+/- 10% or
ORP	(mx)	1.09.	75.5	762	78.3	80.8	27.9	747	72.4	£67	9							+/- 10 mV (see note below)*
Hq	(30)	4.2(0	10,0	5 48	Lh'5	4.49	5.54	5.56	5.55	5.83								#+ 0.1 unit
8	(mg/r)	The state of	1.0.1	990		65.0	6.83			0.28								4/- 10% See note helow)
Spec. Cond.	(ms/cm)	11.0	0.110	111:00	0.11				0	0.149								‡ £
Temp.	0	29.35	22.20	22.04	20.55	T8.18	21.98	-	63	21.95			>					++
Time		1340	1345	1350			_		1415									Stabilizing

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0108-11-01

Sampling Date:

Sampler's Name: Charlette Clark

Sample Collection Time: 30

Sample Purge Rate (L/min)³:

Ollent: Williamson Dickie

ERM

College Park

Peristaltic

Pump Type/Model:

Well ID: MW-25

Total Depth (ft): - 34 34 Depth to Water (ft): - みちゃつ

Well Diameter (in): Well Volume (gal) = 0.041d²h: d = well diameter (inches) h = length of water column (feet)

Well Condition: 400 d

1305 1230 1

JECT, HY Tubing Material: Pump Intake Depth (ft):

Sample ID: MW-25 - 2010 10 15-01

47

ON

QA/QC Collected? OA/QC I.D.

Start/Stop Purge Time: Total Purge Volume (L): Purge Rate (L/min)²:

Laboratory Analyses:

VOCS

☐ pump head discharge (Inorganics including cyanide)

uacuum jug (SVOCs) Sampling Method (check all Ihat apply): Soda straw (VOCs)

DO PH (m/v)	Turbidity (NTUS)	np = pump discharge (all analytes) Purge Volume H ₂ O Depth. (L) (ft)	is) Laster clarity, odor, purge rate, issue
-------------	------------------	--	---

Notes (Water clarity, odor, purge rate, issues with pump/wel	water clair, no oder								Sample tine 1310	-				
H ₂ O Depth (ft)	27.04	27,12	27.12	27.13	27.13	27.15	27.13	27.13						
Purge Volume H ₂ O Depth	Start	1.00	- 1	3	7	D	9	1						
Turbidity	41.1	39.8	32.4	10.4	2.1	1-1	0.1	1.0	7					
ORP (mV)	316.6	327.5	330.1	358.3	361.3	3658	108.1	103.3						
Hd (DS)	5.24	51.7		5.20 358.3	85.4	10.5								
DO (mg/L)	9.08			777 8	25. 95	10.5 01.8	1.75 5.01	1.11						
Spec. Cond. (mS/cm)	4000 H	9 0 038 8.94	0.040.0	0 639 8 44	S 0 65A		150.034	520.076						
Temp.	48.86	23.69	22.79	43.88		2456	3h, X	375						
Time	pet	1335	0461	1945	1350	12855	1300	1305						
	1220	200		-								-		

+/- 10% or <10 NTUs +/- 10 mV (see note below)* +/-0.1 unit +/- 10% (see note below)⁷ 幸龄 ‡°C Stabilizing Criteria

(see note below)*

(see note below)*

(i) - Funge rate to be 05 from oxive.

(b) - Stripping gate to be 07 from to the company of the

(in

SERM ERM

Sampler's Name: Charlette Clark	Sample Collection Time: 1155	Sample ID: MW -9 - 20(0)02 (-6	QA/OC Collected? // CO	Laboratory Analyses: (10C.5 Care C.O.C.)		
Project No. 60 i 21 03	Pump Type/Model: Peri Stalfic Tubing Material: 1/4" 1/20/2		1130 (1150 6.9	6.7	Leoda straw (VOCs) avacuum jug (SVOCs)	Redder prime = prime disoboses (all appliant)
Dickie Bark, GA	Pump Type/Model:	Pump Intake Depth (ft):	Start/Stop Purge Time: 1130 Purge Rate (L/min) ² : 0, 3	Total Purge Volume (L):	Sampling Method (check all that apply): Lebda straw (VOCs)	
RM Client: Williamson Dickie Site Location: College Park, CaA	Well ID: MW-9 Total Depth (ft):	Depth to Water (ft):	Well Diameter (in): Well Volume (gal) = 0.041d ² n:	well diameter (inches) h = length of water column (feet)	Well Condition: Good (negolator)	>

		- - -	C (ec.)														
L Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	03 11m3 : [m 10.4 cot to to 0.7	Shart odo				Collector Sample										
ge (all analytes)	H ₂ O Depth	13,45	13.47	13,51	13,57	13.60										(see note	-
Hadder pump = pump discharge (all analytes)	Purge Volume (L)	state	0,1	200	3.0	0'}										(See note	
☐ Bladder pum	Turbidity (NTUs)	300	0,1	1 COR	1,5	6.1										+f- 10% or	
	OKP (mV)	-51.9	2,001 -	- 143.9	-1732	-157.6										+/- 10 mV (see note	
	Hd Hd	5,5	5.54	5.57	5.55	5.50										++	
	DO (mg/L)	1.6.0	18.0	0,47	0.37	0.3]										+/- 10% (see note	
	Spec. Cond. (mS/cm)	151.0	0.138	0.138	6.139	0.139										*	
	Temp.	31.01	21.34	34		21.35										\$	
	Time	1130	1135	0,4	1145	1150										Stabilizing	2000

Sampling Date: [6-21-2010	Sampler's Name: Chorlette Clark	1255 inc.	min) ³ : NA	Sample ID: MW-37-2010 10 21 -01	No No	ONDCI.D. NA	Wyses: VOCs (see chair)	D pump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
Sampline	Sampler's	Sample Collection Time:	Sample Purge Rate (L/min) ³ :	Sam	QA/QC Collected?	OAC	Laboratory Analyses:		
Project No.: 60 1 21103		o'stalkic	LDPE		20/1250	<i>.</i> Ł.	6.25	raw (VOCs)	☐ Bladder pump = pump discharge (all analytes)
7	HA.	Pump Type/Model: Peristalkic	Tubing Material: 1/4 " LDPE	Pump Intake Depth (ft): 35	Start/Stop Purge Time: 1820/1950	Purge Rate (L/min) ² : O . A	Total Purge Volume (L):	Sampling Method (check all that apply): Lersoda straw (VOCs)	☐ Bladde
M Client Williamson Dickic	Site/Location: College Pork, En A	Well ID: MW -37	Total Depth (ft)!:	Depth to Water (ft): 10,47	Well Diameter (in):	ell Volume (gal) = 0.041d²h:	diameter (inches) h = length of water column (feet)	Condition: 4660	

		_	1	_	Т	1	_	_	1	_	1	1	_	1		_	_	_	_	_	
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	water Clear and actor a sensi	0	2		Time of the property of															
ge (all analytes)	H ₂ O Depth	11.04	10.95	1 00	200		-	1/ 25													
 biacuer pump = pump discharge (all analytes) 	Purge Volume (L)	Start	1,25	×.	270	7 35	5.75	6.29											7.		(con make
n piagoner pum	Turbidity (NTUs)	1.3	4	10	9.8	67	7.2	6.0													A. 10% av
	ORP (mV)	36.9	23.5	36.3	36.7	24.8	20.1	19.1													+/-10 mV
	(AS)	6.13	6.01	5.8%	5.86	200	5.93	5.93													*
	DO (mg/L)	1,51	0.45	0.36			41.0	0.15													+/- 10% (see note
	Spec. Cond. (mS/cm)	6.489	0.493	6,493	164.0	6.497	8640	0.499	W 550												*
	remp.	23.30	22.68	22.43	-		31.85	28.18													4
	Тіте	330	325	330	235	040	245	350													abilizing

GROUND WATER SAMPLING LOG SHEET

ERM

	00-10 CA	Sampling Date:
SherLocation: College Park, GA	66	Sampler's Name:

0.2 L/min Pump Type/Model: Pc. stalttC Sampling Method (check all that apply): Soda straw (VOCs) Tubing Material: 14 (2) DE Start/Stop Purge Time: Pump Intake Depth (ft): Total Purge Volume (L): Purge Rate (L/min)²: Well ID: MW -38R

 $\sigma = \text{well diameter (inches) h} = \text{length of water column (feel.)}$ Well Volume (gal) = 0.041d²h: **5007**

Pool

Well Condition:

Well Diameter (in):

Total Depth (ff)1: Depth to Water (ft):

Sample ID: MW - 28R - 2010 10-21-01 Charlette Chart Laboratory Analyses: VOC5 Cace Chair 0100-12-01 1355 QA/QC Collected? 100 DAVOCI.D. NA Sample Collection Time: Sample Purge Rate (L/min)³:

☐ pump head discharge (Inorganics including cyanide) uacuum jug (SVOCs)

	Jan Cachatta	Jes, W		reduce poor file		SUSpended	7											
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	-3 p/m/d - "c	5.35 Water Clouder, vows Floren land	olids observed	no throu	Wicher still Places lant. Whire particles	reduced Dury rate to 0,5	weter clearer Mat as Flocular			Sample collected 1355)						
e (all analytes)	H ₂ O Depth (ft)		15.35	16.40	17.4	19.3	18,5	18.75	14.81	18.78								(see note
= pump discharg	Purge Volume (L)	A STATE	Start	0.1	0.0	0	7.0	4,5	N.	5.5								See note
Ē	Turbidity		150	29	00	45	30	25	الأ	2								+f- 10% or
	ORP (mV)	1516	110.1	73.7	67,3	623	4.0%	165	58.7	58.3								+/- 10 mV (see note
	Hđ (US)	5.51	4.46	4.36	4.33	4.29	4.27	H.27	12.4	4.26								++
	DO (mg/L)	1150	3.17	0,48	0.25	0.15)).0	01.0	0.10	01.0								+/- 10% (see note
	Spec. Cond. (mS/cm)	6-(3)	0.433	0424	124.0	0.720	0.428	1997	0.498	0.499								*
0	Temp.	78.16	1. K	2000	20.60	30.53	Cross	30.49							100			‡
	Time	QC.	13/5	13 30	1335	330	325	1340	5461	1350								Stabilizing

If Programs the bit of Spense is.

(1) - Start lines at the bed Spense is.

(2) - Start lines at the bed Spense is.

(3) - Start lines at the bed Spense is the start lines of the start lines at the Start lines at the start lines at the Start lines at the Start lines at the start

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Appendix L

Ground Water Analytical Data – October 2010 Annual Ground Water Sampling Event

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



October 28, 2010

Shanna Thompson ERM-Southeast 300 Chastain Center Blvd, Suite 375 Kennesaw GA 30144

TEL: (770) 590-8383 FAX: (770) 590-9164

RE: Williamson Dickie

Dear Shanna Thompson:

Order No: 1010J94

Analytical Environmental Services, Inc. received for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- -NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Brian Rohr

Project Manager

CHAIN OF CUSTODY

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

110001 10 (07 94 Work Order:

10/23/10

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oţ Page Date: 10-22-10

a 80 ß R h Cd No # of Containers ત ď 7 α d R A a q ≥ Same Day Rush (auth req.) your results, place bottle * Analyze onlyfor to check on the status of www.aesatlanta.com trans 1,2 DCE Ξ Turnaround Time Reques Standard 5 Business Days Fax? Y/N Next Business Day Rush cis - 1,2 oct Visit our website 2 Business Day Rush 1.4 Dioxene Fotal # of Containers orders, etc. PCE/TCE/VC STATE PROGRAM (if any): REMARKS - DCE DATA PACKAGE: Other E-mail? Y/N; 0000 SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT. SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE. Thompson PROJECT INFORMATION ANALYSIS REQUESTED PRESERVATION (See codes) Sullivan D'alu's SEND REPORT TO: She And IF DIFFERENT FROM ABOVE) SITE ADDRESS: 74(1 Williamson PROJECT NAME: INVOICE TO PROJECT #: DOOTE # 至 £0928 Ψ φ 4 4 4 φ 6 ሖ 6 3 'n 3 4 DATE/TIME 2 (See codes) 3 5.0 Matrix FedEx UPS MAIL COURIER Composite 300 Chastain Center Blad SHIPMENT METHOD Kennesaw GA 30144 VIA ¥ ¥ Grab × CREYHOUND OTHER FAX: 770-590-9164 Y X no extellar 1430 1593708 1330 1200/ 1230 cc 1310 10-18-10 0920 1420 130 1330 1415 3601 013101 1025 10-8-10 1120 TIME SAMPLED LIEN 10-15-0 01-81-01 10-18-10 10-18-10 10-18-10 RECEIVED 10-5-10 01-51-01 10-14-01 10-15-10 SIGNATURE: Ste DATE OUT Z Jun 20-22-10 92 SPECIAL INSTRUCTIONS/COMMENTS: 13td compounds DATE/TIME - 20 10 1018 - 01 -20101018-01 20101018-01 MW-378-20101015-0 MW-35A-26101015-01 MW-36-20101015-01 MW-38A-201018-01 MW - 35- 20101015-01 MW-38-20101018-61 MW-20-20101014-01 MW-298-20101015-01 MW-25- 20101014-01 MW-19-20101014-01 SAMPLE ID HONE, 770- 590-8383 harlotte Chark ERM MW-33 MW-32 MW-12 A06 -ELINQUISHED BY Analyze SAMPLED BY 10 2 of 38

MATRIX CODES: A = Air GW = Groundwater SE = Sequiment SC = Sequiment SC = Sequiment Se W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water GW = Groundwater SE = Sediment SO = Soil SW = Surface Water

ANALYTICAL ENVIRONMENTAL SERVICES, INC

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188 3785 Presidential Parkway, Atlanta GA 30340-3704

CHAIN OF CUSTODY

1010 394 Work Order:

M.D 10123/10

Treat

Date: 10 -22-10

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R W A a 4 No # of Containers a U $|\gamma$ 7 q Ų Y a ≥ Same Day Rush (auth req.) your results, place bottle to check on the status of وم Fax? Y/N II II II www.aesatlanta.com Standard 5 Business Days trans 1,2 DCE Next Business Day Rush 2 Business Day Rush Visit our website Dioxane cis 1,2 DCE Fotal # of Containers 2 V/22 RECEIP orders, etc. Analyze only STATE PROGRAM (if any): REMARKS - DCE DATA PACKAGE TRIP V Other E-mail? Y/N; Jemp 7, PCE / 0000 SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT. SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE. Shence The mpson college Park, GA PROJECT INFORMATION ANALYSIS REQUESTED PRESERVATION (See codes) SITE ADDRESS: 2411 Sullivanted Williamson Dickie IF DIFFERENT FROM ABOVE) SEND REPORT TO: ROJECT NAME INVOICE TO: QUOTE # 17 4 120028 2 ? 4 N 2 ζ 4 6 2 DATE/TIME (See codes) 1.00 **₹** Matrix UPS MAIL COURIER 300 Chastain Gr. Blud ste 375 Vennesaw 6x 30144 Composite 4915-055-011 SHIPMENT METHOD VIA VIA ታ Grab ۲ OTHER harette llas 1005 0401 P-61-01 0541 01-31-01 5160 5001 30S 1155 1405 0711 079-01 5050 600-01 2021 1255 CLIENT FedEX 2011 GREYHOUND 135 SAMPLED 10-25/10 RECEIVED BY 10-20-10 10-20-10 10-20-10 10-21-10 10-21-6 01-05-01 9-61-01 12-51-(c 0-61-01 OUT FAX Z DATE/TIME 000 Juneary 10-22-10 9:26 for the 7 listed compounds MW-28R-20101021-01 MW-10A-20101020-01 MW-10-20101020-01 10-61010102-081-NW MW-37-20101021-01 - 20101020-MW -134-20101019-01 MW-34 -2010101019-01 MW-2 - 20101020 -01 MW-4- 20,101020-01 MW9-20101021-01 770-590-8383 Charlette Clark MW-13-20101019-01 Mw-14-20101019-01 SAMPLE ID PECIAL INSTRUCTIONS/COMMENTS: PR. R 7-906 ELINQUISHED BY MW-I Analyze AMPLED BY: OMPAN 01 3 of 38

WW = Waste Water SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) MATRIX CODES. A = Air

Client: ERM-Southeast
Project: Williamson Dickie

Lab ID: 1010J94

Case Narrative

Date:

2-Nov-10

Sample Receiving Nonconformance:

Sample 1010J94-003A had a collection date of 10/15/2010 listed on the container, while the COC had a collection date of 10/14/2010. The sample was reported according to the Chain of Custody.

A Trip Blank was provided, but not listed on the Chain of Custody. Trip blank analyzed at no cost to the client.

Volatile Organic Compounds Analysis by Method 8260B:

Trichloroethene value for Samples 1010J94-021A and - 025A is "E" qualified, indicating an estimated value over linear calibration range. Sample was diluted and re-analyzed with analyte being below reporting limit due to the level of dilution required for other compounds.

Client:ERM-SoutheastClient Sample ID:MW-20-20101014-01Project:Williamson DickieCollection Date:10/14/2010 2:30:00 PMLab ID:1010J94-001Matrix:Groundwater

Date:

28-Oct-10

Reporting **Dilution** BatchID Analyses Result Qual Units Date Analyzed Analyst **Factor** Limit Volatile Organic Compounds by GC/MS SW8260B (SW5030B) 1,4-Dioxane BRL 150 137147 10/26/2010 13:08 JT BRL JT 137147 Vinyl chloride 2.0 ug/L 10/26/2010 13:08 1,1-Dichloroethene BRL 5.0 ug/L 137147 1 10/26/2010 13:08 JT BRLtrans-1,2-Dichloroethene 5.0 ug/L 137147 1 10/26/2010 13:08 JT cis-1,2-Dichloroethene 400 50 ug/L 137147 10 10/26/2010 21:50 JT 9.7 5.0 137147 JT Trichloroethene ug/L 10/26/2010 13:08 74 5.0 ug/L 137147 1 10/26/2010 13:08 JT Tetrachloroethene Surr: 4-Bromofluorobenzene 80.9 64.7-130 %REC 137147 1 10/26/2010 13:08 JT 80.1 64.7-130 %REC 137147 10 10/26/2010 21:50 JT Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane 104 80.7-129 %REC 137147 1 10/26/2010 13:08 JT 105 %REC 80.7-129 137147 10 10/26/2010 21:50 JT Surr: Dibromofluoromethane Surr: Toluene-d8 89.6 71.1-120 %REC 137147 10/26/2010 13:08 JT 92 137147 71.1-120 %REC 10 10/26/2010 21:50 JT Surr: Toluene-d8

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-19-20101014-01Project:Williamson DickieCollection Date:10/14/2010 3:10:00 PM

Date:

28-Oct-10

Lab ID:1010J94-002Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 13:37	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 13:37	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
Surr: 4-Bromofluorobenzene	84.2	64.7-130		%REC	137147	1	10/26/2010 13:37	JT
Surr: Dibromofluoromethane	106	80.7-129		%REC	137147	1	10/26/2010 13:37	JT
Surr: Toluene-d8	92.3	71.1-120		%REC	137147	1	10/26/2010 13:37	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-25-20101014-01Project:Williamson DickieCollection Date:10/14/2010 1:10:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-003 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 14:05	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 14:05	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:05	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:05	JT
cis-1,2-Dichloroethene	23	5.0		ug/L	137147	1	10/26/2010 14:05	JT
Trichloroethene	6.2	5.0		ug/L	137147	1	10/26/2010 14:05	JT
Tetrachloroethene	110	5.0		ug/L	137147	1	10/26/2010 14:05	JT
Surr: 4-Bromofluorobenzene	78.9	64.7-130		%REC	137147	1	10/26/2010 14:05	JT
Surr: Dibromofluoromethane	108	80.7-129		%REC	137147	1	10/26/2010 14:05	JT
Surr: Toluene-d8	90.9	71.1-120		%REC	137147	1	10/26/2010 14:05	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-29R-20101015-01Project:Williamson DickieCollection Date:10/15/2010 12:30:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-004 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 14:34	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 14:34	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
Surr: 4-Bromofluorobenzene	79.6	64.7-130		%REC	137147	1	10/26/2010 14:34	JT
Surr: Dibromofluoromethane	105	80.7-129		%REC	137147	1	10/26/2010 14:34	JT
Surr: Toluene-d8	91.3	71.1-120		%REC	137147	1	10/26/2010 14:34	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-35-20101015-01Project:Williamson DickieCollection Date:10/15/2010 2:15:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-005 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 15:03	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 15:03	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
Surr: 4-Bromofluorobenzene	81.3	64.7-130		%REC	137147	1	10/26/2010 15:03	JT
Surr: Dibromofluoromethane	107	80.7-129		%REC	137147	1	10/26/2010 15:03	JT
Surr: Toluene-d8	93.7	71.1-120		%REC	137147	1	10/26/2010 15:03	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-35A-20101015-01Project:Williamson DickieCollection Date:10/15/2010 1:30:00 PM

Date:

28-Oct-10

Lab ID:1010J94-006Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/M	IS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 12:51	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 12:51	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
Surr: 4-Bromofluorobenzene	87.5	64.7-130		%REC	137147	1	10/27/2010 12:51	JT
Surr: Dibromofluoromethane	104	80.7-129		%REC	137147	1	10/27/2010 12:51	JT
Surr: Toluene-d8	87.8	71.1-120		%REC	137147	1	10/27/2010 12:51	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-36-20101015-01Project:Williamson DickieCollection Date:10/15/2010 11:30:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-007 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/M	AS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 13:20	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 13:20	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
Surr: 4-Bromofluorobenzene	84.9	64.7-130		%REC	137147	1	10/27/2010 13:20	JT
Surr: Dibromofluoromethane	107	80.7-129		%REC	137147	1	10/27/2010 13:20	JT
Surr: Toluene-d8	91.6	71.1-120		%REC	137147	1	10/27/2010 13:20	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-37A-20101015-01Project:Williamson DickieCollection Date:10/15/2010 10:35:00 AM

Date:

28-Oct-10

Lab ID:1010J94-008Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 13:48	JT
Vinyl chloride	2.6	2.0		ug/L	137147	1	10/27/2010 13:48	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
cis-1,2-Dichloroethene	110	5.0		ug/L	137147	1	10/27/2010 13:48	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
Surr: 4-Bromofluorobenzene	87	64.7-130		%REC	137147	1	10/27/2010 13:48	JT
Surr: Dibromofluoromethane	111	80.7-129		%REC	137147	1	10/27/2010 13:48	JT
Surr: Toluene-d8	91.7	71.1-120		%REC	137147	1	10/27/2010 13:48	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-38-20101018-01Project:Williamson DickieCollection Date:10/18/2010 9:20:00 AM

Date:

28-Oct-10

Lab ID:1010J94-009Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 14:17	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 14:17	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
Tetrachloroethene	25	5.0		ug/L	137147	1	10/27/2010 14:17	JT
Surr: 4-Bromofluorobenzene	82.5	64.7-130		%REC	137147	1	10/27/2010 14:17	JT
Surr: Dibromofluoromethane	110	80.7-129		%REC	137147	1	10/27/2010 14:17	JT
Surr: Toluene-d8	93.9	71.1-120		%REC	137147	1	10/27/2010 14:17	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-38A-20101018-01Project:Williamson DickieCollection Date:10/18/2010 10:25:00 AM

Date:

28-Oct-10

Lab ID:1010J94-010Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 18:38	JT
Vinyl chloride	13	2.0		ug/L	137147	1	10/27/2010 18:38	JT
1,1-Dichloroethene	8.6	5.0		ug/L	137147	1	10/27/2010 18:38	JT
trans-1,2-Dichloroethene	5.5	5.0		ug/L	137147	1	10/27/2010 18:38	JT
cis-1,2-Dichloroethene	3800	500		ug/L	137147	100	10/27/2010 12:22	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:38	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:38	JT
Surr: 4-Bromofluorobenzene	82.8	64.7-130		%REC	137147	1	10/27/2010 18:38	JT
Surr: 4-Bromofluorobenzene	83.7	64.7-130		%REC	137147	100	10/27/2010 12:22	JT
Surr: Dibromofluoromethane	108	80.7-129		%REC	137147	100	10/27/2010 12:22	JT
Surr: Dibromofluoromethane	111	80.7-129		%REC	137147	1	10/27/2010 18:38	JT
Surr: Toluene-d8	86.2	71.1-120		%REC	137147	1	10/27/2010 18:38	JT
Surr: Toluene-d8	91.9	71.1-120		%REC	137147	100	10/27/2010 12:22	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-32-20101018-01Project:Williamson DickieCollection Date:10/18/2010 11:20:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-011 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 14:45	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 14:45	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:45	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:45	JT
cis-1,2-Dichloroethene	20	5.0		ug/L	137147	1	10/27/2010 14:45	JT
Trichloroethene	5.6	5.0		ug/L	137147	1	10/27/2010 14:45	JT
Tetrachloroethene	100	5.0		ug/L	137147	1	10/27/2010 14:45	JT
Surr: 4-Bromofluorobenzene	81.7	64.7-130		%REC	137147	1	10/27/2010 14:45	JT
Surr: Dibromofluoromethane	114	80.7-129		%REC	137147	1	10/27/2010 14:45	JT
Surr: Toluene-d8	91.7	71.1-120		%REC	137147	1	10/27/2010 14:45	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-33-20101018-01Project:Williamson DickieCollection Date:10/18/2010 1:20:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-012 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 15:14	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 15:14	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
Surr: 4-Bromofluorobenzene	86.3	64.7-130		%REC	137147	1	10/27/2010 15:14	JT
Surr: Dibromofluoromethane	110	80.7-129		%REC	137147	1	10/27/2010 15:14	JT
Surr: Toluene-d8	90.9	71.1-120		%REC	137147	1	10/27/2010 15:14	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

ter than Result value

Client:ERM-SoutheastClient Sample ID:MW-12-20101018-01Project:Williamson DickieCollection Date:10/18/2010 2:20:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-013 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 15:43	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 15:43	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:43	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:43	JT
cis-1,2-Dichloroethene	23	5.0		ug/L	137147	1	10/27/2010 15:43	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:43	JT
Tetrachloroethene	22	5.0		ug/L	137147	1	10/27/2010 15:43	JT
Surr: 4-Bromofluorobenzene	80.6	64.7-130		%REC	137147	1	10/27/2010 15:43	JT
Surr: Dibromofluoromethane	110	80.7-129		%REC	137147	1	10/27/2010 15:43	JT
Surr: Toluene-d8	93.6	71.1-120		%REC	137147	1	10/27/2010 15:43	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client: ERM-Southeast Client Sample ID: DUP-1

Project: Williamson Dickie Collection Date: 10/18/2010 12:00:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-014 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 16:11	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 16:11	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
Tetrachloroethene	26	5.0		ug/L	137147	1	10/27/2010 16:11	JT
Surr: 4-Bromofluorobenzene	83.2	64.7-130		%REC	137147	1	10/27/2010 16:11	JT
Surr: Dibromofluoromethane	115	80.7-129		%REC	137147	1	10/27/2010 16:11	JT
Surr: Toluene-d8	93.9	71.1-120		%REC	137147	1	10/27/2010 16:11	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-14-20101019-01Project:Williamson DickieCollection Date:10/19/2010 9:15:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-015 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 18:10	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 18:10	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
Tetrachloroethene	9.8	5.0		ug/L	137147	1	10/27/2010 18:10	JT
Surr: 4-Bromofluorobenzene	85	64.7-130		%REC	137147	1	10/27/2010 18:10	JT
Surr: Dibromofluoromethane	112	80.7-129		%REC	137147	1	10/27/2010 18:10	JT
Surr: Toluene-d8	94.5	71.1-120		%REC	137147	1	10/27/2010 18:10	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast Client Sample ID: MW-13-20101019-01 **Project: Collection Date:** 10/19/2010 10:05:00 AM Williamson Dickie

Date:

28-Oct-10

Lab ID: 1010J94-016 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	75030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 13:11	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 13:11	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 13:11	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 13:11	GK
cis-1,2-Dichloroethene	6.6	5.0		ug/L	137089	1	10/26/2010 13:11	GK
Trichloroethene	10	5.0		ug/L	137089	1	10/26/2010 13:11	GK
Tetrachloroethene	120	5.0		ug/L	137089	1	10/26/2010 13:11	GK
Surr: 4-Bromofluorobenzene	89.5	64.7-130		%REC	137089	1	10/26/2010 13:11	GK
Surr: Dibromofluoromethane	103	80.7-129		%REC	137089	1	10/26/2010 13:11	GK
Surr: Toluene-d8	97.5	71.1-120		%REC	137089	1	10/26/2010 13:11	GK

Qualifiers:

Value exceeds maximum contaminant level

BRL Below reporting limit

Н Holding times for preparation or analysis exceeded

Analyte not NELAC certified

Analyte detected in the associated method blank

Greater than Result value

E Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-13A-20101019-01Project:Williamson DickieCollection Date:10/19/2010 10:40:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-017 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 16:40	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 16:40	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
Tetrachloroethene	18	5.0		ug/L	137089	1	10/26/2010 16:40	GK
Surr: 4-Bromofluorobenzene	90.1	64.7-130		%REC	137089	1	10/26/2010 16:40	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	137089	1	10/26/2010 16:40	GK
Surr: Toluene-d8	94.1	71.1-120		%REC	137089	1	10/26/2010 16:40	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-34-20101019-01Project:Williamson DickieCollection Date:10/19/2010 11:40:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-018 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 17:10	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 17:10	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
Tetrachloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
Surr: 4-Bromofluorobenzene	93.8	64.7-130		%REC	137089	1	10/26/2010 17:10	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	1	10/26/2010 17:10	GK
Surr: Toluene-d8	94.9	71.1-120		%REC	137089	1	10/26/2010 17:10	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-18D-20101019-01Project:Williamson DickieCollection Date:10/19/2010 2:30:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-019 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	75030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 13:39	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 13:39	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
Tetrachloroethene	17	5.0		ug/L	137089	1	10/27/2010 13:39	GK
Surr: 4-Bromofluorobenzene	94.6	64.7-130		%REC	137089	1	10/27/2010 13:39	GK
Surr: Dibromofluoromethane	97.4	80.7-129		%REC	137089	1	10/27/2010 13:39	GK
Surr: Toluene-d8	95	71.1-120		%REC	137089	1	10/27/2010 13:39	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-4-20101020-01Project:Williamson DickieCollection Date:10/20/2010 9:05:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-020 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 14:09	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 14:09	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 14:09	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 14:09	GK
cis-1,2-Dichloroethene	190	5.0		ug/L	137089	1	10/27/2010 14:09	GK
Trichloroethene	49	5.0		ug/L	137089	1	10/27/2010 14:09	GK
Tetrachloroethene	1700	100		ug/L	137089	20	10/27/2010 16:38	GK
Surr: 4-Bromofluorobenzene	91.8	64.7-130		%REC	137089	1	10/27/2010 14:09	GK
Surr: 4-Bromofluorobenzene	87	64.7-130		%REC	137089	20	10/27/2010 16:38	GK
Surr: Dibromofluoromethane	106	80.7-129		%REC	137089	20	10/27/2010 16:38	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	137089	1	10/27/2010 14:09	GK
Surr: Toluene-d8	94.6	71.1-120		%REC	137089	1	10/27/2010 14:09	GK
Surr: Toluene-d8	99.3	71.1-120		%REC	137089	20	10/27/2010 16:38	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-1-20101020-01Project:Williamson DickieCollection Date:10/20/2010 10:05:00 AM

Date:

28-Oct-10

Lab ID:1010J94-021Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 14:38	GK
Vinyl chloride	11	2.0		ug/L	137089	1	10/27/2010 14:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 14:38	GK
trans-1,2-Dichloroethene	20	5.0		ug/L	137089	1	10/27/2010 14:38	GK
cis-1,2-Dichloroethene	1300	1000		ug/L	137089	500	10/27/2010 16:08	GK
Trichloroethene	400	5.0	E	ug/L	137089	1	10/27/2010 14:38	GK
Tetrachloroethene	20000	2500		ug/L	137089	500	10/27/2010 16:08	GK
Surr: 4-Bromofluorobenzene	91.5	64.7-130		%REC	137089	500	10/27/2010 16:08	GK
Surr: 4-Bromofluorobenzene	94.6	64.7-130		%REC	137089	1	10/27/2010 14:38	GK
Surr: Dibromofluoromethane	105	80.7-129		%REC	137089	500	10/27/2010 16:08	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	137089	1	10/27/2010 14:38	GK
Surr: Toluene-d8	96	71.1-120		%REC	137089	500	10/27/2010 16:08	GK
Surr: Toluene-d8	98.5	71.1-120		%REC	137089	1	10/27/2010 14:38	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

ater than Result value

Client:ERM-SoutheastClient Sample ID:MW-2-20101020-01Project:Williamson DickieCollection Date:10/20/2010 11:05:00 AM

Date:

28-Oct-10

Lab ID:1010J94-022Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 17:40	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 17:40	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 17:40	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 17:40	GK
cis-1,2-Dichloroethene	23	5.0		ug/L	137089	1	10/27/2010 17:40	GK
Trichloroethene	9.2	5.0		ug/L	137089	1	10/27/2010 17:40	GK
Tetrachloroethene	64	5.0		ug/L	137089	1	10/27/2010 17:40	GK
Surr: 4-Bromofluorobenzene	88.9	64.7-130		%REC	137089	1	10/27/2010 17:40	GK
Surr: Dibromofluoromethane	108	80.7-129		%REC	137089	1	10/27/2010 17:40	GK
Surr: Toluene-d8	96	71.1-120		%REC	137089	1	10/27/2010 17:40	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-10-20101020-01Project:Williamson DickieCollection Date:10/20/2010 2:05:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-023 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 15:38	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 15:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 15:38	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 15:38	GK
cis-1,2-Dichloroethene	14	5.0		ug/L	137089	1	10/27/2010 15:38	GK
Trichloroethene	11	5.0		ug/L	137089	1	10/27/2010 15:38	GK
Tetrachloroethene	210	50		ug/L	137089	10	10/28/2010 09:45	GK
Surr: 4-Bromofluorobenzene	90.6	64.7-130		%REC	137089	1	10/27/2010 15:38	GK
Surr: 4-Bromofluorobenzene	94	64.7-130		%REC	137089	10	10/28/2010 09:45	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	10	10/28/2010 09:45	GK
Surr: Dibromofluoromethane	103	80.7-129		%REC	137089	1	10/27/2010 15:38	GK
Surr: Toluene-d8	96.8	71.1-120		%REC	137089	1	10/27/2010 15:38	GK
Surr: Toluene-d8	96.7	71.1-120		%REC	137089	10	10/28/2010 09:45	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client: ERM-Southeast Client Sample ID: MW-10A-20101020-01 **Project: Collection Date:** 10/20/2010 1:05:00 PM Williamson Dickie

Date:

28-Oct-10

Lab ID: 1010J94-024 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/28/2010 10:15	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/28/2010 10:15	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 10:15	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 10:15	GK
cis-1,2-Dichloroethene	270	100		ug/L	137089	20	10/28/2010 10:46	GK
Trichloroethene	98	5.0		ug/L	137089	1	10/28/2010 10:15	GK
Tetrachloroethene	1100	100		ug/L	137089	20	10/28/2010 10:46	GK
Surr: 4-Bromofluorobenzene	87.9	64.7-130		%REC	137089	1	10/28/2010 10:15	GK
Surr: 4-Bromofluorobenzene	91	64.7-130		%REC	137089	20	10/28/2010 10:46	GK
Surr: Dibromofluoromethane	104	80.7-129		%REC	137089	20	10/28/2010 10:46	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	1	10/28/2010 10:15	GK
Surr: Toluene-d8	98.1	71.1-120		%REC	137089	1	10/28/2010 10:15	GK
Surr: Toluene-d8	96	71.1-120		%REC	137089	20	10/28/2010 10:46	GK

Qualifiers:

Value exceeds maximum contaminant level

BRL Below reporting limit

Н Holding times for preparation or analysis exceeded

Analyte not NELAC certified

Analyte detected in the associated method blank

Greater than Result value

E Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Client: ERM-Southeast Client Sample ID: DUP-2

Project: Williamson Dickie Collection Date: 10/20/2010 12:00:00 PM

Date:

28-Oct-10

Lab ID:1010J94-025Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/28/2010 11:16	GK
Vinyl chloride	12	2.0		ug/L	137089	1	10/28/2010 11:16	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 11:16	GK
trans-1,2-Dichloroethene	19	5.0		ug/L	137089	1	10/28/2010 11:16	GK
cis-1,2-Dichloroethene	1100	1000		ug/L	137089	500	10/28/2010 13:46	GK
Trichloroethene	410	5.0	E	ug/L	137089	1	10/28/2010 11:16	GK
Tetrachloroethene	19000	2500		ug/L	137089	500	10/28/2010 13:46	GK
Surr: 4-Bromofluorobenzene	88.5	64.7-130		%REC	137089	500	10/28/2010 13:46	GK
Surr: 4-Bromofluorobenzene	91.9	64.7-130		%REC	137089	1	10/28/2010 11:16	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	500	10/28/2010 13:46	GK
Surr: Dibromofluoromethane	102	80.7-129		%REC	137089	1	10/28/2010 11:16	GK
Surr: Toluene-d8	95.1	71.1-120		%REC	137089	500	10/28/2010 13:46	GK
Surr: Toluene-d8	97.7	71.1-120		%REC	137089	1	10/28/2010 11:16	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-9-20101021-01Project:Williamson DickieCollection Date:10/21/2010 11:55:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-026 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/28/2010 14:16	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/28/2010 14:16	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
Tetrachloroethene	20	5.0		ug/L	137089	1	10/28/2010 14:16	GK
Surr: 4-Bromofluorobenzene	89.6	64.7-130		%REC	137089	1	10/28/2010 14:16	GK
Surr: Dibromofluoromethane	102	80.7-129		%REC	137089	1	10/28/2010 14:16	GK
Surr: Toluene-d8	95.9	71.1-120		%REC	137089	1	10/28/2010 14:16	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-37-20101021-01Project:Williamson DickieCollection Date:10/21/2010 12:55:00 PM

Date:

28-Oct-10

Lab ID:1010J94-027Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 18:10	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 18:10	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:10	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:10	GK
cis-1,2-Dichloroethene	7.8	5.0		ug/L	137089	1	10/27/2010 18:10	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:10	GK
Tetrachloroethene	22	5.0		ug/L	137089	1	10/27/2010 18:10	GK
Surr: 4-Bromofluorobenzene	90.7	64.7-130		%REC	137089	1	10/27/2010 18:10	GK
Surr: Dibromofluoromethane	105	80.7-129		%REC	137089	1	10/27/2010 18:10	GK
Surr: Toluene-d8	97.9	71.1-120		%REC	137089	1	10/27/2010 18:10	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-28-20101021-01Project:Williamson DickieCollection Date:10/21/2010 1:55:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-028 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 18:40	GK
Vinyl chloride	3.1	2.0		ug/L	137089	1	10/27/2010 18:40	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
cis-1,2-Dichloroethene	16	5.0		ug/L	137089	1	10/27/2010 18:40	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
Tetrachloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
Surr: 4-Bromofluorobenzene	102	64.7-130		%REC	137089	1	10/27/2010 18:40	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	1	10/27/2010 18:40	GK
Surr: Toluene-d8	96.1	71.1-120		%REC	137089	1	10/27/2010 18:40	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:TRIP BLANKProject:Williamson DickieCollection Date:10/22/2010Lab ID:1010J94-029Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 12:41	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 12:41	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
Tetrachloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
Surr: 4-Bromofluorobenzene	89.1	64.7-130		%REC	137089	1	10/26/2010 12:41	GK
Surr: Dibromofluoromethane	105	80.7-129		%REC	137089	1	10/26/2010 12:41	GK
Surr: Toluene-d8	94.8	71.1-120		%REC	137089	1	10/26/2010 12:41	GK

Date:

28-Oct-10

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Sample/Cooler Receipt Checklist

Client ERM		Work Order	r Number	1010594
Checklist completed by	10/23/1	<u> </u>		
Carrier name: FedEx UPS Courier Client \(\subseteq \ US	Mail Other	r	_	
Shipping container/cooler in good condition?	Yes 🔟	No _	Not Present _	-
Custody seals intact on shipping container/cooler?	Yes	No _	Not Present	_
Custody seals intact on sample bottles?	Yes	No	Not Present _	_
Container/Temp Blank temperature in compliance? (4°C±2)*		No		
Cooler #1 3.40 Cooler #2 Cooler #3	_ Cooler #4 _	Coo	oler#5	Cooler #6
Chain of custody present?	Yes 🖊	No		
Chain of custody signed when relinquished and received?	Yes 🟒	No _		
Chain of custody agrees with sample labels? \0 \23 \10 \text{M}	Yes 🔏	No 🗾		
Samples in proper container/bottle?	Yes 👤	No		
Sample containers intact?	Yes 🗾	No		
Sufficient sample volume for indicated test?	Yes 🟒	No _		
All samples received within holding time?	Yes 🗸	No _		
Was TAT marked on the COC?	Yes 🗸	No _		
Proceed with Standard TAT as per project history?	Yes	No	Not Applicab	le/
Water - VOA vials have zero headspace? No VOA vials su	ibmitted	Yes 🗹	No	
Water - pH acceptable upon receipt?	Yes 👱	No	Not Applicab	le
Adjusted?				-
Sample Condition: Good Other(Explain)				_
(For diffusive samples or AIHA lead) Is a known blank include	led? Yes	1	No /	

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklists

^{*} Samples do not have to comply with the given range for certain parameters.

Client: ERM-Southeast

Project Name: Williamson Dickie

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

35 of 38

Workorder: 1010J94

ANALYTICAL QC SUMMARY REPORT

R RPD outside limits due to matrix

BatchID: 137089

Date:

28-Oct-10

Sample ID: MB-137089 SampleType: MBLK	Client ID: TestCode: Vol	atile Organic Compo	unds by GC/MS	SW8260B	Un: Bat	ts: ug/L chID: 137089		Date: 10/26 lysis Date: 10/26		Run No: 183117 Seq No: 3812815
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Γrichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	44.59	0	50	0	89.2	64.7	130	0	0	0
Surr: Dibromofluoromethane	52.90	0	50	0	106	80.7	129	0	0	0
Surr: Toluene-d8	47.80	0	50	0	95.6	71.1	120	0	0	0
Sample ID: LCS-137089	Client ID:		Un	ts: ug/L	Prep	Prep Date: 10/26/2010 Run No: 183117				
SampleType: LCS	TestCode: Vol	stCode: Volatile Organic Compounds by GC/MS SW8260B			BatchID: 137089			lysis Date: 10/26	Seq No: 3812813	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	59.01	5.0	50	0	118	51	154	0	0	0
Trichloroethene	57.07	5.0	50	0	114	73.9	132	0	0	0
Surr: 4-Bromofluorobenzene	44.23	0	50	0	88.5	64.7	130	0	0	0
Surr: Dibromofluoromethane	51.72	0	50	0	103	80.7	129	0	0	0
Surr: Toluene-d8	48.03	0	50	0	96.1	71.1	120	0	0	0
Sample ID: 1010J94-016AMS SampleType: MS		Client ID: MW-13-20101019-01 TestCode: Volatile Organic Compounds by GC/MS SW8260B		SW8260B	Units: ug/L BatchID: 137089		Prep Date: 10/26/2010 Analysis Date: 10/26/2010			Run No: 183117 Seq No: 3814302
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	52.45	5.0	50	0	105	46.2	183	0	0	0
Trichloroethene	64.30	5.0	50	10.20	108	70.5	149	0	0	0
Surr: 4-Bromofluorobenzene	47.32	0	50	0	94.6	64.7	130	0	0	0
Qualifiers: > Greater than Result val	lue		< Less	than Result value			В	Analyte detected in the asso	ociated method	blank
BRL Below reporting limit			E Estim	ated (value above quantita	ation range)			Holding times for preparati		

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

Analytical Environmental Services, Inc

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

28-Oct-10

Project Name: Williamson Dickie **Workorder:** 1010J94

BatchID: 137089

Sample ID: 1010J94-016AMS SampleType: MS		MW-13-20101019-01 Volatile Organic Compou		SW8260B	Uni Bat	ts: ug/L chID: 137089		Date: 10/26 lysis Date: 10/26		Run No: 183117 Seq No: 3814302
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	48.89	0	50	0	97.8	80.7	129	0	0	0
Surr: Toluene-d8	46.65	0	50	0	93.3	71.1	120	0	0	0
Sample ID: 1010J94-016AMSD SampleType: MSD	Client ID: MW-13-20101019-01 TestCode: Volatile Organic Compounds by GC/MS SW8260B			· ·			Prep Date: 10/26/2010 Run No: 183117 Analysis Date: 10/26/2010 Seq No: 3814303			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	52.33	5.0	50	0	105	46.2	183	52.45	0.229	20
Trichloroethene	64.12	5.0	50	10.20	108	70.5	149	64.30	0.28	20
Surr: 4-Bromofluorobenzene	47.02	0	50	0	94	64.7	130	47.32	0	0
Surr: Dibromofluoromethane	49.52	0	50	0	99	80.7	129	48.89	0	0
Surr: Toluene-d8	47.55	0	50	0	95.1	71.1	120	46.65	0	0

Qualifiers: > Greater than Result value

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Client: ERM-Southeast

Williamson Dickie

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

37 of 38

Workorder: 1010J94

Project Name:

ANALYTICAL QC SUMMARY REPORT

R RPD outside limits due to matrix

BatchID: 137147

Date:

28-Oct-10

Sample ID: MB-137147 SampleType: MBLK	Client ID: TestCode:	Volatile Organic Compo	unds by GC/MS	SW8260B	Un Bat	its: ug/L tchID: 137147		Date: 10/26 lysis Date: 10/26		Run No: 183215 Seq No: 3814681
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Γrichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	42.08	0	50	0	84.2	64.7	130	0	0	0
Surr: Dibromofluoromethane	50.31	0	50	0	101	80.7	129	0	0	0
Surr: Toluene-d8	45.34	0	50	0	90.7	71.1	120	0	0	0
Sample ID: LCS-137147	Client ID:				Un	its: ug/L	Prep	rep Date: 10/26/2010 Run No: 183215		
SampleType: LCS	TestCode:	Volatile Organic Compo	ands by GC/MS	SW8260B	Bat	tchID: 137147	Ana	lysis Date: 10/26	/2010	Seq No: 3814679
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	60.60	5.0	50	0	121	51	154	0	0	0
Γrichloroethene	61.83	5.0	50	0	124	73.9	132	0	0	0
Surr: 4-Bromofluorobenzene	43.13	0	50	0	86.3	64.7	130	0	0	0
Surr: Dibromofluoromethane	49.11	0	50	0	98.2	80.7	129	0	0	0
Surr: Toluene-d8	44.41	0	50	0	88.8	71.1	120	0	0	0
Sample ID: 1010J94-002AMS SampleType: MS		MW-19-20101014-0 Volatile Organic Compo		SW8260B	Un Bat	its: ug/L tchID: 137147		Date: 10/26 lysis Date: 10/26		Run No: 183215 Seq No: 3814697
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	68.41	5.0	50	0	137	46.2	183	0	0	0
Γrichloroethene	63.40	5.0	50	0	127	70.5	149	0	0	0
Surr: 4-Bromofluorobenzene	41.81	0	50	0	83.6	64.7	130	0	0	0
Oualifiers: > Greater than Result value							В	Analyte detected in the ass	ociated method	blank
BRL Below reporting limit	BRL Below reporting limit E Estimated (value above quantita							Holding times for preparati		

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

Analytical Environmental Services, Inc

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

28-Oct-10

Project Name: Williamson Dickie Workorder: 1010J94

BatchID: 137147

Sample ID: 1010J94-002AMS SampleType: MS		MW-19-20101014-01 Volatile Organic Compou		SW8260B	Uni Bat	ts: ug/L chID: 137147		Date: 10/26 lysis Date: 10/26		Run No: 183215 Seq No: 3814697
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	50.54	0	50	0	101	80.7	129	0	0	0
Surr: Toluene-d8	44.46	0	50	0	88.9	71.1	120	0	0	0
Sample ID: 1010J94-002AMSD SampleType: MSD	Client ID: MW-19-20101014-01 TestCode: Volatile Organic Compounds by GC/MS SW8260B			· ·			1		Run No: 183215 Seq No: 3814700	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	69.77	5.0	50	0	140	46.2	183	68.41	1.97	20
Trichloroethene	59.25	5.0	50	0	118	70.5	149	63.40	6.77	20
Surr: 4-Bromofluorobenzene	41.60	0	50	0	83.2	64.7	130	41.81	0	0
Surr: Dibromofluoromethane	49.60	0	50	0	99.2	80.7	129	50.54	0	0
Surr: Toluene-d8	43.18	0	50	0	86.4	71.1	120	44.46	0	0

Qualifiers: Greater than Result value

> BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Appendix M

Plan to Maintain Compliance

PLAN TO MAINTAIN COMPLIANCE DICKIES INDUSTRIAL SERVICES SITE (former) – HSI #10127

The Dickies Industrial Services, Incorporated ("DISI") property has been fully delineated and corrective action has been completed for Tax Parcel No. 130036LL1463 and Tax Parcel No. 130036LL1356 ("DISI property") in accordance with the Type 3/4 Risk Reduction Standards as documented in the Voluntary Compliance Status Report. To assure continued compliance with the Type 3/4 Risk Reduction Standards for soil, the owner of the DISI property shall implement this Plan To Maintain Compliance ("Plan").

- **1.0 MONITORING TO ASSURE COMPLIANCE WITH TYPE 3/4 RISK REDUCTION STANDARDS.** The owner of the DISI property shall institute and conduct the following monitoring program to assure continued compliance with Type 3/4 Risk Reduction Standards for soil:
 - A. Review of Contracts and other written Agreements. The owner of the DISI property shall review each contract and lease agreement that it enters into concerning the DISI property, and each informal agreement regarding the use of the site, to ensure that such contracts and agreements will not result in the use of the DISI property for any purpose that is inconsistent with the non-residential status on which the Type 3/4 Risk Reduction Standards for soil are based.
 - **B.** On-Site Monitoring. The owner of the DISI property shall monitor the DISI property to ensure that its actual use by tenants or other authorized occupants is consistent with Type 3/4 Risk Reduction Standards for soil. To fulfill this requirement, an on-site inspection of the DISI property shall be conducted at least annually.
- July 1 of each year, the owner of the DISI property shall submit an annual written report, in the form provided in Exhibit 1, to the Hazardous Sites Response Program to certify its continued compliance with this Plan. In each report, the owner of the DISI property shall certify that it has not entered into any contract or other written agreement that grants a use of the site that is inconsistent with the non-residential status on which the Type 3/4 Risk Reduction Standards for soil are based. It shall further certify that, based on the on-site inspection, the actual use of the site is consistent with its non-residential status. The report shall include the following certification.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluate that information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true and 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."

- 3.0 NOTICE TO GEORGIA EPD PRIOR TO TRANSFER OF PROPERTY. In the event that an owner of the DISI property conveys the whole or any part of its ownership interest in the DISI property or in the event that title to the real property at the DISI property is conveyed, in whole or in part, to any other person by operation of law, the owner of the DISI property shall, not fewer than thirty (30) days after the transfer, notify Georgia EPD in writing of the name and address of the transferee or successor in title, and of the nature and date of the transfer or conveyance.
- **4.0 DURATION OF PLAN.** This Plan shall remain in full force and effect until such time as the Director determines that the DISI property meets the Type 1/2 Risk Reduction Standards for soil, and therefore no further action is required.

EXHIBIT 1

ANNUAL WRITTEN REPORT AND CERTIFICATION OF COMPLIANCE WITH TYPE 3/4 RISK REDUCTION STANDARDS FOR SOIL

Ms. Alexandra Cleary Hazardous Site Response Program Georgia Environmental Protection Division 205 Butler Street, S.E., Suite 1162 Atlanta, GA 30334

Re: Dickies Industrial Services, Inc. ("DISI") Annual Monitoring Report Tax Parcel No. 130036LL1463 and Tax Parcel No. 130036LL1356 Dear Ms. Cleary: [Owner's name] hereby certifies that it has complied with the terms of the Plan To Maintain Compliance for the above-referenced tax parcels (the "DISI property"). This annual report is submitted to fulfill the requirements of the Plan To Maintain Compliance, a copy of which is attached for your reference. In compliance with the Plan To Maintain Compliance, [owner's name] has carefully reviewed each contract and lease agreement, and other written agreement, that it has entered into regarding the DISI property. [Owner's name] hereby certifies that no such agreement will result in a use of the DISI property that is inconsistent with the non-residential status on which the Type 3/4 Risk Reduction Standards for soil are based. In compliance with the Plan To Maintain Compliance, [owner's name] conducted an on-site inspection of the DISI property on ______, 20___. This inspection was conducted by . This inspection was conducted to verify that the actual use of the site by tenants and other occupants is and has been consistent with its non-residential status. The inspection revealed no evidence of any inconsistent use. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate that information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true and accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Title:

Date:_____

STATEMENT OF FINDINGS

As required by the rules for the Voluntary Remediation Program ("VRP"), this section presents a concise statement of findings of this Voluntary Compliance Status Report (VCSR). The purpose of this document is to provide final resolution of soil contamination and to certify compliance with the applicable Risk Reduction Standards (RRS) within the framework of Georgia's Voluntary Remediation Program. Excavation activities were performed to remove, transport and dispose of the soils that contained regulated constituents above the applicable RRS. This document will provide the summary of activities conducted to demonstrate compliance with the applicable RRS.

Background

This VCSR is for the former Dickies Industrial Services, Inc. (DISI) facility ("the facility" or "the site") located at 2411 Sullivan Road in College Park, Georgia. Four (4) parcels are enrolled in the VRP. Three (3) are owned by DISI and one (1) is owned by Coca Cola Refreshments, USA, Inc. (CCR). During the period 1970 to 1984 the DISI facility conducted dry cleaning activities. The facility is currently used for warehouse/distribution activities. Site investigation activities began in 1987 and site remediation activities begin in 1999.

This site was placed on Georgia's Hazardous Sites Inventory (HSI) in 1994 because of the Reportable Quantities Screening Method (RQSM) On-Site Exposure Pathway score exceeded the threshold of 20. This Site did not score high enough on the RQSM calculations to be listed on the HSI for the Ground Water Pathway.

The soil cleanup standards that will be used for this site will be the RRS currently used in the HSRA program. The RRS that are guiding corrective action for soils were approved in EPD correspondence dated October 12, 2005. Ground water cleanup standards are not included for this site, since ground water cleanup is not required per Section 12-8-107(g)(2) of the VRP Act.

Chemicals of Interest at this Site

Tetrachloroethene (PCE) and its degradation products are chemicals of interest at this Site. This is based on review of chemicals used at the facility and soil and ground water quality data collected during previous environmental investigations. Constituents found in ground water include the following: tetrachloroethene, trichloroethylene, cis-1,2-dichloroethene, trans-1,2-dichloroethene 1,1-dichloroethene and vinyl chloride. Beginning in 2009 the

analysis suite also included 1,4-dioxane, per request from the EPD. 1,4-dioxane has not been detected in soil or ground water samples.

Summary of Soil Remediation and Investigation Status

Although the release details are not known, the soil investigation data show that the regulated compounds were most likely released from former dry cleaning operations on the north end of the building. Following the removal of soils described in the December 2010 Soil Removal Report to the EPD, soil samples were collected from the base and sidewalls of each excavation area to confirm that soil exceeding RRS for PCE and its degradation products was removed and that compliance with RRS was achieved. Thus, soil remediation has been performed such that soils do not remain on site above the Type 3/4 RRS.

Summary of Ground Water Remediation and Conditions

Ground water corrective action was performed under the HSRA program, as described in the Annual Reports on Corrective Action Progress that have been submitted to the EPD in 2004, 2005, 2006, 2007, 2008, and 2009. A combination of remedial technologies was used to address concentrations of tetrachloroethene and its degradation products that exceeded the RRS.

Additional ground water cleanup is not required under the Voluntary Remediation Program, per Section 12-8-107(g)(2) of the VRP Act.

Risk Reduction Standards and Site Compliance

The following tax parcels in the VRP are in compliance with Type 1 Risk Reduction Standards for soil:

Tax Parcel ID No. 130036LL1349 (owned by DISI) Tax Parcel ID No. 130036LL1414 (owned by CCR)

The following parcels in the VRP are in compliance with the Type 3/Type 4 Risk Reduction Standards for soil:

Tax Parcel ID No. 130036LL1463 (owned by DISI) Tax Parcel ID No. 130036LL1356 (owned by DISI)

Continuing Actions To Maintain Compliance

To assure continued compliance with the Type 3/4 Risk Reduction Standards for soil, the owner of the DISI property will implement a Plan to Maintain Compliance, including but not limited to submittal of an annual written report and certification to EPD.

CERTIFICATION OF COMPLIANCE WITH RISK REDUCTION STANDARDS

I certify under penalty of law that this report and all attachments were prepared under my direction in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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.

Based on my review of the findings of this report with respect to the risk reduction standards of the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that:

The following tax parcels are in compliance with Type 1 Risk Reduction Standards for soil:

Tax Parcel ID No.

130036LL1349

Tax Parcel ID No.

130036LL1414

The following parcels are in compliance with the Type 3/Type 4 Risk Reduction Standards for soil:

Tax Parcel ID No.

130036LL1463

Tax Parcel ID No.

130036LL1356

These tax parcels are shown in the Tax Parcel Map located in Appendix A. The property owners' contact information is provided in Appendix B.

Certified By: 100m B. Saowe

Date: 3/30/11

Attorney for Dickies Industrial Services, Inc.

GROUND WATER SCIENTIST STATEMENT

I certify that I am a qualified ground water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in ground water hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding ground water monitoring and contaminant fate and transport.

I further certify that this Voluntary Compliance Status Report for Hazardous Site Inventory Site No. 10127 was prepared by me and appropriate qualified subordinates working under my direction.

A summary of the hours spent by the Professional Engineer's firm is provided in Appendix C, in order to comply with Voluntary Remediation Plan Act.

Shanna Thompson, P.E.

Georgia License No. PE031306

Date

1.0 INTRODUCTION

1.1 OVERVIEW

Environmental Resources Management (ERM) has prepared this Voluntary Compliance Status Report (VCSR) on behalf of Dickies Industrial Services, Inc ("DISI"). The VCSR is prepared for the former DISI facility (the "facility" or "the Site"), which is currently listed on the Georgia Hazardous Site Inventory (HSI #10127) as a result of previous releases of hazardous substances. The Site is located at 2411 Sullivan Road in College Park, Georgia (see Figure 1). Figure 2, which is a plan view of the facility, shows the building and the former location of the dry cleaning operations. The building is currently utilized by DISI as warehouse/distribution space. No dry cleaning activities currently take place at the facility.

Four (4) parcels comprise the Site and are in the VRP due to the presence of regulated substances in soil. Three (3) of the parcels are located on Sullivan Road in College Park, a suburb of Atlanta, Georgia (see Figure 1) and are owned by DISI. They include approximately 2.25 acres. A single story building having approximately 40,000 square feet of floor space occupies this area of the facility. A dry cleaning operation was formerly located at the northern end of the building. The fourth parcel is on the west, east and north of the DISI parcels and contains a 60-feet wide ingress and egress easement used by DISI. The fourth parcel is owned by Coca-Cola Refreshments USA, Inc. ("CCR"). CCR has given Dickies express permission to enter the CCR property to perform corrective action pursuant to a December 1, 2010 Access Agreement between CCR and DISI. The original VRP application included only two of these parcels, and the other two parcels were added to the VRP via correspondence from Joan Sasine of Bryan Cave to EPD dated February 3, 2011.

Other properties near the facility that exhibit concentrations of regulated substances in ground water include Puja Partners, LLC, Sears Roebuck & Company, Blount Construction Company, and a CSX Railroad right-ofway located on CCR's property.

1.2 CHEMICALS OF INTEREST

Tetrachloroethene (PCE) and its degradation products are the chemicals of interest at the DISI facility. This determination is based upon the facility's history as an industrial dry-cleaning site and sampling and analysis work that dates as far back as 1987. Regulated constituents found in soil include the following: tetrachloroethene, trichloroethene, cis-1,2-dichloroethene and trans-1,2-dichloroethene.

Regulated constituents found in ground water include the following: tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene 1,1-dichloroethene and vinyl chloride. Beginning in 2009 the analysis suite also included 1,4-dioxane, per a request from the EPD. 1,4-dioxane has not been detected in soil or ground water samples. At one point, chloroform was detected in ground water samples; however this was determined to not be attributable to releases from the DISI Site.

Over the course of correspondence between consultants and the EPD, a set of RRS was approved to guide remediation efforts at this Site. A copy of pertinent information and a table of the approved RRS are provided in Appendix D.

1.3 HSI SITE STATUS

This Site was placed on Georgia's Hazardous Sites Inventory (HSI) in 1994 because of the Reportable Quantities Screening Method (RQSM) On-Site Exposure Pathway score exceeded the threshold of 20. This Site did not score high enough on the RQSM calculations to be listed on the HSI for the Ground Water Pathway.

This Site was accepted into Georgia's Voluntary Remediation Program on November 15, 2010.

1.4 PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide final resolution of soil contamination and to certify compliance with the applicable RRS within the framework of Georgia's Voluntary Remediation Program. Excavation activities were performed to remove, transport and dispose of the soils that contained constituents above the applicable RRS. This document will provide the summary of activities conducted to demonstrate compliance with the applicable RRS.

1.5 ORGANIZATION

This Voluntary Compliance Status Report presents a discussion of the regulatory status and Certification of Compliance with Risk Reduction Standards for HSI Site 10127, via the Voluntary Remediation Program Act, as follows:

- Section 2 presents a discussion of the Site location and potential sources of regulated compounds;
- Section 3 presents a summary of previous investigations and the contaminants of concern identified at the Site;
- Section 4 presents a series of soil delineation maps;
- Section 5 presents a summary of ground water conditions.
- Section 6 describes the corrective action activities that have already been performed at this site, including soil vapor extraction, soil excavation, and ground water treatment via air sparging, chemical oxidation, and enhanced passive remediation;
- Section 7 presents the results of soil sampling performed to document compliance with the Site specific RRS in soil.
- Section 8 presents a discussion of RRS and Site compliance.
- Section 9 describes the responsible party that has been performing investigation since 1987 and remediation since 1999.
- Section 10 describes the public notice provided by DISI.
- Section 11 describes the continuing actions that will be in place pending approval of this VCSR.

2.0 SITE BACKGROUND & CONCEPTUAL SITE MODEL

2.1 LOCATION AND DESCRIPTION

The location of the Site is provided on Figure 1. A tax parcel location map showing the four parcels in the VRP is included in Appendix A. The Site is located at 2411 Sullivan Road in College Park, Fulton County, Georgia. The area near the Site includes commercial and industrial properties.

2.2 POTENTIAL SOURCES OF REGULATED MATERIALS

The facility building was constructed in 1969 and operated as an industrial laundry from 1970 to 1984. Operations at the plant from 1970 to 1984 included the use of PCE and associated distillation equipment for recovery and recycling of this material. Residual PCE and degradation products (i.e., trichloroethylene (TCE) and 1,2-dichloroethylene (1,2-DCE)) in subsurface soils (the "source area") were the result of unknown PCE releases on-Site. Descriptions of select equipment and processes are included below. The location of dry cleaning process activities is shown in Figure 2.

Pretreatment of wastewater generated by the on-Site laundering process consisted of settling out solids, grease and other materials in an underground wastewater settling tank (a.k.a. sewer tank). The pretreated wastewater was monitored and discharged into the public sewer in accordance with a permit from the city of College Park. The approximate location of the sewer tank is shown on Figure 2. This sewer tank was excavated and removed during the 2010 soil excavation activities.

From approximately 1980 to 1984, a 500-gallon above ground tank was located indoors and used to collect still bottoms and spent dry cleaning fluids. Contents of the tank were removed on an as-needed basis by reclaiming contractors. The approximate location of this tank is shown on Figure 2.

Empty 55-gallon drums, which previously contained dry-cleaning related fluids and laundry detergents, were temporarily staged adjacent to the northwest corner of the building for transport off-Site. The approximate location of the drum storage was just north of the former sewer tank.

2.3 SITE DESCRIPTION

This section of the VCSR provides a description of the properties which are a part of the Site, including the address and location of such property, its legal description, and the property owner name, address and telephone number, as required by Section 391-3-19-.06(3)(b)(5) of the Rules. As defined by Section 391-3-19-02(2), the Site means that portion of the owner's contiguous property and any other owner's property affected by a release exceeding a reportable quantity.

The following properties are enrolled in the VRP:

- Dickies Industrial Services, Inc. (Tax Parcels 130036LL1463, 130036LL1456, and 130036LL1349,
- Coca-Cola Refreshments USA, Inc. (Tax Parcel 130036LL1414

A map of the tax parcels is provided in Appendix A. The property owners' names, addresses and telephone numbers are included in Appendix B.

2.4 RISK REDUCTION STANDARDS

A summary of cleanup standards to be used for this Site in the Voluntary Remediation Program is provided in Appendix D.

The soil cleanup standards that will be used for this Site will be the RRS currently used in the HSRA program. The RRS that are guiding corrective action for soils were approved in EPD correspondence dated October 12, 2005. For the compounds of interest at this Site the surface and subsurface RRS were calculated to be equal, so only a single soil RRS is listed in Appendix D.

Ground water cleanup standards are not included for this site, since ground water cleanup is not required per Section 12-8-107(g)(2) of the VRP Act, which states:

"The participant shall not be required to perform corrective action or to certify compliance for ground water if the voluntary remediation property was listed on the inventory as a result of a release to soil exceeding a reportable quantity for soil but was not listed on the inventory as a result of a release to ground water exceeding a reportable quantity, and

if the participant further demonstrates to the director at the time of enrollment that a release exceeding a reportable quantity for ground water does not exist at the voluntary remediation property; and the ground water protection requirements for soils shall be based on protection of the established point of exposure for ground water as provided under this part... "

2.5 CONCEPTUAL SITE MODEL

The Conceptual Site Model provides an assessment of exposure pathways to human and environmental receptors that may have been or could be potentially exposed regulated chemical from a release at the facility. The building at the facility is currently occupied and is used as warehouse/distribution space. The area surrounding the facility is used for commercial activities. The following sections discuss the details of the Conceptual Site Model, as organized by the exposure pathway: soil exposure, ground water exposure, surface water exposure, and vapor exposure.

Although the release details are not known, the soil investigation data show that the regulated compounds were most likely released from former dry cleaning operations on the north end of the building.

2.5.1 Assessment of The Soil Exposure Pathway

The soil pathway is a pathway that could potentially be completed by industrial workers at the facility; however, investigation and remediation activities have brought the Site soils to levels that do not pose unacceptable risk. Soil remediation has been performed such that there are no longer soils that exceed the Type 3/4 RRS. The Type 3/4 RRS are calculated in a manner that considers protection of direct soil exposure and the soil to ground water pathway. Thus, the soils remaining on Site do not pose an unacceptable risk to human health or the environment.

2.5.2 Assessment Of The Ground Water Exposure Pathway

Because the facility and surrounding area are served by a municipal water supply system, ground water is not being used for human consumption. Therefore, the human exposure to contaminated ground water is not currently an exposure pathway. A map of the potential ground water

receptors within three miles of the Site is provided in Figure 3. This Receptor Map shows that no ground water receptors were located in the downgradient direction within three miles of the Site. This fact is important when considering this Site relative to Section 107(g)(2) of the VRP Act.

2.5.3 Assessment Of The Surface Water Exposure Pathway

Surface water cleanup standards were not calculated because the surface water pathway was determined to be incomplete, due to the fact that:

- (1) Soils formerly above RRS have been remediated.
- (2) There are not surface water bodies within the vicinity of the soil remediation effort.

The facility and adjacent properties are not shown as wetlands on the National Wetlands Inventory maps prepared by the U.S. Fish and Wildlife Service. With the exception of some wet-weather ditches and other manmade depressions, no wetland-like areas are present on the Site. No perennial streams or other surface water bodies have been observed on or near the facility. A map showing the location of the nearest surface water feature is provided as Figure 4.

2.5.4 Assessment of the Vapor Intrusion Exposure Pathway

Potential human receptor groups in the area include facility workers located on the properties that exhibit concentrations of volatile organic compounds (VOCs) in ground water samples.

2.5.4.1 Initial Vapor Intrusion Assessment

The vapor intrusion assessment for this Site is based on OSWER guidance (EPA, 2002), which provides a three-tiered approach to determine if there is a completed vapor intrusion pathway that causes unacceptable risk levels.

TIER 1 (Primary Screening) has three basic questions designed to screen out sites at which vapor intrusion pathway does not ordinarily need further consideration. For the subject Site:

• Chemicals of sufficient volatility and toxicity are known to be present in the subsurface (e.g. PCE and it's degradation products) and

• Buildings are located near the subsurface contaminants (e.g. DISI facility).

Since the above information does not indicate an incomplete vapor intrusion pathway, the assessment is carried forward to TIER 2.

TIER 2 (Secondary Screening) has two multipart questions which are structured to use existing data to assess the vapor intrusion pathway. For the subject Site:

- Indoor air data are not currently available,
- There is confirmed contamination (i.e. source of vapors) in the unsaturated zone, and
- measured ground water concentrations for select compounds exceed ground water target levels at a risk of 10-5 (Georgia's acceptable risk level).

Furthermore, ground water concentrations of select compounds exceed target concentrations by more than a factor of 50. Therefore, based on screening presented in the TIER 1 and TIER 2 assessments, Site-specific evaluations were conducted at the subject site.

TIER 3 calls for a site-specific evaluation of the vapor intrusion pathway beyond secondary screening using (1) collection of soil gas samples and/or (2) computer modeling. During 2010, both of these site specific evaluation methods were used to assess the level of risk posed to human receptors by vapor intrusion from the ground water plume.

2.5.4.2 Soil Gas Sampling

Subslab soil gas samples were collected from three locations beneath the DISI facility. Subslab soil gas probes were collected from immediately below the facility's concrete slab. Soil gas probes were installed beneath the slab by installing a 1" diameter boring in the slab. The soil gas probes were constructed of a 1.5" ceramic tip connected to 0.125" OD Nylaflow® tubing and completed with a gas-tight Swagelok nut and cap. After placing the tip and tubing into the boring, clean silica sand was used to fill the annular space around the tip to a height of 0.5" above the tip. Following emplacement of the silica sand filter pack, approximately 1" of hydrated granular bentonite was placed in the annular space around the probe. The vapor probe was completed to the surface with hydrated hydraulic cement. Vapor probe design and locations are described in Appendix E.

After allowing the hydraulic cement to set (~15 minutes), the vapor probe was enclosed with a shroud that was pressurized with helium. The vapor probe was connected to a gas-tight Nylaflow tube which exited the shroud and connected to a peristaltic pump. The peristaltic pump was switched on and allowed to pump >3 well volumes from the vapor probe. After purging at least 3 well volumes, a helium detector was used to confirm the absence of helium in the effluent vapor stream. In order to confirm that the shroud was filled with helium, the helium detector was connected to a valved port open to the inside of the shroud. Any vapor probes that allowed helium to enter the sample stream were replaced with new equipment.

Vapor samples were collected using 200 mL/min flow regulators in 6 liter batch certified-clean summa canisters. The samples were analyzed by AirToxics Laboratory using EPA method TO-15 for tetrachloroethene, associated daughter products, and 1,4-dioxane. The laboratory reports from this soil vapor sampling event are provided in Appendix F. Results from the three vapor samples, shown in the table below, along with site-specific lithologic information were used as inputs to the Johnson and Ettinger model to further evaluate the vapor intrusion pathway.

Table - Subslab vapor data summary

	V-1	V-2	V-3	V-3 dup
Compound	(ppbv)	(ppbv)	(ppbv)	(ppbv)
Vinyl Chloride	< 0.72	< 0.72	< 0.78	< 0.78
cis-1,2-Dichloroethene	< 0.72	< 0.72	< 0.78	< 0.78
Trichloroethene	< 0.72	1.5	1.6	1.5
Tetrachloroethene	3.6	6.0	35	33
trans-1,2-Dichloroethene	< 0.72	< 0.73	< 0.78	< 0.78
1,4-Dioxane	<2.9	<2.9	<3.1	<3.1

Bold concentrations are greater than the "Target Shallow Soil Gas Concentration Corresponding to Target Indoor Air Concentration Where the Soil Gas to Indoor Air Attenuation Factor=0.1" values given in OSWER, 2002 at the 10-5 risk level.

2.5.4.3 Vapor Intrusion Modeling

Since select compound concentrations were greater than screening levels given in OSWER¹, 2002 (i.e. the bold data in the table above), the Johnson and Ettinger ²model was used to determine concentrations of regulated

EPA, 2002. OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Ground water and Soils Subsurface Vapor Intrusion Guidance. November 2002. EPA530-D-02-004.

Johnson, P.C., and R.A. Ettinger. 1991. Heuristic model for predicting the intrusion rate of contaminant vapors in buildings. Environ. Sci. Technol. 25: 1445-1452.

compounds representing an unacceptable risk. The Johnson and Ettinger (1991) model is a one-dimensional analytical solution to convective and diffusive vapor transport into indoor spaces.

Modeling to Assess Vapor Intrusion Risk input parameters used in the tetrachloroethene (PCE) and trichloroethene (TCE) soil gas screening models and output from the models are shown in Appendix G. Input parameters given in Appendix G represent either default parameters suggested by the model or Site-specific parameters (e.g. LF, LS, TS, and lithology). PCE and TCE were the only compounds detected above laboratory detection limits in the vapor samples, thus they are the only compounds carried forward in the vapor intrusion assessment.

Boring logs for borings installed in the vicinity of the vapor probes indicate the subsurface lithology to be sandy clay or a clayey sand. Since a clayey sand would likely have a higher permeability and therefore represent a "worst-case" scenario, the soil classification system (SCS) classification of sandy loam (SL) was used to represent subsurface lithology.

Results from the Johnson and Ettinger (1991) model indicate that the incremental risk from vapor intrusion to indoor air for carcinogenic effects at the DISI facility is 1.9×10^{-7} , which is orders of magnitude less than the 1×10^{-5} risk level allowed. Furthermore, the hazard quotient from vapor intrusion to indoor air for noncarcinogenic effects is 1.2×10^{-4} .

Similarly, results from the Johnson and Ettinger (1991) model for TCE indicate that the incremental risk from vapor intrusion to indoor air for carcinogenic effects at the DISI facility is 1.3×10^{-7} , which is orders of magnitude less than the 1×10^{-5} risk level allowed. Furthermore, the hazard quotient from vapor intrusion to indoor air for noncarcinogenic effects from TCE is 6.7×10^{-5} .

2.5.4.4 *Vapor Intrusion Conclusions*

Based on results presented above, measured soil gas concentrations do not represent unacceptable risks due to the vapor intrusion pathway in this industrial setting.

This section of the VCSR provides a summary of previous Site investigations. The previous Site investigations were performed in a stepwise approach that occurred over the past 24 years. In order to convey the results of multiple years of data collection, the discussion has been arranged to follow the timeline of the major submittals to the EPD regarding investigation and remediation activities at this HSI Site. This timeline is as follows:

- Investigation Prior to the Compliance Status Report (1987 2001)
- Investigation Performed During Corrective Action (2001 2010)
- Soil Removal Report (Dec 2010)

The Site investigation and delineation results from each period are summarized below.

3.1 INVESTIGATION PRIOR TO THE INITIAL COMPLIANCE STATUS REPORT (1987-2001)

The original CSR effort was for the purpose of delineating the extent of contamination, as described in a series of CSR submittals to the EPD from 1998 through August 15, 2000. The CSR was approved by the EPD on February 14, 2001. The original CSR compiled data collected by the previous consultants, along with data collected by ERM, in order to show site delineation. A summary of the investigations conducted by the various consultants is provided in the list below.

- Atlanta Testing & Engineering, Inc. (AT&E) Beginning 1987
 - Performed an assessment of the former Eastern Foods property (now CCR)
 - o Installed one monitoring well
- Hill-Fister Engineers, Inc. Beginning 1987
 - Installed three monitoring wells
 - Collected two soil samples

- Camp Dresser & McKee (CDM) Beginning 1990
 - o Performed a Phase I Environmental Assessment
 - o Performed a Phase II Environmental Assessment
 - Installed seven soil borings
 - Installed eight monitor wells (MW-1 through MW-8)
 Collected soil gas samples and ground water samples using soil probe techniques
 - Collected and analyzed numerous soil samples and ground water samples for VOCs, and
 - Measured water levels and conducted hydraulic conductivity tests to evaluate ground water occurrence and movement.
- Law Associates, Inc. (Law) Beginning 1991
 - Performed a Phase II Assessment at the Mini Storage property west of the facility (this parcel is currently owned by Puja Properties).
 - o Installed three monitoring wells
- RMT Beginning 1993
 - Installed 10 ground water monitoring wells (MW-3A, MW-9, MW-9A, MW-10, MW-10A, MW-11, MW-12, MW13, MW-13A, and MW-14)
 - o Collected and analyzed ground water samples,
 - Measured water levels and conducted hydraulic conductivity tests to evaluate ground water occurrence and movement, and
 - o Surveyed monitoring wells.
- Atlanta Environmental Management Beginning 1998
 - Installed eight borings by using direct push technology (DPT),
 - Collected numerous soil and ground water samples from DPT borings,
 - Collected ground water samples from existing monitoring wells, and
 - Analyzed soil and ground water samples for VOCs
- ERM Beginning 1998
 - o Installed 30 soil borings using direct push technology (DPT),
 - Sampled ground water at 17 locations both on and off-Site using DPT methods,
 - o Installed ground water monitoring wells and
 - o Conducted ground water elevation monitoring.

The results of these efforts were included in the 1998 – 2000 CSR and CSR Addenda.

3.2 INVESTIGATION PERFORMED DURING CORRECTIVE ACTION (2001-2010)

A Corrective Action Plan (CAP) was prepared and submitted to the EPD on June 13, 2001 and approved on June 28, 2002. A brief CAP Addendum was submitted on April 19, 2004 and approved by the EPD on June 18, 2004. A CAP Addendum was also submitted to EPD in 2009. EPD did not officially respond to this addendum, because the Site entered the VRP prior to the CAP Addendum review by the EPD.

3.2.1 Soil Sampling to Monitor Corrective Action Progress

Soil sampling was performed during the construction of the remediation system in 2003 and then annually thereafter as a provision of the CAP approval. During this time soils from both inside and outside the building were sampled and analyzed for VOCs. Since these locations were used to assess progress in VOC remediation, many locations were re-sampled on an annual basis. Since soil borings cannot technically be collected from the exact location on multiple locations, each year's data was collected from within two feet of a permanent identifying marker. Details on sampling methods and laboratory reports were included with reports submitted to the EPD between 2003 and 2010. Results of final soil samples from each location are included in Table 1.

3.2.2 Ground Water Sampling to Monitor Corrective Action

Each Annual Report included ground water monitoring data from the well network that was established as of 2002. The Annual Reports also included copies of the field parameter measurements for the sampling events that were performed using low flow sampling methods.

3.3 INVESTIGATION PERFORMED SINCE THE 2010 VRP SUBMITTAL TO THE EPD (2010-2011)

3.3.1 Soil Investigation

In order to fully delineate the contaminants of concern in soil to the west of the source areas, three additional boring locations were installed on the western CCR property boundary (SB-A, SB-B, and SB-C). Sampling depths were selected to provide information to fill in data gaps needed to complete delineation. The boring logs and laboratory reports from this soil investigation are provided Appendix H. Data are summarized in Table 1 and shown on the soil delineation figures. These borings provided sufficient information to complete the delineation within the CCR property and without having to access the Puja property for soil sampling.

3.3.2 Ground Water Investigation

One additional monitoring well, MW-39, was installed in 2011. This well was installed in response to EPD's November 15, 2010 correspondence. This well was screened in the most likely depth to find regulated substances based on the results for tetrachloroethene at nearby wells (MW-13, MW-13A, and MW-32). EPD requested that this well be installed to better understand the southwest edge of the regulated substances in ground water. The boring log and well construction diagram are provided in Appendix I. This well was successful in providing delineation in the southwest direction, as discussed in the ground water summary in Section 5 of this report.

4.0 SOIL DELINEATION SUMMARY

The figures referenced in this section provide a visual representation of the soil investigations that have been performed in a step-wise approach over the past two decades. In order to convey the results of multiple years of data collection, the soils sample locations on the following set of figures are coded with a red symbol and text if they exceed the delineation concentrations:

- Figure 5 Soil Delineation Map: Tetrachloroethene in Soil (1990-2010)
- Figure 6 Soil Delineation Map: Trichloroethene in Soil (1990-2010)
- Figure 7 Soil Delineation Map: 1,1-Dichloroethene in Soil (1990-2010)
- Figure 8 Soil Delineation Map: Cis-1,2-Dichloroethene in Soil (1990-2010)
- Figure 9 Soil Delineation Map: Trans-1,2-Dichloroethene in Soil (1990-2010)
- Figure 10 Soil Delineation Map: Vinyl Chloride in Soil (1990-2010)
- Figure 11 Soil Delineation Map: 1,4-Dioxane in Soil (1990-2010)

A soil delineation boundary is shown on these figures in order to show that delineation in all directions has been achieved and that only four tax parcels had to be investigated in order to find those boundaries (three DISI parcels and one parcel belonging to CCR). This section provides a discussion of (1) the general approach used to evaluate ground water contamination, (2) the analytical parameters selected and rationale for selection, (3) sampling locations, (4) sampling and analytical procedures, (5) statistical procedures used to evaluate data, (6) procedures used to establish background concentrations, and (7) the results of the assessment activities as required by Section 391-3-19-.06(3)(b)(2) of the Rules. Ground water investigations were completed by ERM between 1998 and 2010, which includes monitoring prior to and during remediation activities. During this work, the following tasks were completed:

- Geologic logs, construction records, and historical ground water elevation data were reviewed to determine/clarify the direction of ground water movement at the facility and surrounding properties.
- Ground water elevation monitoring was conducted at selected wells to determine/clarify the direction of ground water movement.
- Ground water monitoring wells were installed to monitor ground water quality and elevations in the saprolite aquifer. The locations of these wells are included on Figure 12.

5.1 AREAS INVESTIGATED

The ground water investigation network was setup up prior to the 2003 remediation construction effort. These wells were monitored quarterly for two years, and most wells have been monitored annually throughout the seven year ground water remediation period. The well construction details have been submitted with previous CSR/CAP documents, and a summary of monitoring well construction information is provided in Table 2.

In addition to the monitoring well network used throughout remediation, one additional well was installed in 2011. This well, MW-39, was successful in providing delineation in the southwest direction, since the

analytical results were below detection limits. The analytical data report is provided in Appendix J.

5.2 GENERAL APPROACH

The general approach to ground water monitoring has been annual monitoring for the purpose of monitoring the plume size and plume stability, and remediation progress. In addition, some monitoring wells, air sparge wells, injection wells, and passive soil vapor extraction wells were sampled intermittently for the sake of monitoring remediation progress in specific areas of ground water remediation activity. Results of the ground water monitoring activities have been reported to the EPD on an annual basis in the form of Annual Progress Reports. These data were also used over the course of the seven-year remediation period to adapt remediation systems to address the higher concentration areas of the ground water plume.

5.3 ANALYTICAL PARAMETERS SELECTED AND RATIONALE FOR SELECTION

The ground water quality data indicate that PCE and its associated degradation products are the predominant VOCs present in the saprolite aquifer at the facility and neighboring properties.

5.4 METHODS USED TO CHARACTERIZE GEOLOGY AND HYDROGEOLOGY

5.4.1 Subsurface Geology

Hollow-stem-auger drilling, rock coring, and DPT methods were employed during the ground water investigations. Table 2 presents a summary of monitoring well construction details. Boring logs for well installations have been submitted to the EPD throughout the investigation and remediation process. According to boring logs prepared during investigation over the past 24 years, the facility is underlain by saprolite of varying thickness, then hard granite gneiss and a mica schist.

5.4.2 Ground Water Gradients, Flow Rates, and Flow Direction

Ground water gradients and flow directions at the facility were determined from potentiometric surface maps, such as the one created with the October 2010 water level monitoring data (Figure 13). The water level measurements and potentiometric surface calculations are shown in

Table 3. The general direction of ground water flow is to the east, with a small component of flow to the northeast and to the north.

5.4.3 Hydraulic Conductivity And Other Hydrogeologic Characteristics

The general direction of ground water flow is to the east/slight northeast, at an estimated rate of 39 to 67 feet per year. As documented in the 2001 CAP, horizontal hydraulic gradients for the facility and nearby properties estimated from the water table contours range from 0.002 to 0.008. Based on these data and an assumed porosity of 0.2 and gradient of 0.005, the ground water flow at the site is estimated to be in the range of 39 to 67 feet per year.

5.5 GROUND WATER SAMPLING LOCATIONS AND DEPTHS

Ground water sampling locations are shown on Figure 12, and the well construction details for the monitoring wells are provided in Table 2.

5.5.1 Saprolite Aquifer Monitoring Well Installation & Construction Methods

Hollow-stem-auger drilling methods were utilized to advance boreholes for the monitoring wells. During the drilling, soil samples were collected and logged. Subsequent to completing a borehole to the desired depth, the well casing and screen were placed inside the hollow-stem-augers. The casing and screen are 2-inch diameter, schedule 40 PVC having threaded joints. The well screen length varies as described in Table 2.

Subsequent to placing the well screen and casing inside the hollow-stemaugers, a filter pack of washed silica sand was placed in the well annulus from the bottom of the borehole to approximately 2-to-4 feet above the top of the screen. The hollow-stem-augers were slowly withdrawn from the borehole as the sand was placed. A layer of bentonite pellets was place on top of the sand pack. The remainder of the annular space was filled to ground surface with a cement-bentonite grout mixture. Each well was completed at the ground surface by installing either a flush-mount, bolt-down cover or a stand-up protective metal casing. A concrete pad was poured around each well and the each well's cap was equipped with a lock.

5.5.2 Bedrock Aquifer Well Installation And Construction Methods

Hollow-stem-auger drilling methods were used to advance a borehole to the point of auger refusal, approximately 82 feet below grade. At this depth, temporary steel casing was set and rock coring activities were

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initiated using a nominal 4-inch diameter core barrel. Initially, 10 feet of rock were cored to ensure that competent bedrock had been encountered. At this point, rock-coring activities were stopped and the borehole was reamed to nominal diameter of 10 inches to an approximate depth of 92 feet below grade. Six-inch diameter, schedule 40 PVC casing was then set in the borehole and grouted into place. The annular space around the casing was filled with a 95 percent cement-5 percent bentonite grout. The grout was placed using the tremie method and allowed to cure for 24 hours.

Once the grout had cured, the PVC casing was flushed with potable water. Rock coring activities were resumed. A qualified geologist examined each rock core. In addition to describing the rock type, the cores were examined for evidence of secondary porosity, such as fractures or structural features and oxidation zones.

The bedrock well at the facility was completed as on open hole well to a depth of 132 feet below grade. As such, no additional casing or screen were installed. The well was completed by installing a bolt-down, flushmount cover and a concrete pad at the ground surface.

5.5.3 Well Development Procedures

The saprolite aquifer wells were developed using bailing and pumping methods. In the case of bailing, disposable polyethylene bailers equipped with new nylon rope were used. Other wells were developed by pneumatic pump. During the development, the temperature, specific conductivity, ph, and turbidity of the purged water was monitored.

The bedrock well was developed by over pumping with a 2-inch diameter electric submersible pump. During development, the temperature, specific conductance, pH, and turbidity of the development water were monitored.

5.6 GROUND WATER SAMPLING PROCEDURES

5.6.1 Monitoring Well Ground Water Elevations And Measurements

Before ground water samples were collected, the depth to ground water and total depth were measured for each monitoring well. These measurements were collected using the following procedure.

1. The lock and locking cap covering the well were removed.

- 2. Sufficient time was allowed for the water level in each well to stabilize.
- 3. A clean electronic water level probe was lowered to the water surface.
- 4. The distance from the reference point to the water surface was recorded to the nearest 0.01 foot.
- 5. The probe was lowered to the bottom of the monitoring well.
- 6. The distance from the reference point to the bottom of the well was recorded to the nearest 0.01 foot.
- 7. The probe was removed from the well and cleaned.

Results from the most recent potentiometric surface mapping event, October 2010, are provided in Table 3 and Figure 13.

5.6.2 Sample Handling and Preservation Techniques

5.6.2.1 Sample Identification

Ground water samples were identified by the monitoring location from which they were collected. For example, the ground water sample collected from MW-20 was identified as MW-20.

5.6.2.2 Sample Preservation and Holding Times

The samples were acidified in the field using hydrochloric acid to a pH of less than 2. Subsequent to being collected, they were placed in ice-filled coolers. They were delivered to a NELAC accredited laboratory by ERM personnel or by courier. The samples were analyzed within 14 days of their collection.

5.6.2.3 Equipment Decontamination Procedures

In between each sampling interval and location where a re-useable discrete interval ground water sampler was used, the units were thoroughly decontaminated.

5.6.2.4 Sample Chain of Custody Procedures

The field team member who collected the samples retained sample custody in the field. Chain of custody forms were completed by this individual prior to surrendering possession of the samples. The chain of custody records were maintained to document the delivery of the ground water samples to the subcontracted laboratory.

5.6.2.5 Trip Blanks

Trip blanks were typically included with VOC sample deliveries to the laboratory.

5.7 ANALYTICAL PROCEDURES

5.7.1 Field Analytical Techniques

Temperature, specific conductance, pH, and turbidity were measured in the field as the ground water samples were collected. These measurements for the most recent annual ground water sampling event (October 2010) are included in Appendix K.

5.7.2 Laboratory Analytical Techniques

The ground water samples and associated trip blanks were analyzed for VOCs by method 8260B. Analyses were conducted by ASI and AES laboratories, which are both located in the metro Atlanta area.

5.8 METHODS USED TO DETERMINE BACKGROUND GROUND WATER QUALITY

The VOCs monitored at the facility typically do not occur naturally in ground water. Therefore, no efforts to establish background concentrations of these constituents in the ground water at the facility were undertaken.

5.9 RESULTS OF GROUND WATER EVALUATION

5.9.1 PHYSIOGRAPHY AND DRAINAGE

The facility is located in the Greenville Slope District of the Piedmont Physiographic Province (Clark and Zia, 1976). This area is characterized by rolling topography that decreases gradually in elevation from 1,000 feet in the northeast to 600 feet in the southwest. Relief varies from 150 to 200

feet in the east to 100 to 150 feet in the west. All streams in this district eventually flow to the Gulf of Mexico.

Ground surface elevations at the facility range from approximately 1,020 feet to 1,000 feet. The ground surface slopes generally from southwest to northeast, in the direction of an unnamed tributary of the Flint River. Ditches at the facility convey surface water drainage generally to the north.

5.9.2 Geology and Hydrogeology

5.9.2.1 Regional

Soils in the Piedmont Physiographic Province are typically silt and clayrich materials that formed from the in-place weathering of the underlying crystalline bedrock. The specific character of soils in the Piedmont is dependent on the nature of the rock from which they weathered. The percentage of sand-sized particles comprising the soils, however, typically tends to increase with depth. As such, while silt and clay-sized materials are predominant at shallow depths, sand-sized materials are predominant at greater depths. Because of its greater permeability, the deeper, more coarse-grained zone can serve as a preferential pathway for contaminant migration.

Regionally, the area near the facility is underlain by a complex of late Precambrian to early Paleozoic rocks referred to as the Atlanta Group (McConnell and Abrams, 1984). More specifically, the facility is underlain by the Tar Creek Member of the Clarkston Formation. The Clarkston Formation is composed of sillimanite-garnet-quartz-plagioclase-biotite-muscovite schist interlayered with hornblende-plagioclase amphibolite.

The occurrence and movement of ground water in the area of the facility is within two separate but interconnected water-bearing zones. These include a shallow water-bearing zone located within the soils, and a deeper water-bearing zone located in the bedrock. The shallow water-bearing zone is referred to as the saprolite aquifer. The deeper water-bearing zone is referred to as the bedrock aquifer.

Ground water in the saprolite aquifer occurs in the interstitial pore spaces between individual grains comprising the soil and is typically under water table (i.e., unconfined) conditions. The direction of ground water movement in the saprolite aquifer typically approximates the land surface topography, with the direction of movement being from upland areas to nearby drainage features (i.e., creeks, rivers, etc.). As a result, ground

water flow systems within the saprolite aquifer typically consist of numerous small ground water basins corresponding to local drainage patterns (Cressler, et. al., 1983). Based on a review of ground surface topography, the direction of ground water movement in the saprolite aquifer at the facility is expected to be towards the northeast. The unnamed tributary of the Flint River is located approximately 1,500 feet northeast of the facility is expected to be the ground water discharge point for the saprolite aquifer.

Ground water in the bedrock aquifer is located in the fractures and other structural features of the rock. Ground water movement within this zone is controlled by the distribution and degree of interconnection of rock discontinuities. Consequently, the direction of ground water movement within the bedrock is more difficult to predict. Discharge points for ground water in the bedrock aquifer, however, will be associated with the major streams in the area. These include the Flint River located approximately 3.2 miles east of the facility. Recharge of the bedrock aquifer typically occurs as the result of the downward movement of ground water through the overlying soils.

5.9.2.2 Local

Geologic logs for wells and soil borings installed during previous investigations at the facility were submitted with previous CSR and CAP documents. A geologic cross-section along the ground water flow path was prepared. The location of the cross section is along the ground water flow path, as shown in Figures 12 and 13.

Bedrock has been observed at the facility at depths ranging from 27 feet below grade at MW-4 near the southern edge of the DISI facility, to 82 feet below grade at well MW-18D located near the center of the facility. Rock underlying the facility consists of pegmatite, biotite-muscovite schist and biotite – gneiss with garnet. Well MW-18D was installed into the bedrock aquifer by ERM. It is completed to a depth of 132 feet below grade. That portion of the well from 92 to 132 feet is an open hole within the bedrock. Fractures are present throughout this open hole interval. They are more concentrated, however, from 92 to 97 feet below grade. The ground water quality sample collected from MW-18D is representative of the full open hole interval of the well.

Ground water elevation monitoring conducted by ERM indicates that the water table at the facility is located at depths ranging from approximately 8 to 25 feet below grade. Locations associated with the greatest depths to ground water are associated with topographically higher areas in the

southern portion of the facility. In most other areas of the facility, the water table is located less than 10 feet below grade.

5.10 GROUND WATER QUALITY

A summary of the ground water samples results is presented in Table 4, and the full laboratory data reports for this event are provided in Appendix L. The sampling locations associated with these samples are shown on Figure 12. The following series of ground water figures shows the status of the compounds historically detected at this site, as well as the degradation products of the released compounds.

- Figure 14 Tetrachloroethene in Ground Water
- Figure 15 Trichloroethene in Ground Water
- Figure 16 1,1-dichloroethene in Ground Water
- Figure 17 Cis-1,2-dichloroethene in Ground Water
- Figure 18 Trans-1,2-dichloroethene in Ground Water
- Figure 19 Vinyl Chloride in Ground Water
- Figure 20 1,4-Dioxane in Ground Water
- Figure 21 Cross Section I-I' with October 2010 Ground Water Data

As expected, the highest concentrations of these VOCs are present in proximity to the location of the former sewer tank and former outdoor drum storage area, which were located to the northwest of the DISI building.

A Corrective Action Plan (CAP) was prepared and submitted to the EPD on June 13, 2001 and approved on June 28, 2002. A brief CAP Addendum was submitted on April 19, 2004 and approved by the EPD on June 18, 2004. A CAP Addendum was also submitted to EPD in 2009. EPD did not officially respond to this addendum, because the Site entered the VRP prior to the CAP Addendum review by the EPD.

Corrective Action commenced at this facility when a soil vapor extraction (SVE) system was installed in the source area to treat soil under the building footprint. Ground water remediation in the source area on the DISI property began on May 15, 2003 when an air sparging (AS) system and a chemical oxidation system went on line. In September 2004, a system of injection wells was installed to deliver chemicals for enhancing natural attenuation of VOCs. This system of wells was installed in the dilute, downgradient area of the ground water plume.

6.1 SOIL CORRECTIVE ACTION VIA SOIL VAPOR EXTRACTION ('99-'09)

Soil remediation was performed using soil vapor extraction (SVE) from 1999 - 2009. The active SVE system included a network of 21 soil vapor extraction wells that were installed in the unsaturated zone under the warehouse floor in 1999 and seven new active SVE wells that were installed in 2008 to address the soil in areas beneath the warehouse and to the northwest of the warehouse.

Soil sampling performed between 2003 and 2007 showed recalcitrant areas that were not being treated to low enough levels using the SVE system. Soil sampling was conducted in May 2009 for analysis of VOCs in order to better delineate the effectiveness of operations at reducing the soil areas that remain above RRS. A majority of the soil samples were below RRS, but a few recalcitrant areas were located. These results have guided the recommendation for selective soil excavation that was proposed in the 2009 Corrective Action Plan Addendum.

The SVE system was removed prior to the 2010 soil excavation activities, since the soil excavation was designed to bring soils into compliance, thus negating the need for further soil vapor extraction.

6.2 SOIL EXCAVATION (2010)

Excavation design was presented in the April 2010 Voluntary Remediation Plan submitted to the EPD. Excavation was designed to remove the areas that exceeded the applicable RRS, based on additional sampling events performed in 2009 and 2010. The soil excavation design figure is provided in Figure 22. Soil excavation was completed and soil confirmation sampling results show that further remediation is not needed to meet the Type 3/4 RRS, as discussed in detail in Section 7 of this report.

6.3 GROUND WATER CORRECTIVE ACTION (2003 – 2010)

Ground water corrective action has been performed, as described in the Annual Reports on Corrective Action Progress that have been submitted to the EPD in 2004, 2005, 2006, 2007, 2008, and 2009. A combination of remedial technologies was used to address concentrations of tetrachloroethene and its degradation products that exceeded the risk reduction standards (RRS).

An air sparge (AS) system, passive soil vapor extraction system (SVE), and in-situ chemical oxidation system (ISCO) began operations on May 15, 2003. These systems are located within the DISI property boundary. The AS and ISCO systems were operational and discussed in annual reports to the EPD between 2003 and 2009.

An enhanced natural attenuation (a.k.a. enhanced passive remediation) system was installed in September 2004 to address VOC concentrations in the downgradient, dilute portions of the ground water plume beyond the DISI property boundary. This system of injection wells is located on the CCR property. The location, construction, and performance were monitored and assessed in reports submitted to the EPD between 2004 and 2009.

7.0 EVALUATION OF POST-REMEDIATION SOIL CONDITIONS

7.1 PURPOSE OF SOIL EXCAVATION AND CONFIRMATION SAMPLING

Following the removal of soils as shown in the design drawing (Figure 22) soil samples were collected from the base and sidewalls of each excavation to confirm that:

- soil exceeding RRS for PCE and its degradation products was removed and
- compliance with RRS was achieved.

Detailed information about the sampling methods and results were presented in the December 2010 Soil Removal Report, as well as copies of the laboratory data reports and soil disposal manifests. Soil laboratory analytical results are summarized in Table 1.

7.2 SOIL RISK REDUCTION STANDARDS

The soil cleanup standards that will be used for this site will be the risk RRS currently used in the HSRA program. The RRS that are guiding corrective action for soils were approved in EPD correspondence dated October 12, 2005. For the compounds of interest at this site the surface and subsurface standards were calculated to be equal, so only a single soil RRS is listed in Appendix D.

7.3 SAMPLING AND ANALYTICAL PROCEDURES

7.3.1 Sampling Methods

Soil samples were collected from the base and sidewalls of each excavation using a stainless steel sampling spoon. Samples collected below a depth of 4-feet bgs were collected from the excavator bucket because entering excavations of depths greater than 4-feet requires that a confined space entry permit be prepared per ERM's health and safety policies. All sampling equipment was decontaminated prior to use at different locations in accordance with specifications outlined in the FSAP.

7.3.2 Sample Handling and Preservation Techniques

Following collection, soil samples were labeled with a unique sample I.D., date and time of analyses, sampler's initials and analyses requested. Samples were then placed into a cooler and maintained in a secure location pending transport to the analytical laboratory.

7.3.3 Chain-Of-Custody Procedures

Chain-of-Custody documentation was employed throughout the sampling event. Upon completion of sample collection, the sample I.D., date and time of collection, sampler's initials, analyses requested and turnaround time requested were logged on a chain-of-custody form. The form was kept with the sample team leader until the samples were relinquished to the laboratory. Upon relinquishment, the sample team leader and receiver of the samples signed the chain-of-custody form and the sample team leader kept one copy of the form.

7.3.4 Laboratory Analytical Techniques

Excavation confirmation samples were analyzed via EPA Method 8260 on a 24-hour turnaround time basis. Analytical results are summarized in Table 1 and analytical reports were provided with the December 2010 Soil Removal Report.

7.4 COMPLIANCE WITH RISK REDUCTION STANDARDS

Final confirmation sample locations are presented in Figures 23 to 29. Confirmation samples that did not pass RRS criterion are not shown on the figures because the soil associated with failed samples has been excavated. However, these samples are included in the soil data summary table. Confirmation sampling for each area is described below.

A series of maps was created to show the locations and analytical data from the soil samples collected from the base and sidewalls of each excavation area. The excavation confirmation sample locations and results are shown in plan view on Figures 23–29. Figures 23–29 show the analytical data in plan view for tetrachloroethene, trichloroethene, 1,1-diochloroethene, cis-1,2-diochloroethene, trans1,2-diochloroethene, vinyl chloride, and 1,4-dioxane, respectively.

A cross-section location map is shown on Figure 30, and vertical cross-sections of the excavation areas and sampling results are shown on Figures 31–37. Figures 31–37 show the analytical data in cross-section view for tetrachloroethene, trichloroethene, 1,1-diochloroethene, cis-1,2-diochloroethene, trans1,2-diochloroethene, vinyl chloride, and 1,4-dioxane, respectively.

The excavation areas were described in full detail in the December 2010 Soil Removal Report, and they are summarized below:

- Soil in Area A was excavated to a depth of 9 feet below the concrete surface, which extended approximately 1 foot into the ground water table. The planned excavation area was expanded to the south and east based on confirmation sampling results. The final surface area of this excavation was 21 ft x 25 ft.
- Soil in Area B was excavated to a depth of 4 feet below the grassy surface north of the building. The planned excavation area was expanded based on confirmation sampling results as follows: 2 feet to the north and 2 feet to the east. The final surface area of this excavation was 17 ft x 22 ft.
- Soil in Area C was excavated to a depth of 6 feet below the grassy surface north of the building. The planned excavation area was expanded based on confirmation sampling results as follows: 2 feet to the north and 2 feet to the east. The final surface area of this excavation was 7 ft x 12 ft.
- Soil in Area D was excavated to a depth of 2 feet below the concrete floor of the warehouse building. The planned excavation area was expanded based on confirmation sampling results as follows: 10 feet to the west, 4 feet to the south, and 1 foot to the east. The final surface area of this area is irregular, but is 21 ft x 14 ft at its largest dimensions, as shown in Figure 22.
- Soil in Area E was excavated to a depth of 4 feet below the concrete warehouse floor. Area E was split into three smaller sections for the purpose of collecting confirmation samples. Each of the three section began with a surface area of 25' by 35.' The three sections of Area E are:
 - Area EN, which is the northern third of Area E. Soil in Area EN was excavated to a depth of 4 feet below the concrete

floor of the warehouse building. The final surface area of this excavation was the same as the design surface area, 25 ft \times 35 ft.

- Area EM, which is the middle third of Area E. Soil in Area EM was excavated to a depth of 4 feet below the concrete floor of the warehouse building. The planned excavation area was expanded based on confirmation sampling results by 1 foot in depth and also by 4 feet on the east wall. The final surface area of this excavation was 29 ft x 35 ft x five feet deep., and
- Area ES, which is the southern third of Area E. Soil in Area ES was excavated to a depth of 4 feet below the concrete floor of the warehouse building. The planned excavation area was expanded based on confirmation sampling results as follows: 8 feet to the west, 6 feet to the south, and 3 feet to the east. The final surface area of this area is irregular, but is 46 ft x 31 ft at its largest dimensions, as shown in Figure 22.
- Soil in Area F was excavated to depth 6 feet below the concrete floor of the warehouse. The excavation area is shown in plan view on Figure 22. Area F was a deeper excavation spot that was located within a larger, shallower excavation area (Area E). Thus, Area F was actually a 2-foot deep excavation from 4 ft bgs to 6 ft bgs. The final surface area of this excavation was the same as the design surface area, 10 ft x 20 ft.
- Area G was excavated to a depth of 4 feet below the concrete floor of the warehouse. The excavation area is shown in plan view on Figure 22. The final surface area of this excavation was the same as the design surface area, 10 ft x 10 ft.

Excavation confirmation samples from the sidewalls and the base achieved results below RRS, as shown in Figures 23 – 37 and in the analytical data summary provided in Table 1.

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This section presents a summary of the RRS compliance status for HSI Site #10127.

8.1 SOILS

A summary of the soil samples, including the post-excavation confirmation samples collected in June 2010, are presented in Table 1. Also included in Table 1 are the respective RRS.

Based on a review of data presented in Sections 3, 4, and 5 of this document, it is determined that the four (4) Tax Parcels in the VRP are in compliance with the applicable RRS for soils. Specifically,

- Two (2) Tax Parcels in the VRP (130036LL1463 and 130036LL1356) are in compliance with the Type 3/4 RRS.
- Two (2) Parcels in the VRP (130036LL1349 and Tax Parcel 130036LL1414) are in compliance with the Type 1/2 RRS for soil.

8.2 GROUND WATER

Neither corrective action nor certification of compliance for ground water is required at this site pursuant to O.C.G.A. 12-8-107(g)(2). The site was listed on the HSI as a result of a release to soil exceeding a reportable quantity but was not listed on the inventory as a result of a release to ground water exceeding a reportable quantity. A release exceeding a reportable quantity for ground water also did not exist at the time the site was enrolled in the VRP. In addition, the establishment of the soil RRS took into account the ground water protection requirements. The ground water at the site has already been monitored for in excess of five (5) years. In addition, the soil vapor sampling conducted from soils over the most concentrated portion of the ground water plume, as discussed in Section 4, did not exceed established risk levels.

9.0 RESPONSIBLE PARTIES

This section of the CSR provides, as required by Section 391-3-19-.06(3)(b)(6) of the Rules, the name, address and telephone number of any other person who may be a responsible party for the Site, and a description of the type and amount of regulated substances such party may have contributed to a release. The party responsible for the release is Dickies Industrial Services, Inc., the owner and former operator of the facility.

10.0 PUBLIC NOTICE

As required by the Georgia Rules for the Voluntary Remediation Program, a Public Notice will be published in the Fulton County Daily Report and the Atlanta Journal Constitution indicating that the public may submit comments to EPD on the VCSR within thirty (30) days. A notice of the VCSR availability for review will also be sent to Zachary Williams, Fulton County Manager and Jack P. Longino, Mayor of College Park.

In addition, a copy of the VCSR will be sent to the following adjacent and nearby property owners:

- 1) Coca Cola Refreshments USA, Inc.,
- 2) Puja Partners, LLC,
- 3) Sears Roebuck & Company, and
- 4) Blount Construction Company, Inc.

11.0 CONTINUING ACTIONS TO MAINTAIN COMPLIANCE WITH TYPE 3/4 RISK REDUCTION STANDARDS

To assure continued compliance with the Type 3/4 Risk Reduction Standards for soil, the owner of the DISI property will implement a Plan to Maintain Compliance, including but not limited to submittal of an annual written report and certification to EPD. The Plan and draft Certification are attached as Appendix M.

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample	Depth of Sample	Name of Organization that			nes this n sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
			Collected Sample					RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	d - Chemicals Not Detected	l Above Soil NC
CP-SB-4	Sep-90	4-6	CDM	1	of	1	CP-BH-4-03	170	< 60	NA	NA	NA	NA	NA
CP-SB-5	Sep-90	6-8	CDM	1	of	1	CP-BH-5-04	<60	< 60	NA	NA	NA	NA	NA
CP-SB-7	Sep-90	6-8	CDM	1	of	1	CP-BH-7-04	150	< 60	NA	NA	NA	NA	NA
CP-MW-1	Oct-90	5-7	CDM	1	of	1	CP-MW1	470	310	NA	<130	<60	NA	<60
	Aug-92	3.5-5	RMT				RMT-MW10A	54.8	NA	<5.0	<10.0	<5.0	NA	<5.0
RMT-MW10-A	Aug-92	8.5-10	RMT	1	of	1	RMT-MW10A	27.7	NA	<5.0	<10.0	<5.0	NA	<5.0
	Aug-92	10-11.5	RMT				RMT-MW10A	53.2	NA	<5.0	<10.0	<5.0	NA	<5.0
	Sep-92	3.5-5	RMT				RMT-MW3A	<200	<200	<200 ^A	NA	NA	NA	NA
RMT-MW-3A	Sep-92	5-6.5	RMT	1	of	1	RMT-MW3A	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	6.5-8	RMT				RMT-MW3A	<200	<200	<200 ^A	NA	NA	NA	NA
RMT-SB-1	Sep-92	3.5-5	RMT	1	of	1	RMT-SB1	<200	<200	<200 ^A	NA	NA	NA	NA
14,11 35 1	Sep-92	6.5-7.5	RMT	•			RMT-SB1	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	2-3.5	RMT				RMT-SB2	<200	<200	200 ^A	NA	NA	NA	NA
RMT-SB-2	Sep-92	3.5-5	RMT	1	of	1	RMT-SB2	<200	<200	340 ^A	NA	NA	NA	NA
	Sep-92	5-6.5	RMT				RMT-SB2	<200	<200	250 ^A	NA	NA	NA	NA
RMT-SB-4	Sep-92	5-6.5	RMT	1	of	1	RMT-SB4	8	<2.5	5.1 ^A	<1.2	NA	NA	<1.2
RMT-SB-6	Sep-92	3.5-5	RMT	1	of	1	RMT-SB6	<200	<200	490 ^A	NA	NA	NA	NA
	Sep-92	6.5-8	RMT				RMT-SB6	430	340	4800 ^A	<130	NA	NA	<130
	Sep-92	2-3.5	RMT				RMT-SB10	230	<200	<200 ^A	NA	NA	NA	NA
RMT-SB-10	Sep-92	3.5-5	RMT	1	of	1	RMT-SB10	220	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	5-6.5	RMT				RMT-SB10	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	8.5-10	RMT				RMT-SB12	<2.3	<2.3	<2.3 ^A	<1.2	NA	NA	<1.2
RMT-SB-12	Sep-92	13.5-15	RMT	1	of	1	RMT-SB12	<200	<200	<200 ^A	NA	NA	NA	NA
	Sep-92	18.5-20	RMT				RMT-SB12	<200	<200	<200 ^A	NA	NA	NA	NA
	Apr-98	1-2	AEM				AEM-GP-2/1-2	270	21	8.2	< 2.0	< 5.0	NA	< 5.0
AEM-GP2	Apr-98	3-4	AEM	1	of	1	AEM-GP-2/3-4	400	160	110	< 10.0	< 25.0	NA	<25.0
177.6.075	Apr-98	1-2	AEM	_			AEM-GP-5/1-2	37	< 5.0	< 5.0	< 2.0	< 5.0	NA	< 5.0
AEM-GP5	Apr-98	6-7	AEM	1	of	1	AEM-GP-5/6-7	150	< 5.0	<1 0.0	< 4.0	< 10.0	NA	<10.0
	Apr-98	11-12	AEM				AEM-GP-7/11-12	40	< 5.0	< 5.0	< 2.0	< 5.0	NA	< 5.0
AEM-GP7	Apr-98	16-17	AEM	1	of	1	AEM-GP-7/16-17	140	< 5.0	< 5.0	< 2.0	< 5.0	NA	< 5.0
	Apr-98	6-7	AEM				AEM-GP-7/6-7	44	< 5.0	7	< 2.0	< 5.0	NA	< 5.0
A FN (CDO	Apr-98	11-12	AEM	1		4	AEM-GP-8/11-12	220	12	17	< 2.0	< 5.0	NA	< 5.0
AEM-GP8	Apr-98	6-7	AEM	1	of	1	AEM-GP-8/6-7	60	< 5.0	17	< 2.0	< 5.0	NA	< 5.0
GP-1B	Aug-99	6-8	ERM	1	of	1	ERM-GP1B-6-8	67	< 10.0	< 10.0	< 21.0	< 10.0	NA	NR
GP-1C		8-10	ERM	1	of	1	ERM-GP1C-8-10	37	< 8.6	< 8.6	< 17.0	< 8.6	NA NA	NR
GP-1D	Aug-99 Aug-99	0-2	ERM	1	of	1	ERM-GP-1D-0-2	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-1E	Aug-99 Aug-99	0-2	ERM	1	of	1	ERM-GP-1E-0-2	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-2D	Aug-99 Aug-99	0-2	ERM	1	of	1	ERM-GP-1E-0-2 ERM-GP-2D-0-2	140	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-2E	Aug-99	4-6	ERM	1	of	1	ERM-GP-2E-4-6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-3B	Aug-99	4-6	ERM	1	of	1	ERM-GP3B-4-6	110	28	< 11.0	< 22.0	< 11.0	NA NA	NR
GP-3C	Aug-99	6-8	ERM	1	of	1	ERM-GP3C-6-8	46	16	< 6.4	< 13.0	< 6.4	NA NA	NR
GP-3D	Aug-99	4-6	ERM	1	of		ERM-GP-3D-4-6	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-3E	Aug-99	6-8	ERM	1	of	1	ERM-GP-3E-6-8	5.2	< 5.0	< 5.0	< 5.0	< 5.0	NA NA	< 5.0
GP-4B	Aug-99	4-6	ERM	1	of	1	ERM-GP4B-4-6	< 6.8	< 6.8	< 6.8	< 14.0	< 6.8	NA	NR
GP-4C	Aug-99	6-8	ERM	1	of		ERM-GP4C-6-8	49	< 14.0	< 14.0	< 28.0	< 14.0	NA	NR
ERM-SB1	Aug-99	4	ERM	1	of		ERMSB-1-4	< 6.0	< 6.8	< 6.8	< 14.0	< 6.8	NA NA	< 6.8
	C //	•				-	ERMSB-2-4	0.0	0.0	0.0	11.0	0.0	- 11.1	

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Pate of Sample	Depth of Sample	Name of Organization that	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene	
			Collected Sample			RRS = 877 ug/kg	RRS = 877 ug/kg RRS = 500 ug/kg		RRS = 200 ug/kg	RRS = 200 ug/kg Not Calculated		l - Chemicals Not Detected Above Soil NC	
ERM-SB3	Aug-99	4	ERM	1 of 1	ERMSB-3-4	27	< 6.3	< 6.3	< 13.0	< 6.3	NA	< 6.3	
ERM-SB4	Aug-99	4	ERM	1 of 1	ERMSB-4-4	120	< 5.8	< 5.8	< 12.0	< 5.8	NA	< 5.8	
ERM-SB5	Aug-99	4	ERM	1 of 1	ERMSB-5-4	< 5.7	< 5.6	< 5.6	< 11.0	< 5.6	NA	< 5.6	
ERM-SB6	Aug-99	4	ERM	1 of 1	ERMSB-6-4	< 6.1	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB7	Aug-99	8	ERM	1 of 1	ERMSB-7-8	< 6.8	< 6.5	< 6.5	< 13.0	< 6.5	NA	< 6.5	
ERM-SB8	Aug-99	4	ERM	1 of 1	ERMSB-8-4	< 6.3	< 6.1	< 6.1	< 12.0	< 6.1	NA	< 6.1	
ERM-SB9	Aug-99	8	ERM	1 of 1	ERMSB-9-8	< 6.1	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB10	Aug-99	8	ERM	1 of 1	ERMSB-10-8	< 6.4	< 6.3	< 6.3	< 13.0	< 6.3	NA	< 6.3	
ERM-SB11	Aug-99	8	ERM	1 of 1	ERMSB-11-8	< 6.7	< 7.1	< 7.1	< 14.0	< 7.1	NA	< 7.1	
ERM-SB12	Aug-99	8	ERM	1 of 1	ERMSB-12-8	100	12	120	< 13.0	< 6.3	NA	< 6.3	
ERM-SB13	Aug-99	4	ERM	1 of 1	ERMSB-13-4	< 5.9	< 5.6	< 5.6	< 11.0	< 5.6	NA	< 5.6	
ERM-SB14	Aug-99	8	ERM	1 of 1	ERMSB-14-8	< 6.0	< 5.9	< 5.9	< 12.0	< 5.9	NA	< 5.9	
ERM-SB15	Aug-99	4	ERM	1 of 1	ERMSB-15-4	< 6.3	< 6.1	< 6.1	< 12.0	< 6.1	NA	< 6.1	
ERM-SB16	Aug-99	4	ERM	1 of 1	ERMSB-16-4	15	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB17	Aug-99	8	ERM	1 of 1	ERMSB-17-8	41	< 6.3	< 6.3	< 13.0	< 6.3	NA	< 6.3	
ERM-SB18	Aug-99	8	ERM	1 of 1	ERMSB-18-8	< 7.1	< 6.4	< 6.4	< 13.0	< 6.4	NA	< 6.4	
ERM-SB19	Aug-99	4	ERM	1 of 1	ERMSB-19-4	< 6.1	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB20	Aug-99	8	ERM	1 of 1	ERMSB-20-8	50	8.9	20	< 13.0	< 6.7	NA	< 6.7	
ERM-SB21	Aug-99	4	ERM	1 of 1	ERMSB-21-4	< 5.7	< 5.9	< 5.9	< 12.0	< 5.9	NA	< 5.9	
ERM-SB22	Aug-99	8	ERM	1 of 1	ERMSB-22-8	71	7	34	< 14.0	< 6.8	NA	< 6.8	
ERM-SB23	Aug-99	8	ERM	1 of 1	ERMSB-23-8	60	11	90	< 14.0	< 7.2	NA	< 7.2	
ERM-SB24	Aug-99	4	ERM	1 of 1	ERMSB-24-4	< 5.9	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB25A	Aug-99	4	ERM	1 of 1	ERMSB-25A-4	< 5.9	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB32	Aug-99	4	ERM	1 of 1	ERMSB-32-4	< 6.0	< 5.9	< 5.9	< 12.0	< 5.9	NA	< 5.9	
ERM-SB33	Aug-99	4	ERM	1 of 1	ERMSB-33-4	8.2	< 5.7	< 5.7	< 11.0	< 5.7	NA	< 5.7	
ERM-SB34	Aug-99	4	ERM	1 of 1	ERMSB-34-4	< 5.9	< 5.2	< 5.2	< 10.0	< 5.2	NA	< 5.2	
ERM-SB35	Aug-99	8	ERM	1 of 1	ERMSB-35-8	< 6.7	< 6.0	< 6.0	< 12.0	< 6.0	NA	< 6.0	
ERM-SB36	Aug-99	8	ERM	1 of 1	ERMSB-36-8	< 25.0	< 6.7	< 6.7	< 13.0	< 6.7	NA	< 6.7	
ERM-SB40	Aug-99	4	ERM	1 of 1	ERMSB-40-4	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	NA	< 5.0	
ERM-SB39	Aug-99	4	ERM	1 of 1	ERMSB-39-4	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	NA	< 5.0	
ERM - SVE PILOT TRENCH WEST	Aug-99	4	ERM	1 of 1	SVE PILOT TRENCH WEST	370	75	270	< 5.0	< 5.0	NA	< 5.0	
	A 01	2-4'	ERM		GP-5F	6.	12.	53.	< 5.	< 5.	NA	< 5.	
GP-5F	Apr-01 Apr-01	6-8'	ERM	1 of 1	GP-5F	< 5.	< 5.	< 5.	< 5.	< 5.	NA NA	< 5.	
GI-51	Apr-01	10-12'	ERM	d 1 01 1 F	GP-5F	< 5.	< 5.	< 5.	< 5.	< 5.	NA NA	< 5.	
	Ap1-01	10-12	EKIVI		Gi -3i	\ 3.	\ 5.	\ 5.	\ 3.	\ 3.	IVA	\ 3.	
GP-AS-41	Jan-03	2-4	ERM	1 of 1	AS-41	280.	< 5.8	< 5.8	< 12.	< 5.8	NA	< 5.8	
GP-5D	Jan-03	2-4'	ERM	2 of 2	GP-5D (and GP-5DR)	280,000.	62.	< 5.7	< 11.	< 5.7	NA	< 5.7	
CP-SB-6	Jan-03	6-8	ERM	2 of 2	CP-SB6	510.	400.	550.	43.	< 6.3	NA	< 6.3	
RMT-SB-3	Jan-03	6.5-8	ERM	2 of 2	RMT-SB3	430.	100.	< 6.3	77.	< 6.3	NA	< 6.3	
RMT-SB-5	Jan-03	6.5-8	ERM	2 of 2	RMT-SB5	210.	31.	49.	< 13.	< 6.5	NA	< 6.5	
RMT-SB-7	Jan-03	6.5-8	ERM	2 of 2	RMT-SB7	110.	23.	140.	< 13.	< 6.4	NA	< 6.4	
RMT-SB-8	Jan-03	3.5-5	ERM	2 of 2	RMT-SB8	< 5.9	< 5.9	< 5.9	< 12.	< 5.9	NA	< 5.9	
RMT-SB-9	Jan-03	2.5-3	ERM	2 of 2	RMT-SB9	130.	< 5.6	< 5.6	< 11.	< 5.6	NA	< 5.6	
RMT-SB-11	Jan-03	3.5-5	ERM	2 of 2	RMT-SB11	57.	< 5.8	< 5.8	< 12.	< 5.8	NA	< 5.8	
AEM-GP1	Jan-03	3-4	ERM	2 of 2	AEM-GP1	6.9	< 5.5	< 5.5	< 11.	< 5.5	NA	< 5.5	
	Apr-05	2-4'	ERM		GP-4A	10.	< 1.8	< 1.8	< 1.8	< 1.8	NA	< 1.8	
GP-4A	Apr-05	4-6'	ERM	3 of 3	GP-4A	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9	NA	< 1.9	
GI -4A	Apr-05	6-8'	ERM	3 01 3	GP-4A	< 2.3	< 2.3	< 2.3	< 2.3	< 2.3	NA	< 2.3	
	Apr-05	8-10'	ERM	Ī	GP-4A	3.	< 2.	< 2.	< 2.	< 2.	NA	< 2.	

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample	Depth of Sample	Name of Organization that Collected Sample	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
						RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	- Chemicals Not Detected	l Above Soil NC
	Apr-06	2-4'	ERM		AS-42	< 28.	< 28.	< 28.	< 28.	< 28.	NA	< 28.
	Apr-06	4-6'	ERM		AS-42	< 31.	< 31.	< 31.	< 31.	< 31.	NA	< 31.
GP-AS-42	Apr-06	6-8'	ERM	1 of 1	AS-42	< 31.	< 31.	< 31.	< 31.	< 31.	NA	< 31.
	Apr-06	8-10'	ERM		AS-42	< 28.	< 28.	< 28.	< 28.	< 28.	NA	< 28.
	Apr-06	10-12'	ERM		AS-42	< 35.	< 35.	< 35.	< 35.	< 35.	NA	< 35.
AG 45	. 07		EDIA		CD AC 45	470	44	27	. 0.6		374	
AS-17 GP-AS-20	Apr-07	5-7' 13-15'	ERM ERM	4 of 4	GP-AS-17	470 < 5.5	14 < 5.5	27 < 5.5	< 9.6 < 11.	< 4.8 < 5.5	NA NA	< 4.8 < 5.5
GP-AS-20 GP-AS-28	Apr-07 Apr-07	12-14'	ERM	4 of 4 4 of 4	GP-AS-20 GP-AS-28	< 6.5	< 6.5	< 6.5	< 11.	< 6.5	NA NA	< 6.5
GP-AS-8	Apr-07	12-14'	ERM	4 of 4	GP-AS-8	< 5.6	< 5.6	< 5.6	< 11.	< 5.6	NA NA	< 5.6
GP-SVE-17	Apr-07	6-8'	ERM	4 of 4	GP-SVE-17	230	< 4.9	< 4.9	< 9.8	< 4.9	NA NA	< 4.9
GP-SVE-21	Apr-07	12-14'	ERM	4 of 4	GP-SVE-21	< 5.3	< 5.3	< 5.3	< 11.	< 5.3	NA	< 5.3
GP-SVE-8	Apr-07	12-14'	ERM	4 of 4	GP-SVE-8	26	< 6.8	< 6.8	< 14.	< 6.8	NA	< 6.8
GI SVE S	Apr-07	2-4'	ERM	1 01 1	GP-SVE-34	260.	120.	< 4.6	< 9.2	< 4.6	NA	< 4.6
on o :	Apr-07	4-6'	ERM	1 , , ⊢	GP-SVE-34	340.	39.	< 4.2	< 8.5	< 4.2	NA	< 4.2
GP-SVE-34	Apr-07	6-8'	ERM	1 of 1	GP-SVE-34	5.8	< 5.3	< 5.3	< 11.	< 5.3	NA	< 5.3
	Apr-07	8-10'	ERM		GP-SVE-34	9.9	< 5.	< 5.	< 10.	< 5.	NA	< 5.
	M 00		ED3.6		IIA 4 (0!)				40.2		N.T.4	
HA-1	May-09	3	ERM	1 of 1	HA-1 (3')	<4.6	<4.6	<4.6	<9.2	<4.6	NA NA	<4.6
	May-09	6	ERM	<u> </u>	HA-1 (6')	47	<5.6	<5.6	<11	<5.6	NA NA	<5.6
HA-2	May-09	3	ERM ERM	1 of 1	HA-2(3') HA-2(6')	170	5.6 <5.6	35 <5.6	<10	<5.2 <5.6	NA NA	<5.2 <5.6
	May-09 May-09	<u>6</u> 3	ERM		HA-3(3')	65 24	<5.6 <6.4	<5.6 <6.4	<11 <13	<5.6 <6.4	NA NA	<5.6 <6.4
HA-3	May-09	6	ERM	1 of 1	HA-3(6')	15	<5.2	<5.2	<10	<5.2	NA NA	<5.2
	May-09	3	ERM		HA-4(3')	130	<5.0	<5.0	<10	<5.0	NA NA	<5.0
HA-4	May-09	6	ERM	1 of 1	HA-4(6')	290	10	27	<9.9	<5.0	NA NA	<5.0
HA-9	May-09	3	ERM	1 of 1	HA-9(3')	17	21	5.3	<9.2	<4.6	<460	<4.6
HA-10	May-09	5	ERM	1 of 1	HA-10(5')	29	<4.8	<4.8	<9.7	<4.8	<480	<4.8
HA-11	May-09	5	ERM	1 of 1	HA-11(5')	31	<4.2	<4.2	<8.5	<4.2	<420	<4.2
HA-12	May-09	5	ERM	1 of 1	12	950	<300	<300	<600	<300	<30000	<300
HA-13	May-09	3	ERM	1 of 1	HA-13(3')	42	18	<5.4	<11	<5.4	<540	<5.4
HA-14	May-09	3	ERM	1 of 1	HA-14(3')	32	91	59	<9.9	<5.0	<500	<5.0
HA-15	May-09	5	ERM	1 of 1	HA-15(5')	5.6	<5.2	<5.2	<10	<5.2	<520	<5.2
HA-16	May-09	5	ERM	6 of 6	HA-16(5')	<4.7	<4.7	<4.7	<9.3	<4.7	<470	<4.7
HA-17	May-09	5	ERM	1 of 1	17	<5	<5	<5	<10	<5	<100	<5
HA-18	May-09	3	ERM	1 of 1	HA-18(3')	85	7.4	<5.4	<11	<5.4	<540	<5.4
HA-20	May-09	5	ERM	1 of 1	HA-20(5')	<5.2	<5.2	<5.2	<12	<5.8	<580	<5.8
HA-21	May-09	3	ERM	1 of 1	HA-21(3')	230	<5.6	<5.6	<11	<5.6	< 560	<5.6
HA-22	May-09	3	ERM	1 of 1	HA-22(3')	23	<5.6	<5.6	<11	<5.6	<560	<5.6
HA-24	May-09	5	ERM	1 of 1	HA-24(5')	<4.4	100	180	<8.8	61	<440	<4.4
HA-25	May-09	3	ERM	1 of 1	HA-25(3')	85	<4.6	<4.6	<9.2	<4.6	<460	<4.6
HA-26	May-09	3	ERM	1 of 1	HA-26(3')	20	<5.5	<5.5	<11	<5.5	<550	<5.5
HA-27	May-09	5	ERM	1 of 1	HA-27(5')	12	<5.6	<5.6	<11	<5.6	<560	<5.6
HA-28	May-09 May-09	5 5	ERM ERM	1 of 1 1 of 1	28 29	14	<4.6	<4.6 <5.2	<9.2	<4.6	<460 <520	<4.6
HA-29	iviay-09	<u> </u>	EKIVI	1 of 1	27	<5.2	<5.2	\3. 2	<10	<5.2	\ 320	<5.2
CP 100	Jan-10	4	ERM	1 (1	GP-100(4')	150	<4.9	<4.9	<9.8	<4.9	<150	<4.9
GP-100	Jan-10	7	ERM	1 of 1	GP-100(7')	8.4	<5.6	<5.6	<11	<5.6	<170	<5.6
CD 101	Jan-10	3	ERM	1 of 1	GP-101(3')	8200	<230	<230	<470	<230	<7000	<230
GP-101	Jan-10	8	ERM	1 of 1	GP-101(8')	40	<6.2	<6.2	<12	<6.2	<180	<6.2
GP-102	Jan-10	3	ERM	1 of 1	GP-102(3')	170	<4.5	<4.5	<9	<4.5	<130	<4.5
O1 -102	Jan-10	8	ERM	1 01 1	GP-102(8")	<5.6	<5.6	<5.6	<11	<5.6	<170	<5.6
GP-103	Jan-10	3	ERM	1 of 1	GP-103(3')	1800	<4.3	<4.3	<8.6	<4.3	<130	<4.3
G1 -100	Jan-10	8	ERM	1 01 1	GP-103(8')	65	<5.8	<5.8	<12	<5.8	<170	<5.8
GP-104	Jan-10	3	ERM	1 of 1	GP-104(3')	120	<6.4	<6.4	<13	<6.4	<190	<6.4
O1 -101	Jan-10	8	ERM	1 01 1	GP-104(8')	47	<6.0	<6.0	<12	<6.0	<180	<6.0
HA-19	Jan-10	2.5	ERM	2 of 2	HA-19(2.5')	82000	1200	<240	<470	<240	<7100	<240
11117	Jan-10	5	ERM	_	HA-19(5')	47	9.9	<5.7	<11	<5.7	<170	<5.7

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample	Depth of Sample	Name of Organization that	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
			Collected Sample			RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	l - Chemicals Not Detected	Above Soil NC
HA-30	Jan-10	3	ERM	1 of 1	HA-30(3')	43000	1700	38	<9.7	<4.9	<150	<4.9
11A-50	Jan-10	5	ERM	1 01 1	HA-30(5')	53000	5700	16	<11	<5.4	<160	<5.4
HA-31	Jan-10	3	ERM	1 of 1	HA-31(3')	100000	600	<260	<520	<260	<7800	<260
	Jan-10	5	ERM		HA-31(5')	48000	1100	<270	<550	<270	<8200	<270
HA-32	Jan-10	3	ERM	1 of 1	HA-32(3')	30000	49	<4.8	<9.7	<4.8	<150	<4.8
	Jan-10	5	ERM		HA-32(5')	660	8.1	<4.6	<9.1	<4.6	<140	<4.6
GP-1A	Jan-10 Jan-10	10	ERM ERM	2 of 2	GP-1A(7') GP-1A(10')	9.4	<5.0 <6.2	<5.0 <6.2	<10 <12	<5.0 <6.2	<150 <190	<5.0 <6.2
	Jan-10	3	ERM		GP-2A(3')	25000	<240	<240	<470	<240	<7100	<240
GP-2A	Jan-10	10	ERM	2 of 2	GP-2A(10')	610	<5.8	<5.8	<12	<5.8	<170	<5.8
GP-3A	Jan-10	5	ERM	2 of 2	GP-3A(5')	30	<5.4	<5.4	<11	<5.4	<160	<5.4
	Jan-10	2	ERM		GP-2B(2')	66000	52	<4.9	<9.7	<4.9	<150	<4.9
GP-2B	Jan-10	5	ERM	2 of 2	GP-2B(5)	14	<4.9	<4.9	<9.8	<4.9	<150	<4.9
GP-2C	Jan-10	1	ERM	2 of 2	GP-2C(1')	910	270	<4.5	<9.0	<4.5	<140	<4.5
AEM-GP4	Jan-10	1.5	ERM	2 of 2	AEM-GP-4(1.5)	160	7.6	<4.8	<9.6	<4.8	<140	<4.8
AEM-HA6	Jan-10	4.5	ERM	2 of 2	AEM-HA6(4.5')	69	<6	<6	<12	<6.0	<180	<6.0
AEWI-HA6	Jan-10	7	ERM	2 01 2	AEM-HA6(7')	13	<4.9	<4.9	<9.8	<4.9	<150	<4.9
	Jan-10	3	ERM		HA-23(3')	1100	67	<5.0	<9.9	<5.0	<150	<5.0
HA-23	Jan-10	7	ERM	2 of 2	HA-23(7')	89	15	<5.6	<11	<5.6	<170	<5.6
	Jan-10	10	ERM		HA-23(10')	39	<5.5	<5.5	<11	<5.5	<160	<5.5
GP-AS-23	Jan-10	5	ERM	6 of 6	GP-AS-23(5')	89	<4.6	<4.6	<9.3	<4.6	<140	<4.6
GP-5GR	Jan-10	3	ERM	7 of 7	GP-5GR(3')	6600	13	<5.2	<10	<5.2	<160	<5.2
GP-5DR	Jan-10	3	ERM	5 of 5	GP-5D(3')	39000	<250	<250	<500	<250	<7500	<250
CD FE	Jan-10	11	ERM	2 -6 2	GP-5D(11')	620	<6.6	<6.6	<13	<6.6	<200	<6.6
GP-5E GP-5H	Jan-10 Jan-10	3	ERM ERM	3 of 3 4 of 4	GP-5E(3') GP-5H(3')	74 61000	13 2300	<4.8 <210	<9.5 <430	<4.8 <210	140 <6400	<4.8 <210
Gr-5H	Jan-10 Jan-10	3	ERM	4 01 4	GP-AS-39(3')	2000	<5.9	<5.9	<12	<5.9	<180	<5.9
GP-AS-39	Jan-10	11	ERM	6 of 6	GP-AS-39(11')	530	<5.8	<5.8	<12	<5.8	<170	<5.8
GP-AS-40	Jan-10	3	ERM	4 of 4	GP-AS-40(3')	1500	10	<4.5	<9.0	<4.5	<130	<4.5
AEM-GP-3	Jan-10	3	ERM	6 of 6	AEM-GP-3(3')	12000	3100	34	<9.7	<4.9	<150	<4.9
AREA A NORTHWALL 3'	6/14/10	North Wall - 3' bgs	ERM	1 of 1	AREA A NORTHWALL 3'	460	<180	<180	<360	<180	< 5400	<180
AREA A NORTHWALL 6'	6/14/10	North Wall - 6' bgs	ERM	1 of 1	AREA A NORTHWALL 6'	140	<4.4	<4.4	<8.7	<4.4	<130	<4.4
AREA A SOUTHWALL 3' AREA A SOUTHWALL 6'+6'	6/14/10 6/22/10	South Wall - 3' bgs South Wall - 6' bgs	ERM ERM	1 of 1 1 of 1	AREA A SOUTHWALL 3' AREA A SOUTHWALL 6'+6'	450 790	<200 21	<200	<400	<200 <5.1	< 5900 <150	<200
AREA A EASTWALL 3'	6/14/10	East Wall - 3' bgs	ERM	1 of 1 1 of 1	AREA A EASTWALL 3'	170	<4.5	19 17	<10.0 <9.0	<4.5	<130	<5.1 <4.5
AREA A EASTWALL 6'+2'	6/18/10	East Wall - 6' bgs	ERM	1 of 1	AREA A EASTWALL 5' AREA A EASTWALL 6'+2'	300	<4.3	14	<8.6	<4.3	<130	<4.3
AREA A WESTWALL 3'	6/14/10	West Wall - 3' bgs	ERM	1 of 1	AREA A WESTWALL 3'	75	<3.3	9	<6.5	<3.3	<98	<3.3
AREA A WESTWALL 6'	6/14/10	West Wall - 6' bgs	ERM	1 of 1	AREA A WESTWALL 6'	140	4.4	19	<7.8	<3.9	<120	<3.9
AREA B WEST WALL SURFACE	6/3/10	West Wall	ERM	1 of 1	AREA B WEST WALL SUR	710	<3.4	<3.4	<6.9	<3.4	<100	<3.4
AREA B EAST WALL 2'	6/7/10	East Wall	ERM	1 of 1	AREA B EAST WALL 2'	30	<3.1	<3.1	<6.3	<3.1	<94	<3.1
AREA B NORTHWALL	6/7/10	North Wall	ERM	1 of 1	AREA B NORTHWALL	110	<3.4	<3.4	<6.7	<3.4	<100	<3.4
AREA B BOTTOM SURFACE	6/4/10	Bottom	ERM	1 of 1	AREA B BOTTOM SUR	81.4	<2.7	<2.7	<5.4	<2.7	<80	<2.7
AREA C NORTHWALL	6/7/10	North Wall	ERM	1 of 1	AREA C NORTHWALL	19	<4.5	<4.5	<8.9	<4.5	<130	<4.5
AREA C EAST WALL SURFACE	6/3/10	East Wall	ERM	1 of 1	AREA C EAST WALL SUR	34	<4.3	<4.3	<8.7	<4.3	<130	<4.3
	6/3/10	West Wall	ERM	1 of 1	AREA C WEST WALL SUR	94	<2.6	<2.6	<5.2	<2.6	<77	<2.6
AREA C WEST WALL SURFACE		D ()	ERM	1 of 1	AREA C BOTTOM SUR	63	<3.4	<3.4	<6.7	<3.4	00</td <td><3.4</td>	<3.4
AREA C WEST WALL SURFACE AREA C BOTTOM SURFACE	6/4/10	Bottom				E00	4.5	<3.0	<6.0	-20		<3.0
AREA C WEST WALL SURFACE AREA C BOTTOM SURFACE AREA D SOUTH WALL 4'	6/1/10	South Wall	ERM	1 of 1	AREA D SOUTH WALL 4'	500	4.5			<3.0	<90	
AREA C WEST WALL SURFACE AREA C BOTTOM SURFACE AREA D SOUTH WALL 4' AREA D WESTWALL 10'	6/1/10 6/9/10	South Wall West Wall	ERM ERM	1 of 1	AREA D WESTWALL 10'	570	23	<5.7	<11	<5.7	<170	<5.7
AREA C WEST WALL SURFACE AREA C BOTTOM SURFACE AREA D SOUTH WALL 4' AREA D WESTWALL 10' AREA D EASTWALL 1'	6/1/10 6/9/10 5/21/10	South Wall West Wall East Wall	ERM ERM ERM	1 of 1 1 of 1	AREA D WESTWALL 10' AREA D EASTWALL 1'	570 500	23 14	<5.7 <3.7	<11 <7.4	<5.7 <3.7	<170 <110	<5.7 <3.7
AREA C WEST WALL SURFACE AREA C BOTTOM SURFACE AREA D SOUTH WALL 4' AREA D WESTWALL 10' AREA D EASTWALL 1' AREA D BOTTOM SURFACE	6/1/10 6/9/10 5/21/10 5/19/10	South Wall West Wall East Wall Base	ERM ERM ERM ERM	1 of 1 1 of 1 1 of 1	AREA D WESTWALL 10' AREA D EASTWALL 1' AREA D BOTTOM SUR	570 500 590	23 14 <3.5	<5.7 <3.7 <3.5	<11 <7.4 <7.0	<5.7 <3.7 <3.5	<170 <110 <110	<5.7 <3.7 <3.5
AREA C WEST WALL SURFACE AREA C BOTTOM SURFACE AREA D SOUTH WALL 4' AREA D WESTWALL 10' AREA D EASTWALL 1'	6/1/10 6/9/10 5/21/10	South Wall West Wall East Wall	ERM ERM ERM	1 of 1 1 of 1	AREA D WESTWALL 10' AREA D EASTWALL 1'	570 500	23 14	<5.7 <3.7	<11 <7.4	<5.7 <3.7	<170 <110	<5.7 <3.7

Table 1 Soil Analytical Data Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/kg

Name of this location on the Soil Delineation Maps	Date of Sample Depth of Sample		Name of Organization that Collected Sample	Number of times this location has been sampled	Sample ID	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	trans-1,2- Dichloroethene	1,4-Dioxane	1,1-Dichloroethene
			Concercu Sumpre			RRS = 877 ug/kg	RRS = 500 ug/kg	RRS = 18,900 ug/kg	RRS = 200 ug/kg	Not Calculated	d - Chemicals Not Detected	l Above Soil NC
AREA ES WESTWALL N-8	6/9/10	West Wall - northern part	ERM	1 of 1	AREA ES WESTWALL N-8	430	330	<3.0	<6.1	<3.0	<91	<3.0
AREA ES EASTWALL 3'	6/3/10	East Wall	ERM	1 of 1	AREA ES EASTWALL 3'	750	<3.5	<3.5	<7	<3.5	<110	<3.5
AREA ES BOTTOM SURFACE	5/20/10	Base	ERM	1 of 1	AREA ES BOTTOM SUR	12	<3.3	<3.3	<6.6	<3.3	<100	NR
AREA EM WEST WALL SURFACE	5/25/10	West Wall	ERM	1 of 1	AREA EM WEST WALL SUR	85	<6.2	<6.2	<12	<6.2	<190	<6.2
AREA EM EAST WALL 4'	6/3/10	East Wall	ERM	1 of 1	AREA EM EAST WALL 4'	36	<2.9	<2.9	<5.8	<2.9	<87	<2.9
AREA EM BOTTOM 1'	5/25/10	Base	ERM	1 of 1	AREA EM BOTTOM 1'	790	<3.2	<3.2	<6.4	<3.2	<96	<3.2
AREA EN WEST WALL SURFACE	5/21/10	West Wall	ERM	1 of 1	AREA EN WEST WALL SUR	17	37	<3.2	<6.3	<3.2	<95	<3.2
AREA EN NORTHWALL W-S	5/21/10	North Wall - West Side	ERM	1 of 1	AREA EN NORTHWALL W-S	24	10	<3.4	<6.9	<3.4	<100	<3.4
AREA EN NORTHWALL E-SU	5/21/10	North Wall - East Side	ERM	1 of 1	AREA EN NORTHWALL E-SU	78	14	<4.0	<8.1	<4.0	<120	<4.0
AREA EN EASTWALL 1'	5/24/10	East Wall	ERM	1 of 1	AREA EN EASTWALL 1'	790	<3.3	<3.3	<6.6	<3.3	<98	<3.3
AREA EN BOTTOM SURFACE	5/21/10	Base	ERM	1 of 1	AREA EN BOTTOM SUR	69	4.8	<3.7	<7.4	<3.7	<110	<3.7
AREA F NORTH WALL SURFACE	5/26/10	North Wall	ERM	1 of 1	AREA F NORTH WALL SUR	11	<4.0	<4.0	<7.9	<4.0	<120	<4.0
AREA F WEST WALL SURFACE	5/26/10	West Wall	ERM	1 of 1	AREA F WEST WALL SUR	50	<3.4	<3.4	<6.9	<3.4	<100	<3.4
AREA F SOUTH WALL SURFACE	5/26/10	South Wall	ERM	1 of 1	AREA F SOUTH WALL SUR	170	13	<3.4	<6.8	<3.4	<100	<3.4
AREA F EAST WALL SURFACE	5/26/10	East Wall	ERM	1 of 1	AREA F EAST WALL SUR	63	6.1	<3.5	<7.0	<3.5	<110	<3.5
AREA F BOTTOM SURFACE	5/26/10	Base	ERM	1 of 1	AREA F BOTTOM SUR	20	<4.4	<4.4	<8.8	<4.4	<130	<4.4
AREA G WEST WALL SURFACE	5/20/10	West Wall	ERM	1 of 1	AREA G WEST WALL SUR	87	<3.8	<3.8	<7.6	<3.8	<110	<3.8
AREA "G" SOUTHWALL SURFACE	5/19/10	South Wall	ERM	1 of 1	AREA "G" SOUTHWALL SUR	45	<4.3	<4.3	<8.6	<4.3	<130	<4.3
AREA "G" EASTWALL SURFACE 2'	5/19/10	East Wall	ERM	1 of 1	AREA "G" EASTWALL SUR 2'	37	<4.7	<4.7	<9.4	<4.7	<140	<4.7
AREA "G" BOTTOM SURFACE 4'	5/19/10	Base	ERM	1 of 1	AREA "G" BOTTOM SUR 4'	620	<3.4	<3.4	<6.8	<3.4	<100	<3.4
ERM-SB-A	9/23/10	4	ERM	1 of 1	ERM-SB-A-4	<6	<6	<6	<12	<6	<180	<6
	9/23/10	8	ERM	- 01 1	ERM-SB-A-8	<5.6	<5.6	<5.6	<11	<5.6	<170	<5.6
ERM-SB-B	9/23/10	8	ERM	1 1	ERM-SB-B-8	<4.9	<4.9	<4.9	<9	<4.9	<150	<4.9
ERM-SB-C	9/23/10	4	ERM	1 1	ERM-SB-C-4	6	<5	<5	<10	<5	<150	<5

NOTES:

A Reported as 1,2-Dichloroethene, total
NA = Not Analyzed
NS = Not Sampled
Highlighted Cells > RRS (these samples > RRS have since been remediated)

Table 2 Monitoring Well Construction Details Former Dickies Industrial Services, Inc. HSI Site No. 10127

Land Surface Elevation (ft-msl) (8) (ft bg) (ft) (ft) (ft) (ft) (ft) (ft) (ft) (ft	,		
CDM WELLS	nate Aquifer Zone	ne Property	Comment
		·	
CP-MW-1 1013.04 1014.29 2 Flush Mount 20 13.1 5 15 5-20 2"/PVC 16 10/16/90 2204298.28 1319058.	8.15 Shallow	DISI	Well was raised 10 1/8 inches (0.843 ft) on 3/15/04 during well pad repairs. TOC values in this table has been changed to reflect this.
CP-MW-2 1013.04 1012.85 2 Flush Mount 27 7 20 7-27 2"/PVC 17 10/17/90 2204248.04 1319062.	2.43 Shallow	DISI	
CP-MW-3 1013.41 1013.12 2 Flush Mount 27 7 20 7-27 2"/PVC NA 10/19/90 2/11/03 2204242.69 1318973.	3.46 Shallow	DISI	
CP-MW-4 1023.73 1023.46 13 Flush Mount 27 17 10 17-27 2"/PVC NA 10/18/90 2/11/03 2204289.32 1319068.		DISI	
CP-MW-5 1014.72 1017.04 12 2.5 31 16 15 16-31 2"/PVC NA 3/11/91 2/14/00 2204264.93 1319256.		CCE	Closed 2/14/00 for CCE construction
CP-MW-6 1012.92 1012.73 30 Flush Mount 45 34 10 34-44 2"/PVC NA 3/12/91 12/1/03 2204241.80 1319062.	2.64 Deep	DISI	Closed by ERM/Kilman team on 12/1/2003.
CP-MW-7 1013.76 1013.60 5 Flush Mount 24 9 15 9-24 2"/PVC NA 3/13/91 04/07/03 2204202.46 1319120.	0.90 Shallow	CCE	Closed 4/7/2003 due to proximity to AS well and screened depth
CP-MW-8 1013.35 1013.21 6 Flush Mount 55 10 40 10-50 4"/PVC 30 3/14/91 2204267.17 1319062.	2.70 Deep	DISI	
Hill-Fister Engineers, Inc.			
EF-MW-1 14 2.83 30.5 20.5 10 20.5-30.5 2"/PVC NA 9/25/87 2/14/00	Shallow	CCE	Closed 2/14/00 for CCE construction
EF-MW-2 1012.75 1014.77 2.5 2.5 15 5 10 5-15 2'/PVC NA 9/25/87 12/1/03 2204339.31 1319194.	4.95 Shallow	DISI	Closed by ERM/Kilman team on 12/1/2003.
EF-MW-3 1011.89 1013.60 2 1.58 18 8 10 8-18 2"/PVC NA 9/25/87 2/14/00 2204399.76 1319329.	9.27 Shallow	CCE	Closed 2/14/00 for CCE construction
A.T.&E. Consultants, Inc.	•	•	
EF-MW-4 1012.63 1014.11 2.5 1.5 18.5 8.5 10 8.5-18.5 2"/PVC 14 6/26/87 2204289.32 1319068.	8.64 Shallow	DISI	
RMT Wells	o.o1 Shahow	Digi	
	T.00	Diet	
MW-3A 1013.02 1013.26 34.5 Flush Mount 72 47 5 47-52 2"/PVC NA 9/9/92 2/11/03 2204242.21 1318967. MW-9 1014.06 1016.90 1 Yes 15 16.12 3.5 10 3.5-13.5 2"/PVC 10.5 8/26/92 204248.6 1319198		DISI	
1011.00 1011.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 101.00 1 1 1 1		DISI	D AC 10 II 4/2002
MW-9A 1013.94 1016.65 31 Yes 41.5 16.91 36.5 5 36.5-41.5 2"/PVC NA 8/27/92 4/2/03 2204275.39 1319198.		DISI	Became AS-13 well, 4/2003
MW-10 1015.08 1018.08 5 Yes 20 17.82 8.5 10 8.5-18.5 2"/PVC 16 8/26/92 2204399.40 1319053. MW-10A 1012.83 1015.78 43 Yes 54.5 15.5 47.8 5 47.8-52.8 2"/PVC 51 8/31/92 2204399.56 1319061.		DISI	
MW-10A 1012.65 1015.76 45 168 54.5 15.5 47.8 5 47.8-52.8 2/1 VC 51 8/31/92 2/14/00 2204207.52 1319289. MW-11 1014.87 1017.60 2 Yes 15 5 10 5-15 2"/PVC NA 9/1/92 2/14/00 2204207.52 1319289.		CCE	Closed 2/14/00 for CCE construction
MW-12 1013.39 1013.25 2 Yes 15 12.42 5 10 5-15 2"/PVC 10 9/1/92 Converted to SVE-4 2204200.51 1319062.		CCE	Became SVE-4 well during construction, 4/2003. New TOC was not surveyed - do not use for GW potentiometric surface maps
MW-13 1013.99 1013.50 2 Flush Mount 15 17.08 5 10 5-15 2"/PVC ₁₃ 9/1/92 2204193.30 1318955.		CCE	WELL TOC WAS LOWERED ON 1/13/06. Lowered by 3.39 feet
MW-13A 1013.96 1013.56 62 Flush Mount 72 17.25 65 5 65-70 2"/PVC 70 9/2/92 2204193.62 1318950.		CCE	WELL TOC WAS LOWERED ON 1/13/06 by 3.39 feet
MW-14 1014.21 1017.28 2 Flush Mount 17.5 5 10 5-15 2"/pvc 13 9/4/92 2204203.00 1319204.	4.37 Shallow	CCE	
ERM Wells			
MW-9B 1014.20 1016.81 2 2.43 16 6 10 6-16 2"/PVC NA 3/12/1999 12/1/03 2204290.25 1319199		DISI	Closed by ERM/Kilman team on 12/1/2003.
MW-9C 1013.99 1016.84 Ground Surface 2.57 15 5 10 5-15 2"/PVC NA 3/12/1999 12/1/03 2204304.93 1319198. MW-15 1023.85 1023.67 56 Flush Mount 70 60 10 60-70 2'/PVC NA 9/30/1998 2/11/03 2203929.63 1318697.		DISI SEARS	Closed by ERM/Kilman team on 12/1/2003.
MW-16 1023.66 1023.42 15 Flush Mount 29 19 10 19-29 2"/PVC NA 10/1/1998 2/11/03 2203934.11 1318699.		SEARS	
MW-17 1027.23 1029.41 14 2.03 29 18 10 18-28 2"/PVC NA 10/1/1998 2/14/00 2204536.09 1318692.		CCE	Closed 2/14/00 for CCE construction
MW-18D 1013.40 1013.97 No Seal Flush Mount 132 12.38 92 Open Borehole Borehole 6"/PVC 110 10/29/1998 2204306.25 1319064.	4.42 Deep	DISI	Rock Well. Well was raised 9 1/2 inches (0.791 ft) on 4/7/04 during well pad repairs. TOC value in this table has been changed to reflect this.
MW-19 1022.68 1022.36 57 Flush Mount 75 24.36 65 10 65-75 2"/PVC 70 11/24/1998 2204931.78 1318964.	4.69 Deep	CCE	
MW-20 1022.68 1022.45 17.5 Flush Mount 33 25.02 23 10 23-33 2"/PVC 28 11/24/1998 2204937.2 1319213.		CCE	
MW-21 1031.18 1030.74 29 Flush Mount 51 30.56 40 10 40.50 2"/PVC NA 11/30/1998 6/2/2003 2203447.33 1319249.		DOVER	
MW-22 1031.17 1030.86 20 Flush Mount 35 30.55 24.6 10 24.6 34.6 2"/PVC NA 12/1/1998 6/2/2003 2203450.5 1319237. MW-23 1008.84 1011.02 46 2.18 62 52 10 52-62 2"/PVC NA 3/9/1999 9/12/2002 2204687.09 1320542.		DOVER CCE/STEVENSO	NI
MW-23 1008.84 1011.02 46 2.18 62 52 10 52-62 2-/PVC NA 3/9/1999 9/12/2002 2204687.09 1320342. MW-24 1009.09 1011.16 3 1.84 19 8 10 8-18 2"/PVC NA 3/10/1999 9/12/2002 2204687.51 1320535.		CCE/STEVENSO	
MW-25 1023.12 1022.82 30 Flush Mount 34 30.95 34 10 34-44 2"/PVC 39 3/10/1999 2205501.13 1319122.		CCE	
MW-26 1006.71 1009.31 14** 2.35 35.5 35.5 10 35.5-45.5 2"/PVC NA 5/5/1999 9/12/2002 2204825.51 1320916.		CCE/STEVENSO	N
MW-27 1006.92 1009.16 Surface 1.49 23 10 10 8-18 2"/PVC NA 5/5/1999 9/12/2002 2204819.98 1320911.		CCE/STEVENSO	N
MW-28 NS NS Surface NS 22 2 10 22-32 2"/PVC NA 8/12/1999 2/14/00 NS NS	Shallow Shallow	CCE	Closed 2/14/00 for CCE construction

WD Well construction.XLS- printed on 3/25/2011

Table 2 Monitoring Well Construction Details Former Dickies Industrial Services, Inc. HSI Site No. 10127

Well No.	Land Surface Elevation (ft-msl)	TOC Elevation (ft-msl) (8)	Top of Bentonite Seal (ft bg)	Casing† Stick-up (TOC to Pad) (ft)	Total Boring Depth (ft bg)	Depth to Water Below TOC	Casing Length (ft)	Screen Length (ft)	Screen Interval (ft-bg)	Casing/ Screen Material diameter	Depth of PDE Placement (ft-bTOC)	Date Completed	Date Closed	Easterly Coordinate	Northerly Coordinate	Aquifer Zone	Property	Comment
MW-28R	1009.56	1009.53	19	Flush Mount	33	11.37	13	10	23-33	2"/PVC	18	9/6/2002		2204564.88	1319752.56	Shallow	CCE	
MW-29	1005.87	1009.31	20.5	3.44	35		25	10	25-35	2"/PV€	NA	7/10/2000	2/14/00	2204858.07	1319936.85	Shallow	CCE	Temporary. May have been destroyed during construction
MW-29R	1010.21	1010.07	20.8	Flush Mount	35	14	25	10	25-35	2"/PVC	30	9/5/2002		2204845.17	1319887.15	Shallow	CCE	no standard penetration test performed
MW-30	1022.85	1026.11	16	3.26	35		21	10	21-31	2"/PVC	NA	7/10/2000	12/1/2003	2204120.19	1319794.83	Shallow	CCE	Closed by ERM/Kilman team on 12/1/2003.
MW-31	1017.75	1017.38	35***	Flush Mount	63.5		53.5	10	53.5-63.5	2"/PVC	59	7/13/2000		2204050.47	1318808.45	Deep	SMITH	Closed by ERM/Betts Env. team in Dec. 2007
MW-32	1019.76	1019.19	Surface	Flush Mount	20	17.92	10	10	10-20	2"/PVC	15	7/12/2000		2203979.36	1319176.24	Shallow	PUJA	
MW-33	1030.14	1029.73	18	Flush Mount	33	29.24	23	10	23-33	2"/PVC	28	7/11/2000		2203686.27	1319238.93	Shallow	DOVER	
MW-34	1015.39	1015.4	25	Flush Mount	40	14.53	30	10	30-40	2"/PVC	35	9/4/2002		2204190.55	1318812.74	Deep	DISI	
MW-35	1022.71	1022.55	20.5	Flush Mount	35	22.32	25	10	25-35	2"/PVC	30	9/5/2002		2204556.04	1318845.61	Shallow	CCE	no lithologies taken
MW-35A	1022.74	1022.57	36	Flush Mount	50	22.32	40	10	40-50	2"/PVC	45	9/5/2002		2204558.69	1318845.34	Deep	CCE	<u> </u>
MW-36	1015.31	1015.16	7.6	Flush Mount	22	14.6	12	10	12-22	2"/PVC	17	9/5/2002		2204239.23	1319377.7	Shallow	CCE	
MW-37	1013.92	1013.49	21	Flush Mount	35	13.47	25	10	25-35	2"/PVC	30	9/6/2002		2204382.5	1319345.81	Shallow	CCE	no lithologies taken
MW-37A	1013.98	1013.69	36	Flush Mount	50	13.19	40	10	40-50	2"/PVC	45	9/6/2002		2204386.36	1319345.75	Deep	CCE	
MW-38	1018.5	1018.4	19.8	Flush Mount	35	18.83	25	10	25-35	2"/PVC	30	9/4/2002		2204597.63	1319050.56	Shallow	CCE	no lithologies taken
MW-38A	1018.5	1018.31	35.8	Flush Mount	49	18.73	39	10	39-49	2"/PVC	44	9/4/2002		2204597.78	1319048.11	Shallow	CCE	
MW-39	NS	NS	13	Flush Mount	25		15	10	15-25	2"/PVC	NA	2/18/2011		NS	NS	Shallow	PUJA	

NOTES

Ground surface elevations and top-of-casing elevations surveyed on September 15, 1998

Depths to ground water collected in September 2002

Well coordinates surveyed on September 15, 1998

ft bg = feet below ground

ft msl = feet above mean sea level

ft btoc = feet below top of casing

NA = Not Available NS = Not surveyed

Note: FF of Bldg. 1019.5

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ENVIRONMENTAL RESOURCES MANAGEMENT

WD Well construction.XLS- printed on 3/25/2011

^{* =} Surface casing set to 92 feet bg., well is bedrock, open borehole well.

^{** =} Top of Bentonite seal should be at about 31.5 feet bg., some cave-in occurred when augers were pulled.

^{*** =} Top of Bentonite seal should be at about 48 feet bg., some cave-in occurred when augers were pulled.

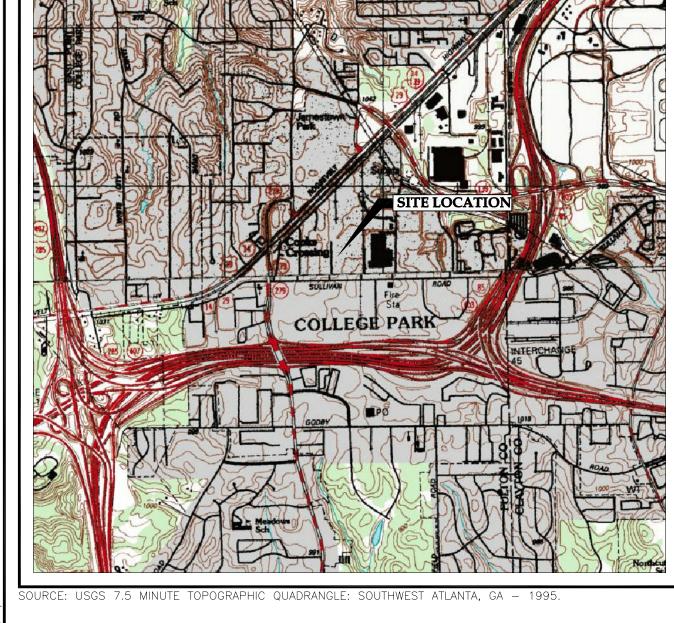
Table 3 Ground Water Elevation Data Former Dickies Industrial Services, Inc. HSI Site No. 10127

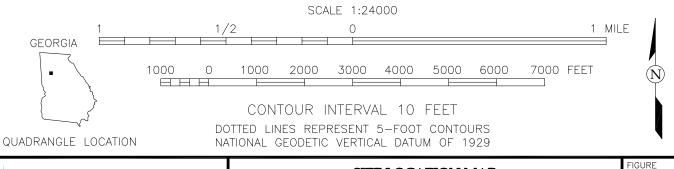
		October	3, 2005	October	11, 2006	October	10, 2007	October	6, 2008	October :	20, 2009	October 11, 2010	
Well ID	TOC ELEV	Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation
MW-1	1014.29	9.53	1004.76	12.50	1001.79	14.10	1000.19	14.15	1000.14	10.35	1003.94	11.40	1002.89
MW-2	1012.85	5.11	1007.74	9.80	1003.05	12.21	1000.64	12.86	999.99	9.58	1003.27	8.90	1003.95
MW-4	1014.11	8.94	1005.17	10.60	1003.51	13.10	1001.01	13.67	1000.44	10.00	1004.11	9.60	1004.51
MW-8	1013.21	8.14	1005.07	9.90	1003.31	11.38	1001.83	13.12	1000.09	9.83	1003.38	9.30	1003.91
MW-9	1016.90	12.22	1004.68	13.90	1003.00	16.05	1000.85	16.44	1000.46	13.35	1003.55	12.91	1003.99
MW-10	1018.08	13.53	1004.55	15.50	1002.58	17.90	1000.18	18.11	999.97	14.48	1003.60	14.74	1003.34
MW-10A	1015.78	11.42	1004.36	13.10	1002.68	15.58	1000.20	15.88	999.90	12.68	1003.10	12.40	1003.38
MW-12	1013.25	13.23	1000.02	13.40	999.85	15.37	997.88	15.95	997.30	13.18	1000.07	12.18	1001.07
MW-13	1013.50	12.72	1004.17	10.80	1002.70	12.90	1000.60	13.46	1000.04	10.73	1002.77	9.77	1003.73
MW-13A	1013.56	NM	NM	10.80	1002.76	12.94	1000.62	13.50	1000.06	10.78	1002.78	9.77	1003.79
MW-14	1017.28	11.97	1005.31	13.80	1003.48	15.89	1001.39	16.45	1000.83	13.64	1003.64	12.72	1004.56
MW-18D	1013.97	5.92	1008.05	10.80	1003.17	12.19	1001.78	13.46	1000.51	10.80	1003.17	9.96	1004.01
MW-19	1022.36	19.50	1002.86	20.96	1001.40	21.46	1000.90	23.92	998.44	21.66	1000.70	20.64	1001.72
MW-20	1022.45	21.02	1001.43	22.31	1000.14	24.11	998.34	24.79	997.66	23.08	999.37	22.63	999.82
MW-25	1022.82	25.59	997.23	27.30	995.52	28.85	993.97	29.50	993.32	27.85	994.97	26.48	996.34
MW-28R	1009.53	NM	NM	10.45	999.08	11.56	997.97	17.75	991.78	14.65	994.88	13.95	995.58
MW-29R	1010.07	10.92	999.15	12.54	997.53	13.29	996.78	14.32	995.75	10.70	999.37	11.79	998.28
MW-32	1019.19	17.20	1001.99	16.09	1003.10	16.78	1002.41	18.80	1000.39	15.91	1003.28	14.91	1004.28
MW-33	1029.73	25.30	1004.43	27.20	1002.53	29.24	1000.49	29.55	1000.18	27.34	1002.39	25.77	1003.96
MW-34	1015.40	NM	NM	11.90	1003.50	14.23	1001.17	14.92	1000.48	12.23	1003.17	11.12	1004.28
MW-35	1022.55	NM	NM	19.16	1003.39	21.31	1001.24	22.30	1000.25	20.79	1001.76	18.86	1003.69
MW-35A	1022.57	NM	NM	19.15	1003.42	21.31	1001.26	22.30	1000.27	20.80	1001.77	18.82	1003.75
MW-36	1015.16	NM	NM	12.22	1002.94	14.30	1000.86	14.90	1000.26	11.90	1003.26	11.19	1003.97
MW-37	1013.49	NM	NM	10.94	1002.55	13.31	1000.18	13.80	999.69	10.64	1002.85	10.20	1003.29
MW-37A	1013.69	9.34	1004.35	10.96	1002.73	13.15	1000.54	13.75	999.94	10.85	1002.84	10.05	1003.64
MW-38	1018.40	14.53	1003.87	15.70	1002.70	17.91	1000.49	19.65	998.75	16.76	1001.64	15.30	1003.10
MW-38A	1018.31	14.50	1003.81	15.70	1002.61	17.93	1000.38	18.92	999.39	16.64	1001.67	15.25	1003.06

Table 4
VOCs in Ground Water Monitoring Wells
Former Dickies Industrial Services, Inc. HSI Site No. 10127 ug/L

Existing Well ID	Date Installed	Date Sampled			Det	tected Compound (u	ıg/L)		
Existing Well ID	Date Histalieu	Date Sampled	PCE	TCE	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	1,4-Dioxane
MW-1	10/16/1990	10/20/2010	20,000	400	< 5	1,300	20	11	< 150
MW-2	10/17/1990	10/20/2010	64	9.2	< 5	23	< 5	< 2	< 150
MW-4	6/26/1987	10/20/2010	1700	49	< 5	190	< 5	< 2	< 150
MW-8	3/14/1991	10/23/2009	< 2	< 2	< 2	< 2	< 2	< 2	< 500
MW-9	8/26/1992	10/21/2010	20	< 5	< 5	< 5	< 5	< 2	< 150
MW-9A (converted to AS-13 4/2/03)	8/27/1992	9/10/2002	350	19	< 2	53	< 2	< 2	NA
MW-10	8/26/1992	10/20/2010	210	11	< 5	14	< 5	< 2	< 150
MW-10A	8/31/1992	10/20/2010	1,100	98	< 5	270	< 5	< 2	< 150
MW-12 (converted to SVE-4 4/2/03)	9/1/1992	10/18/2010	22	< 5	< 5	23	< 5	< 2	< 150
MW-13	9/1/1992	10/19/2010	120	10	< 5	6.6	< 5	< 2	< 150
MW-13A	9/2/1992	10/19/2010	18	< 5	< 5	< 5	< 5	< 2	< 150
MW-14	9/4/1992	10/19/2010	10	< 5	< 5	< 5	< 5	< 2	< 150
MW-18D	10/29/1998	10/19/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-19	11/24/1998	10/14/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-20	11/24/1998	10/14/2010	74	9.7	< 5	400	< 5	< 2	< 150
MW-21 (closed 6/2/2003)	11/30/1998	3/3/2003	< 2	< 2	< 2	< 2	< 2	< 2	NA
MW-22 (closed 6/2/2003)	12/1/1998	9/4/2002	< 2	< 2	< 2	< 2	< 2	< 2	NA
MW-25	3/10/1999	10/14/2010	110	6.2	< 5	23	< 5	< 2	< 150
MW-28/28R	9/6/2002	10/21/2010	< 5	< 5	< 5	16	< 5	3.1	< 150
MW-29/29R	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-32	7/12/2000	10/18/2010	100	5.6	< 5	20	< 5	< 2	< 150
MW-33	7/11/2000	10/18/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-34	9/4/2002	10/19/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-35	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-35A	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-36	9/5/2002	10/15/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-37	9/6/2002	10/21/2010	22	< 5	< 5	7.8	< 5	< 2	< 150
MW-37A	9/6/2002	10/15/2010	< 5	< 5	< 5	110	< 5	2.6	< 150
MW-38	9/4/2002	10/18/2010	< 5	< 5	< 5	< 5	< 5	< 2	< 150
MW-38A	9/4/2002	10/18/2010	< 5	< 5	8.6	3,800	< 5	13	< 150
MW-39	2/18/2011	2/23/2011	< 5	< 5	< 5	< 5	< 5	< 2	< 150

NA = Not Analyzed

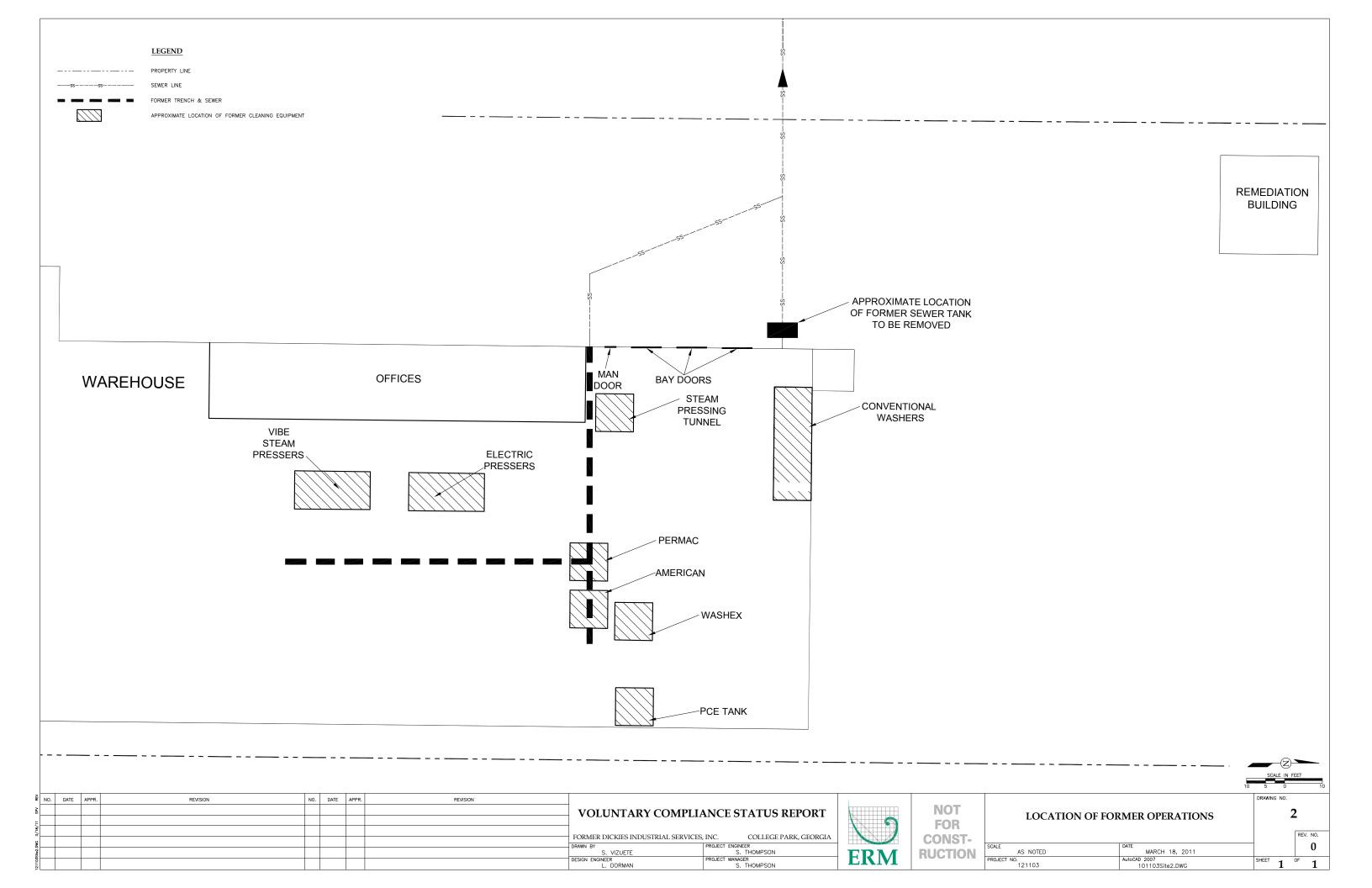


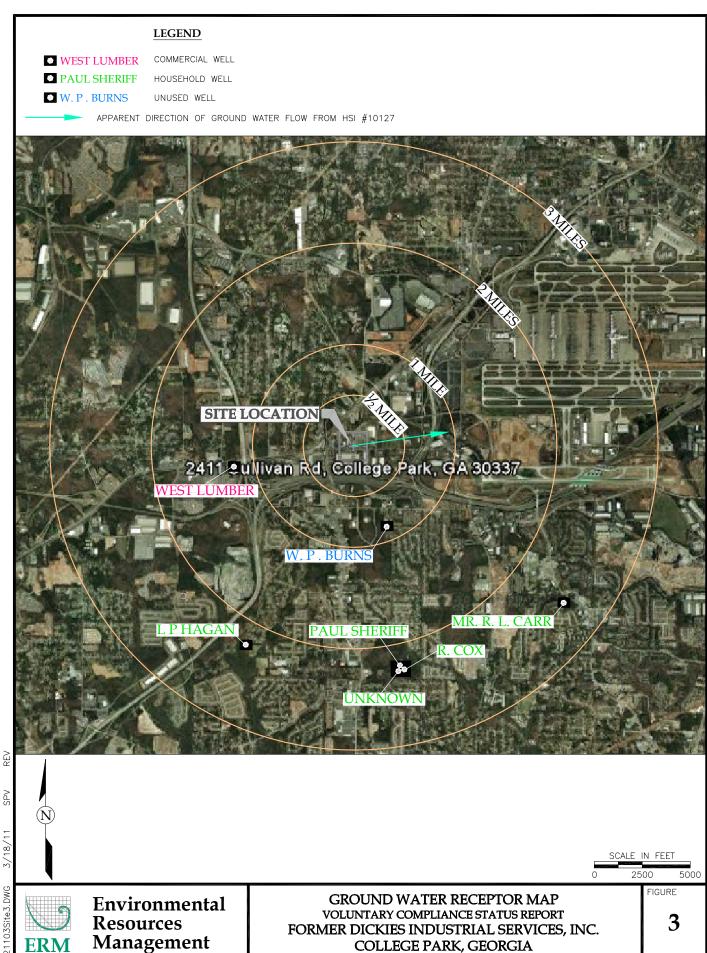


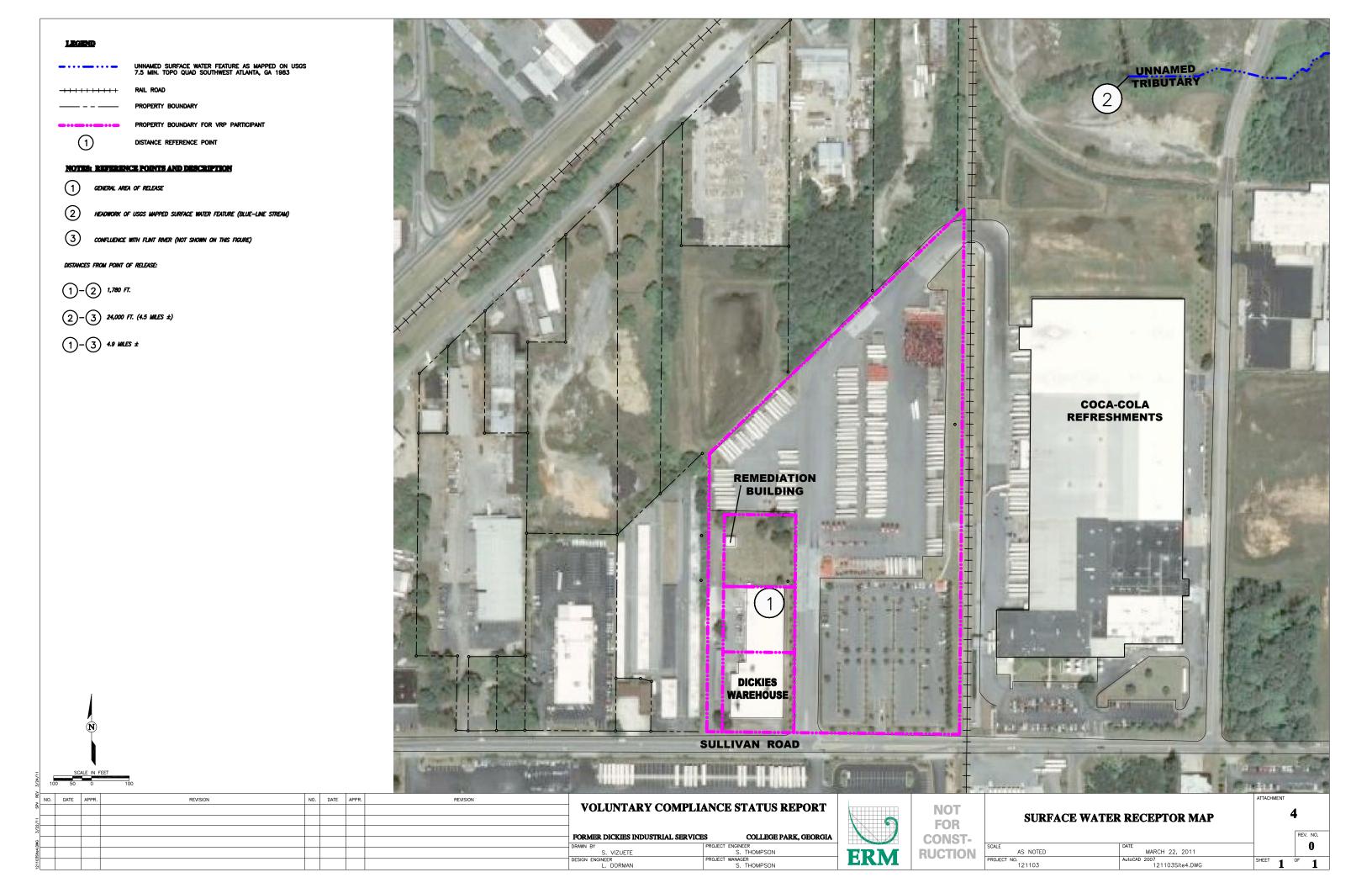
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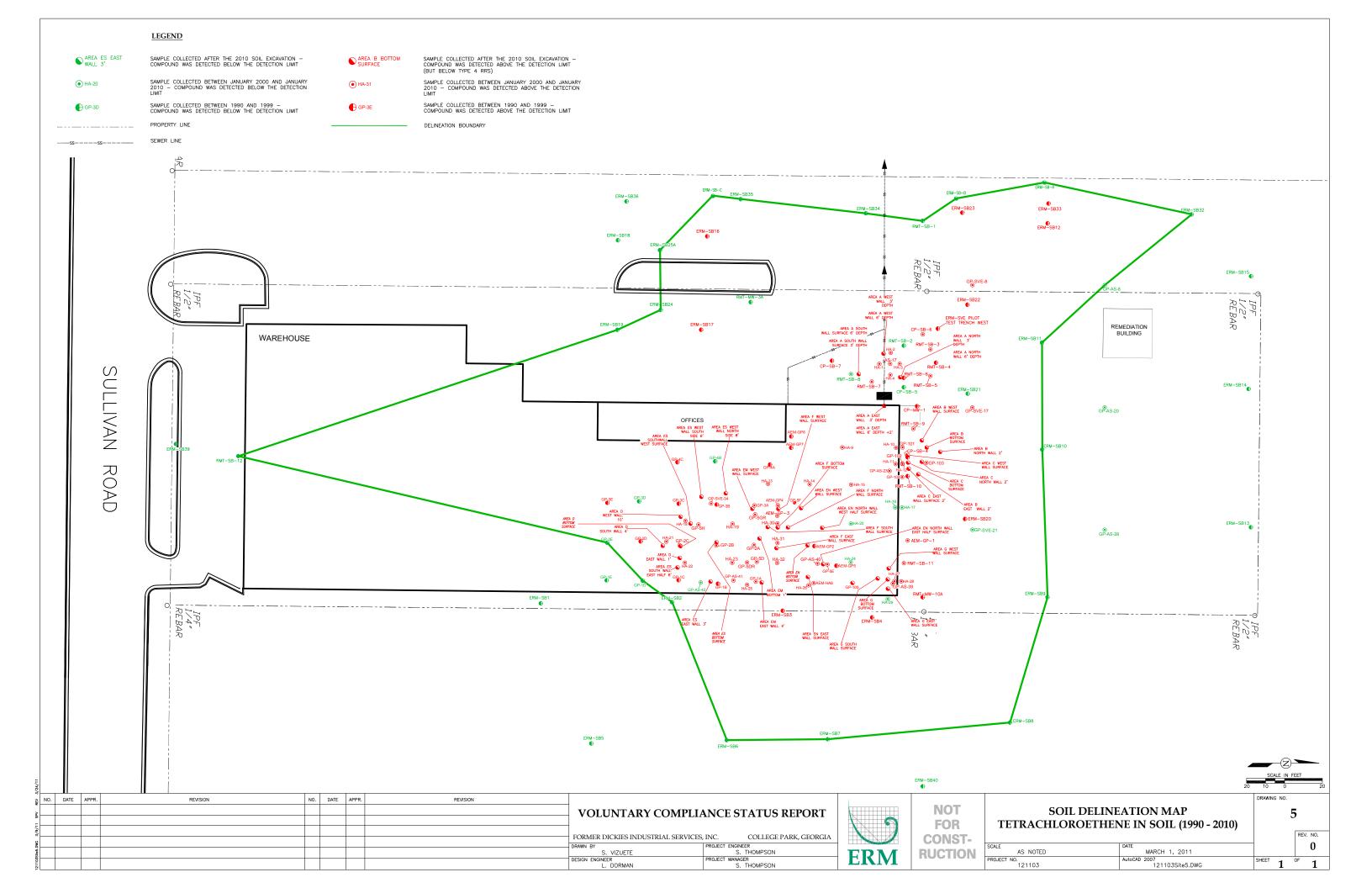
Environmental Resources Management SITE LOCATION MAP
VOLUNTARY COMPLIANCE STATUS REPORT
FORMER DICKIES INDUSTRIAL SERVICES, INC.
COLLEGE PARK, GEORGIA

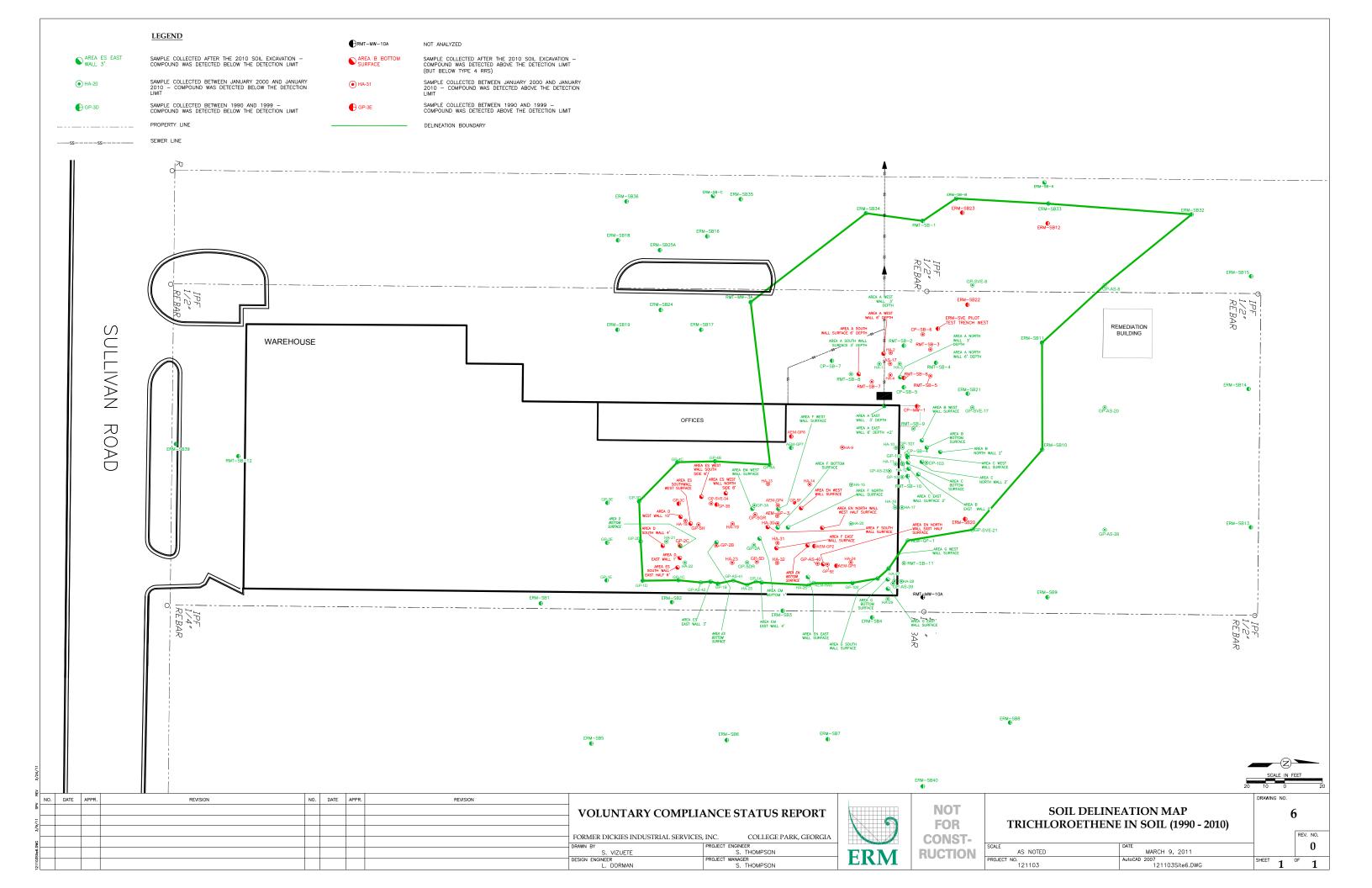
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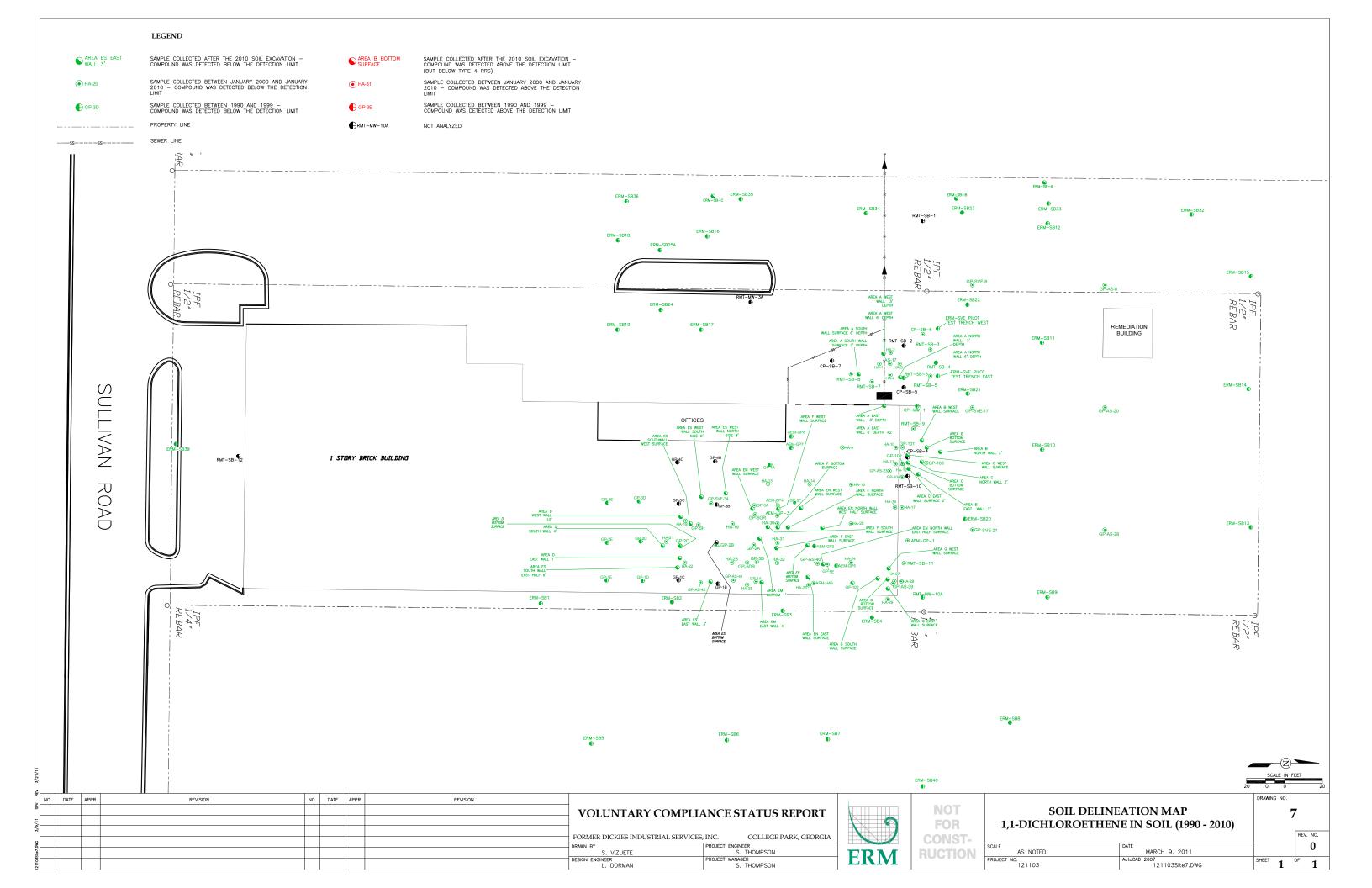


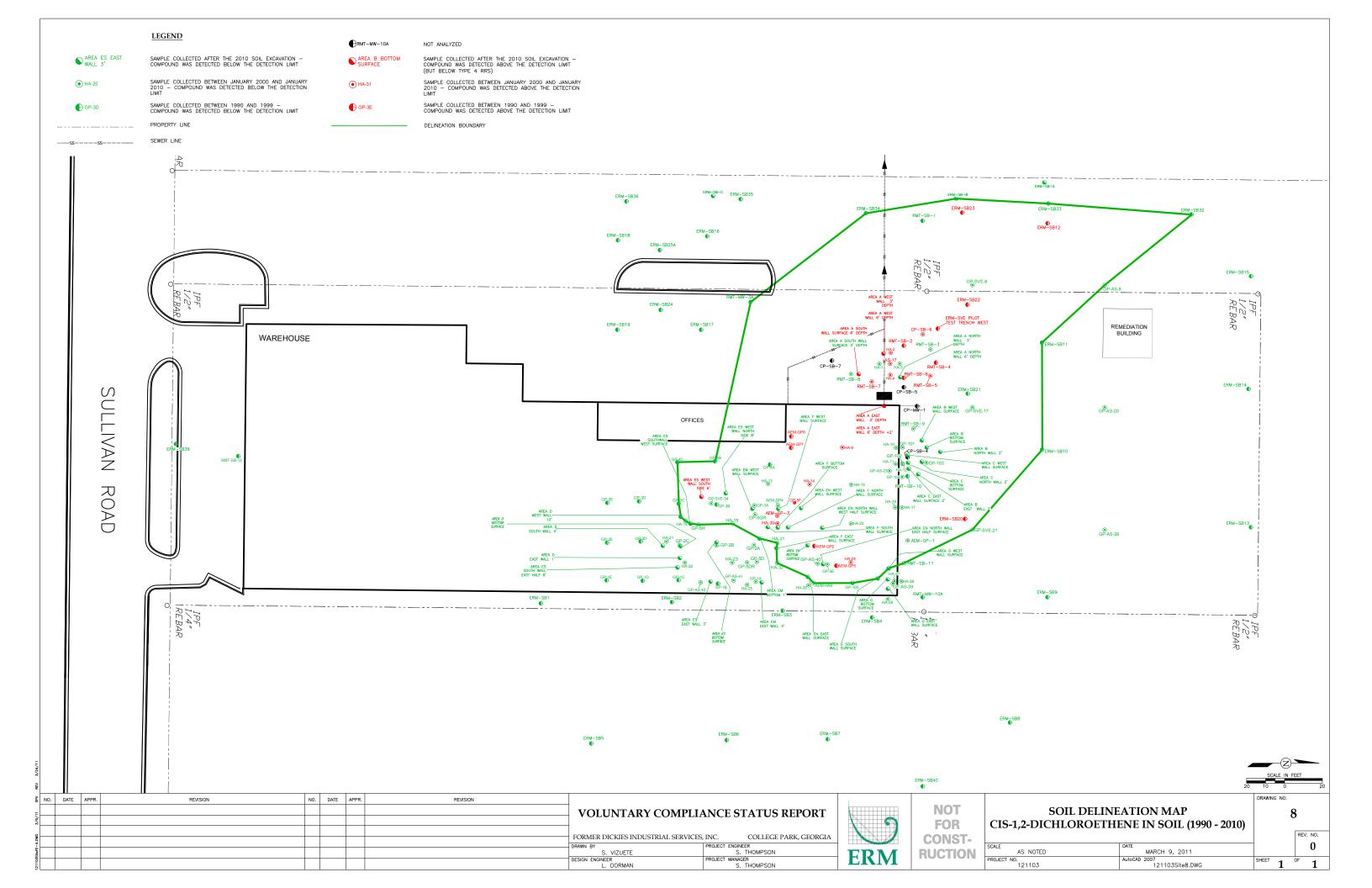


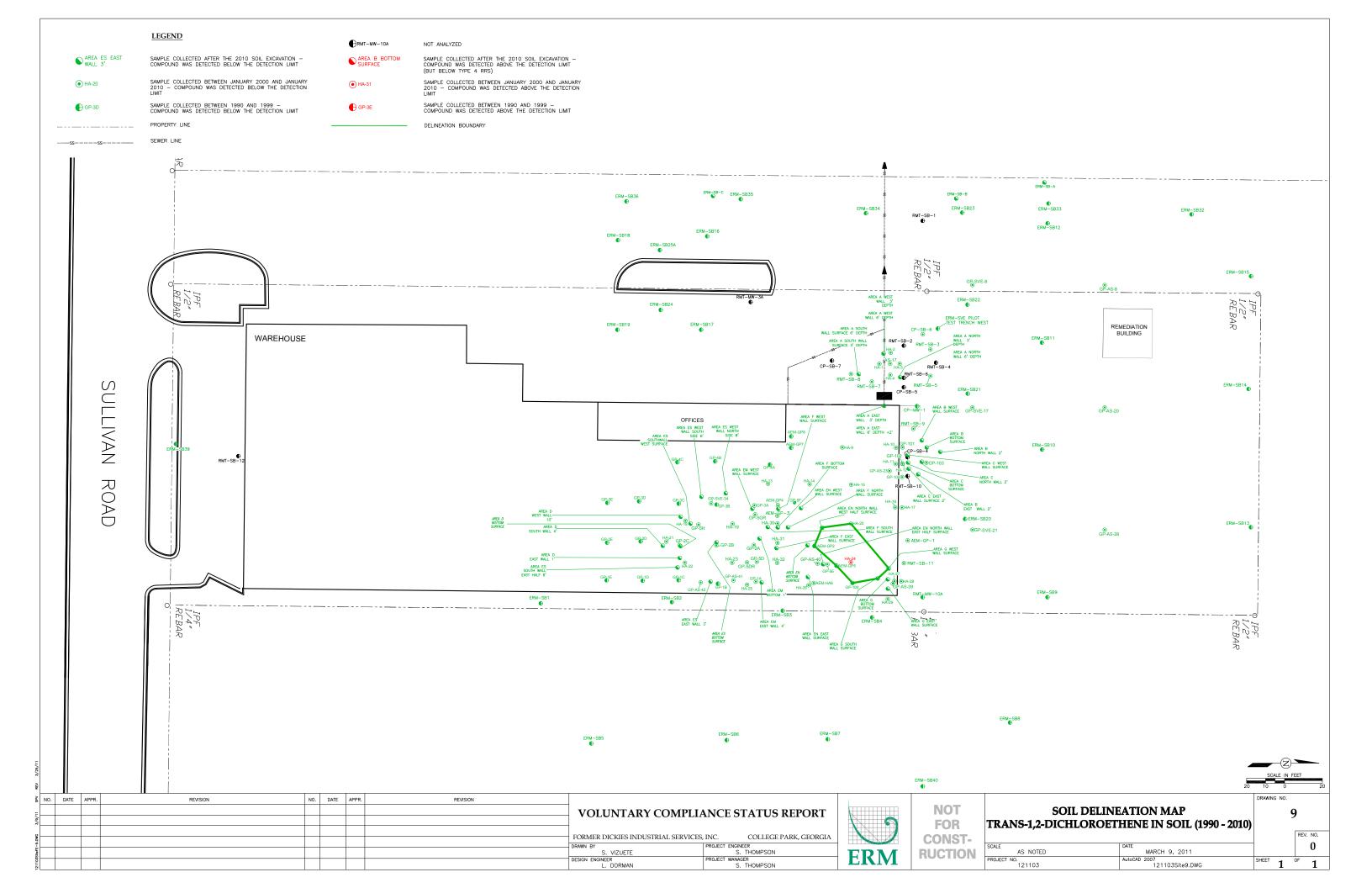


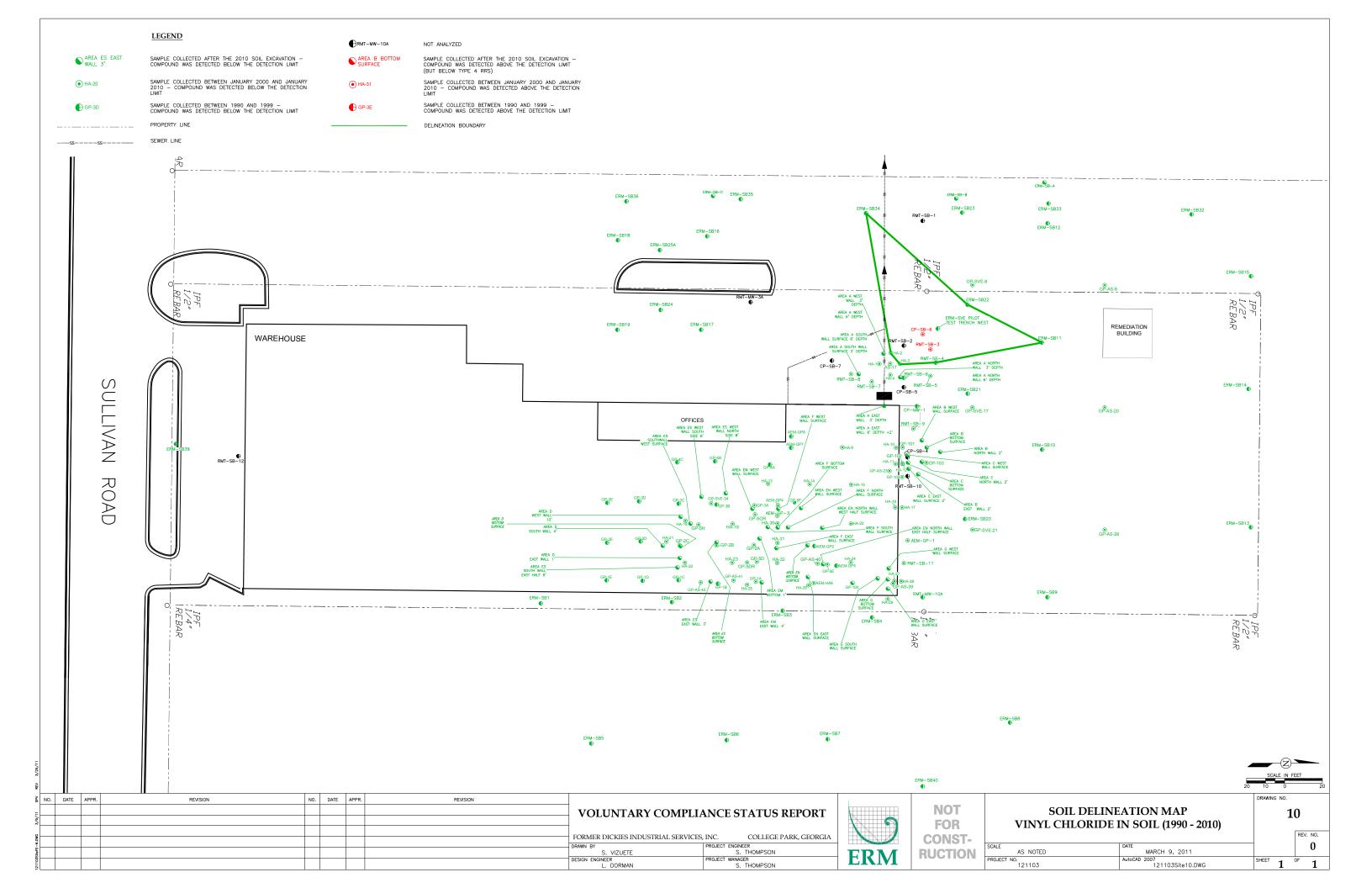


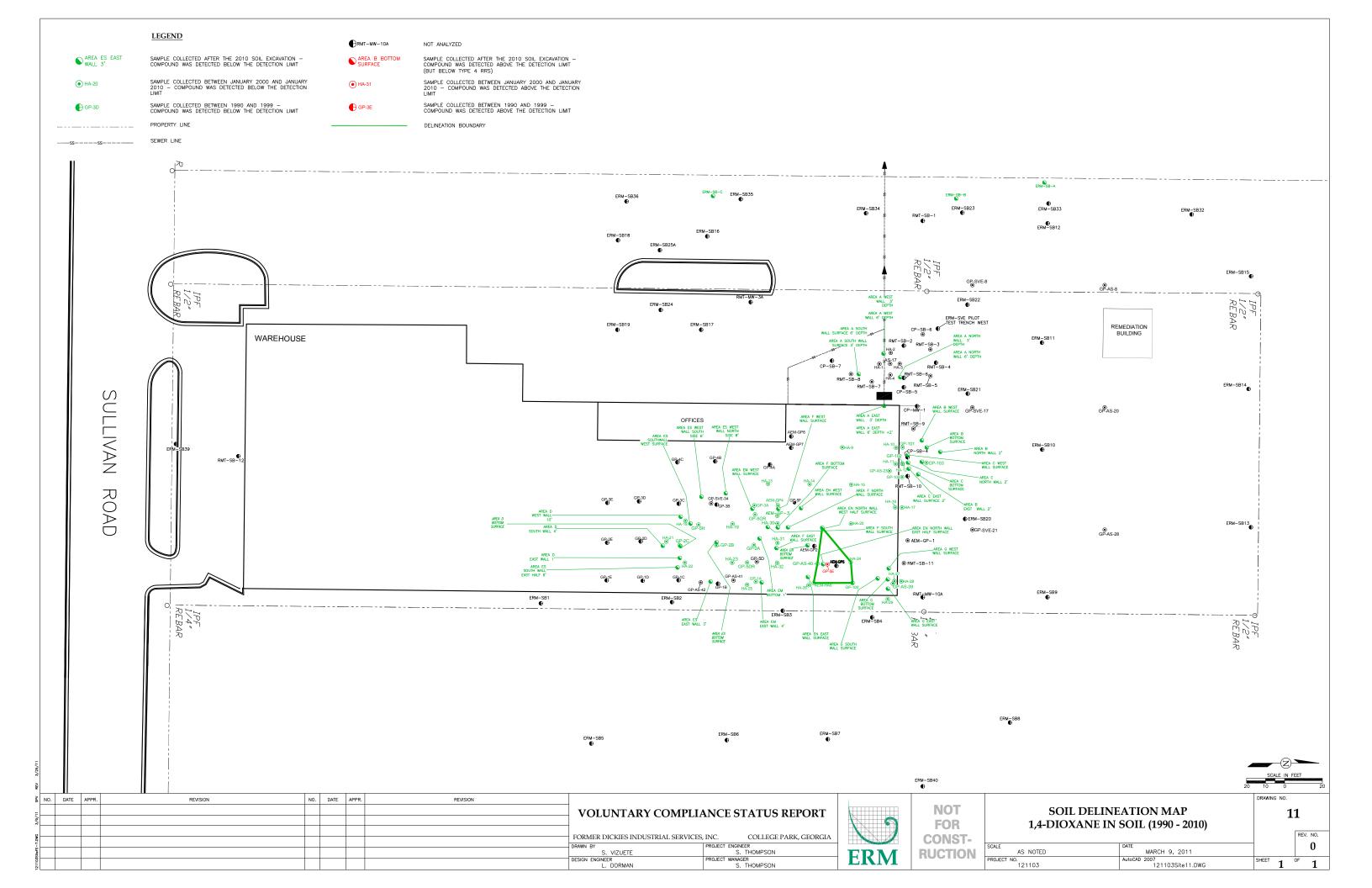


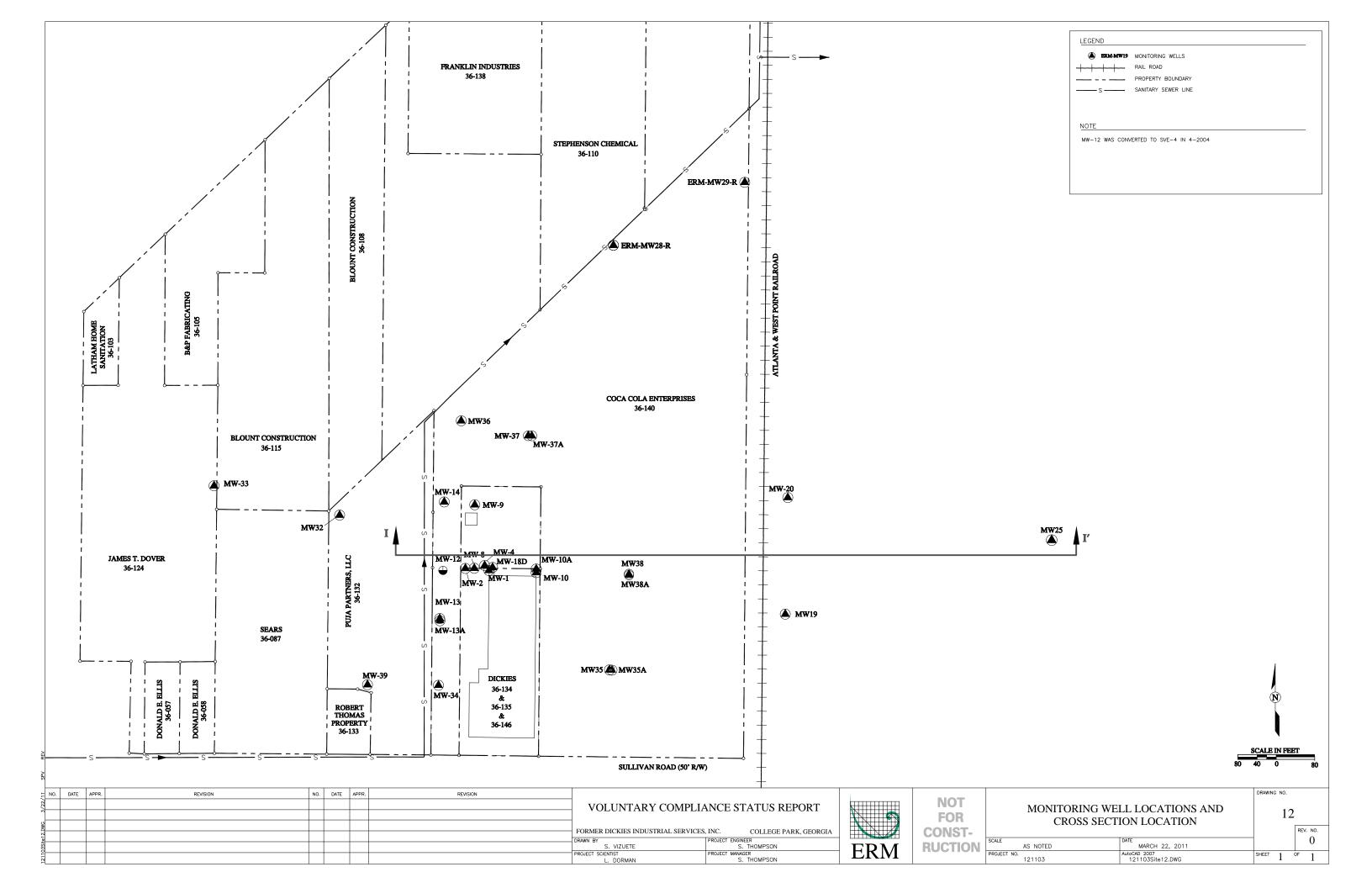


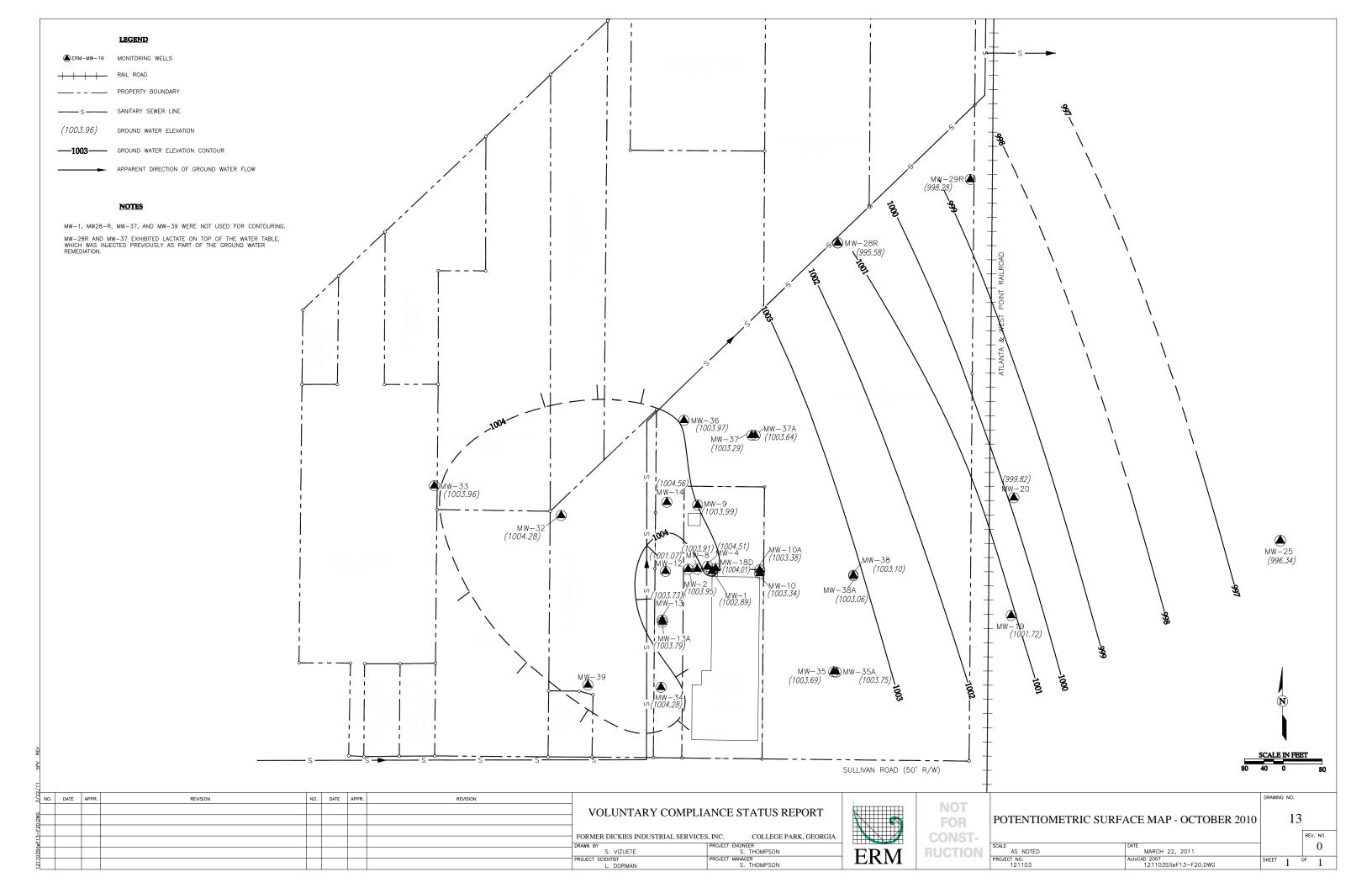


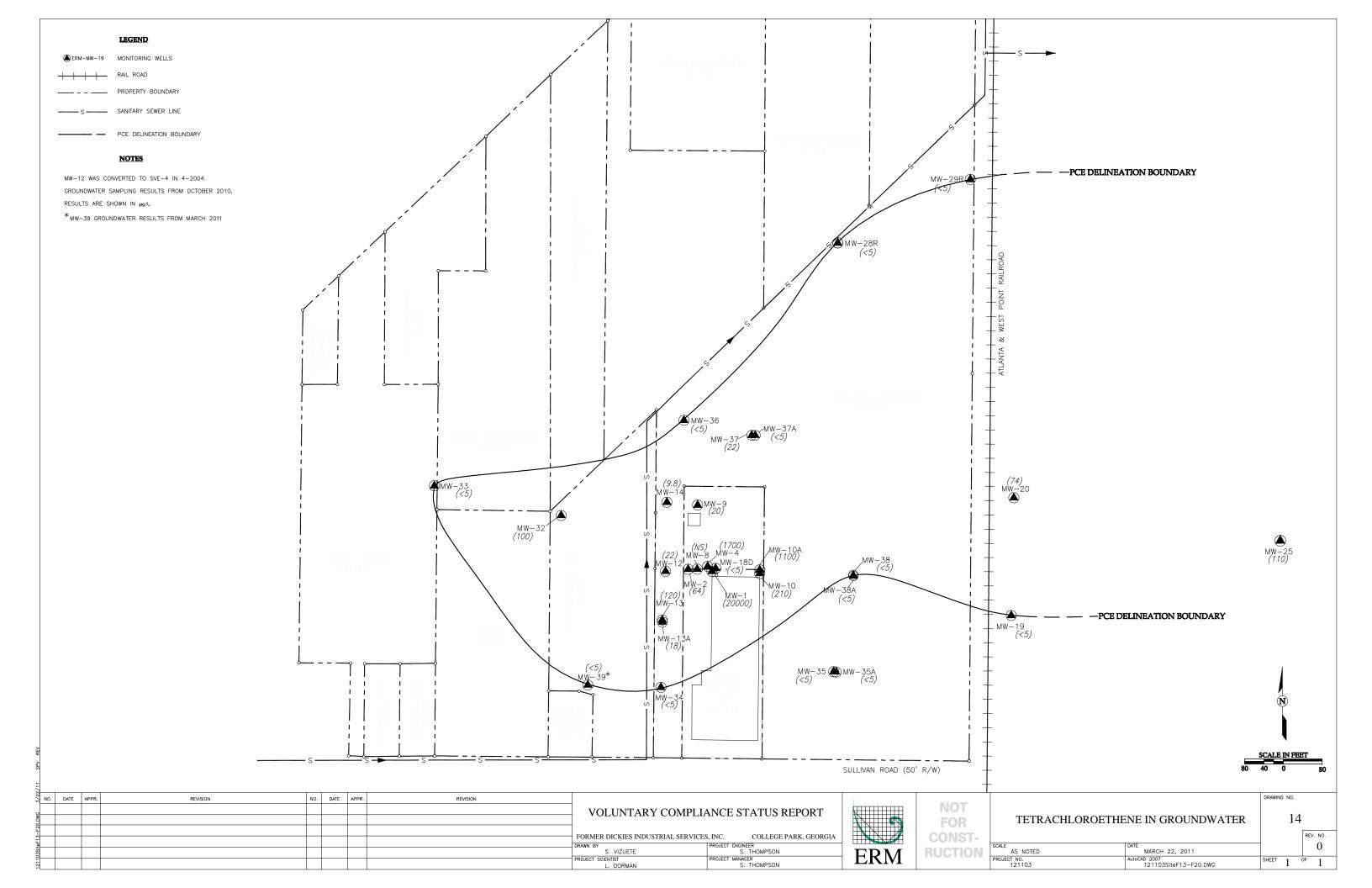


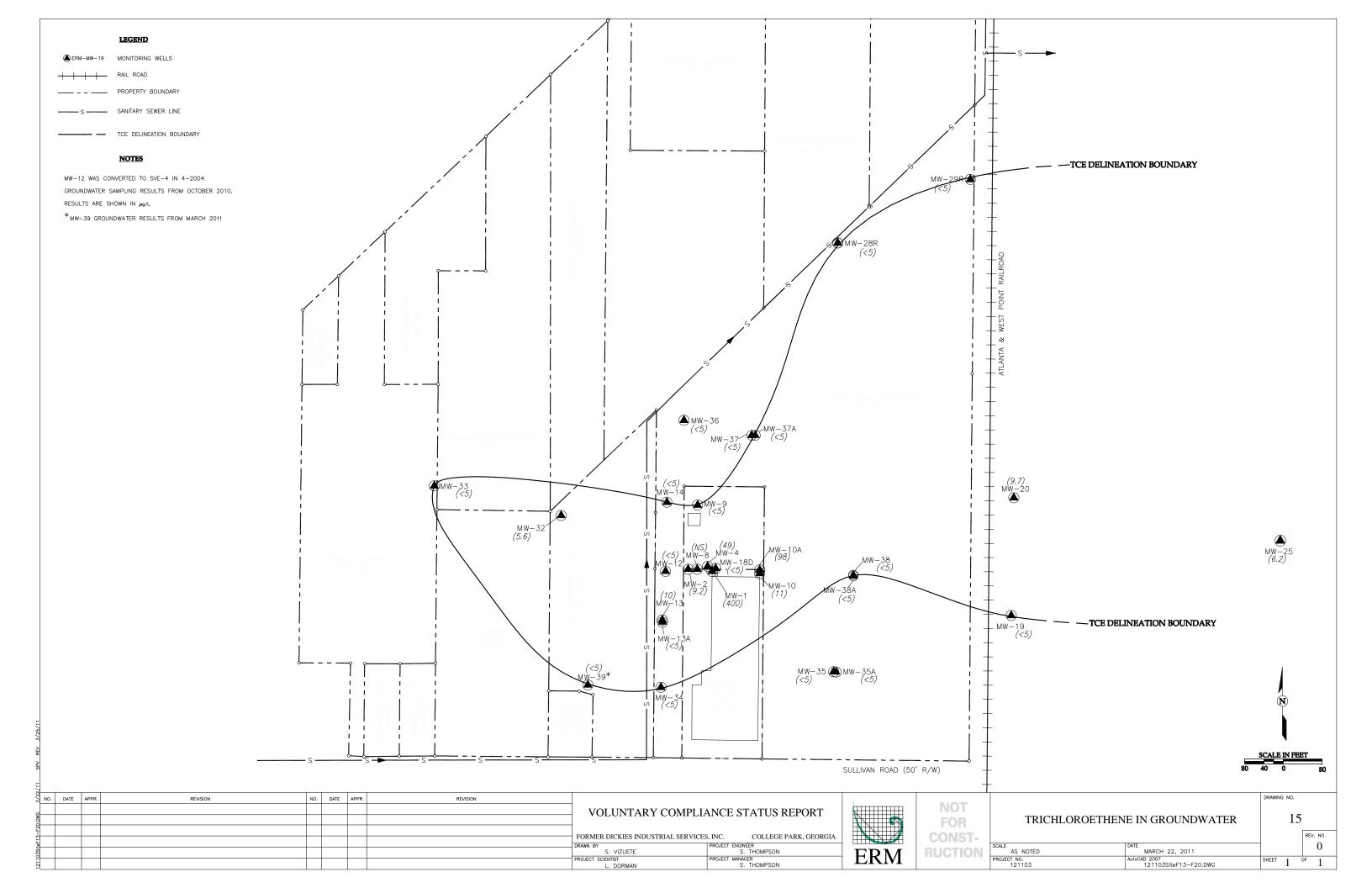


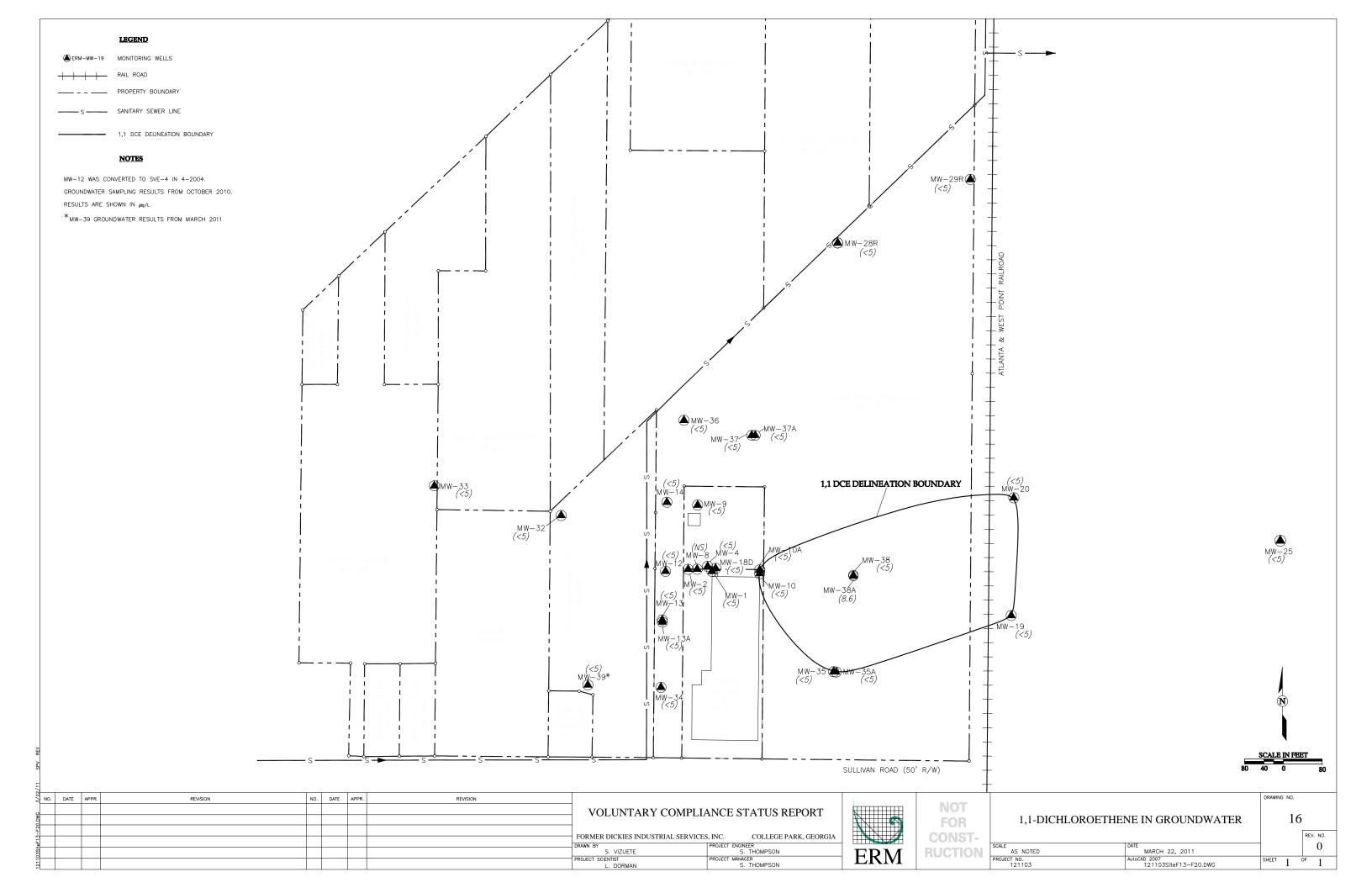


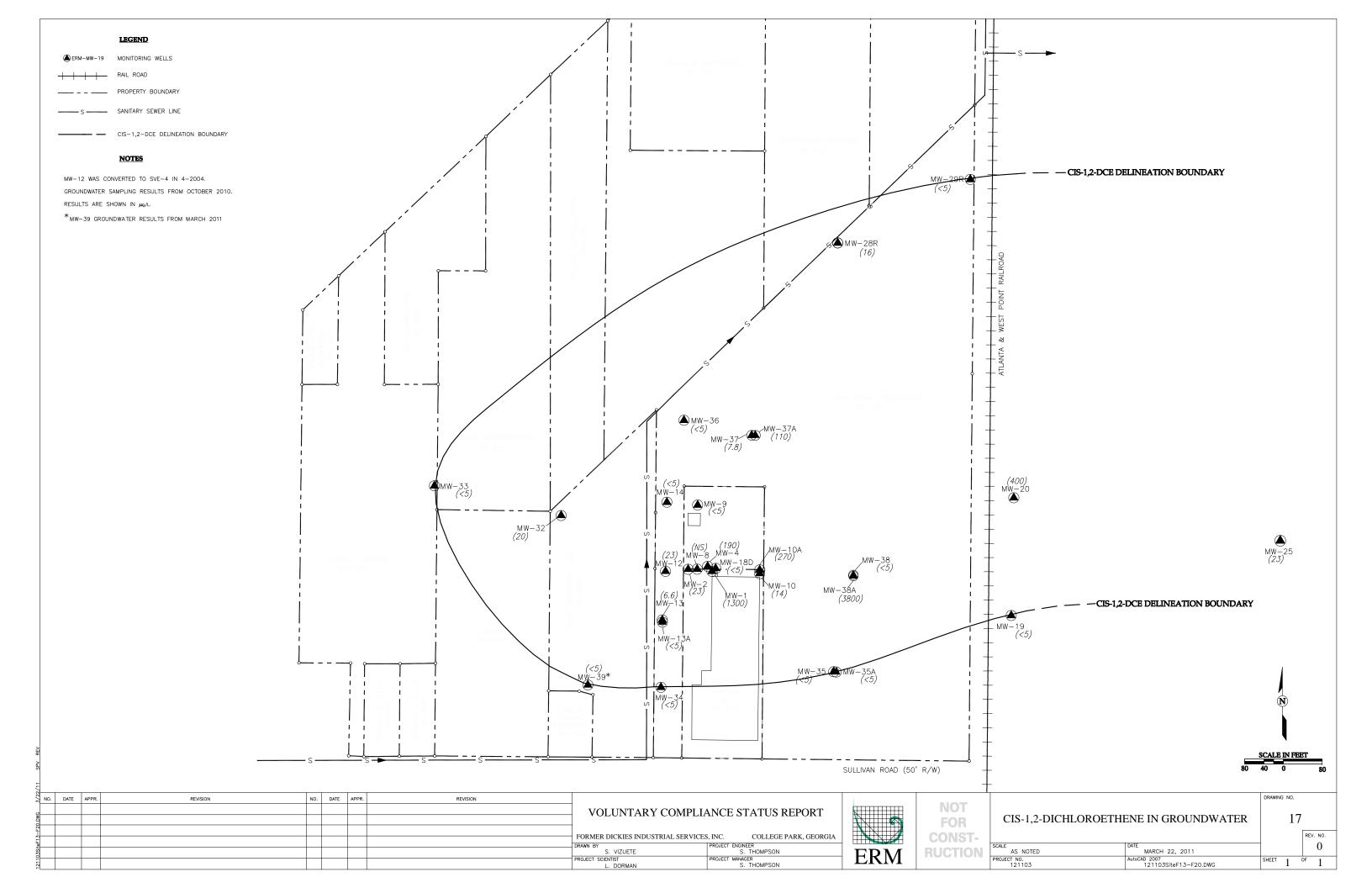


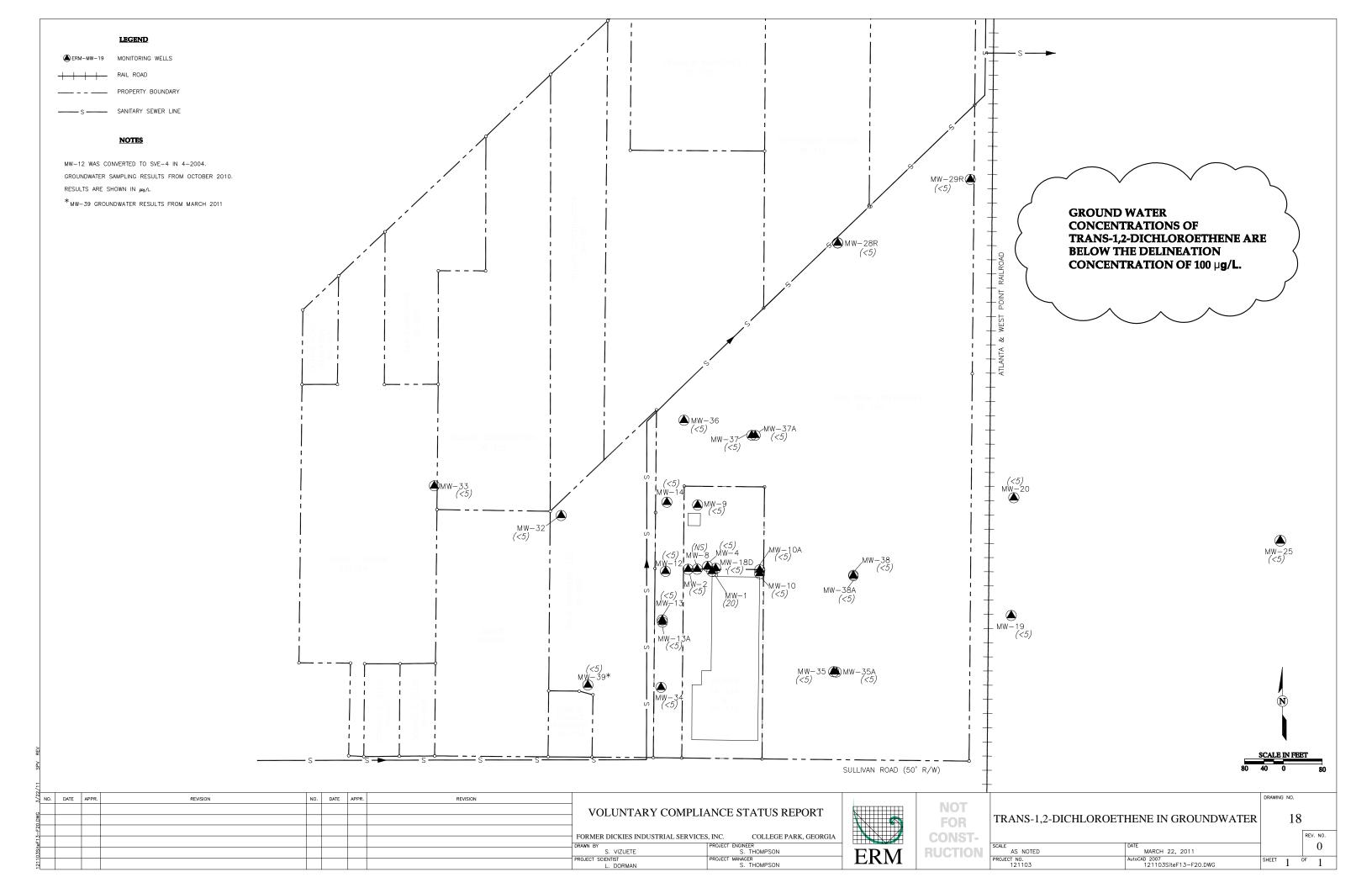


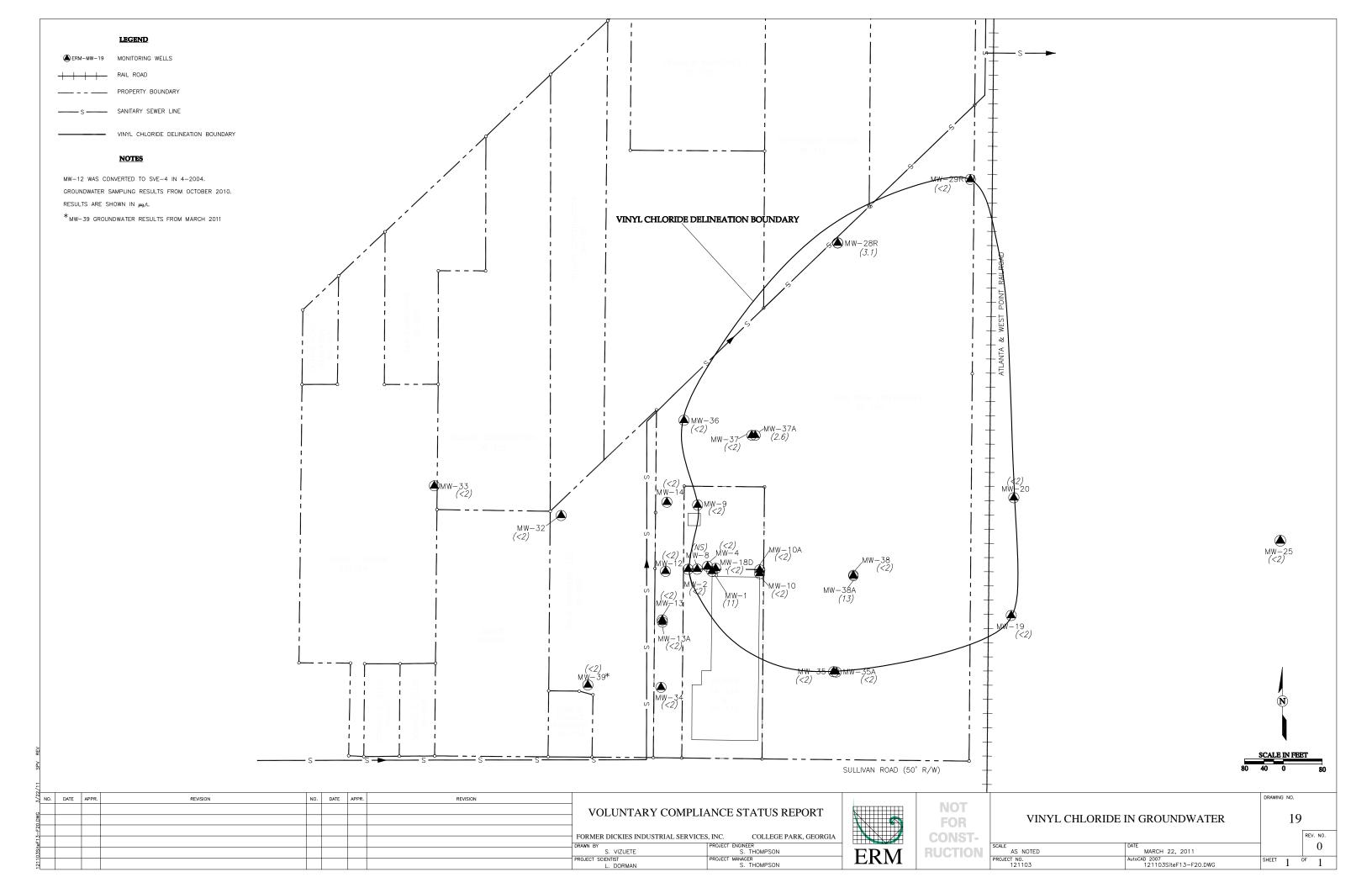


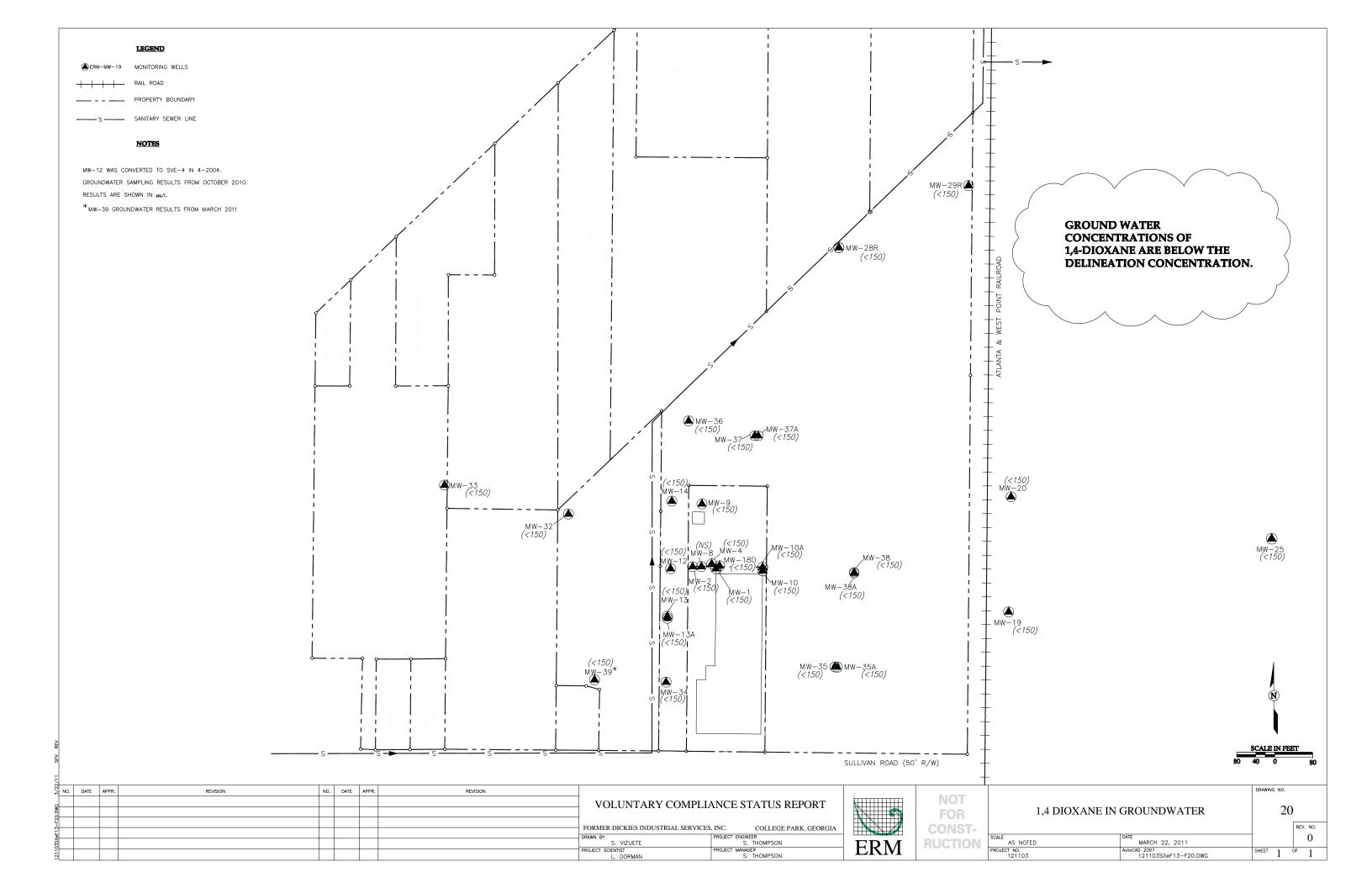


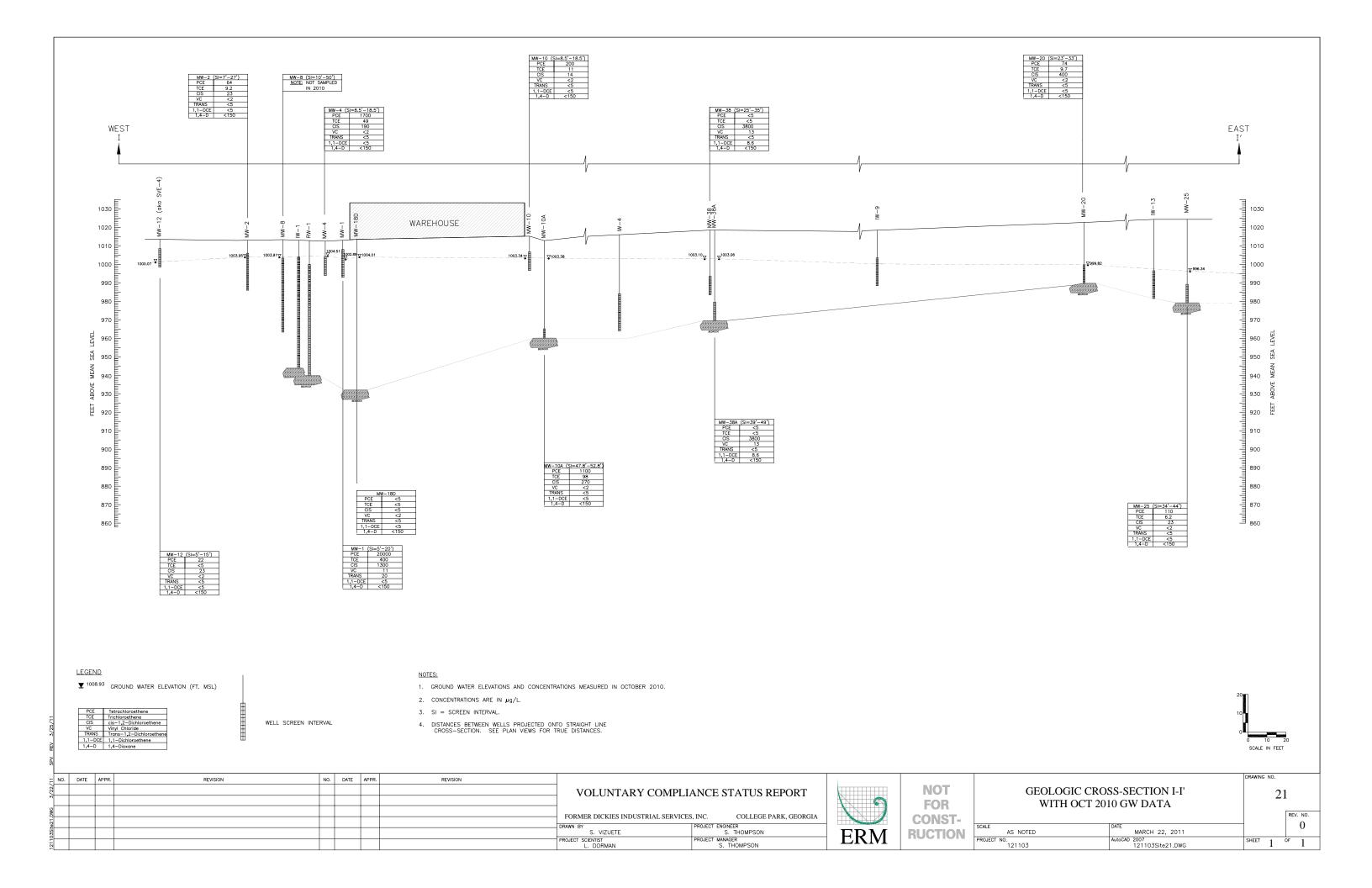


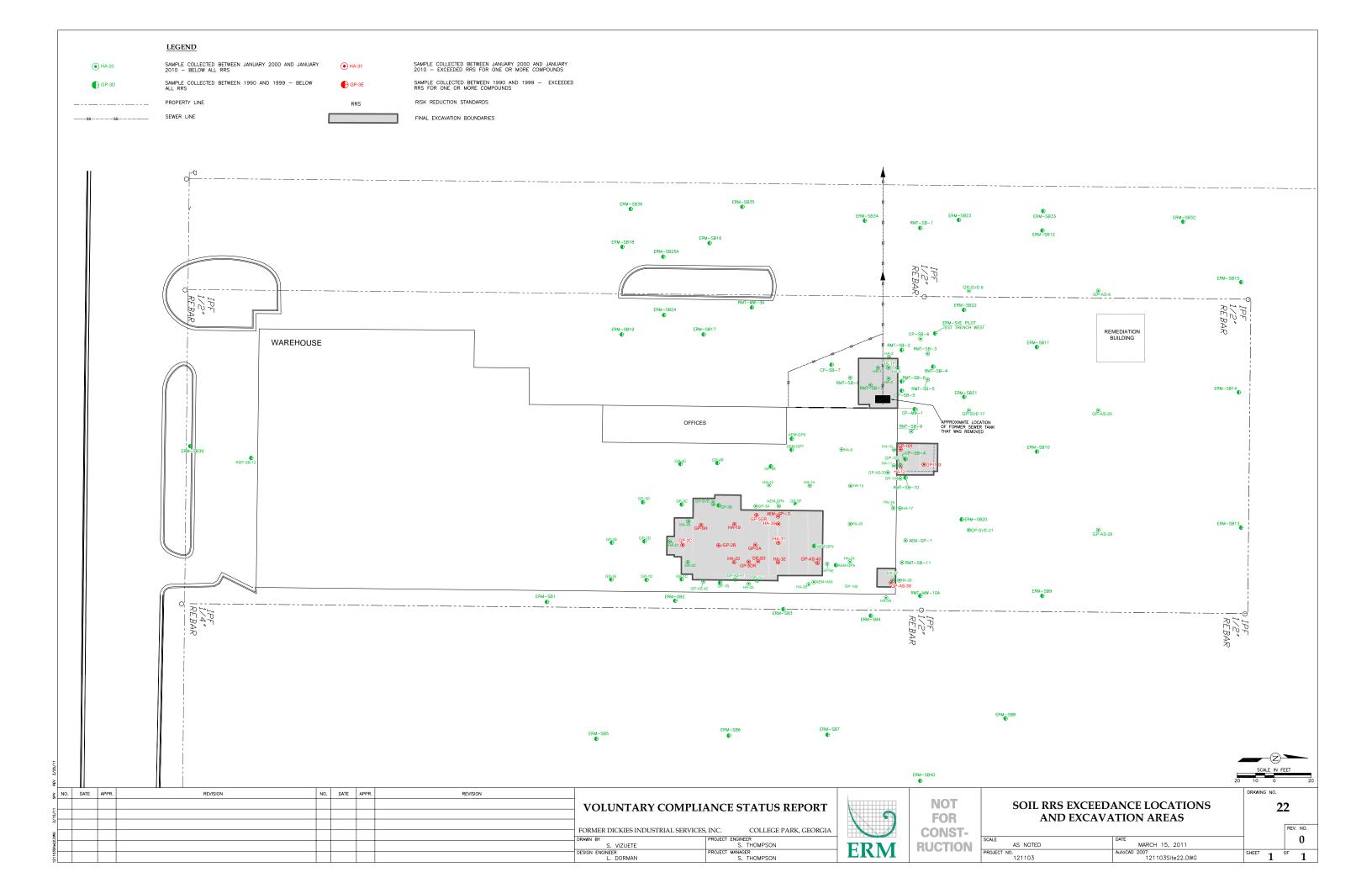


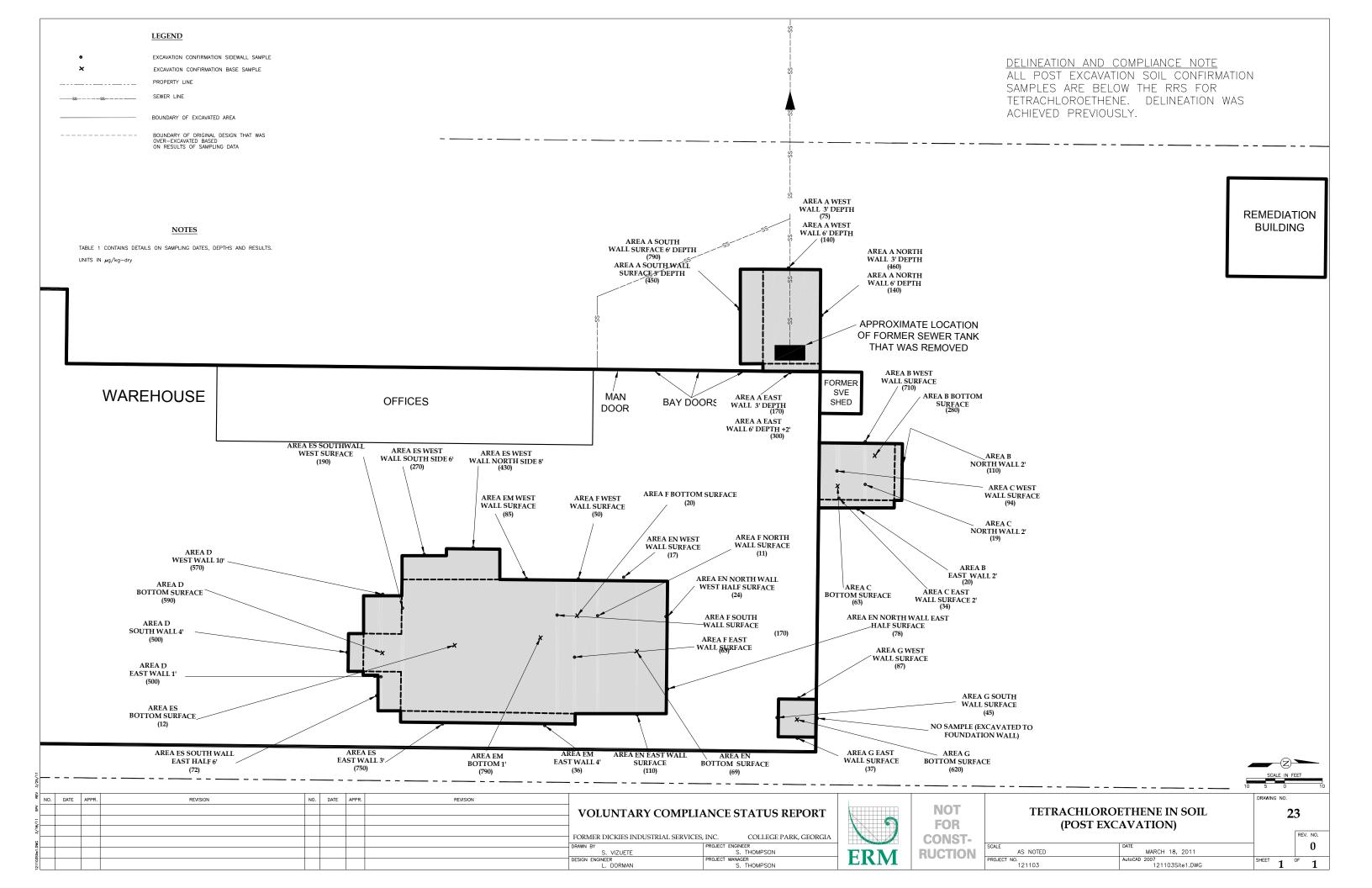


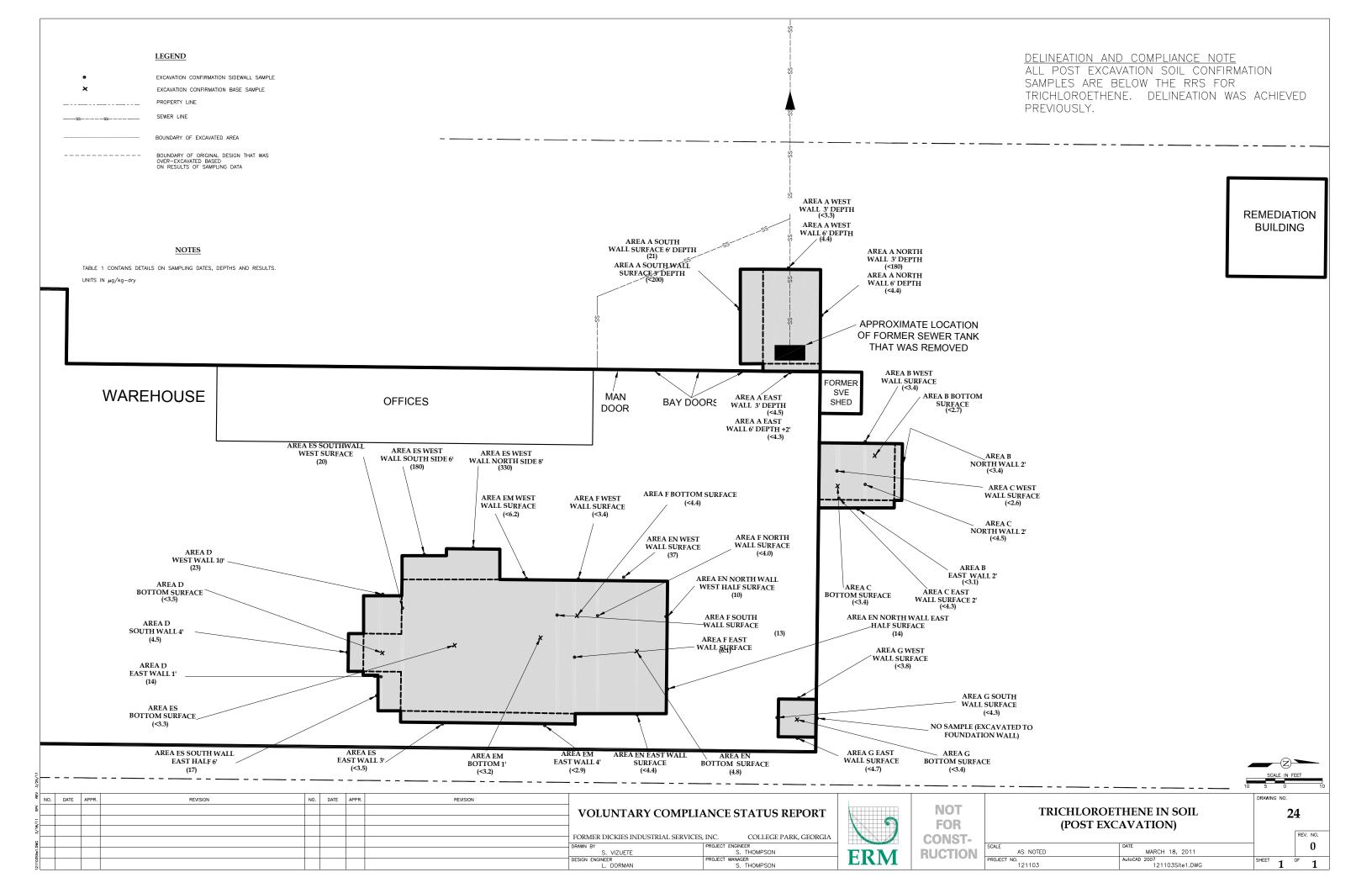


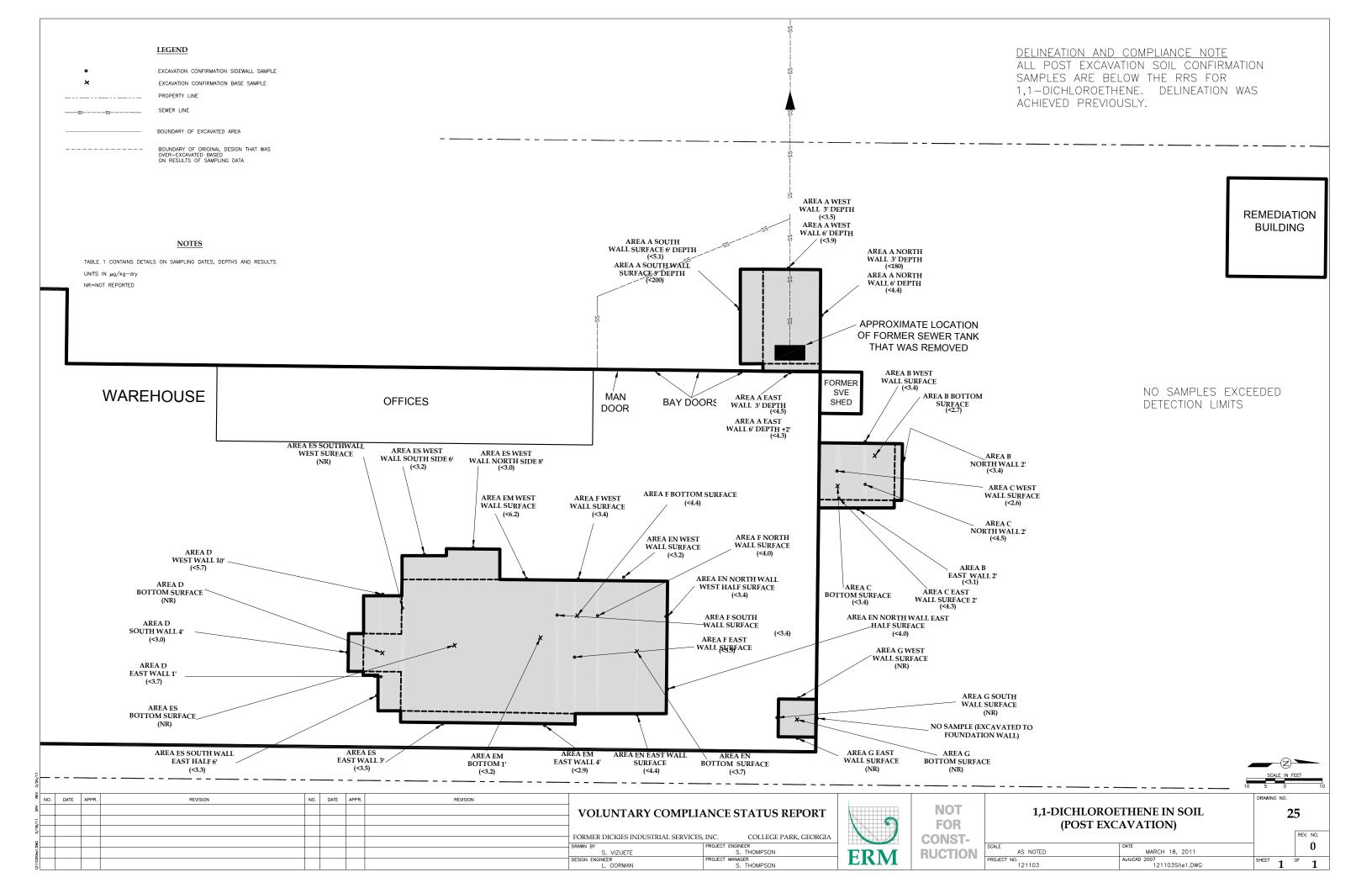


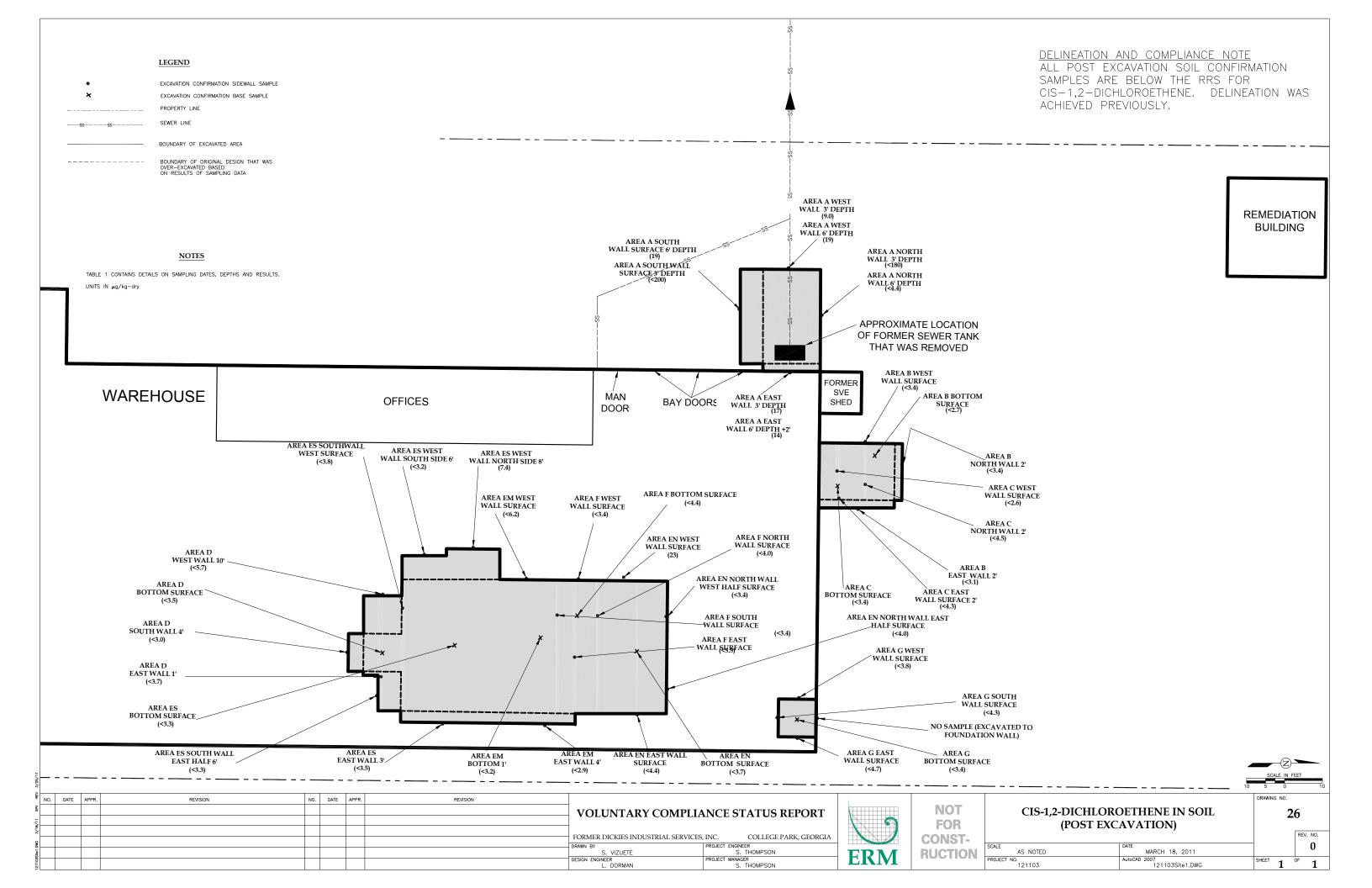


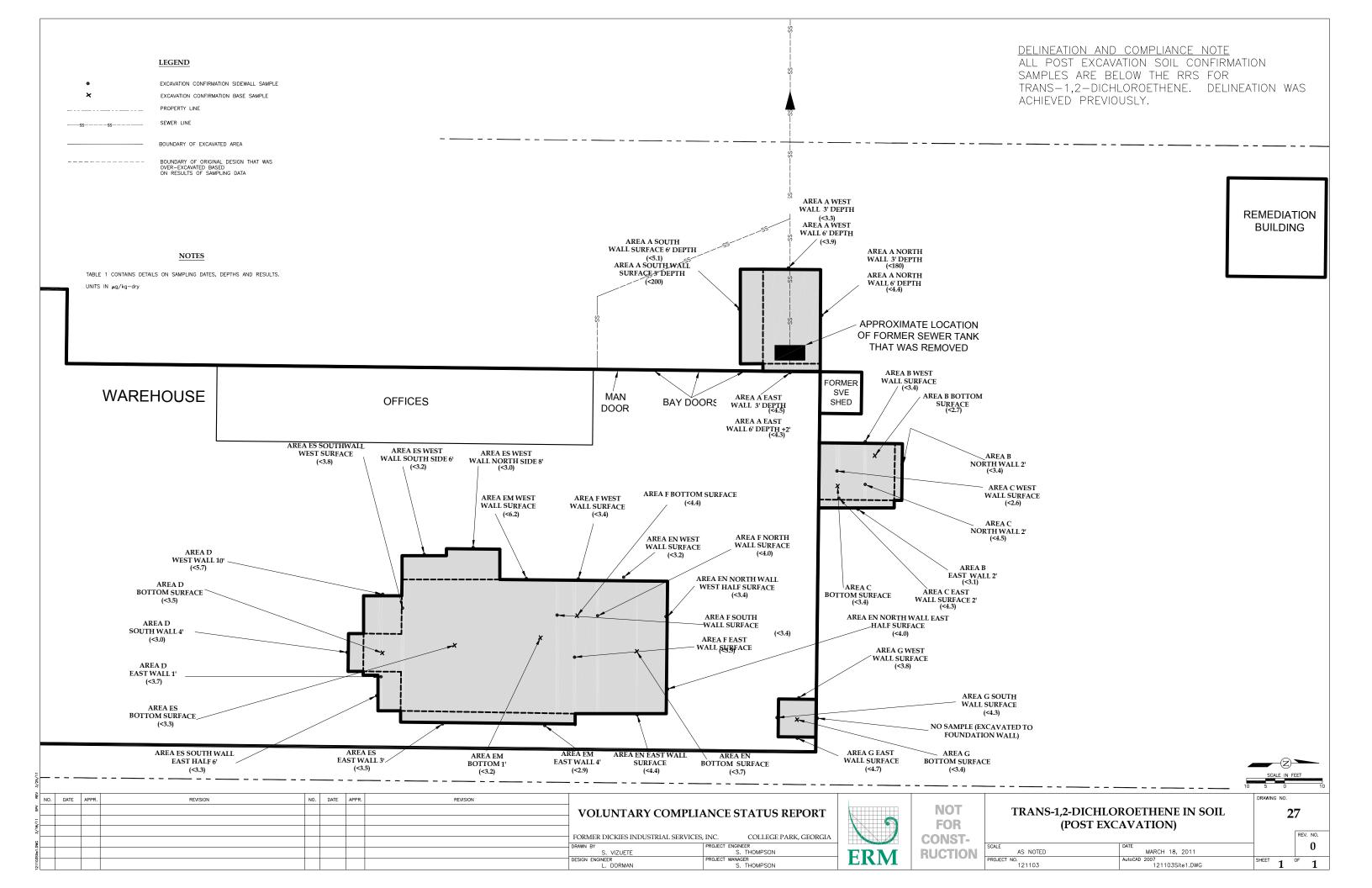


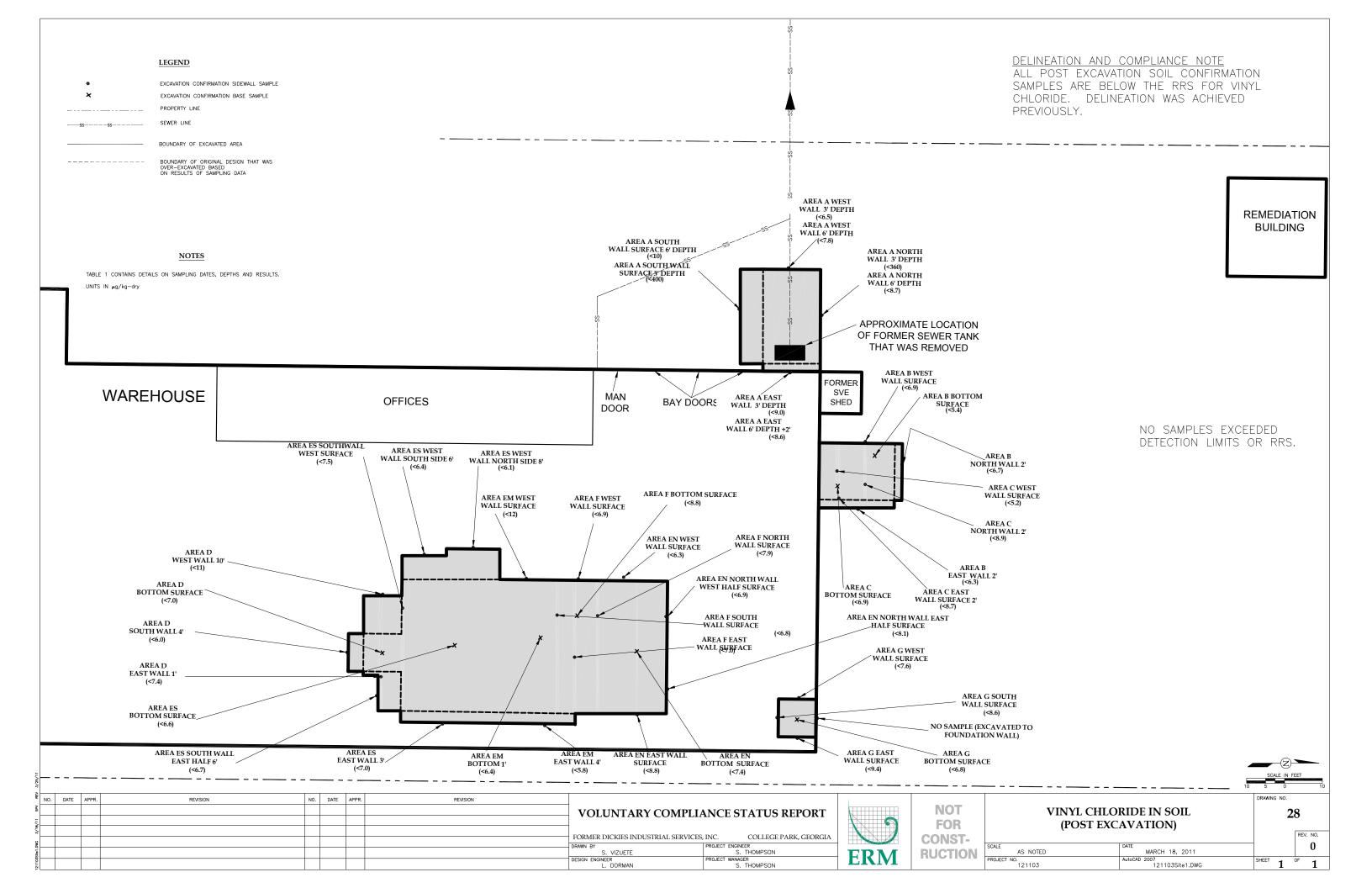


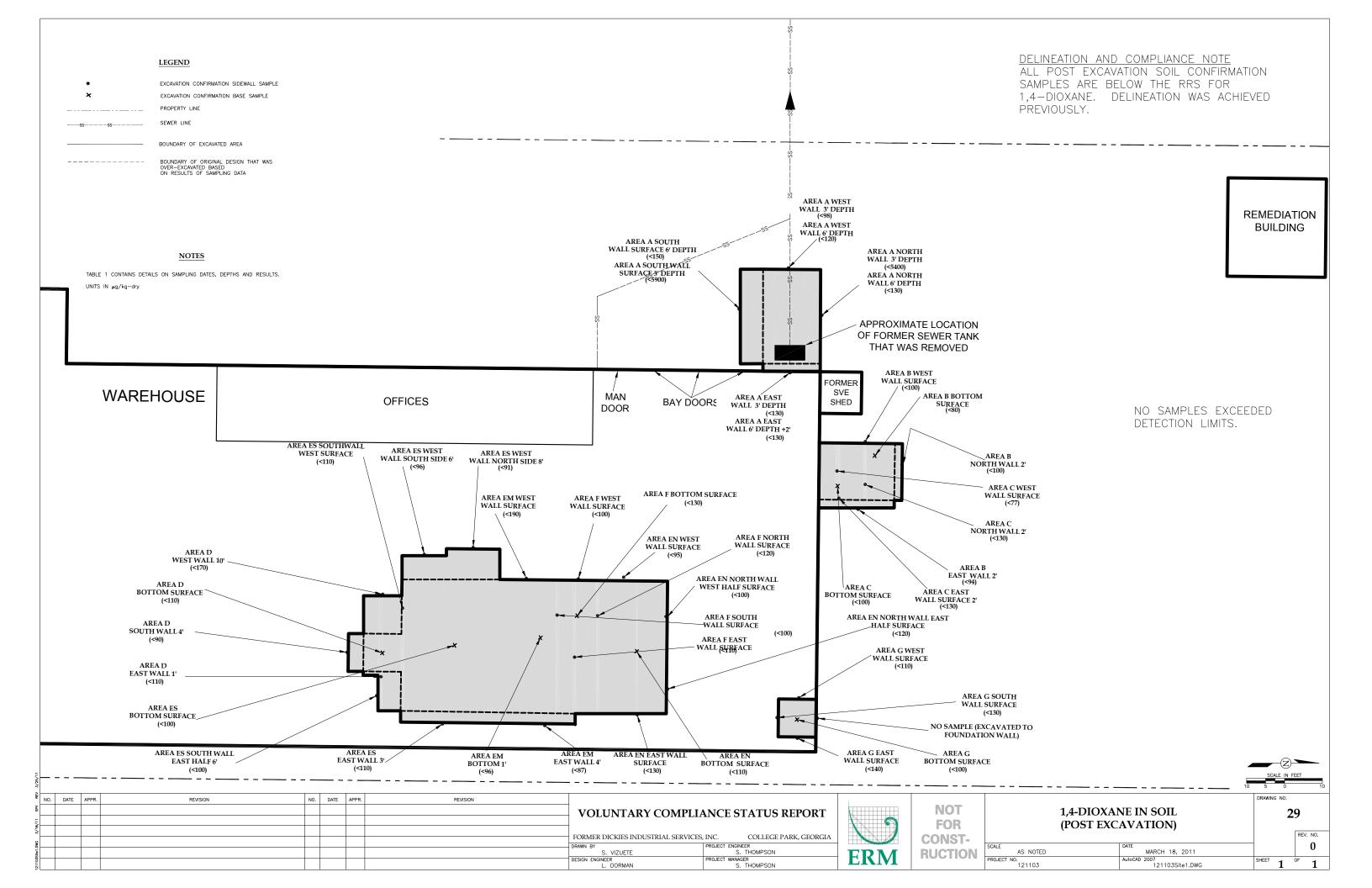


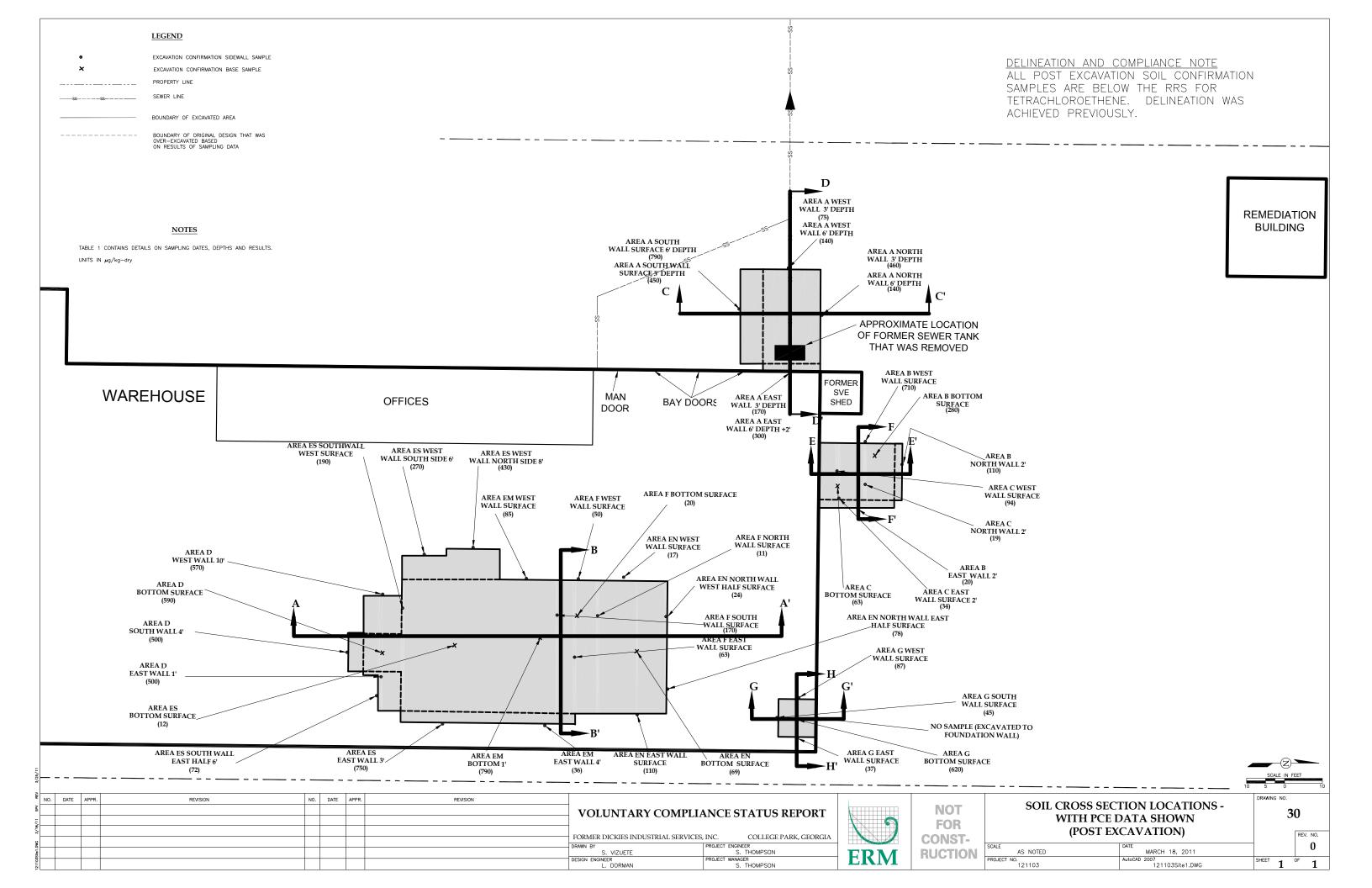


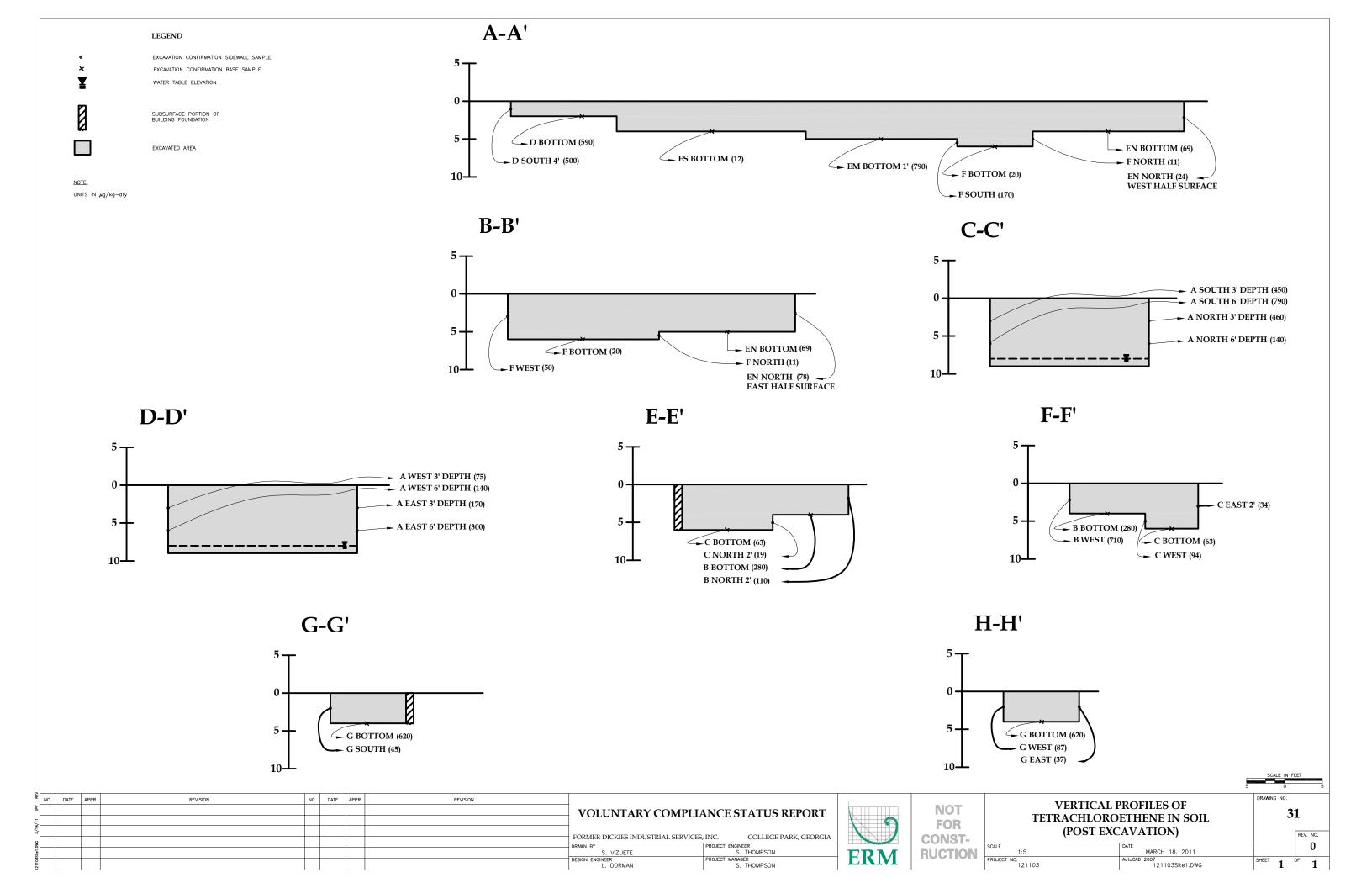


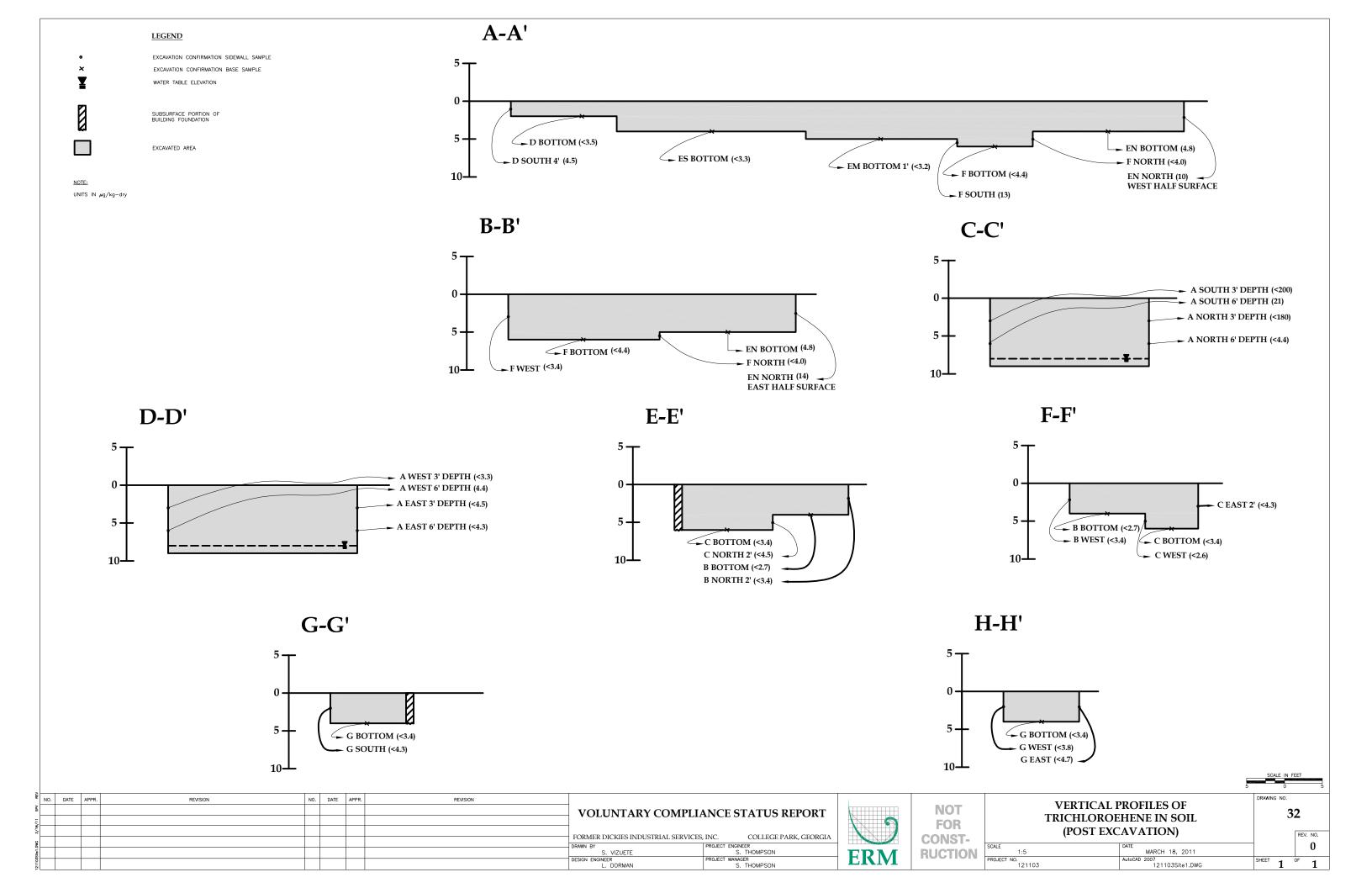


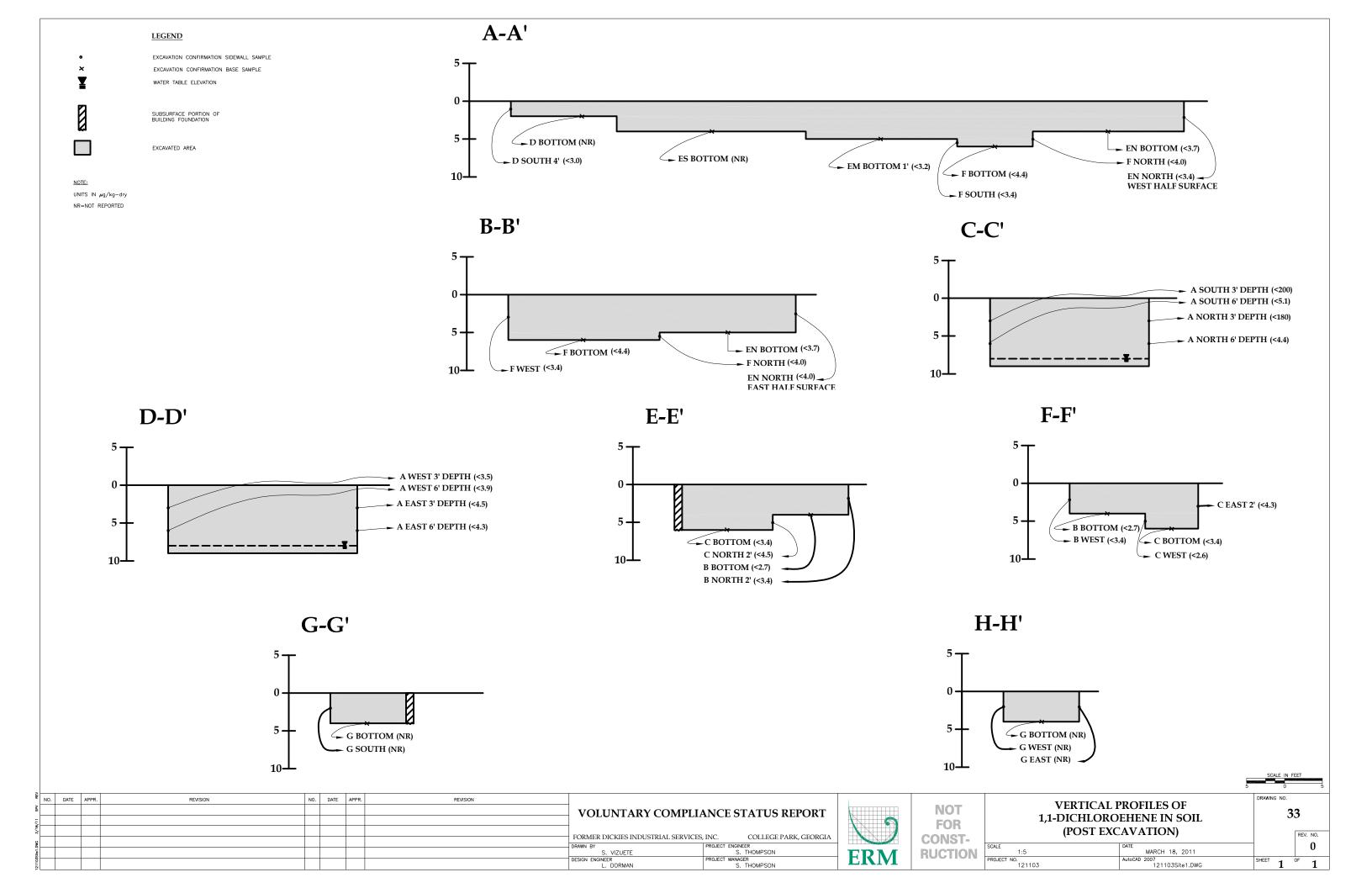


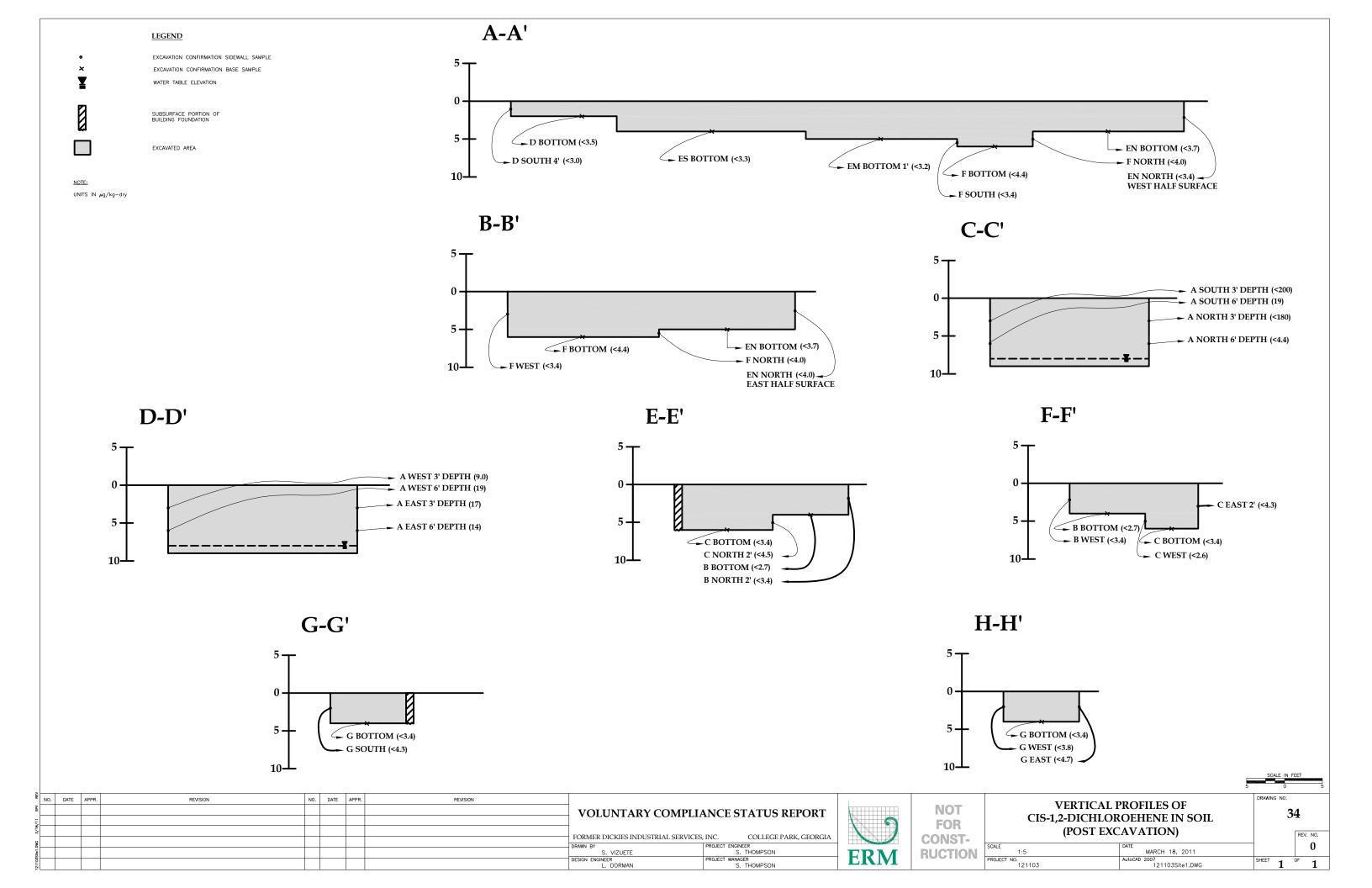


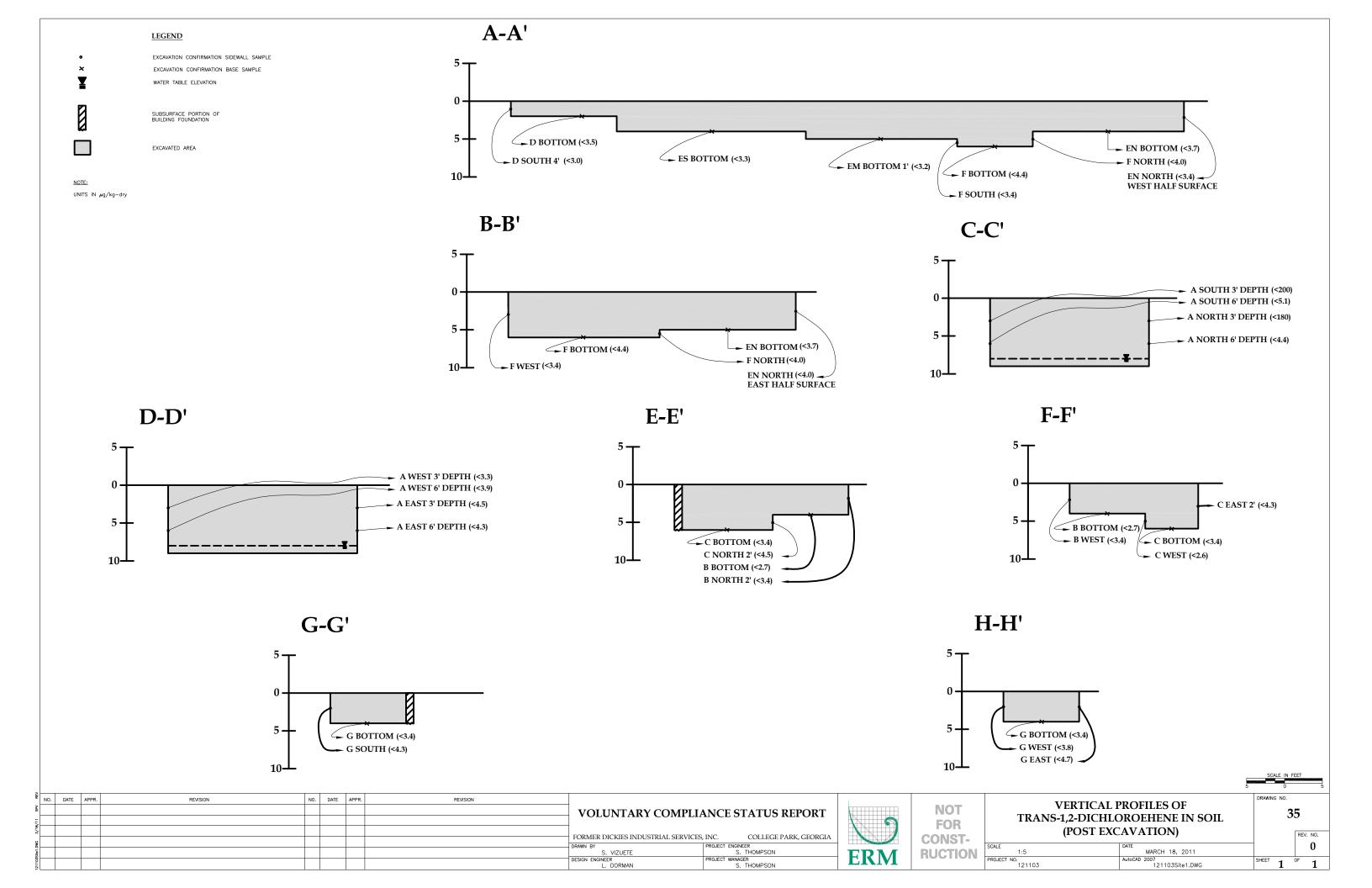


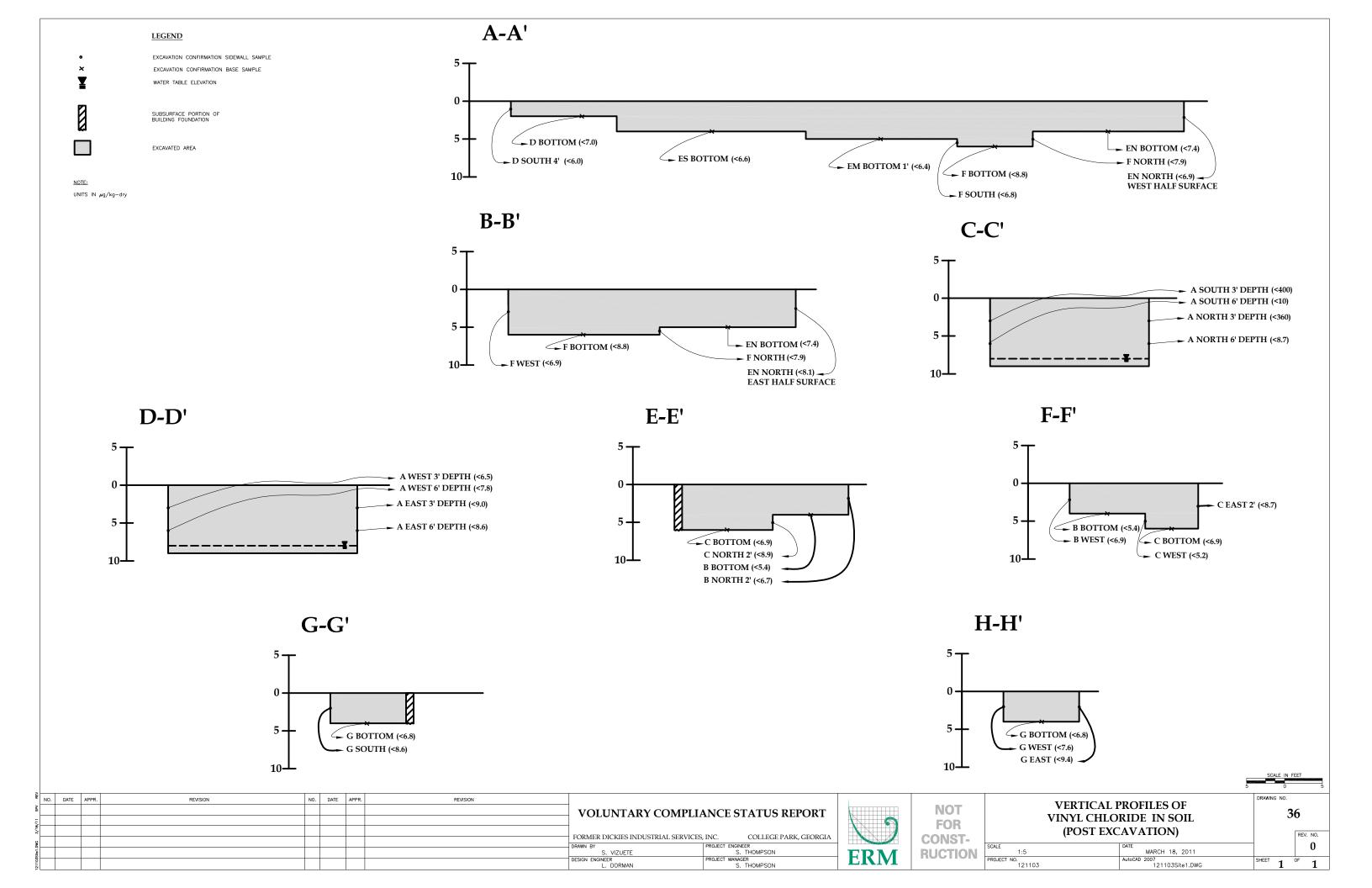


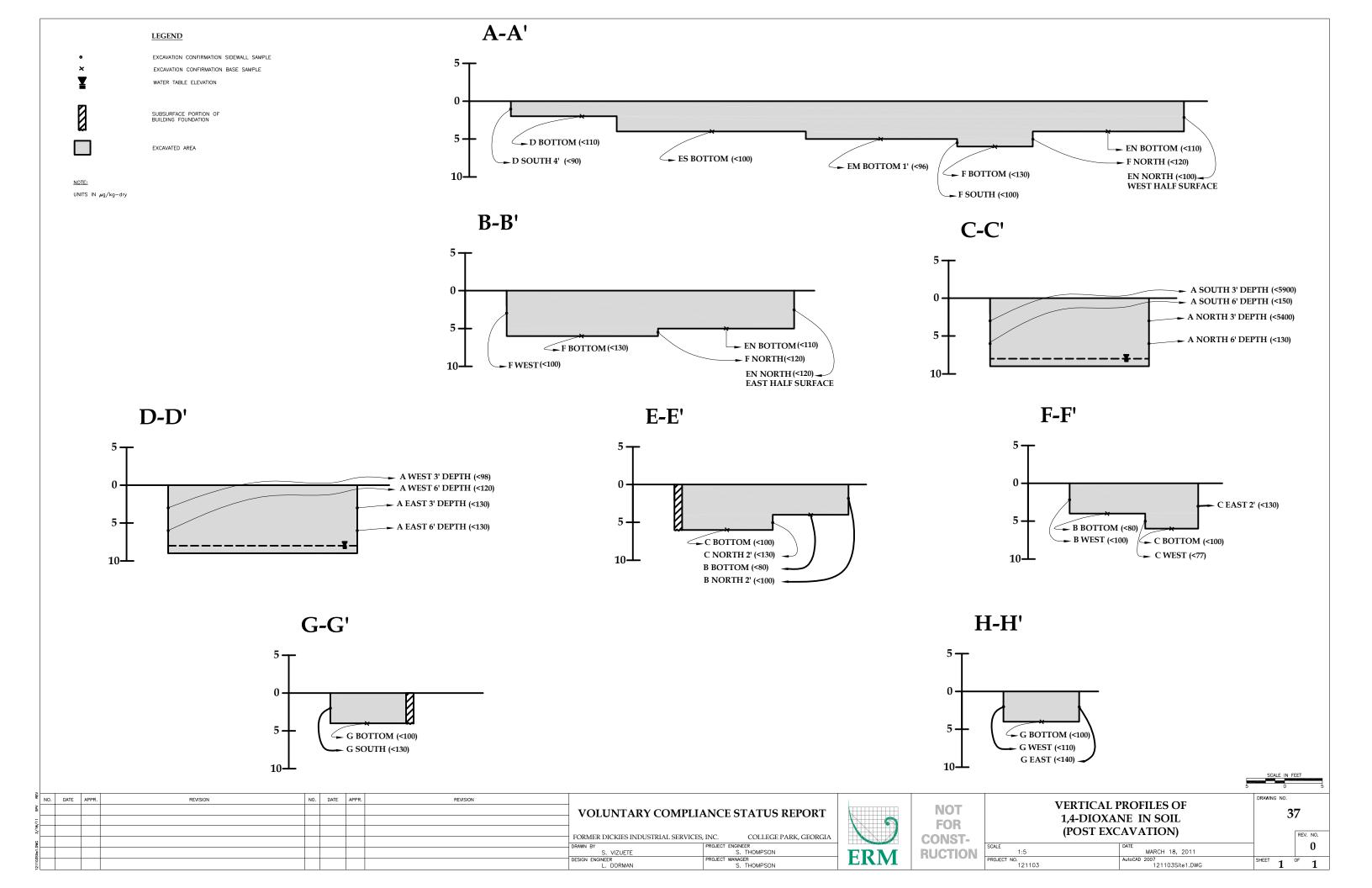


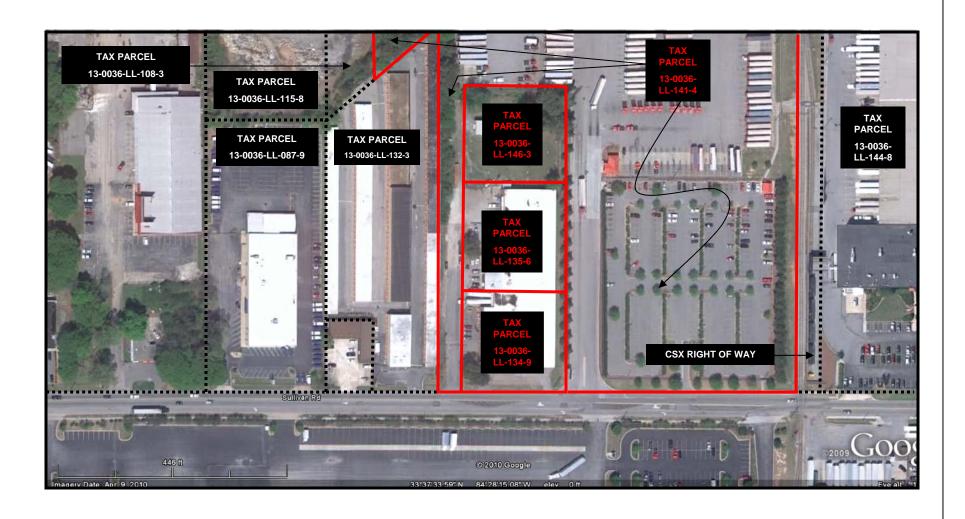












LEGEND

VRP Tax Parcels

.....

Other Nearby Tax Parcels



TAX PARCEL MAP
VOLUNTARY COMPLIANCE STATUS REPORT
FORMER DICKIES INDUSTRIAL SERVICES, INC.
COLLEGE PARK, GEORGIA

APPENDIX



APPENDIX B VRP TAX PARCEL DETAILS VOLUNTARY SOMPLIANCE STATUS REPORT

Tax Parcel ID	Owner	Physical Address	Contact Person
130036LL1414	Coca-Cola Refreshments	Sullivan Road	Reginald E. Prime Coca-Cola Refreshments P.O. Box 723040 Atlanta, GA 33139-0040 (770) 989-3144
130036LL1463			Joan B. Sasine, Esq. Bryan Cave
130036LL1356	Dickies Industrial Services, Inc.	2411 Sullivan Road	One Atlantic Center Fourteenth Floor 1201 West Peachtree Street, NW
130036LL1349			Atlanta, GA 30309-3488 (404) 572-6647

Appendix C Documentation of Work Performed by the Professional Engineer Since the Previous VRP Submittal

Dickies Industrial Services, Inc. HSI # 10127 College Park, Georgia

Month	Number of Hours Invoiced by Shanna Thompson, P.E.		Activities Performed by Shanna Thompson, P.E. Since the Previous Submittal
May-10	89	hours	Oversee Soil Removal and Confirmation Sampling
Jun-10	86	hours	Oversee Soil Removal and Confirmation Sampling
Jul-10	35	hours	Data Management from Soil Removal Activities - Backfill, Cleaning, Documentation
Aug-10	66	hours	Draft Voluntary Compliance Status Report
Sep-10	38	hours	Oversee final soil delineation samples and survey / VCSR Revisions
Oct-10	30	hours	Oversee Annual Ground Water Sampling Event and Vapor Intrusion Assessment
Nov-10	16	hours	Oversee Vapor Intrusion Assessment
Dec-10	27	hours	Prepare Soil Removal Report
Jan-11	13	hours	Finalize Vapor Intrusion Assessment
Feb-11	21	hours	Oversee Additional Well Installation and Sampling / VCSR Modifications
Mar-11	66	hours	Completion and Distribution of VCSR

Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, SE, Suite East 1462, Atlanta, Georgia 30334
Chris Clark, Commissioner
Environmental Protection Division
F. Allen Barnes, Director
Hazardous Waste Management Branch
404 657 8600

MEMORANDUM

TO:

Jacki Scarbary, Environmental Specialist

Hazardous Sites Response Program

FROM:

Greg Gilmore, Geologist &

Hazardous Sites Response Program

THROUGH:

Antonia Beavers, Acting Unit Coordinator

Hazardous Sites Response Program

DATE:

February 23, 2010

RE:

Dickies Industrial Services

Email from Joan Sasine regarding Leaching Calculations

HSI# 10127

Discussion:

I have reviewed the above referenced document and offer the following comments:

Comments:

1. EPD concurs that the Soil Screening Level (SSL) value 0.877 mg/kg calculated using a default Dilution Attenuation Factor (DAF) of 20 has been shown to be protective of groundwater. This value is based on total and SPLP concentrations used to calculate a site-specific K_d value. Please continue the excavation as planned.

Notes to CO:

I cannot find out who originally calculated the site-specific Kd value in the past. I do not think that we can go back and recalculate a value that has already been determined to be protective of groundwater at the site. Since we have already approved this number in the letter dated October 12, 2005 then we should use the value provided by EPD. If the consultant would like to change the number you can have them resubmit calculations for review and at that time we can reevaluate the Total vs. SPLP data to determine if a new number is warranted.

From:

"Sasine, Joan" < Joan.Sasine@BryanCave.com>

To:

1

"jacki.scarbary@dnr.state.ga.us" <jacki.scarbary@dnr.state.ga.us>, "'s...

CC:

'Antonia Beavers' <Antonia.Beavers@dnr.state.ga.us>

Date:

11:48 AM 1/22/10

Subject:

Dickies Industrial Services HSI Site

Attachments:

bc.jpg; 2nd Report Response.pdf

Attached is a 10/12/05 letter from EPD discussing the RRS for PCE. It states on page 2 that the Kd is 8.5L/kg; the DAF is 20; and the SSL is .877mg/kg. I just want to be sure, before we begin excavating, that the Type 4 RRS for PCE approved by EPD is .877 mg/kg. I would appreciate your confirmation. Thanks so much, Joan.

[http://www.ecave.net/marketing/sigs/WDC901/bc.jpg] Joan B. Sasine Partner

One Atlantic Center | Fourteenth Floor | 1201 West Peachtree Street, NW | Atlanta, GA 30309-3488 t: 404.572.6647 | f: 404.572.6999 | e: joan.sasine@bryancave.com<mailto:joan.sasine@bryancave.com>

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Georgia Department of Natural Resources

2 Martin Luther King Jr. Drive, S.E., Suite 1462 East, Atlanta, Georgia 30334 Noel Holcomb, Commissioner Environmental Protection Division Carol A. Couch, Ph.D., Director 404/657-8600

October 12, 2005

CERTIFIED MAIL Return Receipt Requested

Mr. Jack D. Riggenbach ERM-EnvironClean, LLC 300 Chastain Center Blvd., Suite 375 Kennesaw, GA 30144

Re:

Second Annual Report on Effectiveness of Corrective Action dated June 30, 2005

Your Letter dated January 7, 2005 Former Dickies Industrial Services Site College Park, Georgia, HSI# 10127

Dear Mr. Riggenbach:

The Georgia Environmental Protection Division (EPD) has received and reviewed your letter dated January 7, 2005 regarding Soil-Water Partition Equation/calculation of SSLs and Type 4 Risk Reduction Standard (RRS) for soil and groundwater and your Second Annual Report on Effectiveness of Corrective Action (Report) dated June 30, 2005 for Former Dickies Industrial Services site. EPD provides the following comments on your Report and issues regarding Soil-Water Partition Equation/calculation of SSLs and Type 4 RRS for soil and groundwater.

Report

EPD concurs with your Conclusions and Recommendations except your proposed change for soil and groundwater sampling activities.

Soil: Please keep AS-23, AS-31, AS-39, and GP-5G as soil sampling locations, as your proposed Type 4 RRS value for tetrachloroethene has not been approved by EPD.

Groundwater: Please monitor MW-34 annually instead of biannually to better monitor the movement/change of the contamination plume.

Kd and Soil Screening Level (SSL) Calculations

In reviewing your totals vs. SPLP data in your April 15, 2004 letter for the calculation of a site-specific K_d value of tetrachloroethene, you included data sets with total concentrations outside one order of magnitude of your current calculated soil screening level (SSL) (4 mg/kg) and your previously calculated SSL (29.9 mg/kg). Since the relationship between total concentrations and SPLP data is not linear, results outside an order of magnitude of the calculated SSL will yield inaccurate results.

Williamson-Dickie Manufacturing Company October 12, 2005 Page 2

EPD has calculated a site-specific K_d value based on your total concentrations and SPLP concentrations for the site. Based on the site-specific data, the appropriate K_d value is 8.5 L/kg. Using a dilution attenuation factor (DAF) of 20, the SSL that is protective of groundwater is 0.877 mg/kg.

Type 4 RRS for Soil and Groundwater

The Type 4 risk reduction standards (RRSs) for chemicals in groundwater obtained by using a K factor of 0.25 L/m³ and presented in Table 2-3 of the Report, are correct except for trichloroethene. The correct Type 4 RRS for trichloroethene in groundwater should be 0.0012 mg/L instead of 0.012 mg/L on Table 2-3.

The value given for trichloroethene, calculated from RAGS equation 6, is incorrect. This value resulted from the use of a Target Risk (TR) of 10^{-4} instead of 10^{-5} . The correct value for trichloroethene should be 1.33 mg/kg instead of 1.33E+01 mg/kg on Table 2-7.

If you have any questions regarding this matter, please contact Mr. Yue Han at 404-657-8600.

Sincerely,

Alexandra Y. Cleary

Unit Coordinator

Hazardous Sites Response Program

AYC/yh

cc: Joan Sasine File: HSI# 10127

Table 1-2

Risk Reduction Standards for Soil

Former Dickies Industrial Services, Inc.

HSI Site No. 10127 mg/kg

	Type 3 (mg/kg)		Type 4 (mg/kg)	
Chemical	Surface Soils Soils >2' Below Surface		Surface Soils	Soils >2' Below Surface
1,1-dichloroethene	0.7	0.7	NC	NC
cis-1,2-dichlorothene	0.5	0.5	18.9	18.9
Tetrachloroethene	0.5	0.5	.877*	.877*
Trichloroethene	0.5	0.5	0.36	0.36
Vinyl Chloride (adult)	0.2	0.2	0.03	0.03

Concentration to which site will be certified

Source: ERM letter submittal to EPD on January 7, 2005

 $^{^{\}ast}$ RRS was modified to be in compliance with the EPD letter to ERM dated October 12, 2005.

<u>App E - 2010 Vapor Intrusion Assessment Photo Log - HSI 10127</u>



Photo 1

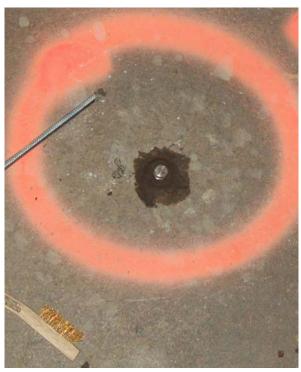


Photo 2

App E - 2010 Vapor Intrusion Assessment Photo Log - HSI 10127



Photo 3

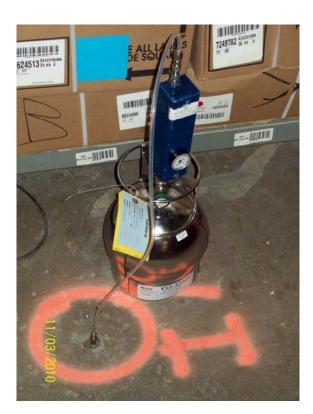
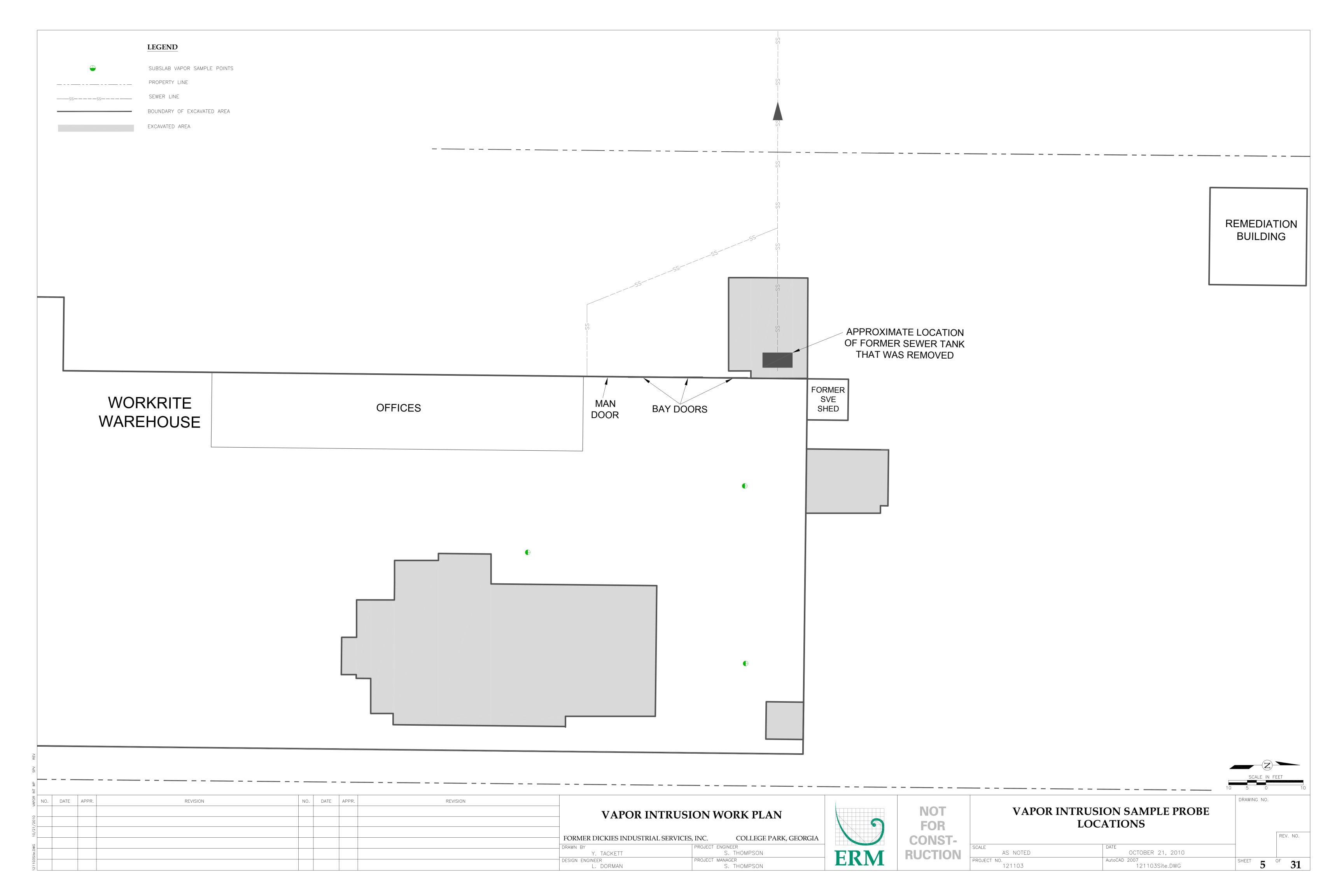


Photo 4





11/16/2010 Mr. Lane Dorman ERM-Southeast 300 Chastain Center Blvd. Suite 375

Kennesaw GA 30144

Project Name: Project #:

Workorder #: 1011158

Dear Mr. Lane Dorman

The following report includes the data for the above referenced project for sample(s) received on 11/5/2010 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott

Project Manager



WORK ORDER #: 1011158

Work Order Summary

CLIENT: Mr. Lane Dorman BILL TO: Mr. Lane Dorman

ERM-Southeast ERM-Southeast

300 Chastain Center Blvd. Suite 375 300 Chastain Center Blvd. Suite 375

Kennesaw, GA 30144 Kennesaw, GA 30144

PHONE: 770-590-8383 **P.O.** #

FAX: 770-423-2151 PROJECT #

DATE RECEIVED: 11/05/2010 CONTACT: Ausha Scott

DATE COMPLETED: 11/12/2010

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	V-1	Modified TO-15	2.0 "Hg	5 psi
02A	V-2	Modified TO-15	2.0 "Hg	5 psi
03A	V-3	Modified TO-15	4.0 "Hg	5 psi
04A	V-3 dup	Modified TO-15	4.0 "Hg	5 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

Linda d. Fruman

DATE: <u>11/16/10</u>

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP - AI 30763, NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020



LABORATORY NARRATIVE EPA Method TO-15 ERM-Southeast Workorder# 1011158

Four 6 Liter Summa Canister samples were received on November 05, 2010. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample V-3 did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

The Chain of Custody (COC) information for sample V-2 did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS

Client Sample ID: V-1 Lab ID#: 1011158-01A

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Tetrachloroethene	0.72	3.6	4.9	24

Client Sample ID: V-2 Lab ID#: 1011158-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Trichloroethene	0.72	1.5	3.9	8.1	
Tetrachloroethene	0.72	6.0	4.9	40	

Client Sample ID: V-3 Lab ID#: 1011158-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.78	1.6	4.2	8.8
Tetrachloroethene	0.78	35	5.2	240

Client Sample ID: V-3 dup

Lab ID#: 1011158-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.78	1.5	4.2	8.3
Tetrachloroethene	0.78	33	5.2	230



Client Sample ID: V-1 Lab ID#: 1011158-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111012	Date of Collection: 11/2/10 1:18:00 PM
Dil. Factor:	1.44	Date of Analysis: 11/10/10 01:16 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
Trichloroethene	0.72	Not Detected	3.9	Not Detected
Tetrachloroethene	0.72	3.6	4.9	24
trans-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
1,4-Dioxane	2.9	Not Detected	10	Not Detected

Container Type: 6 Liter Summa Canister

•	0/5	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: V-2 Lab ID#: 1011158-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111013	Date of Collection: 11/2/10 1:37:00 PM
Dil. Factor:	1.44	Date of Analysis: 11/10/10 01:52 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.72	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
Trichloroethene	0.72	1.5	3.9	8.1
Tetrachloroethene	0.72	6.0	4.9	40
trans-1,2-Dichloroethene	0.72	Not Detected	2.8	Not Detected
1,4-Dioxane	2.9	Not Detected	10	Not Detected

Container Type: 6 Liter Summa Canister

0	0/ 0	Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: V-3 Lab ID#: 1011158-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111014	Date of Collection: 11/2/10 2:17:00 PM
Dil. Factor:	1.55	Date of Analysis: 11/10/10 02:31 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.78	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Trichloroethene	0.78	1.6	4.2	8.8
Tetrachloroethene	0.78	35	5.2	240
trans-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
1,4-Dioxane	3.1	Not Detected	11	Not Detected

Container Type: 6 Liter Summa Canister

_		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: V-3 dup Lab ID#: 1011158-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111015	Date of Collection: 11/2/10 2:17:00 PM
Dil. Factor:	1.55	Date of Analysis: 11/10/10 03:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.78	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Trichloroethene	0.78	1.5	4.2	8.3
Tetrachloroethene	0.78	33	5.2	230
trans-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
1,4-Dioxane	3.1	Not Detected	11	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: Lab Blank Lab ID#: 1011158-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111005a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/10/10 08:31 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1.4-Dioxane	2.0	Not Detected	7.2	Not Detected

Surrogates	%Recovery	Method Limits
Juitogales	/orcecovery	Lillits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: CCV Lab ID#: 1011158-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/10/10 07:20 AM

Compound	%Recovery
Vinyl Chloride	87
cis-1,2-Dichloroethene	93
Trichloroethene	84
Tetrachloroethene	85
trans-1,2-Dichloroethene	90
1,4-Dioxane	94

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: LCS Lab ID#: 1011158-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	d111003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 11/10/10 07:41 AM

Compound	%Recovery
Vinyl Chloride	93
cis-1,2-Dichloroethene	94
Trichloroethene	90
Tetrachloroethene	91
trans-1,2-Dichloroethene	91
1.4-Dioxane	103

		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: LCSD Lab ID#: 1011158-07AA

MODIFIED EPA METHOD TO-15 GC/MS

ı			
	File Name:	d111004	Date of Collection: NA
	Dil. Factor:	1.00	Date of Analysis: 11/10/10 08:00 AM

Compound	%Recovery
Vinyl Chloride	90
cis-1,2-Dichloroethene	96
Trichloroethene	88
Tetrachloroethene	91
trans-1,2-Dichloroethene	91
1,4-Dioxane	98

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	99	70-130



Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnity Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B (916) 985-1000 FAX (916) 985-1020 FOLSOM, CA 95630-4719

Page _

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Only Fedy	Lab Shipper Name Air Bill #	Relinquished by: (signature) Date/Time Reco	Relinquished by: (signature) Date/Time	HelizapyShep by: (signature) Date/Time Hecc 11/3/10 1730 F.				0.763 7/4	ONA V-3 duo	03 V-W	02A V-2	0/A \(\sigma - 1\)	Lab I.D. Field Sample I.D. (Location)		Phone 770-590-5383 Fax	tarn Couts City To	Company Fig. W. Sign) Canal Company Fig. W. Co	Project Manager Shanna Thompson
7		Received by: (signature)	Received by: (signature)	Fed Ex					34447	5588	1337	5x t S	Can *			GAZIP 30	Transport	
2 5	Temp (°C)	90	_	11/3/10	200				11/2/10	OIR/III	11/2/10	11/2/10	of Collection	Date	Projec	Project #	P.O. #	Proje
Good	Condition	Ate/Time	4	1430					T +	千万	1337	1318	of Collection of Collection	Time	Project Name	*	The second secon	Project Info:
Yes No		<u>0</u>		Analyze	N .				TO-15 Mod	TO-15 Mad	TO-15 Mad	TO-15 Med	Analyses Requested			- Control of the Cont		
o (None	Custody Seals Intact?		trans, a DOE) VO) 1,7-10 oxane						22	8	30	SIR	sted Initial	Cani	specify	Rush	Normal	Turn Around
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1011158	Work Order#	The state of the s	J-1- Dioxane	FOT PCE, TCE, CISTANA									Receipt Final	Canister Pressure/Vacuum	N ₂ He	Pressurization Gas:		Lab Use Only Pressurized by:

DATA ENTRY SHEET

GW-SCREEN Version 3.1; 02/04	CALCULATE RISK-E	BASED GROUNDW YES	ATER CONCENT	RATION (enter "X" in "YE	ES" box)		
Reset to Defaults	CALCULATE INCRE (enter "X" in "YES" b			OUNDWATER CONCEN	ITRATION		
		YES	X				
	ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C _W (µg/L)	C	Chemical	=		
	127184	1.10E+02	Tetrac	chloroethylene	I		
MORE	ENTER Depth	ENTER	ENTER	ENTER			
<u> </u>	below grade to bottom of enclosed space floor, L _F (cm)	Depth below grade to water table, L _{WT} (cm)	SCS soil type directly above water table	Average soil/ groundwater temperature, T _S (°C)		ENTER Average vapor flow rate into bldg. ave blank to calcula Q _{soil} (L/m)	ite)
	200	807.72	SI	18.3333	= 7		
MORE ↓	ENTER Vadose zone SCS Soil type (used to estimate Soil vapor permeability)	OR •	ENTER User-defined vandose zone soil vapor permeability, k _v (cm²)	ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^V (g/cm³)	ENTER Vadose zone soil total porosity, n ^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^{\vee} (cm³/cm³)
	SI			SI	1.35	0.489	0.167
MORE ↓	ENTER Target risk for carcinogens, TR (unitless) 1.0E-06	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT _C (yrs)	ENTER Averaging time for noncarcinogens, AT _{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	
END	groundwater c						

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RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (μg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (μg/L)	Final indoor exposure groundwater conc., (µg/L)
_				
NA	NA	NA	2.00E+05	NA

Incremental	Hazard
risk from	quotient
vapor	from vapor
intrusion to	intrusion to
indoor air,	indoor air,
carcinogen	noncarcinogen
(unitless)	(unitless)
7.0E-06	4.6E-03

MESSAGE SUMMARY BELOW:

END

1 of 1

DATA ENTRY SHEET

GW-SCREEN Version 3.1; 02/04	CALCULATE RISK-E	BASED GROUNDW	ATER CONCENT	RATION (enter "X" in "YE	S" box)		
		YES					
Reset to Defaults	CALCULATE INCRE (enter "X" in "YES" be			OUNDWATER CONCENT	TRATION		
		YES	X				
	ENTER	ENTER Initial					
	Chemical	groundwater					
	CAS No. (numbers only,	conc., C _W					
	no dashes)	(μg/L)	(Chemical	=		
	79016	6.20E+00	Trich	nloroethylene	I		
MORE	ENTER Depth	ENTER	ENTER	ENTER			
•	below grade to bottom	Depth		Average soil/		ENTER Average vapor	
	of enclosed	below grade	SCS	groundwater		flow rate into bldg.	
	space floor,	to water table,	soil type	temperature,		ave blank to calcula	te)
	L _F	L _{WT}	directly above	T _S		Q _{soil}	
	(cm)	(cm)	water table	(°C)	= :	(L/m)	
	200	807.72	SI	18.3333			
MORE 🖖							
<u> </u>	ENTER		ENTER				
	Vadose zone SCS		User-defined vandose zone	ENTER Vadose zone	ENTER Vadose zone	ENTER Vadose zone	ENTER Vadose zone
	soil type		soil vapor	SCS	soil dry	soil total	soil water-filled
	(used to estimate	OR	permeability,	soil type	bulk density,	porosity,	porosity,
	soil vapor		k_v	Lookup Soil	$\rho_b^{\ \ V}$	n ^V	$\theta_{\mathbf{w}}^{\ \ V}$
	permeability)		(cm ²)	Parameters	(g/cm ³)	(unitless)	(cm ³ /cm ³)
	SI			SI	1.35	0.489	0.167
MORE							
•	ENTER Target	ENTER Target hazard	ENTER Averaging	ENTER Averaging	ENTER	ENTER	
	risk for	quotient for	time for	time for	Exposure	Exposure	
	carcinogens,	noncarcinogens,	carcinogens,	noncarcinogens,	duration,	frequency,	
	TR	THQ	AT _C	AT _{NC}	ED	EF	
	(unitless)	(unitless)	(yrs)	(yrs)	(yrs)	(days/yr)	
	1.0E-06	1	70	30	30	350	
	Used to calcula groundwater co						

END

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RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

INCREMENTAL RISK CALCULATIONS:

Hazard

quotient from vapor

intrusion to indoor air,

noncarcinogen

(unitless)

2.4E-03

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)		Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)
					•	
NA	NA	NA	1.47E+06	NA		4.6E-06

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

END

1 of 1

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



October 01, 2010

Shanna Thompson ERM-Southeast 300 Chastain Center Blvd, Suite 375 Kennesaw GA 30144

TEL: (770) 590-8383 FAX: (770) 590-9164

RE: Williamson Dickie

Dear Shanna Thompson: Order No: 1009I42

Analytical Environmental Services, Inc. received 5 samples on September 24, 2010 11:05 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- -NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Brian Rohr

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

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	(110) 590 -8385	(//»	160-6	<u> [[b]</u>			3		-PCE	1-2	3	ĺŝ	3		your results, place bottle orders, etc.	ıtaine
SAMPL	(770) 590 -8383 EDBY: Joe Tan	SIGNATURE:	Jong Ta	<u>^</u>			50.00	77	7-1	9-21-B	¥ ;	ع ۓ			orders, etc.	No # of Containers
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#	SAMPLE ID			Q.	Composite	Matrix (See codes)	-77		J. c40.		ERVAT:	ION (Se	e codes)	111	REMARKS	
		DATE	TIME	Grab	Cor	Mat (See	5/4	<i>†</i>	MA							
1	ERM-SB-A-4	9/23/10	1055	レ		50	M									4
2	ERM-SB-A-8		1105			11										
3	ERM-SB-B-8		1015													
4	ERM-SB-A-8 ERM-SB-B-8 ERM-SB-C-4	I J	0930	U		V	V									
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Or	Aux Tan 9/23/10 1300	1:	Ź		9.2	2:05	PROJ	ECT NAI	ME:	ぴかっ	0	iuk	-		Total # of Containers	16
3:	QUISHED BY DATE/TIME 2/23/10 1300 9-24-17	2: 10 3:	afi 9/2	24/12			PROJ SITE	ECT #: ADDRE:	ss: 2	+11	Sull	iva	n kul	· ,	Turnaround Time Request Standard 5 Business Days 2 Business Day Rush Next Business Day Rush	
SPECL	AL INSTRUCTIONS/COMMENTS:	OUT 9 /	SHIPMENT	METHO VIA:	OD		1114	ICE TO: IFFEREN				• • •	ניקיייי	-07V	Same Day Rush (auth req.) Other	
		1	/ NT FedEx UI EYHOUND 01	VIA: PS MAI I'HER	IL COU	RIER	QUO	 ГЕ #:				PC)#:		STATE PROGRAM (if any): E-mail? Y N; Fax? Y N DATA PACKAGE: I II III	IV
	LES RECEIVED AFTER 3PM OR SATURDAY ARE CONS						F NO		IARKE	D ON C	COC AI	ES WIL	L PROCE	ED AS STANDARD		

Client: ERM-SoutheastProject: Williamson Dickie

Lab ID: 1009I42

Case Narrative

Date:

1-Oct-10

Sample Receiving Nonconformance:

A Trip Blank was provided but not listed on the Chain of Custody. The trip blank was analyzed at no cost to the client.

Client: ERM-Southeast Client Sample ID: ERM-SB-A-4

Project: Williamson Dickie Collection Date: 9/23/2010 10:55:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-001 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW	5035)			
1,4-Dioxane	BRL	180		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Vinyl chloride	BRL	12		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
1,1-Dichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
trans-1,2-Dichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
cis-1,2-Dichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Trichloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Tetrachloroethene	BRL	6.0		ug/Kg-dry	135698	1	09/29/2010 17:53	GK
Surr: 4-Bromofluorobenzene	94.6	58.2-140		%REC	135698	1	09/29/2010 17:53	GK
Surr: Dibromofluoromethane	102	71.1-132		%REC	135698	1	09/29/2010 17:53	GK
Surr: Toluene-d8	96.2	77.6-119		%REC	135698	1	09/29/2010 17:53	GK
PERCENT MOISTURE D2216								
Percent Moisture	14.1	0		wt%	R181271	1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client: ERM-Southeast Client Sample ID: ERM-SB-A-8

Project: Williamson Dickie Collection Date: 9/23/2010 11:05:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-002 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW	5035)			
1,4-Dioxane	BRL	170		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Vinyl chloride	BRL	11		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
1,1-Dichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
trans-1,2-Dichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
cis-1,2-Dichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Trichloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Tetrachloroethene	BRL	5.6		ug/Kg-dry	135698	1	09/29/2010 19:17	GK
Surr: 4-Bromofluorobenzene	92.5	58.2-140		%REC	135698	1	09/29/2010 19:17	GK
Surr: Dibromofluoromethane	101	71.1-132		%REC	135698	1	09/29/2010 19:17	GK
Surr: Toluene-d8	96.3	77.6-119		%REC	135698	1	09/29/2010 19:17	GK
PERCENT MOISTURE D2216								
Percent Moisture	16.5	0		wt%	R181271	1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client: ERM-Southeast Client Sample ID: ERM-SB-B-8

Project: Williamson Dickie Collection Date: 9/23/2010 10:15:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-003 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW:	5035)			
1,4-Dioxane	BRL	150		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Vinyl chloride	BRL	9.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
1,1-Dichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
trans-1,2-Dichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
cis-1,2-Dichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Trichloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Tetrachloroethene	BRL	4.9		ug/Kg-dry	135698	1	09/29/2010 19:48	GK
Surr: 4-Bromofluorobenzene	93.3	58.2-140		%REC	135698	1	09/29/2010 19:48	GK
Surr: Dibromofluoromethane	102	71.1-132		%REC	135698	1	09/29/2010 19:48	GK
Surr: Toluene-d8	96.1	77.6-119		%REC	135698	1	09/29/2010 19:48	GK
PERCENT MOISTURE D2216								
Percent Moisture	16.5	0		wt%	R181271	1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client: ERM-Southeast Client Sample ID: ERM-SB-C-4

Project: Williamson Dickie Collection Date: 9/23/2010 9:30:00 AM

Date:

1-Oct-10

Lab ID: 1009I42-004 **Matrix:** Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS	SW8260B			(SW:	5035)			
1,4-Dioxane	BRL	150		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Vinyl chloride	BRL	10		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
1,1-Dichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Trichloroethene	BRL	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Tetrachloroethene	6.0	5.0		ug/Kg-dry	135698	1	09/29/2010 20:18	GK
Surr: 4-Bromofluorobenzene	88.8	58.2-140		%REC	135698	1	09/29/2010 20:18	GK
Surr: Dibromofluoromethane	102	71.1-132		%REC	135698	1	09/29/2010 20:18	GK
Surr: Toluene-d8	95.6	77.6-119		%REC	135698	1	09/29/2010 20:18	GK
PERCENT MOISTURE D2216								
Percent Moisture	13.8	0		wt%	R181271	. 1	09/29/2010 13:00	AS

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client:ERM-SoutheastClient Sample ID:TRIP BLANKProject:Williamson DickieCollection Date:9/24/2010Lab ID:1009I42-005Matrix:Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	135636	1	09/28/2010 16:12	GK
Vinyl chloride	BRL	2.0		ug/L	135636	1	09/28/2010 16:12	GK
1,1-Dichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
Trichloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
Tetrachloroethene	BRL	5.0		ug/L	135636	1	09/28/2010 16:12	GK
Surr: 4-Bromofluorobenzene	89.6	60.1-127		%REC	135636	1	09/28/2010 16:12	GK
Surr: Dibromofluoromethane	107	79.6-126		%REC	135636	1	09/28/2010 16:12	GK
Surr: Toluene-d8	96.3	78-116		%REC	135636	1	09/28/2010 16:12	GK

Date:

1-Oct-10

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Less than Result value

Sample/Cooler Receipt Checklist

Client ERM		Work Order	1009I42
Checklist completed by Signature Date	9/24	/	
Carrier name: FedEx UPS Courier Client US	Mail Other	Γ	
Shipping container/cooler in good condition?	Yes _	No	Not Present
Custody seals intact on shipping container/cooler?	Yes	No	Not Present
Custody seals intact on sample bottles?	Yes	No	Not Present
Container/Temp Blank temperature in compliance? (4°C±2)*	Yes _	No ·	
Cooler #1 3.4° Cooler #2 Cooler #3	_ Cooler #4 _	Coo	ler#5 Cooler #6
Chain of custody present?	Yes _ $ u$	No	
Chain of custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample labels?	Yes _	No	
Samples in proper container/bottle?	Yes _	No	
Sample containers intact?	Yes _	No	
Sufficient sample volume for indicated test?	Yes _	No	
All samples received within holding time?	Yes	No	
Was TAT marked on the COC?	Yes _	No	
Proceed with Standard TAT as per project history?	Yes	No	Not Applicable
Water - VOA vials have zero headspace? No VOA vials su	bmitted	Yes _	No
Water - pH acceptable upon receipt?	Yes _	No	Not Applicable
Adjusted?		•	
Sample Condition: Good Other(Explain)			
(For diffusive samples or AIHA lead) Is a known blank includ	ed? Yes	_ N	

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

^{*} Samples do not have to comply with the given range for certain parameters.

Client: ERM-Southeast

Williamson Dickie

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

10 of 13

Workorder: 1009I42

Project Name:

ANALYTICAL QC SUMMARY REPORT

Date:

1-Oct-10

BatchID: 135636

R RPD outside limits due to matrix

Sample ID: MB-135636 SampleType: MBLK	Client ID: TestCode:	Volatile Organic Compo	ands by GC/MS	SW8260B	Un Ba	its: ug/L tchID: 135636		Date: 09/28 lysis Date: 09/28		Run No: 181090 Seq No: 3768672
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
rans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Γrichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	45.59	0	50	0	91.2	60.1	127	0	0	0
Surr: Dibromofluoromethane	51.15	0	50	0	102	79.6	126	0	0	0
Surr: Toluene-d8	47.30	0	50	0	94.6	78	116	0	0	0
Sample ID: LCS-135636	Client ID:				Un	its: ug/L	Prep	Date: 09/28	/2010	Run No: 181090
SampleType: LCS	TestCode:	Volatile Organic Compo	inds by GC/MS	SW8260B	Bat	tchID: 135636	Ana	lysis Date: 09/28	/2010	Seq No: 3768671
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	52.40	5.0	50	0	105	61.4	146	0	0	0
Γrichloroethene	44.89	5.0	50	0	89.8	74.4	130	0	0	0
Surr: 4-Bromofluorobenzene	47.77	0	50	0	95.5	60.1	127	0	0	0
Surr: Dibromofluoromethane	52.95	0	50	0	106	79.6	126	0	0	0
Surr: Toluene-d8	50.17	0	50	0	100	78	116	0	0	0
Sample ID: 1009J06-001AMS SampleType: MS	Client ID: TestCode:	Volatile Organic Compo	inds by GC/MS	SW8260B	Un Ba	its: ug/L tchID: 135636		Date: 09/28 lysis Date: 09/28		Run No: 181090 Seq No: 3768674
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	66.95	5.0	50	0	134	48.8	172	0	0	0
Γrichloroethene	80.75	5.0	50	26.55	108	70.3	140	0	0	0
Surr: 4-Bromofluorobenzene	43.35	0	50	0	86.7	60.1	127	0	0	0
Qualifiers: > Greater than Result va	lue		< Less	than Result value			В	Analyte detected in the ass	ociated method	blank
BRL Below reporting limit			E Estim	ated (value above quantit	ation range)			Holding times for preparati		

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

1-Oct-10

Project Name: Williamson Dickie **Workorder:** 1009I42

BatchID: 135636

Sample ID: 1009J06-001AMS SampleType: MS	IS Client ID: TestCode: Volatile Organic Compounds by GC/MS SW8260B				Uni Bat	ts: ug/L chID: 135636		Date: 09/28 lysis Date: 09/28		Run No: 181090 Seq No: 3768674
Sumple 1 ype. 1120	10000000		-		240		1 1110	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,_010	•
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	50.80	0	50	0	102	79.6	126	0	0	0
Surr: Toluene-d8	47.68	0	50	0	95.4	78	116	0	0	0
Sample ID: 1009J06-001AMSD	Client ID:				Uni	its: ug/L	Prep	Date: 09/28	/2010	Run No: 181090
SampleType: MSD	TestCode: V	olatile Organic Compo	ands by GC/MS	SW8260B	Bat	chID: 135636	Ana	lysis Date: 09/28	/2010	Seq No: 3768675
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	71.19	5.0	50	0	142	48.8	172	66.95	6.14	21.6
Trichloroethene	77.48	5.0	50	26.55	102	70.3	140	80.75	4.13	20.3
Surr: 4-Bromofluorobenzene	43.92	0	50	0	87.8	60.1	127	43.35	0	0
Surr: Dibromofluoromethane	51.69	0	50	0	103	79.6	126	50.80	0	0
Surr: Toluene-d8	46.19	0	50	0	92.4	78	116	47.68	0	0

Qualifiers: > Greater than Result value

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

12 of 13

nalytical Environmental Services, Inc

Date: 1-Oct-10

Client: ERM-Southeast
Project Name: Williamson Dickie

ANALYTICAL QC SUMMARY REPORT

Workorder: 1009I42

BatchID: 135698

R RPD outside limits due to matrix

Sample ID: MB-135698 SampleType: MBLK	Client ID: TestCode:	Volatile Organic Compou	nds by GC/MS	SW8260B	Un Bat	its: ug/Kg tchID: 135698		Date: 09/29 alysis Date: 09/29		Run No: 181182 Seq No: 3770484
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
rans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	10	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	46.81	0	50	0	93.6	58.2	140	0	0	0
Surr: Dibromofluoromethane	49.27	0	50	0	98.5	71.1	132	0	0	0
Surr: Toluene-d8	46.46	0	50	0	92.9	77.6	119	0	0	0
Sample ID: LCS-135698 SampleType: LCS	Client ID: TestCode:	Volatile Organic Compou	nds by GC/MS	SW8260B	Un Bat	its: ug/Kg tchID: 135698		Date: 09/29 O Date: 09/29		Run No: 181182 Seq No: 3770485
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	57.82	5.0	50	0	116	66.1	158	0	0	0
Γrichloroethene	48.48	5.0	50	0	97	74.5	137	0	0	0
Surr: 4-Bromofluorobenzene	47.13	0	50	0	94.3	58.2	140	0	0	0
Surr: Dibromofluoromethane	46.84	0	50	0	93.7	71.1	132	0	0	0
Surr: Toluene-d8	45.41	0	50	0	90.8	77.6	119	0	0	0
Sample ID: 1009E63-009AMS SampleType: MS	Client ID: TestCode:	Volatile Organic Compou	nds by GC/MS	SW8260B	Un Bat	its: ug/Kg-c tchID: 135698	• •	Date: 09/29 alysis Date: 09/29		Run No: 181182 Seq No: 3770487
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
,1-Dichloroethene	61.87	5.8	58.29	0	106	60.6	160	0	0	0
Trichloroethene	55.51	5.8	58.29	0	95.2	70.3	147	0	0	0
Surr: 4-Bromofluorobenzene	53.44	0	58.29	0	91.7	58.2	140	0	0	0
Qualifiers: > Greater than Result val	ue		< Less	than Result value			В .	Analyte detected in the ass	ociated method	blank
BRL Below reporting limit			E Estin	nated (value above quantit	ation range)		Н	Holding times for preparat	ion or analysis e	exceeded

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

1-Oct-10

Project Name: Williamson Dickie Workorder: 1009I42

BatchID: 135698

Sample ID: 1009E63-009AMS SampleType: MS	Client ID: TestCode: V	Volatile Organic Compou	SW8260B	Units: ug/Kg-dry BatchID: 135698				9/2010 9/2010	Run No: 181182 Seq No: 3770487	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	56.74	0	58.29	0	97.3	71.1	132	0	0	0
Surr: Toluene-d8	54.50	0	58.29	0	93.5	77.6	119	0	0	0
Sample ID: 1009E63-009AMSD SampleType: MSD	Client ID: TestCode:	olatile Organic Compou	ands by GC/MS	SW8260B	Uni Bat	ts: ug/Kg-d chID: 135698	-	lysis Date: 09/2	9/2010 9/2010	Run No: 181182 Seq No: 3770488
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	63.69	5.8	58.29	0	109	60.6	160	61.87	2.9	30.9
Trichloroethene	54.15	5.8	58.29	0	92.9	70.3	147	55.51	2.47	28
Surr: 4-Bromofluorobenzene	50.88	0	58.29	0	87.3	58.2	140	53.44	0	0
Surr: Dibromofluoromethane	57.17	0	58.29	0	98.1	71.1	132	56.74	0	0
Surr: Toluene-d8	56.07	0	58.29	0	96.2	77.6	119	54.50	0	0

Qualifiers: Greater than Result value

> BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

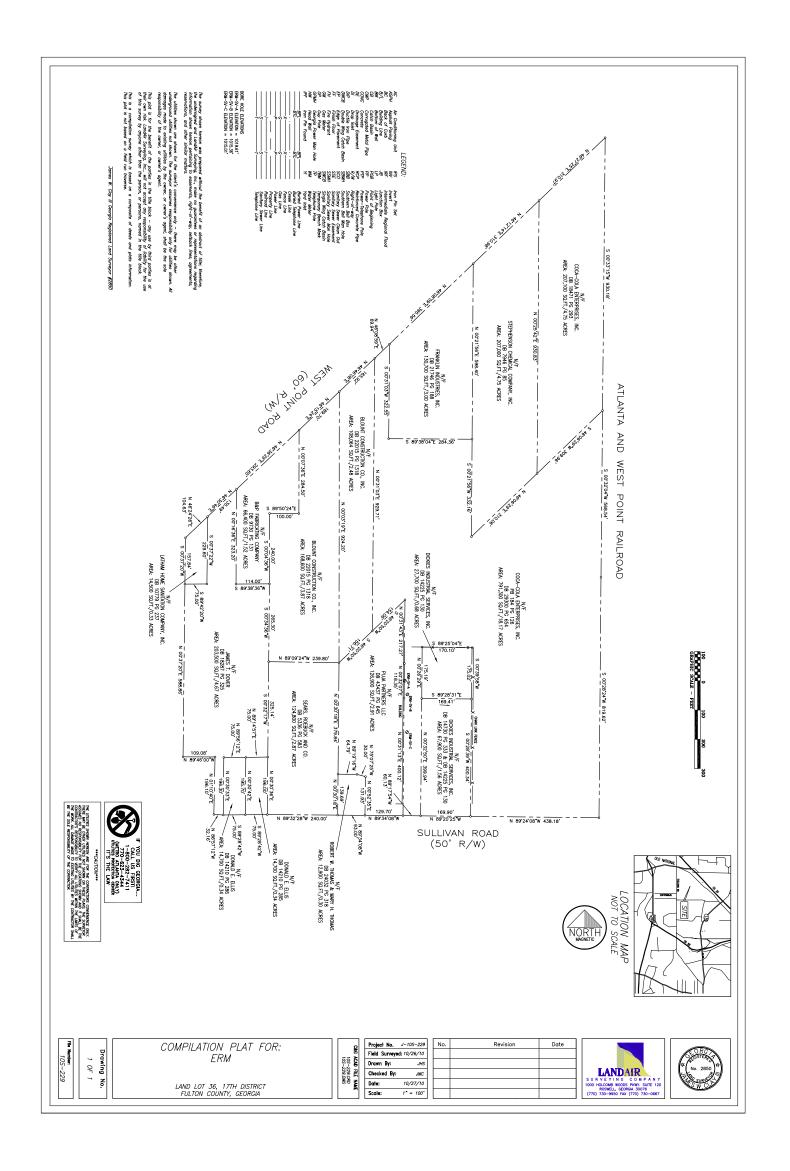
N Analyte not NELAC certified

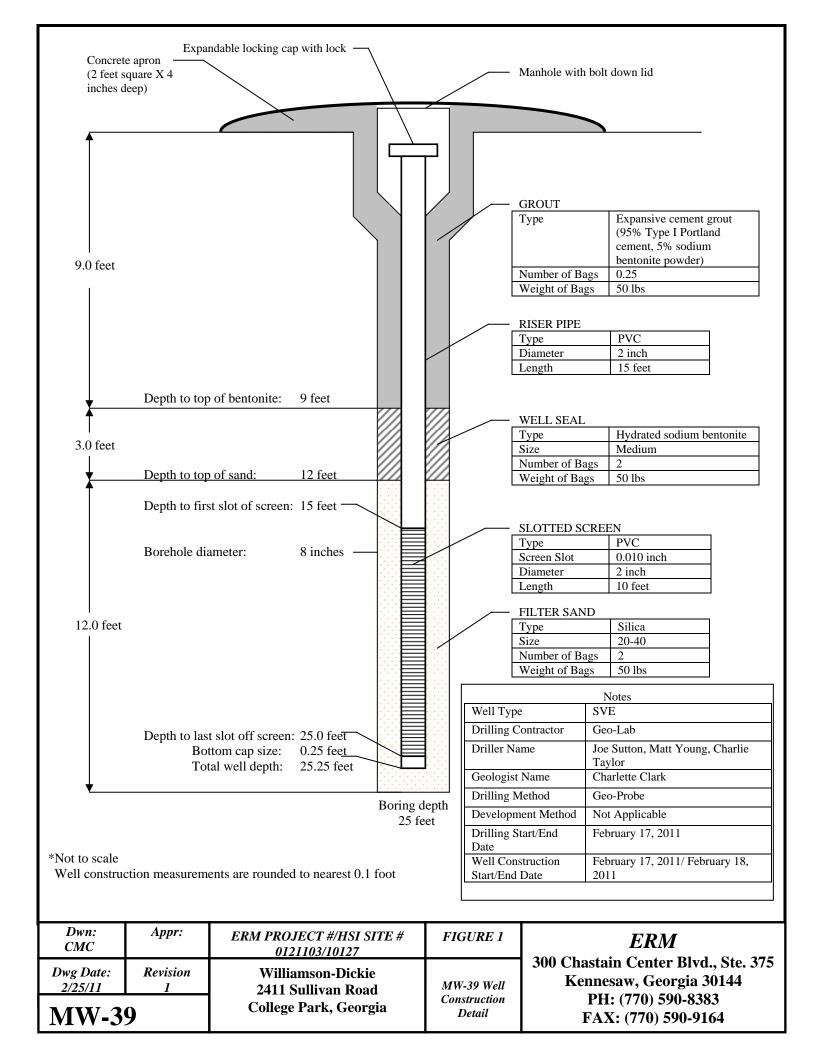
S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix





100												
- km	нш –					SOIL BORING # MW-39						
- XX	9		Enviror	nmental								
HILL						PROJECT NUMBER: 0121103						
FR	M.	Res	sources N	Managemo	ent	LOCATION: College Park, Georgia						
DATE I	DRILLED		2/17/2011			DRILLING COMPANY: EM-Services						
START			10:00			DRILLERS NAME(S): Joe Sutton, Matt Young, Charlie Taylor						
STOP T	IME:		11:30			DRILL RIG/METHOD: Geo-Probe						
COMPI	LETION	DEPTH:	25 ft bgs			SAMPLING METHOD: NA						
		R LEVEL:				FIELD SCREENING EQUIPMENT:						
BORIN	G DIAMI	ETER:	8" Nominal			LOGGED BY: C. Clark						
WELL S	SCREEN	LENGTH:	10 ft			Page 1 of 1						
WELL			BLOW	INCHES	PID							
DETAIL	DEPTH	USCS	COUNTS	RECOVERED	(ppm)	DESCRIPTION						
	-											
NIA	- -		NIA	NIA	NΙΔ							
NA	0 _		NA	NA	NA	Hand Auger to 6 ft below ground surface (bgs)- asphalt layer						
	\Box					from 0-1 ft. Then reddish brown sandy CLAY						
	† 											
	FF											
	4 -											
		CL		NIA	40							
NA	6-	CL	NA	NA	48							
	L ` _					Reddish-orange CLAY with some silt, medium stiff, dry. Transitions						
						to tan soft clay, slightly moist at 11 ft with trace mica						
	8 =											
	= =											
	-10 -	CI		NIA	00							
NA		CL	NA	NA	60							
	12					Tan, soft, silty CLAY to 14 ft then reddish brown soft, silty clay						
	- '2 -											
	F =											
	14-											
	\vdash											
	16											
NA	t_ ∵	CL	NA	NA	60							
	- -					Moist, micaceous silt with trace CLAY. Very soft. Transitions to						
	18 _					red and white, then at 20 ft becomes red sitly CLAY, soft, moist						
<u> </u>	├					micaceous and red from 20 ft to 22 ft bgs						
	-20					milicaceous and red from 20 ft to 22 ft bgs						
	\Box											
NA	+	CL	NA	NA	60							
	- 22 -					SAA except wet. Red and white silty, micaceous CLAY. Very soft						
	 					,						
	24											
	- ₋₂₆ -											
NA	+ ²⁰ =	CL	NA	NA	60							
	F =					Boring terminated at 27 ft bgs						
						Č Č						





ERM	Client:		MSTN -				0121	103	Sampling Date: 2/23/11
	Site/Location:	2411 S	ulivan	ea.	College	Park	CA		Sampler's Name: Amy GINSUOM
Well Volume d = well diameter	Well ID: Total Depth (ft) ¹ : Depth to Water (ft): Well Diameter (in): e (gal) = 0,041d ² h: r (inches) h = length	14.13 21 11.9 th of water column	I (feet)	Pump Start/: Pur Total F	ump Type/Model: Tubing Material: Intake Depth (ft): Stop Purge Time: ge Rate (L/min) ² : turge Volume (L): ck all that apply):	+8f18 15' 10:00 0.1 4.0	И	□ vacuum jug	Sample Collection Time: 10:50 Sample Purge Rate (L/min) ³ : 0:1 Sample ID: MW-34 QA/QC Collected? USS QA/QC I.D. DUP Laboratory Analyses: VULS EDGO
TTON CONGLEC	- gaine	.0-	- Gamp	iilig Mediod (C)ie	ск ан шагарруу.			vacuum jug arge (all analytes)	
Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)		Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:10 10:15 10:20 10:35 10:35 10:40	19.98 20.10 20.13 19.80 20.39 20.39	1074 1079 1071 1070 1070 1070	6.01 5.39 5.60 5.60 5.40 5.43 5.40	5.06 5.00 4.90 4.90 4.90 4.90	331.5 330.7 337.1 244.2 349.3 251.4 334.4	4.61 5.26 5.97 3.60 2.96 2.98	1 2,0 2,5 3,0 3,5 4,0	14.42 14.45 14.47 14.49 14.50 14.51	Clearing prior, 100 milling Clearing ador, 100 milling SAA SAA SAA
Stabilizing Criteria ⁵	*/- 1°C	+/- 3%	+/- 10% (see note below) ⁷	+/- 9.1 unit	+/- 10 mV (see note. below) ³	+/- 10% or	(see note	(see note	

Criteria* 1°C 3% below) 0.1 unit below)* 10 N°Criteria* 1°C 3% below) 0.1 unit below)* 10 N°Criteria* 1°C 3% below) 0.1 unit below)* 10 N°Criteria* 1°C 3% below

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



February 28, 2011

Shanna Thompson ERM-Southeast 300 Chastain Center Blvd, Suite 375 Kennesaw GA 30144

TEL: (770) 590-8383 FAX: (770) 590-9164

RE: Williamson-Dickie

Dear Shanna Thompson: Order No: 1102J35

Analytical Environmental Services, Inc. received 3 samples on February 23, 2011 12:35 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- -NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Brian Rohr

Project Manager

CHAIN OF CUSTODY

3 785 Presidential Parkway, Atlanta GA 30340-3704

AES TEL:: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

Date: <u>2/23/</u>	Page	of	
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COMPANY: ERM Southeast	300 Chastain Center Biva. Ste 375 Kennsaw, GA 30194				id.		ANALYSIS REQUESTED						Visit our website		
	Ste 375 Kenveso	5 1W, 6A	304	14		0968								www.aesatlanta.com to check on the status of	
PHONE: 770-590-9383	FAX:			•		8								your results, place bottle	tainers
SAMPLED BY AMY GYISUOLD	SIGNATURE	y Yw	mile	1		[3								orders, etc.	# of Container
SAMPLE ID		APLED	'	1 1	(es)	707					Щ				% W
" SAMPLE ID			Grab	Composite	Matrix (See codes)	H	_	P	RESERV	ATION (S	See codes)	$\neg \neg$		REMARKS	
, MW-39	2/2/11	10:50	V	0	6W	X	+	\vdash	+	\vdash	++	$\dashv \dashv$	+	REPORT 24 HV TA	$\overline{}$
2 DILP 3 TPIP Blank	2/23/11		V		GW	X		П						Standard TAT	
3 Trip Blank	203/11														
4			<u> </u>									$\dashv \dashv$			
5		 	 	\vdash		\sqcup				-	\dashv	\dashv			
7	 			\vdash		┝┤	-	-	+	-	++	$\dashv \dashv$			
8	 			-		\vdash	-			\vdash \vdash	++	++	+		
9						\vdash	-	+			++	$\dashv \dashv$			
10												\top			
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14 DATE/TIME	DEGEN ED D	<u></u>	ĻĻ	<u> </u>										D. D. C. L. L. L. L. L. L. L. L. L. L. L. L. L.	
1:	1: L	125	9/9	3/11	DATE/TIME	PROJEC	CT NAM		ROJECT	INFOR	MATION_			RECEIPT	
any Dissured 2/3/11 1235	760			7/7		W	Miar	nov	<u>1- D</u>	ICKLE	7			Total # of Containers	
. J	2:			12	: 35	PROJEC	CT #: (1121	03	11. 1/01	2 101			Turnaround Time Request	
3:	3:					SITE A	DDRESS	Coll	POP	nnyar Davr	n pal homp			O Standard 5 Business Days O 2 Business Day Rush	
						SEND I	EPORT	то: 5	ndnn	a T	homp	M		Neut Dusings Day Puch	
REDOYT MULLI-DELICIST 2-TOE	OUT /	SHIPMENT	METHO VIA:	DD		INVOIO (IF DIF	E TO: FERENT	FROM A	ABOVE)		1			Same Day Rush (auth req.) Other	
trans-1,2-DCE, PLE. TUE, VINUI	IN VIA:					INVOICE TO: (IF DIFFERENT FROM ABOVE) QUOTE #: PO#: Y; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD E MADE.					STATE PROGRAM (if any):				
chloride and IA-Dioxne	CLIEN	FedEx UP	S MAII	L COUR	IER	OLIOTE	. #.							E-mail? Y/N; Fax? Y/N	IV
SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSI SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION	DERED AS RE	CEIVED ON THE	HE NEXT	T BUSINE	ESS DAY; II	F NO TA	T IS MA	RKED	ON COC	AES WI	LL PROCE	ED AS STA	NDARD 7	DATA PACKAGE: I II III TAT.	1 4

Client: ERM-Southeast Client Sample ID: MW-39

Project Name: Williamson-Dickie Collection Date: 2/23/2011 10:50:00 AM

Date:

28-Feb-11

Lab ID: 1102J35-001 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	142561	1	02/24/2011 11:27	SB
Vinyl chloride	BRL	2.0		ug/L	142561	1	02/24/2011 11:27	SB
1,1-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
Trichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
Tetrachloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:27	SB
Surr: 4-Bromofluorobenzene	90.5	64.7-130		%REC	142561	1	02/24/2011 11:27	SB
Surr: Dibromofluoromethane	90.9	80.7-129		%REC	142561	1	02/24/2011 11:27	SB
Surr: Toluene-d8	90.4	71.1-120		%REC	142561	1	02/24/2011 11:27	SB

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Client:ERM-SoutheastClient Sample ID:DUPProject Name:Williamson-DickieCollection Date:2/23/2011Lab ID:1102J35-002Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	142561	1	02/24/2011 11:55	SB
Vinyl chloride	BRL	2.0		ug/L	142561	1	02/24/2011 11:55	SB
1,1-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
Trichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
Tetrachloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 11:55	SB
Surr: 4-Bromofluorobenzene	90.3	64.7-130		%REC	142561	1	02/24/2011 11:55	SB
Surr: Dibromofluoromethane	92.3	80.7-129		%REC	142561	1	02/24/2011 11:55	SB
Surr: Toluene-d8	89.1	71.1-120		%REC	142561	1	02/24/2011 11:55	SB

Date:

28-Feb-11

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Client:ERM-SoutheastClient Sample ID:TRIP BLANKProject Name:Williamson-DickieCollection Date:2/23/2011Lab ID:1102J35-003Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	142561	1	02/24/2011 10:58	SB
Vinyl chloride	BRL	2.0		ug/L	142561	1	02/24/2011 10:58	SB
1,1-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
trans-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
cis-1,2-Dichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
Trichloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
Tetrachloroethene	BRL	5.0		ug/L	142561	1	02/24/2011 10:58	SB
Surr: 4-Bromofluorobenzene	92.5	64.7-130		%REC	142561	1	02/24/2011 10:58	SB
Surr: Dibromofluoromethane	89.2	80.7-129		%REC	142561	1	02/24/2011 10:58	SB
Surr: Toluene-d8	90.4	71.1-120		%REC	142561	1	02/24/2011 10:58	SB

Date:

28-Feb-11

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

J Estimated value detected below Reporting Limit

Sample/Cooler Receipt Checklist

Client ERM		Work Orde	er Number	1102135
Checklist completed by Signature Da	2-23- ate	-1[
Carrier name: FedEx UPS Courier Client C	US Mail Othe	er		
Shipping container/cooler in good condition?	Yes 🗸	No	Not Present	
Custody seals intact on shipping container/cooler?	Yes	No	Not Present	<u>~</u>
Custody seals intact on sample bottles?	Yes	No	Not Present	~
Container/Temp Blank temperature in compliance? (4°C±2))* Yes 🔽	No		
Cooler #1 Cooler #2 Cooler #3	Cooler #4 _	Co	ooler#5	Cooler #6
Chain of custody present?	Yes	No		
Chain of custody signed when relinquished and received?	Yes	No		
Chain of custody agrees with sample labels?	Yes 🗸	No _		
Samples in proper container/bottle?	Yes _	No _		
Sample containers intact?	Yes 🗸	No _		
Sufficient sample volume for indicated test?	Yes _	No		
All samples received within holding time?	Yes 🗸	No _		
Was TAT marked on the COC?	Yes _	No		
Proceed with Standard TAT as per project history?	Yes	No _	Not Applica	able
Water - VOA vials have zero headspace? No VOA vials	submitted	Yes 👱	No _	
Water - pH acceptable upon receipt?	Yes 🗹	No	Not Applica	able
Sample Condition: Good Other(Explain) (For diffusive samples or AIHA lead) Is a known blank included.				_

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

^{*} Samples do not have to comply with the given range for certain parameters.

Client: ERM-Southeast

Williamson-Dickie

ANALYTICAL QC S

Workorder: 1102J35

Project Name:

ANALYTICAL QC SUMMARY REPORT

Date:

28-Feb-11

BatchID: 142561

R RPD outside limits due to matrix

Sample ID: MB-142561 SampleType: MBLK	Client ID: TestCode:	Volatile Organic Compo	ands by GC/MS	SW8260B	Un Bat	its: ug/L tchID: 142561		Date: 02/24 lysis Date: 02/24		Run No: 191162 Seq No: 3988922
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Trichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	44.37	0	50	0	88.7	64.7	130	0	0	0
Surr: Dibromofluoromethane	48.25	0	50	0	96.5	80.7	129	0	0	0
Surr: Toluene-d8	44.59	0	50	0	89.2	71.1	120	0	0	0
Sample ID: LCS-142561	Client ID:				Units: ug/L		Prep Date: 02/24/2011 Run No: 191162			Run No: 191162
SampleType: LCS	TestCode:	Yode: Volatile Organic Compounds by GC/MS SW8260B			BatchID: 142561		Analysis Date: 02/24/2011			Seq No: 3988913
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	39.63	5.0	50	0	79.3	60	140	0	0	0
Trichloroethene	50.57	5.0	50	0	101	70	130	0	0	0
Surr: 4-Bromofluorobenzene	50.45	0	50	0	101	64.7	130	0	0	0
Surr: Dibromofluoromethane	46.87	0	50	0	93.7	80.7	129	0	0	0
Surr: Toluene-d8	47.41	0	50	0	94.8	71.1	120	0	0	0
Sample ID: 1102I46-003AMS SampleType: MS	Client ID: TestCode: Volatile Organic Compounds by GC/MS SW8260B			Units: ug/L BatchID: 142561		Prep Date: 02/24/2011 Analysis Date: 02/24/2011			Run No: 191162 Seq No: 3989705	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	43.77	5.0	50	0	87.5	46.2	183	0	0	0
Trichloroethene	50.35	5.0	50	0	101	70.5	149	0	0	0
Surr: 4-Bromofluorobenzene	45.41	0	50	0	90.8	64.7	130	0	0	0
Qualifiers: > Greater than Result va	lue		< Less	than Result value			В	Analyte detected in the asse	ociated method	blank
BRL Below reporting limit E Estimat				ated (value above quantit	ation range)	tion range) H Holding times for preparation or analysis exceeded				

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

7 of 8

Rpt Lim Reporting Limit

Estimated value detected below Reporting Limit

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

28-Feb-11

BatchID: 142561

Project Name: Williamson-Dickie

Workorder: 1102J35

Sample ID: 1102I46-003AMS SampleType: MS	Client ID: TestCode:	Volatile Organic Compo	ands by GC/MS	SW8260B	Uni Bat	ts: ug/L chID: 142561		Date: 02/2 4 lysis Date: 02/2 4	4/2011 4/2011	Run No: 191162 Seq No: 3989705
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	45.02	0	50	0	90	80.7	129	0	0	0
Surr: Toluene-d8	43.63	0	50	0	87.3	71.1	120	0	0	0
Sample ID: 1102146-003AMSD SampleType: MSD	Client ID: TestCode:	Volatile Organic Compou	ands by GC/MS	SW8260B	Uni Bat	ts: ug/L chID: 142561		Date: 02/2 4 lysis Date: 02/2 4	4/2011 4/2011	Run No: 191162 Seq No: 3989842
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	45.78	5.0	50	0	91.6	46.2	183	43.77	4.49	20
Trichloroethene	50.76	5.0	50	0	102	70.5	149	50.35	0.811	20
Surr: 4-Bromofluorobenzene	43.10	0	50	0	86.2	64.7	130	45.41	0	0
Surr: Dibromofluoromethane	44.14	0	50	0	88.3	80.7	129	45.02	0	0
Surr: Toluene-d8	43.59	0	50	0	87.2	71.1	120	43.63	0	0

Qualifiers: Greater than Result value

> BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

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							-1	1 2 DCE	41.1														
Sampling Date: 70 - 20 - 70	Sampler's Name: Charlette Clarl	Sample Collection Times $/405$	Sample Purge Rate (L/min) ³ : NA	Sample 1D: NW - 10 - 20 (0 1020 -0)	QA/QC Callected? //O	QAQCID.	Laboratory Analyses: TCE, PCE, VC , 1 , 1 DCE	ump head discharge (Inorganics including cyanide)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	6.3	lowered owner rate to . 2	0					Samole time 1405						
/03		à						U vacuum jug (SVOCs)	H ₂ O Depth	15.25	15.25	15.25	15.25	15.35	15.35								
Project No.: #0121/03		21472	LDPE		O		٧,	no dischare	Purge Volume (L)	Start	1.5	2.5	3.5	4.5	5,5								
Project No.:		Peristo	14" L	1,11	1330	0.2	12 2	Geoda straw (V	Turbidity (NTUs)	61	13	0.75	0,80	0.54	14.0								
		Pump Type/Model: Peristaltic	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply):	ORP (mV)	500	108.0	10/.1	102,5	1031	103.5								
Dickie	¥	Pur	5	Pump Ir	Start/St	Purg	Total Pu	ng Method (chec	PH (SU)	04,40	324	3,42	3.40	5.38	3.35								
nson -	0 K						et)		DO (mg/L)	4.93	202.17	4,28	4,21	4.31	4,33								
Williamson - Dickie	SiterLocation: (D)/Page Pork	Well ID: MW-10	30	15.35	: :	,	f water column (fe	nerds leck	Spec. Cond. (mS/cm)	6.079	0.080	0.078	0.077	0.077	0.076								
Client:	Site/Location:	Well ID:	Total Depth (ft) 1:	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = 0.041d²h:	thes) h = length of	- 70	Temp.	18,95	18.77	18,78	18.80		91.81								
ERM			Ē	Dep	Wel	Weil Volume (g	d = well diameter (inches) h = length of water column (feet)	Well Condition: 400 d	Time	1330	1335	1340	5481	1350	13551	e e							

++- 10% or <10 NTUs

(see note below)*

(see note below)*

ERM

Sampling Dale: 10-20-10 Sampler's Name: Choclette Clort	Sample Collection Time: 7305 Sample Purge Rate (Lmin) ³ . MA	Sample ID: <u>MW - 10 A - 20 10 i 020 - 0/</u> OA/OC Collected?	QNOCID. THE NY	Laboratory Analyses: JCK, R. E., JC. 1, 100 E. 1, 2 DCE	55) 🗆 pump head discharge (Inorganics Including eyanide) (+r ans +c i S)	☐ Bailer (only used if necessary)
5)2[4]2 Project No.: 012[[0]3	Pump TypeModelt $\mathcal{H}_{\mathcal{L}_{I}}$ $\mathcal{H}_{\mathcal{L}_{I}}$ $\mathcal{H}_{\mathcal{L}_{I}}$ $\mathcal{H}_{\mathcal{L}_{I}}$ St. Tubing Material: $\mathcal{H}_{\mathcal{L}_{I}}$ $\mathcal{L}_{\mathcal{L}_{I}}$ $\mathcal{L}_{\mathcal{L}_{I}}$	Pump Intake Depth (II): PS 5 C Start/Stop Purge Time: 1,3,35	Purge Rate (L/min)? 0, 7	Total Purge Volume (L):	ng Method (check all that apply): 🔾 soda straw (VOCs) 🗆 vacuum jug (SVOCs)	☐ Bladder pump = pump discharge (all analytes)
Silectocation: College Porte, GA	Well ID: MW - 10.A Total Depth (ft): 54.5	Depth to Water (ft): /// / Well Diameter (in): /// / / /	Well Volume (gal) = 0.041d ² h;	d = well diameter (inches) h = length of water column (feet)	Well Condition: 106d 10epds new 10thapping Method (check all that apply): Grada straw (VOCs)	

	_	_	_	9	_	_		_	_		_	_	_	_	_	_	_	_	_	_	
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	3.3 Water Clear 219 odor		weiter level doosed ~ 1 lowered raite				Samol collected													
(all analytes)	H ₂ O Depth	13.35	13.95	14.33	14,72	16 41	14.95	2)													(see note
☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Stort	1.0	3.0	2,5	30	S.	1													stee note
☐ Bladder pump	Turbidity	1.5	0.1	A.75	450	0.28	0,25														+/- 10% or
	ORP (mV)	163.3	66.4	55.8	63.9	60,3	58.6														4/- 10 mV 6ee note
	Hq (US)	7.04	6.37	6.43	6.03	6.17	6.21														*
	DO (mg/L)	11.33	9.00	8,50	8.09	200	64.8														+/- 10% (See note
	Spec Cond. (mS/cm)	1.8.0		680.0	5800	6800	6.089	;													\$:
	Temp.	23.80	19.58	16.11	-		18.55														÷ .
	Time	1335	1340					1305													Stabilizing

Criteria* 1*C 3% below? 0.1 unit below? 0.1 unit below? 6.10 unit below? 6.10 unit below? 6.10 unit below? 6.10 unit below? 6.10 unit below? 6.10 unit below. 6

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10-20-10 Sample Collection Time: 10 05 Duge Sample Purge Rate (L/min)³: NA Sampling Date: QA/QC I.D. QA/QC Collected? Project No.: 0(21103 Pump Type/Model: Pcn'5-tylhic 0,2 0 1 LPDE 0530 , 7 Start/Stop Purge Time: Tubing Material: Total Purge Volume (L): Pump Intake Depth (II): Purge Rate (L/min)²: Client: Williamson - Dickie Site/Location: College Park 000 10.0e d = well diameter (inches) h = length of water column (feet) Well ID: MW-Total Depth (ft)1: Well Diameter (in): Depth to Water (ft): Well Volume (gal) = $0.041d^2h$:

Sample 10: MW- | -20101021-C| Samplers Name: Charlete Char Laboratory Analyses: VCC SC see Chaulm

			_	_	_	_		_		_	_	_	_	_		_	_	_	_	_		_		_	_
SVOCs) pump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)	Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)				1.0 al				Collect Samo 4 p 1005															
U vacuum jug (ge (all analytes)	H ₂ O Depth	11.09	00.11	11.30	11.34	11.35	11.37	11.40	85															thee note
(OCs)	e = pump dischar	Purge Volume (L)	Start	7.0	0, 5	3.0	4.0	5.0	6.0																(see note
Soda straw (V	☐ Bladder pump	Turbidity (NTUs)	12	11	0	5.5	6.7	5.0	4,0																+/- 10% or
k all that apply):		ORP (mV)	77.6	85.9	77.4	3.96	82.1	85.9	86.8																+/- 10 mV (see note
ng Method (chec	بانار	Hd (DS)	5.63	4,88	5.13	5.75	5.02	49.4	4.84																*
	-	DO (mg/L)	10.65	10.33	10.07	10.25	10.03	19.77	16.60	9															+/- 10% (see note
POIT 12	12/2/21	Spec. Cond. (mS/cm)	1510	5,195	0.196	951.0	0.197	0.197	951.0																*
		Temp.	-			30.39	18,05	20.73	20.19																*
Well Condition:		Тіте	0260	0935	0460	2460	0550	5550	1000																Stabilizing
	hod (check all that apply): 🖅 Soda straw (VOCs) 🔝 vacuum jug (SVOCs)	POIT Sampling Method (check all that apply): Maroda straw (VOCs)	DO 14 TO Sampling Method (check all that apply): 4-80da straw (VOCs) U vacuum jug (SVOCs Conf. O. V. V. V. V. V. V. V. V. V. V. V. V. V.	DO 11 DO 12 Do 11 DO 12 DO 1	Control Cont	Control Cont	Control Dol 1 15 15 15 15 15 15 15	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Cont	Control Do 1 1 2 Sampling Method (check all that apply); LFGods straw (VOCs) Locate Lo	Conference Double Creek DOIT Sampling Method (check all that apply): 456ds straw (VOCs) Juracum ing (SVOCs) Creek Cr	Control Cont	Conference DOIT Sampling Method (check all that apply); Mode Durbour Durbo	Control Cont	70. 20.01 10.05 10.00 10	

(i) - Front unequare spath is believe or well until after progregs and stranging to notice researchesing time that may be research on the went contain.

(ii) - Front greate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less.

(iii) - Sampling cate to be 6.35 from or less than the sampling cate to be interested to be contained to the cate of th

Client Williamson - DX Kir

Project No.: 0 (21 103)

Sampling Date:

Sampler's Name:

2090 Sample Purge Rate (L/min)³: Sample Collection Time:

> Prosta (AC 4 LDPE

Tubing Material:

Pump Intake Depth (ft):

Pump Type/Model:

Well ID: MW-4

Total Depth (ft)1:

Sample ID: M.W-4-2010(0 21 - 0 / se chrim Z

Laboratory Analyses: VOCS DAVOCID NA QA/QC Collected? \(\infty\) 0060 My / Je Start/Stop Purge Time: 08 25 0.1 Total Purge Volume (L): Purge Rate (L/min)²:

Notes (Water of wife, aday many and a second softh water		ORP Turbidity Puree Volume H.O Denth	Ha	200	Spec. Cand.	Temp.	Time
☐ Bailer (only used if necessary)	scharge (all analytes)	☐ Bladder pump = pump dis					
☐ pump head discharge (Inorganics including cyanide)	☐ vacuum jug (SVOCs)	t apply); 🗹 soda straw (VOCs)	Sampling Method (check all that apply); K soda s	San	da bers	1 000 / NOC	Well Condition
					1 1		

d = well diameter (inches) h = length of water column (feet)

Well Diameter (in): Depth to Water (ft):

Well Volume (gal) = 0.041d²h:

								١.		
time	CO P.	Spec. Cand. (mS/cm)	DO (mg/L)	Hd (SC)	ORP (mV)	Turbidity (NTUs)	Purge Volume (I.)	H ₂ O Depth	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	77.77
2835	31.16	67110	7.09	16.59	56.1	72	545.7	686	water both gramme lovet in 10	Mater Profilery Purple
0830	21.19	5.11.0	75.7	6.01	62.6	45	1,25	10.3	250 ml a	in color
18.35	71,25	0.167	6.38	5.53	78.1	120	2,50	54,01		
58 UD	30.09	0-166	5.97	2.(7	89.7	34	0.0	10.45		
10	21.01	11,165	90.9	2,19	98.6	32	0.4	10.45		
0	21.04	0.165	he. 9	5.38	7.83	30	0.0	10.45		
855	20.06	0.165	6.30	5.39	84.3	28	6.0	10.45		
300	20.03	0.165	08.9	5.33	85.7	35	7.0	10.45	All Darameters stable, Torbidit,	
										3
									Sollower linet a lient ting	7
									>	
Stabilizing	7+	**	+/- 10% (see note	4+	+/-10 mV	**************************************	(see note	ojou oen)		

See note | +/- 10% or | (see note | below)* | <10 NTUs | below)* | below)* | below)* | 1) Do not measure eight to bollom at well until after purply, and amplitude for relative but may be restaing an our with comment.

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							(A DCE	C'S 12 DCE	12 DCF		
10-20-10	Charling Plank	5011	NA	Sample ID: MV-2-2010 10,00 21 - 01	IVo	MA	NUOCS (PCE, TCE, UC, 1, DOE	\Box pump head discharge (Inorganics including cyanide)	1/225	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	
Sampling Date:	Sampler's Name:	Sample Collection Time:	Sample Purge Rate (L/min)³: IU∆	Sample ID:	QA/QC Collected? (\$\int_0\$)	QA/QC I.D.	Laboratory Analyses:		☐ Bailer (only used if necessary)	Notes (Water clarity, odor,	
60								☐ vacuum jug (SVOCs)	ge (all analytes)	H ₂ O Depth	
Project No.: 012/103		145	LOPE	2	0/1100	`હ		VOCs)	☐ Bladder pump = pump discharge (all analytes)	Purge Volume H ₂ O Depth	
Project No.:		Perst	18	-	1040	Õ	7	U coda straw (☐ Bladder purr	Turbidity	
		Pump Type/Model:	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply): Lucoda straw (VOCs)		ORP (mV)	
		۵		Pump	Start/	Pur	Total P	ing Method (che		Hq (SU)	
a - Dickie	Perli	7					(lee)	Sampl		DO (mg/L)	İ
Olient: Williamston - Dickit	Colles	MW-2	52	9.25	<u>ر</u>		of water column (f	3 beits		Spec Cond. (mS/cm)	
Client:	Site/Location:	Well ID:	Total Depth (ft)1:	Depth to Water (ft): 9, 35	Well Diameter (in):	Well Volume (gal) = 0.041d ² h ₁	nches) h = length	Well Condition: accd 1 00 beits	,	Temp.	Í
ERM				ď	*	Well Volume	d = well diameter (inches) h = length of water column (feel)	Well Condition:		Time	

, 10		_		_			_		_			_				_	
□ Bailer (only used if necessary)	Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)	lowered rate to 0.2 Umin	water clear, no odor				collected Samole										
je (all analytes)	H ₂ O Depth	826	8,5	5,5	5.6	8.5											(see note
☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Start	/	Ü	m	7											(see note
☐ Bladder pump	Turbidity	4.5	32	1.3	7.5	0.51											+/- 10% or
	ORP (mV)	5.711	59.7	57.1	8.48	53.8											+/- 10 mV (see note helmu)"
	Hd (US)	600	3.48	41.9	6.31	6.33											* to
	DO (mg/L)	6.43	3.13	2.21	1.97	1.84											++-10% (See note helow)
	Spec. Cond. (m5/cm)	001.0	0.100	650.0	0.098	0.058											† £
2	Temp.	33.31			22.95												7.0
	Time	0401	1045		1055		1105										Stabilizing Criteria ⁶

Criteria 1°C 3% below) 0.1 unit below) (10 Do not measure depth to bettom of well units store purging and sampling to ordere resupending time that not be recting on the recti below).

(3) - Sampling rate to be 0.25 ipm or less
 (4) - Field exercisely mass exercises to be accorded course 2 to 5 months.

(4) - Cristal parameter intersocientation to effect a centre of 3 to 3 th interess.
(5) - Solbilization enhance based on three most recent consecutive measurements.

(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep through (7) - DO is not a stabilization criterion for the Groundwater sampling. SESD Sundard Operating Procedure.

) - DO is not a stabilization enterion for the "Groundwater sampling" SESD Standard Operating Procedure) - ORP is not a stabilization enterion for the "Groundwater sampling" SESD Standard Operating Procedure

(8.1)

10-19-10	Charlette Clank	1430	NA	Sample ID: MW-187-20101019 -01	No	NA	VOCS (see chain)
Sampling Date:	Sampler's Name:	Sample Collection Time:	Sample Purge Rate (L/min) ³ :	Sample ID:	QA/QC Collected?	QA/QC I.D.	Laboratory Analyses: VO (
Project No.: \$012,1103		Pump Type/Model: Ports 16	Tubing Material: 2, " LDPE	Pump Intake Depth (ft):	Start/Stop Purge Time: 1400 / 1430	Purge Rate (L/min) ² :	Total Purge Volume (L):
Williamson-Dickie	College Park, GA	WELLID: MW-718D	13 P	10.5°	w. 6 Mehres Str		column (feet)
ERM Client:	Site/Location:	Well ID:	Total Depth (ft) ¹ :	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = 0,041d ² h;	d = well diameter (inches) h = length of water o

VOCs) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	8.250 pure rate, water clouds, no oder	7	Somered Sur rate to 0.150	0 1			Collected samole								
□ vacuum jug (SVOCs)	e (all analytes)	H ₂ O Depth	10.51	10.80	11.04	11.19	17.31	11.35	11.37								(see note
	☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Start	0.1	0.0	3.0	4.0	0.8	0.0								(See note
Soda straw (V	☐ Bladder pump	Turbidity (NTUs)	25	22	20	15	01	16	.00 .03								+ 10% or
all that apply);		ORP (mV)	147,5	69.5	8.50	6.65	58.2	56.7	54.6								4/- 10 mV (see note
Sampling Method (check all that apply); El-Yoda straw (VOCs)		Hd (DS)	26.3	6.09	60.9	01 9	01.9	1.12	6.15								*
Sampli		DO (mg/L)	10.7	88.0	0.80	0.86	0.88	68.0	0.86								+/- 10% (see note
beits		Spec. Cond. (mS/cm)	(2)10	0.123	0.123	0.133	781.0	124 O	481.0								\$ }
ON / post		Temp.	31.13	30 95	95'08	21.07	_		21.30								4 5
Well Condition: 4804 / NO 66145	J)	Time	. 00h/æ	504/	1410	1415	1430	1425	1430								Stabilizing

Criteria* 1*C 3% below 70 units to the control of t

ERM

Sampler's Name: Charlette (lark	Sample Callection Time: +++5 140	Sample 10: MW-34-2010 10:8-0	DAVOGILD. 1614	Laboratory Analyses: VOCS (see chain)	OCs) Doump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
Project No.: 0 (2(10 ⁷)	Pump Type/Model: Rostaltic	17.	Purge Rate (L/min) ² : 0.3	Total Purge Volume (L):	Sampling Method (check all that apply): 🗗 50da straw (VOCs)	☐ Bladder pump = pump discharge (all analytes)
SlielLocation: College Park, 6,4	Well ID: MXX - 3 Y Pumi	Depth to Water (ft): 11.30 Pump Int. Well Diameter (in): 2. Start/Stot		d = well diameter (inches) h = length of water column (feet) Total Purg		
ERM site	Total E	Depth to Well Dian	Well Volume (gal) = 0.041d²h:	d = well diameter (inches)	Well Condition: Soud	0

below this rate

- pump shots off 20 re rest 2 0.350, lowered to 0.2 Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.) 073 Q. Samole clear, no oddr collected 50.05 Vater introl 12.48 13.13 1245 (all and... 2.50 (see note below)* Purge Volume (L) (see note below)* 5.0 され 3,0 4.0 0. 30 -4- 10% or <10 NTUs Turbidity (NTUs) 0.01 と,0 3.0 30 0 5.0 59.1 575 +/- 10 mV (see note below)" 60.7 ORP (mV) 5,65 5.56 5,45 5.84 Hq (SU) (52) 1.36 1.67 1.47 DO (mg/L) +/- 10% (see note below)^T 3.09 6.3 0.069 0.065 0.075 23,40 0.067 23.57 0.068 Spec. Cond. (mS/cm) 23.60 24.31 23.13 24.86 Temp. 011 1115 1130 135 3 135

MW -L3 A Pump TypeModel: Te c. Staffht Sample Purp TypeModel: Te c. Staffht Sample Purp TypeModel: C. Sample Purp Pump Intake Depth (II): C. Sample Purp Pump Intake Depth (II): C. Sample Purp Pump Pump Time: C. Sample Purp Pump Pump Pump Pump Pump Pump Pump Pum	Client: Willta	Williamson-Dickle College Park, Gak	Kie	Project No.: 012(103	601	Sampling Date: Sampler's Name:	Sampling Date: 16 - 19 - 10 Sampler's Name: Clark
1); 73. Tubing Material: 14 to 15 Sample Purge Report (1); 63 to 14 to 25 to 14 to 25 to 14 to 25 to 14 to 25 to 2	Well ID:		Pump Type/Model:			Sample Collection Time:	Oho!
11); 9,15 Pump Intake Depth (II): 63-1 Start/Stop Purge Time: 10,30 1 (410	pth (ft) ¹ :	73	Tubing Material:	* 72	3dO7	Sample Purge Rate (L/min) ³ :	NA
7): Start/Stop Purge Time: 10.30 / 1 (40 0.2) Purge Rate (L/min)?: Start Stop Purge Rate (L/min)?: Total Purge Volume (L): A 1 Labc Sampling Method (check all that apply): (A 5oda straw (VOCs)	aler (ft);	9,95	Pump Intake Depth (ft):			Sample ID:	MW-134-70101019-01
9h; Purge Rate (L'min)?: 6.7 gith of water column (feet) Total Purge Volume (L): H Labo Sampling Method (check all that apply): G/Soda straw (VOCs) U vacuum jug (SVOCs)	eter (in);	-CK	Start/Stop Purge Time:			QA/QC Collected?	NO
gth of water column (feet) Total Purge Volume (L): Labo Sampling Method (check all that apply): (A Soda straw (VOCs)	$Iell\ Volume\ (gal) = 0.041d^2h$:	2	Purge Rate (L/min) ² :	6.3		QA/QC I.D.	
Sampling Method (check all that apply); Proda straw (VOCs)	= length of v	water column (feet)	Total Purge Volume (L):	4		Laboratory Analyses:	V0Cs
	PO	Sampling Me	ethod (check all that apply):	Soda straw (VOCs)	uscuum jug (SVO		scharge (Inorganics including cyanide)

		_		_	_	1	T	_	_	 _	T	Т	T	Ť	1	ì	_				
Notes (Water clarity, odor, purge rate, issues with pump/well/weather/ote.)	3.350 rate (water clear)	lovered since care to 0.2 Card	strys owns ny p		domos barellos alato lisa															~	
H ₂ O Depth	50 c/	10.85	11. 601	11.07	11.25																See note
Purge Volume	start	0.1	0.6	6.6	0.4																(see note
Turbidity	-, 00	2.5	1.7	<i>(</i> :	0		7.2														+/- 10% or
ORP (mV)	107.0	8.19	59.3	55.3	59.4																+/- 10 mV (see note
PH (SU)	083	200	7.14	7.14	7.13																+
DO (mg/L)	6.93	5.09	5.16																		+/- 10% (see note
Spec. Cond. (mS/cm)	691.0			461.0	0.173																‡
Temp.	3189	59	8	21.12		-															7+
Time	200	380		55.0	GH G																abilizing

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Sampling Date: 10.19-10 Sampler's Name: Charlette Clark	Sample Collection Time: 1005 Sample Purge Rate (L/min) ² : N/A Sample ID: MwJ - 13 - 2 c/c (c (9 - 0)) OA/OC Collectied? MO OA/OC LO (10 - 0) A	Laboratory Analyses: (SVOCs)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	were clear, no odar rate 0.25	•			Collected Sample @ 1005						
601		□ vacuum jug (SVOCs)	H ₂ O Depth (ft)	10.29	10.35	10.35	10.39							
Project No.: 0(2((03)	Peristaltic 14" LOPE 13 140 //00	S, C Persoda straw (VOCs) avacuum jug Bladder pump = pump discharge (all analytes)	Purge Volume (L)	+rays		2,50	222							
Project No.:	Peristal /4" LDE /4" LDE 0940 ///	Soda straw (Turbidity (NTUs)	23	0.0	150	0 × 2 × 0 × 0 × 0 × 0 × 0 × 0 × 0 × 0 ×							
	Pump Type/Model: Peristoration Tubing Material: V4" LT Pump Intake Depth (It): /3 Start/Stop Purge Time: Off40 // Purge Rate (L/min)?: c.25	Total Purge Volume (L): od (check all that apply):	ORP (mV)	77.3	68.4	0,69	68.7							
Dickie GA	Pump Ir Start/St	Total Purge Volume (L): Sampling Method (check all that apply): Bladder pump = pur	Hd (US)	4.53	カゲン	1.70	2,23	\$						
Williamson-Dickie Collage Park, GA	6		DO (mg/L)	1717.0	0.86	200	50.0							
1 1	MW -13	of water column (fe	Spec. Cond. (mS/cm)	3 0.046	0.049	3700	0.050.0							
Client: Site/Location:	Well ID: Total Depth (ft): Depth to Water (ft): Well Diameter (in): Well Volume (gal) = 0.0410 ² h;	nches) h = length o	Temp.	80,707,63		0	23.52							
ERM	De W Well Volume 6	d = well diameter (inches) h = length of water column (feet) Well Condition: QCCC	Time	0440		0450	09.55							

(see note below)*

(see note below)*

+/- 10% or <10 NTUs

College Part, G, & Site/Location:

Willyamsen - Dichie

Project No.: 0(2/103

10-19-10 Sampling Date:

Sampler's Name: Charlette Clark 0915 Sample Collection Time:

> Peristaltic Y." LOPE

Pump Type/Model: Tubing Material:

17.5

Total Depth (ft)1: Depth to Water (ft):

Well ID: MW -14

2821

Sample Purge Rate (L/min)³: NA

Sample ID: MW - 14(-2010 1019-01

ΝS ₹2 * QA/QC Collected? QA/QC I.D.

Start/Stop Purge Time: 08:30 | 8905

Pump Intake Depth (ft):

Purge Rate (L/min)²: 0.25

Total Purge Volume (L):

d = well diameter (inches) h = length of water column (feet)

37.5

Well Volume (gal) = 0.041d²h:___ Well Diameter (in):

Laboratory Analyses: VOC 5 (See Chain

U pump head discharge (Inorganics including cyanide)

songe volume Er accorded

* Reallolate

Bailer (only used if necessary) uscuum jug (SVOCs) ☐ Bladder pump = pump Sampling Method (check all that apply): Losoda straw (VOCs) Well Condition: 560d

	weather/etc3	200								9								
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	woter cloudy, no color somethe cate	2.0							Stabilization reached sampled								
e (all analytes)	H,O Depth	10,61	10061	13.01	12.01	13,01	13.01	13.01	13,01								Charle make	below)*
! Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Steen	1.25	3.8	2.75	N, O,	6.25	7.50	8.25								Franchis	below)*
☐ Bladder pump	Turbidity	06	20	20		23.	2,0	0.1	0.5									44- 107- or
-	ORP (mV)	4.74	127.9	101.1	95.5	97.3	506	85.8	823								Vm 01-/+	below)"
	Hq (US)	4.89	4.15	3.47	40.4	3.96	4.09	4.13	4.29								,	0.1 unit
	DO (mg/L)	3.57	1.55	1.25	30.1	1.03	10.	1.03	E0.1								+/- 10%.	pelow)
	Spec. Cond. (mS/cm)	0.020	0.020	0.019	6,0,9	6.00	6.0.0	910.0	6,0,0								4	Criteria 1"C 3" below] 0.1 unit below" <
	Temp.		19.65	19.97	20.0H	20.12	Soils	20,17	30,08								*	1,0
	Time	0 695	0835	0840	5480	0520	Sale Ditte	606	3060								Stabilizine	Criteria

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Sampling Date: 10 - 18 - 10.	Sample Collection Time: 6920	Sample Purge Rate (L/min) ³ : N-A	Sample 10: MW - 38 - 2010 10 18 - 01 6	QA/IDC Collected? YeS	DO SO SO SO SO SO SO SO SO SO SO SO SO SO	Laboratory Analyses: VOC 5) Upump head discharge (Inorganics including cyanide)
Project No.: 0 2 0.3	Pump Type-Model: Peristalthe	X4" LOPE	30,	Start/Stop Purge Time: 6850 / 6975	0.1	3.5	Goda straw (VOCs)
Williamson. Dickie		35 Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min)²:	et) Total Purge Volume (L):	Sampling Method (check all that apply): Theoda straw (VOCs)
ERM CHENT WILLIAM STELLOCATION: CELLEGE	Well 10: MW - 38	Total Depth (ft): 38	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = $0.041 d^2 h$:	d = well diameter (inches) h = length of water column (feet)	Well Condition: ACOCA

☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	Water clear, no oder 0.3 ml/min		7			Sample collected 0520									
e (all analytes)	H ₂ O Depth	15.50	15,55	15.51	15.59	15.60										(see note below)*
Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Start	1,5	2.0	2.5	3.0										(see note below)*
☐ Bladder pump	Turbidity (NTUs)	0.95	0.95	0.95	500	960										*/- 10% or <10 NTUs
	ORP (mV)	224.3	219.2		213,9	205.4	A.					(6				+/- 10 mV (sec note below)*
	Hd (US)	3.15	106.4	4.70	4.62	19.4										++ 0.1 unit
	DO (mg/L)	3.37	2.1%	3.06	1.83	1.78										+t-10% (see note below)?
	Spec. Cond. (mS/cm)	0.023	0.018	810.0	810.0	10.0										44-
	Temp.	14.74	19.61	19.68	19.69	-										+/+ 1°C
	Time	0880	0855	-	5030	0110										Stabilizing Criteria*

(i) - Praguzate to be 05 from or less.

(i) - Stapping et to be 27 from or less.

(ii) - Stapping et to be 27 from or less.

(ii) - Stapping et to be 27 from or less.

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(iii) - Stapping en entre base or have mast recent exercente menaterents.

(ii) - Stapping en entre base or have mast recent exercente menaterents.

(iii) - Stapping en entre base or have mast recent exercente menaterents.

(iii) - Stapping en entre base of proposition of the Carlo of the

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Sampling Date: 10 · 18 - 10 Sampler's Name: Charle fite Clark	Sample Collection Time: 162.5	Sample 10: 19W - 36 4 - 20 10 18		Laboratory Analyses: VCK-5 Dett (hours)	SVOCs) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	lowered port 10th emoting flow cell				lowered care					Collected Semply @ 1025	203						
63					☐ vacuum jug (SVOCs)	ge (all analytes)	H ₂ O Depth	15.50	15.80	18.81	15.81	15.82	18.81	15.81	15.8/	18.81								
Project No.: 0/2//03	Pristaltic Yu" LOPE	77,		5	VOCs)	☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Start	1.0	1.5	u Ó	3.5	2.75	3,00	3,35	3,50								
Project No.:	Peris Yy	197, CH	0 1	3.5	Soda straw (☐ Bladder pum	Turbidity	017	33	30	20	15	8/	12	10	9.5								
	Pump Type/Model: Tubing Material:	Pump Intake Depth (ft): Start/Stop Puma Time	Purge Rate (L/min) ² :	Fotal Purge Volume (L):	k all that apply):		ORP (mV)	187.3	189.0	189.1	189.5	189.0	185.3	189,5	184.2	1925								
Rack, GA	. Pa	Pump I	Purg	Total Pu	Sampling Method (check all that apply): 🖼 Soda straw (VOCs)		Hq (US)	5.57	6.45	6.46	6.47	94.5	6.44	6.46	6.43	6.43								
Rack	38 A			eet)	Samp		DO (mg/L)	38.8	€8.0	0.67	14.0	6.23	0.24	0.25	021	0,19								
College	MW -	15,32	6	of water column (Spec, Cond. (mS/cm)	350.0	0,537	0,580	0.593	600,0	063	6.624	0.675	0.626								
Client: Site/Location:	Well ID: Total Depth (tt) ¹ :	Depth to Water (ft):	Well Volume (gal) = 0,041d²h;	ches) h = length	3000)	Temp.	19.03	20.62	30.58			36.39	3038	76,06	20.23								
ERM	-	Dei	Well Volume	d = well diameter (inches) h = langth of water column (feet)	Well Condition:		Time	0530	0535	0340	2460	0550	0955	1000	5001	1010								
				U			$\overline{}$			_	_	$\overline{}$	-	_		-	_	_			-	$\overline{}$	_	_

(see note below)*

(see note below)*

+/- 10% or <10 NTUs

+/- 10 mV (see note below)*

+/- 10% (see note below)?

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Sampling Date: 10 - 12 - 10 Sampler's Name: Chark	Sample Collection Time: 430 (1/30		QA/QC Collected? A/e	QA/QCI,D. NA	Laboratory Analyses: VOCS * ORG. Chain) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
1) CK i.e. Project No.: 6/2/103	Pump Type/Model: $\overline{Q_{PC}}$, $> + c \sqrt{+c}$	K-17' 6.5	Start/Stop Purge Time: 10 45 / 1110	Purge Rate (L/min) ² : 6,2	Total Purge Volume (L):	Sampling Method (check all that apply): A soda straw (VOCs)	☐ Biadder pump = pump discharge (all analytes)
ERM client (1) illiamson Dickie stelloozion: College Park, Cy	Well ID: MUJ 3	Depth to Water (tt): 15.09	Well Diameter (in):	Well Volume (gal) = 0.041d²h:	= well diameter (inches) h = length of water column (feet)	Well Condition: accd	

☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/retc.)	water 17ht brown, cloudy, turbid	Gen without purse cleared up after	0					Stable Sample collected @ 1120									
je (all analytes)	H ₂ O Depth	15.2		15.31	15.28	15.25	15.35	57.51	3								(see note	below)*
= pump discharg	Purge Volume (L)	Stut		8	3	4	5	7	9								(See note	below)*
Ē	Turbidity (NTUs)	28		12/	8,8	8.7	4.0	1.0									+/- 10% or	<10 NTUs
	ORP (mV)	133,3		89,5	80.7	77.7	78.7	1.66									++- 10 mV (see note	below)"
	hd (SU)	573		5.39	5.38	5.31	5.25	5.17									*	0.1 unit
	DO (mg/L)	5.38		P.0.0	45.0	44.0	6.4.2	0.40		1.							+/- 10% (see note	pelow)
	Spec. Cond. (mS/cm)	6.15Y		6,103	0.102	(A.101	0.100	0,099									*	3%
	Temp.	53.15		73.61	10.	50.00	לכינג										*	1°C
	Time	1045	550	1050	1055	1100	105	0111									Stabilizing	Criteria
			Dompeo Y51	720 0012											1,		ю	

Sampling Date: $\frac{7O-78-1}{Cho_{r}}$ (2 the $2h_{r}$ length of $2h_{r}$ length $2h_{r}$ lengt	Sample Collection Time: 1320	Sample Purge Rate (L/min) ³ :	Sample ID: MW-33 - 2 C, 0 (0 (% - 0)	QA/QC Collected? $\lambda \epsilon$	ONOC ID, N.A	Laboratory Analyses: VOC'S (620 C) (QLIN)	SVOCs) Upump head discharge (Inorganics including cyanide)	
Sickle Project No.: 6121 1 03	Pump Type/Model: Ter/5 tel/th	Tubing Material: ゲゲートのグ	Pump Intake Depth (ft):	Start/Stop Purge Time: 1940/1905	Purge Rate (L/min) ² : O , A	Total Purge Volume (L):	Sampling Method (check all that apply): 🗗 Soda straw (VOCs)	(analysis and positive and analysis analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis and analysis analysis analysis analysis analysis analysis analysis a
ERM Clent: Williamsen-Dickie Shelocation: College Park, GA	Well ID: MW-33	Total Depth (ft) : 33	Depth to Water (ft): 25.50	Well Diameter (in):	Well Volume (gal) = 0,041d ² h:	= well diameter (inches) h = length of water column (feet)	Well Condition:	

											Ī							
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	Lyche Chody O.2 mila		water clear				well stuble collected samoles po	1320									
je (all analytes)	H ₂ O Depth (ft)	26.0	26.C	260	26.0	0.98	26.0											below)*
☐ Biadder pump = pump discharge (all analytes)	Purge Volume	おけ	0.7	0.0	0.0		0										. Section 2	below)*
☐ Bladder pump	Turbidity	(30)		4.1	1.6	0.1	1-1										-	44- 10% or
İ	ORP (mV)	1202	101.1	5 811	130.4	1310	130.0										+4-10 mV	below)" 0.1 unit below)"
	PH (SU)	6.31	4.31	3.58	3,74	3.34	333)										0.1 unit
	DO (mg/L)	15.14	14.5	572	5.65	5,53	5.71										+/-10%	pelow)
	Spec. Cond. (mS/cm)	6.037	0,000		0.039	0.038	0.438										5	3%
	Temp.	21.50	19.50	19.57	19.51	19,50	19.57										1/4	1,0
	Time	ch8/	(345	1350	1255	1300	1305										Stabilizing	Criteria* 1°C 3%

Parge rate measure depth is believe if well until stop purply, and simpling to reduce resuspending free that may be resting on the well bodons.
 Sampling art to be 25 years.
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ERM

Sampling Date: 10-18-70	Sampler's Name: ringlette clark	Sample Collection Time: $I \sim U \sim U$	Sample Purge Rate (L/min) ³ : NJ A	Sample 10: MW-12-2010 10 8-0	QA/QC Collected? NC	GADGID, 174	Laboratory Analyses: VOCS (LARL Chair)	Cs) Upump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
Project No.: 6 (2(/ 6)		Bustaltic	14" LDPE	141	1350/1415	0.0 + 0.2	8.35	Skoda straw (VOCs) □ vacuum jug (SVOCs)	☐ Bladder pump = pump discharge (all analytes)
Williamson Dichie	1016, 614	Pump Type/Model:	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply): 🖂 coda straw (VOCs)	
ERM Client: William	Site/Location: (1/1/5 1/6	Well D: MW-12	Total Depth (ft) ¹ :	Depth to Water (ft): 12.65	Well Diameter (in):	Well Volume (gal) = $0.041 d^2 h$:	d = well diameter (inches) h = length of water column (feet)	Well Condition:	

re Temp.	Spec. Cond. (mS/cm)	DO (mg/L)	ht (SU)	(mV)	Turbidity	Purge Volume (L)	H ₂ O Depth	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
				i Q				
50 0553110	3 0.039	0.05	4.87	01.1	63	5+2-4	13.65	Courty P. Withel Duras
35.	- Fo							
355 21.67	0.037	3.76	4.89	107.6	27	7.5	12-21	clear rute 0.3 my min
400 21.70	0.036	086	4.35	87. b	25	3.0	12.84	
405 B1.52	0.036	14.0	D. 6	157,5	23	4.35	12.89	11/20 00 odor 0.25 21/m.
410 31.55	0.036	0,3%	1.85	1539	25	5.25		low of 0.2
405 A1, SD	0,036	0, 43	1.52	1477	26			
410 21.52	O.036	0.40	7.85	146.7	ũ	7.25	12.79	
415 21.68	950.0	Ø.Ч/	1.82	9.44.1	1.6	8.25	12.79	
<u> </u>								Stable Collected Sample 1420
Stabilizing +/- Criteria* 1*C	\$ 8 5	+/- 10% (see note below)*	+/- 0.1 unit	+/-10 mV (see note below)*	+/- 10% or	(see note	(see note	
noc on undap a	til after purging and sam	pling to enduce avangered	oding fines that may be	may be resume on the well had	Total	, and a	Carona Carona	

Client: Williamson Dickic

ERM

College Park, GA

Site/Location:

Project No.: 4058C

801210B

10-15-10 C. Clark Sampling Date: Sampler's Name:

1415

Sample Collection Time:	Sample Purge Rate (L/min) ³ : N.A	Sample ID: MW -35 - 2010[015 0	QA/QC Collected? \\\ \\ \\ \\ \\	ON/OCLD. /(M)	Laboratory Analyses: VOCS 9260	s) Upump head discharge (Inorganics including cyanide)
Pump Type/Model: P2019ta/fil		27'	1830/1355	0.1	000	Svocs) accuum jug (SVOCs)
Pump Type/Model:	Tubing Material:	7. / 2 Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min)²:	Total Purge Volume (L):	Sampling Method (check all Ihat apply): Uedda straw (VOCs)
Well 10: MW-35	Total Depth (ft)!: 74	Depth to Water (It): 1925 19.12	Well Diameter (in):	Well Volume (gal) = 0,041d ² h:	d = well diameter (inches) h = length of water column (feet)	Well Condition:

Dedda straw (VOCs)	Sampling Method (check all that apply): Qedda straw (VOCs) Diadder pump = pum Diadder pump = pum Sub ORP Turbidity Pump W.12 SH ORP ORP Sub ORP W.12 SH ORP ORP ORP ORP W.12 SH ORP ORP ORP W.12 SH ORP ORP ORP W.12 SH ORP ORP W.12 SH ORP ORP W.12 SH ORP ORP W.12 SH ORP ORP W.13 W.14 ORP W.14 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15 W.15	Samy (ms/tu) (mg/tu) (0.53) (0.53)	Well Condition: Temp. Spr (**) 23、73、 33、79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)	21.					Stabilization reached somple time 1415									
H,O Depth	P1 25 19	19.10	19.10	19,10	01.51										(see note below)*
Purge Volume (L)	Start	s,	1.0	1.5	2.0										(see note below)*
Turbidity (NTUs)	18		6.7	1.4	0.1										+/- 10% or <10 NTUs
ORP (mV)	0, T, 0	7 45	53.	537	57.9										+/- 10 mV (see note below)*
Hq (US)	でしか	4.68	4.65	4,63	4 53										+/+ 0.1 smit
DO (mg/L)	0.53	V. 74-5	36	27	12.0	A									+/- 10% (see note below)?
Spec. Cond. (mS/cm)	750.0			00.00											***
Temp.	33,30	-		100	23 75										
Time	1330						ます								Stabilizing Criteria*

ERM

6011210

Sampler's Name: Clark Sampling Date:

Sample Collection Time:

οN Sample ID: MW QA/QC Collected? Sample Purge Rate (L/min)³:

Laboratory Analyses: VOCS

NA

☐ pump head discharge (Inorganics including cyanide)

Project No.: 1605 W.C. Groot

M. LOPE 1350/1310 Pump Type/Model: Peristal hic 6.0 Tubing Material: Pump Intake Depth (ft): Start/Stop Purge Time: Purge Rate (L/min)²: Total Purge Volume (L):___ Site/Location: Callete P. K & A Client Williamson Didite

Well ID: MW -354

Total Depth (ft) : Depth to Water (ft): Well Diameter (in):

uscoum jug (SVOCs) ☐ Bladder pump = pump discharge (all analytes) Sampling Method (check all that apply): ID soda straw (VOCs)

d = well diameter (inches) h = length of water column (feet)

Well Condition: Good

☐ Bailer (only used if necessary)

				_	_			_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	yaterclear, no odor						Samole Fine 1330								-13									
ge (all analytes)	H ₂ O Depth (ft)	19.29	19,33	19.43	19,50	19.95																			(see note below)*
☐ Bladder pump = pump discharge (all analytes)	Purge Volume (L)	Stirt	1.0	3.0	3.0	1,0																			(see note below)*
☐ Bladder pump	Turbidity	14.8	1.39	1.97	1.51	1.25	8.0																	100000000000000000000000000000000000000	+/- 10% or <10 NTUs
	ORP (mV)	84, 8	63.5	65.7	1 ho)	4.89																		Vm 01-/+	(see note below)*
	Hd (SU)	5.03	5.34	4,52	i, 69																				+/- 0.1 unit
	DO (mg/L)	526	4.14	3.93	3.85	4	4.05																	+/- 10%	below)
	Spec. Cond. (mS/cm)	540.0	0.043	5.043	C+0.0	0.042																			* %
	Temp.	23.74		W. C.C.	_	1	-																		
	Time	1350	1255	/300	1305														, t			4		A STATISTICAL AND A STATISTICA	Stabilizing +/- Criteria 1°C

(II) - Do not measure depth to beliation of well will have purpose and sampling to reduce resuspending fines that may be resting on the well beliation.

(I) - Singer in the bold 5 pin or less.

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(I) - ORP is not a stabilization retrievin for the Coundriester sampling SESS standard Operating Fineston.

0121103

Project No. 100590

OHEN: Williamsen - Dirkie

Site/Location:

MW-297

Well ID:

35 12.00

Total Depth (ft)1:

Depth to Water (ft):

Well Volume (gal) = $0.041d^2h$: Well Diameter (in):

Sampling Date: 16 -15-10

Sampler's Name:

LDPE 名がなんだ これ Pump Type/Model: Tubing Material: Pump Intake Depth (ft):

Sample Purge Rate (Umin)*: NA Sample ID: MW-24R-2010 1015 -01

120 1230

Sample Collection Time:

\$ Laboratory Analyses: VCS QA/QC Collected? NS QA/QCI,D. (3.15 0 Start/Stop Purge Time: //45/ Purge Rate (L/min)*:0.25 Total Purge Volume (L):

. COUNTY				Delice of the property of the		A DOOR OF THE PARTY OF THE PART	2000		
well collulion.	283			Carle of the control	Code min in a				
							Andrew discharge	toophood in or	Bailar (only used if persecent)
						T placer purit	piagner britis = britis niscilarde (a	ge (all allalytes)	Dalles (cit) date (cit)
1.00	The same	Cure Court	5	75"	OND	Torkidite	Pure Volume	H.O Deoth	otes (Water clarity, odor, burge rate, issues with pump/well/weather/etc.)
200	CHID.	Spec Cond.	3		777			-	

Notes (Water darity, odor, punge rate, issues with pump/well/weather/etc.)	e350 werelecting oder, browder	is! " lawared purge rate 0,2	a))						Sam de cullected P. 1250							
H ₂ O Depth	12.65	13,52	14.28	14.20	14.25	14.27	14.27	70 97								(see note below)*
Purge Volume (L)	Stear		2	3	h	'n	9									(See note below)*
Turbidity (NTUs)	3.92	4.01	3.00	1.02	001	1.00	2001	0 H. 1								+/- 10% or
ORP (mV)	68.2	0.8%	67.7	65.6	585	59.7	6.0.3									+/- 10 mV (see note below)*
Hq (SU)	5.16	187	60	4.76	5.19	5.13	5.11									** 44 0.1 umit
DO (mg/L)	2.5		1.97	1.22	6.39	0.35	. ic. o	8								+/- 10% (see note helow)?
Spec Cond. (mS/cm)	P.C J.O	1500	0.030	0.030	160.0	160.0	260.0									* #
Temp.	33.510			-		H17. 1.2	21.39									\$ \$
Time	1145			(200)	1205											Stabilizing

Project No

ລ			
	1	K	
	1	Ĭ	
	3	\$	1

Sampling Date: 10 - 15 --1C Sampler's Name: C. Charle

Client: Williamson Dicking

Site/Location:

Pensita (+)C

Pump Type/Model:

Well D. MW-36

Total Depth (ft) :_

Start/Stop Purge Time: 1050 / 11 15 6

Pump Intake Depth (ft):

11.5

Purge Rate (L/min)²:

Well Volume (gal) = 0.041d²h:

Well Diameter (in): Depth to Water (ft):

Sample 10: MW-36-2001015-01

Sample Purge Rate (L/min)³:

Sample Collection Time:

QA/QC LD.

QA/QCI.D.

1130

S. S.

pump head discharge (Inorganics including cyanide) Laboratory Analyses: 100 / 826 C uscuum jug (SVOCs) Sampling Method (check all that apply): Er soda straw (VOCs) Total Purge Volume (L): d = well diameter (inches) h = length of water column (feet) Well Condition: Apoch

ss) Bailer (only used if necessary)	Notes (Water darity, odor, purge rate, issues with pump/w
ie (all analytes)	H ₂ O Depth
oumo = pumo discharo	Purge Volume (L)
adder	Turbidity
	ORP (mV)
	Hq (SU)
-	DO (mg/L)
	Spec. Cond. (mS/cm)
}	Temp.

Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	witer (100,000 odor	6.3 allen				3	Jame 10 time 1,30								
H ₂ O Depth	11.51	18.58	11,59	11.60	11.68	1971									(see note
Purge Volume	Stant	1.0	3.0	3,0	4.0	5.0									(see note
Turbidity	P1. 4	2.26	7.1	1,64	1.40	1.25									*/- 10% or
ORP (mV)	50.7	52.1	55. i	57.4	61.2	63.8									+/- 10 mV (sec note below)*
Hq (SU)	49.4	4,49	_		4.75	4.19									*/* 0.1 unit
DO (mg/L)	180	0.73	76 0.59	0.31	0.27	12.3									+/- 10% (see note below)*
Spec. Cond. (mS/cm)	0,080	2	0.000	0,065	0.065										\$ K
Temp.	81.03		_		1.2	20.05									*** 11,C
Time	1050														Stabilizing Criteria ⁵

						purg ret		•	2011	\$	X	4								
65 Sampling Date: 10-75-10. Sampler's Name: 2. Clork	Sample Collection Time: 1035 Sample Purge Rate (L/min) ³ : NA	QA/QC Collected? N B QA/QC LD. IN A	Laboratory Analyses: VOC 5 (See choin)		☐ Bailer (only used if necessary) Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	, water clear, thursd	heart of to a		Afisinal particles visible, nor	1000 red 168 to 6:55		Tucked, to still byok from	200	<i>d</i> :	1035 10/16-15 Samole	1 1				
4017107				U vacuum jug (SVOCs)	H,O Depth	11.20	77.7	11.60	11.50	11.77		134	1,25						open only	isee note
78577	*17	1 1015		/OCs)	Bladder pump = pump discharge (all analytes) Turbidity Purge Volume H ₂ O Depth (NTUs) III)	Start	5,0	1.50	000	17/4	475	4.75	5,00						of the state	isce note
Project No.:	200 22	0.20	20	Sampling Method (check all that apply): [4] soda straw (VOCs)	Eladder pump	-	26.5	29.5	27.4	20.7	76.7	265	25.1		0	1				+/- 10 - 01
	Pump Type/Modet: Tubing Material: Pump Intake Depth (#):	Start/Stop Purge Time:	Total Purge Volume (L):	k all that apply):	ORP (mV)		27.0	27.6	28.8	140	23.2	23.5	32.5						V# 01-/+	Dec note
SA SA	Pun	Start/Si Purg	Total Pu	ng Method (chec	hd (US)	5.96	559			7 67	5.03	16.5	5.91							-/+
Manson - Del	374		el)	Sampli	DO (mg/L)	2.57	0,59	0.39	0.32	0000	1010	0.15	21.0						***************************************	Dec note
3 4	MW 2 50'	٠, 1	of water column (fe		Spec. Cond. (mS/cm)	0.420	0.622		0110		19 610		000						Į,	-/+
Client: Site/Location:	Well ID:	Well Diameter (in): Well Volume (aal) = 0.041 d ² h:	ches) h = length o		Temp.	31.65	21.90	\mathbf{T}	36		31 05	3 8							5	*
ERM	T. Dept	well Volume (a	d = well diameter (inches) h = length of water column (feel)	Well Condition:	Time	0930	0935				0001								1	Stabilizing

Celteria 1°C 3% below? 40 In the bottom is well will altre particula and simplified to reduce consequently fines that may be resting on the well bottom.

(1) - Down measure depth is bottom in seed until after particula and sampling the reduce consequently fines that may be resting on the well bottom.

(3) - Sampling calle to be US from cleas.

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Project No.:

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Ollent: Willtamson - Drokie Site/Location: College Park, CA

ERM

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2110	588
80	2

Sampling Date: 10 - 14 - 10

Sampler's Name: (horlette Clork しょうかん 1510 Sample Collection Time: Sample Purge Rate (L/min)3:

Pump Type/Model: Peristaltic

Well ID: MW -(9

21:10 Š

Total Depth (ft)¹: Depth to Water (ft): Well Diameter (in): Well Volume (gal) = $0.041d^2h$:

Sample ID: MW - 19-20101015 - 0 QA/QC Collected? No

VOC S XX QA/QC LD.

☐ pump head discharge (Inorganics including cyanide)

Laboratory Analyses: Start/Stop Purge Time: +4-12-40 1440/1500 Tubing Material: 1/4" LDPE Sampling Method (check all that apply): 🗗 soda straw (VOCs) Total Purge Volume (L):_ Pump Intake Depth (ft): Purge Rate (L/min)²:

uacuum jug (SVOCs)

d = well diameter (inches) h = length of water column (feet)

Well Condition: 200

☐ Bailer (only used if necessary) ☐ Bladder pump = pump discharge (all analytes)

							_	Г	П	T	Т	Т	1			
Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	Odec					Sample Fine 4520-1612 1510	1 20 Served 1 251.00-									
H ₂ O Depth	21,15	21,78	21.34	21,34	21.34											
Purge Volume (L)	Start) •	5.	0.3	3.											
Turbidity	3,2	1.2	1,49	1.25	(, (S											
ORP (mV)	55.3	53.0	52.8	51.7	533											
Hd (SU)	6.31	41.9	6.14	6.13	6.12											
DO (mg/L)	3.69	5,47	62'0	0.3S	0.22											
Spec. Cond. (mS/cm)		0.073	0.072	120.0	170.0											
Temp.	40.00 OE.12	20.89 0.073	20.70 0.072	20.76	13.05											
Time	7540	1945	1580	1545	0091	_										
	0440	1455	352	1455	000			-	•			1:				

** Stabilizing Criteria⁸

(see note

(see note below)*

+/- 10% or <10 NTUs

+/-10 mV (see note below)*

++ 0.1 unit

+/- 10% (see note below)⁷

* in

(i) - Fings rate to be 4.5 given or iso.

(i) - Standard to the beta 15 given or iso.

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(i) - Standard to the beta 15 given or iso.

(ii) - Standard to the transfer of the transf

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	Z	6	
Z	1	G	3

Oct. 14, 2010 Charlette Clark	(430	MA	Sample ID: MW - 20-2010 10 14-01	No	NA	VOCS	☐ pump head discharge (Inorganics including cyanide)	ed if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
Sampling Date:	Sample Collection Time:	Sample Purge Rate (L/min) ³ :	Sample ID:	QA/QC Collected?	QA/QC I.D.	Laboratory Analyses: VOCS		☐ Bailer (only used if necessary)	Notes (Water clarity, odor,
0121103	4-					ī	☐ vacuum jug (SVOCs)	ge (all analytes)	H,O Depth
Project No.: De CE	Pump Type/Model: Peristaltic Pump	LDPE	35,	1340 /1415		ن	VOCs)	☐ Bladder pump = pump discharge (all analytes)	Turbidity Purge Volume H ₂ O Depth
Project No.:	Perista	7	-	1340	.O.	7	Soda straw (☐ Bladder pum	Turbidity
	пр Туре/Model:_	Tubing Material:	Pump Intake Depth (ft):	Start/Stop Purge Time:	Purge Rate (L/min) ² :	Total Purge Volume (L):	Sampling Method (check all that apply): [Lesoda straw (VOCs)		ORP
SCK PE	Pul		Pump Ir	Start/SI	Purg	Total Pu	ng Method (chec		Hq
Park, GA	٥		7			a()	Sampli		8
William Coilege T	MW-2	33	23.6	, C	a	of water column (fee			Spec. Cond.
Client: Site/Location:	Well ID:	Total Depth (ft)1:	Depth to Water (ft):	Well Diameter (in):	Well Volume (gal) = 0.041d²h:	nches) h = length	pod)	Temp.
ERM		•	Dei	We	Well Volume (d = well diameter (inches) h = length of water column (feet)	Well Condition:		Time

Notes (Water darity, odor, purge rate, issues with pump/well/weather/etc.)		water clear no oder									Semple time 1430							
H,O Depth	an	33.68	11:00	22.72	22.72	22.72	22.72	22.74	22.74	22.74								(see note
Purge Volume	3	Start	.5,	0.1	1.5	2.0	5.8	3.0	3.5	0.4								(see note
Turbidity		3.81	3.50	A.54	1.87	1.84	1.S2	1.07	1.25	- 08								+/- 10% or
ORP	(mx)	1.09.	75.5	762	78.3	80.8	27.9	747	72.4	£67	9							+/- 10 mV (see note below)*
Hq	(30)	4.2(0	10,0	5 48	Lh'5	4.49	5.54	5.56	5.55	5.83								#+ 0.1 unit
8	(mg/r)	The state of	1.0.1	990		65.0	6.83			0.28								4/- 10% See note helow)
Spec. Cond.	(ms/cm)	11.0	0.110	111:00	0.11				0	0.149								‡ £
Temp.	0	29.35	22.20	22.04	20.55	T8.18	21.98	-	63	21.95			>					++
Time		1340	1345	1350			_		1415									Stabilizing

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Col. 120 Sec

0108-11-01

Sampling Date:

Sampler's Name: Charlette Clark

Sample Collection Time: 30

Sample Purge Rate (L/min)³:

Ollent: Williamson Dickie

ERM

College Park

Peristaltic

Pump Type/Model:

Well ID: MW-25

Total Depth (ft): - 34 34 Depth to Water (ft): - みちゃつ

Well Diameter (in): Well Volume (gal) = 0.041d²h: d = well diameter (inches) h = length of water column (feet)

Well Condition: 400 d

1305 1230 1

THE LEPPE Tubing Material: Pump Intake Depth (ft):

Sample ID: MW-25 - 2010 10 15-01

47

ON

QA/QC Collected? OA/QC I.D.

Start/Stop Purge Time: Total Purge Volume (L): Purge Rate (L/min)²:

Laboratory Analyses:

VOCS

☐ pump head discharge (Inorganics including cyanide)

uacuum jug (SVOCs) Sampling Method (check all Ihat apply): Soda straw (VOCs)

DO PH (m/v)	Turbidity (NTUS)	np = pump discharge (all analytes) Purge Volume H ₂ O Depth. (L) (ft)	is) Laster clarity, odor, purge rate, issue
-------------	------------------	--	---

Notes (Water clarity, odor, purge rate, issues with pump/wel	water clair, no oder								Sample tine 1310	-			
H ₂ O Depth (ft)	27.04	27,12	27.12	27.13	27.13	27.15	27.13	27.13					
Purge Volume H ₂ O Depth	Start	1.00	- 1	3	7	D	9	1					
Turbidity	41.1	39.8	32.4	10.4	2.1	1-1	0.1	1.0	7				
ORP (mV)	316.6	327.5	330.1	358.3	361.3	3658	108.1	103.3					
Hd (DS)	5.24	51.7		5.20 358.3	85.4	10.5							
DO (mg/L)	9.08			777 8	25. 95	10.5 01.8	1.75 5.01	1.11					
Spec. Cond. (mS/cm)	4000 H	9 0 038 8.94	0.040.0	0 639 8 44	S 0 65A		150.034	520.076					
Temp.	48.86	23.69	22.79	43.88		2456	3h, X	375					
Time	pet	1335	0461	1945	1350	12855	1300	1305					
	1220	200		-									

+/- 10% or <10 NTUs +/- 10 mV (see note below)* +/-0.1 unit +/- 10% (see note below)⁷ 幸龄 ‡°C Stabilizing Criteria

(see note below)*

(see note below)*

(i) - Funge rate to be 05 from oxive.

(b) - Stripping gate to be 07 from to the company of the

(in

SERM ERM

Sampler's Name: Charlette Clark	Sample Collection Time: 1155	Sample ID: MW -9 - 20(0)02 (-6	QA/OC Collected? /\lambda \in \lambda \in	Laboratory Analyses: (10C.5 Care C.O.C.)		
Project No. 60 i 21 03	Pump Type/Model: Peri Stalfic Tubing Material: 1/4" 1/20/2		1130 (1150 6.9	6.7	Leoda straw (VOCs) avacuum jug (SVOCs)	Pladder prime = prime disoboses (all appliant)
Dickie Bark, GA	Pump Type/Model:	Pump Intake Depth (ft):	Start/Stop Purge Time: 1130 Purge Rate (L/min) ² : 0, 3	Total Purge Volume (L):	Sampling Method (check all that apply): Lebda straw (VOCs)	
RM Client: Williamson Dickie Site Location: College Park, CaA	Well ID: MW-9 Total Depth (ft):	Depth to Water (ft):	Well Diameter (in): Well Volume (gal) = 0.041d ² n:	well diameter (inches) h = length of water column (feet)	Well Condition: Good (negolator)	>

		- - -	C (ec.)														
L Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	03 11m3 : [m 10.4 cots to 0.7	Shart odo				Collector Sample										
ge (all analytes)	H ₂ O Depth	13,45	13.47	13,51	13,57	13.60										(see note	-
Hadder pump = pump discharge (all analytes)	Purge Volume (L)	state	0,1	200	3.0	0'}										(See note	
☐ Bladder pum	Turbidity (NTUs)	300	0,1	1 COR	1,5	6.1										+f- 10% or	
	OKP (mV)	-51.9	2,001 -	- 143.9	-1732	-157.6										+/- 10 mV (see note	
	Hd Hd	5,5	5.54	5.57	5.55	5.50										++	
	DO (mg/L)	1.6.0	18.0	0,47	0.37	0.3]										+/- 10% (see note	
	Spec. Cond. (mS/cm)	151.0	0.138	0.138	6.139	0.139										*	
	Temp.	31.01	21.34	34		21.35										\$	
	Time	1130	1135	0,4	1145	1150										Stabilizing	2000

Sampling Date: [6-21-2010	Sampler's Name: Chorlette Clark	1255 inc.	min) ³ : NA	Sample ID: MW-37-2010 10 21 -01	No No	ONDCI.D. NA	Wyses: VOCs (see chair)	D pump head discharge (Inorganics including cyanide)	☐ Bailer (only used if necessary)
Sampline	Sampler's	Sample Collection Time:	Sample Purge Rate (L/min) ³ :	Sam	QA/QC Collected?	OAC	Laboratory Analyses:		
Project No.: 60 1 21103		o'stalkic	LDPE		20/1250	<i>.</i> Ł.	6.25	raw (VOCs)	☐ Bladder pump = pump discharge (all analytes)
7	HA.	Pump Type/Model: Peristalkic	Tubing Material: 1/4 " LDPE	Pump Intake Depth (ft): 35	Start/Stop Purge Time: 1820/1950	Purge Rate (L/min) ² : O . A	Total Purge Volume (L):	Sampling Method (check all that apply): In Soda straw (VOCs)	☐ Bladde
M Client Williamson Dickic	Site/Location: College Pork, En A	Well ID: MW -37	Total Depth (ft)!:	Depth to Water (ft): 10,47	Well Diameter (in):	ell Volume (gal) = 0.041d²h:	diameter (inches) h = length of water column (feet)	Condition: 4660	

		_	1	_	Т	1	_	_	1	_	1	1	_	_	_	_	1	_	_	_	_	
☐ Baller (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	water Clear and actor a sensi	0	2		Time of the property of																
ge (all analytes)	H ₂ O Depth	11.04	10.95	1 00	200		-	7 50														,
□ biacuer pump = pump discharge (all analytes)	Purge Volume	Start	1,25	×.	270	7 35	5.75	6.39												*		freemote
□ piaoder pum	Turbidity (NTUs)	1.3	4	10	8.6	67	7.2	16.0														1000
	ORP (mV)	36.9	23.5	36.3	36.7	24.8	20.1	19.1														4/- 10 mV
	(AS)	6.13	6.01	5.8%	5.86	200	5.93	5.93														*
	DO (mg/L)	1,51	0.45	0.36			41.0	0.15														+/- 10% (see note
	Spec. Cond. (mS/cm)	6.489	0.493	6,493	164.0	6.497	8640	0.499	000													‡
	remp.	23.30	22.68	22.43	-		31.85	28.18														4
	Time	330	325	330	235	0,40	245	350														abilizing

ERM

	00-10 CA	Sampling Date:
SherLocation: College Park, GA	66	Sampler's Name:

0.2 L/min Pump Type/Model: Pc. stalttC Sampling Method (check all that apply): Soda straw (VOCs) Tubing Material: 14 (2) Start/Stop Purge Time: Pump Intake Depth (ft): Total Purge Volume (L): Purge Rate (L/min)²: Well ID: MW -38R

 $\sigma = \text{well diameter (inches) h} = \text{length of water column (feet)}$ Well Volume (gal) = 0.041d²h: **5007**

Pool

Well Condition:

Well Diameter (in):

Total Depth (ff)1: Depth to Water (ft):

Sample ID: MW - 28R - 2010 10-21-01 Charlette Chart Laboratory Analyses: VOC5 Cace Chair 0100-12-01 1355 QA/QC Collected? 100 DAVOCI.D. NA Sample Collection Time: Sample Purge Rate (L/min)³:

☐ pump head discharge (Inorganics including cyanide) uacuum jug (SVOCs)

	Jan Cachatta	Jes, W		reduce poor file		SUSpended	7											
☐ Bailer (only used if necessary)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)	-3 p/m/d - "c	5.35 Water Clouder, vows Floren land	olids observed	no throu	Wicher still Places lant. Whire particles	reduced Dury rate to 0,5	weter clearer Mat as Flocular			Sample collected 1355)						
e (all analytes)	H ₂ O Depth (ft)		15.35	16.40	17.4	19.3	18,5	18.75	14.81	18.78								(see note
= pump discharg	Purge Volume (L)	A STATE	Start	0.1	0.0	0	7.0	4,5	N.	5.5								See note
Ē	Turbidity		150	29	00	45	30	25	الأ	2								+f- 10% or
	ORP (mV)	1516	110.1	73.7	67,3	623	4.0%	165	58.7	58.3								+/- 10 mV (see note
	Hđ (US)	5.51	4.46	4.36	4.33	4.29	4.27	H.27	12.4	4.26								++
	DO (mg/L)	1150	3.17	0,48	0.25	0.15)).0	01.0	0.10	01.0								+/- 10% (see note
	Spec. Cond. (mS/cm)	6-(3)	0.433	0424	124.0	0.720	0.428	1997	0.498	0.499								*
0	Temp.	78.16	1. K	2000	20.60	30.53	Cross	30.49							100			‡
	Time	QC.	13/5	13 30	1335	330	325	1340	5461	1350								Stabilizing

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(1) - Start lines at the bed Spense is.

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ANALYTICAL ENVIRONMENTAL SERVICES, INC.



October 28, 2010

Shanna Thompson ERM-Southeast 300 Chastain Center Blvd, Suite 375 Kennesaw GA 30144

TEL: (770) 590-8383 FAX: (770) 590-9164

RE: Williamson Dickie

Dear Shanna Thompson:

Order No: 1010J94

Analytical Environmental Services, Inc. received for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

- -NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/10-06/30/11.
- -AIHA Certification ID #100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/11.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Brian Rohr

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

3785 Presidential Parkway, Atlanta GA 30340-3704

CHAIN OF CUSTODY

110001 BÉ 10 (07 94 Work Order:

10/23/10

oţ Page Date: 10-22-18

a 80 ß R h ™ No # of Containers ત ď 7 α d R A a q ≥ Same Day Rush (auth req.) your results, place bottle * Analyze onlyfor to check on the status of www.aesatlanta.com trans 1,2 DCE Ξ Turnaround Time Reques Standard 5 Business Days Fax? Y/N Next Business Day Rush cis - 1,2 oct Visit our website 2 Business Day Rush 1.4 Dioxene Fotal # of Containers orders, etc. PCE/TCE/VC STATE PROGRAM (if any): REMARKS - DCE DATA PACKAGE: Other E-mail? Y/N; 0000 SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT. SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE. Thompson PROJECT INFORMATION ANALYSIS REQUESTED PRESERVATION (See codes) Sullivan D'alu's SEND REPORT TO: She And IF DIFFERENT FROM ABOVE) SITE ADDRESS: 24(1 Williamson PROJECT NAME: INVOICE TO PROJECT #: DOOTE # 至 £0928 Ψ φ 4 4 4 φ 6 ሖ 6 3 'n 3 4 DATE/TIME 2 (See codes) 3 5.0 Matrix FedEx UPS MAIL COURIER Composite 300 Chastain Center Blad SHIPMENT METHOD Kennesaw GA 30144 VIA ¥ ¥ Grab × CREYHOUND OTHER FAX: 770-590-9164 Y X no extellar 1430 1593708 1330 1200/ 1230 cc 1310 10-18-10 0920 1420 130 1330 1415 3601 013101 1025 10-8-10 1120 TIME SAMPLED LIEN 10-15-0 01-81-01 10-18-10 10-18-10 10-18-10 RECEIVED 10-5-10 01-51-01 10-14-01 10-15-10 SIGNATURE: Ste DATE OUT Z Jun 20-22-10 92 SPECIAL INSTRUCTIONS/COMMENTS: 13td compounds DATE/TIME - 20 10 1018 - 01 -20101018-01 20101018-01 MW-378-20101015-0 MW-35A-26101015-01 MW-36-20101015-01 MW-38A-201018-01 MW - 35- 20101015-01 MW-38-20101018-61 MW-20-20101014-01 MW-298-20101015-01 MW-25-20101014-01 MW-19-20101014-01 SAMPLE ID HONE, 770- 590-8383 harlotte Chark ERM MW-33 MW-32 MW-12 A06 -ELINQUISHED BY Analyze SAMPLED BY 10 2 of 38

MATRIX CODES: A = Air GW = Groundwater SE = Sequiment SC = Sequiment SC = Sequiment Se W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water GW = Groundwater SE = Sediment SO = Soil SW = Surface Water

ANALYTICAL ENVIRONMENTAL SERVICES, INC

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188 3785 Presidential Parkway, Atlanta GA 30340-3704

CHAIN OF CUSTODY

1010 394 Work Order:

M.D 10123/10

Treat

Date: 10 -22-10

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R W A a 4 No # of Containers a U $|\gamma$ 7 q Ų Y a ≥ Same Day Rush (auth req.) your results, place bottle to check on the status of وم Fax? Y/N II II II www.aesatlanta.com Standard 5 Business Days trans 1,2 DCE Next Business Day Rush 2 Business Day Rush Visit our website Dioxane cis 1,2 DCE Fotal # of Containers つ ヘノコン RECEIP orders, etc. Analyze only STATE PROGRAM (if any): REMARKS - DCE DATA PACKAGE TRIP V Other E-mail? Y/N; Jemp 7, PCE / 0000 SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT. SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE. Shence The mpson college Park, GA PROJECT INFORMATION ANALYSIS REQUESTED PRESERVATION (See codes) SITE ADDRESS: 2411 Sullivanted Williamson Dickie IF DIFFERENT FROM ABOVE) SEND REPORT TO: ROJECT NAME INVOICE TO: QUOTE # 17 4 120028 2 ? 4 N 2 ζ 4 6 2 DATE/TIME (See codes) 1.00 **₹** Matrix UPS MAIL COURIER 300 Chastain Gr. Blud ste 375 Vennesaw 6x 30144 Composite 4915-055-011 SHIPMENT METHOD VIA VIA ታ Grab ۲ OTHER harette llas 1005 0401 P-61-01 0541 01-31-01 5160 5001 30S 1155 1405 0711 079-01 5050 000-01 2021 1255 CLIENT FedEX 2011 GREYHOUND 135 SAMPLED 10-25/10 RECEIVED BY 10-20-10 10-20-10 W- 20 -U 10-21-10 10-21-6 01-05-01 9-61-01 12-51-(c 0-61-01 OUT FAX Z DATE/TIME 000 Juneary 10-22-10 9:26 for the 7 listed compounds MW-28R-20101021-01 MW-10A-20101020-01 MW-10-20101020-01 10-61010102-081-NW MW-37-20101021-01 - 20101020-MW -134-20101019-01 MW-34 -2010101019-01 MW-2 - 20101020 -01 MW-4- 20,101020-01 MW9-20101021-01 770-590-8383 Charlette Clark MW-13-20101019-01 Mw-14-20101019-01 SAMPLE ID PECIAL INSTRUCTIONS/COMMENTS: PR. R 7-906 ELINQUISHED BY MW-I Analyze AMPLED BY: OMPAN 01 3 of 38

WW = Waste Water SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) MATRIX CODES. A = Air

Client: ERM-Southeast
Project: Williamson Dickie

Lab ID: 1010J94

Case Narrative

Date:

2-Nov-10

Sample Receiving Nonconformance:

Sample 1010J94-003A had a collection date of 10/15/2010 listed on the container, while the COC had a collection date of 10/14/2010. The sample was reported according to the Chain of Custody.

A Trip Blank was provided, but not listed on the Chain of Custody. Trip blank analyzed at no cost to the client.

Volatile Organic Compounds Analysis by Method 8260B:

Trichloroethene value for Samples 1010J94-021A and - 025A is "E" qualified, indicating an estimated value over linear calibration range. Sample was diluted and re-analyzed with analyte being below reporting limit due to the level of dilution required for other compounds.

Client:ERM-SoutheastClient Sample ID:MW-20-20101014-01Project:Williamson DickieCollection Date:10/14/2010 2:30:00 PMLab ID:1010J94-001Matrix:Groundwater

Date:

28-Oct-10

Reporting **Dilution** BatchID Analyses Result Qual Units Date Analyzed Analyst **Factor** Limit Volatile Organic Compounds by GC/MS SW8260B (SW5030B) 1,4-Dioxane BRL 150 137147 10/26/2010 13:08 JT BRL JT 137147 Vinyl chloride 2.0 ug/L 10/26/2010 13:08 1,1-Dichloroethene BRL 5.0 ug/L 137147 1 10/26/2010 13:08 JT BRLtrans-1,2-Dichloroethene 5.0 ug/L 137147 1 10/26/2010 13:08 JT cis-1,2-Dichloroethene 400 50 ug/L 137147 10 10/26/2010 21:50 JT 9.7 5.0 137147 JT Trichloroethene ug/L 10/26/2010 13:08 74 5.0 ug/L 137147 1 10/26/2010 13:08 JT Tetrachloroethene Surr: 4-Bromofluorobenzene 80.9 64.7-130 %REC 137147 1 10/26/2010 13:08 JT 80.1 64.7-130 %REC 137147 10 10/26/2010 21:50 JT Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane 104 80.7-129 %REC 137147 1 10/26/2010 13:08 JT 105 %REC 80.7-129 137147 10 10/26/2010 21:50 JT Surr: Dibromofluoromethane Surr: Toluene-d8 89.6 71.1-120 %REC 137147 10/26/2010 13:08 JT 92 137147 71.1-120 %REC 10 10/26/2010 21:50 JT Surr: Toluene-d8

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client:ERM-SoutheastClient Sample ID:MW-19-20101014-01Project:Williamson DickieCollection Date:10/14/2010 3:10:00 PM

Date:

28-Oct-10

Lab ID:1010J94-002Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 13:37	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 13:37	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 13:37	JT
Surr: 4-Bromofluorobenzene	84.2	64.7-130		%REC	137147	1	10/26/2010 13:37	JT
Surr: Dibromofluoromethane	106	80.7-129		%REC	137147	1	10/26/2010 13:37	JT
Surr: Toluene-d8	92.3	71.1-120		%REC	137147	1	10/26/2010 13:37	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client:ERM-SoutheastClient Sample ID:MW-25-20101014-01Project:Williamson DickieCollection Date:10/14/2010 1:10:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-003 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 14:05	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 14:05	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:05	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:05	JT
cis-1,2-Dichloroethene	23	5.0		ug/L	137147	1	10/26/2010 14:05	JT
Trichloroethene	6.2	5.0		ug/L	137147	1	10/26/2010 14:05	JT
Tetrachloroethene	110	5.0		ug/L	137147	1	10/26/2010 14:05	JT
Surr: 4-Bromofluorobenzene	78.9	64.7-130		%REC	137147	1	10/26/2010 14:05	JT
Surr: Dibromofluoromethane	108	80.7-129		%REC	137147	1	10/26/2010 14:05	JT
Surr: Toluene-d8	90.9	71.1-120		%REC	137147	1	10/26/2010 14:05	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

< Less than Result value

Client:ERM-SoutheastClient Sample ID:MW-29R-20101015-01Project:Williamson DickieCollection Date:10/15/2010 12:30:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-004 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B		(SW5030B)						
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 14:34	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 14:34	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 14:34	JT
Surr: 4-Bromofluorobenzene	79.6	64.7-130		%REC	137147	1	10/26/2010 14:34	JT
Surr: Dibromofluoromethane	105	80.7-129		%REC	137147	1	10/26/2010 14:34	JT
Surr: Toluene-d8	91.3	71.1-120		%REC	137147	1	10/26/2010 14:34	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

< Less than Result value

Client:ERM-SoutheastClient Sample ID:MW-35-20101015-01Project:Williamson DickieCollection Date:10/15/2010 2:15:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-005 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SV	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/26/2010 15:03	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/26/2010 15:03	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/26/2010 15:03	JT
Surr: 4-Bromofluorobenzene	81.3	64.7-130		%REC	137147	1	10/26/2010 15:03	JT
Surr: Dibromofluoromethane	107	80.7-129		%REC	137147	1	10/26/2010 15:03	JT
Surr: Toluene-d8	93.7	71.1-120		%REC	137147	1	10/26/2010 15:03	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Less than Result value

Client:ERM-SoutheastClient Sample ID:MW-35A-20101015-01Project:Williamson DickieCollection Date:10/15/2010 1:30:00 PM

Date:

28-Oct-10

Lab ID:1010J94-006Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/M	IS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 12:51	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 12:51	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 12:51	JT
Surr: 4-Bromofluorobenzene	87.5	64.7-130		%REC	137147	1	10/27/2010 12:51	JT
Surr: Dibromofluoromethane	104	80.7-129		%REC	137147	1	10/27/2010 12:51	JT
Surr: Toluene-d8	87.8	71.1-120		%REC	137147	1	10/27/2010 12:51	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-36-20101015-01Project:Williamson DickieCollection Date:10/15/2010 11:30:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-007 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/M	AS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 13:20	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 13:20	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:20	JT
Surr: 4-Bromofluorobenzene	84.9	64.7-130		%REC	137147	1	10/27/2010 13:20	JT
Surr: Dibromofluoromethane	107	80.7-129		%REC	137147	1	10/27/2010 13:20	JT
Surr: Toluene-d8	91.6	71.1-120		%REC	137147	1	10/27/2010 13:20	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-37A-20101015-01Project:Williamson DickieCollection Date:10/15/2010 10:35:00 AM

Date:

28-Oct-10

Lab ID:1010J94-008Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 13:48	JT
Vinyl chloride	2.6	2.0		ug/L	137147	1	10/27/2010 13:48	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
cis-1,2-Dichloroethene	110	5.0		ug/L	137147	1	10/27/2010 13:48	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 13:48	JT
Surr: 4-Bromofluorobenzene	87	64.7-130		%REC	137147	1	10/27/2010 13:48	JT
Surr: Dibromofluoromethane	111	80.7-129		%REC	137147	1	10/27/2010 13:48	JT
Surr: Toluene-d8	91.7	71.1-120		%REC	137147	1	10/27/2010 13:48	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-38-20101018-01Project:Williamson DickieCollection Date:10/18/2010 9:20:00 AM

Date:

28-Oct-10

Lab ID:1010J94-009Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 14:17	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 14:17	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:17	JT
Tetrachloroethene	25	5.0		ug/L	137147	1	10/27/2010 14:17	JT
Surr: 4-Bromofluorobenzene	82.5	64.7-130		%REC	137147	1	10/27/2010 14:17	JT
Surr: Dibromofluoromethane	110	80.7-129		%REC	137147	1	10/27/2010 14:17	JT
Surr: Toluene-d8	93.9	71.1-120		%REC	137147	1	10/27/2010 14:17	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-38A-20101018-01Project:Williamson DickieCollection Date:10/18/2010 10:25:00 AM

Date:

28-Oct-10

Lab ID:1010J94-010Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 18:38	JT
Vinyl chloride	13	2.0		ug/L	137147	1	10/27/2010 18:38	JT
1,1-Dichloroethene	8.6	5.0		ug/L	137147	1	10/27/2010 18:38	JT
trans-1,2-Dichloroethene	5.5	5.0		ug/L	137147	1	10/27/2010 18:38	JT
cis-1,2-Dichloroethene	3800	500		ug/L	137147	100	10/27/2010 12:22	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:38	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:38	JT
Surr: 4-Bromofluorobenzene	82.8	64.7-130		%REC	137147	1	10/27/2010 18:38	JT
Surr: 4-Bromofluorobenzene	83.7	64.7-130		%REC	137147	100	10/27/2010 12:22	JT
Surr: Dibromofluoromethane	108	80.7-129		%REC	137147	100	10/27/2010 12:22	JT
Surr: Dibromofluoromethane	111	80.7-129		%REC	137147	1	10/27/2010 18:38	JT
Surr: Toluene-d8	86.2	71.1-120		%REC	137147	1	10/27/2010 18:38	JT
Surr: Toluene-d8	91.9	71.1-120		%REC	137147	100	10/27/2010 12:22	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-32-20101018-01Project:Williamson DickieCollection Date:10/18/2010 11:20:00 AM

Date:

28-Oct-10

Lab ID:1010J94-011Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 14:45	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 14:45	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:45	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 14:45	JT
cis-1,2-Dichloroethene	20	5.0		ug/L	137147	1	10/27/2010 14:45	JT
Trichloroethene	5.6	5.0		ug/L	137147	1	10/27/2010 14:45	JT
Tetrachloroethene	100	5.0		ug/L	137147	1	10/27/2010 14:45	JT
Surr: 4-Bromofluorobenzene	81.7	64.7-130		%REC	137147	1	10/27/2010 14:45	JT
Surr: Dibromofluoromethane	114	80.7-129		%REC	137147	1	10/27/2010 14:45	JT
Surr: Toluene-d8	91.7	71.1-120		%REC	137147	1	10/27/2010 14:45	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client: ERM-Southeast Client Sample ID: MW-33-20101018-01 **Project: Collection Date:** 10/18/2010 1:20:00 PM Williamson Dickie

Date:

28-Oct-10

Lab ID: 1010J94-012 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 15:14	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 15:14	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
Tetrachloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:14	JT
Surr: 4-Bromofluorobenzene	86.3	64.7-130		%REC	137147	1	10/27/2010 15:14	JT
Surr: Dibromofluoromethane	110	80.7-129		%REC	137147	1	10/27/2010 15:14	JT
Surr: Toluene-d8	90.9	71.1-120		%REC	137147	1	10/27/2010 15:14	JT

Qualifiers:

Value exceeds maximum contaminant level

BRL Below reporting limit

Н Holding times for preparation or analysis exceeded

Analyte not NELAC certified

Analyte detected in the associated method blank

Greater than Result value

E Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-12-20101018-01Project:Williamson DickieCollection Date:10/18/2010 2:20:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-013 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 15:43	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 15:43	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:43	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:43	JT
cis-1,2-Dichloroethene	23	5.0		ug/L	137147	1	10/27/2010 15:43	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 15:43	JT
Tetrachloroethene	22	5.0		ug/L	137147	1	10/27/2010 15:43	JT
Surr: 4-Bromofluorobenzene	80.6	64.7-130		%REC	137147	1	10/27/2010 15:43	JT
Surr: Dibromofluoromethane	110	80.7-129		%REC	137147	1	10/27/2010 15:43	JT
Surr: Toluene-d8	93.6	71.1-120		%REC	137147	1	10/27/2010 15:43	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client: ERM-Southeast Client Sample ID: DUP-1

Project: Williamson Dickie Collection Date: 10/18/2010 12:00:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-014 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 16:11	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 16:11	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 16:11	JT
Tetrachloroethene	26	5.0		ug/L	137147	1	10/27/2010 16:11	JT
Surr: 4-Bromofluorobenzene	83.2	64.7-130		%REC	137147	1	10/27/2010 16:11	JT
Surr: Dibromofluoromethane	115	80.7-129		%REC	137147	1	10/27/2010 16:11	JT
Surr: Toluene-d8	93.9	71.1-120		%REC	137147	1	10/27/2010 16:11	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-14-20101019-01Project:Williamson DickieCollection Date:10/19/2010 9:15:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-015 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137147	1	10/27/2010 18:10	JT
Vinyl chloride	BRL	2.0		ug/L	137147	1	10/27/2010 18:10	JT
1,1-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
Trichloroethene	BRL	5.0		ug/L	137147	1	10/27/2010 18:10	JT
Tetrachloroethene	9.8	5.0		ug/L	137147	1	10/27/2010 18:10	JT
Surr: 4-Bromofluorobenzene	85	64.7-130		%REC	137147	1	10/27/2010 18:10	JT
Surr: Dibromofluoromethane	112	80.7-129		%REC	137147	1	10/27/2010 18:10	JT
Surr: Toluene-d8	94.5	71.1-120		%REC	137147	1	10/27/2010 18:10	JT

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast Client Sample ID: MW-13-20101019-01 **Project: Collection Date:** 10/19/2010 10:05:00 AM Williamson Dickie

Date:

28-Oct-10

Lab ID: 1010J94-016 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	75030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 13:11	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 13:11	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 13:11	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 13:11	GK
cis-1,2-Dichloroethene	6.6	5.0		ug/L	137089	1	10/26/2010 13:11	GK
Trichloroethene	10	5.0		ug/L	137089	1	10/26/2010 13:11	GK
Tetrachloroethene	120	5.0		ug/L	137089	1	10/26/2010 13:11	GK
Surr: 4-Bromofluorobenzene	89.5	64.7-130		%REC	137089	1	10/26/2010 13:11	GK
Surr: Dibromofluoromethane	103	80.7-129		%REC	137089	1	10/26/2010 13:11	GK
Surr: Toluene-d8	97.5	71.1-120		%REC	137089	1	10/26/2010 13:11	GK

Qualifiers:

Value exceeds maximum contaminant level

BRL Below reporting limit

Н Holding times for preparation or analysis exceeded

Analyte not NELAC certified

Analyte detected in the associated method blank

Greater than Result value

E Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-13A-20101019-01Project:Williamson DickieCollection Date:10/19/2010 10:40:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-017 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 16:40	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 16:40	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 16:40	GK
Tetrachloroethene	18	5.0		ug/L	137089	1	10/26/2010 16:40	GK
Surr: 4-Bromofluorobenzene	90.1	64.7-130		%REC	137089	1	10/26/2010 16:40	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	137089	1	10/26/2010 16:40	GK
Surr: Toluene-d8	94.1	71.1-120		%REC	137089	1	10/26/2010 16:40	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-34-20101019-01Project:Williamson DickieCollection Date:10/19/2010 11:40:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-018 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 17:10	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 17:10	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
Tetrachloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 17:10	GK
Surr: 4-Bromofluorobenzene	93.8	64.7-130		%REC	137089	1	10/26/2010 17:10	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	1	10/26/2010 17:10	GK
Surr: Toluene-d8	94.9	71.1-120		%REC	137089	1	10/26/2010 17:10	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-18D-20101019-01Project:Williamson DickieCollection Date:10/19/2010 2:30:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-019 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	75030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 13:39	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 13:39	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 13:39	GK
Tetrachloroethene	17	5.0		ug/L	137089	1	10/27/2010 13:39	GK
Surr: 4-Bromofluorobenzene	94.6	64.7-130		%REC	137089	1	10/27/2010 13:39	GK
Surr: Dibromofluoromethane	97.4	80.7-129		%REC	137089	1	10/27/2010 13:39	GK
Surr: Toluene-d8	95	71.1-120		%REC	137089	1	10/27/2010 13:39	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-4-20101020-01Project:Williamson DickieCollection Date:10/20/2010 9:05:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-020 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 14:09	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 14:09	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 14:09	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 14:09	GK
cis-1,2-Dichloroethene	190	5.0		ug/L	137089	1	10/27/2010 14:09	GK
Trichloroethene	49	5.0		ug/L	137089	1	10/27/2010 14:09	GK
Tetrachloroethene	1700	100		ug/L	137089	20	10/27/2010 16:38	GK
Surr: 4-Bromofluorobenzene	91.8	64.7-130		%REC	137089	1	10/27/2010 14:09	GK
Surr: 4-Bromofluorobenzene	87	64.7-130		%REC	137089	20	10/27/2010 16:38	GK
Surr: Dibromofluoromethane	106	80.7-129		%REC	137089	20	10/27/2010 16:38	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	137089	1	10/27/2010 14:09	GK
Surr: Toluene-d8	94.6	71.1-120		%REC	137089	1	10/27/2010 14:09	GK
Surr: Toluene-d8	99.3	71.1-120		%REC	137089	20	10/27/2010 16:38	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-1-20101020-01Project:Williamson DickieCollection Date:10/20/2010 10:05:00 AM

Date:

28-Oct-10

Lab ID: 1010J94-021 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 14:38	GK
Vinyl chloride	11	2.0		ug/L	137089	1	10/27/2010 14:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 14:38	GK
trans-1,2-Dichloroethene	20	5.0		ug/L	137089	1	10/27/2010 14:38	GK
cis-1,2-Dichloroethene	1300	1000		ug/L	137089	500	10/27/2010 16:08	GK
Trichloroethene	400	5.0	E	ug/L	137089	1	10/27/2010 14:38	GK
Tetrachloroethene	20000	2500		ug/L	137089	500	10/27/2010 16:08	GK
Surr: 4-Bromofluorobenzene	91.5	64.7-130		%REC	137089	500	10/27/2010 16:08	GK
Surr: 4-Bromofluorobenzene	94.6	64.7-130		%REC	137089	1	10/27/2010 14:38	GK
Surr: Dibromofluoromethane	105	80.7-129		%REC	137089	500	10/27/2010 16:08	GK
Surr: Dibromofluoromethane	100	80.7-129		%REC	137089	1	10/27/2010 14:38	GK
Surr: Toluene-d8	96	71.1-120		%REC	137089	500	10/27/2010 16:08	GK
Surr: Toluene-d8	98.5	71.1-120		%REC	137089	1	10/27/2010 14:38	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-2-20101020-01Project:Williamson DickieCollection Date:10/20/2010 11:05:00 AM

Date:

28-Oct-10

Lab ID:1010J94-022Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 17:40	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 17:40	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 17:40	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 17:40	GK
cis-1,2-Dichloroethene	23	5.0		ug/L	137089	1	10/27/2010 17:40	GK
Trichloroethene	9.2	5.0		ug/L	137089	1	10/27/2010 17:40	GK
Tetrachloroethene	64	5.0		ug/L	137089	1	10/27/2010 17:40	GK
Surr: 4-Bromofluorobenzene	88.9	64.7-130		%REC	137089	1	10/27/2010 17:40	GK
Surr: Dibromofluoromethane	108	80.7-129		%REC	137089	1	10/27/2010 17:40	GK
Surr: Toluene-d8	96	71.1-120		%REC	137089	1	10/27/2010 17:40	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-10-20101020-01Project:Williamson DickieCollection Date:10/20/2010 2:05:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-023 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 15:38	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 15:38	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 15:38	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 15:38	GK
cis-1,2-Dichloroethene	14	5.0		ug/L	137089	1	10/27/2010 15:38	GK
Trichloroethene	11	5.0		ug/L	137089	1	10/27/2010 15:38	GK
Tetrachloroethene	210	50		ug/L	137089	10	10/28/2010 09:45	GK
Surr: 4-Bromofluorobenzene	90.6	64.7-130		%REC	137089	1	10/27/2010 15:38	GK
Surr: 4-Bromofluorobenzene	94	64.7-130		%REC	137089	10	10/28/2010 09:45	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	10	10/28/2010 09:45	GK
Surr: Dibromofluoromethane	103	80.7-129		%REC	137089	1	10/27/2010 15:38	GK
Surr: Toluene-d8	96.8	71.1-120		%REC	137089	1	10/27/2010 15:38	GK
Surr: Toluene-d8	96.7	71.1-120		%REC	137089	10	10/28/2010 09:45	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client: ERM-Southeast Client Sample ID: MW-10A-20101020-01 **Project: Collection Date:** 10/20/2010 1:05:00 PM Williamson Dickie

Date:

28-Oct-10

Lab ID: 1010J94-024 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/28/2010 10:15	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/28/2010 10:15	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 10:15	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 10:15	GK
cis-1,2-Dichloroethene	270	100		ug/L	137089	20	10/28/2010 10:46	GK
Trichloroethene	98	5.0		ug/L	137089	1	10/28/2010 10:15	GK
Tetrachloroethene	1100	100		ug/L	137089	20	10/28/2010 10:46	GK
Surr: 4-Bromofluorobenzene	87.9	64.7-130		%REC	137089	1	10/28/2010 10:15	GK
Surr: 4-Bromofluorobenzene	91	64.7-130		%REC	137089	20	10/28/2010 10:46	GK
Surr: Dibromofluoromethane	104	80.7-129		%REC	137089	20	10/28/2010 10:46	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	1	10/28/2010 10:15	GK
Surr: Toluene-d8	98.1	71.1-120		%REC	137089	1	10/28/2010 10:15	GK
Surr: Toluene-d8	96	71.1-120		%REC	137089	20	10/28/2010 10:46	GK

Qualifiers:

Value exceeds maximum contaminant level

BRL Below reporting limit

Н Holding times for preparation or analysis exceeded

Analyte not NELAC certified

Analyte detected in the associated method blank

Greater than Result value

E Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Client: ERM-Southeast Client Sample ID: DUP-2

Project: Williamson Dickie Collection Date: 10/20/2010 12:00:00 PM

Date:

28-Oct-10

Lab ID:1010J94-025Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/28/2010 11:16	GK
Vinyl chloride	12	2.0		ug/L	137089	1	10/28/2010 11:16	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 11:16	GK
trans-1,2-Dichloroethene	19	5.0		ug/L	137089	1	10/28/2010 11:16	GK
cis-1,2-Dichloroethene	1100	1000		ug/L	137089	500	10/28/2010 13:46	GK
Trichloroethene	410	5.0	E	ug/L	137089	1	10/28/2010 11:16	GK
Tetrachloroethene	19000	2500		ug/L	137089	500	10/28/2010 13:46	GK
Surr: 4-Bromofluorobenzene	88.5	64.7-130		%REC	137089	500	10/28/2010 13:46	GK
Surr: 4-Bromofluorobenzene	91.9	64.7-130		%REC	137089	1	10/28/2010 11:16	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	500	10/28/2010 13:46	GK
Surr: Dibromofluoromethane	102	80.7-129		%REC	137089	1	10/28/2010 11:16	GK
Surr: Toluene-d8	95.1	71.1-120		%REC	137089	500	10/28/2010 13:46	GK
Surr: Toluene-d8	97.7	71.1-120		%REC	137089	1	10/28/2010 11:16	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast Client Sample ID: MW-9-20101021-01 **Project: Collection Date:** 10/21/2010 11:55:00 AM Williamson Dickie

Date:

28-Oct-10

Lab ID: 1010J94-026 Matrix: Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/28/2010 14:16	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/28/2010 14:16	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/28/2010 14:16	GK
Tetrachloroethene	20	5.0		ug/L	137089	1	10/28/2010 14:16	GK
Surr: 4-Bromofluorobenzene	89.6	64.7-130		%REC	137089	1	10/28/2010 14:16	GK
Surr: Dibromofluoromethane	102	80.7-129		%REC	137089	1	10/28/2010 14:16	GK
Surr: Toluene-d8	95.9	71.1-120		%REC	137089	1	10/28/2010 14:16	GK

Qualifiers:

Value exceeds maximum contaminant level

BRL Below reporting limit

Н Holding times for preparation or analysis exceeded

Analyte not NELAC certified

Analyte detected in the associated method blank

Greater than Result value

E Estimated (value above quantitation range)

Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:MW-37-20101021-01Project:Williamson DickieCollection Date:10/21/2010 12:55:00 PM

Date:

28-Oct-10

Lab ID:1010J94-027Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 18:10	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/27/2010 18:10	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:10	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:10	GK
cis-1,2-Dichloroethene	7.8	5.0		ug/L	137089	1	10/27/2010 18:10	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:10	GK
Tetrachloroethene	22	5.0		ug/L	137089	1	10/27/2010 18:10	GK
Surr: 4-Bromofluorobenzene	90.7	64.7-130		%REC	137089	1	10/27/2010 18:10	GK
Surr: Dibromofluoromethane	105	80.7-129		%REC	137089	1	10/27/2010 18:10	GK
Surr: Toluene-d8	97.9	71.1-120		%REC	137089	1	10/27/2010 18:10	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Client:ERM-SoutheastClient Sample ID:MW-28-20101021-01Project:Williamson DickieCollection Date:10/21/2010 1:55:00 PM

Date:

28-Oct-10

Lab ID: 1010J94-028 **Matrix:** Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SW	/5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/27/2010 18:40	GK
Vinyl chloride	3.1	2.0		ug/L	137089	1	10/27/2010 18:40	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
cis-1,2-Dichloroethene	16	5.0		ug/L	137089	1	10/27/2010 18:40	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
Tetrachloroethene	BRL	5.0		ug/L	137089	1	10/27/2010 18:40	GK
Surr: 4-Bromofluorobenzene	102	64.7-130		%REC	137089	1	10/27/2010 18:40	GK
Surr: Dibromofluoromethane	101	80.7-129		%REC	137089	1	10/27/2010 18:40	GK
Surr: Toluene-d8	96.1	71.1-120		%REC	137089	1	10/27/2010 18:40	GK

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Client:ERM-SoutheastClient Sample ID:TRIP BLANKProject:Williamson DickieCollection Date:10/22/2010Lab ID:1010J94-029Matrix:Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Volatile Organic Compounds by GC/	MS SW8260B			(SV	V5030B)			
1,4-Dioxane	BRL	150		ug/L	137089	1	10/26/2010 12:41	GK
Vinyl chloride	BRL	2.0		ug/L	137089	1	10/26/2010 12:41	GK
1,1-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
Trichloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
Tetrachloroethene	BRL	5.0		ug/L	137089	1	10/26/2010 12:41	GK
Surr: 4-Bromofluorobenzene	89.1	64.7-130		%REC	137089	1	10/26/2010 12:41	GK
Surr: Dibromofluoromethane	105	80.7-129		%REC	137089	1	10/26/2010 12:41	GK
Surr: Toluene-d8	94.8	71.1-120		%REC	137089	1	10/26/2010 12:41	GK

Date:

28-Oct-10

Qualifiers:

* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative
NC Not confirmed

Sample/Cooler Receipt Checklist

Client ERM		Work Order	r Number	1010594
Checklist completed by	10/23/1	<u> </u>		
Carrier name: FedEx UPS Courier Client \(\subseteq \ US	Mail Other	r	_	
Shipping container/cooler in good condition?	Yes 🔟	No	Not Present _	-
Custody seals intact on shipping container/cooler?	Yes	No _	Not Present	_
Custody seals intact on sample bottles?	Yes	No	Not Present _	_
Container/Temp Blank temperature in compliance? (4°C±2)*		No		
Cooler #1 3.40 Cooler #2 Cooler #3	_ Cooler #4 _	Coo	oler#5	Cooler #6
Chain of custody present?	Yes 🖊	No		
Chain of custody signed when relinquished and received?	Yes 🟒	No _		
Chain of custody agrees with sample labels? \0 \23 \10 \text{M}	Yes 🔏	No 🗾		
Samples in proper container/bottle?	Yes 👤	No		
Sample containers intact?	Yes 🗾	No		
Sufficient sample volume for indicated test?	Yes 🟒	No _		
All samples received within holding time?	Yes 🗸	No _		
Was TAT marked on the COC?	Yes 🗸	No _		
Proceed with Standard TAT as per project history?	Yes	No	Not Applicab	le
Water - VOA vials have zero headspace? No VOA vials su	ibmitted	Yes 🗹	No	
Water - pH acceptable upon receipt?	Yes 👱	No	Not Applicab	le
Adjusted?				-
Sample Condition: Good Other(Explain)				_
(For diffusive samples or AIHA lead) Is a known blank include	led? Yes	1	No /	

See Case Narrative for resolution of the Non-Conformance.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklists

^{*} Samples do not have to comply with the given range for certain parameters.

Client: ERM-Southeast

Williamson Dickie

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

35 of 38

Workorder: 1010J94

Project Name:

ANALYTICAL QC SUMMARY REPORT

R RPD outside limits due to matrix

BatchID: 137089

Date:

28-Oct-10

Sample ID: MB-137089 Sample Type: MBLK	Client ID: TestCode:	Volatile Organic Compo	unds by GC/MS	SW8260B		its: ug/L tchID: 137089		Date: 10/26 alysis Date: 10/26		Run No: 183117 Seq No: 3812815	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual	
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0	
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Γrichloroethene	BRL	5.0	0	0	0	0	0	0	0	0	
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0	
Surr: 4-Bromofluorobenzene	44.59	0	50	0	89.2	64.7	130	0	0	0	
Surr: Dibromofluoromethane	52.90	0	50	0	106	80.7	129	0	0	0	
Surr: Toluene-d8	47.80	0	50	0	95.6	71.1	120	0	0	0	
Sample ID: LCS-137089	Client ID:				Un	its: ug/L	Prep	Date: 10/26	/2010	Run No: 183117	
SampleType: LCS	TestCode:	stCode: Volatile Organic Compounds by GC/MS SW8260B				tchID: 137089	Analysis Date: 10/26/2010			Seq No: 3812813	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual	
1,1-Dichloroethene	59.01	5.0	50	0	118	51	154	0	0	0	
Trichloroethene	57.07	5.0	50	0	114	73.9	132	0	0	0	
Surr: 4-Bromofluorobenzene	44.23	0	50	0	88.5	64.7	130	0	0	0	
Surr: Dibromofluoromethane	51.72	0	50	0	103	80.7	129	0	0	0	
Surr: Toluene-d8	48.03	0	50	0	96.1	71.1	120	0	0	0	
Sample ID: 1010J94-016AMS SampleType: MS		MW-13-20101019-0 Volatile Organic Compo		SW8260B	Units: ug/L BatchID: 137089				/2010 /2010	Run No: 183117 Seq No: 3814302	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual	
1,1-Dichloroethene	52.45	5.0	50	0	105	46.2	183	0	0	0	
Trichloroethene	64.30	5.0	50	10.20	108	70.5	149	0	0	0	
Surr: 4-Bromofluorobenzene	47.32	0	50	0	94.6	64.7	130	0	0	0	
Qualifiers: > Greater than Result va	lue		< Less	than Result value			В	Analyte detected in the ass	ociated method	blank	
BRL Below reporting limit			E Estim	nated (value above quantit	ation range)			H Holding times for preparation or analysis exceeded			

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

28-Oct-10

Project Name: Williamson Dickie **Workorder:** 1010J94

BatchID: 137089

Sample ID: 1010J94-016AMS SampleType: MS	Client ID: MW-13-20101019-01 TestCode: Volatile Organic Compounds by GC/MS SW8260B					Units: ug/L BatchID: 137089		Date: 10/26 lysis Date: 10/26		Run No: 183117 Seq No: 3814302
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Surr: Dibromofluoromethane	48.89	0	50	0	97.8	80.7	129	0	0	0
Surr: Toluene-d8	46.65	0	50	0	93.3	71.1	120	0	0	0
Sample ID: 1010J94-016AMSD SampleType: MSD		MW-13-20101019-01 Volatile Organic Compou	Uni Bat	ts: ug/L chID: 137089		Date: 10/26 lysis Date: 10/26		Run No: 183117 Seq No: 3814303		
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	52.33	5.0	50	0	105	46.2	183	52.45	0.229	20
Trichloroethene	64.12	5.0	50	10.20	108	70.5	149	64.30	0.28	20
Surr: 4-Bromofluorobenzene	47.02	0	50	0	94	64.7	130	47.32	0	0
Surr: Dibromofluoromethane	49.52	0	50	0	99	80.7	129	48.89	0	0
Surr: Toluene-d8	47.55	0	50	0	95.1	71.1	120	46.65	0	0

Qualifiers: > Greater than Result value

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Client: ERM-Southeast

Williamson Dickie

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

37 of 38

Workorder: 1010J94

Project Name:

ANALYTICAL QC SUMMARY REPORT

R RPD outside limits due to matrix

BatchID: 137147

Date:

28-Oct-10

Sample ID: MB-137147 SampleType: MBLK	Client ID: TestCode:	Volatile Organic Compo	unds by GC/MS	SW8260B	Un Bat	its: ug/L tchID: 137147		Date: 10/26 lysis Date: 10/26		Run No: 183215 Seq No: 3814681
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
1,4-Dioxane	BRL	150	0	0	0	0	0	0	0	0
cis-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Tetrachloroethene	BRL	5.0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Γrichloroethene	BRL	5.0	0	0	0	0	0	0	0	0
Vinyl chloride	BRL	2.0	0	0	0	0	0	0	0	0
Surr: 4-Bromofluorobenzene	42.08	0	50	0	84.2	64.7	130	0	0	0
Surr: Dibromofluoromethane	50.31	0	50	0	101	80.7	129	0	0	0
Surr: Toluene-d8	45.34	0	50	0	90.7	71.1	120	0	0	0
Sample ID: LCS-137147	Client ID:		Un	its: ug/L	Prep	Run No: 183215				
SampleType: LCS	TestCode:	Volatile Organic Compo	Bat	tchID: 137147	Analysis Date: 10/26/2010			Seq No: 3814679		
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	60.60	5.0	50	0	121	51	154	0	0	0
Γrichloroethene	61.83	5.0	50	0	124	73.9	132	0	0	0
Surr: 4-Bromofluorobenzene	43.13	0	50	0	86.3	64.7	130	0	0	0
Surr: Dibromofluoromethane	49.11	0	50	0	98.2	80.7	129	0	0	0
Surr: Toluene-d8	44.41	0	50	0	88.8	71.1	120	0	0	0
Sample ID: 1010J94-002AMS SampleType: MS		MW-19-20101014-0 Volatile Organic Compo		SW8260B	Units: ug/L BatchID: 137147		*		/2010 /2010	Run No: 183215 Seq No: 3814697
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,1-Dichloroethene	68.41	5.0	50	0	137	46.2	183	0	0	0
Γrichloroethene	63.40	5.0	50	0	127	70.5	149	0	0	0
Surr: 4-Bromofluorobenzene	41.81	0	50	0	83.6	64.7	130	0	0	0
Qualifiers: > Greater than Result value							В	Analyte detected in the ass	ociated method	blank
BRL Below reporting limit			E Estim	nated (value above quantit	ation range)			Holding times for preparati		

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

Client: ERM-Southeast

ANALYTICAL QC SUMMARY REPORT

Date:

28-Oct-10

Project Name: Williamson Dickie **Workorder:** 1010J94

BatchID: 137147

Sample ID: 1010J94-002AMS SampleType: MS	Client ID: MW-19-20101014-01 TestCode: Volatile Organic Compounds by GC/MS SW8260B					Units: ug/L BatchID: 137147		Prep Date: 10/26/2010 Analysis Date: 10/26/2010		Run No: 183215 Seq No: 3814697	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual	
Surr: Dibromofluoromethane	50.54	0	50	0	101	80.7	129	0	0	0	
Surr: Toluene-d8	44.46	0	50	0	88.9	71.1	120	0	0	0	
Sample ID: 1010J94-002AMSD	Client ID: N	4W-19-20101014-0	Uni	its: ug/L	Prep	Prep Date: 10/26/2010 Run No: 183215					
SampleType: MSD	TestCode: V	olatile Organic Compou	inds by GC/MS	SW8260B	Bat	chID: 137147	Ana	lysis Date: 10/26	/2010	Seq No: 3814700	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual	
1,1-Dichloroethene	69.77	5.0	50	0	140	46.2	183	68.41	1.97	20	
Trichloroethene	59.25	5.0	50	0	118	70.5	149	63.40	6.77	20	
Surr: 4-Bromofluorobenzene	41.60	0	50	0	83.2	64.7	130	41.81	0	0	
Surr: Dibromofluoromethane	49.60	0	50	0	99.2	80.7	129	50.54	0	0	
Surr: Toluene-d8	43.18	0	50	0	86.4	71.1	120	44.46	0	0	

Qualifiers: > Greater than Result value

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

PLAN TO MAINTAIN COMPLIANCE DICKIES INDUSTRIAL SERVICES SITE (former) – HSI #10127

The Dickies Industrial Services, Incorporated ("DISI") property has been fully delineated and corrective action has been completed for Tax Parcel No. 130036LL1463 and Tax Parcel No. 130036LL1356 ("DISI property") in accordance with the Type 3/4 Risk Reduction Standards as documented in the Voluntary Compliance Status Report. To assure continued compliance with the Type 3/4 Risk Reduction Standards for soil, the owner of the DISI property shall implement this Plan To Maintain Compliance ("Plan").

- **1.0 MONITORING TO ASSURE COMPLIANCE WITH TYPE 3/4 RISK REDUCTION STANDARDS.** The owner of the DISI property shall institute and conduct the following monitoring program to assure continued compliance with Type 3/4 Risk Reduction Standards for soil:
 - A. Review of Contracts and other written Agreements. The owner of the DISI property shall review each contract and lease agreement that it enters into concerning the DISI property, and each informal agreement regarding the use of the site, to ensure that such contracts and agreements will not result in the use of the DISI property for any purpose that is inconsistent with the non-residential status on which the Type 3/4 Risk Reduction Standards for soil are based.
 - **B.** On-Site Monitoring. The owner of the DISI property shall monitor the DISI property to ensure that its actual use by tenants or other authorized occupants is consistent with Type 3/4 Risk Reduction Standards for soil. To fulfill this requirement, an on-site inspection of the DISI property shall be conducted at least annually.
- July 1 of each year, the owner of the DISI property shall submit an annual written report, in the form provided in Exhibit 1, to the Hazardous Sites Response Program to certify its continued compliance with this Plan. In each report, the owner of the DISI property shall certify that it has not entered into any contract or other written agreement that grants a use of the site that is inconsistent with the non-residential status on which the Type 3/4 Risk Reduction Standards for soil are based. It shall further certify that, based on the on-site inspection, the actual use of the site is consistent with its non-residential status. The report shall include the following certification.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluate that information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true and 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."

- 3.0 NOTICE TO GEORGIA EPD PRIOR TO TRANSFER OF PROPERTY. In the event that an owner of the DISI property conveys the whole or any part of its ownership interest in the DISI property or in the event that title to the real property at the DISI property is conveyed, in whole or in part, to any other person by operation of law, the owner of the DISI property shall, not fewer than thirty (30) days after the transfer, notify Georgia EPD in writing of the name and address of the transferee or successor in title, and of the nature and date of the transfer or conveyance.
- **4.0 DURATION OF PLAN.** This Plan shall remain in full force and effect until such time as the Director determines that the DISI property meets the Type 1/2 Risk Reduction Standards for soil, and therefore no further action is required.

EXHIBIT 1

ANNUAL WRITTEN REPORT AND CERTIFICATION OF COMPLIANCE WITH TYPE 3/4 RISK REDUCTION STANDARDS FOR SOIL

Ms. Alexandra Cleary Hazardous Site Response Program Georgia Environmental Protection Division 205 Butler Street, S.E., Suite 1162 Atlanta, GA 30334

Re: Dickies Industrial Services, Inc. ("DISI") Annual Monitoring Report Tax Parcel No. 130036LL1463 and Tax Parcel No. 130036LL1356 Dear Ms. Cleary: [Owner's name] hereby certifies that it has complied with the terms of the Plan To Maintain Compliance for the above-referenced tax parcels (the "DISI property"). This annual report is submitted to fulfill the requirements of the Plan To Maintain Compliance, a copy of which is attached for your reference. In compliance with the Plan To Maintain Compliance, [owner's name] has carefully reviewed each contract and lease agreement, and other written agreement, that it has entered into regarding the DISI property. [Owner's name] hereby certifies that no such agreement will result in a use of the DISI property that is inconsistent with the non-residential status on which the Type 3/4 Risk Reduction Standards for soil are based. In compliance with the Plan To Maintain Compliance, [owner's name] conducted an on-site inspection of the DISI property on ______, 20___. This inspection was conducted by . This inspection was conducted to verify that the actual use of the site by tenants and other occupants is and has been consistent with its non-residential status. The inspection revealed no evidence of any inconsistent use. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate that information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true and accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Title:

Date:_____