



August 9, 2010

Environmental Administrator  
Hazardous Waste Regulation Section M.S. 4560  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Attention: Mr. Merlin D. Russell, Jr.  
Environmental Specialist III  
Hazardous Waste Regulation

Subject: Remedial Action Plan  
Safety-Kleen Systems, Inc. -- Medley, Florida  
EPA ID No. FLD 984 171 694; Permit No. 56019/HO/006

Dear Mr. Russell:

This letter transmits the referenced Remedial Action Plan (RAP) in accordance with Conditions I.15.a, I.16 and I.17 of the facility permit. This RAP was prepared pursuant to Condition V.4 and Part VI of the facility permit. Appendix A within this RAP is a Site Assessment Report Addendum. This RAP with Appendix A constitutes a combined document in accordance with the Department's letter of May 14, 2010.

This transmittal includes one hard copy and one electronic copy of the RAP, and one electronic copy (CD) of both the field and the laboratory Electronic Data Deliverables (EDDs) associated with a May 4, 2010 groundwater sampling event.

If you have any questions, please call me at (847) 468-6733. Thank you.

Sincerely,

Robert A. Schoepke, P.G.  
Director – Remediation

Enclosures: RAP and EDDs

cc: Jeff Curtis / S-K Compliance  
Larry Rodriguez / S-K facility manager  
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Bob Colberg / ECT (electronic copy)  
Project File

**REMEDIAL ACTION PLAN  
SAFETY KLEEN SYSTEMS, INC.  
8755 NW 95<sup>TH</sup> STREET  
MEDLEY, FLORIDA  
EPA ID NO. FLD 984 171 694**

*PREPARED FOR:*



**SAFETY-KLEEN SYSTEMS, INC.  
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*PREPARED BY:*



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**100666-1111  
AUGUST 2010**

## PROFESSIONAL CERTIFICATION

The technical contents of this Remedial Action Plan for the Environmental Protection Agency (EPA) Facility No. FLD 984 171 694, Safety Kleen Systems, Inc. Medley, Florida represent our professional interpretations and are arrived at in accordance with generally accepted engineering practices. The findings and results of this report are for the sole use and benefit of the FDEP and the Safety-Kleen Systems, Inc. Utilization of this report by other parties is at their risk, and Environmental Consulting & Technology, Inc. is not liable for consequences or damages extending therefrom.

Prepared by:



Robert R. Colberg  
Senior Scientist

Date:

8/6/10

I certify that engineering interpretations in this report have been produced by me and staff under my supervision.



Reviewed by:



Mario E. Farrulla, P.E.  
Florida License No. 55168

Date:

8/6/10

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## **1. INTRODUCTION AND OBJECTIVE**

This Remedial Action Plan (RAP) was developed by Environmental Consulting & Technology, Inc. (ECT) to provide design information for groundwater and soil treatment systems to remediate solvent impacts detected at the Safety-Kleen Systems, Inc. Medley (SK-Medley) facility. Facility identification information is as follows:

Safety-Kleen Systems, Inc.  
8755 NW 95<sup>th</sup> Street  
Medley Florida,  
EPA ID No. FLD 984 171 694  
Northeast ¼ of the southeast ¼ of Section 9, Township 53 South, Range 40 East

A Site Assessment Report (SAR) was submitted to the Florida Department of Environmental Protection (FDEP) on April 8, 2010. The FDEP provided SAR review comments in a letter dated May 14, 2010. That letter requested submittal of a “combined document” to include: (1) a SAR Addendum addressing the FDEP review comments; and (2) a RAP. The SAR Addendum (SARA), which provides the requested responses to comments, is included under Appendix A of this document. The reader is advised to review the SARA (Appendix A) prior to review of the remainder of this RAP / “combined document”.

This assessment and remediation work is being performed pursuant to Specific Condition V.4 and Part VI of the facility permit, to address and Area of Concern (AOC). The facility permit is intended to be modified as described in Appendix A, response to Comment 1.

The location of the facility is illustrated on Figure 1 and the properties in the vicinity of the facility are illustrated on Figure 2. A facility map is presented as Figure 3 and the general area of investigation is illustrated on Figure 4.

This RAP presents the selection and design of a remedial action system that will effectively reduce the concentration and mass of contaminants identified within the subsurface of the facility.



Existing site conditions at the SK-Medley facility do not require immediate or emergency steps to abate an imminent threat to human health or safety, nor do the site conditions warrant pursuing a monitoring only or No Further Action (NFA) status. Therefore, designing and implementing a RAP according to Section 62-780.700 of the Florida Administrative Code (F.A.C.) is considered the proper course of action.

## **2. CONTAMINATION ASSESSMENT SUMMARY**

### **2.1 SITE INFORMATION**

The SK-Medley facility is comprised of an industrial waste processing center. The facility includes five aboveground storage tanks (ASTs) containing virgin mineral spirits, waste mineral spirits, and oil wastes. Surrounding properties include a landscaping company, a transportation company, a landfill and recycling center, a chemical/oil company, a concrete contractor, and a collision repair company. A rail line is located to the northeast of the site.

### **2.2 CONTAMINANT SOURCES**

The source of documented impacts in the AOC is unknown, and there are no reports of spills or releases of contaminants from facility operations in that general area. The volume of contaminants released is also unknown.

### **2.3 INTERIM REMEDIAL ACTIONS**

Free phase product has not been documented on site and interim remedial actions have not been undertaken.

### **2.4 CONTAMINATION ASSESSMENT ACTIVITIES**

Detailed information regarding the site assessment is included in the April 8, 2010, SAR, and in the SARA (Appendix A herein).

Additionally, supplemental soil and groundwater assessment activities were conducted in May 2010, following submittal of the SAR. Specifically, supplemental groundwater activities included the sampling of monitor wells MW-1, MW-3, MW-4, MW-4D, MW-5, and MW-5D, for volatile organic compounds. Supplemental soil assessment activities included the collection and analysis of soil samples at soil boring locations SB-10 through SB-15 for arsenic. As part of the supplemental assessment conducted in May 2010, ECT proceeded with the analysis of an archived soil sample collected previously during the February 2010 sampling event. This soil sample, collected from the MW-5 location, was analyzed for arsenic. The purpose of the supplemental soil and

groundwater assessment was primarily for remedial design considerations. Results of these analyses are discussed in the following sections. As requested by FDEP, the results of the most recent groundwater assessment are also being submitted separately as electronic data deliverables (EDDs).

## **2.5 AQUIFER CHARACTERIZATION**

Based on the evaluation of site data obtained from previous supplemental site assessment activities, the following aquifer characteristics were determined:

- The depth to groundwater ranges between 2 to 3.75 feet below land surface (ft bls) onsite (Table 1) and has been observed at less than 2 ft bls following rain events;
- Subsurface soil conditions consist of fine grained sand to 4 ft bls, and oolitic limestone that is moderately consolidated to unconsolidated to 28 ft bls;
- The groundwater gradient is relatively flat with a very slight gradient and flow direction apparently to the southeast (0.001 ft/ft); and
- The hydraulic conductivity was estimated to be 50 ft/day, and the rate of groundwater flow was estimated to be 50 ft per year.

Table 1 presents a summary of water level data, and Figure 5 illustrates the groundwater elevation data collected on May 4, 2010.

## **2.6 IMPACTED SOIL**

As discussed in Section 2.4, a soil sample was collected from the location of monitoring well MW-5 during the February site assessment event; this sample was laboratory archived until May when it was analyzed for arsenic. Additionally, six soil samples (SB-10 through SB-15) were collected on May 4, 2010, for further delineation of arsenic impacts. The soil samples were collected at 1 ft bls, which is approximately 1 ft above the observed high water table level. A summary of soil analytical results is presented as Table 2. A copy of the laboratory reports are presented in Appendix B.

As presented on Figure 6, arsenic impacted soil was identified along the west side of the AST containment structure. The concentration of arsenic impacts is above the residential exposure soil cleanup target level (SCTL) in four of the samples (SB-2, SB-4, SB-14, and SB-15); in contrast, all soil arsenic concentrations were below the industrial SCTL. As illustrated in Figure 7, the area of arsenic impacted soil is approximately 100 square feet ( $\text{ft}^2$ ). Accordingly, assuming a depth to the water table of 2.5 ft, the volume of arsenic impacted soil is estimated at approximately 250 cubic ft ( $\text{ft}^3$ ) (9.25 cubic yards [ $\text{yd}^3$ ] or approximately 15 tons).

Tetrachloroethylene (PCE) was detected in soil at the location of monitoring well MW-5 at a depth 1 ft bls. Soil analytical data is presented on Figure 6, and the extent of soil impacts by arsenic and PCE are illustrated on Figure 7. The area of soil impacted with PCE, as illustrated in Figure 7, is estimated to be 44  $\text{ft}^2$  (132  $\text{ft}^3$  or 4.9  $\text{yd}^3$ , 7.8 tons assuming a depth to groundwater of 3 ft).

It is noteworthy that there is essentially no overlap of soil area impacted by arsenic versus the area impacted by PCE.

## **2.7 DISSOLVED GROUNDWATER IMPACTS**

Analytical results for groundwater samples collected from monitoring wells onsite indicate that the type of contaminant impacts to the subsurface environment is associated with chlorinated solvents and associated daughter by-products from solvent breakdown.

The most recent round of groundwater samples was collected on May 4, 2010. The results of the laboratory analysis of the samples are summarized in Table 3 and illustrated on Figure 8. The area of the dissolved contaminant plume is approximately 707 ft<sup>2</sup>. The groundwater sampling logs are presented as Appendix C, and the groundwater laboratory analytical report is presented in Appendix B. The May 2010 groundwater analyses indicate that groundwater maximum contaminant levels (MCLs) are exceeded at monitoring wells MW-1, MW-4, and MW-5.

## ***2.8 SOURCE MASS ESTIMATION***

A calculation of the mass of contaminants based on groundwater and soil data is presented as Appendix D. The calculated mass of contaminants associated with solvents is 0.03 pounds.

## ***2.9 POTABLE WELL SURVEY***

A potable well survey conducted by ECT did not revealed any potable wells within a quarter mile of the site. The area of the site is supplied with municipal water.

## ***2.10 UNDERGROUND UTILITIES***

Utilities are provided to the facility along the western portion of the property. No utilities have been identified in the area of concern and there does not appear that utilities have an effect on the potential migration of contaminant identified.

### 3. REMEDIAL ACTION ALTERNATIVE ANALYSIS

This section describes the selection of remedial technologies that will best address the cleanup of the site impacts. An environmentally safe, reliable, and cost effective soil and groundwater treatment method for the SK-Medley facility includes the following:

- Identifying rehabilitation levels specified in Rule 62-780.680, F.A.C.;
- Developing screening criteria to assess appropriate remedial action technologies that should accomplish the remedial action objectives; and
- Identifying applicable remedial technologies.

#### 3.1 SITE REHABILITATION LEVELS

Upon completion of remedial actions, Rule 62-780.700(18), F.A.C. requires that soil and groundwater meet the No Further Action criteria with respect to either:

- Rule 62-780.680(1): Risk Management Options Level I,
- Rule 62-780.680(2): Risk Management Options Level II, or
- Rule 62-780.680(3): Risk Management Options Level III.

In general, Risk Management Options Level I criteria requires that: (1) free product does not exist; (2) contaminated soil is not present in the unsaturated zone and meets direct exposure and leachability criteria; and (3) groundwater contaminant concentrations do not exceed groundwater cleanup target levels (GCTLs) listed in Chapter 62-777 F.A.C. Table 1 without institutional and engineering controls.

Risk Management Option Level II is similar to Level I except institutional controls and, if appropriate, engineering controls shall apply and alternative SCTLs are established, and criteria for direct exposure and leachability are met. The soil arsenic concentrations detected onsite are all below the industrial SCTL; therefore, proposing an alternative SCTL is not necessary at this time. Risk Management Option Level II will be used as the basis of this RAP. Institutional controls (a restrictive covenant) will be used to address the arsenic in soil, as further described in the following sections.

### **3.2 SELECTION OF APPLICABLE REMEDIAL ALTERNATIVES**

The selection of applicable remedial alternatives is based on the findings presented in the SAR and recent groundwater and soil sampling results presented herein. Remedial alternatives were selected to eliminate threats to human health and the environment, by reducing or eliminating the mobility, toxicity and volume of contamination. Remedial action technologies or alternatives applicable to site conditions and contaminants were screened and evaluated to select the most appropriate remedial action for accomplishing site rehabilitation. Table 4 presents an evaluation of remedial alternatives to address identified impacts to soil and groundwater.

The results of the supplemental contamination assessment activities indicate that the facility currently has soil containing arsenic above residential direct exposure SCTL, but below the industrial exposure SCTL (area near monitoring well MW-1). Additionally, tetrachloroethene was detected at concentrations above the leachability SCTL (monitoring well MW-5 location).

Groundwater with concentrations of chlorinated solvents above the GCTLs (in this case, MCLs) is present at wells MW-1, MW-4, and MW-5. No free product was observed during the assessment activities.

The following sections present the specific screening and evaluation consideration for appropriate technologies, and the basis for the selected technologies proposed for the SK-Medley facility.

#### **3.2.1 UNSATURATED SOILS**

##### **3.2.1.1 Arsenic-Soil**

As discussed above, soil containing arsenic above the residential direct exposure SCTL but below the industrial exposure SCTL is present in the unpaved area immediately west of the AST area. Figure 7 illustrates the delineated area of arsenic impacts. Generally, arsenic impacted soils exists from 1 ft bls (below a layer of gravel) to the water table (average depth 2.5-3 ft bls at monitoring well MW-1). Dissolved arsenic in groundwater has not been detected in any groundwater sample collected (i.e., from wells MW-1, MW-2R, and MW-3).

The volume of soil impacted by arsenic is estimated to be approximately 9.25 yd<sup>3</sup> or approximately 15 tons.

The technology evaluation presented in Table 4 indicates that excavation and disposal, or institutional controls, are the two best options. Since the soil meets the industrial exposure SCTL concentration, and the facility is currently an industrial facility and arsenic impacts to groundwater are not present, an alternative SCTL is not necessary. It is proposed that the area of arsenic impact exceeding the residential SCTL (see Figure 7) will be left in place and will be addressed via an institutional control that will be established (i.e., a restrictive covenant).

Safety-Kleen System, Inc. is the owner of the property per Miami-Dade County Property Appraisers Office database. As such, the property owner will establish an instrument of institutional control.

#### 3.2.1.2 Chlorinated Compounds-Soil

As discussed in Section 2.6 of this document, soil containing PCE above the leachability concentration is present in the area of monitoring well MW-5. The soil sample indicating the presence of PCE was collected from 1 ft bls.

The volume of soil impacted by PCE is estimated to be approximately 5 yd<sup>3</sup> or approximately 8 tons, as illustrated on Figure 7.

The remedial alternatives evaluated in Table 4 suggest that excavation would be a good alternative. However, since the arsenic impacted soil is proposed to be left in place, and the area is paved, excavation becomes a less practical approach. Soil vapor extraction (SVE) would also be a good alternative. However, the water table has been observed at 1 ft bls during rain events; therefore, SVE would have severe limitations with regard to groundwater uptake and processing.



Since the mass of PCE in both soil and groundwater is very low, it is proposed to treat the PCE impacted soil in place. All considered, this RAP proposes an innovative approach to address the PCE in soil; induced air-stripping (Table 4). As discussed below in Section 3.2.2, air sparging (AS) will be the selected alternative for groundwater remediation. Three of the proposed air sparging wells are positioned such that they will have a pronounced and overlapping influence of air flow in the specific area where PCE exists in the overlying soil (i.e., MW-5 area; see Section 4.1 and Figure 9). The air rising from the water table surface would permeate through the impacted vadose soil and would strip the volatile PCE from the soil and aspirate it to the atmosphere. The undersurface of the asphalt in that area is sloped such that the induced air flow can exit to the north from the paved area into the gravel area.

The effectiveness of the induced air-stripping remedial alternative will be documented by confirmatory soil sampling and analysis, as described in Section 7.

### 3.2.2 GROUNDWATER TREATMENT

As discussed in Section 2.6 of this document, groundwater is impacted with chlorinated solvents above the groundwater MCLs. Groundwater impacts are present at monitoring wells MW-1, MW-4, and MW-5. The remedial alternative evaluation in Table 4 indicates that AS would be the best remedial alternative to address groundwater impacts.

Since the estimated total mass of chlorinated solvent impacts is approximately 0.03 pounds, the generation of any volatilized contaminants would be below the permissible emission standard of 5.5 pounds per day for any single hazardous air pollutant. Based on this, the capture and treatment of volatile compounds is not proposed.

### 3.2.3 SOIL GAS TREATMENT

As discussed above, soil gas treatment is not proposed. Since the water table rises to within 1 ft of land surface, the application of a vacuum would produce large volumes of groundwater requiring treatment as well as cause soil vapor extraction system deactivation.

The underside of pavement in the area of the plume slopes upward to the north, toward the unpaved area on the west side of the AST containment structure. Therefore, vapors will tend to migrate upward and north of the pavement and aspirate to the atmosphere.

### **3.3 SITE REHABILITATION LEVELS AND CLEANUP TIME**

Site rehabilitation levels for PCE impacted soil will be the PCE leachability SCTL. For groundwater, the GCTLs for the detected chlorinated solvents will be their respective MCLs.

Based on experience with similar sites, it is estimated that the achievement of cleanup goals will require no more than 1.5 years.

## **4. REMEDIAL ACTION DESIGN AND SPECIFICATIONS**

This section discusses the selected remedial methodologies and refers to the appendices for detailed specifics of each selected alternative. The construction, system startup, and operation and maintenance (O&M) of the system are discussed in Section 5. The system monitoring specifications are presented in Sections 6 and 7. Cost of the proposed remedial action is presented in Section 8.

### **4.1 AIR SPARGING WELL PLACEMENT AND DESIGN**

Since a pilot test was not performed, ECT researched FDEP OCULUS for AS sites in the area surrounding the SK-Medley facility with similar geologic conditions. Pilot tests conducted at other sites indicated a radius of sparging influence of 9 to 10 ft with air sparging wells submerged 20 ft below the water table.

It is proposed to utilize the two existing deep wells as AS wells (MW-4D and MW-5D); these wells were originally designed to serve as AS wells, if needed. Considering a sparging radius of 10 ft, four additional wells were plotted to encompass the contaminant plume as illustrated on Figure 9. The sparging influence was overlapped by approximately 45 percent to ensure treatment of the aquifer. The proposed design specifies a total of six air sparging wells.

Each of the new four AS wells will be constructed with 1-inch diameter well casings with 1-inch diameter by 20 inches of micro-porous polyethylene screen with 40 micrometer ( $\mu\text{m}$ ) openings set to a depth of 24 ft bls. A filter pack of 20/30 graded silica sand to 1 ft over the top of the screen, 1 to 2 ft of fine sand seal and neat portland grout will be installed to within 3 ft of land surface. Figure 10 illustrates the construction details of the AS wells. The AS wells will be installed by hollow stem auger method. The air sparging wells will be completed as below grade wells with protective steel manholes.

Each sparging well will be individually plumbed to the remediation area with 1-inch diameter Schedule 80 polyvinyl chloride (PVC) pipe or poly-tubing and will be equipped with a control valve, flow meter, and pressure gauge.

#### ***4.2 AIR SPARGING DELIVERY SYSTEM***

The pressure requirement of the air compressor is based on the estimates of formation pressure and friction losses in the piping system. The calculated total pressure requirement of the air compressor is presented in Appendix E. The volumetric rate for air sparging wells will be 7 standard cubic feet per minute (scfm) at 14 pounds per square inch (at wellhead) based on estimates for the specified air sparging well depth. Based on reliability, a low-pressure rotary claw air compressor with a 7.5 horsepower motor is specified. The total air delivery requirement will be approximately 42 scfm. The selected compressor will provide variability with regard to the volume and pressure capabilities.

Air will be delivered to each of the individual AS wells via a piping system stubbed up at the equipment area or by directly connected hoses. Each AS well will be plumbed with an individual line and will have a flow indicator, flow control valve, and pressure gauge connected to an air manifold. The conceptual layout of the remediation system is illustrated on Figure 11.

#### ***4.3 REMEDIAL SYSTEM POWER AND CONTROL***

The conceptual remediation system is illustrated on Figure 12 depicting the process and instrumentation diagram (PID). The equipment will be located on a skid with a control panel mounted on it. The control panel will be installed within a lockable weatherproof enclosure and connected to a fusible disconnection switch.

The remedial system will be provided with power from an existing load center within the facility.

#### **4.4 REMEDIAL EQUIPMENT AREA**

The selected equipment area will be located under the existing canopy on the west side of the AST containment structure. The equipment will be skid mounted and will be tied down in accordance with local building codes on the existing surface.

Noise and odor from the system are not anticipated to be a potential problem being that the site is an industrial facility and is surrounded by commercial operations.

The electrical work will conform to the National Electric Codes with regard to the location designation. Figure 11 illustrates the conceptual equipment area layout. Since the facility is a secure property, fencing around the air compressor is not planned.

## **5. REMEDIAL SYSTEM CONSTRUCTION, SYSTEM STARTUP, OPERATION AND MAINTENANCE**

The following section describes the planned activities following RAP approval and the identified tasks in keeping the proposed system in operation.

### ***5.1 PLANNING AND BIDDING FOR CONSTRUCTION***

Construction plans and specifications for remediation wells and system installation will be prepared. Request for proposals from construction contractors as well as equipment vendors will be requested. ECT will provide an evaluation and recommendations of selected contractors/vendors to Safety Kleen Systems, Inc.

### ***5.2 CONSTRUCTION PERMITTING***

All electrical, mechanical, structural, and building permits required by Miami-Dade County will be obtained by licensed subcontractors selected from the bidding process. A licensed well driller will obtain well drilling permits.

### ***5.3 CONSTRUCTION***

During the installation of the remedial system, the project engineer or designated subordinate will supervise the installation activities. The project engineer will make decisions to plan changes due to unforeseen conditions and ensure that the plans are adhered to as best as possible.

During the installation of the piping, impacted soils may be encountered. All native impacted soils will be returned to the excavated areas. Remnant impacted soils will be separated from clean soil and placed on and covered with plastic sheeting. Stockpiled soil will be sampled and then hauled to a permitted disposal facility.

After completion of the system installation, the engineer of record will inspect the facility. Two copies of the engineering (as-built) drawings of the completed remedial system will be prepared and submitted to the FDEP within 120 days of initiating operation of active remediation in accordance with Rule 62-780.700(11), F.A.C.

#### **5.4 REMEDIATION SYSTEM STARTUP**

Upon completion of all construction activities and baseline groundwater sampling, system startup and testing will be conducted. Baseline groundwater samples will be collected prior to system startup as described in Section 6. Operation of the remediation system will be initiated within 120 days of RAP approval, in accordance with Rule 62-780.700(12), F.A.C.

The as-built drawings submittal (Section 5.3) will also include a summary of the systems startup activities, per Rule 62-780.700(11), F.A.C., and will be submitted to FDEP within 120 days of initiating operation of active remediation. The summary of the systems startup activities will include relevant data summary tables and figures, and descriptions of the observed conditions.

#### **5.5 REMEDIAL SYSTEM OPERATION & REPORTING**

During the first quarter, the system will be operated fulltime. After the first quarter, the system may be operated on a cyclical basis based on data collected during the first quarter.

Two copies of an annual Remedial Action Status Report (RASR) of system operation and monitoring will be submitted within 60 days after the anniversary date of initiating operations of the remedial system. The RASR content and reporting schedule (annual) will be in accordance with Rule 62-780.700(13)(a) through (g), F.A.C.

#### **5.6 REMEDIAL SYSTEM MAINTENANCE**

Initial site visits after system startup will be conducted weekly for the first month, and bi-weekly for the second month. Afterward, site visits and routine maintenance will be conducted on a monthly basis. More frequent site visits may be necessary dependent on the operating conditions encountered.

The presence of dissolved inorganic compounds such as iron, manganese, and calcium carbonate in groundwater has the potential to precipitate onto AS well screens. Should this

occur, well development chemicals such as sulfamic acid that is used by the water well industry will be used to rehabilitate AS wells.



## 6. GROUNDWATER MONITORING PLAN

The purpose of the groundwater monitoring plan is to verify that the remedial action accomplishes the goals established in this RAP. This section includes the designation of a groundwater monitoring well network for sampling and analysis and the recommended sampling and analysis program during active remediation.

The schedule of monitoring, sampling, and analysis that is proposed for the groundwater monitoring plan is presented as Table 5. The monitoring wells that will be sampled prior to system startup for a baseline data reference point include all eight currently existing water table monitor wells; that is, MW-1, MW-2R, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8.

The proposed groundwater monitoring program will document remedial system performance through quarterly sampling and analysis of groundwater from certain specified wells, and annual sampling and analysis of groundwater from other specified wells, per Rules 62-780.700(3)(g)2 and 3, F.A.C., respectively. This also provides historical water quality and water level data to further verify the effects of remediation. Designated quarterly monitoring wells include MW-1, MW-3, MW-4, and MW-5. Designated annual monitoring wells include MW-2R, MW-7, and MW-8. The quarterly and annual sampling schedules will be relative to the month of remedial system startup.

The AS system will be deactivated for a period of not less than 12 hours prior to groundwater sampling. Water levels will be recorded at each well to be sampled prior to each sampling event.

As required by Rule 62-780.700(13)(a) through (g), F.A.C., an annual RASR will be submitted and will include the groundwater monitoring results. The annual reports will include quarterly water table elevation maps, tabulated water level data, sampling data forms, tabulated analytical data, flow meter, pressure, hour meter readings, and other required data.

When the dissolved contaminant concentrations in the groundwater sampled are below the required rehabilitation levels, or reach the levels defined in Chapter 62-777, F.A.C. for two consecutive sampling periods, remedial operations will cease.

In accordance with Rule 62-780.700(21), F.A.C., once the No Further Action criteria of subsection 62-780.680(1), F.A.C., or the leveling off criteria of subsection 62-780.700(19), F.A.C., have been met, two copies of a Post Active Remediation Monitoring Plan prepared pursuant to Rule 62-780.750, F.A.C., will be submitted to FDEP, unless the FDEP has concurred that Post Active Remediation Monitoring sampling for groundwater is unnecessary based on the site-specific conditions. If the FDEP agrees that groundwater sampling is unnecessary and the site meets the No Further Action criteria of subsection 62-780.680(1), F.A.C., a Site Rehabilitation Completion Order will be issued by FDEP as referenced in subsection 62-780.680(7), F.A.C.

Otherwise, if contaminant concentrations meet the requirements of the GCTLs, further remedial action and monitoring will not be performed. The site rehabilitation completion report will then be submitted to FDEP.

## **7. SYSTEM AND SOIL MONITORING PLAN**

The treatment wells, selected monitoring wells, and system data will be monitored in accordance with Table 6 to monitor the effects of the remedial system.

Since PCE impacted soil exceeding the leachability SCTL has been identified at the monitoring well MW-5 location, confirmatory soil samples will be collected for laboratory analyses from four locations illustrated on Figure 13. These soil confirmatory soil samples and analyses will be in accordance with Table 7.

## 8. REMEDIAL ACTION COST ESTIMATE

The cleanup is estimated to require 1.5 years to complete. The following is a cost estimate breakdown:

<b>Equipment</b>				
AS Compressor and Accessories	each	1	\$28,000.00	\$28,000.00
			<b>Equipment Total</b>	<b>\$28,000.00</b>
<b>Installation</b>				
Remedial Well Installation	each	4	\$1,100.00	\$4,400.00
3/4" Sch. 80 Piping	lump sum	1	\$400.00	\$400.00
Trenching	lump sum	1	\$2,000.00	\$2,000.00
Equipment Installation	lump sum	1	\$4,000.00	\$4,000.00
Miscellaneous (Connectors, tees, valves, etc.)	lump sum	1	\$1,400.00	\$1,400.00
			<b>Installation Total</b>	<b>\$12,200.00</b>
<b>Professional Services</b>				
Bid Package, Solicitation	lump sum	1	\$1,500.00	\$1,500.00
Construction Drawings and Specs	lump sum	1	\$2,800.00	\$2,800.00
Upper Level Technical - System Install	hours	40	\$30.00	\$1,200.00
Upper Level Professional - System Install	hours	40	\$45.00	\$1,800.00
As-builts Drawings	lump sum	1	\$1,000.00	\$1,000.00
ODCs & Sub/Equipment Markup (10%)	lump sum	1	\$4,850.00	\$4,850.00
			<b>Professional Services Total</b>	<b>\$13,150.00</b>
<b>Operation &amp; Maintenance</b>				
System O&M (FDEP Template - Small System)	monthly	18	\$3,600.00	\$64,800.00
Electrical Costs	monthly	18	\$1,200.00	\$21,600.00
Sampling and Reporting	quarterly	6	\$4,500.00	\$27,000.00
			<b>Operation &amp; Maintenance Total</b>	<b>\$113,400.00</b>
<b>System Decommissioning &amp; PARM</b>				
System Decommissioning	lump sum	1	\$10,000.00	\$10,000.00
Sampling and Reporting (PARM)	quarterly	4	\$3,500.00	\$14,000.00
			<b>System Decommission &amp; PARM</b>	<b>\$24,000.00</b>
			<b>TOTAL ESTIMATED REMEDIAL COSTS</b>	<b>\$190,750.00</b>

## **TABLES**

**Table 1. Monitor Well Details and Water Levels**  
**Safety-Kleen Systems, Inc.**  
**Medley, Florida**

All Measurements = Feet (except well diameter in inches)  
 No Data = Blank

WELL NO.	MW-1			MW-2R			MW-3			MW-4			MW-4D			MW-5		
DIAMETER	2"			2"			2"			1"			1"			1"		
WELL DEPTH (ft bls)	11			12			11			11.6			23.6			11.8		
SCREEN INTERVAL (ft bls)	1 - 11			2 - 12			1 - 11			1.6- 11.6			21.9 - 23.6			1.8 - 11.8		
TOC ELEVATION (ft NGVD)	5.91			6.35			5.39			5.77			6.33			7.01		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
11/14/2007	3.11	2.80		2.9	3.45		2.89	2.5										
11/8/2008	2.77	3.14		2.8	3.55		2.82	2.57										
9/10/2009	3.06	2.85		2.87	3.48		2.96	2.43										
9/10/2009	2.95	2.96		2.85	3.50		3.08	2.31										
9/10/2009*	3.91	2.00		4.05	2.3		4.09	1.3										
11/19/2009	2.61	3.30		2.64	3.71		2.61	2.78										
11/19/2009	2.61	3.30		2.62	3.73		2.64	2.75										
2/15/2010	2.68	3.23		2.69	3.66		2.7	2.69		2.71	3.06		2.69	3.64		2.71	4.30	
2/23/2010	2.63	3.28		2.61	3.74		2.68	2.71		2.62	3.15		2.62	3.71		2.61	4.40	
5/4/2010	2.21	3.70		2.20	4.15		2.24	3.15		2.22	3.55		2.23	4.10		2.21	4.80	

WELL NO.	MW-5D			MW-6			MW-7			MW-8								
DIAMETER	1"			1"			1"			1"								
WELL DEPTH (ft bls)	27.8			11.8			10.7			11.1								
SCREEN INTERVAL (ft bls)	26.1 - 27.8			1.8 - 11.8			0.7 - 10.7			1.1- 11.1								
TOC ELEVATION (ft NGVD)	6.83			9.05			6.58			6.83								
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
2/15/2010	2.72	4.11		2.71	6.34		2.70	3.88		2.69	4.14							
2/23/2010	2.63	4.20		2.61	6.44		2.62	3.96		2.62	4.21							
5/4/2010	2.18	4.65		2.15	6.90		2.23	4.35		2.23	4.60							

\* = Measured after rain event.

Table 2. Soil: Summary of all Constituents Detected  
Safety-Kleen Systems, Inc.  
Medley, Florida

Sample #	Date	Tetrachloroethene (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)
SCTLs: Residential		8.8	2.1	120	82	210	400
SCTLs: Industrial		18	12	130,000	1,700	470	1,400
SCTLs: Leachability		0.03	NSE	1,600	8	38	***
SB-1 (1 ft)	09/10/09 02/15/10	4.90 <0.0054	0.95 N/A	15.6 N/A	0.20 N/A	5.74 N/A	9.0 N/A
SB-2 (1 ft)	09/10/09 02/15/10	0.26 <0.0058	3.15 N/A	22 N/A	<0.27 N/A	8.70 N/A	11.0 N/A
SB-3 (0-1')	11/19/09	<0.0053	<1.97	17.5	N/A	N/A	N/A
SB-4 (0-1')	11/19/09	<0.0062	2.39	26.4	N/A	N/A	N/A
SB-5 (0-1')	11/19/09	<0.0049	<1.90	15.6	N/A	N/A	N/A
SB-6 (0-1')	11/19/09	<0.0049	<1.92	17.0	N/A	N/A	N/A
SB-7 (0-1')	02/04/10	N/A	1.06	N/A	N/A	N/A	N/A
SB-10	05/04/10	N/A	<1.07	N/A	N/A	N/A	N/A
SB-11	05/04/10	N/A	<1.07	N/A	N/A	N/A	N/A
SB-12	05/04/10	N/A	<1.05	N/A	N/A	N/A	N/A
SB-13	05/04/10	N/A	<1.25	N/A	N/A	N/A	N/A
SB-14	05/04/10	N/A	2.12	N/A	N/A	N/A	N/A
SB-15	05/04/10	N/A	3.64	N/A	N/A	N/A	N/A
MW-5	02/15/10	0.13	<1.00	N/A	N/A	N/A	N/A
Duplicate	02/15/10	0.86	N/A	N/A	N/A	N/A	N/A

Notes: SCTLs = Soil cleanup target levels per Chapter 62-777, Florida Administrative Code.

NSE = No standard established.

mg/kg = Milligrams per kilogram.

N/A = Parameter not analyzed for.

**Bold** = Result exceeds Residential SCTL. [None exceed Industrial SCTL.]

**Shaded** = Result exceeds Leachability SCTL. [None exceed Industrial SCTL.]

\*\*\* Leachability values may be derived using the SPLP test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.

Sources: Analytical Services, Inc., 2010; and  
ECT, 2010.

Table 3. Groundwater: Summary of all Constituents Detected  
Safety-Kleen Systems, Inc.  
Medley, Florida

Well No.	Date	Tetrachloroethene (mg/L)	Trichloroethene (mg/L)	cis-1,2- Dichloroethene (mg/L)	trans-1,2- Dichloroethene (mg/L)	Vinyl Chloride (mg/L)	Barium (mg/L)	Arsenic (mg/L)
<b>MCL</b>		<b>0.003</b>	<b>0.003</b>	<b>0.07</b>	<b>0.1</b>	<b>0.001</b>	<b>2</b>	<b>0.010</b>
MW-1	05/15/09 *	<0.0002	0.0014	0.10	<0.0006	0.0079	N/A	N/A
	09/10/09	0.23	0.056	0.067	0.0025	0.008	0.0157	<0.005
	11/19/09 *	<0.0002	<0.0007	0.056	0.0043	0.016	N/A	N/A
	02/15/10	<0.0020	<0.0020	0.02	0.0046	0.017	N/A	N/A
	05/04/10 *	0.0074	0.0036	0.0051	<0.0006	<0.0008	N/A	N/A
MW-2R	05/01/09 *	<0.0002	<0.0007	0.015	<0.0006	<0.0008	N/A	N/A
	09/10/09	<0.002	<0.002	<0.002	<0.002	<0.002	0.0406	<0.005
	11/19/09	<0.002	<0.002	0.0038	<0.002	<0.002	N/A	N/A
	02/15/10	<0.002	<0.002	0.0024	<0.002	<0.002	N/A	N/A
MW-3	09/10/09	<0.002	<0.002	0.0079	<0.002	<0.002	0.0373	<0.005
	11/19/09	<0.002	<0.002	0.0098	<0.002	0.0021	N/A	N/A
	02/15/10	<0.002	<0.002	0.0046	<0.002	<0.002	N/A	N/A
	05/04/10	<0.002	<0.002	0.0064	<0.002	<0.002	N/A	N/A
MW-4	02/15/10	<0.002	<0.002	0.0095	<0.002	<0.002	N/A	N/A
	05/04/10	<0.002	<0.002	0.022	<0.002	0.0028	N/A	N/A
MW-4D	02/15/10	<0.002	<0.002	<0.002	<0.002	<0.002	N/A	N/A
	05/04/10	<0.002	<0.002	<0.002	<0.002	<0.002	N/A	N/A
MW-5 Duplicate	02/15/10	0.013	0.0025	0.081	<0.002	0.0046	N/A	N/A
	05/04/10	0.016	0.0047	0.025	<0.002	0.0016	N/A	N/A
	05/04/10	0.015	0.0048	0.025	<0.002	0.0015	N/A	N/A
MW-5D	02/15/10	<0.002	<0.002	<0.002	<0.002	<0.002	N/A	N/A
	05/04/10	<0.002	<0.002	<0.002	<0.002	<0.002	N/A	N/A
MW-6	02/15/10	<0.002	<0.002	<0.002	<0.002	<0.002	N/A	N/A
MW-7	02/15/10	<0.002	<0.002	<0.002	<0.002	<0.002	N/A	N/A
MW-8	02/15/10	<0.002	<0.002	<0.002	<0.002	<0.002	N/A	N/A

**Notes:**

MCL = Maximum contaminant level per Chapter 62-550, Florida Administrative Code.

mg/L = Milligrams per liter.

N/A = Parameter not analyzed for.

**Bold** = Result exceeds MCL.

\* = Samples per DERM Permit analyzed by Palm Beach Environmental Laboratories, Inc.; all other samples per FDEP RCRA Permit analyzed by Analytical Services, Inc.

Sources: Palm Beach Environmental Laboratories, Inc., 2010;  
Analytical Services, Inc., 2010; and  
ECT, 2010.



**TABLE 4. REMEDIAL ALTERNATIVE ANALYSIS  
SAFETY KLEEN SYSTEMS-MEDLEY, FL**

SOIL													
Arsenic	Long/Short Term Protection of Human Health & Environment	Rank	Implementability	Rank	Operational Requirements	Rank	Feasibility	Rank	Time to Cleanup	Rank	Cost	Rank	Total Score
Excavation	Will provide a permanent removal of exposure.	4	Area very accessible.	3	None required.	4	Area accessible to standard construction equipment. Extra material handling may be required.	3	Removal could be completed in 1-2 days.	4	Not a high cost given the small area and long term permanent removal of impacts.	3	21
Soil Vapor Extraction	Arsenic is not a volatile constituent.	n/a		n/a		n/a		n/a		n/a		n/a	
Capping w/ Institutional Control	Will prevent any exposure to underlying impacted soil.	3	Area very accessible. Requires Deed restriction and survey.	2	Maintaining integrity of impervious surface not difficult.	3	Area accessible to standard construction equipment.	4	Arsenic impacts will remain. Deed restriction for future property use. Can be addressed during site closure.	2	Small area requiring a cap will not be expensive.	3	17
Institutional Control w/o Engineering Control	Site is a secure industrial facility with physically secure boundaries.	3	Requires Deed restriction and survey.	4	None required.	4	Requires Deed restriction and survey	4	Arsenic impacts will remain. Deed restriction for future property use. Can be addressed during site closure.	2	Cost for drafting Deed restriction and PLS survey of area of concern.	4	21
Stabilization	Arsenic appears naturally stable since dissolved arsenic was not detected in groundwater samples.	1	Area very accessible.	3	None required.	4	Area accessible to standard construction equipment. Extra material handling required.	2	Arsenic impacts will remain. Deed restriction for future property use.	2	Arsenic will remain possibly above direct exposure criteria.	1	13
Bioremediation	Arsenic is an element and will not break down.	n/a		n/a		n/a		n/a		n/a		n/a	
Oxidation	The oxidation of arsenic produces arsenic trioxide a very toxic compound.	n/a		n/a		n/a		n/a		n/a		n/a	
Natural Attenuation	Arsenic is an element and will not break down.	n/a		n/a		n/a		n/a		n/a		n/a	
PCE	Long/Short Term Protection of Human Health & Environment	Rank	Implementability	Rank	Operational Requirements	Rank	Feasibility	Rank	Time to Cleanup	Rank	Cost	Rank	Total Score
Excavation	Will provide a permanent removal of exposure.	4	Area very accessible.	3	None required.	4	Area accessible to standard construction equipment.	3	Removal could be completed in 1-2 days.	4	Not a high cost, given the small area and long term permanent removal of impacts	3	21
Soil Vapor Extraction	Will provide a permanent removal of exposure.	3	Area very accessible.	4	Soil vapor extraction systems are relatively simple to operate. Electric power and air emissions treatment is required.	3	The water table has been observed at 1 ft below land surface during rain events. Excessive water uptake is probable.	1	Removal of PCE from the vadose zone is typically completed in less than one year.	3	Not a high cost, given the small area and long term removal of impacts.	3	17
Capping w/ Institutional Control	Will prevent any exposure to underlying impacted soil.	2	Area very accessible. Requires Deed restriction and survey.	4	Maintaining integrity of impervious surface not difficult.	3	Potential for continued leaching to groundwater.	1	PCE impacts will remain. Deed restriction for future property use.	1	Small area requiring a cap is already paved.	3	14
Induced air stripping (Innovation)	Will provide a permanent removal of exposure.	3	Area very accessible.	4	None required (applies the groundwater air sparging system).	3	PCE is a volatile constituent, and facilitated by slope of pavement. Less disturbance than excavation.	4	Concurrent with air sparging of groundwater.	3	No cost, except confirmatory soil samples.	4	21
Stabilization	Stabilization of organic constituents in soil reduces the leachability of the contaminants.	2	Area very accessible.	4	None required.	4	Area accessible to standard construction equipment. Extra material handling required.	2	Stabilization could be completed in 1-2 days.	3	More costly than other methods and potential leaching may occur.	1	16
Bioremediation	PCE located in the phreatic zone is exposed to oxygen and may not break down under these conditions. Should breakdown occur, daughter compounds are regulated. Injection of a carbon source is required.	2	Area very accessible.	4	None required.	3	Area accessible to standard injection equipment.	4	Periodic monitoring required to evaluate if reductive dechlorination is occurring. Daughter compounds may result.	2	Fairly high cost compared to other methods and the potential for incomplete degradation.	2	17
Oxidation	To oxidize PCE an oxidizer has to be introduced. Untreated portions of the impacted soil may remain.	2	Area very accessible.	4	None required.	3	Area accessible to standard injection equipment.	4	Periodic monitoring required to evaluate if reductive dechlorination is occurring.	2	Fairly high cost compared to other methods and the potential for incomplete degradation.	2	17
Natural Attenuation	PCE located in the vadose zone is exposed to oxygen and may not break down under these conditions. Should breakdown occur, daughter compounds are regulated. Injection of a carbon source is required.	1	Area very accessible	4	None required.	4	Requires nothing to do.	4	PCE may not break down and the potential for daughter compounds for continued leaching is present.	1	No cost associated with leaving PCE impacted soil in place. High potential for continued leaching. Long term monitoring cost may be incurred.	3	17

TABLE 4. REMEDIAL ALTERNATIVE ANALYSIS  
SAFETY KLEEN SYSTEMS-MEDLEY, FL

GROUNDWATER													
Chlorinated Solvents	Long/Short Term Protection of Human Health & Environment	Rank	Implementability	Rank	Operational Requirements	Rank	Feasibility	Rank	Time to Cleanup	Rank	Cost	Rank	Total Score
Groundwater Recovery and Treatment	Groundwater recovery provides a capture measure for reducing potential migration and possible removal of dissolve solvents.	2	Area very accessible. Need for treatment of extracted groundwater.	2	Groundwater recovery systems are relatively simple but require frequent cleaning and maintenance of equipment. Disposal of treated water required via infiltration, NPDES or POTW.	2	Area accessible for remediation system construction methods.	3	The presence of leachable contaminants may extend the operation for several years.	1	Equipment, O&M costs are high due to the potential for long-term operation.	1	11
Air Sparging	The low concentrations and shallow impacts make sparging a practical method for rapid removal of dissolved solvents.	4	Area very accessible. No effluent treatment required.	4	Air sparging systems are relatively simple to operate. Electric power and capture of emissions for treatment may be required.	3	Area accessible for remediation system construction methods.	3	Removal of dissolved solvent from the shallow water table is typically completed in less than one year with the present concentration of solvents.	3	Not a high cost, given the small area and long term removal of impacts.	3	20
Ozone Sparging	The low concentrations and shallow impacts make ozone sparging a practical method for rapid removal of dissolved solvents.	4	Area very accessible. No effluent treatment required.	4	Ozone sparging systems are fairly complex and special safety requirements are necessary.	2	Area accessible for remediation system construction methods.	3	Removal of dissolved solvent from the shallow water table is typically completed in less than one year with the present concentration of solvents.	3	Equipment fairly expensive and special materials must be used for compatability with ozone.	1	17
Bio-Sparging	Chlorinated solvents will not be reduced under oxidative conditions. Potential reduction from volatilization.	1	Area very accessible. No effluent treatment required.	4	Bio-sparging systems are relatively simple to operate. Electric power and capture of emissions for treatment may be required.	3	Area accessible for remediation system construction methods.	3	Chlorinated solvents will not be reduced under oxidative conditions. Potential reduction from volatilization.	1	Long-term operation may not result in achievement of cleanup goals.	1	13
Bioremediation	Chlorinated solvents will break down under reductive conditions. Injection of a carbon source required.	3	Area very accessible. No effluent treatment required.	4	None required.	4	Area accessible for remediation system construction methods.	3	Periodic monitoring required to evaluate if reductive dechlorination is occurring. Daughter compounds may result.	2	Fairly high cost compared to other methods and the potential for incomplete degradation.	1	17
Natural Attenuation	Chlorinated solvent tend to break down to daughter compounds and stall. Daughter compounds often have lower MCLs.	1	Area very accessible.	4	None required.	4	Requires nothing to do.	3	Chlorinated solvents may not break down completely.	1	No cost associated with leaving dissolved solvents in place. High potential for plume migration. Long-term monitoring cost may be incurred.	3	18

n/a = not applicable  
1 = poor  
2 = fair  
3 = good  
4 = best

Source: ECT 2010.



**Table 5. Groundwater Monitoring Plan and Analytical Summary**  
**Safety Kleen Systems, Inc., Medley, Florida**  
**EPA ID NO. FLD 984 171 694**

Monitor Wells (MW- )	Frequency	Analysis
MW-1, 2R, 3, 4, 5, 6, 7, 8	Baseline	EPA 8260
MW-1, 3, 4, 5	Quarterly	EPA 8260
MW-2R, 7, 8	Annually	EPA 8260

Constituents to be monitored include the following:

Acetone	2-Chlorotoluene	trans-1,3-Dichloropropene	1,1,1,2-Tetrachloroethane
Acrolein	4-Chlorotoluene	Ethylbenzene	1,1,2,2-Tetrachloroethane
Acrylonitrile	Dibromochloromethane	Ethyl methacrylate	Tetrachloroethene
Allyl chloride	1,2-Dibromo-3-Chloropropane	Hexachlorobutadiene	Toluene
Benzene	1,2-Dibromoethane	4-Isopropyltoluene	1,2,3-Trichlorobenzene
Bromobenzene	Dibromomethane	Hexachloroethane	1,2,4-Trichlorobenzene
Bromochloromethane	1,2-Dichlorobenzene	Iodomethane	1,1,1-Trichloroethane
Bromodichloromethane	1,3-Dichlorobenzene	Isopropylbenzene	1,1,2-Trichloroethane
Bromoform	1,4-Dichlorobenzene	Methacrylonitrile	Trichloroethene
Bromomethane	trans-1,4-Dichloro-2-butene	Methyl acrylate	Trichlorofluoromethane
n-Butylbenzene	Dichlorodifluoromethane	2-Hexanone	1,2,3-Trichloropropane
sec-Butylbenzene	1,1-Dichloroethane	Methylene chloride	1,2,4-Trimethylbenzene
t-Butylbenzene	1,2-Dichloroethane	Methyl ethyl ketone	1,3,5-Trimethylbenzene
Carbon disulfide	1,1-Dichloroethene	Methyl methacrylate	Vinyl acetate
Carbon tetrachloride	cis-1,2-Dichloroethene	4-Methyl-2-pentanone	Vinyl chloride
Chlorobenzene	trans-1,2-Dichloroethene	Methyl-t-butyl ether	Xylene, m,p-
1-Chlorobutane	1,2-Dichloropropane	Naphthalene	Xylene, o-
Chloroethane	1,3-Dichloropropane	2-Nitropropane	Xylenes- Total
2-Chloroethylvinyl ether	2,2-Dichloropropane	Propionitrile	
Chloroform	1,1-Dichloropropene	n-Propylbenzene	
Chloromethane	cis-1,3-Dichloropropene	Styrene	

Source: ECT, 2010.

**Table 6. Air Sparging System Monitoring Schedule  
Safety Kleen Systems, Inc., Medley, Florida  
EPA ID NO. FLD 984 171 694**

<b>Sample Point</b>	<b>Analysis Method</b>	<b>Sampling Schedule</b>
All Air Sparge Wells	Pressure and Flowrate	Weekly the first month Monthly thereafter
MW-1, MW-3, MW-4, MW-5, MW-7	Dissolved Oxygen Water Level	Weekly the first month, Monthly 1 <sup>st</sup> Quarter, Quarterly thereafter

Source: ECT, 2010.

**Table 7. Soil Monitoring Plan**  
**Safety Kleen Systems, Inc., Medley, Florida**  
**EPA ID NO. FLD 984 171 694**

Sample Point	Analysis Method	Sampling Schedule
Four soil samples (Figure 13) @ 1.5 ft bls	EPA Method 8260	At or near the end of active remediation

Constituents to be monitored include the following:

Acetone	2-Chlorotoluene	trans-1,3-Dichloropropene	1,1,1,2-Tetrachloroethane
Acrolein	4-Chlorotoluene	Ethylbenzene	1,1,2,2-Tetrachloroethane
Acrylonitrile	Dibromochloromethane	Ethyl methacrylate	Tetrachloroethene
Allyl chloride	1,2-Dibromo-3-Chloropropane	Hexachlorobutadiene	Toluene
Benzene	1,2-Dibromoethane	4-Isopropyltoluene	1,2,3-Trichlorobenzene
Bromobenzene	Dibromomethane	Hexachloroethane	1,2,4-Trichlorobenzene
Bromochloromethane	1,2-Dichlorobenzene	Iodomethane	1,1,1-Trichloroethane
Bromodichloromethane	1,3-Dichlorobenzene	Isopropylbenzene	1,1,2-Trichloroethane
Bromoform	1,4-Dichlorobenzene	Methacrylonitrile	Trichloroethene
Bromomethane	trans-1,4-Dichloro-2-butene	Methyl acrylate	Trichlorofluoromethane
n-Butylbenzene	Dichlorodifluoromethane	2-Hexanone	1,2,3-Trichloropropane
sec-Butylbenzene	1,1-Dichloroethane	Methylene chloride	1,2,4-Trimethylbenzene
t-Butylbenzene	1,2-Dichloroethane	Methyl ethyl ketone	1,3,5-Trimethylbenzene
Carbon disulfide	1,1-Dichloroethene	Methyl methacrylate	Vinyl acetate
Carbon tetrachloride	cis-1,2-Dichloroethene	4-Methyl-2-pentanone	Vinyl chloride
Chlorobenzene	trans-1,2-Dichloroethene	Methyl-t-butyl ether	Xylene, m,p-
1-Chlorobutane	1,2-Dichloropropane	Naphthalene	Xylene, o-
Chloroethane	1,3-Dichloropropane	2-Nitropropane	Xylenes- Total
2-Chloroethylvinyl ether	2,2-Dichloropropane	Propionitrile	
Chloroform	1,1-Dichloropropene	n-Propylbenzene	
Chloromethane	cis-1,3-Dichloropropene	Styrene	

Source: ECT, 2010.

## FIGURES



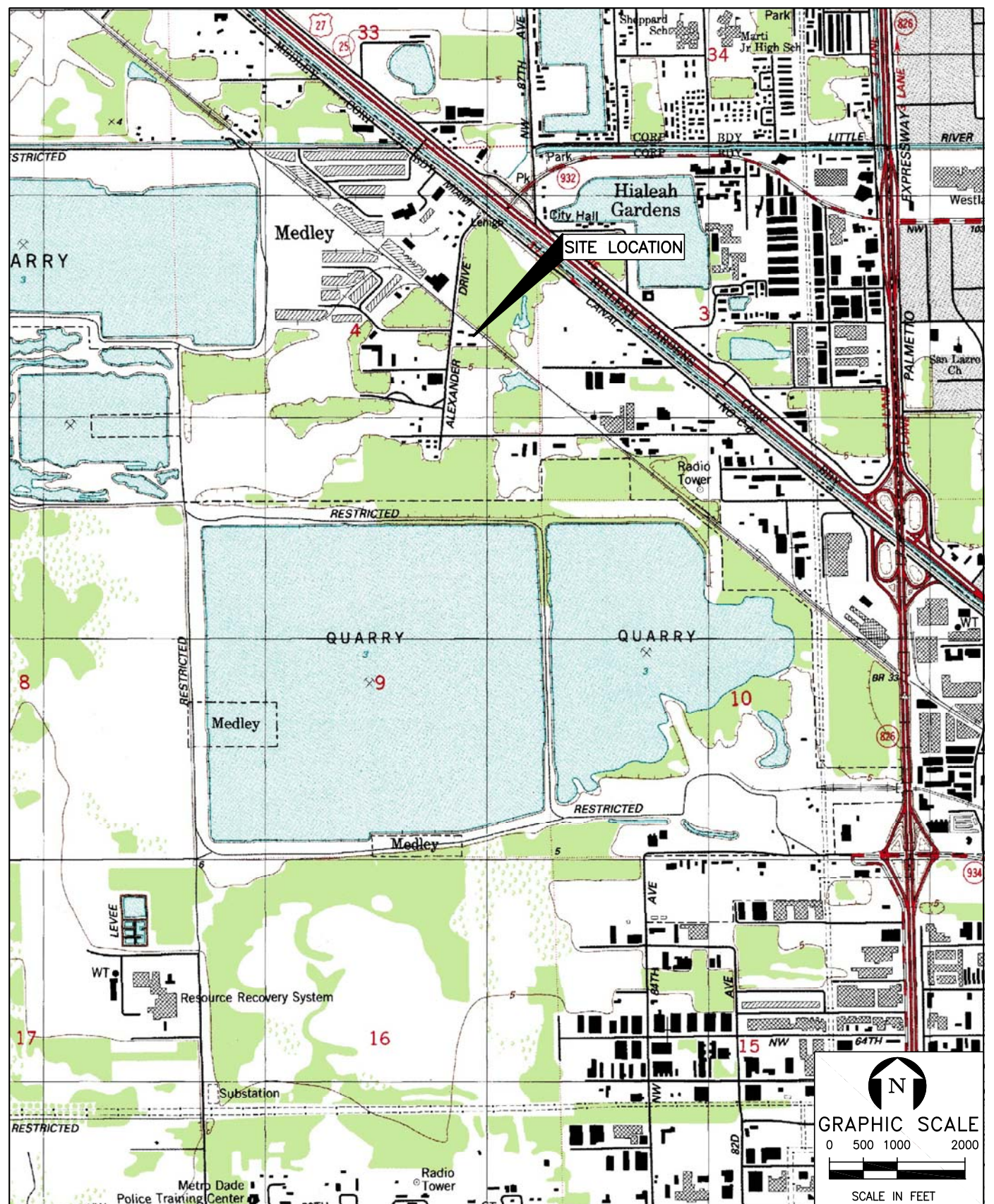


FIGURE 1.  
GENERAL LOCATION AND TOPOGRAPHICAL MAP  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Sources: USGS Quad Map of Hialeah, FL.,1980; ECT, 2010.

**ECT**

Environmental Consulting &amp; Technology, Inc.



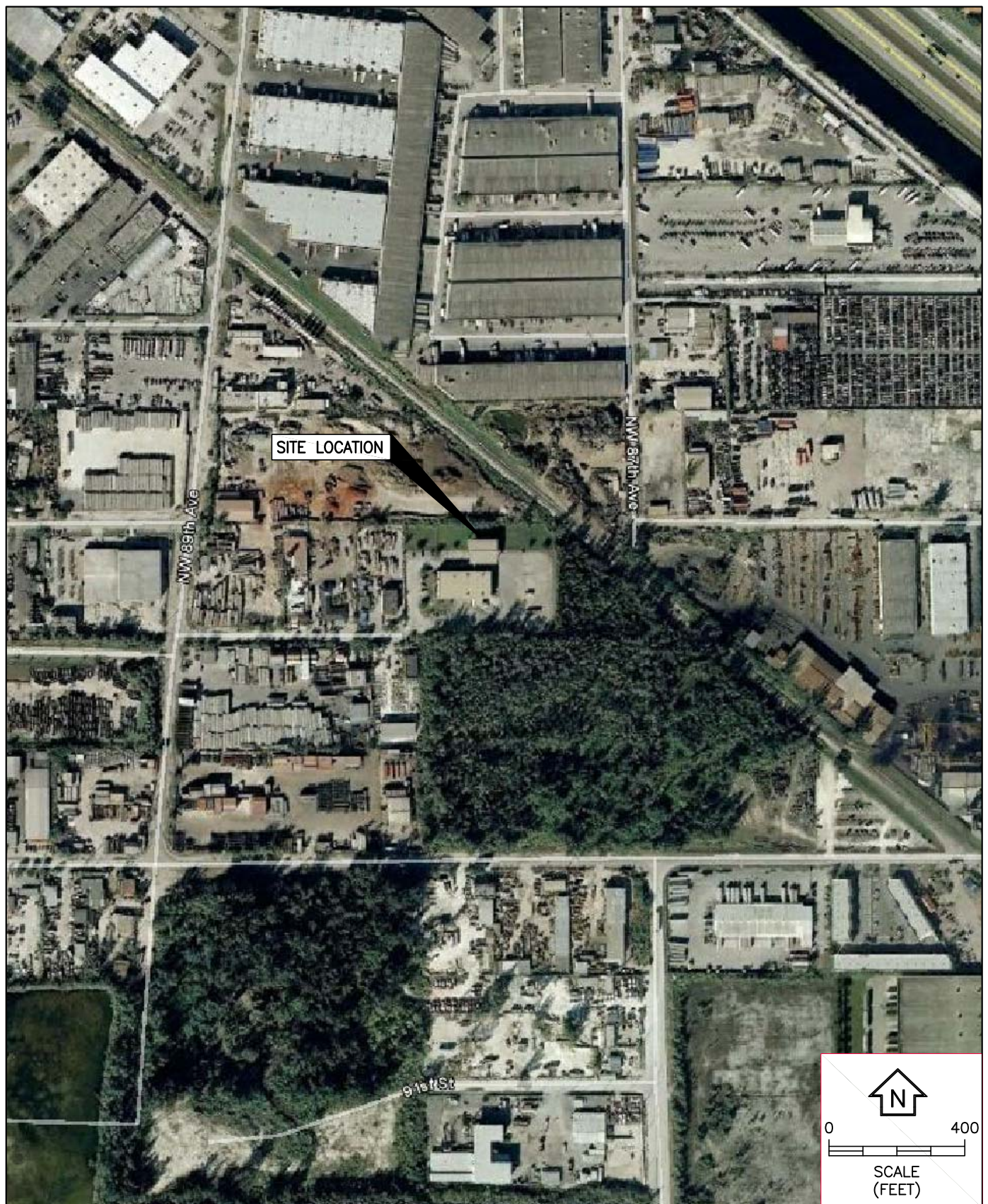


FIGURE 2.  
SITE VICINITY MAP  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Sources: Google Earth Aerial Photograph, FL., 2009; ECT, 2010.

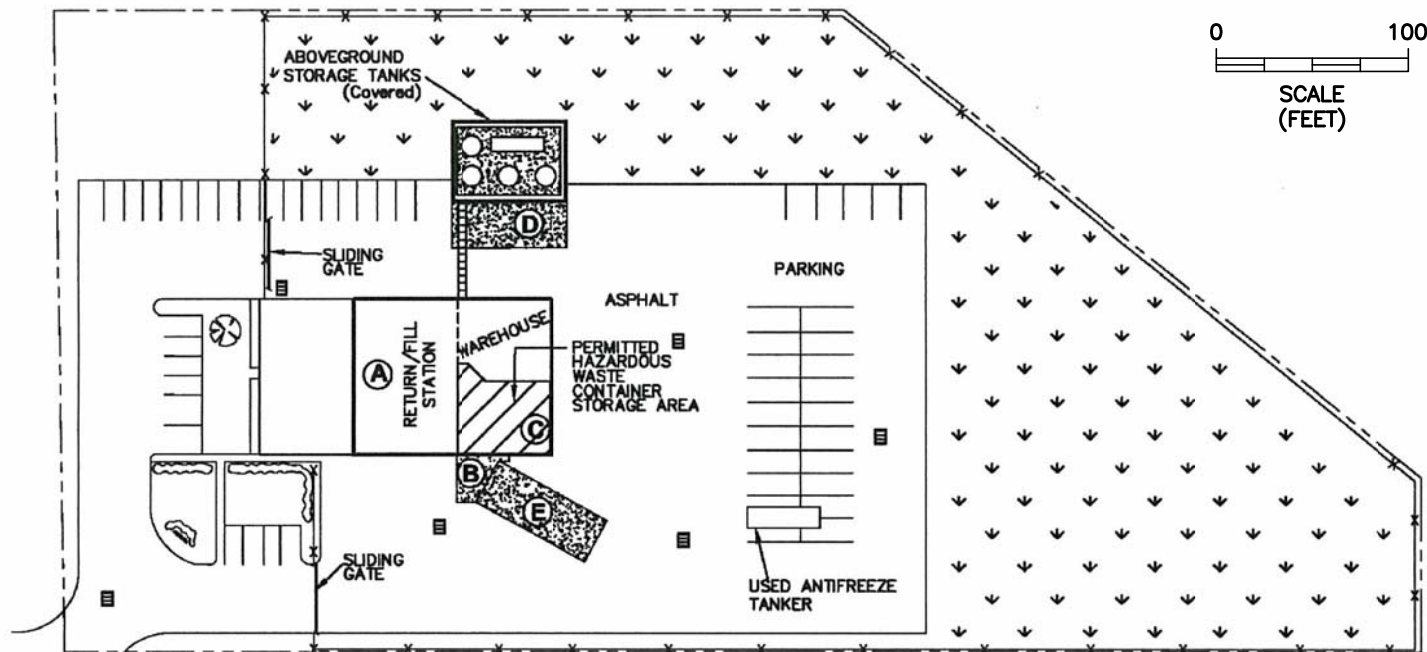
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*Environmental Consulting & Technology, Inc.*



# Safety-Kleen Systems, Inc. Facility Medley, Florida

Revision 0 - 09/19/07



## LEGEND

- |  |                                   |  |   |
|--|-----------------------------------|--|---|
|  | PROPERTY BOUNDARY                 |  | (A) PARTS WASHER SOLVENT DRUM DUMP/BARREL WASH/REFILL (TRUCKS DO NOT DRIVE THROUGH BUILDING)      |
|  | CHAIN-LINK FENCE                  |  | (B) LOADING & UNLOADING OF DRUMS CONTAINING SOLVENTS AND WASTES FRs (TRANSFER) FROM TRUCKS        |
|  | HAZARDOUS WASTE MANAGEMENT AREAS  |  | (C) LOADING & UNLOADING OF DRUMS CONTAINING SOLVENTS AND WASTE FROM LOCAL AREA VANS & TRUCKS      |
|  | CONCRETE                          |  | (D) LOADING & UNLOADING OF PARTS WASHER SOLVENT (COVERED DRIVEWAY), USED OIL, AND OILY WASTEWATER |
|  | GRASS                             |  | (E) LOADING CONTAINERIZED WASTE TRUCKS FOR SHIPMENT TO RECYCLE CENTERS                            |
|  | EXISTING ABOVEGROUND STORAGE TANK |  |   |
|  | EXISTING ABOVEGROUND STORAGE TANK |  |   |
|  | STORM WATER CATCH BASIN           |  |   |

FIGURE 3.  
FACILITY MAP  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Sources: ERM, 2007; ECT, 2010.

# **ECT**

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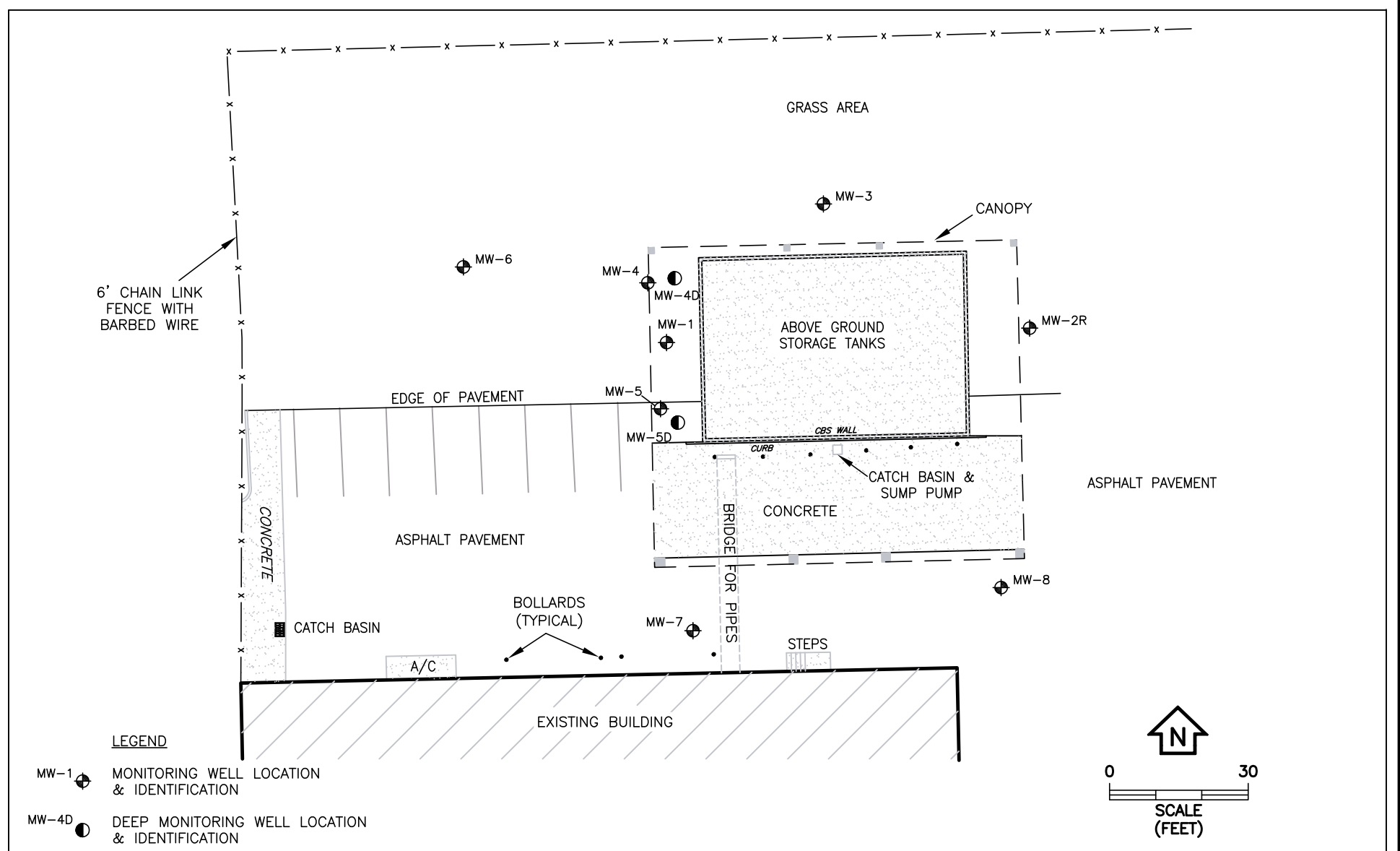


FIGURE 4.  
 AREA OF INVESTIGATION  
 SAFETY-KLEEN SYSTEMS, INC.  
 8755 NW 95TH STREET  
 MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
 Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

**ECT**  
 Environmental Consulting & Technology, Inc.

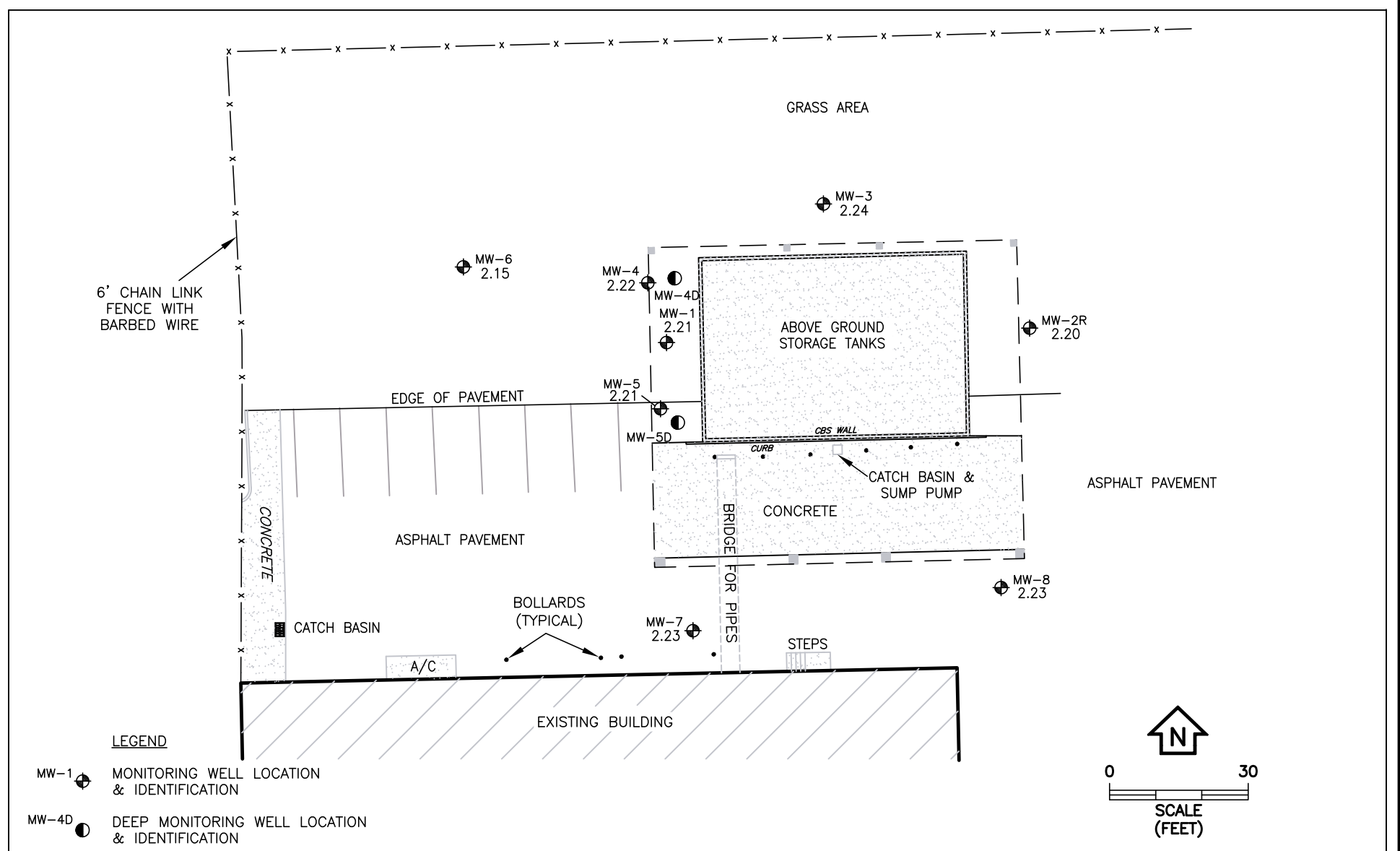


FIGURE 5.  
 WATER TABLE ELEVATION MAP, MAY 4, 2010  
 SAFETY-KLEEN SYSTEMS, INC.  
 8755 NW 95TH STREET  
 MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
 Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

**ECT**  
 Environmental Consulting & Technology, Inc.

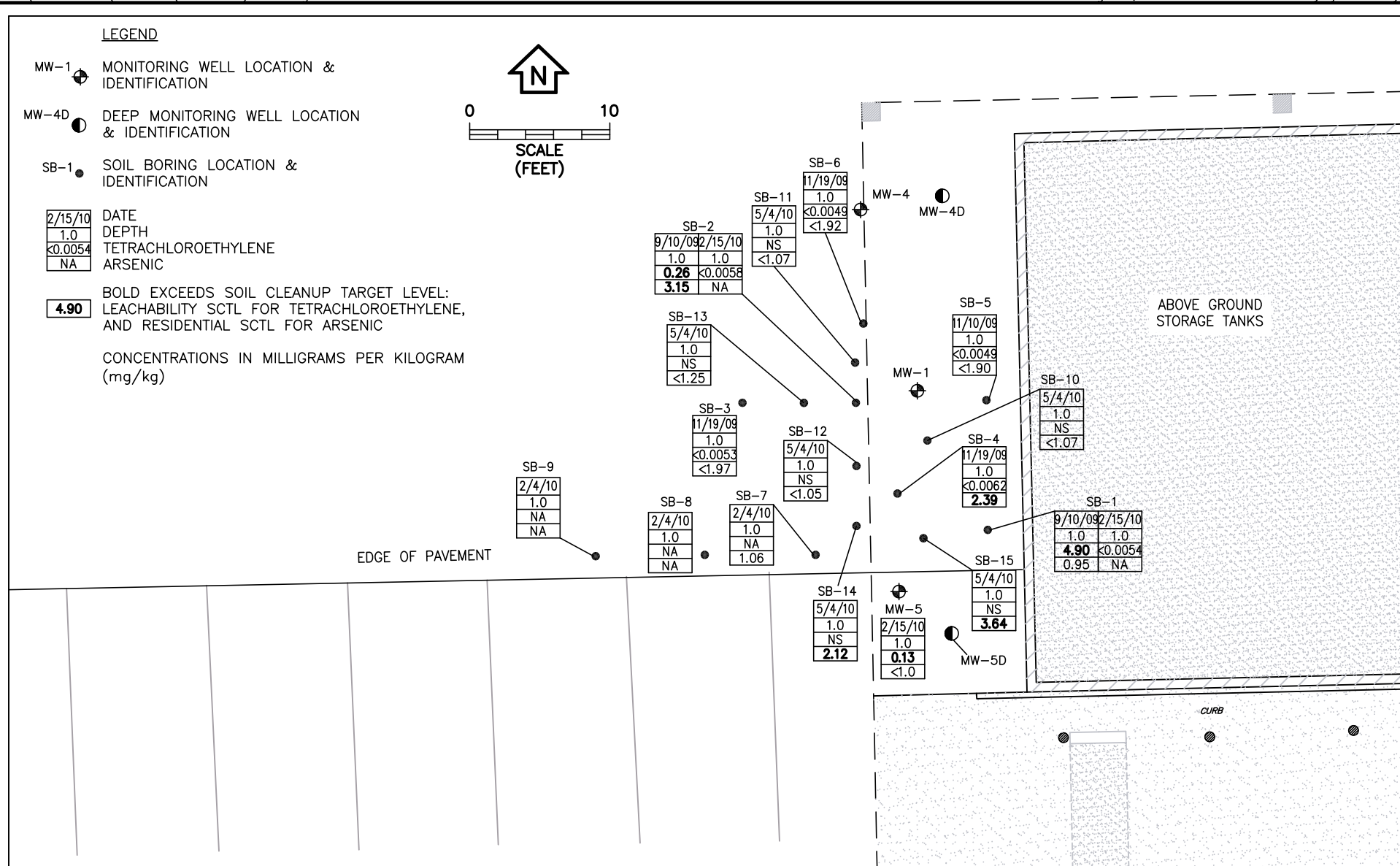


FIGURE 6.  
SOIL ANALYTICAL DATA  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

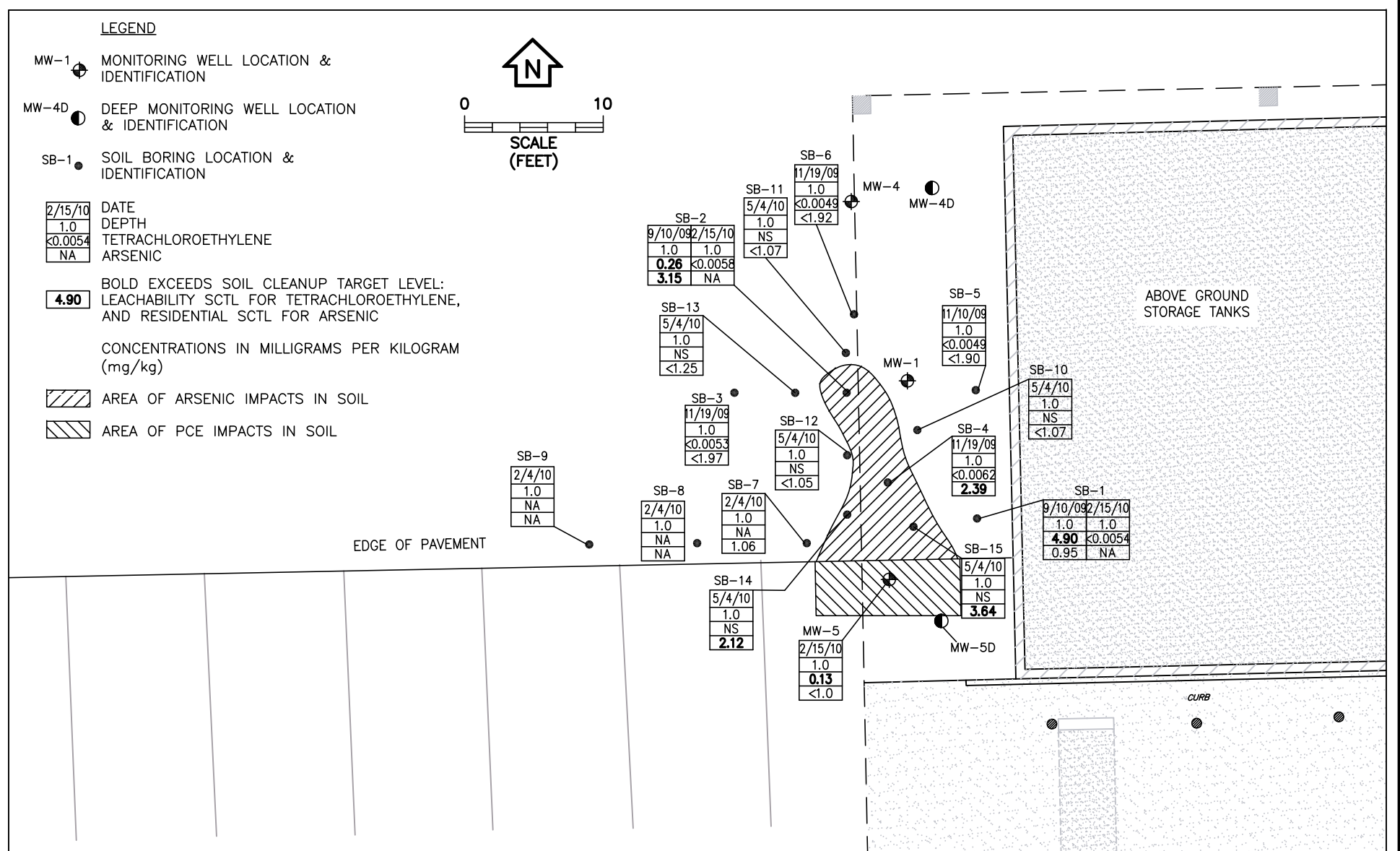


FIGURE 7.  
EXTENT OF SOIL IMPACTS  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.



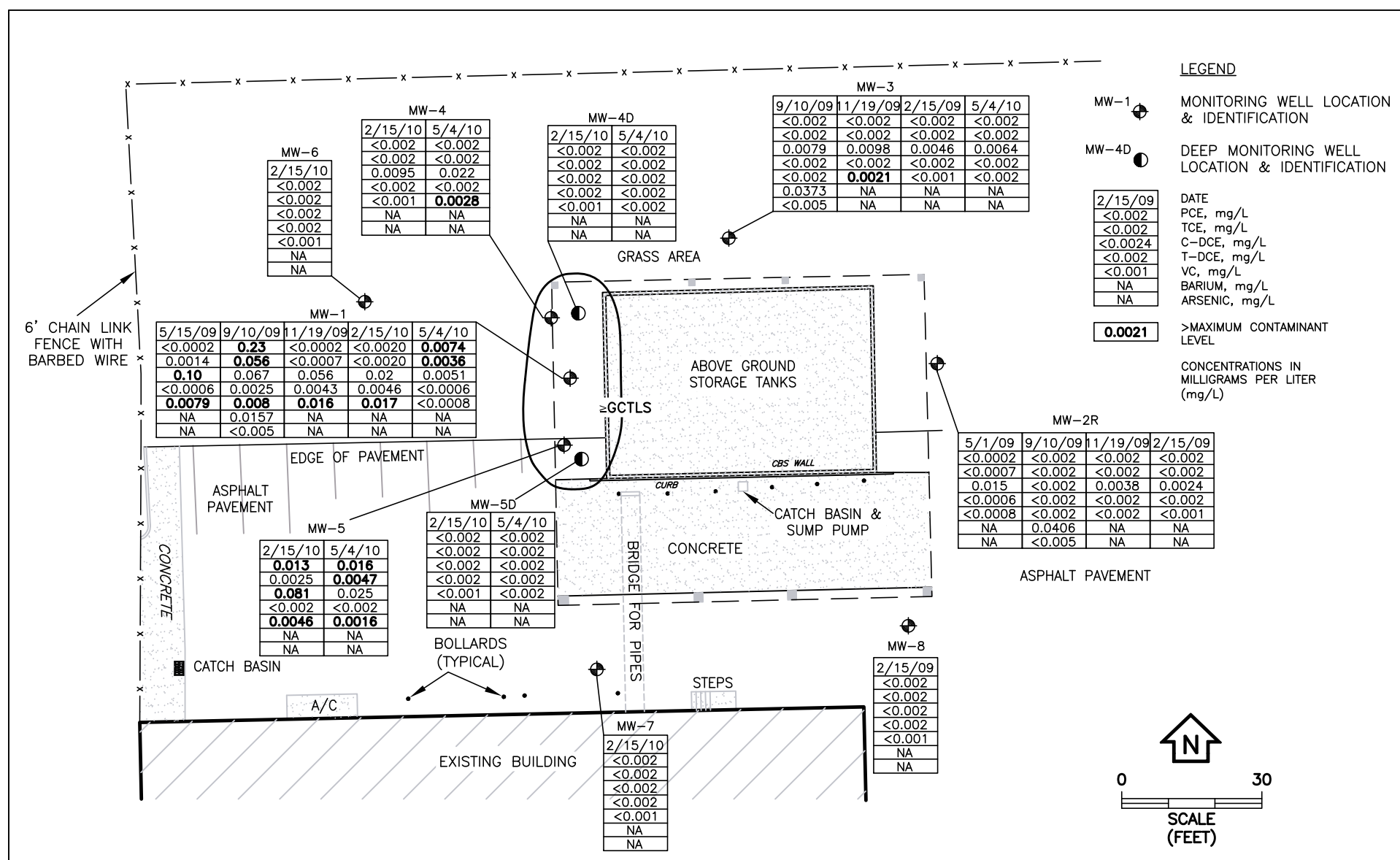


FIGURE 8.  
GROUNDWATER ANALYTICAL SUMMARY  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

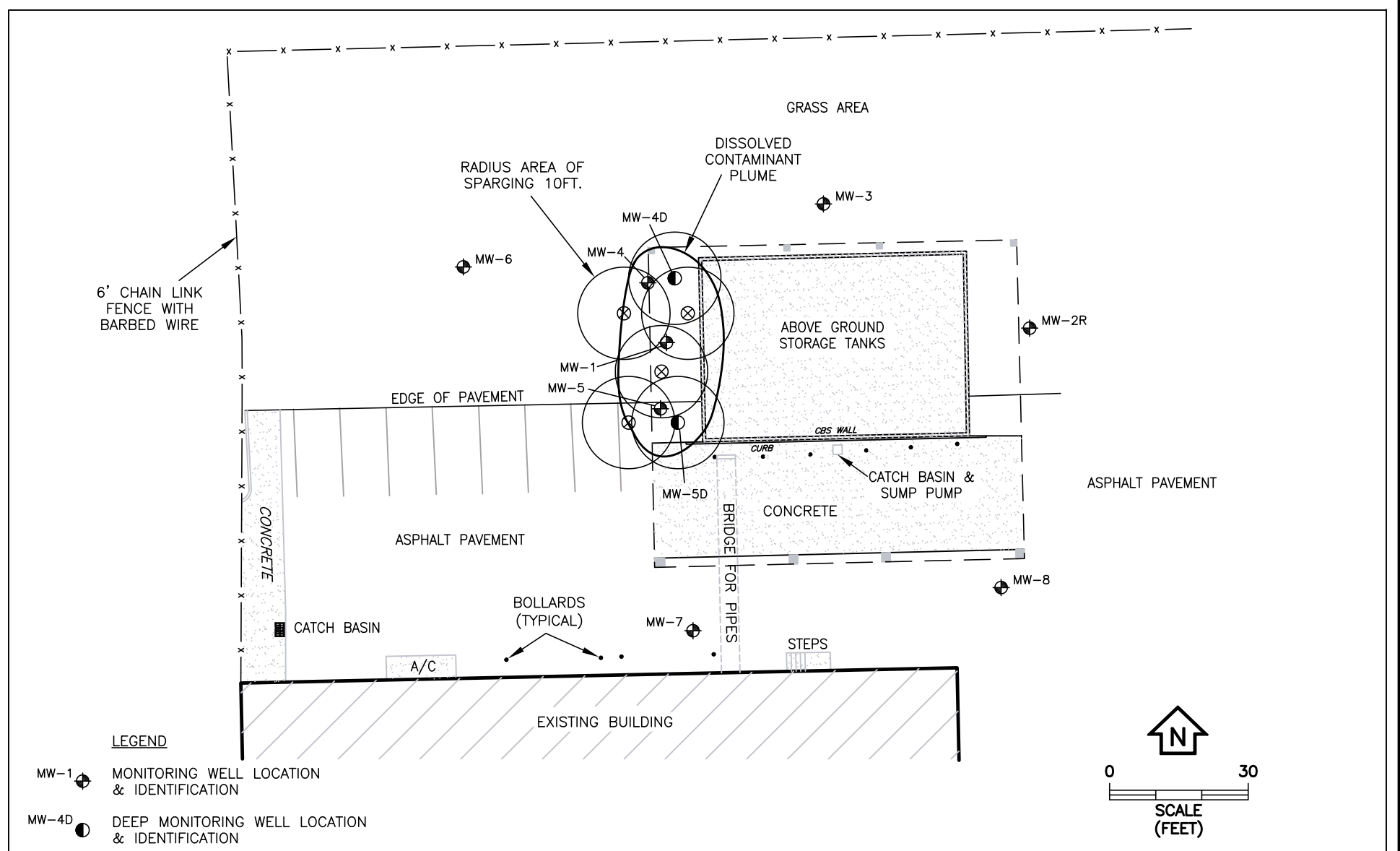
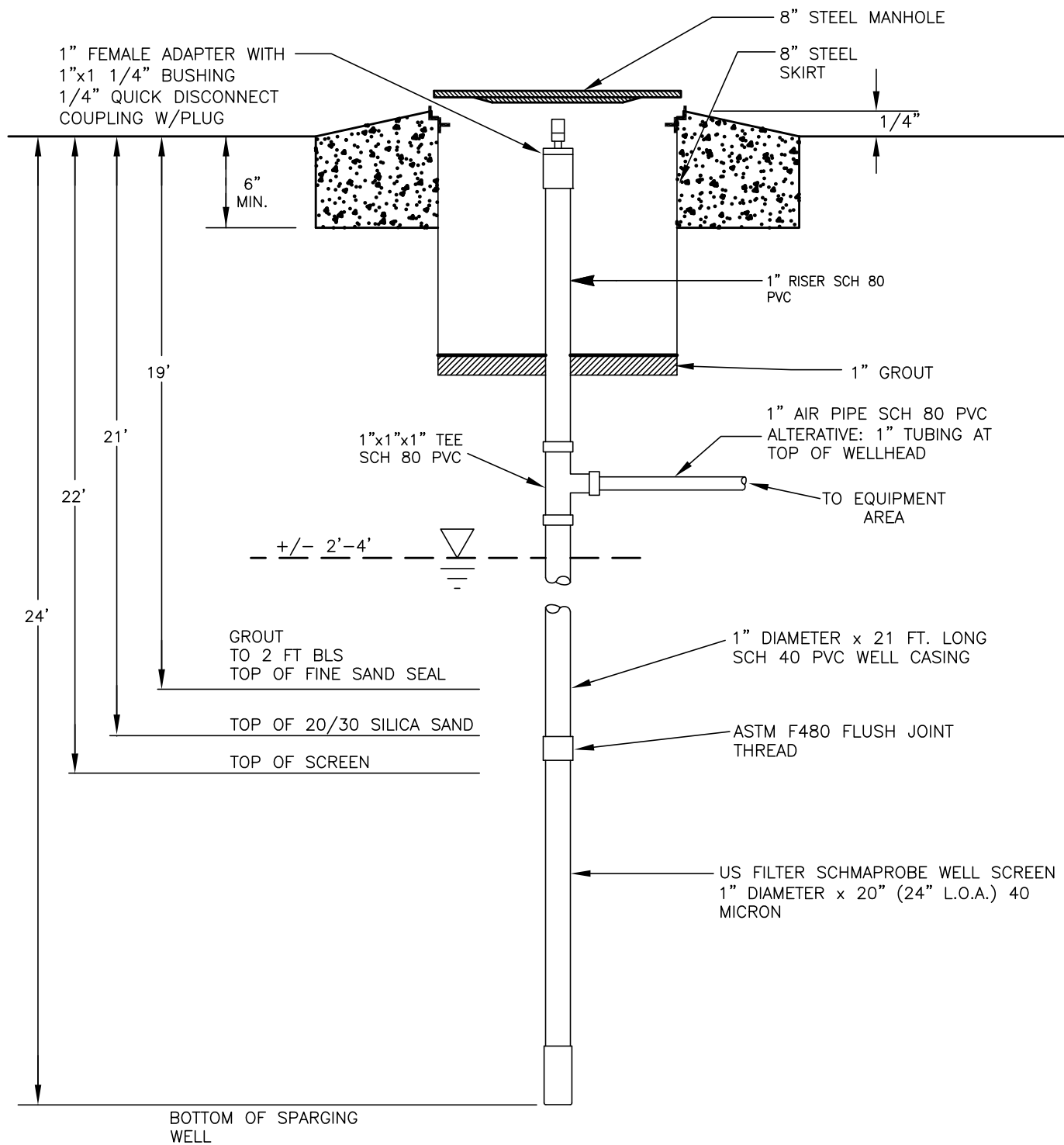


FIGURE 9.  
 AIR SPARGING INFLUENCE  
 SAFETY-KLEEN SYSTEMS, INC.  
 8755 NW 95TH STREET  
 MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
 Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

**ECT**  
 Environmental Consulting & Technology, Inc.



### AIR SPARGING WELL (6 TOTAL)

NOT TO SCALE

FIGURE 10.  
AIR SPARGING WELL CONSTRUCTION DETAILS  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Source: ECT, 2010.

**ECT**  
Environmental Consulting & Technology, Inc.



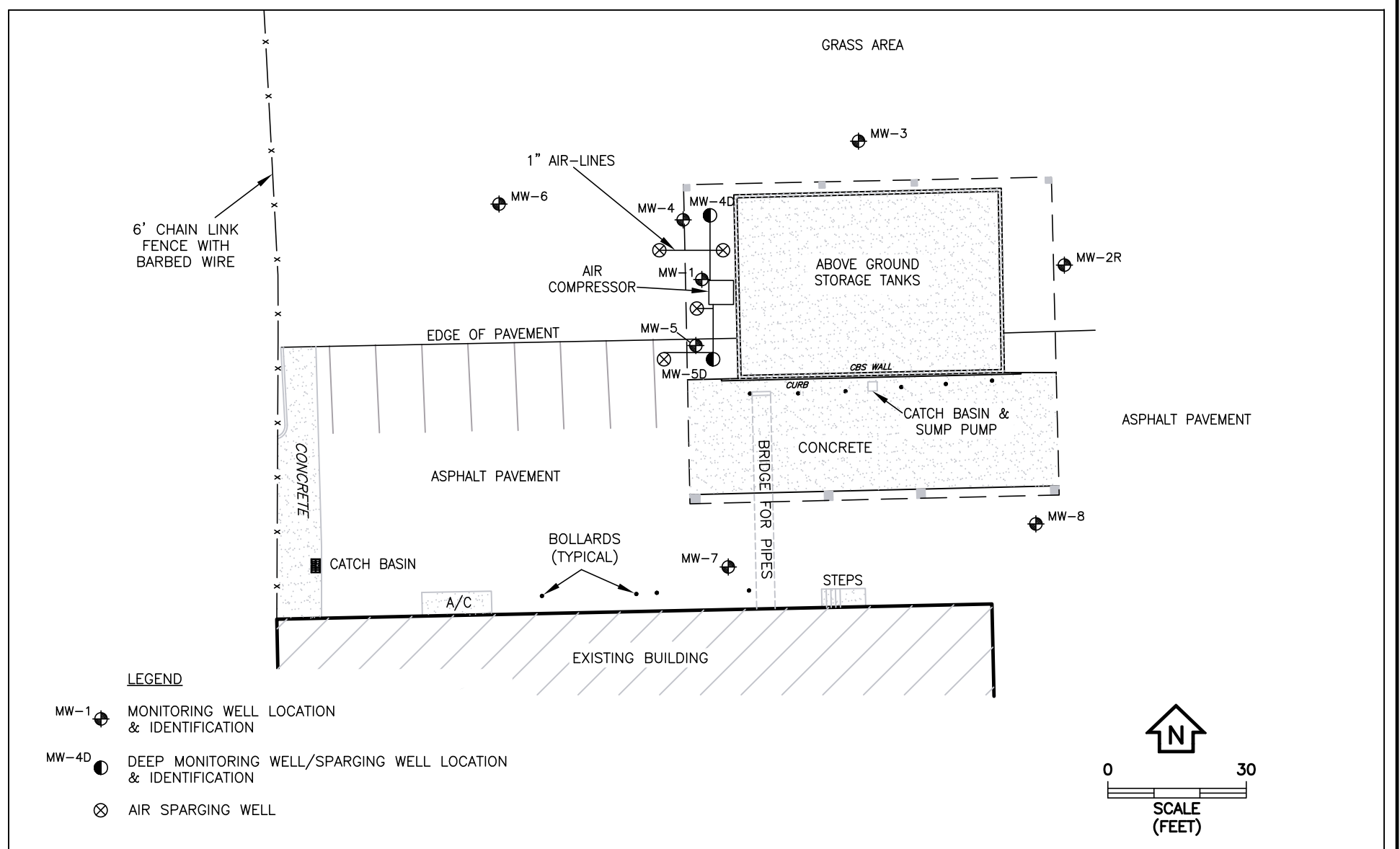


FIGURE 11.  
 CONCEPTIONAL SYSTEM LAYOUT  
 SAFETY-KLEEN SYSTEMS, INC.  
 8755 NW 95TH STREET  
 MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
 Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

**ECT**  
 Environmental Consulting & Technology, Inc.

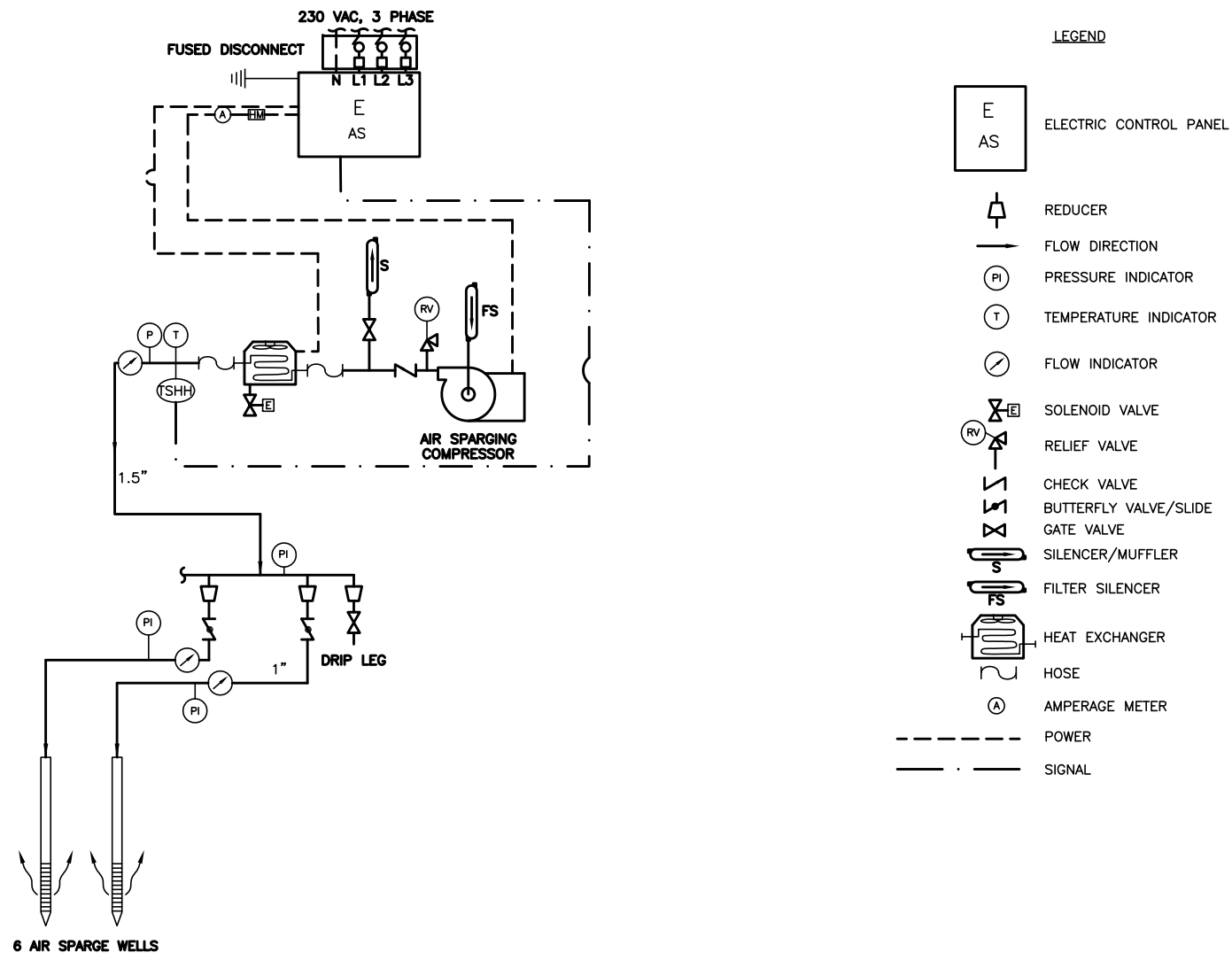


FIGURE 12.  
 PROCESS AND INSTRUMENTATION DIAGRAM  
 SAFETY-KLEEN SYSTEMS, INC.  
 8755 NW 95TH STREET  
 MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
 Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

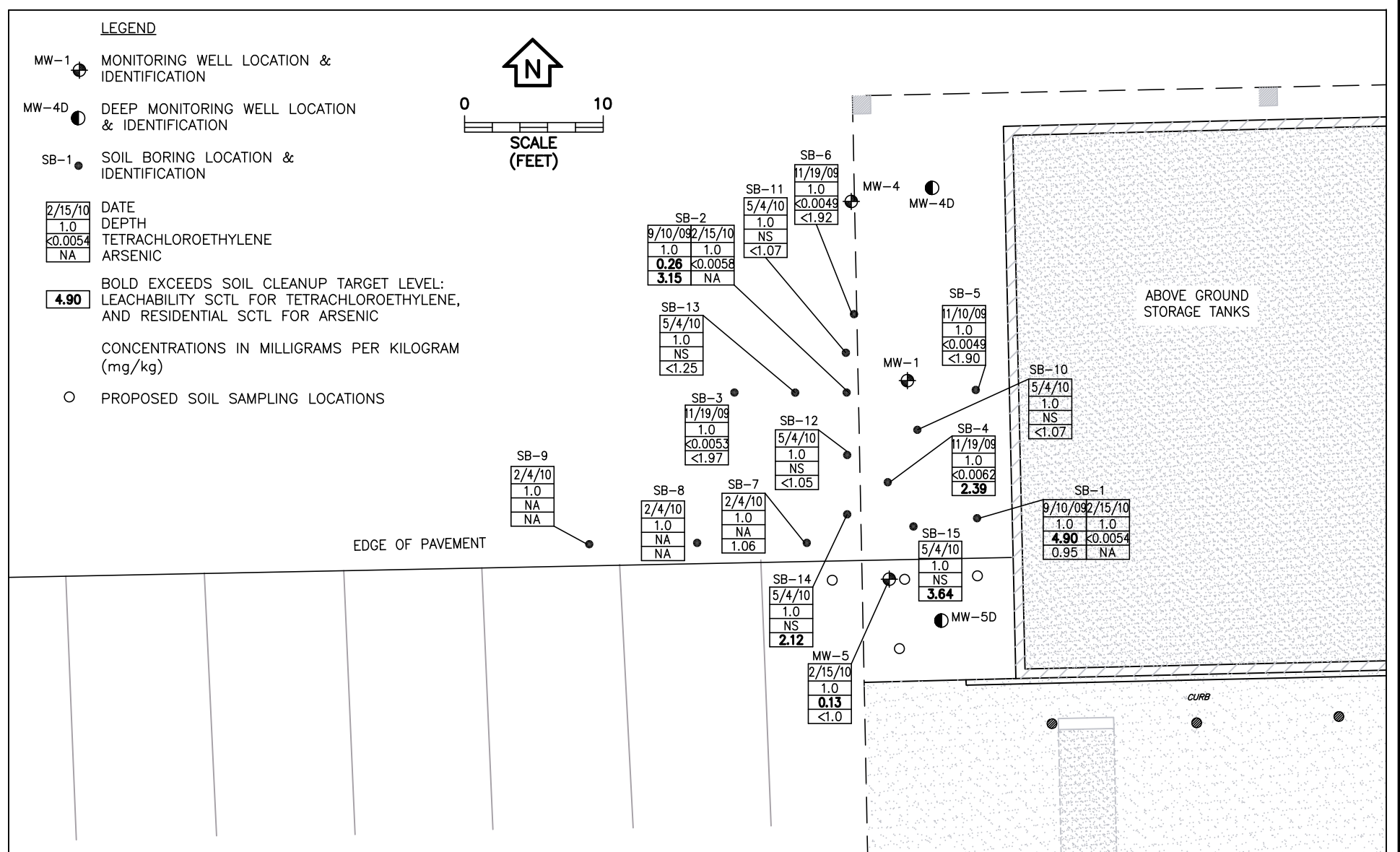


FIGURE 13.  
SOIL MONITORING PLAN  
SAFETY-KLEEN SYSTEMS, INC.  
8755 NW 95TH STREET  
MEDLEY, MIAMI-DADE COUNTY, FLORIDA  
Sources: Bloomster Professional Land Surveyors, Inc., 2010; ECT, 2010.

**APPENDIX A**  
**SITE ASSESSMENT REPORT ADDENDUM**

## **APPENDIX A**

### **Site Assessment Report Addendum**

#### **Safety-Kleen Systems, Inc. -- Medley, Florida EPA ID No. FLD 984 171 694; Permit No. 56019/HO/006**

This Appendix A constitutes the Site Assessment Report Addendum (SARA) for the Safety-Kleen Systems, Inc. -- Medley, Florida facility. In accordance with the May 14, 2010, letter from Department, this SARA specifically addresses the comments requiring a response that were attached to the Department's letter.

All the Department's comments are reprinted below, and those requiring a response are followed by the Safety-Kleen (S-K) response. In addition, S-K has chosen to provide a response to several of the comments that do not require a response.

#### **General Comments Not Requiring a Response:**

1. As a follow up to the Department's January 15, 2010 letter, at some point the permit will be modified to include the area under investigation. Because a specific source of the contamination was not determined, this area will be considered an Area of Concern (AOC).

#### **Response:**

S-K acknowledges this fact and believes it would be appropriate and efficient to modify the permit after Department approval of the Remedial Action Plan (RAP), in accordance with Permit Condition VI.A.2. This approach would achieve adding the AOC to the permit at the same time as incorporating the final remedy into the permit, and possibly any updates per Comment No. 2 below.

2. As noted in the cover letter, Rule 62-780.600(7), F.A.C. allows a SAR to reference previously submitted documents, and the Department has chosen to review previously submitted information, contained in Safety Kleen's September 19, 2007 Part B to determine compliance with required information. Safety Kleen should ensure that the Part B information is current whether or not a response is asked or not. If any of the information referenced in the Part B needs updating, the application update and subsequent permit modification should be done with the AOC modification mentioned in comment 1. above.

3. Safety Kleen should provide electronic data deliverables (EDDs) using ADaPT format (discussed in further detail below) with future groundwater monitoring reports.

**Response:**

As presented in the RAP portion of this combined document, a sampling event occurred in May 2010, which was after submittal of the SAR. Results from that sampling event are included herein and are also being submitted separately as EDDs (See also the response to comment 24, below).

4. An identification of present real property owner(s) was not provided (Rule 62-780.600(8)(a)(1)(a), F.A.C. However, the Part B identifies the land owner as Len Longshore.

**Response:**

For clarification, the property owner is Safety-Kleen Systems, Inc., whereas Mr. Longshore is the owner's authorized agent that signed the application.

5. The SAR is missing discussion on storage of waste antifreeze and mercury-containing lamps and devices. There is also no discussion or details on the container storage area (Rule 62-780.600(8)(a)(1)(b), F.A.C.). This information can be found in the Part B:

- Waste antifreeze                      Part II.A.5
- Mercury-containing lamps        Part II.A.5
- Container storage area            Part II.B Containers

6. A description of all known products used or manufactured and of all known by-products and wastes (including waste constituents) generated during the life of the facility was not included (Rule 62-780.600(8)(a)(1)(c), F.A.C.). A great deal of information on the products and the wastes can be gleaned from Safety Kleen's Part B:

- Description of Facility Operations    Part I.D.2 (discussions on products and wastes)
- Waste Types                              Part I.D.3 (waste codes and annual quantities)
- Waste Information                      Part II.A.5

7. A summary of *current* and past environmental permits and enforcement actions was not submitted (Rule 62-780.600(8)(a)(1)(d), F.A.C.). Safety Kleen's September 19, 2007 Part B lists seven existing or pending environmental permits (although some may have expired) in Part I.A.19. If this table needs to be updated, it should also be updated for the Part B. FDEP enforcement actions are summarized in other FDEP databases.

8. A figure showing the property boundary was not submitted (Rule 62-780.600(8)(a)(3), F.A.C.). Figure 2.2-4 in the Part B illustrates the legal boundaries.



9. A figure showing all buildings, utilities, sewers, floor drains, drain lines, and above and underground structures was not included (Rule 62-780.600(8)(a)(4), F.A.C.). A number of figures in the Part B identify catch basins and trenches.

- Figure 2.1-1 Facility Layout & Access Control Features
- Figure 2.2-4 Legal Boundaries
- Figure 2.2-6 Locations of Hazardous Waste Storage Areas
- Figure 5.6-4 Return/Fill Station
- Figure 8.1-1 Container Storage Area
- Figure 9.2-1 Tank Storage Area

**General Comments Requiring a Response:**

10. There should be a brief description of any permitted releases with focus on any discharge locations (Rule 62-780.600(8)(a)(1)(e), F.A.C.) and sampling requirements. If discharge locations are in ditches or conveyances that are not hard-piped, there should be discussion on any impacts the discharge(s) might have on groundwater flow because of the area's flat gradient.

**Response:**

The only permitted release at the facility is associated with rainwater accumulation in the secondary containment area for the aboveground storage tanks, as describe in S-K's September 19, 2007 RCRA Part B permit application (in Part II, page 21). Such rainwater may be "discharged to the ground surface" (no specified location) if certain precautions are taken and specified conditions are satisfied. In practice, such water is pumped onto the ground in areas immediately outside the containment walls. This secondary containment area is covered by an overhanging roof. As such, the amount of rainwater accumulation is typical minimal. Such minimal discharge would not be expected to have an important influence on groundwater flow directions. Groundwater monitoring is performed at three monitor wells surrounding the containment area (MW-1, MW-2R, and MW-3) in accordance with S-K's Industrial Waste Annual Operating Permit issued by Miami-Dade County. The groundwater monitoring parameters include volatile organic compounds (VOCs), petroleum range organics (FLPRO), and the metals lead, chromium, cadmium, and silver.

11. A map of individual contaminant discharge locations (permitted or unpermitted), including the latitude and longitude coordinates of the known discharge locations, was not included (Rule 62-780.600(8)(a)(5), F.A.C.).

**Response:**

The S-K facility has no permitted contaminant discharge locations.

This site assessment is the result of an unpermitted discharge of unknown origin. The exact location of the discharge is unknown. However, the soil and groundwater quality

data maps included in this document suggest the discharge location was at or very near monitor well MW-1. The longitude and latitude for MW-1 location were submitted to the Department electronically on March 9, 2010 (within the WACS spreadsheet); respectively, they are:

MW-1 80° 20' 25.14" W 25° 51' 37.74" N

12. The SAR must include any off site activities (e.g., dewatering, active remediation, or flood control pumping) in the immediate vicinity of the site that may impact the groundwater flow at the site (Rule 62-780.600(3)(j), F.A.C.). If there are none, then simply state so.

**Response:**

There appear to be no such offsite activities in the immediate vicinity of the S-K facility (i.e., within, say, 500 feet) that would effect onsite groundwater flow directions. However, at greater distances, the Miami Canal (flood control) exists approximately 0.3 miles to the northeast (SAR Figure 4), and two regional groundwater well fields exist several miles away toward both the southwest and the southeast (SAR Figure 5). The combined net-effect from these features, if any, is unknown and could not be accurately evaluated as a practical and temporal matter.

**Specific Comments Not Requiring a Response:**

(page/paragraph)

13. (3-1/Section 3.1 Potable Well Survey) The presence of injection or drainage wells as defined in Chapter 62-528, F.A.C. within 0.25 miles was not provided; however, the Part B (Part I.B.4) states that there are no injection or withdrawal wells on site, and to the best of Safety Kleen's knowledge, none are within 0.25 miles of the facility.

14. (8-4/Table): A "Not possible" exposure between wildlife and soil is inconsistent with the text on (8-5/4) which states that "Wildlife is *unlikely* [emphasis added] to be exposed to impacted soils...". The Department concurs with the "unlikely" exposure.

15. Table 2: The Total Chromium Leachability SCTL is 38 mg/kg.

16. (7-3/2): As depicted on Figure 6, the horizontal extent of PCE contaminated soils may not have been determined south or east of SB-1 or west, south and east of the MW-5 location. MW-5 is located within the parking area and is covered. Similarly, the vertical extent may not have been assessed. However, resampling of PCE on February 15 (See Table 2) indicated that PCE was below detection levels at SB-1 and SB-2 but PCE exceeded leachability levels at MW-5. These data suggest low levels of PCE in and around the MW-5 area. It is quite possible that low levels of PCE remain in areas



beneath pavement or concrete buildings to the east. Based upon the low levels of soil and groundwater contamination at this time, any remaining soil contamination beneath the concrete of the tank storage area can be addressed at closure.

**Response:**

The RAP includes actions intended to remediate the low PCE concentrations in soil near MW-5, along with subsequent confirmation soil sampling.

17. (7-3/3): The vertical extent of arsenic contamination was not determined. The two samples containing arsenic above residential SCTLs were taken at 1'0 bls. Both samples are located on either side of MW-1. The depth to water in MW-1 is between 2.0' and 3.3' bls. If excavation is selected as the remedy, confirmation samples from the bottom of the excavation can be used to verify that the arsenic-contaminated soils are removed. If a restrictive covenant is used, restrictions can be placed against the soils between the land surface and water table. If excavated, the low level PCE contaminated soils that are not covered by asphalt or concrete would also be removed.

**Response:**

S-K intends to apply a restrictive covenant with regard to arsenic in soil, as described in the RAP.

**Specific Comments Requiring a Response:**  
(page/paragraph)

18. (5-3/2) Here and elsewhere, the SAR states that investigation-derived waste (IDW) was drummed for disposal and managed through the Safety Kleen management system. The SAR should explain the Safety Kleen management system as it relates to management of IDW.

**Response:**

The IDW is transferred to DOT approved containers at the time of generation and labeled. For first time waste streams, a profile is created using recent soil or groundwater data. The profile identifies a treatment or disposal facility based on profile criteria. Once the profile is approved, the labeled containerized waste is shipped to the designated facility in accordance with applicable regulations.

A copy of the manifest associated with transport and disposal of the Medley facility IDW is provided here as Attachment 1 to this Appendix A.

19. (8-2/3): As written, this paragraph suggests that the PCE-contaminated soil was in an unpaved area previously. Has this area recently been paved? Please clarify.

**Response:**

The area has not been recently paved. In the paved area (MW-5), PCE exceeded the leachability SCTL. In the unpaved area at SB-1 and SB-2, PCE exceeded the leachability SCTL when originally sampled in September 2009; however, the February 2010 resampling at the SB-1 and SB-2 locations did not detect PCE. As such, PCE above the leachability SCTL is no longer present in the unpaved area (although it was previously).

20. Figure 3:

- The grassy swale mentioned in (3-1/2) is not identified on this figure. The swale and direction(s) of surface water flow across the facility should be identified (Rule 62-780.600(8)(a)(3), F.A.C.). Also, if any stormwater flows offsite, Safety Kleen must determine its pathway and discharge into any natural or man-made water bodies (Rule 62-780.600(3)(i), F.A.C.). The runoff control system for the facility is discussed in the Part B (Part II.A.1.).
- Identify the dashed line around the "Above Ground Storage Tanks". From other site maps, it is not possible to identify what this line represents.

**Response:**

The words "grassy drainage swale" used in the text were probably a poor choice of words. The subject area is the "Grass Area" shown in Figure 3, and more fully illustrated Figure 2. The grass area covers the northern third of the property (and the eastern portion of the property is an unpaved wooded area). The grass area is quite flat, as indicated by the elevation survey data (see SAR Appendix H). Rainwater typically infiltrates to the water table through the relatively permeable soils. There are no specific point locations where stormwater runoff exits the property, and there are no engineered water management structures in the grass area. The eastern boundary of the property's grass area appears to have a slightly lower elevation than other areas; as such, under severe storm events, stormwater may sheet flow toward the east and exit the property. There are no nearby surface water bodies toward the east. Relevant details are also illustrated on Figure 2.2-5 in S-K's September 19, 2007, RCRA Part B permit application, and are described in Part II.A.1 (starting at page 1) of that application.

The dashed line around the Above Ground Storage Tanks represents the lateral extent of the roof that overhangs that area. It is referred to as the "Covered Area" on the site survey map (see SAR Appendix H).

21. Appendix G: Other than SB-1/MW-2R, how were the Boring Log Sample Descriptions created? Were the descriptions taken from cuttings, split spoon, etc.?

**Response:**

The various methods used to obtain samples for onsite lithologic descriptions were as follows:

- MW-4D: 0 to 13 ft, grab samples from hollow stem auger cuttings; 13 to 25 ft, inferred from drilling resistance while augering.
- MW-5D: 0 to 5 ft, grab samples from hollow stem auger cuttings; 5 to 25 ft, direct push core samples; 25 to 32.5 ft, split spoon samples.
- MW-1: "lithology based on grab samples from auger flights and drilling resistance while augering" (ERM, 4-27-92).
- MW-3: "lithology from 4 – 12 ft inferred from drilling resistance and grab samples within auger stems" (ERM, 4-27-92).

### **Remedial Action Plan:**

22. In developing the RAP, ensure that you review the corrective action requirements of your permit. In particular, note Specific Condition Part V.4, and Part VI.

#### **Response:**

As requested, S-K has reviewed the permit in light of matters that are relevant to developing the RAP.

23. As a reminder, the RAP must include a detailed cost estimate for financial assurance purposes, as required by Specific Condition Part 1.32 of your permit.

#### **Response:**

The RAP contained in this document includes a detailed cost estimate.

### **ADaPT:**

24. The Department of Environmental Protection's Bureau of Solid and Hazardous Waste (BSHW) is in the process of upgrading its approach to environmental data quality assurance and the management of its databases. These changes will better serve the technological demands of the regulated community and the public.

On October 1, 2009 the Hazardous Waste Regulation Section required that all data submitted to the program be submitted in an electronic format compatible with Automated Data Processing Tool software (ADaPT). ADaPT was developed for the automated evaluation of compliance with quality assurance requirements (Chapter 62-160, F.A.C) and provides many functions. We have provided presentations concerning the development of ADaPT at the last several EPA/DEP Industry Workshops held in December. Specific information on the ADaPT process is provided below.

To assist with this transition to the ADaPT software, the Department notified state certified laboratories by letters dated October 2, 2008 and March 25, 2009 of its intent to require the use of ADaPT for the electronic submittal of water quality data to the Department. Bureau staff contacted NELAC certified laboratories that are used by solid

and hazardous waste facilities to determine their intent and readiness to use ADaPT.

We believe ADaPT is a great tool that can save considerable time in the review and reporting of data. An added benefit is that the BSHW can upload data to our Water Assurance Compliance System (WACS) database for use in decision making and legislative inquiries.

If your laboratory does not use ADaPT and you would like assistance, or if you have questions, we will be happy to address your concerns at this time. For technical questions concerning ADaPT, please contact Clark Moore by phone at (850) 245-8739 or by email at [clark.b.moore@dep.state.fl.us](mailto:clark.b.moore@dep.state.fl.us) . For administrative questions concerning the use of ADaPT, please contact Bryan Baker at (850) 245-8787 or [bryan.baker@dep.state.fl.us](mailto:bryan.baker@dep.state.fl.us) .

Automated Data Processing Tool (ADaPT) software was developed for the automated evaluation of environmental quality data. ADaPT runs under Microsoft Access and is a tool that laboratories, consultants, solid and hazardous waste facility permittees and Department staff can all use to evaluate groundwater data. ADaPT performs the following functions:

- an error check for correctness and completeness of the data;
- checks blank contamination rules and accuracy and precision criteria for each method and sample matrix;
- performs a data review that measures integrity of sample results against associated laboratory quality control, holding times, and method detection limits;
- checks the results for compliance against user selectable criteria and standards, such as water quality standards and cleanup target levels; and
- imports the latest monitoring data into the Department's Water Assurance Compliance System (WACS) database via public file transfer protocol (ftp).

Each program (hazardous waste, solid waste) maintains a 'library' within ADaPT of analytes and associated laboratory methods.

The ADaPT Electronic Data Deliverable (EDD) consists of two electronic deliverables:

- a Laboratory EDD, identified as "hwldd"; and
- a Field EDD identified as "hwfdd."

The Laboratory EDD shall be submitted in a comma separated (.csv format) text file which can be produced through Microsoft Excel. The Laboratory EDD file name format shall be: Florida Facility I.D. *space* Sampling Date (yyyymm).hwldd. The period at the end would not be included. For example, with Florida Facility I.D. 12345 and where sampling started in November and ended in December of 2008 the Laboratory EDD file name should be 12345 200812.hwldd.

The Field EDD shall be submitted in the same comma separated (.csv format) text file as the Laboratory EDD. The Field EDD file name format shall be: Florida Facility I.D. *space* Sampling Date (yyyymm).hwfdd. Again the period at the end is not included. For example, with Florida Facility I.D. 12345 and where sampling started in November and ended in December of 2008, the file name should be 12345 200812.hwfdd.

Water quality monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations. A copy of the sealed signature page may be submitted electronically with the report provided that the seal is legible (gray the embossed seal and scan). Otherwise, you must submit an original sealed and signed page.

Two copies of the EDD, one in comma separated text format and one as an Adobe portable document format (.pdf) must be submitted. A digitally "signed" PDF serves to maintain the integrity of the EDD. In order to validate the quality assurance aspects of the laboratory EDD, the permittee shall ensure the laboratory processes the laboratory EDD through ADaPT using both their laboratory specific library and the DEP Hazardous Waste Master library and correct or explain all noted errors prior to submittal. The appropriate entity (laboratory, consultant, or permittee) shall also process the hazardous waste field EDD through ADaPT using the DEP Hazardous Waste Master library and correct or explain all noted errors prior to submittal. As a final completeness check, the permittee or consultant shall process both the lab EDD and field EDD through ADaPT and confirm a successful export to disk prior to submitting the lab EDD, field EDD, and ADaPT error log to the DEP.

Compliance with this direction will address the data submittal and quality assurance requirements of Rule 62-730.225(2) and (3) FAC.

The latest version of the ADaPT software in a zipped form is available for free at: <ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT> and ADaPT training is available from LDC and other consultants. It is the responsibility of those supplying data to the Department to use the latest version of ADaPT.

**Response:**

As requested, both the laboratory EDD and the field EDD are being prepared and submitted.

**Attachment 1**  
**to Appendix A**



## BILL OF LADING/MANIFEST

1. Shipper's US EPA ID No. (If Applicable)

FLD964171694

Document No.

2. Page 1  
of 1

3. Shipper's Name and Mailing Address

SAFETY - KLEEN SYSTEMS INC  
8755 nw 95st  
medley

FL 33178

4. Shipper's Phone (

305) 884-0123

5. Transporter 1 Company Name

SAFETY-KLEEN SYSTEMS, INC.

6.

US EPA ID Number

txr000050930

A. Transporter's Phone

972-265-2000

7. Transporter 2 Company Name

8.

US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

7403  
SAFETY-KLEEN SYSTEMS, INC.  
130-A FRONTAGE ROAD  
LEXINGTON, SC 29073

10.

US EPA ID Number

SCD077995488

C. Facility's Phone

803-356-4061

11. Shipping Name and Description

HM

a. NON-REGULATED LIQUID

12. Containers

No.

Type

13.  
Total  
Quantity14.  
Unit  
Wt/Vol

3

DM

1000.00

P

b. NON REGULATED SOLID

2

DM

800.00

P

15. Special Handling Instruction and Additional Information

24 HR EMERGENCY #1-800-468-1760 (SAFETY-KLEEN - 94138)  
SK AUTHORIZED TO RETAIN LICENSED SUBSEQUENT CARRIERS AS NECESSARY

DOT/PRFL A. 401617/3570872 B. 408970/3570871 C. D.

## 16a. US DOT HAZARDOUS MATERIALS SHIPPER'S CERTIFICATION:

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Printed/Typed Name

Signature required  
here if  
US DOT regulated

Month Day Year

## 16b. NON-REGULATED SHIPPER'S CERTIFICATION: I certify the materials described above on this form are not subject to federal regulations for Transportation or Disposal.

Printed/Typed Name

Sign here if  
material is not  
DOT regulated

Month Day Year

## 17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

## 18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

## 19. Discrepancy Indication Space

## 20. Facility Owner or Operator: Certification of receipt of materials covered by this form except as noted in Item 19.

Printed/Typed Name

Signature

Month Day Year

**APPENDIX B**

**LABORATORY ANALYTICAL REPORTS**





## **ANALYTICAL SERVICES, INC.**

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

### **Laboratory Report**

**Prepared For:**

**Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin, IL 60120**

**Attention: Mr. Bob Schoepke**

**Report Number: ATE0584**

**May 21, 2010**

**Project: Medley, FL**

**Project #:09-0634**

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

  
**Project Manager**

This report may not be reproduced, except in full, without written approval from Analytical Services, Inc. Analytical Services, Inc. certifies that the following analytical results meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

All test results relate only to the samples analyzed.



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
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1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 21, 2010

### ANALYTICAL REPORT FOR SAMPLES

<u>Sample ID</u>	<u>Laboratory ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
MW-5	ATE0584-01	Soil	02/05/10 11:35	02/09/10 10:30



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(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 21, 2010

Report No.: ATE0584  
Client ID: MW-5  
Date/Time Sampled: 2/5/2010 11:35:00AM  
Matrix: Soil

Project: Medley, FL  
Lab Number ID: ATE0584-01  
Date/Time Received: 2/9/2010 10:30:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>General Chemistry</b>										
% Solids	95.0	0.04 %	by Weight	SOP Moisture	H-01	1	5/20/10 14:55	5/20/10 14:55	0050408	MZP
<b>Metals, Total</b>										
Arsenic	ND	1.00	mg/kg dry	EPA 6010C		1	5/20/10 11:00	5/21/10 14:49	0050488	FBS



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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 21, 2010

**Report No.: ATE0584**

### General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050408 - % Solids</b>										
<b>Duplicate (0050408-DUP1)</b>		<b>Source: ATE0584-01</b>			<b>Prepared &amp; Analyzed: 05/20/10</b>					
% Solids	95.0	0.04	% by Weight		95.0			0.03	12	



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May 21, 2010

Report No.: ATE0584

### Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050488 - EPA 3050B</b>										
<b>Blank (0050488-BLK1)</b>					Prepared: 05/19/10 Analyzed: 05/21/10					
Arsenic	ND	1.00	mg/kg wet							
<b>Blank (0050488-BLK2)</b>					Prepared: 05/20/10 Analyzed: 05/21/10					
Arsenic	ND	1.00	mg/kg wet							
<b>LCS (0050488-BS1)</b>					Prepared: 05/19/10 Analyzed: 05/21/10					
Arsenic	95.9	3.00	mg/kg wet	100.00		96	80-120			
<b>LCS (0050488-BS2)</b>					Prepared: 05/20/10 Analyzed: 05/21/10					
Arsenic	96.6	3.00	mg/kg wet	100.00		97	80-120			
<b>Matrix Spike (0050488-MS1)</b>					<b>Source: ATE0309-08</b>		Prepared: 05/19/10 Analyzed: 05/21/10			
Arsenic	99.4	3.00	mg/kg dry	100.10	1.71	98	75-125			
<b>Matrix Spike Dup (0050488-MSD1)</b>					<b>Source: ATE0309-08</b>		Prepared: 05/19/10 Analyzed: 05/21/10			
Arsenic	99.5	3.00	mg/kg dry	100.10	1.71	98	75-125	0.09	20	
<b>Post Spike (0050488-PS1)</b>					<b>Source: ATE0309-08</b>		Prepared: 05/19/10 Analyzed: 05/21/10			
Arsenic	1.00		mg/L	1.0000	0.02	99	80-120			



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Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 21, 2010

### Laboratory Certifications

Code	Description	Number	Expires
LA	Louisiana	02069	06/30/2010
NC	North Carolina	381	12/31/2010
NELAC	NELAC (Drinking Water, Non-Potable Water, Solids)	E87315	06/30/2010
SC	South Carolina	98011001	06/30/2010
TX	Texas	T104704397-08-TX	03/31/2011



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1502 E. Villa Street  
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Attention: Mr. Bob Schoepke

May 21, 2010

## Legend

### Definition of Laboratory Terms

- ND** - None Detected at the Reporting Limit
- TIC** - Tentatively Identified Compound
- CFU** - Colony Forming Units
- SOP** - Method run per ASI Standard Operating Procedure
- RL** - Reporting Limit
- DF** - Dilution Factor
- \* - Analyte not included in the NELAC list of certified analytes.

### Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. ASI is not NELAC certified for diphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

### Definition of Qualifiers

- H-01** Sample was received outside of the EPA recommended holding time or was received with insufficient time to run sample within the EPA recommended holding time.

**Note: Unless otherwise noted, all results are reported on an as received basis.**







# ANALYTICAL SERVICES, INC.

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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 21, 2010

Order # 5205

173350

ANALYTICAL SERVICES, INC.  
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS  
110 TECHNOLOGY PARKWAY NORCROSS, GA 30092  
(770) 734-4200 FAX (770) 734-4201 WWW.ASI-ENV.COM



## CHAIN OF CUSTODY RECORD

CLIENT NAME: ECT		CLIENT ADDRESS: 1502 E. VILLA STREET		PROJECT NAME: SAFETY-KLEEN MEDLEY, FLORIDA	
REPORT TO: SEE NEW FILE		REQUESTED COMPLETION DATE: 5/21/10		PROJECT CODE: 04-0634	
DATE	TIME	CODE	STATUS	ANALYST	REMARKS
5/19/10	12:55	S	DUPLICATE		
ANALYSIS REQUESTED					
CONTAMINANT: 1. PLASTIC 2. AMBER GLASS 3. CLEAR GLASS 4. METAL 5. BRICK 6. OTHER 7. OTHER 8. OTHER 9. OTHER 10. OTHER					
PRESERVATION: 1. NO 2. YES 3. YES 4. YES 5. YES 6. YES 7. YES 8. YES 9. YES 10. YES					
ANALYSIS REQUIRED: 1. YES 2. YES 3. YES 4. YES 5. YES 6. YES 7. YES 8. YES 9. YES 10. YES					
DATE/TIME: 5/19/10 12:55					
ANALYST: [Signature]					
REMARKS: Held As only Trip Back 5/19/10					



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

### LOG-IN CHECKLIST

Printed: 5/21/2010 4:32:42PM

Attn: Mr. Bob Schoepke

Client: Safety-Kleen Corporation - Norcross

Project: Medley, FL

Date Received: 02/09/10 10:30

Work Order: ATE0584

Logged In By: Charles Hawks

### OBSERVATIONS

#Samples: 1

#Containers: 1

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

### CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	NO
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

### Comments:

The sample MW-5 was taken off hold for As on 05/19/2010. The sample type was not listed on the COC for MW-5. CFH



## **ANALYTICAL SERVICES, INC.**

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

### **Laboratory Report**

**Prepared For:**

**Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin, IL 60120**

**Attention: Mr. Bob Schoepke**

**Report Number: ATE0104**

**May 18, 2010**

**Project: Medley, FL**

**Project #:090634-2222**

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

  
**Project Manager**

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All test results relate only to the samples analyzed.



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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-5	ATE0104-01	Ground Water	05/04/10 10:25	05/05/10 09:15
MW-5D	ATE0104-02	Ground Water	05/04/10 10:40	05/05/10 09:15
MW-4	ATE0104-03	Ground Water	05/04/10 11:05	05/05/10 09:15
MW-4D	ATE0104-04	Ground Water	05/04/10 11:25	05/05/10 09:15
MW-3	ATE0104-05	Ground Water	05/04/10 12:05	05/05/10 09:15
SB-10	ATE0104-06	Soil	05/04/10 12:30	05/05/10 09:15
SB-11	ATE0104-07	Soil	05/04/10 12:45	05/05/10 09:15
SB-12	ATE0104-08	Soil	05/04/10 13:10	05/05/10 09:15
SB-13	ATE0104-09	Soil	05/04/10 13:30	05/05/10 09:15
SB-14	ATE0104-10	Soil	05/04/10 13:45	05/05/10 09:15
SB-15	ATE0104-11	Soil	05/04/10 14:00	05/05/10 09:15
EQ	ATE0104-12	Water	05/04/10 14:05	05/05/10 09:15
Trip Blank	ATE0104-13	Water	05/04/10 00:00	05/05/10 09:15
MW-5 Duplicate	ATE0104-14	Water	05/04/10 10:28	05/05/10 09:15



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Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-5

Date/Time Sampled: 5/4/2010 10:25:00AM

Matrix: Ground Water

Project: Medley, FL

Lab Number ID: ATE0104-01

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Acetone	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Acrolein	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Benzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Bromobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Bromoform	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Bromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
2-Chloroethyl Vinyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Chloroform	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Chloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Dibromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
cis-1,2-Dichloroethene	25	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP



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110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-5

Date/Time Sampled: 5/4/2010 10:25:00AM

Matrix: Ground Water

Project: Medley, FL

Lab Number ID: ATE0104-01

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Iodomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Naphthalene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Styrene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Tetrachloroethene	16	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Toluene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Trichloroethene	4.7	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-5

Date/Time Sampled: 5/4/2010 10:25:00AM

Matrix: Ground Water

Project: Medley, FL

Lab Number ID: ATE0104-01

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Vinyl Chloride	1.6	1.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:42	0050101	MP
Surrogate: Dibromofluoromethane	102 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 14:42	0050101	
Surrogate: 1,2-Dichloroethane-d4	99 %	77-116		EPA 8260B			5/05/10 13:30	5/5/10 14:42	0050101	
Surrogate: Toluene-d8	93 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 14:42	0050101	
Surrogate: 4-Bromofluorobenzene	106 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 14:42	0050101	





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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: MW-5D

Lab Number ID: ATE0104-02

Date/Time Sampled: 5/4/2010 10:40:00AM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Ground Water

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Acetone	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Acrolein	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Benzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Bromobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Bromoform	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Bromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
2-Chloroethyl Vinyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Chloroform	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Chloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Dibromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP





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Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: MW-5D

Lab Number ID: ATE0104-02

Date/Time Sampled: 5/4/2010 10:40:00AM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Ground Water

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Iodomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Naphthalene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Styrene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Toluene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-5D

Date/Time Sampled: 5/4/2010 10:40:00AM

Matrix: Ground Water

Project: Medley, FL

Lab Number ID: ATE0104-02

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Vinyl Chloride	ND	1.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:24	0050101	MP
Surrogate: Dibromofluoromethane	104 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 16:24	0050101	
Surrogate: 1,2-Dichloroethane-d4	101 %	77-116		EPA 8260B			5/05/10 13:30	5/5/10 16:24	0050101	
Surrogate: Toluene-d8	92 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 16:24	0050101	
Surrogate: 4-Bromofluorobenzene	106 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 16:24	0050101	



# ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: MW-4

Lab Number ID: ATE0104-03

Date/Time Sampled: 5/4/2010 11:05:00AM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Ground Water

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Acrolein	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Benzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Bromobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Bromoform	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Bromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
2-Chloroethyl Vinyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Chloroform	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Chloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Dibromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
cis-1,2-Dichloroethene	22	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP



# ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: MW-4

Lab Number ID: ATE0104-03

Date/Time Sampled: 5/4/2010 11:05:00AM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Ground Water

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Iodomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Naphthalene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Styrene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Toluene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP



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Environmental Monitoring & Laboratory Analysis

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Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-4

Date/Time Sampled: 5/4/2010 11:05:00AM

Matrix: Ground Water

Project: Medley, FL

Lab Number ID: ATE0104-03

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Vinyl Chloride	2.8	1.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 16:58	0050101	MP
Surrogate: Dibromofluoromethane	102 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 16:58	0050101	
Surrogate: 1,2-Dichloroethane-d4	101 %	77-116		EPA 8260B			5/05/10 13:30	5/5/10 16:58	0050101	
Surrogate: Toluene-d8	94 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 16:58	0050101	
Surrogate: 4-Bromofluorobenzene	102 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 16:58	0050101	



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1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: MW-4D

Lab Number ID: ATE0104-04

Date/Time Sampled: 5/4/2010 11:25:00AM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Ground Water

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Acetone	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Acrolein	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Benzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Bromobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Bromoform	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Bromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
2-Chloroethyl Vinyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Chloroform	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Chloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Dibromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP



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1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: MW-4D

Lab Number ID: ATE0104-04

Date/Time Sampled: 5/4/2010 11:25:00AM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Ground Water

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Iodomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Naphthalene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Styrene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Toluene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP





## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104  
Client ID: MW-4D  
Date/Time Sampled: 5/4/2010 11:25:00AM  
Matrix: Ground Water

Project: Medley, FL  
Lab Number ID: ATE0104-04  
Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Vinyl Chloride	ND	1.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 17:32	0050101	MP
Surrogate: Dibromofluoromethane	103 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 17:32	0050101	
Surrogate: 1,2-Dichloroethane-d4	103 %	77-116		EPA 8260B			5/05/10 13:30	5/5/10 17:32	0050101	
Surrogate: Toluene-d8	91 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 17:32	0050101	
Surrogate: 4-Bromofluorobenzene	103 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 17:32	0050101	



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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: MW-3

Lab Number ID: ATE0104-05

Date/Time Sampled: 5/4/2010 12:05:00PM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Ground Water

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Acetone	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Acrolein	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Benzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Bromobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Bromoform	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Bromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
2-Chloroethyl Vinyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Chloroform	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Chloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Dibromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
cis-1,2-Dichloroethene	6.4	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP



# ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway, Norcross, GA 30092

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Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-3

Date/Time Sampled: 5/4/2010 12:05:00PM

Matrix: Ground Water

Project: Medley, FL

Lab Number ID: ATE0104-05

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Iodomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Naphthalene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Styrene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Toluene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP



# ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-3

Date/Time Sampled: 5/4/2010 12:05:00PM

Matrix: Ground Water

Project: Medley, FL

Lab Number ID: ATE0104-05

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Vinyl Chloride	ND	1.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:06	0050101	MP
Surrogate: Dibromofluoromethane	102 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 18:06	0050101	
Surrogate: 1,2-Dichloroethane-d4	102 %	77-116		EPA 8260B			5/05/10 13:30	5/5/10 18:06	0050101	
Surrogate: Toluene-d8	92 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 18:06	0050101	
Surrogate: 4-Bromofluorobenzene	102 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 18:06	0050101	



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Project: Medley, FL

Client ID: SB-10

Lab Number ID: ATE0104-06

Date/Time Sampled: 5/4/2010 12:30:00PM

Date/Time Received: 5/5/2010 9:15:00AM

Matrix: Soil

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>General Chemistry</b>										
% Solids	86.8	0.04 %	by Weight	SOP Moisture		1	5/10/10 14:40	5/10/10 14:40	0050160	MZP
<b>Metals, Total</b>										
Arsenic	ND	1.07	mg/kg dry	EPA 6010C		1	5/11/10 11:30	5/17/10 14:03	0050252	FBS



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104  
Client ID: SB-11  
Date/Time Sampled: 5/4/2010 12:45:00PM  
Matrix: Soil

Project: Medley, FL  
Lab Number ID: ATE0104-07  
Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>General Chemistry</b>										
% Solids	88.5	0.04 % by Weight		SOP Moisture		1	5/10/10 14:40	5/10/10 14:40	0050160	MZP
<b>Metals, Total</b>										
Arsenic	ND	1.07	mg/kg dry	EPA 6010C		1	5/11/10 11:30	5/17/10 14:09	0050252	FBS



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: SB-12

Date/Time Sampled: 5/4/2010 1:10:00PM

Matrix: Soil

Project: Medley, FL

Lab Number ID: ATE0104-08

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>General Chemistry</b>										
% Solids	95.2	0.04 %	by Weight	SOP Moisture		1	5/10/10 14:40	5/10/10 14:40	0050160	MZP
<b>Metals, Total</b>										
Arsenic	ND	1.05	mg/kg dry	EPA 6010C		1	5/11/10 11:30	5/17/10 14:14	0050252	FBS





## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: SB-13

Date/Time Sampled: 5/4/2010 1:30:00PM

Matrix: Soil

Project: Medley, FL

Lab Number ID: ATE0104-09

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>General Chemistry</b>										
% Solids	79.8	0.04 %	by Weight	SOP Moisture		1	5/10/10 14:40	5/10/10 14:40	0050160	MZP
<b>Metals, Total</b>										
Arsenic	ND	1.25	mg/kg dry	EPA 6010C		1	5/11/10 11:30	5/17/10 14:20	0050252	FBS



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: SB-14

Date/Time Sampled: 5/4/2010 1:45:00PM

Matrix: Soil

Project: Medley, FL

Lab Number ID: ATE0104-10

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>General Chemistry</b>										
% Solids	90.8	0.04 % by Weight		SOP Moisture		1	5/10/10 14:40	5/10/10 14:40	0050160	MZP
<b>Metals, Total</b>										
Arsenic	2.12	1.06	mg/kg dry	EPA 6010C		1	5/11/10 11:30	5/17/10 14:25	0050252	FBS



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: SB-15

Date/Time Sampled: 5/4/2010 2:00:00PM

Matrix: Soil

Project: Medley, FL

Lab Number ID: ATE0104-11

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>General Chemistry</b>										
% Solids	69.5	0.04 % by Weight		SOP Moisture		1	5/10/10 14:40	5/10/10 14:40	0050160	MZP
<b>Metals, Total</b>										
Arsenic	3.64	1.44	mg/kg dry	EPA 6010C		1	5/11/10 11:30	5/17/10 14:45	0050252	FBS



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
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Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104  
Client ID: EQ  
Date/Time Sampled: 5/4/2010 2:05:00PM  
Matrix: Water

Project: Medley, FL  
Lab Number ID: ATE0104-12  
Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Metals, Total</b>										
Arsenic	ND	0.030	mg/L	EPA 6010C		1	5/10/10 11:55	5/13/10 12:13	0050222	FBS



# ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis

110 Technology Parkway, Norcross, GA 30092

(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross

1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: Trip Blank

Date/Time Sampled: 5/4/2010 12:00:00AM

Matrix: Water

Project: Medley, FL

Lab Number ID: ATE0104-13

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Acrolein	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Benzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Bromobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Bromoform	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Bromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
2-Chloroethyl Vinyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Chloroform	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Chloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Dibromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP



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1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: Trip Blank

Date/Time Sampled: 5/4/2010 12:00:00AM

Matrix: Water

Project: Medley, FL

Lab Number ID: ATE0104-13

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Iodomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Naphthalene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Styrene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Toluene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP



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1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: Trip Blank

Date/Time Sampled: 5/4/2010 12:00:00AM

Matrix: Water

Project: Medley, FL

Lab Number ID: ATE0104-13

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Vinyl Chloride	ND	1.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 14:07	0050101	MP
Surrogate: Dibromofluoromethane	102 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 14:07	0050101	
Surrogate: 1,2-Dichloroethane-d4	99 %	77-116		EPA 8260B			5/05/10 13:30	5/5/10 14:07	0050101	
Surrogate: Toluene-d8	91 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 14:07	0050101	
Surrogate: 4-Bromofluorobenzene	106 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 14:07	0050101	





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Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-5 Duplicate

Date/Time Sampled: 5/4/2010 10:28:00AM

Matrix: Water

Project: Medley, FL

Lab Number ID: ATE0104-14

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Acrolein	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Benzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Bromobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Bromoform	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Bromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
2-Chloroethyl Vinyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Chloroform	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Chloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Dibromomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
cis-1,2-Dichloroethene	25	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP



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Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

Client ID: MW-5 Duplicate

Date/Time Sampled: 5/4/2010 10:28:00AM

Matrix: Water

Project: Medley, FL

Lab Number ID: ATE0104-14

Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Iodomethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Naphthalene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Styrene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Tetrachloroethene	15	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Toluene	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Trichloroethene	4.8	2.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP



# ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

Safety-Kleen Corporation - Norcross  
1502 E. Villa Street  
Elgin IL, 60120  
Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104  
Client ID: MW-5 Duplicate  
Date/Time Sampled: 5/4/2010 10:28:00AM  
Matrix: Water

Project: Medley, FL  
Lab Number ID: ATE0104-14  
Date/Time Received: 5/5/2010 9:15:00AM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
<b>Volatile Organic Compounds by EPA 8260</b>										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Vinyl Chloride	1.5	1.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	5/05/10 13:30	5/05/10 18:41	0050101	MP
Surrogate: Dibromofluoromethane	103 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 18:41	0050101	
Surrogate: 1,2-Dichloroethane-d4	100 %	77-116		EPA 8260B			5/05/10 13:30	5/5/10 18:41	0050101	
Surrogate: Toluene-d8	94 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 18:41	0050101	
Surrogate: 4-Bromofluorobenzene	101 %	80-120		EPA 8260B			5/05/10 13:30	5/5/10 18:41	0050101	



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May 18, 2010

**Report No.: ATE0104**

### General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050160 - % Solids</b>										
<b>Duplicate (0050160-DUP1)</b>		<b>Source: ATE0246-01</b>			<b>Prepared &amp; Analyzed: 05/10/10</b>					
% Solids	86.9		0.04 % by Weight		86.5			0.4	12	



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May 18, 2010

Report No.: ATE0104

### Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050222 - EPA 3010A</b>										
<b>Blank (0050222-BLK1)</b>					Prepared: 05/10/10 Analyzed: 05/13/10					
Arsenic	ND	0.030	mg/L							
<b>LCS (0050222-BS1)</b>					Prepared: 05/10/10 Analyzed: 05/13/10					
Arsenic	1.04	0.030	mg/L	1.0000		104	80-120			
<b>Matrix Spike (0050222-MS1)</b>					Source: ATE0078-01 Prepared: 05/10/10 Analyzed: 05/13/10					
Arsenic	11.2	0.300	mg/L	10.000	0.184	110	75-125			
<b>Matrix Spike Dup (0050222-MSD1)</b>					Source: ATE0078-01 Prepared: 05/10/10 Analyzed: 05/13/10					
Arsenic	11.2	0.300	mg/L	10.000	0.184	110	75-125	0.4	20	
<b>Post Spike (0050222-PS1)</b>					Source: ATE0078-01 Prepared: 05/10/10 Analyzed: 05/13/10					
Arsenic	1.15		mg/L	1.0000	0.018	113	80-120			
<b>Batch 0050252 - EPA 3050B</b>										
<b>Blank (0050252-BLK1)</b>					Prepared: 05/11/10 Analyzed: 05/17/10					
Arsenic	ND	1.00	mg/kg wet							
<b>LCS (0050252-BS1)</b>					Prepared: 05/11/10 Analyzed: 05/17/10					
Arsenic	102	3.00	mg/kg wet	100.00		102	80-120			
<b>Matrix Spike (0050252-MS1)</b>					Source: ATE0104-08 Prepared: 05/11/10 Analyzed: 05/17/10					
Arsenic	114	3.15	mg/kg dry	105.01	0.42	108	75-125			
<b>Matrix Spike Dup (0050252-MSD1)</b>					Source: ATE0104-08 Prepared: 05/11/10 Analyzed: 05/17/10					
Arsenic	110	3.15	mg/kg dry	105.01	0.42	105	75-125	3	20	



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May 18, 2010

**Report No.: ATE0104**

### Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050252 - EPA 3050B</b>										
<b>Post Spike (0050252-PS1)</b>			<b>Source: ATE0104-08</b>			<b>Prepared: 05/11/10 Analyzed: 05/17/10</b>				
Arsenic	1.09		mg/L	1.0000	0.004	109	80-120			



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May 18, 2010

**Report No.: ATE0104**

### Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050101 - EPA 5030B</b>										
<b>Blank (0050101-BLK1)</b>				<b>Prepared &amp; Analyzed: 05/05/10</b>						
Acetone	ND	100	ug/L							
Acrolein	ND	50	ug/L							
Acrylonitrile	ND	50	ug/L							
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromobenzene	ND	10	ug/L							
Bromochloromethane	ND	10	ug/L							
Bromodichloromethane	ND	10	ug/L							
Bromoform	ND	10	ug/L							
Bromomethane	ND	10	ug/L							
n-Butylbenzene	ND	10	ug/L							
sec-Butylbenzene	ND	10	ug/L							
tert-Butylbenzene	ND	10	ug/L							
Carbon Disulfide	ND	10	ug/L							
Carbon Tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	10	ug/L							
1-Chlorobutane	ND	10	ug/L							
Chloroethane	ND	5.0	ug/L							
2-Chloroethyl Vinyl Ether	ND	10	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	10	ug/L							
2-Chlorotoluene	ND	10	ug/L							
4-Chlorotoluene	ND	10	ug/L							
Dibromochloromethane	ND	10	ug/L							
1,2-Dibromo-3-chloropropane	ND	10	ug/L							
1,2-Dibromoethane	ND	10	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							
Dichlorodifluoromethane	ND	10	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
cis-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichloropropane	ND	2.0	ug/L							
2,2-Dichloropropane	ND	10	ug/L							
1,1-Dichloropropene	ND	10	ug/L							





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May 18, 2010

Report No.: ATE0104

## Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050101 - EPA 5030B</b>										
<b>Blank (0050101-BLK1)</b>				Prepared & Analyzed: 05/05/10						
cis-1,3-Dichloropropene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Ethyl Methacrylate	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
p-Isopropyltoluene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Iodomethane	ND	10	ug/L							
Isopropylbenzene	ND	10	ug/L							
Methacrylonitrile	ND	10	ug/L							
Methyl Acrylate	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L							
Methylene Chloride	ND	5.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
Methyl Methacrylate	ND	10	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L							
Methyl-tert-Butyl Ether	ND	10	ug/L							
Naphthalene	ND	10	ug/L							
2-Nitropropane	ND	10	ug/L							
Propionitrile (Ethyl Cyanide)	ND	20	ug/L							
n-Propylbenzene	ND	10	ug/L							
Styrene	ND	5.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Toluene	ND	2.0	ug/L							
1,2,3-Trichlorobenzene	ND	10	ug/L							
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	10	ug/L							
1,2,3-Trichloropropane	ND	10	ug/L							
1,2,4-Trimethylbenzene	ND	10	ug/L							
1,3,5-Trimethylbenzene	ND	10	ug/L							
Vinyl Acetate	ND	10	ug/L							
Vinyl Chloride	ND	2.0	ug/L							
m+p-Xylene	ND	5.0	ug/L							
o-Xylene	ND	5.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surrogate: Dibromofluoromethane	51		ug/L	50.000		103	80-120			



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1502 E. Villa Street

Elgin IL, 60120

Attention: Mr. Bob Schoepke

May 18, 2010

Report No.: ATE0104

### Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
<b>Batch 0050101 - EPA 5030B</b>										
<b>Blank (0050101-BLK1)</b>					Prepared & Analyzed: 05/05/10					
Surrogate: 1,2-Dichloroethane-d4	51		ug/L	50.000		102	77-116			
Surrogate: Toluene-d8	47		ug/L	50.000		94	80-120			
Surrogate: 4-Bromofluorobenzene	51		ug/L	50.000		102	80-120			
<b>LCS (0050101-BS1)</b>					Prepared & Analyzed: 05/05/10					
Benzene	53		ug/L	50.000		107	80-119			
Chlorobenzene	49		ug/L	50.000		97	83-111			
1,1-Dichloroethene	52		ug/L	50.000		104	77-121			
Toluene	50		ug/L	50.000		99	78-113			
Trichloroethene	52		ug/L	50.000		105	82-122			
Surrogate: Dibromofluoromethane	52		ug/L	50.000		103	80-120			
Surrogate: 1,2-Dichloroethane-d4	51		ug/L	50.000		102	77-116			
Surrogate: Toluene-d8	47		ug/L	50.000		95	80-120			
Surrogate: 4-Bromofluorobenzene	51		ug/L	50.000		103	80-120			
<b>Matrix Spike (0050101-MS1)</b>					Source: ATE0104-01	Prepared & Analyzed: 05/05/10				
Benzene	55		ug/L	50.000	ND	109	82-123			
Chlorobenzene	50		ug/L	50.000	ND	100	75-119			
1,1-Dichloroethene	55		ug/L	50.000	ND	111	79-119			
Toluene	53		ug/L	50.000	0.1	105	80-114			
Trichloroethene	59		ug/L	50.000	4.7	108	81-125			
Surrogate: Dibromofluoromethane	51		ug/L	50.000		101	80-120			
Surrogate: 1,2-Dichloroethane-d4	50		ug/L	50.000		100	77-116			
Surrogate: Toluene-d8	46		ug/L	50.000		92	80-120			
Surrogate: 4-Bromofluorobenzene	52		ug/L	50.000		104	80-120			
<b>Matrix Spike Dup (0050101-MSD1)</b>					Source: ATE0104-01	Prepared & Analyzed: 05/05/10				
Benzene	54		ug/L	50.000	ND	107	82-123	2	9	
Chlorobenzene	50		ug/L	50.000	ND	99	75-119	0.6	13	
1,1-Dichloroethene	54		ug/L	50.000	ND	108	79-119	3	9	
Toluene	51		ug/L	50.000	0.1	103	80-114	2	9	
Trichloroethene	58		ug/L	50.000	4.7	106	81-125	2	11	
Surrogate: Dibromofluoromethane	51		ug/L	50.000		102	80-120			
Surrogate: 1,2-Dichloroethane-d4	50		ug/L	50.000		99	77-116			
Surrogate: Toluene-d8	46		ug/L	50.000		92	80-120			
Surrogate: 4-Bromofluorobenzene	53		ug/L	50.000		105	80-120			



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May 18, 2010

### Laboratory Certifications

Code	Description	Number	Expires
LA	Louisiana	02069	06/30/2010
NC	North Carolina	381	12/31/2010
NELAC	NELAC (Drinking Water, Non-Potable Water, Solids)	E87315	06/30/2010
SC	South Carolina	98011001	06/30/2010
TX	Texas	T104704397-08-TX	03/31/2011



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May 18, 2010

## Legend

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### Definition of Laboratory Terms

- ND** - None Detected at the Reporting Limit
- TIC** - Tentatively Identified Compound
- CFU** - Colony Forming Units
- SOP** - Method run per ASI Standard Operating Procedure
- RL** - Reporting Limit
- DF** - Dilution Factor
- \* - Analyte not included in the NELAC list of certified analytes.

### Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrosodiphenylamine. ASI is not NELAC certified for diphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

### Definition of Qualifiers

**Note: Unless otherwise noted, all results are reported on an as received basis.**

**ANALYTICAL SERVICES, INC.**

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**May 18, 2010**

171050



**ANALYTICAL SERVICES, INC.**  
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS  
110 TECHNOLOGY PARKWAY NORCROSS, GA 30092  
(770) 734-4200 • FAX (770) 734-4201 • [www.asi-lab.com](http://www.asi-lab.com)

### CHAIN OF CUSTODY RECORD

CLIENT NAME E.C.T. - A-T-S				ANALYSIS REQUESTED				CONTAINER TYPE		PRE-PACKAGED	
CLIENT ADDRESS PHONE NUMBER FAX NUMBER								P. PLASTIC		1. HCL	
REPORT TO: Rick Starnish								A. AMBER H208		2. H2O2A	
REQUESTED COMPLETION DATE								C. CLEAR GLASS		3. H2O2B	
PROJECT NAME/STATE: Safety Klean Medley, FL								V. VOA VIAL		4. H2O2C	
PROJECT #: 090634-2222								S. STERILE		5. NICKEL/VA	
								O. OTHER		6. H2O2D	
										7. B	
DATE	TIME	MATRIX CODE	CORRECTION	SAMPLE IDENTIFICATION	CONTAINER	ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS	ANALYSIS
5/4	1025	GW		MW-5	3						
	1040			MW-5D							
	1105			MW-4							
	1125			MW-4D							
	1205			MW-3							
	1230	SW		SB-10							
	1245			SB-11							
	1310			SB-12							
	1330			SB-13							
	1345			SB-14							
	1400			SB-15							
	1405	W		EA							

WATER ANALYSIS

GW - DRINKING WATER    S - SOIL

MW - WASTEWATER    SL - SLUDGE

GW - GROUNDWATER    SD - SOLID

SW - SURFACE WATER    A - AIR

ST - STORM WATER    L - LIQUID

W - WATER    P - PRODUCT

FIELD/ANALYST INFORMATION

Trick Black - 13

MWF 90 - 14

FOR LAB USE ONLY

DATE: 5/1/04

TIME: 10:00

ANALYST: ATE0104

RECEIVED BY: V.C.

DATE: 5/1/04

TIME: 10:00

ANALYST: V.C.



## ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis  
110 Technology Parkway, Norcross, GA 30092  
(770) 734-4200 FAX (770) 734-4201

### LOG-IN CHECKLIST

Printed: 5/18/2010 4:59:12PM

Attn: Mr. Bob Schoepke

Client: Safety-Kleen Corporation - Norcross

Project: Medley, FL

Date Received: 05/05/10 09:15

Work Order: ATE0104

Logged In By: Charles Hawks

### OBSERVATIONS

#Samples: 14

#Containers: 27

Minimum Temp(C): 2.0

Maximum Temp(C): 2.0

Custody Seal(s) Used: Yes

### CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	NO
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

### Comments:

The samples MW-5 Dup and Trip Blank for volatiles were present in the cooler but were not listed on the COC. CFH



**APPENDIX C**  
**GROUNDWATER SAMPLING LOGS**



## Form FD 9000-24

**SITE**  
**NAME:** Safety Kleen

**SITE**  
**LOCATION:** 8755 NW 95<sup>th</sup> St. Medley, FL

WELL NO: MW-4D

**SAMPLE ID:**

**DATE: 5/4/10**

## PURGING DATA

WELL DIAMETER (Inches): 4	TUBING DIAMETER (Inches): 0.17	WELL SCREEN INTERVAL DEPTH: 20 feet to 25 feet	STATIC DEPTH TO WATER (feet): 410	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)

(only fill out if applicable)  
 = ( 25 feet - 4.10 feet ) X 0.04 gallons/foot = 0.84 gallons  
 EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable)  
 = gallons + ( gallons/foot X feet ) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 23	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 23	PURGING INITIATED AT: 1105	PURGING ENDED AT: 1124	TOTAL VOLUME PURGED (gallons): 7.2
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.01

**PURGING EQUIPMENT CODES:** B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Probas Adak/ Charlie Medina	SAMPLER(S) SIGNATURE(S): <i>Probas Adak</i>	SAMPLING INITIATED AT: 1125	SAMPLING ENDED AT: 1130
--	--	-----------------------------	-------------------------

PUMP OR TUBING DEPTH IN WELL (feet): 23

**TUBING**  
**MATERIAL CODE: PE**

SAMPLING INITIATED AT: 1125

SAMPLING ENDED AT: 1134

PUMP OR TUBING DEPTH IN WELL (feet): 23

**TUBING**  
**MATERIAL CODE: PE**

FIELD-FILTERED: Y N

FILTER SIZE: \_\_\_\_\_  $\mu\text{m}$

FIELD DECONTAMINATION: PUMP Y **(N)**

TUBING Y ~~N~~ (replaced)

Equipment Type: DUPLICATE: Y N

\_\_\_\_\_

### SAMPLE CONTAINER SPECIFICATION

## SAMPLE PRESERVATION

INTENDED	SAMPLING
----------	----------

SAMPLING	SAMPLE TIME
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
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38	38
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41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
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51	51
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54	54
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59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

[illegible]

REMARKS:

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

**SAMPLING EQUIPMENT CODES:** APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;  
RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-180, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

**pH:**  $\pm 0.2$  units **Temperature:**  $\pm 0.2$  °C **Specific Conductance:**  $\pm 5\%$  **Dissolved Oxygen:** all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) **Turbidity:** all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

**Revision Date: February 12, 2009**

## Form FD 9000-24

**SITE**  
**NAME:** Safety Klean

**SITE**  
**LOCATION:** 8755 NW 85<sup>th</sup> St., Medley, FL

WELL NO: MW-5D

SAMPLE ID: Mus-5D

DATE: 5/4/10

## PURGING DATA

WELL DIAMETER (Inches): 8	TUBING DIAMETER (Inches): 0.17	WELL SCREEN INTERVAL DEPTH: 25 feet to 30 feet	STATIC DEPTH TO WATER (feet): 4.65	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (30 \text{ feet} - 4.65 \text{ feet}) \times 0.09 \text{ gallons/foot} = 1.01 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 27.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 27.5	PURGING INITIATED AT: 1020	PURGING ENDED AT: 1039	TOTAL VOLUME PURGED (gallons): 2.16

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 6.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

**PURGING EQUIPMENT CODES:** B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

## SAMPLING DATA

[illegible]

REMARKS:

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

**SAMPLING EQUIPMENT CODES:** APP = After Peristaltic Pump; S = Sailer; BP = Bladder Pump; ESP = Electric Submersible Pump;  
RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

**pH:**  $\pm 0.2$  units **Temperature:**  $\pm 0.2$  °C **Specific Conductance:**  $\pm 5\%$  **Dissolved Oxygen:** all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) **Turbidity:** all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009

## Form FD 9000-24

**SITE**  
**NAME:** Safety Klean

**SITE**  
**LOCATION:** 8755 NW 95<sup>th</sup> St., Medley, FL

WELL NO: MW-5

SAMPLE ID: MW-5

DATE: 5/4/10

WELL DIAMETER (Inches): 3	TUBING DIAMETER (Inches): 0.17	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 4.80	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( 12 feet - 4.80 feet ) X 0.04 gallons/foot = 0.28 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + ( gallons/foot X feet ) + gallons = gallons				

WELL  
DIAMETER (Inches): 2

**TUBING**  
**DIAMETER (Inches): 0.17**

WELL SCREEN INTERVAL  
DEPTH:            feet to            feet

STATIC DEPTH  
TO WATER (feet): 4.80

PURGE PUMP TYPE  
OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

INITIAL PUMP OR TUBING  
DEPTH IN WELL (feet):

FINAL PUMP OR TUBING  
DEPTH IN WELL (feet):

PURGING  
INITIATED AT: 1805

PURGING 107

**TOTAL VOLUME  
PURGED (gallons):** 2.16

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.018

**PURGING EQUIPMENT CODES:** B = Baller, BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

[illegible]

**SAMPLED BY (PRINT) / AFFILIATION:**  
**Probas Adak/ Charlie Medina**

**SAMPLER(S) SIGNATURE(S):**

SAMPLING INITIATED AT: 1074

SAMPLING ENDED AT: 1030

PUMP OR TUBING  
DEPTH IN WELL (feet): 6.8

TUBING  
MATERIAL CODE: PE

FIELD-FILTERED: Y  
Filtration Equipment Type

FILTER SIZE: \_\_\_\_\_  $\mu\text{m}$

FIELD DECONTAMINATION:		PUMP	Y	N	TUBING	Y	N (Replaced)
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Equipment Type: DUPLICATE: (Y)

N

### SAMPLE CONTAINER SPECIFICATION

## SAMPLE PRESERVATION

INTENDED

SAMPLING	SAMPLE RUN
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
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89	89
90	90
91	91
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93	93
94	94
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96	96
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99	99
100	100

SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-5	3	LG	40	wave/Hes	120	6.61	8260	RFBP	~90
MW-SDUP	3	Y	~	wave/Hes	120	6.61	↓	↓	~90
REMARKS:									

REMARKS:

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

**SAMPLING EQUIPMENT CODES:** APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;  
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2008



## Form FD 9000-24

**SITE**  
**NAME: Safety Kleen**

**SITE**  
**LOCATION:** 8755 NW 95<sup>th</sup> St., Medley, FL

WELL NO: MW-3

SAMPLE ID: MW-2

DATE: 5/4/10

## PURGING DATA

WELL DIAMETER (Inches): 2	TUBING DIAMETER (Inches): 0.17	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 3 20	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
(only fill out if applicable)

~~EQUIPMENT VOLUME BURGE - EQUIPMENT VOL~~

**EQUIPMENT VOLUME PURGE:** 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
(only fill out if applicable)

$$= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	5.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	5.5	PURGING INITIATED AT:	1145	PURGING ENDED AT:	1204	TOTAL VOLUME PURGED (gallons):	2.2
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TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % Sat.	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
------	-------------------------------	---	------------------------	--------------------------------	---------------------------	---------------	--	--	---------------------	---------------------	--------------------

1157	1.44	1.44	0.12	3.40	6.60	33.91	0.5	1.70	3.1	11.0	1.0
------	------	------	------	------	------	-------	-----	------	-----	------	-----

120	0.34	1.8	0.12	3.45	6.65	22.90	171	0.65	1.9		
-----	------	-----	------	------	------	-------	-----	------	-----	--	--

1203	0.36	216	0.12	345	6.65	72.90	571	0.45	1.9	5	5
------	------	-----	------	-----	------	-------	-----	------	-----	---	---

	G.H.	G.H.	S.S.	P.S.	S.B.I	(L.M)	L.V				
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[illegible][illegible][illegible][illegible][illegible][illegible]

**WELL CAPACITY (Gallons Per Foot):** 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.85; 5" = 1.02; 6" = 1.47; 12" = 5.88

**TUBING INSIDE DIA. CAPACITY (Gal./Ft.):** 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.016; 5/8" = 0.018

**SAMPLING DATA**

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Probas Adak / Charlie Medina	SAMPLER(S) SIGNATURE(S):  	SAMPLING INITIATED AT: 12:55	SAMPLING ENDED AT: 12:15
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PUMP OR TUBING DEPTH IN WELL (feet): 5.5	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ $\mu$ m
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FIELD DECONTAMINATION:		PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
------------------------	--	------	---	---	--------	---	--------------	------------	---	---

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND USE	SAMPLING METHOD	SAMPLE PUMP
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SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	ANALYSIS AND/OR METHOD	EQUIPMENT CODE	FLOW RATE (mL per minute)
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MW3	3	CG	40	none/Kel	120	6.65	8260	CFPP	290
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[illegible][illegible][illegible][illegible]

REMARKS:									
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**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

**SAMPLING EQUIPMENT CODES:** APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump;  
RBBB = Reverse Flow Peristaltic Pump; SBA = Shovel Method Bailor

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

**NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

**pH:**  $\pm 0.2$  units **Temperature:**  $\pm 0.2$  °C **Specific Conductance:**  $\pm 5\%$  **Dissolved Oxygen:** all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) **Turbidity:** all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

**Revision Date: February 12, 2009**

## Form FD 9000-24

SITE NAME: Safety Klean		SITE LOCATION: 8755 NW 95 <sup>th</sup> St., Medley, FL	
WELL NO: MW-1	SAMPLE ID: MW-1		DATE: 5/4/10

## PURGING DATA

[illegible]

## SAMPLING DATA

[illegible]

**NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

**pH:**  $\pm 0.2$  units **Temperature:**  $\pm 0.2$  °C **Specific Conductance:**  $\pm 5\%$  **Dissolved Oxygen:** all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) **Turbidity:** all readings  $\leq 20$  NTU; optionally  $+ 5$  NTU or  $\pm 10\%$  (whichever is greater)

**Revision Date: February 12, 2009**

## Form FD 9000-24

SITE NAME: Safety Kleen		SITE LOCATION: 8755 NW 95 <sup>th</sup> St., Medley, FL	
WELL NO: MW-4	SAMPLE ID: MW-4	DATE: 5/4/10	

## PURGING DATA

[illegible]

## SAMPLING DATA

<b>SAMPLED BY (PRINT) / AFFILIATION:</b> Probas Adak/ Charlie Medina		<b>SAMPLER(S) SIGNATURE(S):</b> <i>[Signature]</i>		<b>SAMPLING INITIATED AT:</b> 1105	<b>SAMPLING ENDED AT:</b> 1110				
<b>PUMP OR TUBING DEPTH IN WELL (feet):</b> 5-6		<b>TUBING MATERIAL CODE:</b> PE		<b>FIELD-FILTERED:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	<b>FILTER SIZE:</b> ____ µm				
<b>FIELD DECONTAMINATION:</b> PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)				<b>DUPLICATE:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
M-4	3	CG	40	uae/ml	120	6.97	8260	RFPF	~90
<b>REMARKS:</b>									
<b>MATERIAL CODES:</b> AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
<b>SAMPLING EQUIPMENT CODES:</b> APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									
<b>NOTE:</b> 1. The above do not constitute an official certification.									

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH:  $\pm 0.2$  units Temperature:  $\pm 0.2$  °C Specific Conductance:  $\pm 5\%$  Dissolved Oxygen: all readings  $\leq 20\%$  saturation (see Table FS 2200-2); optionally,  $\pm 0.2$  mg/L or  $\pm 10\%$  (whichever is greater) Turbidity: all readings  $\leq 20$  NTU; optionally  $\pm 5$  NTU or  $\pm 10\%$  (whichever is greater)

Revision Date: February 12, 2009



**APPENDIX D**

**CONTAMINANT MASS ESTIMATE**



## Appendix D-Contaminant Mass Estimate Calculation

### Safety Kleen Systems, Inc. Medley

#### Volume A Unsaturated Zone- 0 - 3 ft bls

Concentration of PCE in soil sample collected at 1 ft bls at MW-5 = 0.86 mg/Kg

Area is approximately 11 ft long x 4 ft (average) wide x 3 ft deep.

$$132 \text{ ft}^3 \times 54 \text{ kg/ft}^3 \times 0.86 \text{ mg/kg} = 6.13\text{E}+03 \text{ mg PCE} \quad 0.014 \text{ lbs PCE}$$

#### Volume B Smear Zone - 3 - 4 ft bls (assume PCE concentration the same as at 1 ft bls)

Area is approximately 11 ft long x 4 ft wide x 1 ft thick.

Concentration of PCE in soil sample collected at 1 ft bls at MW-5 = 0.86 mg/Kg

$$44 \text{ ft}^3 \times 54 \text{ kg/ft}^3 \times 0.86 \text{ mg/kg} = 2.04\text{E}+03 \text{ mg PCE} \quad 0.005 \text{ lbs PCE}$$

#### Volume C Ground Water

Total concentration of all contaminants at MW-4 = 0.0288 mg/L

Total concentration of all contaminants at MW-5 = 0.0333 mg/L

Average contaminant concentration = 0.0311 mg/L

The overall shape of impacted ground water resembles an ellipse (see Figure 8)

45 ft long, 20 ft wide, depth 22 ft (depth of top of screen of MW-4D)

Area = 707 ft<sup>2</sup>

Volume = 14,140 ft<sup>3</sup>

Porosity = 30 %

Volume = 4,242 ft<sup>3</sup>

Volume = 31,730 gallons

Volume = 120,099 liters

Mass = 3,729 mg

Mass = 0.0082 pounds

**Total Estimated Mass of Contaminants = 0.03 lbs**

Soil density assumed to be 54 kg/ft<sup>3</sup> or 1.6 tons per cubic yard.

## **APPENDIX E**

### **AIR SPARGING COMPRESSOR DESIGN & SPECIFICATIONS**

# **ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**

Project: Safety Kleen  
EPA ID NO. FLD 984 171 694

Location: Medley, FL  
Performed by RRC

Date: 02-Aug-10  
Reviewed by:

## **AIR SPARGING SYSTEM DESIGN**

**PURPOSE:** Estimate the pressure and flow rates to operate the air sparging wells, and select a design value for equipment and piping design.

### **SITE-SPECIFIC PARAMETER SELECTION:**

From Pilot Study:

Depth to Top of Screen =	26 feet-Deep well MW-5D, deepest well.
Depth to Water Table =	3 feet
Feet of Water Above Well =	23 feet
Hydrostatic Pressure (calculated) =	9.9 psi
Breakout/formation pressure =	1.0 psi -estimated
Wellhead Pressure =	10.9 psi

Base design pressure =	10.9 psig	
Variance possible due to time, well type changes, in-situ variability	25%	2.7 psig
Calculated design value =	13.6 psig	
<b>Design Wellhead Pressure =</b>	<b>13.6 psig</b>	

	Low	High	Units	Notes
Well Flowrate =	5.00	7.0	scfm/well	
No. of Wells =	6	6		If all wells at once.
System Flow Rate =	30.0	42	scfm	
System Flow Rate =	30.0	42.0	scfm	

<b>Selected System Design Flow Rate =</b>	<b>42.0 scfm</b>
<b>System Design Flow Rate per Well and Header Pipe =</b>	<b>7.0 scfm/well</b>

# **ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**

Project: Safety Kleen  
EPA ID NO. FLD 984 171 694

Location: Medley, FL  
Performed by RRC

Date: 02-Aug-10  
Reviewed by:

## **AIR SPARGING PIPE/SYSTEM FRICTIONAL LOSSES**

DESIGN WELLHEAD PRESSURE: **13.6 psig**  
DESIGN SYSTEM FLOW RATE: **42.0 scfm**

PURPOSE: Estimate frictional losses through pipe, filters, instrumentation and fittings for air compressor design.

SOURCE: "Flow of Fluids Through Valves, Fittings and Pipe", Crane, 1988.  
Condensed Air Power Data, Ingersoll-Rand, 1988; Assorted product cut-sheets.

### **CALCULATIONS:**

#### **1. Piping Losses-Section 1**

Longest (highest energy loss) path dictates design.

Longest path = System Trailer to northern most well

1" piping  
to well

1" piping

45 El

90 El

Tee

1" Valve

Flow meter est.

1.5" piping  
Header

valve

piping

90 El

Tee

Flow Rate (scfm)	Pipe Size (Inches)	Length/Eqv (feet)	Number of units	Loss/100 ft psig	Loss per pipe psig	Cumul. Total Loss, psig	Pressure Required at beginning of segment+10%
7	1	20.00	1	0.1	0.02	0.02	Values used on loss conversion calcs
7	0	1.40	0	0.1	0.000	0.02	
7	2	2.62	5	0.1	0.01	0.03	values below includes
7	2	5.20	2	0.1	0.01	0.04	Safety Factor below this table
7	1	13.60	1	0.1	0.01	0.06	below this table
7	1	20	1	0.1	0.02	0.08	13.69
42	1.5	6.00	1	0.24	0.01	0.08	
42	1.5	25.00	1	0.24	0.06	0.14	
42	1.5	10.10	8	0.24	0.19	0.33	
42	1.5	20.10	1	0.24	0.05	0.38	14.06

#### **Total Frictional Pipe Losses**

Safety factor to account for other fittings = 120%

**0.5  
psig**

#### **2. Other Components**

Component	Loss psig
Heat Exchanger	1.00
Air water separator	0.50
Misc.	0.80

#### **3. Total System Losses**

#### **Total Pressure & Flow Requirement**

**16.4 psig      42.0 scfm**

## **ACFM Output CALCULATION**

PURPOSE: Estimate flow rate requirement in terms of compressor outlet condition  
(Convert SCFM to ACFM, b/c Free Air Delivery CFM for this unit is at STP so = SCFM).

$$Q_a = Q_s [P_{atm} / P_{s\_abs}] [(460 + t)/520] = \text{System Flow Rate in ACFM}$$

**Q\_s = 42.0 scfm** = System Design Flow Rate in SCFM  
**P\_atm = 14.7 psig** Atmospheric Pressure (absolute)  
**P\_s\_abs = 31.1 psig** Pressure at compressor outlet (absolute)  
**t deg F = 85.0 F** average ambient air temperature

**Q\_a = 20.8 acfm = actual cfm = OUTlet condition cfm**  
**at Pressure of 16.4 psig**

## **AIR COMPRESSOR MODEL SPECIFICATION**

SUITABLE BRAND / MODEL:

**Rietschle DLR 100, 7.5 hp, 230 volt, 3-phase**



Compressors

Compresores

Compresseurs

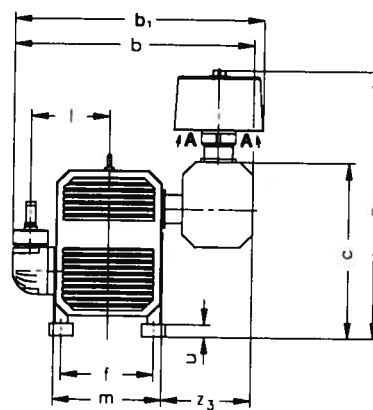
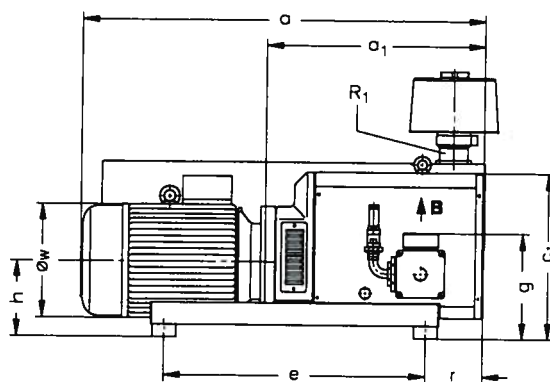
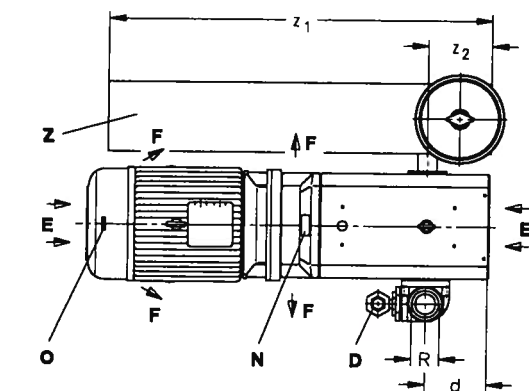
Compressores

**C-DLR****zephyr**

C-DLR 60

C-DLR 100

C-DLR 150



[Inches]

A	Suction	Succión	Aspiration	Sucção
B	Pressure connection	Conexión presión	Raccord surpression	Conexão da pressão
D	Safety valve	Válvula seguridad	Ciাপet de sécurité	Válvula de segurança
E	Cooling air entry	Entrada aire refrigerante	Entrée air refroidissement	Entrada do ar refrigerante
F	Cooling air exit	Salida aire refrigerante	Sortie air refroidissement	Saída do ar refrigerante
N	Data plate	Placa fecha	Etiquette caractéristique	Placa da data
O	Rotation arrow	Dirección de rotación	Flèche sens rotation	Direção da rotação
Z	Inlet silencer	Silenciador entrada	Silencieux d'aspiration	Silenciador de entrada

C-DLR		60	100	150
kw	50 Hz	3.0	3.0	4.0
hp	60 Hz	5.0	5.0	7.5
Inches	a	50 Hz	27.44	27.36
		60 Hz	27.44	31.49
	a1	50 Hz	15.28	15.43
		60 Hz	15.28	17.56
	b / b1	13.70 / 13.70		21.26 / 22.05
	c / c1 / c2	15.04 / 11.61 / 15.04		14.76 / 14.17 / 25.75
	d	2.36		3.62
	e	9.65		17.32
	f	6.30		8.66
	g	11.73		8.23
	h	6.10		5.91
	i	5.43		7.17
	m	6.46		10.00
	r / u	4.21 / 0.79		3.03 / 0.59
	Øw	50 Hz	7.72	8.66
		60 Hz	7.87	9.57
z1		-		24.65
z2 / z3		-		3.94 / 7.28
R / R1		1" NPT / BSP 1"		1 1/2" NPT / BSP 1 1/2"

DA 881/1

1.2.2006

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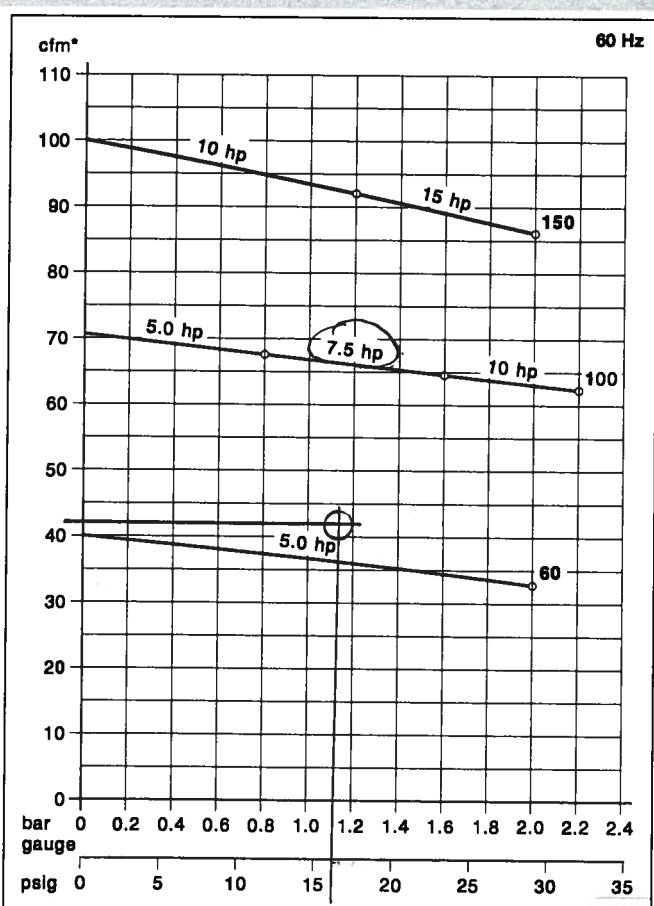
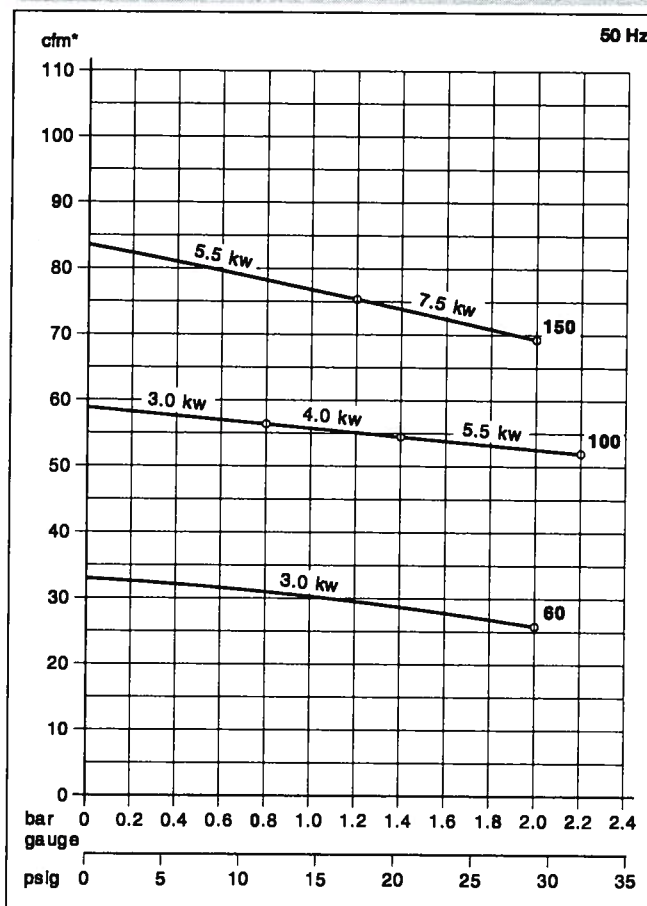
Fax +1 410 / 712 4148

e-mail: sales.hanover@  
gardnerdenver.com

www.gd-elmoietschle.com

C-DLR		60	100	150
cfm	50 Hz	33.0	58.9	83.6
	60 Hz	40.0	70.6	100
psig	50 Hz	29.0	11.6	20.3
	60 Hz	29.0	11.6	23.2
3~	50 Hz	230/400V ± 10%		400/690V ± 10%
	60 Hz	208-230/415-460V ± 10%		208-230/460V ± 10%
kw	50 Hz	3.0	3.0	4.0
hp	60 Hz	5.0	5.0	7.5
A	60 Hz	15/7.5	13.2-12/6.0	21-18.8/9.4
rpm	50 Hz	2850		25-24/12
	60 Hz	3450		25-24/12
dB(A)	50 Hz	78	79	80
	60 Hz	79	83	81
lbs	50 Hz	143	232	243
qt	60 Hz	143	259	286
		0.4	0.55	0.6
ZRZ		#	40	40
ZDR		#	40	40
ZPD		-	-	-
ZMS / ZAD		#	#	#

cfm	Capacity	Capacidad	Volume engendré	Capacidade
psig	Excess pressure	Exceso de presión	Surpression	Pressão excessiva
3~	Motor version	Versión motor	Exécution moteur	Versão do motor
kw / hp	Motor rating	Datos motor	Puissance moteur	Potência do motor
A	Full load amperage	Amperaje de plena carga	intensité absorbée	Amperagem da carga total
rpm	Speed	Velocidad	Vitesse rotation	Velocidade
dB(A)	Average noise level	Nivel de ruido medio	Niveau sonore moyen	Nível médio de ruído
lbs	Weight	Peso	Poids	Peso
qt	Oil capacity (Gear)	instrumentos capacidad aceite	Charge d'huile (Engrenage)	Engrenagem da capacidade do óleo
ZRZ	Accessories	Accesorios	Accessoires	Acessórios
ZDR	Non return leaf	Válvula retención	Clapet anti-retour	Válvula sem retorno
ZPD	Pressure regulating valve	Válvula reguladora de presión	Valve de réglage pression	Válvula de regulagem da pressão
ZMS	Pulsation silencer	Silenciador de pulsación	Absorbeur de pulsations	Silenciador de pulsação
ZAD	Motor starter	Arranque motor	Disjoncteur moteur	Arranque do motor
ZBZ	Soft starter	Soft starter	Démarrage progressif	Soft starter
	Sound box	Caja de sonido	Calisson Insonorisant	Canópla



\* Capacity refers to free air at 1 standard atmosphere and 20° C (68° F). / La capacidad se refiere al aire libre a 1 atmosfera estándar de presión y a 20° C (68° F) de temperatura. / Le débit est mesuré à l'atmosphère de 1 bar (abs.) à 20° C (68° F). / A capacidade refere-se ao ar livre a uma atmosfera padrão 1 e a 20° C (68° F).  
 Curves and tables refer to compressor at normal operating temperature. / Las curvas y las tablas se refieren al compresor a la temperatura normal de operación. / Les courbes et tableaux sont établis, compresseur à température de fonctionnement. / As curvas e tabelas referem-se ao compressor a temperatura normal de operação.  
 Technical information is subject to change without notice. / La información técnica está sujeta a cambios sin previo aviso. / Sous réserve de modification technique. / A informação técnica está sujeita a mudança sem aviso prévio.  
 The listed values for a, kw and full load amperage may vary because of different motor manufacturers. / Los valores listados para a, kw y para el amperaje de carga completa pueden variar para distintos fabricantes de motores. / Les dimensions a et kw ainsi que l'amperage peuvent différer des données indiquées ci-dessus, selon le fabricant du moteur. / Como variam os fabricantes de motores, poderá haver variação dos valores indicados para a, kw e para uma amperagem da carga total.  
 # on request # on pedido # sur demande # a pedido



**APPENDIX F**  
**RAP SUMMARY FORM**





## Remedial Action Plan Summary

Site Name: SafetyKleen Systems - Medley

Location: 8755 NW 95th Street, Medley, Florida

DEP Site ID No. FLD 984 171 694

Current Date: 08/06/2010

Date of Last GW Analysis: 05/04/2010

**CHECK ALL THAT APPLY:**

Media Contaminated: ☒ Groundwater ☐ Sediment ☒ Soil ☐ Air

**Type(s) of Product(s) Discharged:**

☐ Gasoline / Kerosene Analytical Group

☐ Listed Hazardous Waste

☒ Other types of contaminants (solvents, etc.)

List: Solvents

**Method of Groundwater Disposal:**

☐ Infiltration Gallery

☐ Sanitary Sewer

☐ Surface Discharge/NPDES

☐ Injection Well

☐ Other \_\_\_\_\_

**Plume Characteristics:**

• Estimated Mass (lbs):

Groundwater 0.0080000000 Soil 0.0200000000

• Area of Plume 707.0000000000 (ft<sup>2</sup>)

• Depth of Plume 22.0000000000 (ft)

**Groundwater Recovery and Specifications:**

• No. of Recovery Wells \_\_\_\_\_

☐ Vertical ☐ Horizontal

• Design Flow Rate/Well \_\_\_\_\_ (gpm)

• Total Flow Rate \_\_\_\_\_ (gpm)

• Hydraulic Conductivity \_\_\_\_\_ (ft/day)

• Recovery Well Screen Interval \_\_\_\_\_ (ft)

• Depth to Water \_\_\_\_\_ (ft)

**Method of Groundwater Remediation:**

☐ Pump-and-Treat:

☐ Air Stripper

☐ Low Profile ☐ Packed Tower

☐ Diffused Aerator

☐ Activated Carbon

☐ Primary Treatment ☐ Polishing

☒ In Situ Air Sparging - Pressure: 14.0000000000 (psi)

• No. of Sparge Points 6.0000000000

☒ Vertical ☐ Horizontal

• Design Air Flow Rate/Well 7.0000000000 (cfm)

• Total Air Flow Rate 42.0000000000 (cfm)

☐ Biosparging:

• No. of Sparge Points \_\_\_\_\_

☐ Vertical ☐ Horizontal

• Design Air Flow Rate/Well \_\_\_\_\_ (cfm)

☐ Bioremediation:

☐ In Situ ☐ Ex Situ

☐ Other \_\_\_\_\_

**Free Product Present:** ☐ Yes ☒ No

• Estimated Volume \_\_\_\_\_ (gal)

• Maximum Thickness \_\_\_\_\_ (in)

• Method of Recovery \_\_\_\_\_

**Method of Soil Remediation:**

☐ Excavation:

Volume to be excavated \_\_\_\_\_ (yds<sup>3</sup>)

☐ Thermal Treatment

☐ Land Farming On Site

☐ Landfill

☐ Bioremediation

☐ Other \_\_\_\_\_

☐ Vapor Extraction System (VES):

• No. of Venting Wells \_\_\_\_\_

☐ Vertical ☐ Horizontal

• VES - Applied Vacuum \_\_\_\_\_ (wg)

• Design Air Flow Rate \_\_\_\_\_ (cfm)

• Design Radius of Influence \_\_\_\_\_ (ft)

• Air Emissions Treatment

☐ Thermal Oxidizer ☐ Catalytic Converter

☐ Carbon ☐ Other \_\_\_\_\_

☐ Soil Bioventing:

• No. of Venting Wells \_\_\_\_\_

☐ Vertical ☐ Horizontal

• Design Air Flow Rate \_\_\_\_\_ (cfm)

☐ In Situ Bioremediation

☒ Other Institutional Control for Arsenic; Induced air stripping for solvent.

**Natural Attenuation:**

☐ Groundwater ☐ Soil

• Method of Evaluation:

☐ Historical Trends

☐ Site-Specific Parameters

**Estimated Time of Cleanup:** 548 (days)

• Method of Estimation:

☐ Pore Volumes (no. of pore vols. = \_\_\_\_\_)

☐ Exponential Decay (Decay Rate) \_\_\_\_\_ (day<sup>-1</sup>)

☐ Groundwater Transport Model \_\_\_\_\_

☒ Other Experience