FINAL SITE CHARACTERIZATION REPORT REGION 8 DRY CLEANERS – GROUP 2 RUDDICK'S DRY CLEANERS SITE ELMIRA, NEW YORK

SITE NO. 8-08-037

WORK ASSIGNMENT NO. D004434-5

Prepared for:

New York State Department of Environmental Conservation Albany, New York

Prepared by:

MACTEC Engineering and Consulting, PC Portland, Maine

MACTEC: 3612062059

OCTOBER 2007

This document was prepared for the sole use of New York State Department of Environmental Conservation, the only intended beneficiary of our work. No other party shall rely on the information contained herein without prior written consent of MACTEC Engineering and Consulting, PC.

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

1,1,1-TCA 1,1,1-trichloroethane

ASP Analytical Services Protocol

ASTM American Standards of Testing and Measurements

bgs below ground surface

Chemtech Consulting Group, Inc.

DUSR Data Usability Summary Report

EDR Environmental Data Resources, Inc.

°F degrees Fahrenheit

Lu Engineers Joseph Lu Engineering

MACTEC Engineering and Consulting, P.C.

msl mean sea level

NYCRR Title 6 New York Codes, Rules, and Regulations

NYS New York State

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

PCE tetrachloroethene

PID photoionization detector

Report Site Characterization Report

GLOSSARY OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

SC Site Characterization

SCG standards, criteria or guidelines Site Ruddick's Dry Cleaners Site

SVOC semi volatile organic compounds

TCE trichloroethene

TCL Target Compound List

μg/L micrograms per Liter

USEPA United States Environmental Protection Agency

VOC volatile organic compound

WA Work Assignment

1.0 INTRODUCTION

MACTEC Engineering and Consulting, PC (MACTEC), is submitting this Site Characterization Report (Report) to the New York State Department of Environmental Conservation (NYSDEC). This Report addresses the Site Characterization (SC) at the Ruddick's Dry Cleaners site (Site) in the City of Elmira, New York (Figure 1.1). This Report was prepared in response to Work Assignment (WA) No. D0003826-29 (NYSDEC, 2006), and in accordance with the requirements of the July 1997 Superfund Standby Contract No. D003826 between the NYSDEC and MACTEC. The field work and report were conducted under WA# D0004434-5 and the April 2005 Superfund Standby Contract No. D0004434-5 between the NYSDEC and MACTEC.

This Report is one of six site-specific SC reports for the Region 8 Dry Cleaners – Group 2 multiple Site Characterizations WA. The other five SC reports address the sites listed below:

- HTS Coin Operated Laundry and Dry Cleaners (Site No. 8-08-038)
- Universal Dry Cleaners (Site No. 8-08-040)
- Up to Date Cleaners (Site No. 8-26-019)
- Associated Textile Rental Services (Site No. 8-08-041 replaces Schmidt Brothers)
- Rolling Plains (Site No. 8-28-138 replaces Ace Cleaners)

The former Ruddick's Dry Cleaners site, Site No. 8-08-037, is currently listed as a potential hazardous waste site, or "P" site, by the NYSDEC, because insufficient information exists to determine whether wastes were disposed of at the site and whether, if present, those wastes pose a potential significant threat to public health or the environment (New York State [NYS], 2006).

The purpose of the SC is to provide information to be used by the NYSDEC to reclassify the site to one of the following categories:

Class 1

Hazardous waste constitutes a significant threat to public health or the environment, as described in Title 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 (NYS, 2006); and the significant threat to public health or the environment is causing, or presents an imminent danger of causing, either irreversible or irreparable damage to the environment

Class 2 Hazardous waste sites presenting a significant threat to public health or the environment; as defined in 6 NYCRR 375 (NYS, 2006).

Class 3 Hazardous waste sites at which contamination does not presently constitute a significant threat to public health or the environment.

Not Classified Sites where hazardous waste disposal is not documented.

To complete its reclassification, the NYSDEC requires information to establish the following:

- The existence of documented hazardous waste disposal, as defined in NYCRR Part 371 (NYS, 1999a).
- The site's significance with respect to the threat it poses to public health and the environment as defined in 6 NYCRR Part 375 (NYSDEC, 2006).
- Identification of contaminant source.

MACTEC collected reclassification documentation and is presenting it to the NYSDEC so it can recommend follow up action for the Site (i.e., reclassify, delist, or perform additional investigation).

The WA was divided into three tasks. Task 1-Work Plan Development, included a search of state and county site records, and performance of a site inspection to develop information necessary for reclassification or delisting. Task 1 activities did not develop adequate data on which to base a delist or reclassification recommendation. Therefore, Task 2, Subsurface Investigation, was conducted. Task 3-Reporting, was the preparation of this Report. Resources used to prepare this Report include: (1) information provided in the WA, (2) appropriate guidelines in the NYSDEC Draft DER-10 Guidance (NYSDEC, 2002), (3) results of previous investigations, if applicable, and (4) results of the SC investigation.

This report is divided into five sections:

Section 1 - Is the introduction to the report.

Section 2- Describes the site background and physical setting, including a summary of previous investigations.

Section 3 - Presents the work conducted during the field investigations.

Section 4 - Presents results of the field investigation.

Section 5 - Presents an investigation summary.

2.0 SITE BACKGROUND AND PHYSICAL SETTING

On May 3, 2006, MACTEC personnel reviewed available records from the NYSDEC office in Albany, New York, and visited the Chemung County, New York offices. Information was also collected from the Site owner by the NYSDEC. As part of the review, MACTEC ordered a copy of an Environmental Data Resources, Inc. (EDR) report which provides a listing of federal and state governmental information pertaining to potential and documented environmental impacts, both at the Site and within the American Standards of Testing and Measurements (ASTM) recommended search radii. Complete lists of all recommended ASTM record searches for standard due diligence requirements are included in the EDR report, which is provided under separate cover. This information was reviewed to support a Site classification, and to help prepare the scope of work for the SC field investigations. The information collected from these sources is summarized below.

2.1 SITE LOCATION

The former Ruddick's Dry Cleaners is located at 384 Norton Street in a residential neighborhood in the City of Elmira, Chemung County, New York (Figure 1.1). The site property consists of approximately 0.21 acres. The Sullivan Street Public Supply Wells are located to the east of this site.

2.2 SITE HISTORY

Sanborn fire insurance maps reviewed from 1931 to 1995 indicate the presence of three buildings on the Site property during that time. The three buildings consisted of: a 2-story building on west side of the property that is labeled with an 'S', typically signifying a store; a small building in the south central portion of the property that may have been attached to the "store"; and, a 2-story building on the eastern portion of the Site property labeled with a 'D', typically signifying a dwelling. The small building in the south central portion of the property was labeled as a dry cleaner on the 1950 to 1994 Sanborn fire insurance maps. This small building is visible in the 1931 Sanborn map, and although its label is not readable, the Sanborn map identifies a gasoline tank in front (north side) of the building, indicating that this building may have originally served as a gas station. The Manning's City Directories reviewed from 1955 to 1990 also confirm the presence of

Ruddick's Dry Cleaning facility from at least 1955 to 1990. The "dwelling" on the eastern portion of the property is not present in the 1988 Sanborn map. Although the 1995 Sanborn map indicates that the entire Site property is vacant, the two-story multi-family home currently located on the west side of the property appears to be older than 10 years, and roughly matches the shape of the home shown on previous year's maps, so its omission from the 1995 map may be a misprint. There is no other building currently located on the Site property.

Based on the presence of water lines in the 1931 Sanborn maps, it is assumed that the former dry cleaner used public water.

2.3 PREVIOUS INVESTIGATIONS

It is not know if any previous site investigations have been completed for the Site property.

The site is of concern based on the presence of chlorinated solvents in the City of Elmira's Sullivan Street Supply Well. Although other sources of chlorinated solvents exit in the greater Horseheads/Elmira valley, it is not known if this Site is contributing to the contamination plume. Chlorinated solvents (primarily trichloroethene [TCE]) were first detected in the City of Elmira's Sullivan Street supply wells in the mid 1980's. Samples collected between 1981 and 1992 indicated concentrations of TCE in the Sullivan Street Wells ranging from 5.0 to 10.3 micrograms per Liter (μ g/L), in relation to a NYS groundwater standard of 5 μ g/L (New York State Department of Health [NYSDOH], 1994). These wells are located approximately 1100 feet east of the Site, on the west side Newtown Creek (Figure 1.1). There are two supply wells in close proximity to each other. These wells can each produce approximately 3 million gallons per day. The 18-inch diameter wells have casing set to approximately 60 feet below ground surface (bgs), with shutter screen down to 98 feet bgs. Although an air stripper was installed in the late 1990's, the wells are currently not used (LaDouce, 2005). They are turned on twice per year and sampled.

2.4 PHYSICAL SETTING

Topography

The Site is located in the Newtown Creek Valley, which runs north-south, joining the Chemung River Valley to the south, which runs east-west. The Site property is located at 859 feet above mean sea level (msl) and is relatively flat. The valley slopes slightly down to the south and east. Newtown Creek is located at an elevation of approximately 850 feet above msl and approximately 1700 feet east of the Site. Newtown Creek runs south, joining the Chemung River in 1.1 miles. The Chemung River is located at an elevation of approximately 835 feet above msl at the confluence with Newtown Creek. The topography to the west of the site is relatively flat for approximately 1.4 miles, and then rises to a ridge at 1600 feet above msl approximately 0.1 miles, and then rises sharply to a ridge at 1600 feet above msl approximately 1.0 mile from the site.

Climate

The climate of the area is characterized by moderately warm summers and cold winters. Mean monthly temperatures range from 24 degrees Fahrenheit (°F) in January to 70°F in July. Average annual precipitation is 35 inches. Average annual snowfall is 43 inches (National Climatic Data Center, 2004).

Surface Water Hydrology

Surface drainage from the site generally follows the topography, flowing toward low areas and then infiltrating into the ground. The Site property is located within the 100 year flood zone (EDR, 2006).

Groundwater Hydrology

The Newtown Creek and eventually the Chemung River are local groundwater discharge areas. Groundwater at the Site was encountered at approximately 12-15 feet bgs, and based on water level measurements collected, is interpreted to flow southeast towards the Newtown Creek.

Geology

Overburden soils at the site consisted of lacustrine silts, sands and gravels. Surficial geology is mapped as oxidized, non calcareous, fine sand to gravel (Muller, 1986). Based on regional geologic mapping (Rickard and Fisher, 1970) bedrock is expected to consist of shale and siltstones associated with the Upper Devonian West Falls Group; Specifically, the Beers Hill Shale; Grimes Siltstone; Dunn Hill, Millport, and Moreland Shales (Rickard and Fisher, 1970).

Site Walkover

On May 3, 2006 the MACTEC Site Lead, Chuck Staples, and the NYSDEC project manager, Matthew Dunham conducted a walkover of the Site area.

The site walkover consisted of viewing the Ruddick's Dry Cleaners property, and the surrounding neighborhood to assess possible contamination sources and the logistical concerns for the field program. MACTEC personnel documented the walkover with photographs (Appendix A).

Visible sources of contamination (e.g., leaking drums) were not observed, however, detailed inspections of potential sources were not conducted during the site walkover.

2.5 FILE REVIEW

MACTEC reviewed files from various state and local agency offices to develop information to support a reclassification or delisting, and to help prepare the scope of work for the SC field investigations. The EDR report was also reviewed for relevant site information.

2.6 SUMMARY OF DATA RECORDS SEARCH AND ASSESSMENT FINDINGS

Under federal and state regulations a solid waste may be regulated as a hazardous waste if it is a material included in one of the United States Environmental Protection Agency's (USEPA) or the NYSDEC's lists of hazardous wastes. If a material is regulated because of its inclusion on a federal or state list, it is commonly referred to as a "listed hazardous waste." A waste may also be

regulated under the Resource Conservation and Recovery Act as a "characteristic hazardous waste" if it exhibits one of the characteristics of toxicity, corrosivity, reactivity, or flammability.

Results of sampling and analysis of the Sullivan Street Supply Wells indicated the presence of chlorinated solvents (TCE) in groundwater. Spent chlorinated solvents not originating from household sources, including TCE are included on both the USEPA's and the NYSDEC's lists of hazardous wastes. Under 6 NYCRR Part 371.4(a) (1), these spent solvents constitute hazardous waste from non-specified sources. Disposal of these chlorinated solvents has been confirmed by available analytical results from the Sullivan Street Wells, but the source area has not been identified.

As defined by 6 NYCRR Part 375, significant threat can be established by documenting a contravention of environmental standards. Surface water, soil and groundwater are the only media for which NYS has promulgated standards. Under NYS Water Quality Regulations (6 NYCRR Part 701) the state has set numeric standards that are the maximum concentration of compounds in groundwater and surface water that protect public health and/or the environment (NYS, 1999b). In addition, standards for soils have been promulgated under the revised 6 NYCRR 375 Regulations (NYS, 2006).

Analytical data from the Site was not available for review during Task 1, and therefore it was not known if the Site was the source of the TCE contamination or if the Site posed a significant threat. As a result, the SC field investigations were conducted to:

- collect the data necessary to verify the likelihood of uncontrolled waste disposal,
- determine if potential contamination was located on the Site and was migrating offsite, and
- provide sufficient information to allow the NYSDEC to re-classify the site.

3.0 SCOPE OF WORK

To reclassify the Site, the NYSDEC requires data documenting hazardous waste disposal as set forth in 6 NYCRR Part 371, and the potential significant threat to human health and the environment as defined by 6 NYCRR Part 375. Because data necessary to determine if the chlorinated compounds detected in the Sullivan Street Wells originated from the Site or if potential contamination present in Site media are migrating off-site and pose a potential significant threat to human health or the environment were not available in federal and state files reviewed during Task 1, additional field investigations were performed as described below. Task 2 activities included the Field Investigation. The objective of Task 2 activities was to determine whether the volatile organic compounds (VOCs) detected in the city supply well originated from the Site, or whether potential onsite VOC contamination is migrating offsite. Task 3 was the preparation and distribution of this Report.

3.1 TASK 2 - FIELD INVESTIGATIONS

Field investigations included:

- 1) Geoprobe Soil and Groundwater Sampling
- 2) Microwell Installation
- 3) Well Development
- 4) Synoptic Groundwater Measurement Round

The subsurface soil borings, groundwater sample collection, groundwater monitoring well installation and well development activities were conducted from September 25 through September 29, 2006.

The synoptic groundwater measurement round was conducted on November 2, 2006. A Site land survey was completed by Joseph Lu Engineering (Lu Engineers) on December 14, 2006.

MACTEC Engineering and Consulting, P.C., Project 3612062059

3.1.1 General Field Activities

The following subsections describe the activities conducted during the field investigation, including mobilization, health and safety, and decontamination.

3.1.1.1 Mobilization

Upon receiving the NYSDEC authorization to begin fieldwork, MACTEC and its subcontractors mobilized to the Site and began the field exploration program. Field investigations were conducted from September 25 to September 29, 2006.

A field team orientation meeting was held on-site with MACTEC personnel to familiarize field workers with Site history, health and safety requirements, equipment calibration procedures, and other field procedures.

3.1.1.2 Health and Safety

Field investigation activities were conducted at Level D personal protection. Based on photoionization detector (PID) readings, no upgrades to personal protection were warranted.

3.1.1.3 Decontamination

Sampling methods and equipment for this field program were chosen to minimize investigation derived wastes and minimize possibility of cross contamination. Disposable sampling equipment was used as much as practical to minimize decontamination time and water disposal. Non disposable sampling equipment was decontaminated before and after the collection of each sample.

Non disposable sampling equipment was decontaminated by scrubbing the sample collection equipment with potable water and Liquinox, rinsing with potable water, rinsing with deionized water, and then allowing the equipment to air dry. Decontamination fluids did not exhibit visual or olfactory evidence of contamination and were released on-site to the ground surface in the area of decontamination, allowing the liquid to infiltrate into the soil and not run off-site.

3.1.1.4 Investigation Derived Wastes

The field investigation did not result in the generation of wastes that were considered hazardous (i.e., no visual or olfactory signs of contamination, and no PID readings above 5 parts per million were detected). Therefore drill cuttings and purge water resulting from the investigation were placed on the ground surface in the area of exploration and personal protective equipment and disposable sampling equipment were double bagged and disposed of as non-hazardous refuse.

3.2 GEOPROBE® BORINGS AND SAMPLING

Field investigation activities included the completion of Geoprobe® borings, the collection and analysis of groundwater, soil, and soil vapor samples, and the installation of microwells. Geoprobe sampling was conducted over a five day period from September 25 to September 29, 2006. The purpose of the activities was to provide groundwater data for comparison to NYS Class GA Groundwater Quality Standards set forth under 6 NYCRR Parts 700-705 (NYS, 1999b), and to assist the NYSDEC in evaluating significant threat to public health and the environment as defined by 6 NYCRR Part 375 (NYS, 2006). Soil sample analyses were used to assess whether hazardous waste constituents are present in Site soils, and, if possible, confirm a source of chlorinated solvents. Soil vapor sampling results were used to evaluate whether VOCs present in soil and/or groundwater are migrating towards occupied buildings via vapor migration.

MACTEC used a Geoprobe[®] 66DT rubber-mounted track rig sampling device to collect groundwater soil, and soil vapor samples to identify potential chlorinated solvents. The Geoprobe[®] pushed and/or hammered rods and probe tips into the subsurface for sample collection. A total of 21 borings were completed during this investigation, including three soil vapor borings and four microwells. A total of 38 groundwater samples, five soil samples and three soil vapor samples were collected. The boring at GW-18 could not be advanced due to the inability to clear all utilities in the borings vicinity. Sample locations are shown on Figures 3.1 and 3.2 (GS locations correspond to GW locations).

MACTEC worked closely with the NYSDEC, the Ruddick's Cleaners site owner, neighboring property owners, and utility companies while obtaining access to these exploration locations. These locations were chosen to determine groundwater conditions up-gradient and down-gradient of,

as well as at the former dry cleaner building location. Boring locations were also chosen to determine if the Site is the source, or a contributing source of TCE contamination detected in the Sullivan Street Wells.

Soil Sampling. Soil samples were collected using a four-foot long 2 inch diameter core sampler with an acrylic liner for the collection of discrete subsurface soil samples. Soil samples were collected continuously from the ground surface to the groundwater table. PID headspace readings were used to screen soil samples for the presence of VOCs as each soil sample was removed from the sample collection tube. One soil boring (GS-4) was selected for continuous soil sampling to 22 feet bgs, to better characterize site soils. Samples were described using the Unified Soil Classification System. The sample description and classification, VOC headspace reading, and boring observations were recorded on the Field Data Record, included in Appendix B. Based on the PID readings and physical evidence such as color or odor, five unsaturated soil samples were submitted to the laboratory for analysis. Samples exhibiting the highest PID readings and physical evidence of contamination were selected for analysis. Soil samples were shipped to Chemtech Consulting Group, Inc. (Chemtech) for analyses of target compound list (TCL) VOCs using USEPA OLM04.3 methods as described in the NYSDEC Analytical Services Protocol (ASP) of June 2000, including calculation of % moisture. Off-site laboratory analysis included Category B deliverables.

Groundwater Sampling. Groundwater samples were collected using a 2-inch diameter stainless steel mill slot sampling device that was exposed to the aquifer, after being pushed to the desired depth interval. A peristaltic pump or check valve (depending on sample depth) was used for the collection of discrete groundwater samples. One tubing volume of water was purged and one set of field parameters including temperature, conductivity, pH, and turbidity were collected before sampling. VOC samples were collected at a low purge rate (approximately 100 milliliters per minute) to minimize potential volatilization.

To assess vertical extent of contamination, MACTEC attempted to collect groundwater samples from two locations in each boring, the water table and 10 feet into the water table (10 feet below the first sample). Each boring was advanced to at least 10 feet into the water table, which was encountered from 10 feet bgs to 12 feet bgs. For two of the borings (GW-1 and GW-9) a third

sample from 20 feet below the water table was also collected. No sample could be collected from GW-18 due to utilities not being cleared.

Groundwater samples were shipped to Chemtech for analyses of TCL VOCs using USEPA OLM04.3 Methods as described in the NYSDEC ASP of June 2000. Off-site laboratory analysis included Category B deliverables.

Microwell Installation. To determine groundwater flow direction at the Site, four Geoprobe® borings were fitted with one-inch diameter microwells (GW-4, GW-5, GW-6 and GW-7). Microwell locations are shown on Figure 3.1. Groundwater was encountered between 10 feet bgs and 12 feet bgs. The one-inch diameter microwells were installed after groundwater samples were collected from each boring. The microwells were installed as piezometers and used primarily for water level measurements. Microwells were constructed with schedule 40 polyvinyl chloride, with 10 foot lengths of 0.01-inch machine slotted well screens. From these piezometers, water table elevations were determined and a potentiometric map of the Site was created. The wells were constructed with a # 0 sand pack to two feet above the screen, a minimum of two feet of bentonite seal placed above the sand pack, native soil as backfill and sealed at the ground surface with cement or blacktop patch. The wells were completed with a locking cap and a six inch flush mount hex key cover. The wells were developed for twenty minutes with a peristaltic pump to clean the screen and determine if the wells were conductive with groundwater. Well construction diagrams are included in Appendix B

Soil Vapor Sampling. Based on proximity to nearby residences and/or businesses, and discussions with the NYSDEC, three soil vapor samples were collected (GV-1, GV-2, GV-3) and used to evaluate the potential vapor migration of contaminants from the groundwater (Figure 3.1). The Geoprobe® rods were pushed to between 9 and 10 feet bgs, anticipated to be below the rain infiltration line, but above the water table fringe zone. Soil vapor was collected just above the water table to give an indication of the possible vapor migration from potentially contaminated groundwater.

Soil vapor samples were collected from the Geoprobe[®] points using the Geoprobe[®] PRT system. To sample with the Geoprobe[®] PRT system, a specialized point was attached to the end of the Geoprobe[®] rods. The PRT point was exposed to the soil by allowing a disposable point to drop off

the bottom of the rods while pulling the rods up 0.5 feet. The PRT point allows \(\frac{1}{4}\)-inch tubing to be threaded directly to the bottom of the rods, for a small discrete sample point. The tubing was run to the surface and connected directly to the sample collection device. The outside of the rods were sealed at the ground surface with pre-hydrated bentonite. Approximately two liters of soil vapor, plus the volume of the tubing, was purged using 580B OVM PID pump before collecting samples. During the soil vapor purge, vapors were screened using a PID. In addition, helium leak tests were conducted on a subset of the Region 8 Dry Cleaners Group 2 Sites soil vapor samples to ensure samples were representative of sub-surface conditions and not outdoor ambient air. Helium tests were conducted by encapsulating the sample point with a bucket sealed to the ground surface with bentonite. The encapsulated area was filled with helium. The soil vapor sample port was tested for helium breakthrough with a portable monitoring device both before and after collection of the soil vapor sample. No sample had greater than 10 percent of the tracer gas breakthrough. The soil vapor samples were collected with one-liter SUMMA®-type canisters with flow valves (set to approximately 20 minutes per sample). Flow into the canisters was less than 0.1 liters per minute, as requested by the NYSDOH. Samples were sent to Chemtech for VOC analysis by USEPA Method TO-15.

3.3 SUB-SLAB SOIL VAPOR SAMPLING.

One sub-slab soil vapor sample was scoped to be collected from the residential building located on the Site property. Upon further discussions with the NYSDEC Project Manager it was determined that no sample would be collected.

3.4 WATER LEVEL SURVEY

Water levels measurements were conducted November 2, 2006. The round consisted of measuring water levels at the four new microwells, as well as two water levels from adjacent surface water repositories (shown on Figure 1.1). Well caps were opened and the wells were allowed to equilibrate to atmospheric pressure. The depths of the wells as well as the depth to water were measured using a conductivity probe from the top of well risers. Groundwater table elevations were calculated from the well riser elevations (subsection 3.5). Well information and groundwater measurements are presented in Table 3.1.

3.5 SITE SURVEY

After completion of field sampling activities Lu Engineers surveyed the Site, and its' surrounding area including the microwell locations and the two water level locations from adjacent surface water repositories (Eldridge Lake and Weyer Pond shown of Figure 1.1). A base map of the Site was created indicating locations of microwells and all other media sampling locations. Horizontal locations were tied to the NYS Plane Coordinate System using North American Datum of 1983. The Site plan provided horizontal locations of all relevant Site features, which included surrounding homes and businesses at a scale of 1 inch to 50 feet. Relevant features included, but were not limited to all structures, buildings, roads, fences, new monitoring wells, marked underground utilities, fire plugs, and power poles.

Vertical elevations of the four new microwells were tied to msl, North Atlantic Vertical Datum of 1988, and measured to an accuracy of 0.01 feet. Horizontal well measurements are accurate to 0.1 ft. The base map was used to accurately locate all Geoprobe[®] sample points, microwells, and all other media sampling locations. Temporary sample points were located using a Trimble global positioning system and coordinate data is included in Table 3.2. Sample points are included on Figures 3.1 and 3.2, and the Lu Engineers survey map is included in Appendix C.

4.0 DATA ASSESSMENT

This section presents results of the laboratory analyses for soil, groundwater, and air samples collected during Task 2, as well as results of the water level survey.

4.1 ANALYTICAL RESULTS

Soil and groundwater analytical results were compared to appropriate standards, criteria or guidelines (SCGs). There are no exterior soil vapor standards or guidance values, but if detected concentrations exceeded the NYSDOH sub-slab soil vapor guidance values recommended for mitigation, these concentrations were noted as potential concerns. Reported concentrations of individual analytes indicating contravention of standards or guidelines are summarized in the following sections, and noted on Tables 4.1 through 4.4.

A Data Usability Summary Report (DUSR) was completed in accordance with the NYSDEC's Guidance for the Development of DUSRs (NYSDEC, 1997). This report and complete analytical results, including tentatively identified compounds (TICs), are presented in Appendix D. TICs were not evaluated as part of the DUSR.

Based on laboratory or data usability review, some of the data was qualified with a J, B, and/or D. Compounds were qualified J if the concentration listed was an estimated value, which was less than the specified minimum reporting limit but greater than instrument detection limit. Compounds qualified J were analyzed for and determined to be present in the sample, and the mass spectrum of the compound met the identification criteria of the method. The reporting limits for most target VOCs using the OLM04.3 Methods, including the target chlorinated solvents compounds were 10 µg/L. This is above most of the NYS Class GA groundwater standards; however, the actual instrument detection limit was below the NYS Class GA groundwater standards. A list of Chemtech's instrument reporting limits for the OLM04.3 Method is included in Appendix D.

Compounds qualified B indicated that the compound was found in the trip blank, or laboratory blank, and in the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

Compounds qualified D indicated that the compound was reported from an analytical run that required a dilution due to concentrations greater than the highest calibration standard.

Analytical results were compared to the SCGs described below.

Soil Samples. Analytical results were compared to NYS Soil SCGs. Soil SCGs are based on the NYSDEC's Soil Cleanup Objectives (SCOs) from 1) 6 NYCRR Subpart 375-6 - Remedial Program Soil Cleanup Objectives for Unrestricted Use, and, if not listed in (1), then 2) "Technical and Administrative Guidance Memorandum 4046 (NYSDEC, 1994); Determination of SCOs and Cleanup Levels".

Groundwater Samples. Analytical results were compared to: (1) the NYS Class GA Groundwater Quality Standards from 6 NYCRR Parts 700-706 (NYS, 1999b) or, where applicable, (2) the NYS Class GA Groundwater Quality Guidance Values from the Division of Water Technical and Operational Guidance Series 1.1.1 "Ambient Water Quality Standards and Guidance Values" (NYSDEC, 1998).

Soil Vapor Samples. There are currently no SCGs for concentrations of compounds in soil vapor. Soil vapor samples were collected to determine whether this environmental medium is contaminated, characterize the nature and extent of contamination, and identify possible sources of the contamination.

4.1.1 Soil Sample Results

A summary of target VOCs detected in soil samples is presented in Table 4.1.

VOCs were not detected in soil samples above the NYSDEC Soil Clean-up Objectives.

Trace concentrations (<10 μ g/kg) of tetrachloroethene (PCE) were detected at four of the five sample locations ranging from 0.63 μ g/kg (GS-4) to 5.6 μ g/kg (GS-1). These detections were all below the NYSDEC SCO of 1300 μ g/kg.

Trace concentrations (less than 15 μ g/L) of acetone and methylene chloride were detected at sample location GS-3 and trace concentrations(less than 10 μ g/L) of 2-butanone, ethyl benzene, methylene chloride, o-xylene, toluene, and m/p xylene were detected in sample GS-5. All detections were less then NYSDEC Soil Clean-up objectives (see Table 4.1).

4.1.2 Groundwater Sample Results

A summary of target VOCs and semi volatile organic compounds (SVOCs) detected in groundwater samples collected is presented in Table 4.2 and 4.3, respectively, and maximum detections of PCE and TCE per boring are presented on Figure 4.1.

TCE was detected at three of the eighteen sample locations with detections ranging from 2.9 J μ g/L (GW-5) to 19 μ g/L (GW-14). TCE concentrations in groundwater exceeded the NYS Class GA groundwater standard of 5 μ g/L at one location GW-14 (see Table 4.2).

PCE was detected at ten of the eighteen groundwater sample locations with detections ranging from 1.2 J μ g/L (GW-1) to 16 μ g/L (GW-5). PCE concentrations detected at six of the eighteen sample locations exceeded the NYS Class GA groundwater standard for PCE of 5 μ g/L (see Table 4.2).

Cis-1,2-dichloroethene was detected at eight of the eighteen sample locations with detections ranging from 1.8 J μ g/L (GW-8) to 6.3 J μ g/L (GW-5). Cis-1,2-dichloroethene concentrations detected at sample locations GW-4 and GW-5 exceeded the NYS Class GA groundwater standard of 5 μ g/L (see Table 4.2).

Trace concentrations ($<5~\mu g/L$) of methylene chloride were detected at four of the eighteen sampling locations. In addition, trace concentrations ($<5~\mu g/L$) of toluene and acetic acid were reported at location GW-15 and trace detections ($<5~\mu g/L$) of trans-1,2-dichloroethene were reported at locations GW-4 and GW-9. All detections for methylene chloride, toluene, acetic acid, and trans-1,2-dichloroethene were less than their associated NYS Class GA groundwater standard of $5~\mu g/L$ (see Table 4.2).

Trace concentrations ($<5~\mu g/L$) of the SVOC compounds butylbenzyphthalate and dinoctylphthalate were detected at sample locations GW-9 and GW-15. These detections were well below the NYS Class GA groundwater standards of 50 $\mu g/L$ for each compound (see Table 4.3).

Several VOC and SVOC TICs were also reported in the groundwater samples collected. TICs are reported in Appendix D (see Table 1.5).

4.1.3 Soil Vapor Sample Results

A summary of target VOCs detected in soil vapor samples is presented in Table 4.4.

The only VOCs for which the NYSDOH has promulgated guidance values for soil vapor are TCE, PCE, and 1,1,1-trichloroethane (1,1,1-TCA) (NYSDOH, 2006). These guidance values are only applicable when evaluating sub-slab soil vapor samples in relation to indoor air concentrations, and not exterior soil vapor samples.

Trace concentrations ($<10 \mu g/m^3$) of TCE, PCE, and/or 1,1,1-TCA were reported at all three sample locations. These concentrations are not indicative of source area concentrations. In addition, there were slightly elevated concentrations ($>100 \mu g/m^3$) of acetone, cyclohexane, heptane, hexane, and propylene at one or more of the sample locations (see Table 4.4).

4.2 POTENTIOMETRIC SURFACE MAP

The microwell survey and depth to water measurements were used to calculate groundwater table elevations (presented on Figure 4.2). Microwell survey and water elevation data are presented in Table 3.1. Depth to water across the survey area varied from approximately 11 feet bgs to 13 feet bgs. Groundwater elevations varied from 847.35 feet above msl, to 847.23 feet above msl. The groundwater table gradient appears to be flat, varying by only 0.12 feet in elevation over 125 feet of distance, or 0.001 ft/ft (GW-6 to GW-4). Interpreted groundwater flow, based on site groundwater elevations, as well as groundwater elevations measured at the other Region 8 Dry Cleaner's - Group II sites in the Elmira Valley, is to the south/southeast, towards the Newtown Creek.

5.0 INVESTIGATION FINDINGS

A review of physical and chemical data collected during the SC resulted in the following findings:

- 1) The Site is located in a residential neighborhood that is serviced by public water. Low concentrations of TCE (<10.3 $\mu g/L$) have been detected in the City of Elmira's Sullivan Street public supply well, located approximately 0.2 miles east of the Site. Groundwater measurements collected at the Site and in the greater Elmira Valley indicate that groundwater flow is generally to the south-east and not towards this supply well.
- 2) No chlorinated solvents were detected above the NYSDEC Soil Cleanup objectives in the five soil samples collected. Three of the samples were collected from around the reported location of the former Dry Cleaners building footprint.
- 3) TCE, a NYS listed hazardous waste, was detected approximately 800 feet up-gradient of the Site at location GW-14 at a concentration of 19 µg/L in comparison to the NYS standard of 5 µg/L. Low concentrations of TCE (<5 µg/L) were detected in groundwater at the site, and groundwater samples collected down-gradient of the Site at GW-9 and GW-10 showed no detections of TCE, indicating that the Site is not likely a contributing source to the TCE detected in the city supply wells.
- 4) PCE, a common dry cleaning solvent and a NYS listed hazardous waste, was detected in groundwater samples collected from 10 of 18 sample locations; concentrations detected exceeded NYS groundwater standard of 5 μg/L at PCE at 6 of the 18 locations. PCE was not detected in groundwater samples collected from presumably up-gradient sample locations GW-14, GW-13, and GW-12. PCE was detected at the highest concentrations in groundwater samples collected from locations GW-5 (16 μg/L) and GW-4 (14 μg/L), located at the southern edge of the site property; GW-4 is located adjacent to the reported former Dry Cleaners building. Trace concentrations (<10 μg/kg) of PCE was detected onsite at four of the five sampled locations; however, concentrations were below NYSDEC soil cleanup objectives. This data, combined with lower concentrations of PCE detected in downgradient groundwater samples indicate that the Site is likely the source of PCE detected in groundwater.
- 5) Trace concentrations (less than $10~\mu g/m^3$) of PCE and TCE were detected in the three Geoprobe soil vapor samples. 1,1,1 TCA was detected in only one Geoprobe soil vapor sample, GV-1.

Data Gaps. Based on the SC, the following data gaps still exist:

- 1. Based on anticipated groundwater flow direction and concentrations detected, the source of PCE contamination detected in groundwater appears to be in the vicinity of the Site, but a source area has not been located.
- 2. The downgradient extent of PCE contamination above NYS Class GA water standard of 5 has not been defined.

6.0 REFERENCES

- Environmental Data Resources, Inc (EDR), 2006. EDR Radius Map with GeoCheck for Ruddicks Dry Cleaners, 384 Norton Street, Elmira, New York. May 18, 2006.
- LaDouce, 2005. Telephone conversation between MACTEC and Mark LaDouce of the Elmira Water Board. September 9, 2005.
- Muller, et al., 1986. Surficial Geologic Map of New York, Finger Lakes Sheet, New York State Museum Geologic Survey, Map and Chart Series #40. 1986.
- National Climactic Data Center (NCDC), 2004. Comparative Climactic Data for the United States, 1971 to 2000. February, 2004.
- New York State (NYS), 1999a. New York Codes, Rules, and Regulations, Title 6, Part 371 Identification and Listing of Hazardous Wastes. Amended November 1999.
- New York State (NYS), 1999b. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999.
- New York State (NYS), 2006. New York Codes, Rules, and Regulations, Title 6, Part 375 Inactive Hazardous Waste Disposal Sites Remedial Program. Reissued October 2006.
- New York State Department of Environmental Conservation (NYSDEC), 2006. Work Assignment #D003826-29 Region 8 Dry Cleaners Group 2 letter dated March 28, 2006.
- New York State Department of Environmental Conservation (NYSDEC), 2002. Draft DER-10, Technical Guidance for Site Investigation and Remediation. December 2002.
- New York State Department of Environmental Conservation (NYSDEC), 2000. "Analytical Services Protocols"; 6/00 Edition; June 2000.
- New York State Department of Environmental Conservation (NYSDEC), 1998. Division of Water Technical and Operational Guidance Series 1.1.1: "Quality Standards and guidance Values and Groundwater Effluent Limitations"; June, 1998.
- New York State Department of Environmental Conservation (NYSDEC), 1997. "Guidance for the Development of Data Usability Reports"; Division of Environmental Remediation; September 1997.
- New York State Department of Environmental Conservation (NYSDEC), 1994. Revised Technical and Administrative Guidance Memorandum HWR 94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels. January 1994.
- New York State Department of Health (NYSDOH), 2006. "Guidance for Evaluating Soil Vapor Intrusion in the State of New York". October 2006.

New York State Department of Health (NYSDOH), 1994. Public Health Assessment, Facet Enterprises. Prepared by NYSDOH. March 16, 1994.

Rickard and Fisher, 1970. Geologic Map of New York, Finger Lakes Sheet, New York State Map and Chart Series 15. by L.V. Richard and D.W. Fisher. March, 1970.

TABLES

Table 3.1: Monitoring Well Information and Water Level Data

Location ID	Elevation Ground	Elevation (TOC)	Elevation (TOR)	Well Depth (ft BTOR)	Depth to Water (ft BTOR) (11/02/2006)	Groundwater Elevation (11/02/2006)
WL-1	853.69	N/A	853.69	N/A	2.30	851.39
WL-2	852.90	N/A	852.90	N/A	4.23	848.67
GW-4	860.28	860.28	860.06	18.70	12.83	847.23
GW-5	859.66	859.66	859.38	17.80	12.16	847.22
GW-6	858.86	858.86	858.55	20.02	11.20	847.35
GW-7	858.23	858.23	858.00	20.05	10.71	847.29

Wells surveyed by Joseph Lu Engineers on December 14, 2006. Elevations tide to mean sea level using North Atlantic Vertical Datum of 1988.

Water level measurements collected by MACTEC Engineering.

N/A - Not Applicable

TOC = top of casing; TOR = top of riser (or measurement point for lake levels).

ft BTOR = feet below top of riser.

Table 3.2: Survey Data

Location Identification	Location Description	X-Coordinate	Y-Coordinate
GV-01	Soil Vapor Point	759473.5	769102.9
GV-02	Soil Vapor Point	759440.3	769113.2
GV-03	Soil Vapor Point	759508.3	769047.0
GW-1/GS-1	Geoprobe Groundwater/Soil	759454.5	769106.0
GW-2/GS-2	Geoprobe Groundwater/Soil	759472.0	769101.8
GW-3/GS-3	Geoprobe Groundwater/Soil	759505.9	769149.8
GW-4/GS-4	Microwell and Geoprobe Groundwater and Soil Point	759446.8	769092.0
GW-5/GS-5	Microwell and Geoprobe Groundwater and Soil Point	759542.7	769127.8
GW-6	Microwell and Geoprobe Groundwater Point	759532.8	769184.8
GW-7	Microwell and Geoprobe Groundwater Point	759427.8	769145.7
GW-8	Geoprobe Groundwater Point	759457.1	769037.5
GW-9	Geoprobe Groundwater Point	759513.6	769047.5
GW-10	Geoprobe Groundwater Point	759587.9	769042.7
GW-11	Geoprobe Groundwater Point	759598.5	769195.2
GW-12	Geoprobe Groundwater Point	759511.1	769310.2
GW-13	Geoprobe Groundwater Point	759456.5	769523.0
GW-14	Geoprobe Groundwater Point	759331.0	769999.7
GW-15	Geoprobe Groundwater Point	759336.8	769154.7
GW-16	Geoprobe Groundwater Point	759108.3	769063.7
GW-17	Geoprobe Groundwater Point	758423.0	768788.9
GW-19	Geoprobe Groundwater Point	759992.6	769286.8

- 1) Horizontal coordinates are in feet and based on the New York State Plane Coordinates System, Central Zone. They are based on the NAD 1983 coordinate datum.
- 2) Microwell Locations GW-4 to GW-7 were surveyed by Joseph Lu Engineers, a liscenced land surveyor with an accuracy of 0.1 feet.
- 3) The remainder of the locations were surveyed using a Trimble global positioning system with an accuracy of 1-meter.

Created By/Date: BAS 10/4/07 Checked By/Date: CRS 10/10/07

Table 4.1: Soil SampleVOC Results

Location		GS-1/GW-1	GS-2/GW-2	GS-3/GW-3	GS-4/GW-4	GS-4/GW-4	GS-5/GW-5
Sample Date		9/27/2006	9/27/2006	9/28/2006	9/27/2006	9/27/2006	9/26/2006
	Sample ID	RCGS00100901XX	RCGS00200801XX	RCGS00300701XX	RCGS00400401XX	RCGS00400401XD	RCGS00500201XX
	Sample Depth (ft bgs)	9-11	8-10	7-9	4-6	4-6	2-4
	QC Code	FS	FS	FS	FS	FD	FS
Parameter	Criteria	Result Qualifier					
2-Butanone	120	53 UJ	52 UJ	54 U	54 UJ	54 UJ	5.2 J
Acetone	50	53 UJ	52 UJ	12 J	54 UJ	54 UJ	55 U
Ethyl benzene	1000	11 U	10 U	11 U	11 U	11 U	2.2 J
Methylene chloride	50	11 U	10 U	1 J	11 U	11 U	0.99 J
o-Xylene	260	11 U	10 U	11 U	11 U	11 U	4 J
Tetrachloroethene	1300	5.6 J	3.2 J	11 U	1.1 J	0.63 J	3.5 J
Toluene	700	11 U	10 U	11 U	11 U	11 U	0.61 J
Xylene, m/p	260	11 U	10 U	11 U	11 U	11 U	8.3 J
Percent Solids (%)	NA	94	95	93	92	92	90

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Percent Solids analyzed by EPA Merhod 160.3

Results in microgram per kilogram (µg/kg)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting Limit

J = Estimated value

Criteria = Values from Subpart 375-6.8(a) Unrestricted Use Soil Cleanup, "Remedial Program

Soil Clean-up Objectives" (NYSDEC, 2006)

Table 4.2: Groundwater Sample VOC Results

Location		G	GW-1 GW-1		GW-1		GW-2		GW-2				
Sample Date		9/27/2006		9/27/2006		9/27/2006		9/27/2006		9/27/2006			
	Sample ID		RCGW00101701XX		RCGW00102701XX		RCGW00103501XX		RCGW00201301XX		0201301XD		
Sam	ple Depth (ft bgs)		17	27 FG		35		13		13			
	QC Code]	FS		FS	FS		FS		FD			
Parameter	Criteria	Result	Result Qualifier		Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier		
Acetic acid, methyl ester	NA	10	10 U		10 U		10 U		10 U		10 U		
Cis-1,2-Dichloroethene	5	10	U	1.8 J		10	10 U		10 U		U		
Methylene chloride	5	10	U	10 U		2 J		10 U		10	U		
Tetrachloroethene	5	6.4	6.4 J		3.8 J		1.2 J		8.2 J		J		
Toluene	5	10 U		10 U		10	10 U		10 U 10 U		U	10	U
trans-1,2-Dichloroethene	5	10	10 U		10 U		10 U		10 U		10 U		U
Trichloroethene	5	10	U	10	U	10 U		10 U		10	U		

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting Limit.

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Highlighted results exceed associated criteria

Table 4.2: Groundwater Sample VOC Results

Location		G	GW-2 GW-3		GW-3		GW-4		GW-4				
Sample Date		9/27/2006		9/28/2006		9/28/2006		9/27/2006		9/27/2006			
	Sample ID		RCGW00202301XX		RCGW00301301XX		RCGW00302301XX		RCGW00401301XX		RCGW00402301XX		
Samp	ole Depth (ft bgs)		23	13		23		13		23			
	QC Code	1	FS		FS		FS	FS		FS			
Parameter	Criteria	Result	Result Qualifier		Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier		
Acetic acid, methyl ester	NA	10	10 U		10 U		10 U		10 U		10 U		
Cis-1,2-Dichloroethene	5	2.8	J	10 U		1.4 J		10 U		5.7 J			
Methylene chloride	5	10	U	10 U		10 U		4.2 J		2.4 J			
Tetrachloroethene	5	3.4	3.4 J		4 J		4.1 J			7.4 J			
Toluene	5	10 U		10 U		10 U		10	10 U		U		
trans-1,2-Dichloroethene	5	10	10 U		10 U		10 U		10 U 10 U		U	2.1 J	
Trichloroethene	5	10	U	10	U	10 U		10 U		10	U		

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting L

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Highlighted results exceed associated criteria

Table 4.2: Groundwater Sample VOC Results

Location		G	W-5	GW-5		GW-6		GW-6		GW-7			
Sample Date		9/26/2006		9/26/2006		9/26/2006		9/26/2006		9/26/2006			
	Sample ID		RCGW00501301XX		RCGW00502301XX		RCGW00601301XX		RCGW00602301XX		RCGW00701301XX		
Samp	ole Depth (ft bgs)		13	23		13		23		13			
	QC Code	1	FS		FS		FS]	FS		FS		
Parameter	Criteria	Result	Result Qualifier		Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier		
Acetic acid, methyl ester	NA	10	10 UJ		10 UJ		10 UJ		10 UJ		10 UJ		
Cis-1,2-Dichloroethene	5	10	U	6.3 J		10 U		10 U		10 U			
Methylene chloride	5	10	U	10 U		10 U		10 U		10 U			
Tetrachloroethene	5	7.6	7.6 J		16		10 U		4 J		J		
Toluene	5	10	10 U		10 U		10 U		10 U 10 U		U	10 U	
trans-1,2-Dichloroethene	5	10	10 U		10 U		10 U		10 U 10 U		U	10 U	
Trichloroethene	5	10	U	2.9	J	10 U		10 U		10	U		

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting L

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Highlighted results exceed associated criteria

Table 4.2: Groundwater Sample VOC Results

	Location	G	W-7	G	W-8	G	-W-8	G'	W-9	G	W-9
	Sample Date	9/26	5/2006	9/28	8/2006	9/28	8/2006	9/29	0/2006	9/29	9/2006
	Sample ID	RCGW0	0702301XX	RCGW0	0801301XX	RCGW0	0802301XX	RCGW00	0901701XX	RCGW0	0902701XX
Samp	ole Depth (ft bgs)		23		13		23		17		27
	QC Code]	FS		FS		FS]	FS		FS
Parameter	Criteria	Result	Qualifier								
Acetic acid, methyl ester	NA	10	UJ	10	U	10	U	10	U	10	U
Cis-1,2-Dichloroethene	5	10	U	10	U	1.8	J	10	U	3.2	J
Methylene chloride	5	10	U	10	U	10	U	2.1	J	10	U
Tetrachloroethene	5	10	U	4.6	J	7.5	J	1.9	J	10	U
Toluene	5	10	U								
trans-1,2-Dichloroethene	5	10	U	10	U	1.6	J	10	U	2.2	J
Trichloroethene	5	10	U								

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting L

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Table 4.2: Groundwater Sample VOC Results

	Location	G	W-9	G	W-10	G'	W-10	GV	W-11	GV	W-11
	Sample Date	9/29	/2006	9/29	9/2006	9/29	9/2006	9/28	3/2006	9/28	8/2006
	Sample ID	RCGW00	0903701XX	RCGW0	1001701XX	RCGW0	1002701XX	RCGW01	1101501XX	RCGW0	1102501XX
Samp	ole Depth (ft bgs)		37		17		27		15		25
	QC Code]	FS		FS		FS]	FS		FS
Parameter	Criteria	Result	Qualifier								
Acetic acid, methyl ester	NA	10	U								
Cis-1,2-Dichloroethene	5	2.3	J	10	U	10	U	10	U	3.5	J
Methylene chloride	5	10	U	3.2	J	2.6	J	10	U	10	U
Tetrachloroethene	5	10	U	10	U	10	U	10	U	4.9	J
Toluene	5	10	U								
trans-1,2-Dichloroethene	5	1.5	J	10	U	10	U	10	U	10	U
Trichloroethene	5	10	U	10	U	10	U	10	U	3.4	J

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting L

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Table 4.2: Groundwater Sample VOC Results

	Location	GV	W-12	G	W-12	G	W-13	GV	W-13	GV	W-14
	Sample Date	9/28	3/2006	9/28	3/2006	9/20	5/2006	9/26	5/2006	9/28	8/2006
	Sample ID	RCGW0	1201301XX	RCGW0	1202301XX	RCGW0	1301101XX	RCGW01	1302101XX	RCGW0	1401701XX
Samp	ole Depth (ft bgs)		13		23		11	2	21		17
	QC Code]	FS		FS		FS]	FS		FS
Parameter	Criteria	Result	Qualifier								
Acetic acid, methyl ester	NA	10	U								
Cis-1,2-Dichloroethene	5	10	U								
Methylene chloride	5	10	U								
Tetrachloroethene	5	10	U								
Toluene	5	10	U								
trans-1,2-Dichloroethene	5	10	U								
Trichloroethene	5	10	U	10	U	10	U	10	U	6.4	J

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting L

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Table 4.2: Groundwater Sample VOC Results

	Location	GV	W-14	GV	W-15	G'	W-15	GV	W-15	GV	W-16
	Sample Date	9/28	3/2006	9/28	3/2006	9/28	8/2006	9/28	3/2006	9/28	8/2006
	Sample ID	RCGW0	1402701XX	RCGW0	1501301XX	RCGW0	1501301XD	RCGW01	1502301XX	RCGW0	1600901XX
Samp	ole Depth (ft bgs)		27		13		13	2	23		9
	QC Code]	FS		FS		FD]	FS		FS
Parameter	Criteria	Result	Qualifier								
Acetic acid, methyl ester	NA	10	U	10	U	71		10	U	10	U
Cis-1,2-Dichloroethene	5	10	U								
Methylene chloride	5	10	U								
Tetrachloroethene	5	10	U								
Toluene	5	10	U	10	U	1.4	J	10	U	10	U
trans-1,2-Dichloroethene	5	10	U								
Trichloroethene	5	19		10	U	10	U	10	U	10	U

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting L

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Table 4.2: Groundwater Sample VOC Results

	Location	GV	W-16	GV	W-17	G	W-17	GV	W-19	G	W-19
	Sample Date	9/28	3/2006	9/28	3/2006	9/28	3/2006	9/28	3/2006	9/28	8/2006
	Sample ID	RCGW0	1601901XX	RCGW0	1700901XX	RCGW0	1701901XX	RCGW01	1900901XX	RCGW	/01901XX
Samp	ole Depth (ft bgs)		19		9		19		9		19
	QC Code]	FS		FS		FS	l	FS		FS
Parameter	Criteria	Result	Qualifier								
Acetic acid, methyl ester	NA	10	U								
Cis-1,2-Dichloroethene	5	10	U								
Methylene chloride	5	10	U								
Tetrachloroethene	5	10	U								
Toluene	5	10	U								
trans-1,2-Dichloroethene	5	10	U								
Trichloroethene	5	10	U								

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting L

J = Estimated value

Criteria = Values from Technical and

Operational Guidance Series (TOGS) 1.1.1,

Ambient Water Quality Standards and Guidance

Values and Groundwater Effluent Limitations

(NYSDEC, 1998)

All criteria are New York State Groundwater Standards.

NA = Not Available

Table 4.3: Groundwater Sample SVOC Results

	Location GW-1		W-1	G	W-9	GV	V-15	GV	V-15
	Sample Date	9/27	//2006	9/29	9/29/2006 9/28/2006		/2006	9/28/2006	
	Sample ID	RCGW00	0101701XX	RCGW00	901701XX	RCGW01	501301XX	RCGW01	501301XD
San	Sample Depth (ft bgs) 17		17	17		1	13	13	
	QC Code]	FS	I	FS	FS		FD	
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Butylbenzylphthalate	50	10 U		4.5 J		10 U		10 U	
Di-n-octylphthalate	50	10	U	1.1 J		1.4 J		10 UJ	

Only Detected Compounds shown.

Samples analyzed for SVOCs by USEPA Method OLM04.3.

Results in microgram per liter (µg/L)

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the Reporting Limit.

J = Estimated value

Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (NYSDEC, 1998)

All Criteria listed are New York State Guidance Values.

Table 4.4: Exterior Soil Vapor Results

Location	GV-01	GV-01	GV-02	GV-03
Sample Date	9/29/2006	9/29/2006	9/29/2006	9/29/2006
	RCGV00101001XX	RCGV00101001XD	RCGV00201001XX	RCGV00301001XX
OC Code	FS	FD	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
1,1,1-Trichloroethane	3.32 U	3.05	2.18 U	2.12 U
1,1,2,2-Tetrachloroethane	0.69 U	0.69 U	1.37 U	0.76
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.07	1.15	1.53 U	1.07
1,2,4-Trichlorobenzene	1.26	1.48	1.48 U	1.48
1,2,4-Trimethylbenzene	4.96	5.1	11.2	4.96
1,2-Dichlorobenzene	0.78	0.84	1.2 U	0.9
1,2-Dichloroethane	0.4 U	0.53	0.81 U	0.4 U
1,3,5-Trimethylbenzene	1.72	1.72	4.52	1.67
1,3-Dichlorobenzene	0.96	0.9	1.2 U	0.84
1,4-Dichlorobenzene	0.72	0.78	1.2 U	0.84
2-Butanone	6.71	5.48	1.18 U	4.15
2-Propanol	2.82	3.44	0.98 U	4.74
4-Ethyltoluene	1.87	1.77	4.32	1.72
Acetone	0.47 U	0.47 U	152 J	79.3 D
Allyl chloride	0.63 U	15.5	1.26 U	0.63 U
Benzene	10.2	11.1	46.2	3.16
Carbon disulfide	4.23	4.82	7.9	1.03
Carbon tetrachloride	0.88	0.88	1.26 U	0.94
Chlorobenzene	0.46 J	0.51	0.92 U	0.46 J
Chloromethane	0.76	0.92	2.17	0.92
Cyclohexane	22.5	26.4	180 D	3.25
Dichlorodifluoromethane	2.47	3.17	3.27	2.47
Ethyl acetate	0.36 U	42.5	0.72 U	0.36 U
Ethyl benzene	3.29	2.69	7.46	2.73
Heptane	26.7	30.4	198 D	2.99
Hexane	141 D	159 D	645 D	10.9
Methylene chloride	1.6 J	1.36 J	6.19	1.67 J
o-Xylene	4.73	3.86	4.16	3.64
Propylene	365 D	439 D	1.72 U	56.6 D
Styrene	0.6	0.64	0.85 U	0.64
Tetrachloroethene	3.87	4.21	6.79	2.1
Toluene	11.5	11.1	28	10.2
Trichloroethene	0.96	0.91	1.61	0.75
Trichlorofluoromethane	1.85	2.07	2.24 U	2.19
Vinyl acetate	0.35 U	19.9	0.7 U	0.35 U
Xylene, m/p	11.7	8.8	44.1	9.58

Only Detected Compounds shown.

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter ($\mu g/m3$)

QC Code:

FS = Field Sample

FD = Field Duplicate

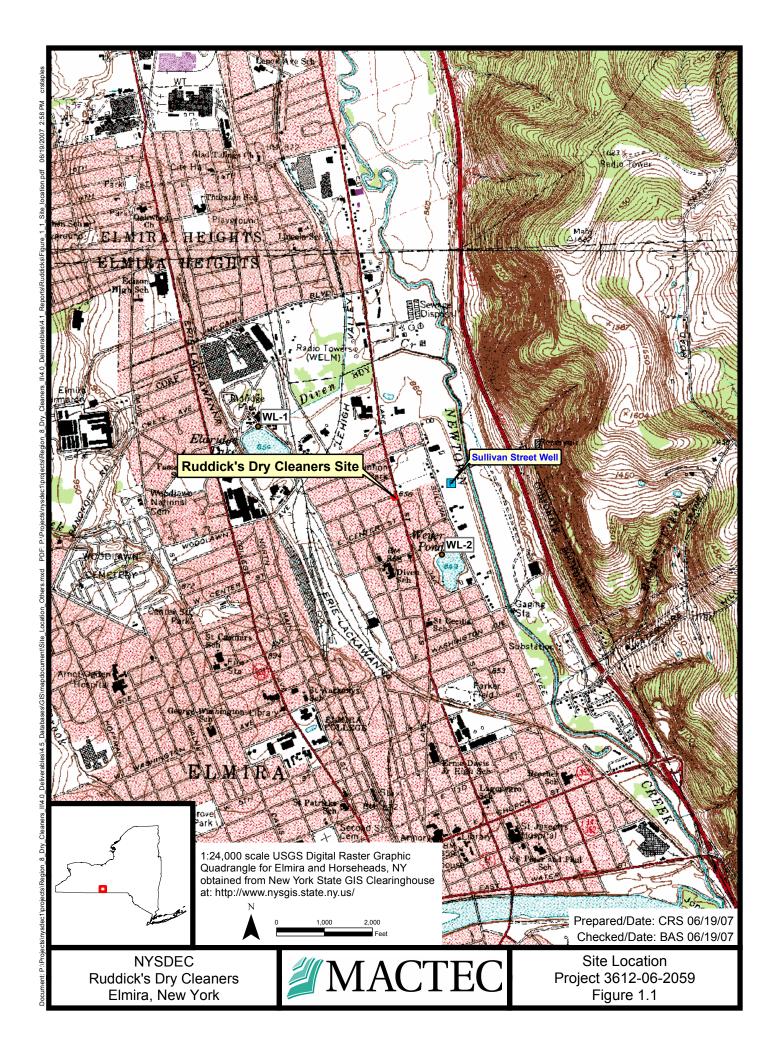
Qualifiers:

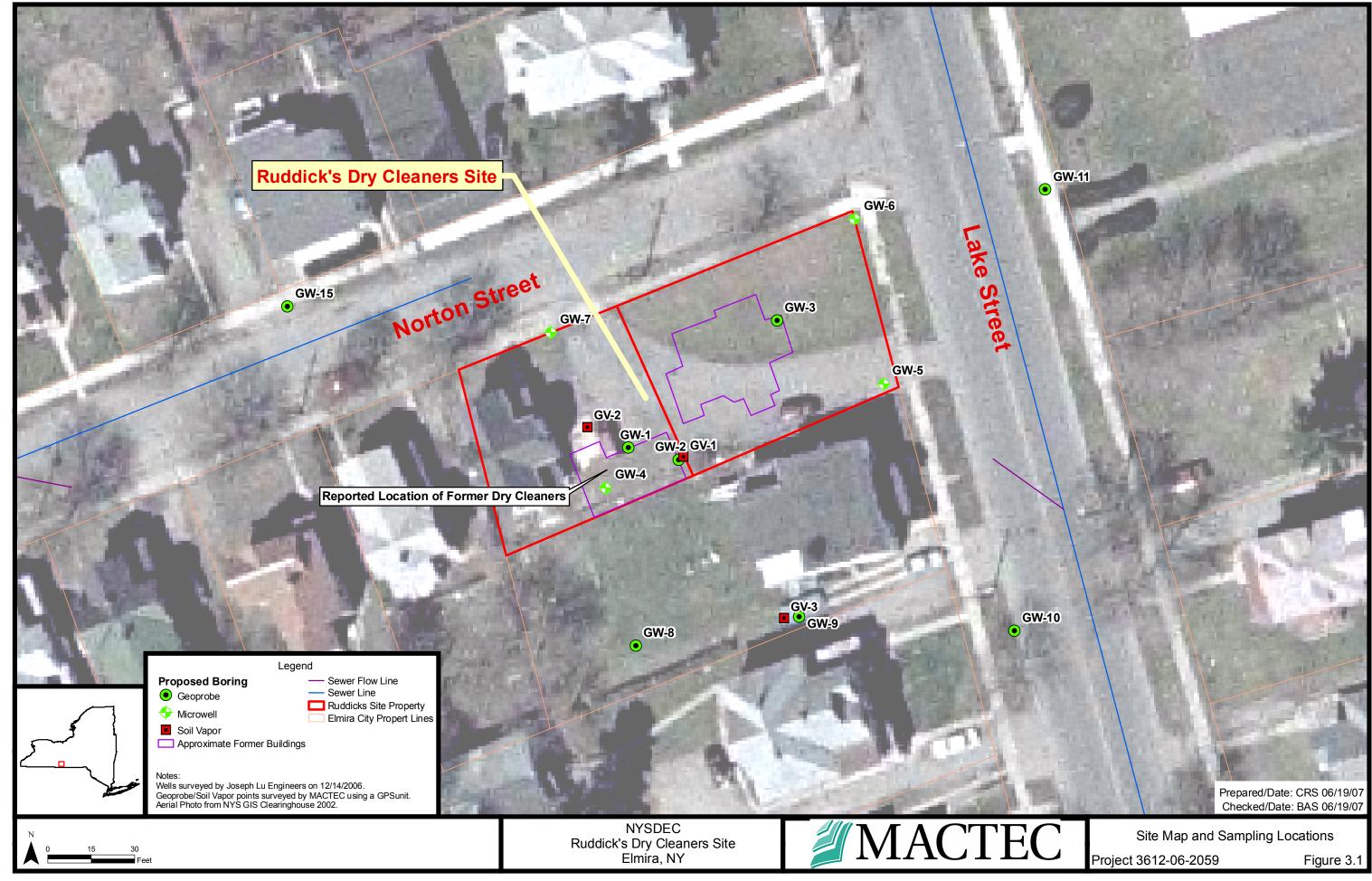
U = Not detected at a concentration greater than the reporting limit

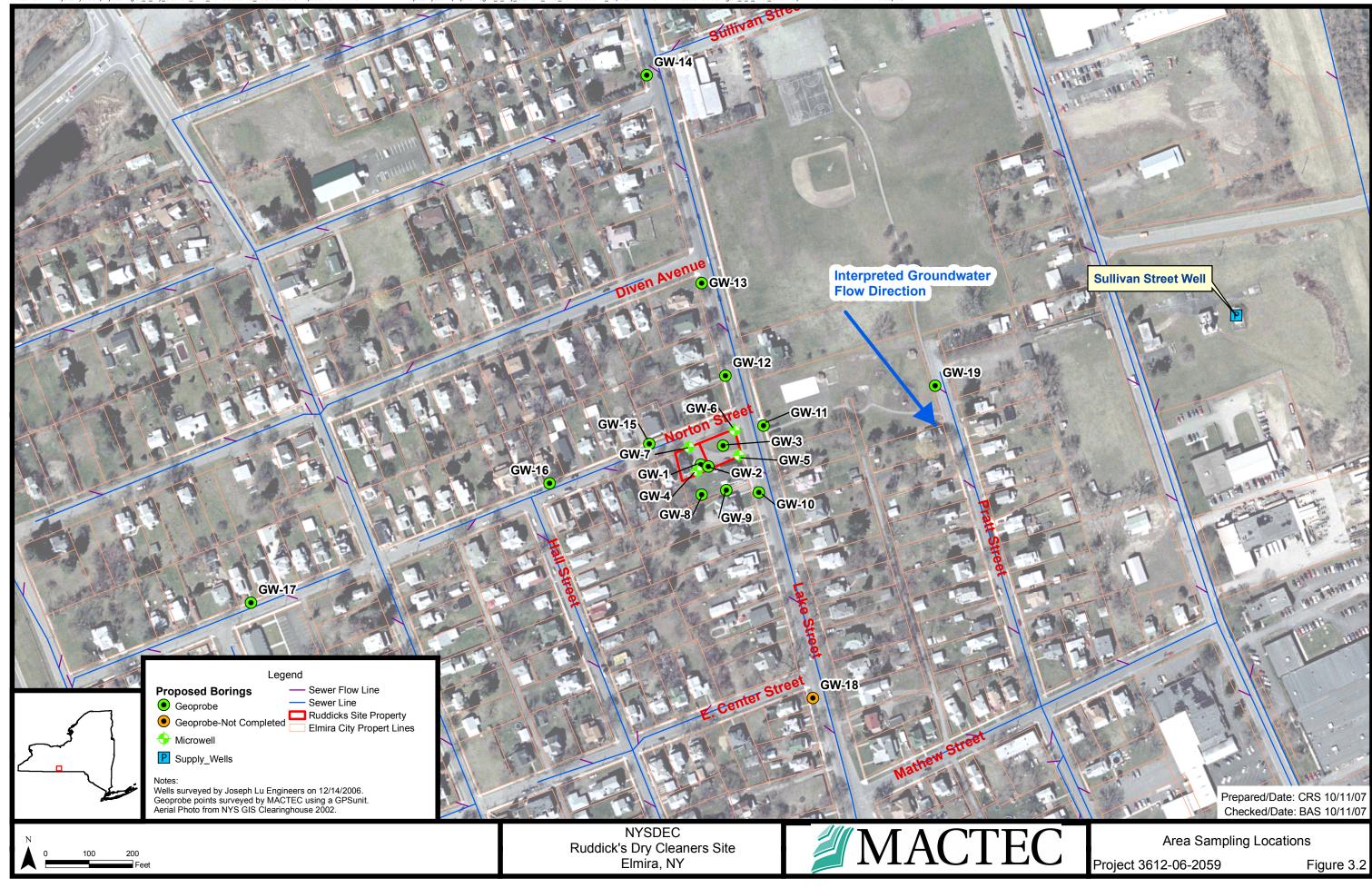
J = Estimated value

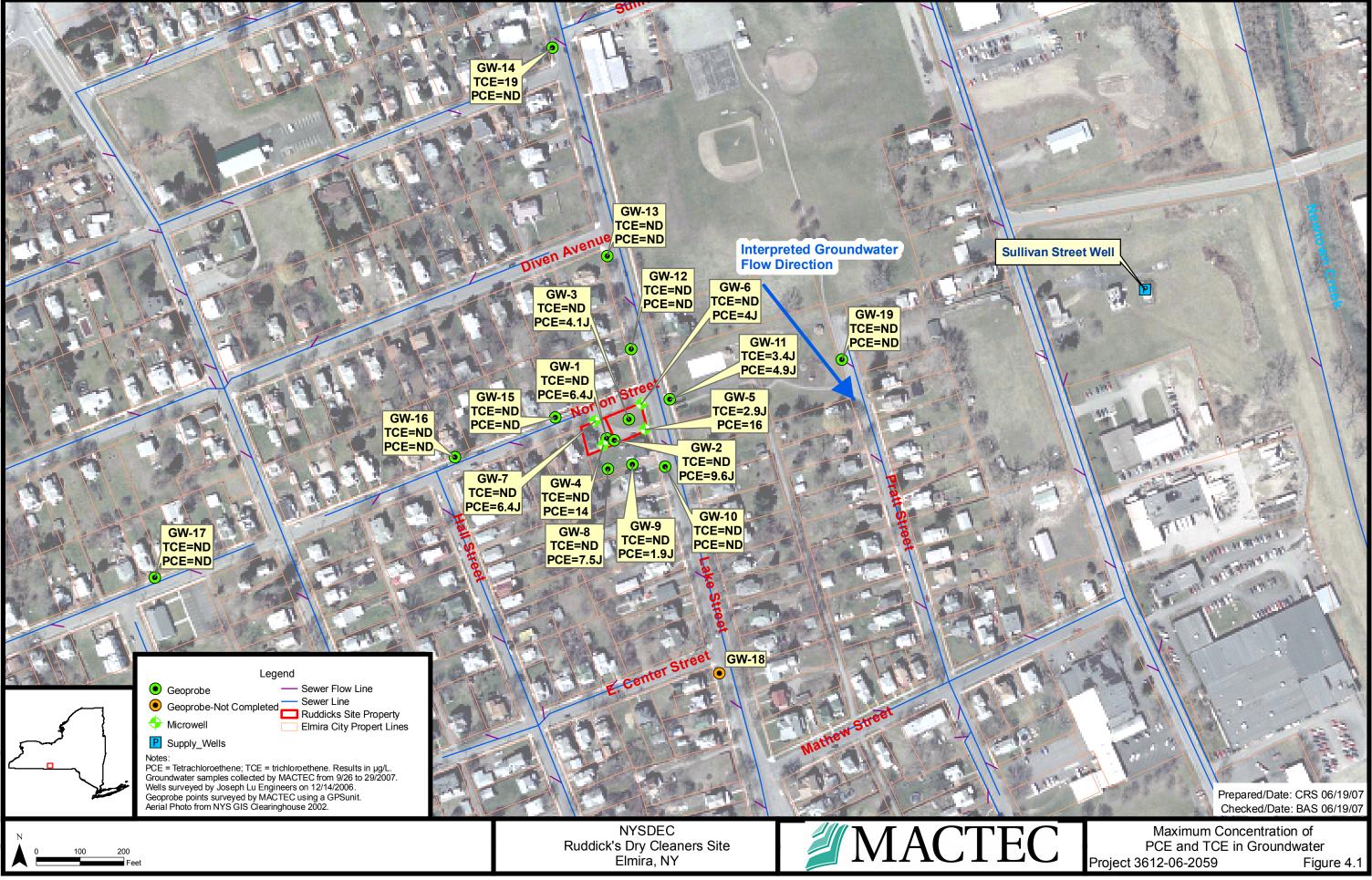
D = Result is reported from a diluted analytical run

FIGURES



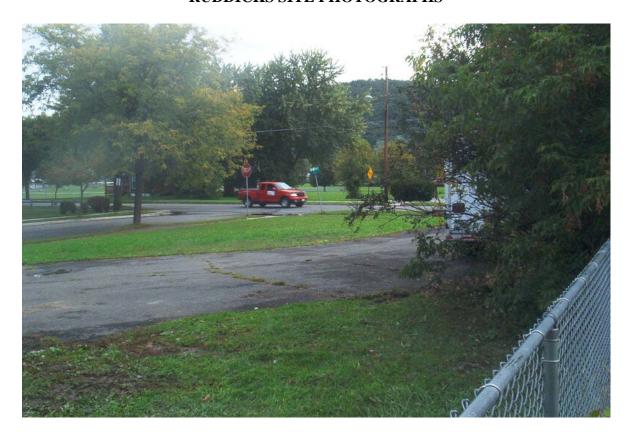






APPENDIX A

SITE PHOTOGRAPHS



Ruddicks Site Property – View looking Northeast.



View of Site (looking North) from adjacent property. Page 1 of 4



Geoprobe setup.



Sampling at GW-13. Page 2 of 4



Groundwater sampling at GW-13.



Conducting Helium Breakthrough Test GV-3. Page 3 of 4



Duplicate Soil Vapor Sampling at GV-1.



Microwell surface completion. Page 4 of 4

APPENDIX B

FIELD DATA FORMS

	Microwell Completion	n Diagram		Well No:
	Project: Region 8 Group 2 EC Logged By: SHAW GEOLOGIC Drilling Me	Protection Level:	D Ground E	
GEOPROBE ROD - 1 1/2"	Soil Drilled: 22'	Rig Type: 66DT Track Rig	Start Date: 9/27/2006	Finish Date: 9/27/2006
Bedrock Interval	N/A	P.I.D. (eV): NA	Casing Size N/A	Auger Size: 2"
Depth (feet) Oxidation andFractures	Bold Signature (Construction Notes) Well Diagram Notes	Notes:		
2	Flush casing Cement: 0 - 0.3 Backfill: 03 -	Well Construction Notes: (Depth to Water Levels: 11/02/2006: 12.83 (TOR)	(all depths in feet from ground	surface)
6	Bentonite seal:			
10 12 14	Schedule 40 PVC casing #10 slot PVC screen w/end cap: 8.5 - 18.5			
16 18	Industrial Quartz Sand pack 00N, 6 - 22. Sump: 18.5 - 18.7	TD = 22'		
MACTEC				1 of 1 PZ-004

			Microwell C	ompletion	Diagram	1			Well No:
Project No.:			Project: Regi			Checked E	reked By: LONGLEY PZ-005 rel: D Ground Elevation: ECT PUSH Driller's Name: LIAM CUMMINS Start Date: Finish Date: 9/26/2006 9/26/2006 Casing Size N/A Auger Size: 2"		
Client Name:			Logged By:		Protection				
Drilling Conti	ractor:	GEC	DLOGIC	Drilling Met	:hod:	DIRECT PU	JSH		
D': T (0)		10.11	B.20. 1		Int. T		lov v D v v		
Bit Type/Size GEOPRO): BE ROD - 1 1/2		Drilled:	24'	Rig Type: 66DT Track				
Bedrock Inte		<u> </u>	N/A		P.I.D. (eV)		Casing Size	N/A	Auger Size: 2"
Oepth (feet)		Graphic Log	Well Diagram	Well Construction Notes	Notes:				
				Flush casing Cement: 0 - 0.2 Bentonite seal: 0.2 - 5.5	Depth to Water at noted water at	12.16' (TOR)	installation		- - - - -
				Schedule 40 PVC casing					- - - - - -
				#10 slot PVC screen w/end cap: 7.6 - 17.6					- - - - -
16				Silica sand filter pack: 5.5- 17.8 Sump: 17.6 -					- - - -
				17.8	TD = 24'				- - -
20 M	ACTE	L			<u> </u>				1 of 1 PZ-005

	Microwell	Completion	n Diagram			Well No:
	SDEC Logged By:		Protection Level:	D G r	LONGLEY	
Drilling Contractor:	GEOLOGIC	Drilling Met	hod: DIRECT	PUSH	Driller's	
Bit Type/Size: GEOPROBE ROD - 1 1/2"	Soil Drilled:	24'	Rig Type: 66 DT Track Rig	Start Date: 9/26/20	006	Finish Date: 9/26/2006
Bedrock Interval	N/A		P.I.D. (eV): NA	Casing Size	N/A	Auger Size: 2"
Depth (feet)	Graphic Mell Diagram	Well Construction Notes	Notes:			
	28	Flush casing				
	→	Schedule 40 PVC casing	Depth to Water Levels:			
	_	Cement: 0 - 0.5	11/02/2006: 11.20' (TOR) noted water at 11.62' at tim	e of installation		
<u> </u>						
6		Bentonite seal and cave-in 0.5 to 8				
8						
		Silica sand filter pack 00N: 8 - 20				
10						
12		#10 slot PVC screen w/end cap, 9.8 to				
14		19.8				
_						
16						
18						
		Sump: 19.84 - 20.02	TD = 24.0'			
MACTEC			<u> </u>			1 of 1 PZ-006

	Microwell (Completion	n Diagram_				W	ell No:
roject No.: 3612062059/01.2	Project: Res	gion 8 Group 2	- Ruddicks	checked I	Bv:	LONGLE	EY P	Z-007
-	SDEC Logged By:		Protection L			round Ele		_ ***
rilling Contractor:	GEOLOGIC	Drilling Met		IRECT P			's Name:	
						LIAM	CUMMINS	
it Type/Size:	Soil Drilled:		Rig Type:		Start Date:		Finish Date:	
GEOPROBE ROD - 1 1/2" edrock Interval	N/A		66DT Track F		9/27/2 Casing Size		9/27/ Auger Size:	
Jurock interval	N/A	1	P.I.D. (ev):	INA	Casing Size	N/A	Auger Size:	
	bo bo		Notes:					
	O Well Diagram	Well						
	aph	Construction						
دّ	б Well Diagram	Notes						
0					•		<u> </u>	
⊣		Flush casing						
_	St. Control of the co	Cement: 0 -	Depth to Water I	evels:				
2	Sancardon Anna Carlo	0.5	Deput to water I	LC VC18.				
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Backfill	11/02/2006: 10.	71' (TOR)				
7 1 1	CONTROL OF	from						
4		boring: 0.5 -	noted water at 1	1.02 at time of	of installation			
		4						
7								
6		Bentonite						
-		seal: 4 -7						
-								
-	4							
8								
┥		Schedule 40						
_		PVC casing						
10								
_								
12								
		#10 slot PVC						
7		- screen w/end cap, 9.9 - 19.9						
14		Cap, 7.7 - 17.9						
7								
7		Silica 00N						
16		sand pack: 7 -						
10		22						
┥								
_								
18								
⊣		Sump: 19.90 -	BOW: 20.05' b	os				
-		20.05	TDS = 34'	.e.,				
20								of 1
MACTEC								

Project No. Report No. Start Date CS/BSOO Sol 2 06 Double Client NYSDEC Site RUDDICKS DRICKARD CS/BSOO Sol 2 06 Double CS/BSO	59
Logged By Randon Shawl Ground Elevation Start Date 04 77 12006 Drilling Contractor GEOLOGIC Driller's Name Rig Type 6610 DT Drilling Method DIRECT PASH Protection Level D P.I.D. (eV) Casing Size (Auger Size Side Dirilled Side Side Side Side Side Side Side Si	
Drilling Contractor GEOLOGIC Drilling Method DIRECT PASH Protection Level D P.I.D. (eV) Casing Size (Auger Size 2) Soil Drilled DIRECT PASH Total Depth (Depth to Groundwater/Date Description) Sample Description Sample Description Sample Description Soil Drilled Size (Span) Monitoring (ppm) Sample Description Soil Drilled Size (Ppm) Washing Groundwater/Date Description Depth to Groundwater/Date Description Monitoring (ppm) Sample Description Soil Drilled Size (Ppm) Sample Description Soil Drilled Size (Ppm) Washing Groundwater/Date Description Sample Description Soil Drilled Size (Ppm) Washing Groundwater/Date Description Sample Description Soil Drilled Size (Ppm) Washing Groundwater/Date D	WATER CONT
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Sample Description Sample Description Sample Description Sold (ppm) Sold ("
Sample No. 8 Sampl	
2.2 1.8 DK Brann STH larm Y five gravel, grass, vorts-fill 1.8-3.5 Lt Brannish orage Sity Sand & gravel; Black Slag Co 3.2 3.5 to 4 Ut over Brann WC SM Clean w coarse Shul, day NP; Sore GM Fives-sit, m Davise Soil Sappille to 4 (ms/nsv) 1 4-6.1 Brown Sity sud & gravel SM duy, NP, Mouse 6.1-8.9 DX Bran Sity sud & Gravel; trace Cly, Derk, moritate 8.9-9 Dive Brann, Sity sud &	
2.2 1.8' DK Brown 514 loam Y five gravel, grass, vorts-fill 1.8-3.5 Lt Brownish orage Sity Sand & gravel; Black Slag Co. 3.2' 3.5 to 4' Ut over Brown WC SM Clean w coarse Shut, day NP; Soce GM Fives-sit, m Davise Socil Sand PLR to 4 (MS) ns D) L 4.1. Brown Sity sud & gravel SM dup, NP, Marke 6.1-8.9 DX Brown Sity sud & Gravel; trace Clay. Derk, moritary 8.9-5 Dive Brown, Sity sud & 8.9-5 Dive Brown, Sity sud	- boto
2.2 1.8 DK Brann SIN larm Y five gravel, grass, vorts-fill 1.8-3.5 Lt Brannish orage Sity Sand & gravel; Black Slag Clem w coarse Shul, day NP; Sare GM Fines-sit, m Davise Soil Sappell to 4 (MS) ns D) L 4.6.1 Brown Sity sud & gmel SM duy, NP. Moense 6.1-8.9 DX Bran Sity sud & Gravel; trace Cly. Derk, mort Art S. 9-9 DINE Brunn, Sity sud &	l ah Tests
4.0 1-8. DK Bram 514 Jam 4 fine gravel, grass, vorts-toly fill 1.8-3.5 Lt Bramish orage Sity Sand & gravel; Black Slag 6.3.2 3.5 to 4 ' Lt orage Bran WC SM Clean W coarse Sud, day NP; Sare GM Fines-sit, in Daise 4.0 4.1. Brown Sity sud & gmol SM dup, NP. Morene 6.1-8.9 DX Bran Sity sud & gravel; trace Clay. Dark, most up 8.9-6 Dive Bram, sity sudy 7.1.	
4.0 3.2 3.5 to 4 ' Ut overle Brown WG SW Clean w coarse Shut, day NP; Sore GW Fines-sit, w Days te Soil Supplies to 4 (ms/nsv) & 4-6.1 Brown Sithysud's 9mel SW 60.1 4.1 Brown Sithysud's 9mel SW 60.1 6.1-8.9 DX Brown Sithysud's GW 60.1 9mel; trace Cly. Dark, month my 8.9-5 Diwe Brown, Sithysudy	
4.0 3.2 3.5 to 4 ' Ut overyle Brown WG SW Clean W. coarse Shul, day NP; Sore GW Fines-sit, M Dayse & Soil Supplies to 4 (MS/MSD) & GW GW, NP. Mense Sithy sud & gmel SW LO. 1 4.6.1 Brown Sithy sud & gmel SW LO. 1 6.1-8.9 DX Brown Sithy sud & GW LO. 1 9.1-8.9 DX Brown Sithy sud & GW LO. 1 8.9-5 DEWE Brown, Sithy sudy	
3-1 Clean M' coarse Shut, damp NP; Sore GM Fines-sit, M Derise Grant Sity sud & gmel SM L.I. Brown Sity sud & gmel SM Compassive Soil Brown Sity sud & gmel SM Compassive Sity sud & gmel SM Sity su	
Fines-sit, or Decise to Supplied to the (ms/ms0) is 4-6.1 Brown Sith said & gone (500 LO.1 day, Nr. m. Decise 6.1-8.9 DX Brown Sith said & genet; trace Cly. Decise, most for 8-9-5 place (Brown, Sith said)	
dup, Nr. mouse 6.1-8.9 DX Born Silty sud 5 quel; trace Cly. Derk, moist may 8.9-5 pline / Brum, silty sudy	
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7- 1 Seg-9 otive Brum, sity sudy - 700ppb Corposik	
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15 4 17 LIBRING LY GATYPICAL TEST BORING LOG	
9404014D(z) L33	

		DUNDWATER SAMP			
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P	roject Number: 3612662	04659101.2	_ Date: <u>c</u>	9127120	06
		5	Time: Start	:: 1625	End: <u>1650</u>
S	ample Location ID: RCGW	00101701X	Signature o	f Sample	
1		MeasuredTop of We	Well Riser 5	Stick-up Ft.	ProtectiveFt.
•		HistoricalTop of Pro Casing	tective (from groun	(d)	Casing/Well Difference
ata		William Willia			ProtectiveFt.
0					Casing
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le l		SS NOT NOT	<u> </u>	4 inch 6 inch	Elect. Cond. Probe Float Activated
Fe		to the			Press. Transducer
Water Level/Well Data		daterial: Well Locked?			
Wa	Height of Water Column X .65	Gal/Ft. (2 in.) =	Gal/Vol.		Yes No
	Ft1.5	Gal/Ft. (6 in.)	Tatal Cal Division	Prot. Casing Secure Concrete Collar Intact	and the second s
		Gal/Ft. (_in.)	_Total Gal Purged	Other	and the second s
Distribution produces					
_	Purging/Sampling	Faulament Hood			
atio	TELEBOOK SHIPKING	Edulphicht Osed.		Decontaminatio	n Fivids Used:
ant:	(If Used For)				
Ě	Purging Sampling Perista	Equipment ID	'	✓ All That Apply at Loc Methanol (100	
Equipment Documentation	Subme	rsible Pump		25% Methano	175% ASTM Type II water
1 =	PVC/S	licon Tubing		Deionized Wa	
l e	Teflon/	Silicon Tubing	- .	Hexane HNO ₃ /D.I. Wa	otos Calutian
효	Hand F		-	Potable Wate	
Eq	In-line	/ac Filter	_	None	
	T T Stain	les steel	A1(+)		
	07			Sample	Observations:
æ	PID: Ambient Air ppm V	/ell Mouth / ppm Purg	e Data Collected	In-line Turb	id Clear Cloudy
ysis Data	201	A 1000		In ContainerColo	
8 8	Purge Data (@ <u>^ 0, 7</u> Gal. @	Gal. @	Gal. @	_Gal. @Gal.
	Temperature, Deg. C	16:6			
Field Ana	pH, units (ing / Specific Conductivity (unifies/cm	0897			
eld	Turbidity (NTUS)	200			
II.	Oxidation - Reduction, +/- mv Dissolved Oxygen, ppm,	5.			
	- APIC				
E IS UKANYA NYA PISANY	Analytical Parameter / If Sam			HARMAN AND AND AND AND AND AND AND AND AND A	
8	Analytical Parameter / If Sam Collecte		Volume Required	Sample Bottle IL	oMos.
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em (inc	SVOCs N	4℃	2x40 ml 2x1 liter AG		
ulr	V Metals Cyanide	_ HN0,,4°C _ NaOH,4°C	1x1 liter P 1x500mLP		id
Rec s Lo	Nitrate/Sulfate	H,S0,,4°C H,S0,,4°C	1x1 liter P	(
on l	Nitrate/Phosphate Pest/PCB	4℃	1x1 liter P 3x1 liter AG		
ctl	TPH TOC	H_S0_,4°C	2x1 liter AG		
olle equi		H ₂ S0,4°C	1x1 liter P	Manager of the Control of the Contro	
ole Collection Requiren	Notes: Creen M	M21:18+16		***************************************	
<u>ā</u> >				•	
Sample Collection Requirements (** If Required at this Location)			CDOURING	ATTO	FIGURE 4-1
		MVCD			DATA RECORD
THE STATE OF THE S		NIODI	EC QUALITY		PROGRAM PLAN vironmental Services—
	4D 1 22			- WOD [1]	VULUULEURI DALVICAS

	1. 18	(GKO)nZD	WATER SAN		ATA RECORD		
P	Project: Ktzson81	s.CGRoup.	II - RUDDICK	<u> </u>	UNDICK DRY	CLEAMERS	
P	Project Number: 30	012062046		Date:	09/27/12	306	
_				Time: Sta		End: 101	
S	ample Location ID:	CGWOOL	02701	Signature	of Sampler	20,100	
	Well Depth	Ft Measure Historical		Well Well Riser Protective (from grou	Stick-upFt.	ProtectiveFt.	
ļ			Casin	, , , ,	(ind)	Casing/Well Difference	
ata						ProtectiveFt.	
	5 3 4 44 4 4					Casing	
We	Depth to Water	_Ft. Well Material: PVC	Well Locked	Well Dia.	2 inch 4 inch	Water Level Equip. Use	
vel/		SS	No	: Kn2	6 inch	Elect. Cond. Probe Float Activated	1
Le		(Se	X VIII	. •		Press. Transducer	
Water Level/Well Data		100 45	Well Locked				.
×	Height of Water Column	. 10 Can L.	2111.)	Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes No	
	- Ft.	1.5 Gal/Ft. (Gal/Ft. (6 in.)	Total Gal Purged	Concrete Collar Intact	-	
·		Gavri.		. day angua	Other		
5	Purgir	ng/Sampling Equipm	ent Used :		Decontamination	on Fluids Used:	
latic					PVVVIII III III III III III III III III	ATTICIOS OSEO.	
ent	(✔ If Used For) Purging Samplin	na	Equipmer	at ID	/ # All The A A cold		
E 5	<u></u>	Peristaltic Pump)		(✓ All That Apply at Lo Methanol (10	0%)	
8	=/ =/	Submersible Pu Bailer			25% Methano	ol/75% ASTM Type II wat	er
Equipment Documentation	. 4 _	PVC/Silicon Tub Teflon/Silicon Tu			Liquinox Solu		İ
l e		Airlift	10/10g		Hexane HNO ₃ /D.I. W	ater Solution	
벌		Hand Pump In-line Filter	,	Memorina cyclose	Potable Water	er	
ш		Press/Vac Filter	5	7(1	None		
	Y V	Stainles SH Screen	5/1	- WISIN			
·	No. Andrews		/		Sample	Observations:	Charles de Managard
ta	PID: Ambient Air	ppm Well Mouth	ppm F	Purge Data Collected	In Container Cold	oid Clear V Cle	oudy
lysis Data	D D	- 0.0				7109	oder
18/8	Purge Dat		Gal. @	Gal. @	Gal. @	_Gal. @Ga	d
	Temperature, Deg. (pH, units		2				
Field Ana	Specific Conductivity	y (µmhos/cm) 0	90				
Jelc	Turbidity (NTUS) Oxidation - Reductio	24	<u> </u>		1		
L.	Dissolved Oxygen,	pm (1) 3	4				-
		vid (r)	. I			1]
POZNANOG INTRODUCE	Analytical Parameter	✓ If Sample	Preservation	V-lu-			
Ø	/	Collected	Method	Volume Required	Sample Bottle IL	ot Nos.	
leni	√ vocs		4°C	2x40 ml			
00)	SVOCs Metals	entanti Mangangga	4°C .	2x1 liter AG			-]
yuli	Metals Cyanide	-	HN0,,4°C NaOH,4°C	1x1 liter P 1x500mLP		131	_
ت ق			H_S0_,4°C H ₂ S0_,4°C	1x1 liter P		uV	-
<u>a</u>	Nitrate/Sulfate	-	H SO 4°C	1v4 litar D			
on H at this	Nitrate/Sulfate Nitrate/Phosphate Pest/PCB		4°C	1x1 liter P 3x1 liter AG			-
ection R	Nitrate/Sulfate Nitrate/Phosphate		4°C H ₃ S0 ₄ ,4°C	3x1 liter AG 2x1 liter AG			-
ollection R	Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH		4°C	3x1 liter AG			-
e Collection R	Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH	Intmal!	4°C H ₃ S0 ₄ ,4°C	3x1 liter AG 2x1 liter AG			- - -
nple Collection Requiren	Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Intmal	4°C H ₂ SO ₂ ,4°C H ₂ SO ₂ ,4°C	3x1 liter AG 2x1 liter AG			
Sample Collection Requirements	Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Intmal!	4°C H ₃ S0 ₄ ,4°C	3x1 liter AG 2x1 liter AG 1x1 liter P	/ATED CANEDI F	FIGURE 4-	1
Sample Collection R	Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Internal!	4°C H, SO, 4°C H, SO, 4°C 28' to 26'	3x1 liter AG 2x1 liter AG 1x1 liter P GROUNDW	ATER SAMPLE	E DATA RECOR	D
TP Springer 1.4 garestones	Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Intmal!	4°C H, SO, 4°C H, SO, 4°C 28' to 26'	3x1 liter AG 2x1 liter AG 1x1 liter P GROUNDW	ASSURANCE	FIGURE 4- E DATA RECOR PROGRAM PLA	D N

	GROUNDWATE	RSAMPLEED	LD DATA RECORD	
P	roject: Ktolon8D.C. GROUPII - R.	IDDICKS Site	: RUDDICKDRY	CLEAMERS
P	roject Number: 36,206,2046 59 0	· l Dat	e: 09/27/20	06
		Tim	e: Start: 1539	End: 1606
S	ample Location ID: RCGW00103F	OXXX Sign	nature of Sampler	
THE REAL PROPERTY OF THE PERSON NAMED IN				
	Well DepthFtMeasured	_Top of Well W	/ell Riser Stick-upFt.	ProtectiveFt.
	Historical	Top of Protective (f Casing	rom ground)	Casing/Well Difference
Jata				ProtectiveFt.
Water Level/Well Data	Depth to Water Ft. Well Material: We PVC SS	II Locked?	/ell Dia 2 inch 4 inch 6 inch	Water Level Equip. Used:Elect. Cond. ProbeFloat ActivatedPress. Transducer
Wate	16 GaVFt. (2 in.) Height of Water Column X	Gal/Vol.	Prot. Casing Secure	Yes No
ntation	Purging/Sampling Equipment Used : (✔ If Used For)		<u>Decontaminatio</u>	n Fluids Used:
Equipment Documentation	plants of A	equipment ID	(All That Apply at Lo Methanol (10) 25% Methano Deionized Wa Liquinox Solu Hexane HNO ₃ /D.I. Walls Potable Wate None	0%) N75% ASTM Type II water ater tion ater Solution
Data		m Purge Data Colle	sample of the color of the colo	
lysis Data	Purge Data @ 16.5 Ga	. @Gal. @	Gal. @	_Gal. @Gal.
Field Ana	pH, units Specific Conductivity (µmhos/cm) Turbidity (NTUS) Oxidation - Reduction, +/- mv Dissolved Oxygen, pmf			
	(1)(1)			
	Analytical Parameter / If Sample Preserv Collected Meth	7 4,0111	- Dumpic Dottic IL	ot Nos.
ants	1,400	Tro quite	3U	
e G	SVOCs 4°C	2x40 ml 2x1 liter	AG	
uin Satio	Metals HN0 ₃ ,	1°C 1x1 liter	P 1	105
3eq	Nitrate/Sulfate H S0	4°C 1x500m 4°C 1x1 liter	P /	60)
T F			Р (
# p¢	TPH H_S0	3x1 liter 4°C 2x1 liter		
llec quire	TOC H ₂ S0,	4°C 1x1 liter	PRODUCTION OF THE PRODUCTION O	
Sample Collection Requirements	Notes: Circen Interval : 36+0	34.		
du.	- Grand G		•	
Sal	-SIGNY SWEN (CHEMICE)	CDOI	INDMATED CARES =	FIGURE 4-1
	on made . Lear	NVSDEC OUT	JNDWATER SAMPLE	DATA RECORD
MARINA CHARLES CONTRACTOR CONTRAC	to los	MISDEC GOY	LITY ASSURANCE F	PROGRAM PLAN

							Test Bori	ng L	. 0g				7		
	Projec	GIONS !).C.	GROUP	IL-	R	nddicks dryc	LEAN	Boring/Well	No. 35002	P.	roject N 3612	10, 20	465	9/01.
	Client	NYS	DEC	<u>.</u>	Sit		LUDDICKS			Sheet N		ı	of	1	
	Logge	DIAN	Nepr	Snaw	'	ound	Start Date Finish Date								
	Drillin	g Contract	or GE	FoloGIC	,	D	riller's Name	n C	mmins	Rig Typ	e b	610	对		
	Drillin	g Method .	DIR	ECT Ph	sH	•			P.I.D. (eV)	Casing	Size	1/21	Auger	Size ₂	,1
	Soil D	rilled 13		Rock Drille		T	otal Depth	Depth t	o Groundwater		-		Well	Boring	
•	Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log		ample scripti		USCS Group Symbol	Notes on Drilling	PI Meter Field Scan 그 중	PI Meter, a option		Lab Tests
5,	1- 2- 3-	4.0					o-4 DK & Sandy load	3rm m, o fi be	SIN five your-fill	- J.		40.1			
2	5- 6- 7-	20/5.0					4-6.5 Some 6.5-8.5 Lt of Some Fin Denses 8.5-9 Fre SINCH; a	as Bum e so	o, it n silt i qu nd, om, nf el of some	mel Commen	onpus loso	20.1 k	801 £	10	0170
	8-1 4- 10-	3.7/4.0					9-10.1 Bra	NN 51	Ity loan,	Fill Fill	***	20.1			
Six	12	5		Automotive Control of the Control of		·	10.1 to 13 lt y Some Su dry, Derso	all, f.	Fut (2 113's)					
	15	14D(z) L33	General Andreas (Antreas Antreas Antre			THE STATE OF THE S	NYSDE	C QU	ALITY ASS	PICAL URANC BB Envi	E PF	r BOF ROGR	AM P	LOG	

	0. 17.	GROUNDWA	TER SAMPL	DIGITALD IDA	TA RECORD	1.0
P	roject: KIZJONY]	S.C. GROUPII -	RUDDICKS		UDDICK DRY	CLEAMERS
1	roject Number:	61206204659	101.2		9/27/20	
		TOTAL POLICE	117101/1411	- Time: Star		End:
S	ample Location ID:	100MODDO	11310111111	Signature of	Sample	
	Mall Denth			ΧŊ		
	Well Depth	_FtMeasured Historical	Top of Well	Well Riser ctive (from group	Stick-upFt.	ProtectiveFt. Casing/Well Difference
_		Para de la companya d	Casing	(non groun	19/	
ata						ProtectiveFt.
	Donth to Mater	Ex. Manual Access to a				
, ≰e	Depth to Water	_FI. Well Material: PVC	Well Locked?	Well Dia	2 inch 4 inch	Water Level Equip. Used:Elect. Cond. Probe
vel		ss n	No No	3	6 inch	Float Activated
٦	•	(see)	The last	-		Press. Transducer
Water Level/Well Data		.16 Gal/Ft. (2 in.)	Well Locked?			
Š	Height of Water Colum	X65 Gal/Ft. (4 in.)		_Gai/Vol.	Well Integrity: Prot. Casing Secure	Yes No
	Ft.	1.5 Gal/Ft. (6 in.) Gal/Ft. (_ in.)	.	Total Gal Purged	Concrete Collar Intact	
٠.				, •	Other	
6	Purgi	ng/Sampling Equipment U	sed:		Decontaminatio	n Fluids Used:
Equipment Documentation	(If Used For)					The state of the s
ner	Purging Sampli	ng	Equipment ID		(✓ All That Apply at Loc	cation)
l n	<u> </u>	Peristaltic Pump Submersible Pump			Methanol (10)	0%) ′
ů	_/	Bailer			Deionized Wa	bl/75% ASTM Type II water ater
Ĕ	<u> </u>	PVC/Silicon Tubing Teflon/Silicon Tubing	-		Liquinox Solu Hexane	tion
Ë	· description	Airlift			HNO ₃ /D.I. W	ater Solution
link		Hand Pump In-line Filter	***************************************		Potable Wate	r
Щ		Press/Vac Filter				
Distriction of the last	<u> </u>	Stainles steel Screen	Stort 111			
. •	DID: Ambient Ai-O	ppm Well Mouth	/	•	Sample	Observations:
ata	FID. AMBIERT AI	1 ppm Well Mouth	ppm Purge l		In-lineTurb In ContainerColo	id Clear VCloudy
ysis Data	Purge Da	a @ <u>^ () <</u> '	0-1-0			
ysk			_ Gal. @	_Gal. @	Gal. @	_Gal. @Gal.
	Temperature, Deg. pH, units	(mg -74		\rightarrow		
Αþ	Specific Conductivit		X			
Fleld Ana	Turbidity (NTUS) Oxidation - Reduction	on, +/- mv				
antes .	Dissolved Oxygen,	PER 1 4.6				
STATE OF THE PROPERTY OF THE P	_					
	Analytical Parameter		reservation	Volume	Sample Bottle IL	ot Nos.
ŧ.		Collected	Method	Required		511100,
men.	√ vocs		°C	2x40 ml		
irer tion)	SVOCs Metals		I°C 1N0, 4°C	2x1 liter AG 1x1 liter P		
oca oca	Cyanide Nitrate/Sulfate	N	laOH,4℃	1x500mLP	100	735
He his L	Nitrate/Phosphate		1,S0,,4°C 1,S0,,4°C	1x1 liter P 1x1 liter P		- 3
llon 1 at 1	Pest/PCB TPH	· · · · · · · · · 4	l°C 1 ₂ S0 ₄ ,4°C	3x1 liter AG		
lec t uirec	_ toc		1,50,,4°C	2x1 liter AG 1x1 liter P		
Sample Collection Requirements (/ If Required at this Location)	Curan	lutured: 12	to ILL			
ole Collection Requiren	Notes: WEW	informal 12	- NOT			
THE T		·				FIGURE 4-1
ഗ്	The H			GROUNDW	ATER SAMPLE	DATA RECORD
	Dup collect	ed here				PROGRAM PLAN
						vironmental Services

		GROUNDWA	TER SAMPL	E FIELD DA	TA RECORD	
P	roject: KtZJON8D	.C. GROUPII -	RUDDICKS	Site:	UDDICK DRY	CLEAMERS
P	roject Number: 36	1206204609	01.2		9127 12	06
		5 1		Time: Star	t 106	End: 1730
S	ample Location ID:	CGW00710-	71210111217		of Sampler	
minumen uz						
	Well Depth		Top of Well	Well Riser	Stick-upFt.	Protective Ft.
		Historical	Top of Prote	ctive (from grou	nd)	Casing/Well Difference
E						ProtectiveFt.
Da						Casing
E	Depth to Water	Ft. Well Material:	Well Locked?:	Well Dia.	2 inch	Water Level Equip. Used:
\ \S		PVC SS W	A Yes DV	S" :	4 inch	Elect, Cond. Probe
e e e			No.	-	6 inch	Float ActivatedPress. Transducer
1	•	30	Well Locked?	-	The second secon	Tross, Fransouce
Water Level/Well Data			-	Gal/Vol.	Well Integrity:	Van Na
\$	Height of Water Column	X65 Gal/Ft. (4 in.)	=		Prot. Casing Secure	Yes No
	- ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	1.5 Gal/Ft. (6 in.) Gal/Ft. (_ in.)	L	Total Gal Purged	Concrete Collar Intact Other	
				•	Other	
- E	Purging	/Sampling Equipment Us	ed:		Decontaminatio	n Fluids Used:
tati	(If Used For)					
len	Purging Sampling	3	Equipment ID		/ / All That Apply at to	4>
ļ ņ	$\frac{\lambda}{\Delta}$	Peristaltic Pump			(✓ All That Apply at Lo- Methanol (10	0%)
000		Submersible Pump Bailer		,	25% Methano	ol/75% ASTM Type II water
=	<u> </u>	PVC/Silicon Tubing			Liquinox Solu	
me.		Teflon/Silicon Tubing Airlift			Hexane HNO ₃ /D.I. W	ator Solution
Equipment Documentation		Hand Pump In-line Filter			Potable Wate	are: Solution
Eq	$\vec{\neq}$ $\vec{\neg}$	Press/Vac Filter	-		None	
	$ \vec{\bot} \vec{\bot} $	Stainles steel	M. 11 (16)	-		
		1			Samuel Commission	
æ	PID: Ambient Air	ppm Well Mouth	ppm Purge	Data Collected	In-lineTurt	
ysis Data				V	In ContainerCold	oredOdor
8 8	Purge Data	e <u>0.5</u>	_ Gal. @	Gal. @	Gal. @	_Gal. @Gal.
	Temperature, Deg. C	Cal Well				
Field Ana	pH, units Specific Conductivity					
ple	Turbidity (NTUS)	7,000			\	No.
Ē	Oxidation - Reduction Dissolved Oxygen, page 1	m 10 10				
		my (V)				,
In annual participation of the control of the contr						
	Analytical Parameter /		eservation Method	Volume	Sample Bottle IL	ot Nos.
ati .	- Augustian - Augu			Required		
Ë =	✓ VOCs SVOCs	4°	C .	2x40 ml 2x1 liter AG		
atior	Metals	Н	N0,,4°C	1x1-liter P		7-
ed (Cyanide Nitrate/Sulfate	N	aOH,4℃ _S0_ ,4°C	1x500mLP 1x1 liter P		14
# Hais	Nitrate/Phosphate		¸S0¸ ,4°C	1x1 liter P	/	
tion dat	Pest/PCB TPH	4°	°C ,S0_,4°C	3x1 liter AG 2x1 liter AG		
llec quire	_ Toc	Н	S0,,4°C	1x1 liter P		
Col	(1.04)	1 1	7/1/ , 2.) /		
Sample Collection Requirements (* If Required at this Location)	Notes: July	without.	24 to 2%	<i>!</i> /		
amr.	and with	onane 18	50.00			FIGURE 4-1
Š	The Market	- J. J. J.	VIM J	GROUNDW	ATER SAMPLE	DATA RECORD
	,	* -	NYSDE	C QUALITY	ASSURANCE	PROGRAM PLAN
940401	4D L22		CENTRAL PROPERTY OF THE PROPER		——— ABB En	vironmental Services

	Test Boring Log										
Proje	GION8 I).C.	GROUP	IL -	R	LNDDICAS DRY CLEANER GS/BS003 36120620465					
Clien				Sit		RUDDICKS Sheet No of					
	ed By	nder	Snaw		ound	Ind Elevation Start Date Finish Date					
Drillin	g Contract	or GE	Tologic		C	Driller's Name Jum (mmin Rig Type 6610					
Drillin	rilling Method DIRECT PASH					Protection Level D P.I.D. (eV) Casing Size Auger Size					
	Orilled (Rock Drille		7	Total Depth to Groundwater/Date Piez Well Boring					
	1		%			Monitorina					
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. ?	SPT-N (Blows/Ft.)	Graphic Log	USCS Group Symbol Notes on Drilling PI Meter Field Scan Head Space					
	0 %	0,	်			O O No					
1-	24					0-0.9 DK Bram Sity Learn Fill Lo. 1 moist, me, Derse, - Fill, nots D9-185					
3- 4_						gravel 1.8-2.3 orage Bram S. 14 Sael 5.9 rate, moist, dang 23-3.8 Squadstone lyers, very mi 144 Sort 3.8-4 Lt Brown S. 14 gravel day 4-6.8 Brown STN Sand & gravel Jan					
5-	21/48					darplmist, M Dense - RCGW 0030P7d1xx (2074) 6.8-8 Lt Bron Sendy silts Fine gravel, net, NP, 10-Se					
7-8-						8-10.7 Silty Sund & grand Cont					
4-	3.0					fives to course grand, Deuse- GM dry NP 2 San gravel of					
-12-		The same of the sa				Some silly clay Sandy silt; wet Sufwated, St ND, look 11.7-11.95 and stone & any cray-GMCir 11.7-12 set metadsilly sand ignored SMCir					
13-			ACCIONATE CONTRACTOR DE CONTRA	A CONTRACTOR OF THE PROPERTY O	TO THE PROPERTY OF THE PROPERT	FIGURE 4.6					
15	na de la companya de	STREET,		NATIONAL PRINCIPLES OF THE PRI	SCHOOLS NO SERVICE SCHOOLS	TYPICAL TEST BORING LOG NYSDEC QUALITY ASSURANCE PROGRAM PLAN					
promountainment	14D(z) L33	4	.	***************************************	+	ABB Environmental Services, Inc.					

		GROUNDW≠	ATER SAMPL	D BIIDLD DA	TA RECORD	
P	roject: Ktolon8D	.C. GROUPII -	RUDDICKS	Site:	UDDICK DRY	CLEAMERS
P	roject Number: 36	120620469	/61.2	Date:	09/28 120	
				Time: Star	t: <u>0500</u>	End: 0810
S	ample Location ID:	CGW0030	V3 DIXX	77	of Sample	
	Well DepthI	FtMeasured Historical	Top of Well	Well Riser	Stick-upFt.	ProtectiveFt.
		i natorical	Casing	ective (from groun	10)	Casing/Well Difference
ata						ProtectiveFt.
		_				Casing
We	Depth to Water	t. Well Material: PVC	Well Locked?	Well Dia	2 inch	Water Level Equip. Used:
/el/		ss nv	No W		6 inch	Elect. Cond. Probe Float Activated
Le		(Zeil	The same	-		Press. Transducer
Water Level/Well Data		10.0-1/51 /0:00	Well Locked?			
×	Height of Water Column		, ,	_Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes No
	Ft.	1.5 Gal/Ft. (6 in.) Gal/Ft. (in.)		Total Gal Purged	Concrete Collar Intact	
		Gavi L (III.	7.		Other	
PORTAL PROPERTY.						
E	Purging	/Sampling Equipment U	lsed:		<u>Decontaminatio</u>	n Fluids Head
Equipment Documentation	/ 8 16 1 land Fad				EXPYTIMITION	11 1 12100 0 300 .
Jen	(✔ If Used For) Purging Sampling	1	Equipment ID		(All That Apply at Loc	action)
l ä	$\overline{\Delta}$	Peristaltic Pump Submersible Pump			Methanol (10	0%)
l õ	=	Bailer		•	25% Methano Deionized Wa	V75% ASTM Type II water
Ĕ	$\overline{\Lambda}$	PVC/Silicon Tubing Teflon/Silicon Tubing			Liquinox Solu	tion
Ĕ		Airlift			Hexane HNO ₃ /D.I. Wa	ater Solution
賣	-	Hand Pump In-line Filter			Potable Wate	r
ш	$\overline{\checkmark}$ $\overline{\checkmark}$	Press/Vac Filter				
-	<u> </u>	Stainles steel Screen	MillSH	¥		
	PID: Ambient Air Lo	1	/	•	Sample (Observations:
ata	TID. ATTOOR AT	T bbitt Aveil World	ppm Purge	Data Collected	In-lineTurb In ContainerColo	
ysis Data	Purge Data	@ ~ D.J	0-1-0			
ysi	Ĭ	11.7	_ Gai. @	Gal. @	Gal. @	_Gal. @Gal.
	Temperature, Deg. C pH, units	(WS) 7.8	7			
Ψp	Specific Conductivity Turbidity (NTUS)	(µmhos/cm) 0.91				
Field Ana	Oxidation - Reduction	, +/- mv				
	Dissolved Oxygen, pe	#IL -3.2				
	Analytical Parameter		reservation	Volume	Sample Bottle IL	ot Nos.
its .		Collected	Method	Required		
Sample Collection Requirements (* If Required at this Location)	✓ VOCs SVOCs		4°C	2x40 ml		
ation at	Metals		4°C HN0,,4°C	2x1 liter AG 1x1 liter P		15
ole Collection Requiren	Cyanide Nitrate/Sulfate	1	NaOH.4°C	1x500mLP 1x1 liter P	() UN	
n R this	Nitrate/Phosphate		H_S0_,4°C H_S0_,4°C	1x1 liter P		
tion dat	Pest/PCB TPH	·	4°C ⊣ ₂ S0₄,4°C	3x1 liter AG 2x1 liter AG		
llec quire	_ TOC (⊣ ² ,S0 ¹ ,4°C	1x1 liter P		
S F	Cruer	1: 11 - 14	/		With the second	
<u>a</u> 2	Notes:				•	
am			\$P-00-1-0-1-0-0			FIGURE 4-1
S	***************************************		**************************************	GROUNDW	ATER SAMPLE	DATA RECORD
			NYSDE	C QUALITY	ASSURANCE F	PROGRAM PLAN
340401	4D L22				ABB En	vironmental Services

		GROUNDW.	ATER SAMPLI	DEHOLD DA	ATA RECORD		
P	roject: Ktz/oN8D	.C. GROUPII -	RUDDICKS	Site:	UNDICK DRY	CLEAMERS	
P	roject Number: 30	120620465	1/01.2		09/78 120		
				Time: Star	rt: 0744	End: 070	9
S	ample Location ID:	CGW0030	230122	Signature of	of Sampler	Aug.	<u> </u>

	Well Depth	FtMeasured Historical	Top of Well	Well Riser	Stick-upFt.	Protective	
		Thatorical	Top of Protect	ctive (from grou	na)	Casing/Well Diffe	erence
ata						Protective	Ft.
		_				Casing	
We	Depth to Water	Ft. Well Material: PVC	Well Locked?	Well Dia.	2 inch 4 inch	Water Level Equip	o. Used:
/el/		ss ny	No No	5 -	6 inch	Elect. Cond. Float Activat	
Le		(see	Well Locked?	-		Press. Trans	ducer
Water Level/Well Data							l
× ×	Height of Water Column	.16 Gal/Ft. (2 in. X65 Gal/Ft. (4 in.		Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes	No
	Ft.	1.5 Gal/Ft. (6 in. Gal/Ft. (in		otal Gal Purged	Concrete Collar Intact		
			.1		Other		
				NAVATOR STOREN STOREN STOREN STOREN			
- E	Purgin	g/Sampling Equipment L	Jsed:		Decontaminatio	n Fluids Used :	
tat	(If Used For)					-	1
l eu	Purging Samplin	g	Equipment ID		(All That Apply at Lo	cation)	
าม	<u> </u>	Peristaltic Pump Submersible Pump			Methanol (10	0%) ´	
್ದಿ	7 7	Bailer		•	Deionized Wa	ol/75% ASTM Type ater	II water
ent		PVC/Silicon Tubing Teflon/Silicon Tubing			Liquinox Solu Hexane	ition	
md	· Mingana salahan	Airlift Hand Pump			HNO ₃ /D.I. W		İ
Equipment Documentation		In-line Filter			Potable Wate	r	1
ш	$ \mathcal{I} \mathcal{I} $	Press/Vac Filter Stainles Stech	MATCO				
		Stainles steel	1210	\			
	PID: Ambient Air	ppm Well Mouth	ppm Purge D	Data Collected	In-line Sample	Observations: pidClear	0
ysis Data					In Container Cold	ored _Odor	Cloudy
<u>s</u>	Purge Data	@ <u>^0-7</u>	Gal. @	Gat @	Gal. @	Gal @	Gal.
	Temperature, Deg. C	124.	?				da.
Fleld Ana	pH, units	(ms) 69		$ \downarrow $			
ā	Specific Conductivity Turbidity (NTUS)	care	5 				
Ĕ	Oxidation - Reduction Dissolved Oxygen, p	n, +/- mv		$\rightarrow =$			
	Ziscorità Gxygori, p	infly - 1.38		<u> </u>			
POS (AN) PROPERTY AND AND AND AND AND AND AND AND AND AND	A real control of the						
m	Analytical Parameter	✓ If Sample F Collected	reservation Method	Volume Required	Sample Bottle IL	ot Nos.	
Sample Collection Requirements (/ If Required at this Location)	VOCs		4°C				
em Em	SVOCs		4°C	2x40 ml 2x1 liter AG			
Cation of the ca	Metals Cyanide		HN0,,4°C NaOH,4°C	1x1 liter P 1x500mLP	701	715	
Rec s Lo	Nitrate/Sulfate		H_S0_,4°C	1x1 liter P			
on at thi	Nitrate/Phosphate Pest/PCB		4°C	1x1 liter P 3x1 liter AG			
red	TPH TOC		H,S0,,4°C	2x1 liter AG			
olle lequi			H [*] ,S0 [*] ,4°C	1x1 liter P			
ole Collection Requiren	Notes: Sover	1:74-22					
dm ⊕			Military production		•	F1 ^1 :	
Sal				GROUNDW	ATER SAMPLE	FIGUR	E 4-1
			NYSDEC	C QUALITY	ASSURANCE F	- DATA REC	OLAM
740404	4D L22		7 4 W 1 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	- ~~~LIII		vironmental Se	

						Test Boring Log
Projec	GIONS !	١٤.	GROUP	11_	R	MDDICAS DRYCLEAMER GS/35004 Project No. 361206204659
Client				Site		LUDDICKS Sheet No of
Logge	17/00	ww.	Snaw	1 -		Elevation Start Date Finish Date 09/27 / 2006
Drillin	g Contracto	or GE	Tologic	,	D	Priller's Name Liam Cummhs Rig Type 6610 DT
Drilling	g Method	DIR	ECT Dh	sH	Р	Protection Level D P.I.D. (eV) Casing Size Auger Size
Soil D			Rock Drilled		T	otal Depth to Groundwater/Date Piez Well Boring
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	USCS Group Symbol Notes on Drilling PI Meter Field Scan Pt Meter Head Space Head Space Lab Tests
1- 2- 3- -4-	4.0					0-1 Brown Lucy (slt, ceny mp Ginss roots - FTI 1-14 Black grovel, slay, -Fill 1.4-1.8 Brown 5.114 cay & gimel ville dry in Stiff, inp 18-4 Horange Brown, Clean encourse SP Soud, damp, inderese, 4 Composite 1.8-4 & Collect Soil Suple & Dup Col
5- 6- 7-	4.0					the nucrecare the sample collectedi insiele looked V, tight insiele looked V, tight if fil of coarse grover
9- 10-	3.1					8-12 V. Duse, Sund-silt- Gravel wit, Sundstore Puses, Sim fill like Characteristics, dry cry loce @ ~11-8 5 10.1
13-14	2.2/2.0	What is a construction of the construction of			groende klichte komus sejech helsente sjeskringt fordit stande.	12-13. (Olive Bram Silt Sads SA Co. 1 12-13. (Olive Bram Silt Sads SA 13-14, Bram Silt Sads Gravel Sutrated , Signt odor Viouse, Set, Sendy silt gravel fine to grave I FIGURE 4-6 17.8 - Some y Sift can TYPICAL TEST BORING LOG NYSDEC QUALITY ASSURANCE PROGRAM PLAN ACCORDANCE OF NEW ABB Environmental Services, Inc.
g.com-market	4D(z) L33	· Sa	3.8. H.			20.0 Holive (Lt Brann silty Sund of coarse Street, sat. 20.0 Clean in coarse Sand, some fines, sat. 21.8 Clean in coarse Sand, some fines, sat. 22. Llarent coarse some! I some Sand's silt

3 1		GROUNDW/	ATER SAMPLI	E FIELD DA	TA RECORD	
P	roject: Ktz/oN8D	C. GROUPII -	RUDDICKS	Site:	NADICK DRY	CLEAMERS
P	roject Number: 30	120620465	1/01.2		9/2/12	06
				Time: Start	: 1130	End: 1/50
S	ample Location ID:	CGWODLO	1301XX	Signature o	f Sample	
Melanta and a market market						
	Well Depth	FtMeasured Historical	Top of Well	Well Riser S	Stick-up Ft.	ProtectiveFt.
		1 notoriod:	Casing	ctive (from groun	(a)	Casing/Well Difference
ata						ProtectiveFt.
	5 4 11 11	_				Casing
We	Depth to Water		Well Locked?	Well Dia	2 inch 4 inch	Water Level Equip. Used:
vel/		ss or	No No	> _	4 inch	Elect. Cond. Probe Float Activated
le le		PVC SS DY	DIVINO W			Press. Transducer
Water Level/Well Data			V			
Š	Height of Water Column		=	Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes No
	Ft.	1.5 Gal/Ft. (6 in.) Gal/Ft. (in.		otal Gal Purged	Concrete Collar Intact	***************************************
			,		Other	
6	Purgin	g/Sampling Equipment U	ised:		Decontaminatio	n Fluids Used
tat	(If Used For)					
Equipment Documentation	Purging Samplin		Equipment ID		(✓ All That Apply at Loc	cation)
ogr	v v	Peristaltic Pump Submersible Pump		· ·	Methanol (10	0%)
ß	\equiv	Bailer		. •	Deionized Wa	N75% ASTM Type II water
ent	<u> </u>	PVC/Silicon Tubing Teflon/Silicon Tubing	***************************************		Liquinox Solu Hexane	tion
ᇤ		Airlift Hand Pump	***************************************		HNO ₃ /D.I. Wa	
ln b	-	In-line Filter			Potable Wate None	r
ш	$ \vec{\Delta} \vec{\Delta} $	Press/Vac Filter Stainles Steel	AN THE COLD	/	***************************************	
		Sycen	Total State of the state of the			
	PID: Ambient Ai	ppm Well Mouth	ppm Purge D	ata Collected	Sample (Observations:
ysis Data					In-lineTurb In ContainerColo	Oloud
ls D	Purge Data	@~0.7	_ Gal. @_	Oral. @	Gal. @	
	Temperature, Deg. C	175	`		Gai. @	_Gal. @Gal.
Field Anal	pH, units	(ms 7.3				
B	Specific Conductivity Turbidity (NTUS)	(µmhos/cm) 0:8	<u> </u>			
프						
-	Dissolved Oxygen, p	714 - 3.8				
NOTES AND ECONOMISSION						
	Analytical Parameter	✓ If Sample Page Collected Collected Page Collected Coll	reservation Method	Volume	Sample Bottle IL	ot Nos.
ants .	/ voc-			Required		
ame o	✓ VOCs _ SVOCs			2x40 ml 2x1 liter AG		
uln catio	Metals Cyanide		1N0,,4°C	1x1 liter P	(m) 11	4
Red S Lo	Nitrate/Sulfate			1x500mLP 1x1 liter P		13
on F	Nitrate/Phosphate Pest/PCB	<u> </u>		1x1 liter P 3x1 liter AG		
ctic ed a	TPH TOC		1,S0,,4°C	2x1 liter AG 2x1 liter AG		
ole Collection Requiren				1x1 liter P		
Sample Collection Requirements (< If Required at this Location)	Notes: Seveen	Internal: 16	1 101)		Victor III. In the Control of the Co	
<u>a</u> >			inneren (* * #		•	
San					4 TO TO TO TO TO TO TO TO TO TO TO TO TO	FIGURE 4-1
			AIVODEO	SHOUNDW,	AIER SAMPLE	DATA RECORD
			MISDEC	QUALITY	ASSUKANCE F	PROGRAM PLAN vironmental Services
	4D L22				- ADD EII	VILLIAM DELMICE

	GROUNDWATER	SAMPLE FIELD DATA RECORD
P	roject: Ktzjon8D.CGROUPII - RUD	DICKS Site: RUNDICK DRY CLEAMERS
P	roject Number: 361206204659 01.	Date: 09/27 12006
		Time: Start: End: End:
S	ample Location ID: KCGW0047230	Signature of Sampler
	Well DepthFtMeasured	
		Top of Well Well Riser Stick-upFt. ProtectiveFt. Top of Protective (from ground) Casing/Well Difference
-		Casing
)ats	-	ProtectiveFt.
=	Depth to Water Ft. Well Material; Well L	
₹	PVC	Well Dia2 inch Water Level Equip. Used:4 inchElect. Cond. Probe
eVe	Depth to Water Ft. Well Material: Well L PVC SS	No 6 inch Float Activated Press. Transducer
7	Jet Dive	Well Dia. 2 inch Water Level Equip. Used: Yes
Water Level/Well Data	.16 Gal/Ft. (2 in.)	Gal/Vol. Well Integrity: Yes No
5	Height of Water Column X65 Gal/Ft. (4 in.) =1.5 Gal/Ft. (6 in.)	Prot. Casing Secure
		Total Gal Purged Concrete Collar Intact Other
_	m	
Equipment Documentation	Purging/Sampling Equipment Used:	<u>Decontamination Fluids Used</u> :
inta	(If Used For)	
Ĕ	Purging Sampling Equ Peristaltic Pump	Jipment ID (✓ All That Apply at Location) ————————————————————————————————————
100	Submersible Pump Bailer	25% Methanol/75% ASTM Type II water
1 2	V PVC/Silicon Tubing	Deionized Water Liquinox Solution
E E	Teflon/Silicon Tubing Airlift	Hexane HNO ₃ /D.I. Water Solution
함	Hand Pump	Potable Water
ם	Press/Vac Filter	None
	T Stainles steel And	HSTOR
		Sample Observations:
ıta	PID: Ambient Air ppm Well Mouth ppm	Purge Data Collected In-line V Turbid Clear Cloudy
ysis Data	Purge Data @ ^ Q Gal.	
ysk.	1 = 0	@Gal. @Gal. @Gal.
	Temperature, Deg. C pH, units (hs) 7.2	
Field Anal	Specific Conductivity (umhos/cm) 0.924	
Fiel	Turbidity (NTUS) Oxidation - Reduction, +/- mv	
	Dissolved Oxygen, ppm / 1.23	
	Analytical Parameter	Cample Dottle ILDI 1105.
nts .	Collected Method	Required
me (i	✓ VOCs	2x40 ml
ation	Metals HN0,,4°C	
6d	Cyanide NaOH,4% Nitrate/Sulfate H,S0,,4%	C 1x500mLP
ole Collection Requiren	Nitrate/Sulfate	
ot a		3x1 liter AG C 2x1 liter AG
olle ollin	TOC H ₂ S0, 4°(C 1x1 liter P
Ğ ≝	Notes: Ween In Wird; 24-7	27'
Sample Collection Requirements (*/ If Required at this Location)		
San		FIGURE 4-1
		GROUNDWATER SAMPLE DATA RECORD
Water Company Company Company		NYSDEC QUALITY ASSURANCE PROGRAM PLAN ABB Environmental Services—
14011.	4D L22	ADD FIMIUMINEMS DELAICES

Proje	ct Transfer		C 0 540	1 0₹ _	0.	Test Boring Log Boring/Well No. Project No. 3612062042
Clien				Sit		NDDICKS DRYCLEAMER GS/35005 3612062046 1012 - UDDICKS Sheet No 1 of _ 1
Logg	ed By		Snaw	Gre		Elevation Start Date Finish Date 09/7/2006
Drillin	g Contract	OF COE	Tologic	·	D	Priller's Name Rig Type 6610 DT
Drillin	g Method	DIR	ECT Ph	sH	Р	Protection Level D P.I.D. (eV) Casing Size (Auger Size
	Orilled (Rock Drille		T	otal Depth Depth to Groundwater/Date Piez/ Well Boring
		0	%			Monitoring (no. 2)
Depth(Feet)	e No. tration ry (Fe	Samble Type	SPT Blows/6" or or or Rec./Rqd.	SPT-N (Blows/Ft.)	Graphic Log	USCS Group Symbol lotes on Drilling leter d Scan dd Space d Space d Space Lab Tests
Dept	Sample No. & Penetration/ Recovery (Feet)	Samþ	SPT Blows/6" or Core Rec./Rqd. %	SF vol8)	Grapl	USCS Group Symbol Notes on Drilling PI Meter Eield Scan 60 PI Meter 60 PI Mete
						0-1 Blacktop
I	19					1-1.8 Brum Sith Sund WG, fines to M. Fine; dang, MPISP, 1005e/mpase 1.8-2-1 Brum Sith cray zone, Wel, MP Site 74.5ppm RC6970050
2-	4.0					trace gives, south odor 21-4 Brown in course said and fine gives, frace self, darp, losse. SPGP
3-						PG, NEISP.
4_						45.2 H Brown Sity cry i give GC LOI
5-	3.9/					5.3 - 6.6 seem come-Migging SP
6-	5.0					Send of trace fine gone, dang. 6.6-7 Some as above but ingrave! 7-85 Clean microage-fine said, love 58
7-						85-9 Same as 7-85 but N trace coarse gravel, damp; love. SP
8-	5					F SPGP
9-	53/					G-17 - Rown We coarse Sind 5 60.1
10-	3.0	-				Gravel of Some fines, loose to 5vd dease in lengts, day, NI, Q11.7 remse of day sondy day
11-						1 LVP II C + Classel.
12						12-14.3 Some as 9-12,
13-	A Company of the Comp			and the second s	The state of the s	
14	149/40	The contemporaries	- MACHINE CONTRACTOR C	**************************************	THE PROPERTY OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF	Squived: PG, five groved, Satrate God NP; 1005e Q 153' lenge of Clean fine Sand ST FIGURE 4-6
15	1/1		NOTIFICATION OF THE PROJECTION	Punnera di pancana	PASSAGRADA SERVICIONA DE LA COMPANSA	TYPICAL TEST BORING LOG
16					The same of the sa	NYSDEC QUALITY ASSURANCE PROGRAM PLAN ABB Environmental Services, Inc.

		GROUNDW	ATER SAMP	LE RIOLD DA	ATA RECORD	
P	roject: Ktolon8D	.C. GROUPII	- RUDDICKS		UDDICK DRY	CLEAMERS
P	roject Number: 36	12062046	9 101-2	_ Date:	09/26 121	506
		5		Time: Sta		End: 1010
S	ample Location ID:	CGWOOSO	11301 X	Signature	of Sampler	

	Well DepthF	***************************************	Top of We	II Well Riser	Stick-up Ft.	Protective Ft.
		Historical	Top of Pro	tective (from grou		Casing/Well Difference
ta			Casing			ProtectiveFt.
Da						Casing
<u>=</u>	Depth to WaterF	t. Well Material:	Well Locked?	Well Dia	2 inch	Water Lovel Cavia II.
₹		PVC	Yes D		4 inch	Water Level Equip. Used:Elect. Cond. Probe
e Ve		ss0	No. Y		6 inch	Float Activated
1		5	Well Locked?	-		Press. Transducer
Water Level/Well Data		.16 Gal/Ft. (2 ii	ν -	0-18/-1		
≥	Height of Water Column	X65 Gal/Ft. (4 in		Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes No
	F1.	1.5 Gal/Ft. (6 in		_Total Gal Purged	Concrete Collar Intact	
		Cari L [i	11.)		Other	<u> </u>
eritoriske makkum						
=	Puraina	/Sampling Equipment	llsad ·		D	arr
at c			<u> </u>		Decontamination	n Fluids Used:
T t	(If Used For)					
Ĕ	Purging Sampling	Peristaltic Pump	Equipment ID		(✓ All That Apply at Lo Methanol (10	cation)
ខ	-/ -/	Submersible Pump			25% Methano	oV75% ASTM Type II water
Equipment Documentation	\exists	Bailer PVC/Silicon Tubing		_	Deionized Wa	ater
l er		Teflon/Silicon Tubir		- 	Hexane	AUOM
튭		Airlift Hand Pump	-	-	HNO ₃ /D.I. W Potable Wate	ater Solution
l di		In-line Filter		-	None	11
ш	$ \mathcal{I} \mathcal{I} $	Press/Vac Filter	11.11.11			
		Stainles stev Screen	Mattern			
· .	PID: Ambient Air Lo.	nom Well Mouth	ppm Purg	e Data Collected	Sample	Observations:
ata			ppii ruig		_In-lineTurb _In ContainerColo	
lysis Data	Purge Data	@	Col. 6	0.1.0		
ys		<u> </u>	Gai. @	Gai. @	Gal. @	Gal. @Gal.
	Temperature, Deg. C pH, units					
A b	Specific Conductivity (μmhos/cm)				
Field Ana	Turbidity (NTUS) Oxidation - Reduction,	+/- mv	-			
<u> </u>	Dissolved Oxygen, pp	n		***************************************	$+\leftarrow$	
	Analytical Parameter	✓ If Sample	D			
Ø	/	Collected	Preservation Method	Volume Required	Sample Bottle IL	of Nos.
ante.	√ vocs		400			
E (c	SVOCs		4°C 4°C	2x40 ml 2x1 liter AG		
uir atio	Metals		HN0,,4°C	1x1-liter P	(3) 100	
ed Log	Cyanide Nitrate/Sulfate		NaOH,4°C H,S0,,4°C	1x500mLP 1x1 liter P		
ole Collection Requiren	Nitrate/Phosphate Pest/PCB		H ₂ S0 ₄ ,4°C	1x1 liter P		
d at	TPH	-	4°C H₂S0₄,4°C	3x1 liter AG 2x1 liter AG		
llec quire	TOC		H ² S0, 4°C	1x1 liter P		
Se E	1 01.10	1. (. (1 1			
Sample Collection Requirements	Notes: No fum	ater view	and			
Ē	5610 010	114 /- 150				FIGURE 4-1
Š	soven to	IT TO 12		GROUNDW	ATER SAMPLE	E DATA RECORD
	ws, wsD	collected b	WYSDI	EC CHALITY	ASSIDAMOE	PROGRAM PLAN
340404	4D L22				ABB Fr	nvironmental Services

		(ekonzid)	WATER SAM	PLE RIGLD D	ATA RECORD	
P	roject: Ktz/oN8D	. C. GROUPI	E-RUDDICK	Site:	WADICK DRY	CLEAMERS
l P	roject Number: 36	12062016	59/01.2	Date:	09/26 120	
			,	Time: Sta	rt: <u>0900</u>	End: 935
S	ample Location ID:	CGW005	023014	Signature	of Sampler	
THE TRUDUTURE WAS						
	Well Depth		Top of V	Vell Well Rise	Stick-upFt.	ProtectiveFt.
		Historical	Top of F	Protective (from grou	ind)	Casing/Well Difference
ta			——— ———			ProtectiveFt.
Da						Casing
l e	Depth to Water	Ft. Well Material:	Well Locked?	Well Dia.	2 inch	Water Level Equip. Used:
₹		PVC	Yes	DVS 1	4 inch	Elect. Cond. Probe
l se		SS) YOU NO	1.0	6 inch	Float ActivatedPress. Transducer
1		B	Well Locked?			rress. Transducer
Water Level/Well Data		.16 Gal/Ft. (2	in.) -	Gal/Vol.	Moll Interview	
	Height of Water Column	X65 GaVFt. (4	in.) =	Gai/Vol,	Well Integrity: Prot. Casing Secure	Yes No
	FL	1.5 Gal/Ft. (6 Gal/Ft. (in.)	Total Gal Purged	Concrete Collar Intact	
· .					Other	
5	Purgin	/Sampling Equipme	nt Used :		Decontamination	on Eluida Haad
Equipment Documentation					Predicallination	n ribios Oseo:
ent	(✔ If Used For) Purging Samplin	7	Fautaman	.n		
E	V ul guy	Peristaltic Pump	Equipment	ID .	(✓ All That Apply at Lo Methanol (10	
၁၀၀	-/ -/	Submersible Pum Bailer	р	 .	25% Methano	01/75% ASTM Type II water
1 7	ブ フ	PVC/Silicon Tubir	ng		Deionized Wa	ater Ition
nei		Teflon/Silicon Tub Airlift	gnic		Hexane	
直	. Securities specification spe	Hand Pump		April and	HNO ₃ /D.I. W	ater Solution
Edu		In-line Filter Press/Vac Filter			None	•
	$ \vec{\bot} \vec{\bot}$	Stainles Stel	1 1/2/11	7		. ,
		green	May of Had			
_	PID: Ambient Air	ppm Well Mouth	ppm Pu	rge Data Collected	In-line Sample Turb	Observations:
Jate			, ,	7	In ContainerCold	oid Clear Cloudy ored Odor
lysis Data	Purge Data	@	Gal. @	Gal @	Gal. @	Col. G.
	Temperature, Deg. C		7		Gar. @	Gal. @Gal.
√na	pH, units		<u> </u>			
/ PI	Specific Conductivity Turbidity (NTUS)	(µmhos/cm)	3		9	
Fleld Ana	Oxidation - Reduction		\ <u> </u>		\rightarrow	
	Dissolved Oxygen, pr	mx	1.			
e in the second						
	Analytical Parameter	✓ If Sample	Preservation	Volume	Sample Bottle IL	ot No.
<u>t</u>		Collected	Method	Required	Gample Bottle IL	UL 14US.
len .	√ vocs	V	4°C	2x40 ml		
on)	SVOCs Metals	-	4°C	2x1 liter AG	() 6G	30
zeati	Metals Cyanide	***************************************	HN0,,4°C NaOH,4°C	1x1-liter P 1x500mLP	(201	
Rec s Lo	Nitrate/Sulfate		H_S0_,4°C	1x1 liter P		
n in	Nitrate/Phosphate Pest/PCB	**************************************	HźS0*,,4°C 4°C	1x1 liter P 3x1 liter AG		
<u> </u>	TPH		H ₂ S0 ₄ ,4°C	2x1 liter AG		
ole Collection Requiren	TOC	332	H̞͡͡S0̞͡,4°C	1x1 liter P		
C Re	Notes: ND Dann	Aux Das	orded.			
Sample Collection Requirements (~ If Required at this Location)	THUISS. IND WATER	-1- > PCC	- or of			
am	* Sevien from	24' to 22'				FIGURE 4-1
S	a	201 10 60		GROUNDW	ATER SAMPLE	DATA RECORD
			NYSE	DEC QUALITY	ASSURANCE P	PROGRAM PLAN
340401	4D L 22		Are to come with the complete or a first part of the property		ABB En	vironmental Services—

			st Boring						
Project REGION & D.C	GROUPIL -	RUDDICA	S DRYCLEA	Boring/Well	1 No. BS006	Pro	ject N	10. <	36/
Client NYSDE	C Si		ICKS		Sheet No			of	\$
Logged By	n Shaw Gr	ound Elevation	n Star	t Date	***************************************	Finish D	Date	6/2	en L
Drilling Contractor	Folocic	Driller's N	ame		Rig Typ			Dr	
Drilling Method	WEST DICH	Protection		P.I.D. (eV)	Casing		·	Auger S	ize,
Soil Drilled 20	Rock Drilled	Total Dep	th Depth	to Groundwate			Piez/	Well B	loring
20			24				Mor	nitoring	
eet) lo. & lon/ lon/ (Feet)	7, 7, 8, 8, 8, 8, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9,	Log	•	L	loqu	Notes on Drilling	(ppi		
Depth(Feet) Sample No. & Penetration/ Recovery (Feet)	SPT Blows/6" or or Nea./Rqd. SPT-N (Blows/Ft.)	Graphic Log	Sampl Descript		USCS Group Symbol	s on C	ran gan	ласе	
San Pe Recc	SPT Blows/6" or Core Rec./Rqd. 9 SPT-N (Blows/Ft.)	Ö			Gro	Note	Pl Meter Field Scan	PI Meter Head Space	
			Burnouth		55			正業	
1=12			Sidny - Fi				Broger		
2		freg	T Brown for	N fines, ar	SW		and the second s		
3-3-4.0		25-	4 Burn Silty	gravel of	1 CC CU		mounte consistence of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the cons		
		Sibra	t Bum siling worst, vapsp, and, trace fil	regimely los	浓		alessicerteronisies		
		4.6	8/14 Swd	and genely	e	40, 01.000	0.1	•	
5 22		thes	to fire give	vel, louse,	1 .				
() NO		6-6	4. Course Sur Louise, Sight	d & fine gos	VA SW	pende -			
7-1		6.4.S	(grant (fil	12 Jul 32 0	1611				Ì
8			Shot, book		14	, succe	(0.1		
9			5 Some as a		, <u> </u> Gn/				
10_3 77		SAVE	1, wet your	deel			The second second second		
		III.6	Tra 1+ Bur	r stly give	1 76	L -	and the second s	W. Tarana	
			110030	1,1	100 1	t good	SPM E.C	1	
		12	n 14 Sure on	5 11.6-12		· · · · · ·	C6 1	ecolistic	
13-1-1		1214	n, judy	(Veddish			, market and the second		ļ
14		Lock	1 Trucks	M SONT III	GM		Secretarion or the second	Homesweether	
15- 40				TY	PICAL :	TEST		GURE 4 ING LO	
16			NYSDEC QU		SURANC ABB Envir				
9404014D(z) L33	16-10 Sa	me as 11	416/V.10		YDD EUVII		o l	n vices,	IIIC.
	a w								

		GROUNDWA	ANDRESAMIDI		TA RECORD	
P	roject: KtzJON&D.	CGROUPII-	RUDDICKS	Site:	UDDICK DRY	CLEAMERS
P	roject Number: 36	20620465	1/01-2	Date:	91 120	06
		. 3		Time: Star	t: 1342	End: (40)
s	ample Location ID: (2)	16W0010	THOLK	~	of Sampler	
THE REAL PROPERTY.			TO TIME	2		
	Well DepthF		Top of Well	Well Riser	Stick-up Ft.	ProtectiveFt.
		Historical	Top of Prote	ctive (from grou	nd)	Casing/Well Difference
ra			Casing			ProtectiveFt.
Dad						CasingFt.
=	Depth to Water Ft	. Well Material:	Well Locked2:	Well Dia.	2 in ah	Manual and Province
≷		PVC	Yes Du	~ No. Dia.	4 inch	Water Level Equip. Used:Elect. Cond. Probe
3Ve		-ss Dr	No.	_	6 inch	Float Activated
۳		PVC SS PY	Well Locked?		And the second second	Press. Transducer
Water Level/Well Data		.16 Gal/Ft. (2 in.)	D			
\$	Height of Water Column	.65 Gal/Ft. (4 in.)		_Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes No
	Ft.	1.5 Gal/Ft. (6 in.)		Total Gal Purged	Concrete Collar Intact	
	. /	Gal/Ft. (in.))	. o.u. darrargad	Other	
P STREET, CONSTRUCT						
=	Puraina/	Sampling Equipment U	ead ·		December 1 of	en 11
ᆴ		THE PROPERTY OF	30Y •		Decontaminatio	n Fluids Used:
l ig	(If Used For)					
Ĕ	Purging Sampling	Peristaltic Pump	Equipment ID		(All That Apply at Loc	
ಶ	-/ -/	Submersible Pump	****		Methanol (100 25% Methano	V75% ASTM Type II water
Equipment Documentation	- / -/	Bailer PVC/Silicon Tubing			Deionized Wa	iter
len Len		Teflon/Silicon Tubing			Hexane	lion
ndı		Airlift Hand Pump	-		HNO ₃ /D.I. Wa Potable Wate	
nb:	Annual An	In-line Filter			None None	
m	$ \vec{\bot} \vec{\bot} $	Press/Vac Filter Stainles Steel	1.11.11			
Militarkojkoporaromi		Screen	10411510			
	PID: Ambient Air	ppm Well Mouth /	/			Observations:
ysis Data	Seveninhur		ppm Purge	Data Collected	In-lineTurb In ContainerColo	
S D	Purge Data	e~1.0	<i></i>		·	
ysk	*		_ Gal. @	_ Gal. @	Gal. @	_Gal. @Gal.
	Temperature, Deg. C pH, units				***************************************	
A	Specific Conductivity (s	LAS 7.1 (1993) 1993	7	The state of the s		***************************************
Fleld Anal	Turbidity (NTUS) Oxidation - Reduction,	+/- my - 497				
LL.	Dissolved Oxygen, ppn		<u> </u>	-1		
		<u> </u>)	
MATERIAL PROPERTY.	Analytical Parameter	✓ If Sample Pr				
Ø	/ diameter		reservation Method	Volume Required	Sample Bottle IL	ot Nos.
ent.	√ VOCs	$\overline{}$	100	,		
em 1)	SVOCs		I°C I°C	2x40 ml 2x1 liter AG		
u zate	Metals Cvanide	;	4N0,,4°C	1x1-liter P		, , <u>î</u>
leq Lo	Nitrate/Sulfate	F	laOH,4°C -¦S0_,4°C	1x500mLP 1x1 liter P	()	140).
	Nitrate/Phosphate Pest/PCB		1,S0,,4°C	1x1 liter P		
3d a	TPH	4	₽°C H ₂ S0_,4°C	3x1 liter AG 2x1 liter AG		
llec quire	TOC		¹ 2S02,4°C	1x1 liter P		
ole Collection Requiren	Notes: Seveen	12'- 14"				
Sample Collection Requirements (*/ If Required at this Location)	Notes: Seveen	. 1 -1			•	·
E						FIGURE 4-1
ιζ	the same of the sa		di direction de l'agrangement de l'agrandation de l'agran	GROUNDW	ATER SAMPLE	DATA RECORD
			NYSDE	C QUALITY	ASSURANCE	PROGRAM PLAN
740404	4D L 22	. The section of the	Medical Post and Adapting the Adapting Landon Commission of the		ABB En	vironmental Services

		GROUND	WATER SAM	PLE FIELD DA	TA RECORD	
P	roject: Ktz-ION&D	.CGROUPI	I - RUDDICK		UNDICK DRY	CLEAMERS
P	roject Number: 36	12062046	54 Bir	Date:	9/24/2	506
		5,		Time: Star	t: <u>13</u> 15	End: 1340
S	ample Location ID:	CGWODD	023011	Signature of	of Sample	
	Well Depth					
	. weit peptil	Ft Measured Historical	Top of I	Vell Well Riser Protective (from group	Stick-upFt.	ProtectiveFt. Casing/Well Difference
_			Casing	, .		
Water Level/Well Data			Well Locked?		,	ProtectiveFt.
=	Depth to Water	Ft Well Material:	Woll I gakada		.	
₹		PVC	Yes Yes	Well Dia.	2 inch 4 inch	Water Level Equip. Used:Elect. Cond. Probe
9.6		ss	Nov	400	6 inch	Float Activated
1.	4	Se.	F MYOU	-		Press. Transducer
ate		.16 Gal/Ft. (2	2 in.) —	Gal/Vol.	Well Integrity:	V
\$	Height of Water Column	X65 GaVFt. (4 1.5 GaVFt. (6	· · · · · · · · · · · · · · · · · · ·	San Voi.	Prot. Casing Secure	Yes No
		GaVFt. (Total Gal Purged	Concrete Collar Intact Other	
						-
Equipment Documentation	Purgin	g/Sampling Equipme	nt Used :		<u>Decontamination</u>	on Fluids Used:
ntat	(If Used For)					
me	Purging Samplin	•	Equipment	ID	(All That Apply at Lo	
no	$\dot{\pm}/\dot{\pm}$	Peristaltic Pump Submersible Pum	np		Methanol (10	0%) oV75% ASTM Type II water
Ğ	1 1	Bailer PVC/Sili∞n Tubi			Deionized Wa	ater
Jen		Teflon/Silicon Tul		the Suprement	Liquinox Solu Hexane	ition
пd		Airlift Hand Pump	***************************************		HNO ₃ /D.I. W	ater Solution
nb		In-line Filter			None	31
-		Press/Vac Filter Stainles Sta Scycen	el 11-115/2	t		· .
		Sycen	10411110		and the second s	
er.	PID: Ambient Ai	ppm Well Mouth	ppm Pu	rge Data Collected	Sample Sample Turt	Observations: pidClearCloudy
Jati	Screen Internet		1 18	LUK I	In ContainerCold	ored Odor
ysis Data	(burge Data	(<u>~0.</u> 3	≤ Gal. @	Gal. @	Gal. @	Gal. @Gal.
	Temperature, Deg. C	:	_			July Comments
Field Ana	pH, units	Carster 1	<u> </u>			
ple	Specific Conductivity Turbidity (NTUS)	80	O			
ŭ	Oxidation - Reduction Dissolved Oxygen, p		-			
	Dissolved Oxygon, p		<u> </u>			
	A wall of a 1 Day					
m	Analytical Parameter /	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.
ent	√ vocs		4°C			
em (in	SVOCs		4°C	2x40 ml 2x1 liter AG		
catio	Metals Cyanide	der de servicia de marco de marco.	HN0,,4°C NaOH,4°C	1x1-liter P 1x500mLP	$\overline{}$	
Rec	Nitrate/Sulfate		H_S0_,4°C	1x1 liter P	(~	
on at thi	Nitrate/Phosphate Pest/PCB		H ² S0 ¹ ,4°C 4°C	1x1 liter P 3x1 liter AG		
og og	TPH TOC		H,S0,,4°C	2x1 liter AG		
olle equi			H ₂ S0,,4°C	1x1 liter P		
Sample Collection Requirements (/ If Required at this Location)	Notes: Del een	reads from	2rl to 27)			
<u>d</u> 2			1	-	•	
Sar	Schlaston	di France 12	T	CDOUNDA	/ATTO = = = = = = = = = = = = = = = = =	FIGURE 4-1
•			KINCI	WUNUUND OFF	ACCUIDANCE	E DATA RECORD
****			IAIO	JEC QUALITY	ASSUKANCE	PROGRAM PLAN
40401	4D L22				VDD EI	TATIOLITICILIS DELAICES

Test Boring Log															
Projec	GIONS I).C.	GROUP	L -	R	nddicks dry(CLEAN	Borin	g/Well GS/C	No. 35 <i>00</i> /	, P.	roject 1 3612	10. 0620	39	101.2
Client	NYS	DEC		Site		LUDDICKS				Sheet N		1	of		
Logge	DIAV	No	Snaw	1 '	und	Elevation	Start	Date 126	1200	b	Finish	Date	/	2006	
Drillin	g Contract	or GE	Fologic	,	D	Priller's Name	1 Mhr	.he		Rig Typ	oe b	610			
Drillin	g Method .	DIR	ECT Ph	SH	Р			P.I.D. (e	<u>v)</u>	Casing	Size	\$6	Auger	Size 2	-
Soil D			Rock Drille		Т	otal Depth	Depth	to Groun	dwater	/Date		Piez/	Well	Boring]
	& / et)	6	%	·						<u>-i</u>	ng	-	nitoring]	
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	S	ample			USCS Group Symbol	Notes on Drilling		om) 8		Lab Tests
Depti	Samp Pene tecove	Samp	SPT B	SF (Blov	Grap	Des	scripti	on		US	otes a	PI Meter Field Scan	PI Meter Head Space		Lab
	LL.		ŭ				-11	1 /	6				P! N Hea		
1	19					0-1.8 Brand 507- FILL 18-4 LtBrand Sund ; fine 9 PG; trave coor	12.14	loumy.	ry	Fill		Lo.1		-	
<u> </u>						Sud i fine 9	un S	y coul	rse T, SP,	- -					
3-	/4.0					PG trave coa	nse gr	avel,	m Dense						
ノ リ_										Andrew Control of Cont		-			
						4.5.9 Same		,		Antonio e a companio e a compan		20.1			
)	20					51 to 7, L+1 grand, dry, 7-7.2 Bran	NP, V	NG M	ne san Iuse,	1					
•	14.0					7-7.2 Bran	in sil	W Sund	Derse			टार्	pb.		
7-						7.2-8 dy S Subranded +	Sityo	My W	9 me	Tar		0.1			
8-	· /					8-108- Sm				inge_		20.1	-		
4	3/8					10.8-11.2 - graves, net,	m Coai	Se Sur				200			
10-	40					11.2 - 11.5 v	swite	Sundati	res			3000	PPE		
11—						9meli v. an	ated	silly so	indy	MI		270 p	4 .		
2	The section of the se						1			SMGV		49.1			
13-										_					CHARGE
14.	1/		The state of the s	The second secon						SECTION STATES S					
15	1/		Coccasion of the Coccas			A. Company of the Com			TY	PICAL	TES		GURE		
16	is production.					NYSDE			ASSI	JRANC	E PF	ROGR	AM P	LAN	
94040	14D(z) L33		4			36'	655 V	N m	er su	or Ella	. 011111	enial S	AI AICE	5, IIIC. *	

	0. 42.	GROUND	WATER SAV	IPLE FIELD DA			
P	roject: Ktz-10N81	s.CGROUPI	I - RUDDICK		UDDICK DRY	CLEAMERS	
	roject Number: 3	012062046	59/01.1		09/26/2		
		45			t: <u> 710 </u>	End: 17)	<i>D</i>
S	ample Location ID:	106W007	01130111	Signature of	of Sampler.		<u> </u>
	Well Depth	FtMeasured Historical		Protective (from grou	Stick-upFt.	ProtectiveCasing/Well Diffe	erence
III Data	Don'th to Motor	Fa Walland				Protective Casing	
Water Level/Well Data	Depth to Water	Ft. Well Material: PVC SS	Well Locked	Well Dia.	2 inch 4 inch 6 inch	Water Level EquipElect. CondFloat ActivatPress. Trans	Probe ed
wat	Height of Water Column	.16 Gal/Ft. (/ 	4 in.) =	Gal/VolTotal Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intac Other	Yes	No
tation		ng/Sampling Equipme	nt Used :	MATERIA CONTRACTOR DE LA CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE C	Decontamination	on Fluids Used:	
Equipment Documentation	(If Used For) Purging Samplii	Peristaltic Pump Submersible Pun Bailer PVC/Silicon Tubi Tefton/Silicon Tu Airlitt Hand Pump In-line Filter Press/Vac Filter Stainics Sta	ng		Deionized W Liquinox Soli Hexane	00%) ol/75% ASTM Type ater ution /ater Solution	il water
Jata	PID: Ambient Air	ppm Well Mouth	ppm Pi	urge Data Collected	Sample m-lineTur In ContainerCol		Cloudy
Field Analysis Data	Purge Dat Temperature, Deg. (pH, units Specific Conductivity Turbidity (NTUS) Oxidation - Reductio	y (µmnos/cm) 7(0	.0	Gal. @	Gal. @	Gal. @	Gal.
L.	Dissolved Oxygen, p		5				
nts	Analytical Parameter	✓ If Sample Collected	Preservation M ethod	Volume Required	Sample Bottle II	ot Nos.	
Sample Collection Requirements (* If Required at this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC		4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P		16	
mple Co (Notes: Swum	mtured;	14+012		*	FIGUR	
Sa			 NYS	GROUNDW DEC QUALITY	ATER SAMPLI	FIGUR E DATA REC PROGRAM P	ORD
		***************************************				nvironmental Se	

		GROUNDW	ATER SAM	PLE FIELD DA	TA RECORD	
P	roject: KtzJON8D	.CGROUPII	- RUDDICK	<u> </u>	UDDICK DRY	CLEAMERS
P	roject Number: 36	12062046	59 101.2	Date:	091,26 12	606
		3	• #	Time: Star	t: 1645	End: <u>1710</u>
S	ample Location ID:	CGW0070	4301人	Signature (of Sample	
THE PERSON NAMED IN						
	Well Depth	t. Measured Historical	Top of V	Vell Well Riser	Stick-up Ft.	ProtectiveFt.
		ristoricat	Casing	Protective (from grou	nd)	Casing/Well Difference
ata						ProtectiveFt.
				Well Dia.		Casing
We	Depth to WaterF		Well Locked?	Well Dia.	2 inch	Water Level Equip. Used:
/el/		ss o	No	ws -	4 inch	Elect. Cond. Probe Float Activated
[e]		PVC SS	- vol	, -		Press. Transducer
Water Level/Well Data						
Wa	Height of Water Column	.16 Gal/Ft. (2 in X65 Gal/Ft. (4 in	·	Gal/Vol.	Well Integrity:	Yes No
	Ft.	1.5 Gal/Ft. (6 in	.)	Takal Oal Day	Prot. Casing Secure Concrete Collar Intact	Marie Constitution Spatial Constitution
		Gal/Ft. (ir	1.)	Total Gal Purged	Other	**************************************
STATE OF THE PARTY OF						
=	Puraino	/Sampling Equipment	llood.			
Equipment Documentation	. Er suits	- SAULWING ENGINEER	<u> </u>		Decontamination	on Fluids Used:
l ii	(✔ If Used For) Purging Sampling					
Ĕ	Purging Sampling	Peristaltic Pump	Equipment	ID	(✓ All That Apply at Lo Methanol (10	
000		Submersible Pump Bailer		,	25% Methano	DI/75% ASTM Type II water
=		PVC/Silicon Tubing			Deionized Wa	ater Ition
He.		Teflon/Silicon Tubin	9		Hexane	
효	Generalista	Hand Pump	***************************************		HNO ₃ /D.I. W Potable Wate	
Eq	7 7	In-line Filter Press/Vac Filter		maga, salaga	None	
	ot ot	Stainles steel	1.1156	<u>F</u>		
C Department of the control of the c	1-1		704 1 100			
ez.	PID: Ambient Air	ppm Well Mouth /	ppm Pu	rge Data Collected	∕In-line ∨ Turt	Observations: pidClearCloudy
ysis Data				<u>·v</u>	In Container VColo	ored _Odor
8 8	Purge Data	@ <u>~0.4</u>	Gal. @	Gal. @	Gal. @	Gal. @Gal.
	Temperature, Deg. C	5-3		. ,		
An	pH, units Specific Conductivity ((M)(M) 7.3	10			
Field Ana	Turbidity (NTUS)	>108		Z 6		
I	Oxidation - Reduction, Dissolved Oxygen, pp					
	20 713			<u> </u>		
	Analytical Parameter					
m	Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.
ent:	√ VOCs	- /	-			
em(SVOCs	<u> </u>	4°C 4°C	2x40 ml 2x1 liter AG		
u zatio	Metals Cyanide		HN0,,4°C	1x1 liter P		
Req	Nitrate/Sulfate		NaOH,4°C H ₂ S0 ₄ ,4°C	1x500mLP 1x1 liter P	$-\left(\cdot \right)$	1705
t this	Nitrate/Phosphate Pest/PCB		H ² S0 ⁴ ,4°C 4°C	1x1 liter P		
ctio ed a	TPH		H,S0,,4°C	3x1 liter AG 2x1 liter AG		
Sample Collection Requirements	TOC	Common and the Common of the C	H,S0,,4°C	1x1 liter P		
လ မီ	Notes: Swell	24-1022				
<u>8</u>	MOTES	21000	***************************************			
am						FIGURE 4-1
(J)			W. C.	GROUNDW	ATER SAMPLE	E DATA RECORD
			NYSE	DEC QUALITY	ASSURANCE I	PROGRAM PLAN
340401	4D L 22		THE RESERVE OF THE PARTY OF THE		ABB En	nvironmental Services—

D:							Test Boring							
1				up	i		IDDICKS DRYCLEA	NAS CZ/S	No. 35008	3	901 N	°. 0620	3/6	34/01
Clien	t NYS	DEC	•		Sit	B R	LUDDICKS		Sheet No.	1		of		
1	ed By Blav	nder	Swa	wl	1 '	Ground Elevation Start Date Start Date 9128/206								
Drillin	ng Contract	or GE	iolo(-1C		D	riller's Name	1 Cumming	Rig Type	66	0)T		OD-HOPPHILICARY, MC.
Drillin	ng Method	DIR	ECT	Dh	sH							Auger	Size	71
	Orilled 5	7 1	Rock Di			T	18 / 10 8 8 8	to Groupdwater	J			Well		
				<u></u>				125	T		∐ Mor	L] nitoring	9	
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or	Core Rec./Rqd. ?	SPT-N (Blows/Ft.)	Graphic Log	Sampl Descript		USCS Group Symbol	Notes on Drilling	Field Scan	PI Meter 3 Head Space		Lab Tests
2-3-	4.0						0-0.7 Brun salt 0.7-2 DK Brun AM-glass; asu 2-if orange Bru Send ? five grandi odor, most, Moss	, s.lly frusa	FIII		0			
5- 6- 7-	50						4-5.2 Fane as 5-2-5.4 pinks 5.4-5.9 ct Bun 900el, dmp, SP, 8.9-9. Cobase	7-4 Sandstone cobb or SAH coinse Dense	SIN ME ON Cand	NA	2.			
8- 4- 10- 11-	32						9-12 Silly Sund Gravel, day; De 12.0-2:5 Lanum Uti grey Cobbles, Sent Clay Verse 12.5-13 Sahnute Noone Clay, to	A & frame fin which it dry, drush; cs within coars		Ky Z	0.1			
13-14		and the same of th	AND THE REAL PROPERTY AND THE PROPERTY A	•	Notific Engineering and the Commission of the Co	TO NOT THE REAL PROPERTY OF THE PROPERTY OF TH	Nome Clay it	19,	SMSC					Opposition of the last of the
15	014D(z) L33	The first of the second of the	The state of the s		And the state of t	A THE CONTRACT OF THE CONTRACT	NYSDEC QI	UALITY ASSU	PICAL TI JRANCE BB Enviro	PRO	BOR GRA	AM PL	.OG _AN	:

		GROUNDW	ATER SAMPLE	EFIELD DA	ATA RECORD		
P	roject: Ktz-10N8D.	CGROUPII-	- RUDDICKS	Site:	UDDICK DRY	CLEAMORS	
P	roject Number: 36	20620465	9/01.2	Date:	09/2/ 120		
_	· · · · · · · · · · · · · · · · · · ·	W. C.		Time: Star		End: 70	9_
S	ample Location ID: (A)	GMODAD	150111	_ Signature o	of Sampler		<u> </u>
	Well DepthF	tMeasured Historical	Top of Well Top of Protect	Well Riser tive (from groun	Stick-upFt.	ProtectiveCasing/Well Diffe	Ft. erence
Vell Data	Depth to WaterF	Well Material:	Well Locked?	Well Dia.	2 inch	Protective Casing Water Level Equi	
Water Level/Well Data		SS DY	Well Locked?	>'` - - -	4 inch 6 inch	Elect. Cond. Float Activat Press. Trans	ed
Wa	Height of Water Column Ft.	.16 Gal/Ft. (2 in. X65 Gal/Ft. (4 in. 1.5 Gal/Ft. (6 in. Gal/Ft. (in) =	Gal/Vol. otal Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes	No
tation		Sampling Equipment (Jsed :	ACT OF THE STATE O	Decontaminatio	n Fluids Used :	
Equipment Documentation	(If Used For) Purging Sampling	Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Teflon/Silicon Tubing	Equipment ID		(All That Apply at Loc Methanol (100 25% Methano Deionized Wa Liquinox Solu Hexane	0%) bV75% ASTM Type ater	II water
Equipm	₹ ₹	Airlitt Hand Pump In-line Filter Press/Vac Filter Stainics Steel	Ant Six		HNO ₃ /D.I. Wa Potable Wate None		
Data	PID: Ambient Ai	ppm Well Mouth	ppm Purge D	ata Collected	Sample (In line Turb In Container Colo		Cloudy
ysis Data	Purge Data	e 10,5	Gal. @	Gal. @	Gal. @	_Gal. @	Gal.
	Temperature, Deg. C pH, units	mel - 16	2:	· ·			
A	Specific Conductivity (Imhos/cm) D.G	<u> </u>				
Field Ana	Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, por	+mv - 700 Al 44	<i>O</i>				
<u> </u>	Analytical Parameter	✓ If Sample P	reservation Method	Volume Required	Sample Bottle IL	ot Nos.	
men (√ VOCs SVOCs			2x40 ml			
ifre ttion)	Metals			2x1 liter AG 1x1 liter P			
ومر المحد	Cyanide Nitrate/Sulfate	j	NaOH.4℃	1x500mLP 1x1 liter P			
T H	Nitrate/Phosphate		H,S0,,4°C	1x1 liter P	(W)	700	
ectionired at	Pest/PCB TPH TOC		H ₃ S0 ₄ ,4°C 2	3x1 liter AG 2x1 liter AG			
Sample Collection Requirements (* If Required at this Location)	Notes: Screen	74612	H¸S0¸,4°C -	1x1 liter P			
amp (Durle well	- DK olive	Bum			FIGUR	E 4-1
ι,		UR VIIIC		GROUNDW	ATER SAMPLE	DATA REC	ORD
340401	4D L22		MISDEC	QUALITY	ASSURANCE F	PROGRAM F vironmental Se	PLAN

		GROUNDWAT	TER SAMPLE			
P	roject: Ktz-10N8D.	C. GROUPII -	RUDDICKS	Site: _ R w	DDICKORY (CLEAMERS
P	roject Number: 36	1206204659	101.2	Date:	1/18/120	
]			- 14/1	Time: Start:	1635	End: 165
S	sample Location ID:	CGW00Y02	15011XX	Signature of	Sampler	
Providence de la companya de la comp						
	Well DepthF	tMeasured Historical	Top of WellTop of Protectiv	Well Riser Sti	ck-upFt.	ProtectiveFt.
	•	THOUSE THE STATE OF THE STATE O	Casing	ve (from ground)		Casing/Well Difference
ata					7	ProtectiveFt.
	Danit to Water					Casing
Me	Depth to WaterF	t. Well Material: PVC	Well Locked?	Well Dia	_2 inch 4 inch	Water Level Equip. Used:Elect. Cond. Probe
Vel		ssrw	No NO		_6 inch	Float Activated
ا أ		(Act)	Well Locked?	-		Press. Transducer
Water Level/Well Data		.16 Gal/Ft. (2 in.)	ν.			
≥	Height of Water Column	X65 Gal/Ft. (4 in.)	Ga		Vell Integrity: Prot. Casing Secure	Yes No
	FI.	1.5 Gal/Ft. (6 in.) Gal/Ft. (_ in.)	LTota	-10-10	Concrete Collar Intact Other	
SWANNERS OF THE STATE OF THE ST			Í	•	obiet	
<u> </u>	Purging	Sampling Equipment Use	<u>ed</u> :		Decontamination	n Fluids Used :
ıtat	(If Used For)					
mer	Purging Sampling	D. C. W. B	Equipment ID	(•	All That Apply at Loc	cation)
no	<u> </u>	Peristaltic Pump Submersible Pump			Methanol (100	0%) V75% ASTM Type II water
Equipment Documentation		Bailer PVC/Silicon Tubing			Deionized Wa	iter
Je II		Teflon/Silicon Tubing			Liquinox Solut	tion
直		Airlift Hand Pump			HNO ₃ /D.I. Wa	
nb:		In-line Filter Press/Vac Filter			None	
		Stainles Steel	ANTISTA			· .
MARKATAN MARKATAN		Sylen	1001111101			
65	PID: Ambient Air	ppm Well Mouth	_ppm Purge Dat	a Collected In	Sample C	Observations:
Dat					ContainerColo	
ysis Data	Purge Data	@ <u>~17</u>	Gal. @G	Sal. @	_Gal. @	Gal. @ Gal.
	Temperature, Deg. C,	15.5				
Field Ana	pH, units Specific Conductivity	mg/ 0:97				***************************************
eld	Turbidity (NTUS)	1100			C C	
II.	Oxidation - Reduction, Dissolved Oxygen, per	+/- mv				
	- V	7/5-3-1				
	Analytical Parameter	✓ If Sample Pres	servation			
Ø	/			Volume Required	Sample Bottle ILo	ot Nos.
len.	√ vocs	4°0	2 2	:40 ml		
rent ion)	SVOCs Metals	4°0	2x	1 liter AG		
qui ocati	Cyanide	Na	OH,4°C 1x	:1-liter P :500mLP	1	
Re Jis L	Nitrate/Sulfate Nitrate/Phosphate	H :	S0, ,4°C 1x	1 liter P 1 liter P	/~	050
lon at t	Pest/PCB TPH	4°0	3x	1 liter AG		
lect uired	TOC	H ₂ :		1 liter AG 1 liter P		
Coll Requ		2711201	- '^			
Sample Collection Requirements ((If Required at this Location)	Notes: Screen	2 LAND				
Juk)	Ower whi	12000 St.	t.1			FIGURE 4-1
Ϋ́	for house.	DAMIN 2N	<u> </u>	ROUNDWA	TER SAMPLE	DATA RECORD
	Sheln on	wter	NYSDEC	QUALITY A	SSURANCE P	PROGRAM PLAN
340401	4D L22	A Comment of the Comm				vironmental Services

							Test Bo	ring	Log						
	Projec	t Rejt	w	81	m C	lie	ners #		Boring/We	II No.	f	Project N 36 /	10. 206	2056	7/04
ſ	Client			;	Sit	te	Rodde	NES		Sheet N	o		of		- Character
	Logge	ed By	lon	1-Su	Gr.	ounc	Elevation	Star	1 Date 1/24/06		Finis	h Date 61/2	a [x &	<i>j</i> -	·
	Drillin	g Contract		eoloric	M		Oriller's Name	0	ming	Rig Typ	pe (66151	1		
ľ	Drillin	g Method	Dov	ret	Rish	F	Protection Level	MICHAEL AND MICH. PROSPECTOR	P.I.D. (eV)	Casing	Size		Auger	Size	,,
	Soil D	rilled 14	$\mathcal{T}_{\mathbf{I}}$	Rock Drille	d	7	Fotal Depth	Depth	to Groundwat	er/Date			Well	Boring	ł
ŀ		a a		, %						_	ğ		nitoring		
	(Feet)	No. & ation/ y (Fee	э Туре	ows/6' r ./Rqd.	r-N s/Ft.)	ic Log		Sampl		CS Symbo	Drillir		om) o		ests
	Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd.	SPT-N (Blows/Ft.)	Graphic Log	De	escript	ion	USCS Group Symbol	Notes on Drilling	PI Meter Field Scan	PI Meter Head Space		Lab Tests
		S - 5	0,	တီ ဝိ						9	ž	Pi Me Field	PI Me Head		
							15-2 Olive St	top Si	1 of 9105	F11		20,1			
		21		And the second of the second o			2-25 olar 1	gran s	andy sit	Fill					
		14.6					25-27 cold 27-3011/2 track five (1) 3-33 lamme	sity a shodg	ray, vet, Ht	SM					
	3						3-3.3 Lamine	ted la	bum m. lear,	SCA					
1	4-	Numeron was recommended on the second of the	evan				4-5.2 Sine	as 3.	3 - 4 mis	SF SP		20.1			
*	5						5.2-5.9 So vet, mp.	·		SCAL	,				
-	[i —	26/					5.9-6.5 Su 65-7 Sw	ne 459	11052	32					
,	1=	15,6					7-75 de	en Mc	oake Soud	- ر					•
	8-	reason.					1.5-9 Lt	3 mm 5	sily sadi	- 35	-				
	Q =	ger von delikkingstallanden gen LEA stadionistische	mange				7.5-9 Lt genes, oners Anjvian	+050	brunded	5%	م	V	-		
	10-	eren.					9+0-1055	m as	7.5.9 YCHV W	- Cm		201			
		20/-0					10.5 ~ 135 9 1. He Send, M Staff(SA) 13.5-145	wett:	most MI	HP GE					
1	1	15.4					135-145	,turst	na 5.1491	mel 5				j	
							4 Sind					1			
	()	,								Jen J		The control of the co		•	
1	41	The control of the co					Management of the control of the con		uuthan kita uu ee etinga een uurungus kortiikkallikoonus, et eelikustiistassa.		1	FI	GURE	4-6	
	1)						NYSDI	EC QU	T ALITY ASS	YPICAL SURANC		T BOR	ING L	.OG	
-	IJ									ARR Envi					

		PLE FIELD DATA RECORD
1	Project: Kegin 8 Dy Clemes II Project Number: 361262059/21-2	Site: Kuddicks Date: 09/29/06
	Toject Number. 36128 203 (1817)	Date: 09/29/96 Time: Start: 0106 End: 0121
5	Sample Location ID: RCGW00901701X	Signature of Sampler.
	sample Essaudi is. Ne Classific Toll 1 1 10 1 1	Signature of Samper
	Well DepthFtMeasuredTop of WHistoricalTop of Pr Casing	Tell Well Riser Stick-upFt. ProtectiveFt. Casing/Well Difference
Data		ProtectiveFt.
Water Level/Well Data	Depth to WaterFt. Well Material: Well Locked?:YesNo	Well Dia 2 inch
Water		Gal/Vol. Well Integrity: Yes No Prot. Casing Secure Concrete Collar Intact Other Other
tion	Purging/Sampling Equipment Used :	Decontamination Fluids Used:
Equipment Documentation	(If Used For) Purging Sampling Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Teflor/Silicon Tubing Airlift Hand Pump In-line Filter Press/Vac Filter	Methanol (100%) 25% Methanol/75% ASTM Type II water Deionized Water Liquinox Solution
Jata	PID: Ambient Air O ppm Well Mouth o ppm Pure	ge Data Collected
Field Analysis Data	Purge Data @ 1.0 Gal. @	
ıts	Analytical Parameter ✓ If Sample Preservation Collected Method	Volume Sample Bottle ILot Nos. Required
Sample Collection Requirements (*/ If Required at this Location)	VOCs	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 1x1 liter AG 2x1 liter AG 1x1 liter P
Sample C	Notes: SWEMS & TO B DWM why UBWW = Clean NYSD	FIGURE 4-1 GROUNDWATER SAMPLE DATA RECORD DEC QUALITY ASSURANCE PROGRAM PLAN
340404	4D 22	ABB Environmental Services—

			PLE FIELD DA'			
P	roject: Kepiun & Mycles	ull H		uddicks		
P	roject Number: 3612062059	101-2	Date:			<i>3</i>
			<u></u>	: 0830	End: 0841	
S	ample Location ID: KC 6W00'	70270 X	Signature of	Sampler:		Name of the last o
	Well Depth FtMeasureHistorica		Protective (from ground	Stick-upFt.	ProtectiveCasing/Well Differe	
Data				The state of the s	Protective Casing	_ Ft.
Water Level/Well Data	Depth to Water Ft. Well Material:PVCSS	Well Locked?	well Dia.	2 inch 4 inch 6 inch	Water Level Equip. I Elect. Cond. Pr Float Activated Press. Transdu	robe
Wate		(4 in.) = (6 in.)	Gai/Vol. Total Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	t	No
ation	Purging/Sampling Equipm	nent Used:		Decontamination	on Fluids Used:	
Equipment Documentation	(If Used For) Purging Sampling Peristaltic Pum Submersible P Bailer PVC/Silicon Tu Teflon/Silicon Ta Airlift Hand Pump In-line Filter Press/Vac, Filte	bing ubing	,	✓ All That Apply at Lo Methanol (10 25% Methan Deionized W Liquinox Solt Hexane HNO ₃ /D.I. W Potable Wate	00%) iol/75% ASTM Type II later ution Vater Solution	water
Jata	PID: Ambient Air P ppm Well Mou	th_ppm Pu	rrge Data Collected	Sample M-lineCol. In ContainerCol.	Observations: bidClear _ oredOdor	_Cloudy
Field Analysis Data	Purge Data Purge Data Purge Data Purge Data Purge Data Purge Data Purge Data Purge Data	Gal. @	Gal. @^		Gal. @	_Gal.
ø	Analytical Parameter	Preservation Method	Volume Required	Sample Bottle II	Lot Nos.	
Sample Collection Requirements (/ If Required at this Location)		4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P		0840	
Sample Co	Notes: Seven; 78 for 2 puft min; 4 B	MWYSI NYSI	GROUNDWA DEC QUALITY			DRD LAN

Project Number: Sample Location D.		Nasaa				ATA RECORD		
Sample Location ID:	1			warn II	Site:	Kudduks		-
Weil Depth P. Meisured Too of Weil Well Right Stock-up Protective Protective P. Casing Casing Casing Protective P. Casing Casing Casing Casing Casing Protective P. Casing	'	oject Number. S	210000				End: 19	7/-
Well Depth P. Meisured Top of Noil Top of Petacetwe (from ground) Casing Protective P. Casing P.	9	ample Location ID:	MALT INO	CAPIOLIC			Ello. C	<u> </u>
Haterical Top of Protective (from ground) Casing/Well Officeros Final Casing Protective Final Casing Final Casing Protective Final Casing Final Ca		ample cocation to.	ADIMIOI ,	1017) IVILIX	Signature	or Sampler:		
Historical Top of Protective Casing Protective Ft.		Well DepthF	tMeasure	dTop of '	Well Rise	Stick-up Et	Protective	Ft.
Depth to Water Ft. Well Material: Well Loader: Well Dis. 2 inch A inch Filed Cond. Probe Field Field Cond. Field Cond. Field Cond. Field Cond. Field Cond. Field Field Cond. Field F			Historical		Protective (from grou	ind)		erence
Depth to Water _ FL _ Weil Materials:	l ta			Casing			Protective	Ft.
Purging/Samaling Equipment Used: Purging/Samaling Equipment Used: Decontamination Fluids Used:	a							
Purgling/Sampling Equipment Used: Purgling/Sampling Equipment Used: Decontamination Fluids Used:	Vell	Depth to WaterF			: Well Dia.		Water Level Equ	ip. Used:
PurglingSampling Equipment Used: PurglingSampling Equipment Used: Decontamination Fluids Used:	Se ≥			A STATE OF THE PARTY OF THE PAR				
PurglingSampling Equipment Used: PurglingSampling Equipment Used: Decontamination Fluids Used:	Lev			South			Press. Tran	sducer
PurglingSampling Equipment Used: PurglingSampling Equipment Used: Decontamination Fluids Used:	ter			200			***************************************	
Purging Sampling Equipment Used: Purging Sampling Equipment Used: Descentamination Fields Used:	_ ×	Height of Water Column	16 Gal/Ft. X .65 Gal/Ft.	(2 in.) (4 in.) =	Gal/Vol.	Well Integrity: Prot. Casino Secure	Yes	No
Purging Sampling Equipment ID Purging Sampling Equipment ID Purging Sampling Peristaltic Pump Schowshible Pump Ballion Tubing Telefonsition Tubing Telefon		Ft.	1.5 Gal/Ft.	6 in.)	Total Gal Purged	Concrete Collar Intact	-	
PID: Ambient Air P ppm Well Mouth D ppm Purge Data Collected In-line Clear Cloudy Purge Data @ 10 Gal. @ G			Gavi L	(11.)		Other		
PID: Ambient Air ppm Well Mouth D ppm Purge Data Collected In-line Colored Color Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of C								
PID: Ambient Air ppm Well Mouth D ppm Purge Data Collected In-line Colored Color Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of C	- E	Purging	Sampling Equipm	ent Used :		Decontamination	n Fluids Used :	
PID: Ambient Air ppm Well Mouth D ppm Purge Data Collected In-line Colored Color Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of C	tat	(If I lead For)	•					
PID: Ambient Air ppm Well Mouth D ppm Purge Data Collected In-line Colored Color Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of C	nen				ID	(All That Apply at Lo	cation)	
PID: Ambient Air ppm Well Mouth D ppm Purge Data Collected In-line Colored Color Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of C	2	<u> </u>	•	·		Methanol (10	0%) 51/75% ASTM Tun	o il water
PID: Ambient Air ppm Well Mouth D ppm Purge Data Collected In-line Colored Color Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of Colored Color Department of Colored Colored Color Department of C	å			ning .		Deionized W	ater	o ii walci
PID: Ambient Air P ppm Well Mouth D ppm Purge Data Collected In-line Clear Cloudy Purge Data @ 10 Gal. @ G	len		Teflon/Silicon Tr			Hexane		
PID: Ambient Air P ppm Well Mouth D ppm Purge Data Collected In-line Clear Cloudy Purge Data @ 10 Gal. @ G	ם	· · · · · · · · · · · · · · · · · · ·	Hand Pump	-				
PID: Ambient Air P ppm Well Mouth D ppm Purge Data Collected In-line Clear Cloudy Purge Data @ 10 Gal. @ G	Equ			***************************************				
PID: Ambient Alp ppm Well Mouth D. ppm Purge Data Collected In-line In Container Colored Codor Purge Data Gal. Gal. Gal. Gal. Gal. Gal. Gal. Gal	_		11 - (1					
Purge Data Collected In-line Turbid Clear Cloudy In Container Colored Odor Purge Data Gal. Gal. Gal. Gal. Gal. Gal. Gal. Gal			Tyles and the latest	. 1		Samola	Observations	
Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Samp	ca	PID: Ambient Air	ppm Well Mout	nCol ppm Pi		∠In-line ∠Turt	oidClear	Cloudy
Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Samp	Dad				***************************************			
Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Preservation Volume Required Analytical Parameter / If Samp	8 8	Purge Data		Gal. @	Gal. @	Gal. @	_Gal. @	Gal.
Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Collected Method Required VOCs		Intl unite	1	: 4		h		
Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Collected Method Required VOCs	Ā	Specific Conductivity (umhos/cm)	0.861		<u> </u>		
Analytical Parameter / If Sample Preservation Method Required Analytical Parameter / If Sample Collected Method Required VOCs	9	Turbidity (NTUS)		600 -			-	
Analytical Parameter / If Sample	ш	Dissolved Oxygen, per	Sup = 7	<u> </u>				
Collected Method Required VOCs 4°C 2x40 ml SVOCs 4°C 2x1 liter AG Metals HN0, 4°C 1x1 liter P Cyanide Nacht, 4°C 1x500mLP Nitrate/Sulfate H, 50, 4°C 1x1 liter P Nitrate/Phosphate H, 50, 4°C 1x1 liter P Pest/PCB 4°C 3x1 liter AG TPH H, 50, 4°C 2x1 liter AG TOC H, 50, 4°C 1x1 liter P H, 50, 4°C 1x1 liter P H, 50, 4°C 1x1 liter P H, 50, 4°C 1x1 liter P FIGURE 4-1 GROUNDWATER SAMPLE DATA RECORD								
VOCs		Analytical Parameter		Preservation	Volume	Sample Bottle IL	ot Nos.	
GITOCHDWATER SAMPLE DATA RECORD	ıts .		Collected	Method	Required			
GIOCHDWAILE SAMPLE DATA RECORD	mer)		<u> </u>					
GIOCHDWAILE SAMPLE DATA RECORD	il rel	Metals		HN0,,4°C				
GIOCHDWAILE SAMPLE DATA RECORD	Foc.		And the second second second second second	NaOH.4°C				
GIOCHDWAILE SAMPLE DATA RECORD	n H H is	Nitrate/Phosphate	West Walter State Commission Comm	H ² S0 ¹ ,,4°C	1x1 liter P		0 0	
GIOCHDWAILE SAMPLE DATA RECORD	ctio	TPH		H_S0_,4°C		Black barrens and a second		
GIOCHDWAILE SAMPLE DATA RECORD	ollec Aquire	TOC		H ₂ S0 ₄ ,4°C	1x1 liter P			
GITOCHDWATER SAMPLE DATA RECORD	Co If Re	Notes: Orcen	28431			***************************************		······································
GITOCHDWATER SAMPLE DATA RECORD	P P	1	7	1		•		
GITOCHDWATER SAMPLE DATA RECORD	San	premen	· olive!	3 m	COALINE			
MISDEC QUALITY ASSURANCE PROGRAM PLAN				RIVO				
9404014D L 22 ABB Environmental Services—				6111	DEC QUALITY			

			Test Bor	Carry March Janes Language Property of the Contract of the Con				
Project Refin	18 D.C	Rud	MKS	Boring/We	II No. -010	Project N	10. 206205	9/01
Client NYSDI	EC	Site	Ruldickp	77	Sheet No.		of	7
Logged By Rvn	ndon A. Sh	ch/	d Elevation	Start Date	of Fir	nish Date	29/06	Rando silverierinistries
Drilling Contractor		W	Driller's Name	im Cummin	Dia Tura	66 Di		***************************************
Drilling Method	West Pisi	- I,	Protection Level	P.I.D. (eV)	Casing Si	ze //2	Auger Size	2"
Soil Drilled	Rock Drilled		Total Depth	Depth to Groundwat	er/Date	Piez	Well Borin	
	8					Mor	nitoring	
No. & ation/	Type ws/6" /Rqd.	Ft.)	s s	ample	SS ymbo	[(pp		ests
Depth(Feet) Sample No. & Penetration/ Recovery (Feet)	Sample Type SPT Blows/6* or Core Rec./Rqd.	(Blows/Ft.) Graphic Log	. De:	scription	USCS Group Symbol	Meter do Scan do do	Space	Lab Tests
S. B. R.	Cor				9 :	Notes on PI Meter Field Scan	PI Meter Head Spa	
				Brown SAN los		40.		
			5	and; dmp, wa	1 1			
1-1/4				for Brum, Sur				
3 = 1 1			In Derse.	2 maril 1.	9/G W			
			Bill over Black to The Art of the Control of the Co			V	550	
			4-25 Brum	s. Hely of some	CL	(20.)		
1-1.6			57 Brun	sity sad agrant	GM			
7-16.0			Tto of house	meanse sends	hat			
\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			fore Gravely	I some fores, an	7.] SW	ACCOUNT ASSESSMENT		
			loose (work					
			20/10 ~ 11 Se	ne as 7 to 9	m	Lo.		
			11 to ~13.5	LF Bram Sinds				
1-24			MP/m1, V. Den	me fine give!	SW			
150				elected slygu	150	1		
3-1			y some sin		ve j	\		
14				n regionale comment de monte de la commentación de la commentación de la commentación de la commentación de la	13 Mich		· ·	
				т	YPICAL TI		GURE 4-6 RING LOG	
			NYSDE	C QUALITY AS	SURANCE	PROGR	AM PLAN	

	0 - 2	GROUNDWA	TER SAMPL	DEHOLD DA	TA RECORD	
P	roject: Ktzjon8D.	C. GROUPII -	RUDDICKS	Site:	WIDDICK DRY	CLEAMERS
P	roject Number: 36	120620465	(101.2	Date:	9/29 120	
		*		Time: Star	t: <u>0906</u>	End: UX2
S	ample Location ID:	CGWOIDO	MANIA	Signature o	of Sampler	
THE RESIDENCE OF THE PERSON NAMED IN						
	Well DepthF		Top of Well	Well Riser	Stick-upFt.	Protective Ft.
		Historical	Top of Protect	ctive (from groun	na)	Casing/Well Difference
ta ta						ProtectiveFt.
Da						Casing
le le	Depth to WaterF	t. Well Material:	Well Locked?;	Well Dia	2 inch	Water Level Equip. Used:
\(\S		PVC SS	Yes DV	S r =	4 inch	Elect. Cond. Probe
e e			No.	_	6 inch	Float Activated Press. Transducer
1	•	Sex	Well Locked?	_		ress. framsducer
Water Level/Well Data		.16 Gal/Ft, (2 in.)	-	Gal/Vol.	Moll Integrity	
3	Height of Water Column	💢65 Gal/Ft. (4 in.)	=	Call VOI.	Well Integrity: Prot. Casing Secure	Yes No
	FI.	1.5 Gal/Ft. (6 in.) Gal/Ft. (in.)		otal Gal Purged	Concrete Collar Intact Other	
			,	•	Other	·
				Entropy of the second s		
l o	Purging	Sampling Equipment U	sed:		<u>Decontaminatio</u>	n Fluids Used
tat	(If Used For)					TITIETE VOVO
Jen	Purging Sampling		Equipment ID		/ / All That Apply at La	
Ä	$\overline{\Lambda}_{i}$ $\overline{\Lambda}_{i}$	Peristaltic Pump			(All That Apply at Loc Methanol (100)	0%)
Equipment Documentation	=/=/	Submersible Pump Bailer		•	25% Methano Deionized Wa	0V75% ASTM Type II water
E	1' _	PVC/Silicon Tubing Teflon/Silicon Tubing			Liquinox Solu	tion
l ë	•	Airlift			Hexane HNO ₃ /D.I. Wa	ater Solution
1 =		Hand Pump In-line Filter			Potable Wate	
m m	\overrightarrow{J}	Press/Vac Filter			None	
	<u> </u>	Stainles steel	Mailistak			
	. 1				Salania	Observations:
E	PID: Ambient Air	ppm Well Mouth	ppm Purge D	ata Collected	∡fh-line V Turb	idClear ♥ Cloudy
lysis Data				<u>V</u>	In ContainerColo	red Odor
8 8	Purge Data	@ <u>~V.S</u>	_ Gal. @	_Gal. @	Gal. @	_Gal. @ Gal.
a ×	Temperature, Deg. C	c c/ 14.1				
₹	pH, units Specific Conductivity ((MS) 7.0				
Field Ana	Turbidity (NTUS)	300/				-
II.	Oxidation - Reduction, Dissolved Oxygen, ppr					
		41V - 20				
POPMENTAL STREET	Applytical Decreases					
	Analytical Parameter	✓ If Sample Pr Collected	eservation Method	Volume Required	Sample Bottle IL	ot Nos.
ĮË.	√ VOCs					
E C	SVOCs			2x40 ml 2x1 liter AG		
ul n	Metals Cyanide		IN0,,4°C	1x1-liter P		<u> </u>
led Log	Nitrate/Sulfate		IaOH,4℃ 1,S0_,4°C	1x500mLP 1x1 liter P	() M	171
F E	Nitrate/Phosphate Pest/PCB		1,50,4°C	1x1 liter P		
te br	TPH	4		3x1 liter AG 2x1 liter AG		
Her quire	_ TOC			1x1 liter P	-Appropries	
Ile Collection Requiren	Notor: CIAMIN	17X h 16				
9 S	Notes:	10 , 18			•	
Sample Collection Requirements (/ If Required at this Location)	ML WALM	· Vavelish	<u> </u>			FIGURE 4-1
Ś	A. h. Mark.	10001,711	NAMA P	GROUNDW	ATER SAMPLE	DATA RECORD
	-		NYSDEC	QUALITY	ASSURANCE F	PROGRAM PLAN
h	4D L 22				ABB En	vironmental Services

		GROUNDWA	TER SAMPL	D FIDLD DA	ATA RECORD	
F	roject: Ktz-IoN&P	.CGROUPII-	RUDDICKS	Site: <i>R</i>	UDDICK DRY	CLEAMERS
F	roject Number: 36	1206204659	101.2	Date:	09/29/120	
			• .	Time: Star	rt: JUK	End: 0000
8	Sample Location ID:	CGWOIDOT	1 O DX	Signature	of Sampler	
	Well Depth		Top of Well	Well Riser	Stick-up Ft.	ProtectiveFt.
	·	Historical	Top of Prote	ective (from grou	nd)	Casing/Well Difference
ata						ProtectiveFt.
0						Casing
Ve	Depth to Water	Ft. Well Material:	Well Locked?	Well Dia.	2 inch	Water Level Equip. Used:
S ≥		PVC SS w	Yes QV	·5· · ·	4 inch 6 inch	Elect. Cond. Probe Float Activated
ě		PVC SS QVD	DIVIN W	-	o mar	Press. Transducer
l e		300	Dia			
Water Level/Well Data	Height of Water Colump	.16 Gal/Ft. (2 in.)	Γ	_Gal/Vol.	Well Integrity:	Yes No
	Height of Water Column Ft.	X65 Gal/Ft. (4 in.) 1.5 Gal/Ft. (6 in.)			Prot. Casing Secure Concrete Collar Intact	,
1		Gal/Ft. (in.)	L	Total Gal Purged	Other	
-						
_						
Equipment Documentation	Purgin	g/Sampling Equipment Us	sed:		Decontaminatio	n Fluids Used:
nta	(If Used For)					
He H	Purging Samplin	•	Equipment ID		(All That Apply at Lo	cation)
าวด		Peristaltic Pump Submersible Pump			Methanol (10)	0%) bV75% ASTM Type II water
ă	→ →	Bailer PVC/Silicon Tubing			Deionized Wa	ater
en		Teflon/Silicon Tubing			Liquinox Solu Hexane	tion
l d		Airlift Hand Pump			HNO ₃ /D.I. W	ater Solution
nb	Manager pro-	In-line Filter			Potable Wate	r
W	$ \vec{\Delta} \vec{\Delta} $	Press/Vac Filter	11 112/1			*
A CONTRACTOR OF THE PARTY OF TH		Stainles steel	10411511F			
`	PID: Ambient Aif-O	ppm Well Mouth	Pura Dura	D-4- 0 #	Sample	Observations:
ata		T bbill Modifi	ppm Purge	Data Collected	In-line VTurb	
lysis Data	Purge Data	@110	0.1.0			
ysk	1	13.4	_ Gai. @	Gal. @	Gal. @	_Gal. @Gal.
na	Temperature, Deg. C pH, units	(ons)			<u> </u>	
¥	Specific Conductivity	(perritos/cm) 0.970	>		$\overline{}$	
Field Anal	Turbidity (NTUS) Oxidation - Reduction	1. +/- my				
—	Dissolved Oxygen, p	50.9				
Section and the second		July				
	Analytical Parameter	✓ If Sample Pre	eservation	Volume	Sample Bottle IL	
8		- 1/	Method	Required	Sample Bottle IL	ot mas.
Sample Collection Requirements ((If Required at this Location)	√ VOCs		C	2x40 ml		
on)	SVOCs Metals	4	°C	2x1 liter AG		
Z di	Cyanide	N:	N0,,4°C aOH,4°C	1x1 liter P 1x500mLP	3	X0 \
Rec is Lo	Nitrate/Sulfate Nitrate/Phosphate	Н Н	S0 ,4°C 2S0 ,4°C	1x1 liter P	1200	0
at th	Pest/PCB	44	Č.	1x1 liter P 3x1 liter AG		
Ted Per	TPH TOC	H	S0, ,4°C	2x1 liter AG		
olle			¸S0 ¸,4°C	1x1 liter P	Market Street, and the street,	
ile Collection Requiren ✓ If Required at this Location)	Notes: WWW	1178118	O		***************************************	
ر <u>ة</u> ج	7 1				•	_
San	DAM WAY	Brancs 1/		^D^!!!	I E sobo kan inin na na na na na na na na na na na na na	FIGURE 4-1
	V	7	k11/~~~~	GHOUNDW	ATER SAMPLE	DATA RECORD
			NYSDE	C QUALITY	ASSURANCE F	PROGRAM PLAN
GADAD1	4D L 22				ABB En	vironmental Services

		Test Boring Lo		
REGION 8 D.C	GROUPEL -	RUDDICKS DRYCLEAMA	Boring/Well No.	Project No. 3612062046
Client NYSDE	Site	RUDDICKS	Sheet No.	of
Logged By	SWAN Grou	nd Elevation Start D	ate X/2006 Fi	inish Date 28/2006
Drilling Contractor	Eologic	D. III. at Alexander	Rig Type	
Drilling Method	PECT DINCH	Protection Level D P.	I.D. (eV) Casing S	ize //// Auger Size
Soil Drilled	Rock Drilled	Total Depth Depth to	Groundwater/Date	Piez Well Borin
	%	76		Monitoring
Depth(Feet) Sample No. & Penetration/ Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. % SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Notes on Drilling Meter Id Scan Aeter ad Space
Samp Pene Recov	SPT I	de Description	Group	Notes on [PI Meter Field Scan PI Meter Head Space
		J-1,2 L+ Burn sill Sandy loam & roots	y fine fill	Zo.
24		1.2.2.2 DEULINE Son	nely S.TF:	
4.0		2-2-2.6 sandstone of 2-6-4 other Brown	cobbus -GC	
3-		squed, day, w	1. Devse. SMS	
		4-7 3-14 5 and 5 9	rusi danp sin	20.1
5 3.9		Denkly, Disk, v.a	yular to	
5.0		4-7 self sind & g. Denselm. Disc, v.a Subvorded itrace growt @ 165. v.	1. Hu q renel	
7-		Fm 7 to 9.	- M	
8		9 to 10.5 50145us	. Jigmel 6m	
19 34		dy nouse,	MOON'S JON	49.1
40		50.5 to 124 clean	Wildan 19.	
	·	dy, monse, 10.5 to 12 4 clean Sund, 1008e, dup. Pi 124 - 12 if Brand Sand's mostly gra to loose, fires to f	sat sity so	
12		to luise, thee to t	in gares	
13			31	
14				
list	MANUFACTURE SACRES		TYPICALT	FIGURE 4-6 EST BORING LOG
		1 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	LITY ASSURANCE	

		GROUNDWA	TER SAMPLE	FIELD DAT	A RECORD	
P	roject: KtoloN& S roject Number: 36	.CGROUPII-	RUDDICKS	Site: _ R w	DOCKDRY (LEAMERS
P	roject Number: 36	12062046 59	01.2		1/28 120	06
		44		Time: Start:		End: 1605
S	ample Location ID:	CGWOILD	50111	Signature of	Sampler	
THE REAL PROPERTY AND ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY ADDRESS OF THE PERTY						
	Well Depthi	tMeasured Historical	Top of Well	Well Riser Sti	ick-upFt.	ProtectiveFt.
		Historical	Top of Protecti	ve (from ground)		Casing/Well Difference
ata						ProtectiveFt.
<u> </u>						Casing
Wel	Depth to Water	Ft. Well Material;	Well Locked?	Well Dia	_2 inch	Water Level Equip. Used:
Se		ss _vd	No. V		_ 4 inch _ 6 inch	Elect. Cond. Probe Float Activated
Fe		100	Soll !	-		Press. Transducer
Water Level/Well Data			\mathcal{D}_{\prime} .			
Wa	Height of Water Column	.16 Gal/Ft. (2 in.) X65 Gal/Ft. (4 in.)		ial/Vol. V	Well Integrity:	Yes No
	——Ft.	1.5 Gal/Ft. (6 in.)	_	4-10-10-1-1-1 (Prot. Casing Secure Concrete Collar Intact	######################################
		GaVFt. (in.)		tal Gal Purged	Other	
CONTROL OF CONTROL						
	Purgino	ı/Sampling Equipment Us	·ad·		.	
atio	- Fraing	SAMPING EQUIPMENT OS			<u>Decontaminatio</u>	n Fluids Used:
ent	(✔ If Used For) Purging Sampling	_				
Ĕ	Purging Sampling	Peristaltic Pump	Equipment ID	(•	All That Apply at Loc Methanol (100	
Equipment Documentation		Submersible Pump Bailer			25% Methano	V75% ASTM Type II water
1 2	$\sqrt{\sqrt{1}}$	PVC/Silicon Tubing			Liquinox Solu	tion
l e		Teflon/Silicon Tubing Airlift	Material Contract Con		Hexane HNO ₃ /D.I. Wa	
를		Hand Pump			Potable Wate	
Eq		In-line Filter Press/Vac Filter	-		None	
	$ \vec{\Delta} \vec{\Delta} $	Stainles steel Screen	MILLIE			
		1				
æ	PID: Ambient Air O	ppm Well Mouth	ppm Purge Da		i-line Turb	Observations: Volear Cloudy
ysis Data					Container Colo	
8 3	Purge Data	<u> </u>	_ Gal. @	Gal. @	Gal. @	_Gal. @ Gal.
	Temperature, Deg. C	16.8				
An	pH, units Specific Conductivity	NS 711.06				
Field Ana	Turbidity (NTUS)	~700.				
正	Oxidation - Reduction Dissolved Oxygen, pg	,4/- mv				
,		MIL -				
	Applytical December					
6	Analytical Parameter		eservation Method	Volume Required	Sample Bottle IL	ot Nos.
<u> </u>	√ vocs					
ءَ ۾	SVOCs	4°		x40 ml x1 liter AG		
ratio H	Metals Cyanide		N0 ₃ ,4°C 1	x1 liter P		
3 cg	Nitrate/Sulfate	H		x500mLP x1 liter P	1~	He02
i iii	Nitrate/Phosphate Pest/PCB	H		x1 liter P x1 liter AG		
ctic e de	TPH TOC	Н	,S0,,4°C 2	x1 liter AG		
odui	_ 100	Н	S0,4°C 1	x1 liter P		
ole Collection Requiren	Notes: Smell	tran 16 to 1	4			
호 >	Δ	0			•	
Sample Collection Requirements (*/ If Required at this Location)	Umenty:	K John D	Crewood	DAILLE	PAR 600 100 - 200	FIGURE 4-1
-	1)	f .2	, G	HOUNDWA	I ER SAMPLE	DATA RECORD
			NYSDEC	QUALITY A	SSURANCE	PROGRAM PLAN
040404	4D 1 22				ABB En	vironmental Services

				PLE FIELD DA	TA RECORD		
P	roject: Ktz-10N8.D.	C. GROUPI	E - RUDDICK		UDDICK DRY		
	roject Number: 36	12062046	59/01-2			006	
	ample Leasting ID:	Caldall 1	-1915 at 11	**********	-1536	End: 155	
3	ample Location ID:	10Mall 1	ONZIONI	(K Signature o	f Sampler		
ıta	Well DepthF	tMeasured Historical	Top of Top of Casing	Protective (from groun	Stick-upFt.	ProtectiveFl Casing/Well Difference	æ
Water Level/Well Data	Depth to WaterF		Well Locked	Well Dia	2 inch 4 inch 6 inch	Casing Water Level Equip. UsElect. Cond. ProbFloat ActivatedPress. Transduce	ed: e
Water	Height of Water Column Ft.	.16 Gal/Ft. (2 X65 Gal/Ft. (4 1.5 Gal/Ft. (6 Gal/Ft. ((in.) =	Gai/VolTotal Gal Purged	Weil Integrity: Prot. Casing Secure Concrete Collar Intac Other	Yes No	- - -
ation	Purging	Sampling Equipme	nt Used :		Decontaminati	on Fluids Used:	
Equipment Documentation	(If Used For) Purging Sampling	Peristaltic Pump Submersible Pum Bailer PVC/Sillicon Tubin Teflon/Sillicon Tubin Airlift Hand Pump In-line Filter Press/Vac Filter	ng	t ID	Deionized W Liquinox Sol Hexane	00%) ol/75% ASTM Type II wa later ution /ater Solution	ater .
Data	PID: Ambient Air 60.	ppm Well Mouth	ppm Pi		In-line VTur	Observations: bidClearC oredOdor	loudy
Field Analysis Data	Specific Conductivity (Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, par	+/- mv	Gal. @	Gal. @	Gal. @	Gal. @G	al.
	¥	<u> </u>			>		
ıts	Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle II	_ot Nos.	
Sample Collection Requirements (/ If Required at this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC Notes: Wo V	milb #	4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P		(55)	
Sampli (*	fing ret	es: Uf Br	MN	GROUNDW.	ATER SAMPLI	FIGURE 4	RD
040401	4D 22		18 I V	DEC QUALITY		PROGRAM PLA nvironmental Servic	

						Test Boring Log						
Proje	GION8 1	20	GROUP	1L ~	R	NDDICKS DRY CLEAMERS (/Well No. SS/BSO# 7	P.	roject N 3612	10. 0620	\$61	lor.
Clien	t NYS	DEC	,	Sit	e R	LUDDICKS	Sheet N	o	1	of		econolina
	ed By	Ne	Snaw	' -		Flevation Start Date	12006	Finish	Date	281	2006	Personal
Drillin	ng Contract	or GE	FoloGia			Oriller's Name Cammh	Rig Typ		610	DT		-
Drillin	ng Method .	DIG	ECT Dh	sH	F	Protection Level D P.I.D. (e)			7′	Auger	Size(1
	Orilled , , '		Rock Drille		7	Total Depth to Ground	dwater/Date			Well	Boring	 }
	10		\			1 1 1 1 1 1		<u></u>	Mo	nitoring		Newson and the
eet)	No. & ttion/ (Feet	Туре	ws/6"	·N /Ft.)	: Log	Sample	S /mbol	Drilling	(bb	om)		sts
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Description	USCS Group Symbol	Notes on Drilling	er	өг Эрасө		ab Tests
۵	Sa P Pec	Š	SF		Ø		Ğ	Not	PI Meter	PI Meter Head Space		
						0-0.8 Ox Brum Silty &	oam Ell		Lail			
1-	3.2					10.8.1.4 prage bown soly	W. Courses V					
V -	4.0					Sand, WG, Dry, NP 1-4-2.1 fine sand/s/t W/F	ine - MI	a				
3-	- - -					Gravel: Mr. Duse 2:1-3.2 DK Brom Clean fil 5:1t. Deny w6, day: BP 3:2-4 5ilty sand ignal d 4-4 c manach Rimo Silh	ne Sadd ml	N				
4_						3.2-4 Silly sand igended			4-	uungso		
5-	1/2					Egine, dy 45-49 LtBram, SAH Saw	· A ZMG	<i>*</i>	20.1			
(–	146					give, any	vel -					
7 —						of some fines 5.3 to 8 of Brown Sands	sitigned GM				-	
· {/_	-					ary, Dense.	-					
u _]					8 to 10.5 If Burn 5.1 Sud & grown, dry moine, 10.5 to 11.1 Brurn groves	tron Gm		201			
10	34					10.5 to 11.1 Burn graves	(SIT+					
*	4.0					some cry, dup, mP/SF 11.1+0/2 reddish/Bum. Sity govel of some M- Cook	sat GMM		CO CONTRACTOR OF THE CONTRACTO			
11-						loose / M Dense	GM		- Continue of the Continue of			
12							The second secon		-d-warmanna, agains			
13-		No. of the last of	Mark Constitution				-					Contraction of the Contraction o
14	1/	Company of the Control of the Contro					Richian Harrison Park	and the second s	National Property of the Parket		_	
15	1	The contract of the contract o		NO LEGISLATION DE LA COLONIA COMPANION DE LA COLONIA C			TYPICAL		Ѓ ВОГ		LOG	
16						NYSDEC QUALITY	ASSURANC ——ABB Envi					
94040	014D(z) L33		•		,		ADD FIIA)		Cintal 3	01 A 10 G	2, 111G.ª	

		GROUNDW	ATER SAM	PLE FIELD DA	TA RECORD	
P	roject: Ktz/oN&D roject Number: 36	.CGROUPII	- RUDDICK	<u> </u>	UNDICK DRY	CLEAMERS
P	roject Number: 36	120620465	59 /oj. L	Date:	9128 120	
1				Time: Start	:: 1031	End: 1048
S	ample Location ID:	CGW01120	1(13011)	Signature o	f Sampler	
	Well Depth	FtMe´asured Historical	Top of I	Protective (from groun	Stick-upFt.	ProtectiveFt. Casing/Well Difference
Vell Data	Depth to WaterF	-t. Well Material:	Well Locked?	Well Dia.		ProtectiveFt. Casing Water Level Equip. Used:
Water Level/Well Data		SS SS	Well Locked?	-	4 inch 6 inch	Elect. Cond. ProbeFloat ActivatedPress. Transducer
Wai	Height of Water Column Ft.	16 Gal/Ft. (2 ir	1.) 1.) =	Gal/Vol.	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes No
Equipment Documentation	Purging (✔ If Used For)	s/Sampling Equipment	Used:		<u>Decontamination</u>	n Fluids Used :
men	Purging Sampling	Peristaltic Pump	Equipment	ID	(All That Apply at Loc	
000		Submersible Pump			Methanol (100 25% Methano	1/75% ASTM Type II water
100	$=$ \sqrt{Z}	Bailer PVC/Silicon Tubing		*******	Deionized Wa	ter
l eu	-	Teflon/Silicon Tubir Airlift	ng		Hexane HNO ₃ /D.I. Wa	
din		Hand Pump In-line Filter			Potable Water	
Eq		Press/Vac Filter			None	
	$ \vec{\Delta} \vec{\Delta}$	Stainles steel Screen	Miles	<u> </u>		
ysis Data	PID: Ambient Air	ppm Well Mouth	/		Sample Container Colo	
sis	Purge Data	@ <u>~ 0.</u>	Gal. @	Gal. @	Gal. @	_Gal. @Gal.
Field Analy	Temperature, Deg. C pH, units	MS1 -15/1				
V P	Specific Conductivity Turbidity (NTUS)	(juranos/cm) 0.4	\$3		_X/	
FI-	Oxidation - Reduction				_ ~	
	Dissolved Oxygen, pe	10/L -3	il =			
erconstantento	V	1				
nts	Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILo	ot Nos.
me (✓ VOCs SVOCs		4°C 4°C	2x40 ml		
ation at	Metals		HN0,,4°C	2x1 liter AG 1x1 liter P		
ed f	Cyanide Nitrate/Sulfate		NaOH,4°C H_S0_,4°C	1x500mLP 1x1 liter P		1/1/6
n H	Nitrate/Phosphate Pest/PCB		H,S0,,4°C H,S0,,4°C 4°C	1x1 liter P		100
ctlo ed a	TPH		H_S0_,4°C	3x1 liter AG 2x1 liter AG		
olle aquir	Toc _		H ₂ S02,4°C	1x1 liter P		
Sample Collection Requirements	Notes: SWW	1: T4 to	12			
du S		1 0.	1/		•	
San	purkye	tw ; Clar	W	CDOLLARA	4 marin 100 mm and 100 mm	FIGURE 4-1
	1 1		, MVO	GROUNDW	AIEH SAMPLE	DATA RECORD
	a quantum monte en commence r>L		MAZI	DEC QUALITY		PROGRAM PLAN vironmental Services——
940401					ADD FD	VILLUITIBLICAL SORUCOC

	A	GROUNDW	ATER SAM	PLE FIELD DA	TA RECORD		
P	roject: Ktzon8D.	.C. GROUPII	- RUDDICK	<u> </u>	UNDICK DRY	CLEAMERS	
	roject Number: 36	120620465	1/01-2		91,28,120		
	ample Location ID:	cicial all 112	Valla In	Time: Star	- 0	End: 103	
3	ample Location ID:[[N	G G M o I L I C	XDOID UX	Signature of	of Sampler		
ta	Well DepthF	tMeasured Historical	Top of I	Protective (from groun	Stick-upFt.	Protective	erence
Water Level/Well Data	Depth to Water F	t. Well Material: PVC SS	Well Locked?	Well Dia.	2 inch 4 inch 6 inch	Casing Water Level Equ Elect. Cond Float Activa Press. Tran	ip. Used: . Probe ted
Water	Height of Water Column Ft.	.16 Gal/Ft. (2 ir X65 Gal/Ft. (4 ir 1.5 Gal/Ft. (6 ir Gal/Ft. (ir	1.)	Gal/Vol. Total Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes	No
ation	Purging	Sampling Equipment	Used:		Decontaminatio	en Fluids Used:	
Equipment Documentation	(If Used For) Purgip(Sampling	Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Teflon/Silicon Tubin Arilitit Hand Pump In-line Filter Press/Vac Filter Stalales		ID	(All That Apply at Logeration Methanol (10) 25% Methanol Deionized Was Liquinox Solu Hexane HNO ₃ /D.l. W Potable Wate None	0%) ol/75% ASTM Typ ater ution ater Solution	e II water
Data	PID: Ambient Air	ppm Well Mouth	ppm Pu	rge Data Collected	In-line Sample In-line V Furb		Cloudy
Field Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen, pp	+/- mv) Gal. @	Gal. @	Gal. @	Gal. @	Gal.
				A			
ţ;	Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.	
Sample Collection Requirements (/ If Required at this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	<u></u>	4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C 4°C H,S0,,4°C H,S0,,4°C	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P		030	
Sample Co	Notes: Sween	VIBRUN	2 1	GPOUNDW	ATED CARADI F	FIGUE	RE 4-1
040404	4D L22		NYSI	DEC QUALITY	ASSURANCE F	E DATA REC PROGRAM ovironmental S	PLAN

							Test Boring Log
	Projec	GIONS !).C.	GROUP	IL -	R	NDDICKS DRYCLEAMER GS/35064 Project No. 3612 96 20 18/012
	Client						LUDDICKS Sheet No of
	Logge	DIAN	der	Snaw	Gro	ound	Elevation Start Date 8/2006 Finish Date 9/2006
	Drillin	g Contract	or GE	ologic	,	D	Driller's Name Sum Chamble Rig Type 6610
	Drillin	g Method .	DIR	ECT Ph	sH	Р	Protection Level D P.I.D. (eV) Casing Size (Auger Size)
	Soil D	rilled 7	1	Rock Drille	4	T	otal Depth (Depth to Groundwater/Date Piez Well Boring
•	(. & n/ eet)	ø.	/6" d.%		g	Monitoring ppm pm pm pm pm pm pm
•	Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	USCS Group Symbol Notes on Drilling PI Meter Head Space Head Space Lab Tests
	<u></u>			O			
5,	1- 2- 3-	4.0					1.4 - Y overfe Bun fines In m coarse graves, desp Ince fine coarse sand, losselm Sul Deise. PG.
2	5- 6- 7-	30					4-6.6 craje Brum clean M. coarse Sond, dans, M Duse- Frace coarse sand @ ~ 4.8-5.5 6.6-7.6 orange dluc Brum fires to incoarse sandy ely, HP Stiff, vet,
	8- 4- 10-	7.0/					7.6-9 Sandshre Layers, reck Graver of Some Stay m. coaxe Sund, day. 9-13 Silfy Sund < Gravel, and verser of line thirt is meisting the mitted, v. Juse, Dry WG, V. myrian
Sy	13-14	37/40	Association to the second seco			STRVictoria accompanies Data in the monotonia and the structure an	13-15.7 Same as 9-13 SM Zo.1 15.7-17 Suturated Lt Bur Sand : S.It : graved fines FIGURE 4-6 to fine Symil: Mouse / Louis TYPICAL TEST BORING LOG to fine NYSDEC QUALITY ASSURANCE PROGRAM PLAN
	94040	14D(z) L33					ABB Environmental Services, Inc.

		DUNDWATER SAM		TA RECORD -	
P	roject: Ktz-10N8D.CGK	LOUPII - RUDDICK		UNDICK DRY CH	EAMERS
P	roject Number: 36/2662	03659101.2		9128 12006	
		8	Time: Start	-	d: <u>0930</u>
S	ample Location ID: RCGW	114017011	Signature o	f Sampler.	
fa e		MeasuredTop of \ HistoricalTop of \ Casing	Protective (from groun	d) Ca	rotectiveFt. asing/Well Difference rotectiveFt.
Water Level/Well Data		Gal/Ft. (2 in.)	Well Dia	Ca	asing Atter Level Equip. Used: Elect. Cond. Probe Float Activated Press. Transducer Yes No
.	Height of Water Column X65	Gal/Ft. (4 in.) = Gal/Ft. (6 in.) Gal/Ft. (_ in.)	Total Gal Purged	Prot. Casing Secure Concrete Collar Intact Other	
entation	Purging/Sampling			<u>Decontamination</u> F	uids Used:
Equipment Documentation	Subme Bailer PVC/Si Teflon/S Airlift Hand P In-line I Press/V	Filter Vac Filter		(All That Apply at Location Methanol (100%) 25% Methanol/75 Deionized Water Liquinox Solution Hexane HNO ₃ /D.I. Water Potable Water None	% ASTM Type II water
sis Data	PID: Ambient Air 2 ppm W	lell Mouthppm Pt		In-line Sample Obs Turbid In Container Colored	Clear Cloudy
Field Analysis I	Purge Data Temperature, Deg. C pH, units Specific Conductivity (unitos/cm) Turbidity (NTUS) Oxidation - Reduction, +/- mv Dissolved Oxygen, pom	0.4 Gal. @	Gal. @	Gal. @Ga	al. @Gal.
s)	Analytical Parameter / If Samp Collecte		Volume Required	Sample Bottle ILot N	los.
Sample Collection Requirements	VOCs SVOCs Metais Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC Notes:	4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C 4°C H,S0,,4°C H,S0,,4°C	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P	Q697	FIGURE 4-1
erfelindesky esta geldichteris (4D 22	NYS		ATER SAMPLE D ASSURANCE PR ABB Enviro	

		GROUNDWA	TER SAMPL	E FIELD DA	TA RECORD	
P	roject: Kton85. roject Number: 36	. (· · GROUP II -	RUDDICKS	Site:	UNDICK DRY	CLEAMERS
P	roject Number: 36	12062046591	01-2	Date:	9178 120	
		, ,		Time: Star	::_0%<	End: 091
S	ample Location ID:	CGWOILD	OFT DIXX	Signature o	010	
The state of the s						
	Well DepthF		Top of Well	Well Riser	Stick-upFt.	ProtectiveFt.
		Historical	Top of Prote	ective (from groun		Casing/Well Difference
a			Casing			ProtectiveFt.
Dat						CasingFt.
=	Depth to Water F	t. Well Material:	Well Locked?	Well Dia	2 inch	Material config.
₹	-	PVC	Yes Du	Meil Dia	4 inch	Water Level Equip. Used:Elect. Cond. Probe
Ne Ve		$-$ ss v_{λ}	No No	_	6 inch	Float Activated
1 7		et. Well Material: PVC SS	Well Locked?	-		Press. Transducer
Water Level/Well Data		.16 Gal/Ft. (2 in.)	V			
Š	Height of Water Column	💢65 Gal/Ft. (4 in.)	=	_Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes No
	Ft.	1.5 Gal/Ft. (6 in.)	•	Total Gal Purged	Concrete Collar Intact	
		Gal/Ft. (in.)	, rotal Gar, algua	Other	
CONTRACTOR OF THE PARTY OF THE						
_	Puraina	/Sampling Equipment U	and.			
₽	TAIR	SAUDING Edublicht O	seu.		<u>Decontaminatio</u>	n Fluids Used:
l it	(If Used For)					•
Ē	Purging Sampling	Peristaltic Pump	Equipment ID		(✓ All That Apply at Loc	
5°		Submersible Pump			Methanol (10) 25% Methanol	0%) bl/75% ASTM Type II water
10	_/ _/	Bailer PVC/Silicon Tubing			Deionized Wa	ater
Equipment Documentation		Teflon/Silicon Tubing	****		Hexane	
l d	·	Airlift - Hand Pump	***************************************		HNO ₃ /D.I. W	
nb:		In-line Filter			None None	1
_ w	$ \mathcal{I} \mathcal{I} $	Press/Vac Filter Stainles Steel	1115	/		1
-		Screen	14191			
	PID: Ambient Aid	ppm Well Mouth /	/			Observations:
at a	TIS. MINDIOIN MIRE	A bout A A B IL WOOTE	ppm Purge	Data Collected	In-line \times Turb In Container \times Cold	
ysis Data	D D	@_^0.7		***************************************		
18/	Purge Data	@ <u> </u>	_ Gal. @	Gal. @	Gal. @	_Gal. @Gal.
	Temperature, Deg. C pH, units	e 144				
Field Ana	Specific Conductivity ((umnos/cm) 0.60	12			
Pe	Turbidity (NTUS) Oxidation - Reduction	7100				
ш	Dissolved Oxygen, pe	79				
·		<u> </u>				
	Applytical Description	4110				
6	Analytical Parameter	✓ If Sample P Collected	reservation Method	Volume Required	Sample Bottle IL	ot Nos.
ΙË	√ vocs					
ءَ ۾	SVOCs		1°C 4°C	2x40 ml 2x1 liter AG		
ulr.	Metals		-1N0,,4°C	1x1 liter P	***************************************	
Fed.	Cyanide Nitrate/Sulfate		NaOH,4℃ H,S0_,4°C	1x500mLP 1x1 liter P	A 8	ALL
E ig	Nitrate/Phosphate		H_S0_,4°C H_S0_,4°C	1x1 liter P		
d at	Pest/PCB TPH		4°C H ₂ S0, ,4°C	3x1 liter AG 2x1 liter AG		
lec	_ TOC		1,50,,4°C	1x1 liter P		
ole Collection Requiren (✓ If Required at this Location)	Comment	0 201				
9 5	Notes: SW CW	mn 18	nli'			
Sample Collection Requirements (/ If Required at this Location)	0.2. 1000	Lalida	+c			FIGURE 4.4
Sa	myc meter V	Tribici'	of some	GROUNDW	ATER SAMOI E	FIGURE 4-1 E DATA RECORD
	The sand		NYSDE	COLLALITY	ACCIDANCE !	PROGRAM PLAN
C40.40.	4D L22		10 t U L Im	CAUALITI		PHOGRAM PLAN
740411	4U L 22				. 100	· · · · · · · · · · · · · · · · · · ·

						1	Test Bo	ring	Log							
	Projec	GIONS !	١.	GROUP	1 <u>L</u>	R	LUDDICKS DRY	CLEAN	Boring/	Well N	o. So# 5	P.	roject N 3612	10. 1 10/20	46	101-2
	Client	NYSI	DEC	,	Sit	e (RUDDICK	S		S	Sheet N	0	1	of		
:	Logge	DIAV	der	Snaw			d Elevation	Star	t Date	12006	,	Finish	Date	81	2006	
	Drilling	Contracto	GE	Tologic	,		Driller's Name	m)	ummir	~1.	Rig Typ	^{ре} 6	610	DT		
	Drilling Method DIRECT PASH				Protection Level D P.I.D. (eV)				Casing Size			Auger Size		1ª		
		rilled \mathcal{V}^{ℓ}		Rock Drille			Total Depth		to Groundy	water/[Date	•	Piez	Well	Boring	
		at) x	<u></u>	, %					A CONTRACTOR OF THE PARTY OF TH			υg		nitoring		
	Depth(Feet)	e No. a ration/ ry (Fee	Sample Type	lows/6 or c./Rqd	SPT-N (Blows/Ft.)	Graphic Log		Sampl			USCS up Symbo	n Drilli		om) g		Lab Tests
	Depth	Sample No. & Penetration/ Recovery (Feet)	Sampl	SPT Blows/6" or Core Rec./Rqd. %	SP (Blow	Graph		escript			Gro	Notes on Drilling	PI Meter Field Scan	PI Meter Head Space	g	Lab
							0-08 Blu 08-1.2 DIN 12 1.4 DK	K tog	[Azpind-	F V.Dev	Fill Com		20.1			
		1.8					12 THOKO	1. re Si	It Sad El	W mi	Sesa	•				ŀ
5,	$ \nu $	4.0					1.7 1.4 Dro 1.4 -3.1 Brow CAY 1 MP 1 WI	Ash ove	yesity?	oarse So	WSM	sc.				
	3-	•					3.1-4 Brum mstiffsoff	517t, 1 wot, 10	Acomsesa. P.	dy cla	SMS				-	
**************************************	-									THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE OW	SMGA	\	20.1			
ς	5	21					of-48 Bu norst, Mar 48-8 sith Dera, du	Sano	1 igm	u -			A CONTRACTOR OF THE PARTY OF TH			
2	(-	40					Derre, dry	, Saw	L Sands to	nc.	2N			i		
•	7-	•														
- Control of the Cont	8-						8-10-4 SV	· Ity sa	a squre	4.	C 00		40.1			
S	9-	19/					10.4-10.5	since DK B	rum Cleev	n Silty	SM		1		·	
3	10_	14.0					cty, day	V Si	FFF L Silty N	A coar	e_					
1		·					to coarce some 10.8 to 12 L Silty, sat	1, NP,	n gwel	Coars	500					
	12	The state of the s					Silty, sat	insta	d wides	C	SM					
	13-				ntango.					-						
24	14-	/		Procedurate Statement Procedure	Pichich Change Spill (Thinks Thinks T							- Approximate Control of the Control		A CONTRACTOR OF THE CONTRACTOR		
·	15-		and the contract of the contra		waterbinespanies	estrates participal de la constante		, , , , , , , , , , , , , , , , , , ,					Ѓ ВОF		_OG	
:	940401	4D(z) L33				A CANADA CONTRACTOR	NYSD	EC QI	JALITY A				ROGR ental S			

		GROUNDWA	TER SAMPLE	FIELD DA	TA RECORD	
P	roject: Ktz-10N8 D. (· GROUPII -	RUDDICKS		WIDDICK DRY	
「	roject Number: 361	206 2096 59	101.1		91 28 120	
s	ample Location ID: (2 C	CMARCON	BOUND	Time: Start		End:
Anna Contraction of the Contract		60.01	1) VIIXX	Signature of	i Sampler	
æ	Well DepthFt.	Measured Historical	Top of Well Top of Protec Casing	Well Riser S tive (from ground	Stick-upFt.	ProtectiveFt. Casing/Well Difference ProtectiveFt.
Water Level/Well Data	Depth to Water Ft.	Well Material: PVC SS	Well Locked?	Well Dia	2 inch 4 inch 6 inch	Casing Water Level Equip. Used:Elect. Cond. ProbeFloat ActivatedPress. Transducer
Water	Height of Water Column	.16 Gal/Ft. (2 in.)		Gal/Vol. otal Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes No
ation		ampling Equipment Us	ed:		Decontaminatio	n Fluids Used :
Equipment Documentation	Purging Sampling	Peristaltic Pump Submersible Pump Bailer PVC/Sillicon Tubing Teflon/Silicon Tubing Airlift Hand Pump In-line Filter Press/Vac Filter	Equipment ID		All That Apply at Loc Methanol (10) 25% Methanol Deionized Wa Liquinox Solu Hexane HNO ₃ /D.l. Wa Potable Wate None	0%) bV75% ASTM Type II water ater tion ater Solution
Data	PID: Ambient Air 💋	ppm Well Mouth	ppm Purge Da		In-line Sample of Turb In ContainerColo	
Field Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (µ Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen	1- mv 9 . 9 04	_ Gal. @	Gal. @	Gal. @	_Gal. @Gal.
ıts .	Analytical Parameter		eservation Method	Volume Required	Sample Bottle IL	ot Nos.
Sample Collection Requirements (/ If Required at this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Na H	C No, 4°C aOH, 4°C So, 4°C So, 4°C C So, 4°C	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P		140
Sample Co	Purp with	frim: 14	13mm	GROUNDW	ATER SAMPLE	FIGURE 4-1 E DATA RECORD
340401	4D L 22		NYSDEC	QUALITY		PROGRAM PLAN vironmental Services

				PLE FIELD DA			
P	roject: Ktz/oN&D	.CGROUPI	I - RUDNICK		UNDICK DRY	CLEAMERS	
۱ ۲	roject Number: 36	12062046	59/01.2	Date:	9128 120	06	
_		0 -1 1	·			End: 13	6
S	ample Location ID:	CGW011	0 43011	Signature of	f Sampler		
	Well Depth	Ft. Measured Historical		Protective (from groun	Stick-upFt.	ProtectiveCasing/Well Diffe	
Water Level/Well Data	Depth to Water	Ft. Well Material:	Well Locked?	Well Dia.	2 inch 4 inch	Protective Casing Water Level EquiElect. Cond.	p. Used:
ater Leve		SS	Well Locked?	Gal/Vol.	6 inch	Float Activat	ed sducer
*	Height of Water Column	X65 Gal/Ft. (1.5 Gal/Ft. (Gal/Ft. (4 in.) = 5 in.)	Total Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other		No
tation	Purgin (✔ If Used For)	g/Sampling Equipme	nt Used :		Decontaminatio	n Fluids Used:	
Equipment Documentation	Purging Samplin	Peristaltic Pump Submersible Pur Bailer PVC/Sillicon Tub Teflon/Silicon Tu	np		Deionized Wa	0%) bV75% ASTM Type ater	il water .
Equipme		Airlitt Hand Pump In-line Filter Press/Vac Filter Stainles St		= = T.V	Hexane HNO ₃ /D.I. Wate Potable Wate None		
ata	PID: Ambient Air 🕼			rrge Data Collected	Sample (In-line Turb In Container Colo	Observations: idClear ored Odor	Cloudy
ysis Data	Purge Data	e^/.	2 Gal @		Gal. @		
-	T	10	1 la	Gai. @	Gai. @	_Gal. @	Gal.
Field Ana	pH, units	mel =	<u> </u>			***************************************	
P	Specific Conductivity Turbidity (NTUS)	(µmhos/cm) Q	777				
E	Oxidation - Reduction	n, +/- mv			-		
	Dissolved Oxygen,	501L -3	·5				
		J				Account the state of the Account of the State of the Stat	
nts .	Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.	
ш (√ VOCs SVOCs		4°C 4°C	2x40 ml			
ation at	Metals		HN0,,4°C	2x1 liter AG 1x1 liter P			
nba Foca	Cyanide Nitrate/Sulfate	All the section because the second	NaOH,4°C H ₂ S0 ₄ ,4°C	1x500mLP 1x1 liter P		1120	
± is	Nitrate/Phosphate	The state of the s	H ₂ S0, 4°C	1x1 liter P	()	112	
tion dat	Pest/PCB TPH		4°C H ₂ S0 ₄ ,4°C	3x1 liter AG 2x1 liter AG			
llec quire	_ TOC	-	H ₂ S0 ₄ ,4°C	1x1 liter P			
Sample Collection Requirements (*/ If Required at this Location)	Notes: Seven	frm 12	4-22		,		
Samp	page with	v: Coord	TIT Bum	∩ GROUNDW	ATER SAMPLE	FIGUR	E 4-1
	ų v		NYSI	DEC QUALITY	ASSURANCE F	PROGRAM	PLAN
340401	4D 1 22					vironmental S	

				Test Boring Log						
i e	C. GROUP	1-	R	DDICKS DRYCLEAMER GS/3	10. Sof E) P.	roject N 3612	0620	360	9/
Client NYSDI	EC	Site	R	-WDDICKS !	Sheet N	0		of		
Logged By	lan Shawl	·		Elevation Start Date 128 1200	,	Finish	Date	81	2006	
Drilling Contractor	SEOLOGIC	,	D	riller's Name Ulm (mmM)	Rig Typ	e 6	610	A CONTRACTOR OF CONTRACTOR		
Drilling Method b	PET Dh	CH.	Р		Casing			Auger	Size	2,10
Soil Drilled, 7	Rock Drille		T	otal Depth / Depth to Groundwater/	Date		Piez	Well	Boring	_
				70' ~7.9'			∐ Mo	nitoring	<u>v</u>	
o. & lon/ Feet)	ype 's/6" 8qd. %	-f.	Log		loqu	Notes on Drilling	 	om)		٠
Depth(Feet) Sample No. & Penetration/ Recovery (Feet)	Sample Type SPT Blows/6" or or	SPT-N (Blows/Ft.)	3raphic Log	Sample Description	USCS Group Symbol	on D	an .	асе		ob Tocto
Sarr Per Per Reco	Sample Type SPT Blows/6" or Core Rec./Rqd.) E	Ü		Grot	Notes	PI Meter Field Scan	PI Meter Head Space		
-				D-1.3 DKBun 5.14 YM Cause	411		区 详 20:1	교포		
	,			Sandy loomy roots, grass 1.3-15 Sindstone, cobbes	(Notice and the second		Changes			
27				1.3-15 Sandstone, Cobbies 1.5 h 2 Drage/olive Siltycay	CL					
4.0				ul come converse send wet, up	SM GN					
3-				2-3:7 onangish Brown Sily Sand & grand whigh, Fill like Story 3-7-4 Librangh angre Sily Cray ny	3.6	1.100				
14-1				4-7.2 Some as 2-3.7,	The Me	E, HP	1	eme eme		
5-1,9				Tenser of Snunstone colbles	GM SM		20.1		`	
				7.2-7.9 Tan mist Viduse Sit fine sway sit; trace cobbies	-					
4.6				7.9-8 Saturated orangeish Burn S.I.Y fore to course such						
				Loose	CL					
8	}			8-11 L& Brum N Some orange	GM.		Lo.1			
9-15				grand & Sanefines & Scha	16.					
14				grand of Sanefines & Sings Subvated, in Derse 11 to 12 crean in warse sand ul trace rounted groves, in De	-					
				Jul trace rounded gerrel, in the	٦.					
				Jan 1 of 1 1000 pines	SM					
							A COLUMN TO SERVICE SE			
13-1	- Alexandrian	A CONTRACTOR OF THE PARTY OF TH				-	- Andrews Control	in the second second		-
14/	No.				A STATE OF THE PERSON NAMED IN COLUMN NAMED IN					Charles of the Control of the Contro
15-		ACT CORCIMINATORY		TYI	PICAL	TES	B)	GURE RING I		MANAGEMENT OF THE PERSON NAMED IN
		A CONTRACTOR CONTRACTO		NYSDEC QUALITY ASSU						Particular Control
9404014D(z) L33				######################################	3B Envi	ironm	ental S	ervice	s, Inc.	£

	1	GROUNDWA	TER SAMPLI			
P	roject: KtzJON8D.	(·GROUPII-	RUDDICKS	Site:	UDDICK DRY	CLEAMORS
1	roject Number: 361	206204659	101.1	Date:	9/28/20	06
				Time: Star	t: 1222	End: 1240
S	ample Location ID:	GW01600	POIXX	Signature o	of Sampler	
	Well DepthFt.	Measured Historical	Top of Well Top of Protect		Stick-upFt.	ProtectiveFt. Casing/Well Difference
		And the state of t	Casing	wa (nom groun	107	
ata						ProtectiveFt.
	Depth to WaterFt.	547-11 9 4 - 1 - 1 - 1				
¥ĕ	Debut to 448 ter Lt.	Well Material:	Yes O	Well Dia	2 inch 4 inch	Water Level Equip. Used:Elect. Cond. Probe
Ve		-ss ord	No. Y	<i>-</i>	6 inch	Float Activated
l e		(20)	Note !	_		Press. Transducer
Water Level/Well Data		.16 Gal/Ft. (2 in.)	Well Locked? Year No	0-101-1	***	Managaria de Carlos de Car
≥	Height of Water Column	.65 Gal/Ft. (4 in.)		Gai/Vol.	Well Integrity: Prot. Casing Secure	Yes No
	Ft.	1.5 Gal/Ft. (6 in.) Gal/Ft. (in.)	L	otal Gal Purged	Concrete Collar Intact Other	
				•	Other	
<u> </u>	Purging/S	Sampling Equipment Us	ed:		Decontaminatio	n Fluids Used:
Itat	(If Used For)					
ner	Purging Sampling	.	Equipment ID		(✓ All That Apply at Lo	cation)
5	<u> </u>	Peristaltic Pump Submersible Pump			Methanol (10	0%) bV75% ASTM Type II water
å	-/-/	Bailer PVC/Silicon Tubing			∠ Deionized Wa	ater
Equipment Documentation		Teflon/Silicon Tubing			Liquinox Solu Hexane	ition
l d	· .	Airlift Hand Pump			HNO ₃ /D.I. W	
l ig		In-line Filter			None	
"	ot ot	Press/Vac Filter Stainles Stell Screen	Age 11			
***************************************		Screen	1411-			
	PID: Ambient Ai	ppm Well Mouth	ppm Purge D	ata Collected	Sample (In-line Turb	Observations: oidClear Cloudy
ysis-Data				1	In ContainerCold	oredOdor
<u>3</u>	Purge Data	e <u>^</u>	Gal. @	Gal. @	Gal. @	Gal. @ Gal.
	Temperature, Deg. C	17.3				a.
Fleld Ana	pH, units	ms/	_			
DE DE	Specific Conductivity (µ Turbidity (NTUS)	entros/cm) () · Y /)		-1=		
Ĕ	Oxidation - Reduction, - Dissolved Oxygen, per	+/- mv				
•	The state of the s	72		\rightarrow		
Fortis programming	Analytical Description	4 // 0				
8	Analytical Parameter		servation fethod	Volume Required	Sample Bottle IL	ot Nos.
ent	√ VOCs				T-0.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000 - 1.000	
em,	SVOCs	4°	C .	2x40 ml 2x1 liter AG		
uin	Metals Cyanide		10,,4°C 10H,4°C	1x1 liter P		
Red s Lo	Nitrate/Sulfate	H.	^	1x500mLP 1x1 liter P		1131
it thi	Nitrate/PhosphatePest/PCB	4°	C T	1x1 liter P 3x1 liter AG		
red &	TPH	Н_	S0_,4°C	2x1 liter AG		
ole Collection Requiren			S0_,4°C	1x1 liter P		
e C	Notes: graen int	m2/: 10 h8	,			
Sample Collection Requirements	orn well					50. 5
Sar	profe with	ζ		CDVIIIIDA	ATEN CARENT	FIGURE 4-1
	/ /		NVCDE	SUNDAN	ACCUIDANCE	DATA RECORD
			NIOUEL	- GUALIIY	ASSUKANCE	PROGRAM PLAN
****	4D L 22					vironmental Services-

	GROUNDWATER SAMPL	E FIELD DATA RECORD
P	roject: Ktolon 8 D.C. Glouf II - RUDDICKS roject Number: 361206204659101.2	
「	roject Number: 301266 2016 59/01.2	Date: <u>09 25 12606</u> Time: Start: 209 End: 1221
s	ample Location ID: RCGWolf 01901XX	Time: Start: 1209 End: 1221 Signature of Sampler
	THE SECOND IS NOT THE PARTY OF	Signature of Samplers
	Well Depth Ft. Measured Top of Well Historical Top of Prote Casing	ective (from ground) Casing/Well Difference
Well Data	Depth to WaterFt. Well Material: Well Locked?	ProtectiveFt. Casing Well Dia2 inch Water Level Equip. Used:
Water Level/Well Data	Depth to WaterFt. Well Material: Well Locked?: PVCSSNoNo	4 inchElect. Cond. Probe6 inchFloat ActivatedPress. Transducer
Wat	Height of Water Column X65 Gal/Ft. (4 in.) =	Gal/Vol. Well Integrity: Yes No Prot. Casing Secure Concrete Collar Intact Other
ation	Purging/Sampling Equipment Used:	Decontamination Fluids Used:
Equipment Documentation	Purging Sampling Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Teflon/Silicon Tubing Airlift Hand Pump In-line Filter Press/Vac Filter	(All That Apply at Location) Methanol (100%)25% Methanol/75% ASTM Type II waterLiquinox SolutionHexaneHNO_3/D.I. Water SolutionPotable WaterNone
ata	Sixien Anil(SII)	Sample Observations: Data Collected
nalysis Data	Temperature, Deg. C	Gal. @Gal. @Gal.
Fleld Anal	Specific Conductivity (###hos/cm) Turbidity (NTUS) Oxidation - Reduction, +/- mv Dissolved Oxygen pert	
	Dissurved Oxygen with	
\$	Analytical Parameter / If Sample Preservation Collected Method	Volume Sample Bottle ILot Nos. Required
men)	VOCs 4°C	2x40 ml
Jire	Metals HN0, 4°C	2x1 liter AG 1x1 liter P
leqt ₃ Loc	Cyanide NaOH,4°C Nitrate/Sulfate H,50,4°C Nitrate/Phosphate H,250,4°C	1x500mLP 1x1 liter P
on F	Nitrate/Phosphate H,S0,,4°C Pest/PCB 4°C	1x1 liter P 3x1 liter AG
ertic	TPH H S0, 4°C TOC H,S0, 4°C	2x1 liter AG
ole Collection Requiren	S. 5 Tage (174/h) 18	1x1 liter P
Sample Collection Requirements ((If Required at this Location)	Notes: Meen Intoles 10	
San	purple neters of Brain clans of	GROUNDWATER SAMPLE DATA RECORD
	- Stight Hydricubn NYSDE	C QUALITY ASSURANCE PROGRAM PLAN ABB Environmental Services
440401	4D L 22	ADD LIMITURING DELVICES

Project REGION 8 D.C. GROWP II ~ RNDDICKS DRICLEANER GS/3SON 3612 06 2 06 2 06 2 06 2 06 2 06 2 06 2 0	
Logged By Drilling Contractor GEOLOGIC Site RUDDICKS Sheet No	1
Drilling Contractor GEOLOGIC Driller's Name Rig Type 6610	
Drilling Contractor GEOLOGIC Driller's Name Jam (nmm) Rig Type 6610	12006
Drilling Method	
Drilling Method DIRECT PASH Protection Level D P.I.D. (eV) Casing Size	er Size
Soil Drilled Rock Drilled Total Depth Depth to Groundwater/Date Piez Wei	I Boring
Monitori	
(mdd) mbol complex c	
Sample No. & Penetration/ ecovery (Feet) Sample Type SPT Blows/6* SPT Blows/6* Or or or or or Bec./Rqd. SPT-N (Blows/Ft.) Graphic Log USCS Group Symbol otes on Drillin otes on Drillin otes or or or or or or or or or or or or or	o o o
Sample No. & Penetration/ Recovery (Feet) Sample Type Sample Type SPT Blows/6" or Core Rec./Rqd. % SPT-N (Blows/Ft.) Graphic Log USCS Group Symbol Notes on Drilling PI Meter Field Scan	.
= Dr ~2' DK Brun 5.14 Lam M Dust 60.1	
2-2' DK Brum 5.1 ty bom M Dust dung: 2'-25' orangish 3 runn gilly sand w Fill Fire clay, wet, HP/mp 3'-4' tan Sandy clay, HP, wet, 5MS	
2- Sine chy wet HPIMP	
1)	
4 Dushed a Cobbole; in Sure. Cisc	
4- ~7.5 Lt Brown Silty Sund Co.1	
5 July Squel, trace cobbles, Derse 7 mg	
dry, NP 7.5.8 Saturated 5/H Sand :	
7- grvv, losk, Sping.	
9 me, lost, Sping. 4 pished cobbit again, v. Soft distrig	
[,] · · · · · · · · · · · · · · · · ·	
12	
[3-]	
FIGUE	1 A-6
TYPICAL TEST BORING	LOG
NYSDEC QUALITY ASSURANCE PROGRAM ABB Environmental Service	- 1

		GROUNDW,	ATER SAMPLE	- The second second second second second second second second second second second second second second second			
P	roject: Ktolon 8 b. roject Number: 36	C. GROUPII.	- RUDDICKS		UNDICKDEN O		
	roject Number	2062046 S	- Toir		9/20120	/) /	7/5
s	ample Location ID: 2	Canal To	AGILL XX	Time: Star Signature o		End: 13L	10
- Water or the same			DIMOTTAN	Signature	i Sampler.		
	Well DepthF	Historical	Top of WellTop of Protec Casing	tive (from groun	,	Protective Casing/Well Diff	erence
Water Level/Well Data	Depth to Water F	t. Well Material; PVC	Well Locked?	Well Dia.	2 inch	ProtectiveCasing Water Level EquiElect. Cond.	p. Used:
ater Leve		.16 Gal/Ft. (2 in.	DING &	-	6 inch	Float Activa	ted
×	Height of Water Column Ft.	X65 GaVFt. (4 in. 1.5 GaVFt. (6 in. GaVFt. (in) =	Gal/Vol. otal Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes	No
ation		Sampling Equipment (Jsed:		<u>Decontaminatio</u>	n Fluids Used:	
Equipment Documentation	Purging Sampling	Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Teflon/Silicon Tubing Airlift Hand Pump In-line Filter Press/Vac Filter Staines			(All That Apply at Loc Methanol (10) 25% Methano Peionized Wa Liquinox Solu Hexane HNO ₃ /D.I. Wate None	0%) bV75% ASTM Type ater tion ater Solution	il water
Data	PID: Ambient Ai	ppm Well Mouth	ppm Purge D	ata Collected	Sample of In-lineTurb In ContainerColo		Cloudy
Field Analysis Data	Purge Data Temperature, Deg. C pH, units Specific Conductivity (Turbidity (NTUS) Oxidation - Reduction, Dissolved Oxygen,	+/- mv		Gal. @	Gal. @	_Gal. @	Gal.
ts .	Analytical Parameter	✓ If Sample F Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.	
Sample Collection Requirements (* Il Required at this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC		4°C HN0, ,4°C NaOH,4°C H, S0, ,4°C H, S0, ,4°C 4°C H, S0, ,4°C	2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P		(334	
Sample Co (🗸 II Rec	Notes: SWell	10/18 Buwn -	Clearing of (GROUNDW CQUALITY	ATER SAMPLE ASSURANCE F	PROGRAM	CORD PLAN
340401	4D 1 22	A Property of the second secon		*****************************	ABB En	vironmental S	ervices

			TER SAMPLE		TA RECORD	4.7	
P	roject: Ktzjon8D.	C GROUPII -	RUDDICKS	Site: R	uddick dry	CLEAMERS	
P	roject Number: 36	1206204650	1/01.2		9/28/12	ral	
		ZX	-	Time: Star	:: 1318	End: 1331	<i></i>
	amala Lasatia - ID-IDI	all to the	Walan Way			Eno: 1331	<u> </u>
5	ample Location ID:	16 M 0 1 10	190111	Signature o	f Sampler		<u> </u>
Printer Continues							
1	Well DepthF		Top of Well	Well Riser	Stick-upFt.	Protective	Ft.
		Historical	Top of Protec	ctive (from groun	1d)	Casing/Well Differ	
l ca			Casing			Desta of	
)at						Protective	Ft.
						Castrig	
\ Ve	Depth to WaterF	t. Well Material:	Well Locked?	Well Dia	2 inch	Water Level Equip.	Used:
\		PVC SS	No.	5	4 inch 6 inch	Elect. Cond. P	
l Š			NOX \	-	oinun	Float Activated	
1	•	30	Myon	-	***************************************	i ress. mansu	uce
Water Level/Well Data		16 Cal/Ft (D:n)	Well Locked?				
N X	Height of Water Column	.16 Gal/Ft. (2 in.) X65 Gal/Ft. (4 in.)	Г	Gal/Vol.	Well Integrity: Prot. Casing Secure	Yes	No
Ì	Ft.	1.5 Gal/Ft. (6 in.)			Concrete Collar Intact		
l		Gal/Ft. (in.)) - T	otal Gal Purged	Other		*************
		ALTONIA GOLINIA					
1							NEW POWERS NO. 12 STORY INC.
=	Purging	Sampling Equipment U	sed:		Decontamination	n Fluide Head	
Equipment Documentation					Decomanimation	il Fibius Oseu:	
#	(If Used For)						
۱ê	Purging Sampling		Equipment ID		(All That Apply at Lo	cation)	
8	<u> </u>	Peristaltic Pump Submersible Pump			Methanol (10	0%)	
8	=/	Bailer		-	Deionized Wa	ol/75% ASTM Type i	water
E	_V _V	PVC/Silicon Tubing			Liquinox Solu		
92		Teflon/Silicon Tubing Airlift			Hexane		
<u>ā</u>		- Hand Pump			HNO ₃ /D.I. W Potable Wate	ater Solution	
l b	-	In-line Filter			None	•	
ш	otag	Press/Vac Filter	1. 116/1/				
	<u> </u>	Stainles steel	MillStor				
1	/0		/		Sample	Observations:	
æ	PID: Ambient Air O	ppm Well Mouth	ppm Purge D	ata Collected	dn-line <u>✓</u> Turt		Cloudy
lysis Data				V	In ContainerCold	ored Odor	
S	Purge Data	~ 0.2	Gal @	Cal @	Gal. @	0-1-0	
ys		1-10		_Gai. @	ua, @	_Gal. @	_Gal.
la	Temperature, Deg. C pH, units			<u> </u>			
Ā	Specific Conductivity (MS/	\$\frac{1}{2}		(V		
Field Ana	Turbidity (NTUS)	Smill.					
Ē	Oxidation - Reduction,	+/- mv			$\sum \mathcal{I}$		
	Dissolved Oxygen, p	"MV - 21	· · · · · · · · · · · · · · · · · · ·				
	Analytical Parameter	✓ If Sample Pr	reservation	Volume			TO THE STREET WORLD STREET, WHITE COLUMN
6	/	Collected	Method	Required	Sample Bottle IL	ot Nos.	
E '	Luca						
Ë	✓ VOCs SVOCs		!°C !°C	2x40 ml	-		
io io	Metals			2x1 liter AG 1x1 liter P		·) \ / ~ -	
금	Cyanide		NaOH.4°C	1x500mLP	$-\sqrt{\lambda}$	1330	****
Re	Nitrate/Sulfate Nitrate/Phosphate		1,S0, ,4°C	1x1 liter P	1	1	
E ±	Pest/PCB			1x1 liter P 3x1 liter AG			
110 14 a	TPH		1.00	2x1 liter AG	+		
Uire	_ TOC	-		1x1 liter P			
Req	(1 1 101	ı				
ole Collection Requiren	Notes: SVLCM	1 W to 18					=
و ج	A	-			•		
Sample Collection Requirements (/ If Required at this Location)	nwa whiti	W. V. Tunh:	TA T			FIGURE	E 4-1
S	1 12 D.	1 Chand Day	-	GROUNDW	ATER SAMPLE	E DATA REC	ORD
	M Sills Il	d) mol Bumin	NYSDEC	QUALITY	ASSURANCE I	PROGRAMA	IAM
040404	4D L22	Jr warm. Man	A Can ba			vironmental Ser	
					البيا حيوماء	· · · · · · · · · · · · · · · · · · ·	* ICC3

						Test Boring	<u>a delegara 1876 des Aurola como ser antico</u>						
Proje	Grong	0.6	GROUP	L	R	ADDICAS DRYCLEA	Boring/Well	No. Sole) P.	roject N 3612	10. 10/20	56	0
Clien						LUDDICKS	1	Sheet N		1	of		
	ed By	nda	Snaw	Gro	und	Elevation Star	t Date 1/25 /200	6	Finish	Date	5/	2006	
Drillir	g Contract	or OÉ	ToLoGIC		D	riller's Name	wirs	Rig Typ	V	610	DT		
Drillir	g Method	DIR	ECT DW	sH	P	rotection Level	P.I.D. (eV)	Casing	Size	, ,	Auger	Size	
	Orilled 12		Rock Drille		\ T		to Groundwater	/Date			Well	Boring	1
			%			10 10/12	5 (2006) 9.5			Mo	nitoring		
eet)	No. & tion/ (Feet	Туре	ws/6" Rqd.	N /Ft.)	Log	Samp	le ·	S ymbol	Drillin	(bt	om)		
Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd.	SPT-N (Blows/Ft.)	Graphic Log	Descrip		USCS Group Symbol	Notes on Drilling	ter	ter Space		
	Sa P Rec	Š	SF		9			Gr	Not	PI Meter Field Scan	PI Meter Head Space		
						0-1 DF Brown silt	1 loan of growl	11-11					
1	2.6			-		1-3.4 Olive Brown so 1-05e, some leases of	ly fine Soud & gr	N		10.1			
2-	4.0	,				3.4-3.7 olive Brown	out confort grow	a Cu		CHRISTIAN CO.			
3-						unst, SP, m. self, 3.7-4 Same as 1-	34.	+		L inner			
4_		-						SMG		1-1			
5-	, ,					4-6.5 clayer gre Sand, PG fine to co 6.5-75 ower Clayer	iarse, met, mp	GC 58°		Ko.			
Ĺ _						16.5-7.5 owe Clay.	sy gradel, moist						-
7_	14.0					7.5-8 cobble-so in sleeve.		6C		National Control of the Control of t			
						I'v Zharar.		M		***************************************			
0						8-99 Bons 5,74	Y Sand & grove	- 17		40.1			
4-	1.8					4. Dense, winst, 1 9.9 - 12 LA Brenz Sgravel, Saturates	S. Ity Sand	16~		-			
10-	4.0					Squarel, Saturation	l, lose	- N				-	
						TOS: My Note	in Smoller	600					-
12						TIEST NO VEN		THE RESIDENCE SHOWING THE PARTY.		1			
13-		de la companya de la	-		Managed Street	ST CONTAINED		1					-
14	1/		Harrison II more page 188								prostation of the second	Brangazzieri (Yranougou	Continue
15	1/		Newspapers and the second			R4 professional profession (Control of Control of Contr	TY	PICAL	TES	9	GURE		William Control of the Control of th
10	No. of Contract of					NYSDEC Q	UALITY ASS	URANC	E PI	ROGR	AM P	LAN	ACCUSION STREET, SALES
the same of the sa	14D(z) L33			_A			Δ	BB Envi	ironm	ental S	ervice	s, inc.	, &

		GKOUND	WATERCOMM		TA RECORD	Ta .
P	Project: Ktz/oN&D Project Number: 36	. C. GROUPI	I - RUDDICK	<u> </u>	UNDICK DRY	CLEAMERS
P	Project Number: 36	12062046	59/01-2	Date:	9126 120	
			•	Time: Star	t: <u>0806</u>	End: 0 120
S	Sample Location ID:	CGWOIS	011101)	Signature of	of Sampler	
	Well Depth		, op 0, .	Well Riser	Stick-up Ft.	ProtectiveFt.
		Historical	Top of I		nd)	Casing/Well Difference
ata						ProtectiveFt.
						Casing
Wel	Depth to Water	Ft. Well Material: PVC	Well Locked?	Well Dia.	2 inch	Water Level Equip. Used:
≤		SS	No.	frs	4 inch 6 inch	Elect. Cond. Probe Float Activated
Le	4	- (Ze)	NO NO	,		Press. Transducer
Water Level/Well Data			Well Locked? Yes No Vision Pinn Pinn Pinn Pinn Pinn Pinn Pinn P			
Wat	Height of Water Colump	.16 Gal/Ft. (2 X65 Gal/Ft. (4	2 in.) Γ	Gal/Vol.	Well Integrity:	Yes No
	Ft.	1.5 GaVFt. (6	s in.)		Prot. Casing Secure Concrete Collar Intact	Printed Printe
	<i></i>	GaVFt. (_	_in.)	Total Gal Purged	Other	
_	Durain	«Complian Faulana				
Equipment Documentation	Polymo	g/Sampling Equipme	nt Osea:		Decontaminatio	n Fluids Used:
ınta	(If Used For)					
Ĕ	Purging Sampling	9 Peristaltic Pump	Equipment	ID	(✓ All That Apply at Loc Methanol (10)	
100	=/-	Submersible Pun Bailer	np		25% Methano	V75% ASTM Type II water
1 =	\exists \exists	PVC/Silicon Tubi			Deionized Wa	iter
ner	· · · · · · · · · · · · · · · · · · ·	Teflon/Silicon Tu Airlift	bing		Hexane	
直		Hand Pump			HNO ₃ /D.I. Water Potable Water	
Equ		In-line Filter Press/Vac Filter			None	
•	$ \mathcal{I} \mathcal{I} $	Stainlesse	U MITSI	<u> </u>		
AN ARCHITECTURE CONTRACTOR CONTRA		Syren				
æ	PID: Ambient Air	ppm Well Mouth	ppm Pu	rge Data Collected	_In-line ∨ Turb	Observations: idClearCloudy
ysls Data					In ContainerColo	
8	Purge Data	@	Gal. @	Gal. @	Gal. @	Gal. @ Gal.
	Temperature, Deg. C	oorjalast seed	1			
A P	pH, units					
Field Anal	Specific Conductivity Turbidity (NTUS)		\	her and the second		-
E	Oxidation - Reduction Dissolved Oxygen, p	ı, +/- mv				
	Dissolved Oxygen, p	XII	<u> </u>			
i	Sand and the sand of the sand					Charles and the specific for the state of the state of the specific for the state of the state o
ACTURACION NAMES						The state of the s
Federal Sections	Analytical Parameter	✓ If Sample	Preservation	Volume	Sample Bottle IL	ot Nos.
at c		✓ If Sample Collected	Method	Volume Required	Sample Bottle IL	ot Nos.
ments	VOCs		Method 4°C	Required 2x40 ml	Sample Bottle IL	ot Nos.
Jirements ation)	VOCs SVOCs Metals		Method	Required	Sample Bottle IL	or Nos.
equirements Location)	VOCs SVOCs		Method 4°C 4°C HN0 ₃ ,4°C NaOH 4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP	Sample Bottle IL	ot Nos.
n Requirements this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate		Method 4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P	Sample Bottle IL	ot Nos.
tion Requirements d at this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH		Method 4°C 4°C HN0,,4°C NaOH,4°C H S0,,4°C H 2S0,4°C 4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG	Sample Bottle IL	ot Nos.
llection Requirements quired at this Location)	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB		Method 4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P	Sample Bottle IL	ot Nos.
Collection Requirements Required at this Location)	VOCs SYOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Collected	Method 4°C 4°C HN0, 4°C NaOH, 4°C H S0, 4°C H ² S0, 4°C 4°C H, S0, 4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG	Sample Bottle IL	or Nos.
ble Collection Requirements	VOCs SVOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH		Method 4°C 4°C HN0, 4°C NaOH, 4°C H S0, 4°C H ² S0, 4°C 4°C H, S0, 4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG	Sample Bottle IL	ot Nos.
ample Collection Requirements ((I Required at this Location)	VOCs SYOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Collected	Method 4°C 4°C HN0, 4°C NaOH, 4°C H S0, 4°C H ² S0, 4°C 4°C H, S0, 4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG	Sample Bottle IL	Time Cost
Sample Collection Requirements (* If Required at this Location)	VOCs SYOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Collected	Method 4°C 4°C HN0, 4°C NaOH, 4°C H S0, 4°C H ² S0, 4°C 4°C H, S0, 4°C	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P	Simple	FIGURE 4-1
Sample Collection Requirements (I Required at this Location)	VOCs SYOCs Metals Cyanide Nitrate/Sulfate Nitrate/Phosphate Pest/PCB TPH TOC	Collected	Method 4°C 4°C HN0,,4°C NaOH,4°C H,S0,,4°C H,S0,,4°C H,S0,,4°C M,S0,,4°C CMW	Required 2x40 ml 2x1 liter AG 1x1 liter P 1x500mLP 1x1 liter P 1x1 liter P 3x1 liter AG 2x1 liter AG 1x1 liter P	TATER SAMPLE	Time Cost

		GROUND	WATER SAM	PLE FIELD DA	ATA RECORD		
P	roject: Ktz-10N8D	. C. GROUP I	I - RUDDICK	<u> </u>	UNDICK DRY	CLEAMERS	
P	roject Number: 36	12062046	54 101.5		09/26/26		
			U .	Time: Sta	rt: <u>67</u> 35	End: 0805	
S	ample Location ID:	CGW018	0210/X	Signature	of Sample		
Jacobson and St.		·					
	Well Depth	FtMeasured Historical	Top of \	Well Riser	Stick-up Ft.	Protective	
		Historical	lop of l	Protective (from grou	nd)	Casing/Well Diffe	rence
ata						Protective	Ft.
						Casing	
Ve	Depth to Water	Ft. Well Material:	Well Locked?	Well Dia.		Water Level Equip	. Used:
l ≤		PVC	NOI	\$\sqrt{\sq}}}}}}}}}}}}}} \end{\sqrt{\sq}}}}}}}}}}}}}}}} \end{\sqititendet\sintitend{\sq}\sqrt{\sqrt{\sq}}}}}}}}}}} \end{\sqititend{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	4 inch 6 inch	Elect. Cond. Float Activate	
e e		•	Well Locked?	1	oma	Press. Trans	
Water Level/Well Data		3	Well Locked?				
Nat	Uniobt of Water Column	.16 Gal/Ft. (2	! in.)	Gal/Vol.	Well Integrity:	Yes	No
	Height of Water Column Ft.	65 GaVFt. (4 1.5 GaVFt. (6			Prot. Casing Secure Concrete Collar Intact	-	
		GaVFt. (Total Gal Purged	Other		
STORESCO CON							
_							
Equipment Documentation	Purgino	g/Sampling Equipme	nt Used :		Decontamination	n Fluids Used:	
ıta	(✓ If Used For)						
Je L	Purging Sampling		Equipment	ID	(All That Apply at Lo	cation)	
เก	<u> </u>	Peristaltic Pump Submersible Pun	<u> </u>		Methanol (10	0%) ´	
å	=/ 7	Bailer		· ·	Deionized Wa	ol/75% ASTM Type ater	II water
l ti	<u> </u>	PVC/Silicon Tubi Teflon/Silicon Tul	ng	-	Liquinox Solu Hexane	tion	
Ě		Airlitt			Hexane HNO ₃ /D.I. W.	ater Solution	·
T	-	Hand Pump In-line Filter	-		Potable Wate None	r	
ш		Press/Vac Filter	- 13 - 13 - 1		14016		
	<u> </u>	Stainles ste Screen	W11/2	to L	***************************************	,	
	PID: Ambient Air	\			Sample	Observations:	
E E	PID. Ambient Air	ppm Well Mouth	ppm Pu	rge Data Collected	√In-line ✓ Turb In Container ✓ Cold	id Clear	Cloudy
ysis Data							***************************************
/sls	Purge Data	@ /	Gal. @	Gal. @	Gal. @	_Gal. @	Gal.
	Temperature, Deg. C						
A	Specific Conductivity	(µmhos/cm)	_ _				
Fleld Ana	Turbidity (NTUS) Oxidation - Reduction	. ,					
ш	Dissolved Oxygen, pp	i, +/- mv 	/				
	Analytical Parameter	() (Cample	.				
Ø	/	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.	
ent.	VOCs	$\overline{}$	490				***************************************
and Co	SVOCs		4°C 4°C	2x40 ml 2x1 liter AG	Suple 10	ne pos	00
uin atio	Metals Cyanide		HN0,,4°C	1x1 liter P		- %-	
led Lo	Nitrate/Sulfate	-	NaOH,4°C H ₂ S0 ₄ ,4°C	1x500mLP 1x1 liter P			
F Fi	Nitrate/Phosphate Pest/PCB		H ₂ S0 ₄ ,4°C	1x1 liter P			
to by	TPH		4°C H ₂ S0 ₄ ,4°C	3x1 liter AG 2x1 liter AG			
llec quire	TOC	Married Marriage Marriage	H ₂ S0 ₄ ,4°C	1x1 liter P			
Sample Collection Requirements (/ If Required at this Location)	No 4-10	o'i pavamote					
9 2	Notes: 190 V	Calledad			•		1
am	- vot vot	COLVETCO!				FIGUR	E 4-1
Ś				GROUNDW	ATER SAMPLE	DATA REC	ORD
			NYSI		ASSURANCE F		
-	4D L 22					vironmental Se	

									Test Boring Log							
F	Rejec	GIONS !	20	.GR	gua	11_	R	<u>Lu</u>	DDICKS DRYCLEAMER GS	II No.	09	, P.	roject N 3612	0620	465	14/0
	Client	NYS	DEC	;		Sit			uddicks	She	et No	o	1	of		
1	ogge	DIAV	Na	2 SI	naud				Start Date	006		Finish	Date	81	2006	
Ī	Orilling	Contract	or Gi	Tol	0611	·		Dr	iller's Name Im Cumins	Rig	Тур	e b	610	M		***************************************
1	Orilling	g Method .	DIG.	1571	Dh	.cu	1	Pr	otection Level D P.I.D. (eV)		sing		1/2	Auger	Size 7	2 "
-	Soil D		~/ 1		Drille		1	To	tal Depth , (Depth to Groundwat					Well	Boring	7
F		Water and the second se			<i>_</i>				10/27				Mo	L nitoring		
	eet)	Sample No. & Penetration/ Recovery (Feet)	lype	"3/sv	or Core Rec./Rqd. %	7. T.	00	- Log	Comple		loqu	Notes on Drilling	(þþ	om)		sts
	Depth(Feet)	Sample No. 8 Penetration/ ecovery (Fee	Sample Type	SPT Blows/6"	or Rec./F	SPT-N (Bldws/Ft.)	Graphic Log	ا ا	Sample Description	USCS	Group Symbol	s on [r Xan	r pace		Lab Tests
	۵	Sar Pe Reco	Sa	SP	Core	(E	් ලි	5			Gro	Note	Pl Meter Field Scan	PI Meter Head Space		7
-	· -	THE PROPERTY OF THE PARTY OF TH		-				\dashv	0-0.8 Blackfop				<u>a. u.</u> 20. 1	<u>L</u> I		
	1-	19		ļ					0.8, 1.4 Brans 1 H Fill	۱ - ا	711					
-		110							0-0.8 Blackfop 0.8-1.4 Brown S.It/ Fill 1.4-4 DK olives Itychy web, w pres of brock	+						
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									4-8 All fill; bricks	,			La.			
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1	4-									-			and Advantage of the Control of the			
ods.	<u> </u> 0									-						
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	16				entre discontinuin spoke its	Afgerserature.	Company of the Compan		NYSDEC QUALITY AS:				ROGR ental S			
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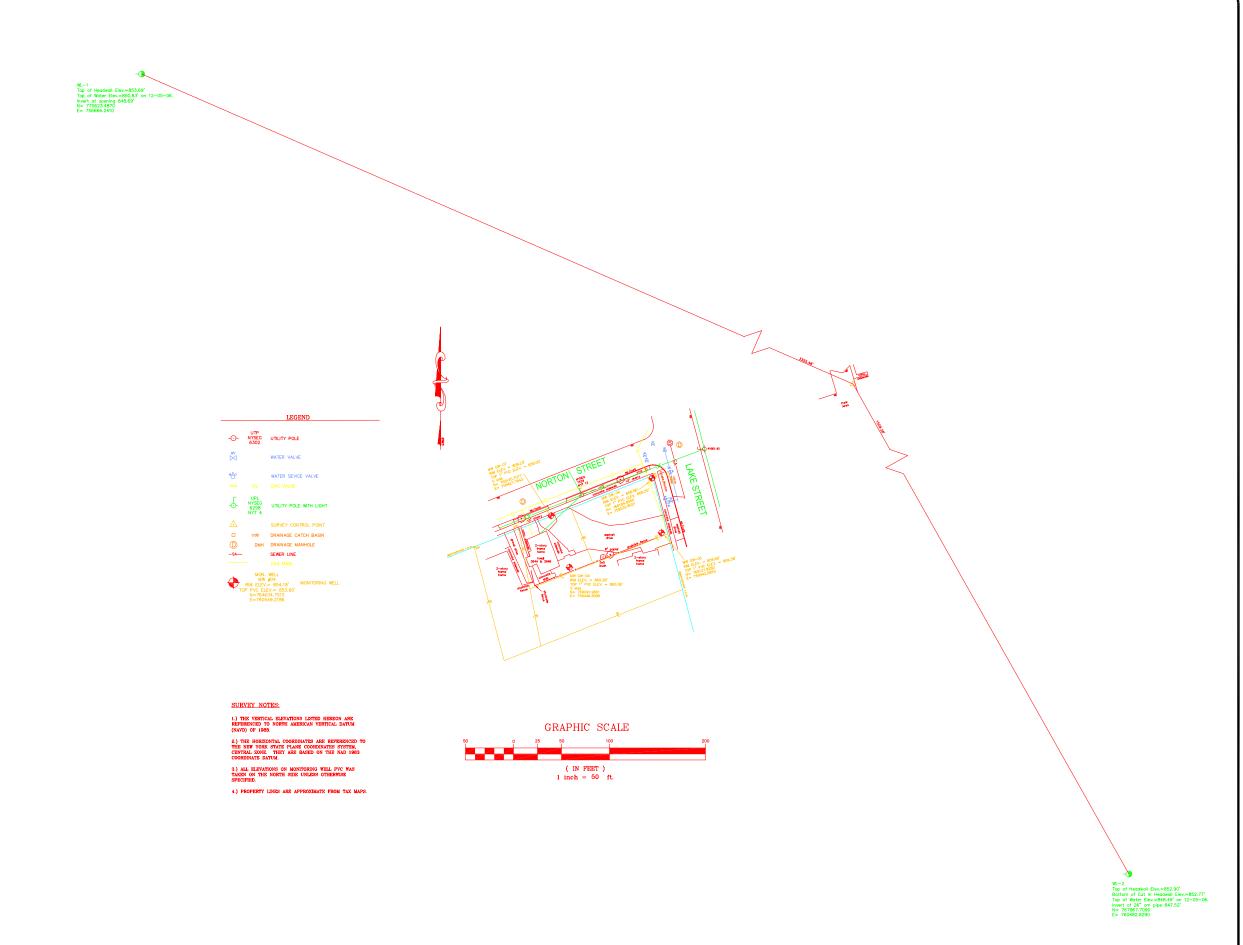
		GROUNDWA	TER SAMPLE	RIELD DA	TA RECORD	
P	roject: Ktz-10N&D.	C. GROUPII -	RUDDICKS	Site:	UDDICK DRY	CLEAMORS
P	roject Number: 36	2062046	101.2	Date:o	9/28,120	
		3		Time: Start	: 1442	End: 1456
S	ample Location ID: (2)	16W0/90	09 gil	Signature o	f Sampler	
	Well DepthF	Measured Historical	Top of WellTop of Protecti	Well Riser Sive (from groun	Stick-upFt.	Protective Ft. Casing/Well Difference
ell Data	Depth to Water Fr	. Well Material:	Well I acked?	Well Dia	2 inch	ProtectiveFt. Casing Water Level Equip. Used:
Water Level/Well Data		PVC SS OV	Well Locked?) -	4 inch 6 inch	Elect. Cond. Probe Float Activated Press. Transducer
Wat	Height of Water Column	.16 GaVFt. (2 in.) X65 GaVFt. (4 in.) 1.5 GaVFt. (6 in.) GaVFt. (in.	= [G	al/Vol. Ital Gal Purged	Well Integrity: Prot. Casing Secure Concrete Collar Intact Other	Yes No
tation	Purging/	Sampling Equipment U	sed:		Decontamination	n Fluids Used :
Equipment Documentation	Purging Sampling	Peristaltic Pump Submersible Pump Bailer PVC/Silicon Tubing Teflon/Silicon Tubing Airlitt	Equipment ID		(All That Apply at Loc Methanol (100 25% Methano Deionized Wa Liquinox Solu Hexane HNO ₃ /D.I. Wa	0%) ' V75% ASTM Type II water tter tion
Equip		Hand Pump In-line Filter Press/Vac Filter Stainics Stati Screen			Potable Water None	
sis Data	PID: Ambient Air	ppm Well Mouth	ppm Purge Da	ita Collected	Sample (In ContainerColo	
<u>></u>	Purge Data Temperature, Deg. C	@ ~ V.5 	Gal. @	Gal. @	Gal. @	_Gal. @Gal.
Field Anal	pH, units Specific Conductivity (Turbidity (NTUS)	1 (20)				
II.	Oxidation - Reduction, Dissolved Oxygen, ppr	n'a() 3.5/		5		
nts	Analytical Parameter	✓ If Sample P. Collected	reservation Method	Volume Required	Sample Bottle ILo	ot Nos.
emel	✓ VOCs SVOCs			x40 ml x1 liter AG	Manufacture	
uin	Metals Cyanide		1N0,,4°C 1	x1 liter P x500mLP		
Red is Lo	Nitrate/Sulfate Nitrate/Phosphate		1,50,4°C 1	x1 liter P		1431
on at th	Pest/PCB		\$°C 3	x1 liter P x1 liter AG		
ered ired	TPH TOC	<u> </u>		x1 liter AG		
ole Collection Requirer (* If Required at this Location)			1,200,4,40 1	x1 liter P		
	Notes: Weeh	· 10-408	<u> </u>		•	
Sample Collection Requirements	proje neter	DKBur	-9 Clear	ROHNDW	ATED CARADI C	FIGURE 4-1
	1 "	•	NYSDEC	QUALITY	ATER SAMPLE ASSURANCE F	DATA RECORD PROGRAM PLAN
940401	4D L22					vironmental Services

	GROUNDW.	ATER SAMPL	DEFIDED DA	TA RECORD	
P	roject: Ktown & D.C GROUP II -	- RUDDICKS	Site: R	undick dry	CLEAMERS
P	roject Number: 36120620465	9/01.2		9/28/20	06
	5 _	•	Time: Start		End: 144)
S	ample Location ID: RCGW0190	190122	Signature of	Sampler	
PROPERTY OF THE PARTY OF THE PA					
	Well DepthFtMeasured	Top of Well	Well Riser S	Stick-upFt.	ProtectiveFt.
	Historical	Top of Prote	ective (from groun		Casing/Well Difference
E		Casing			ProtectiveFt.
Da					Casing
le.	Depth to WaterFt. Well Material:	Well Locked?:-	Well Dia	2 inch	Water Level Equip. Used:
S	PVC SS	NA Year D	/S* =	4 ITIGN	Elect. Cond. Probe
e Ve		No.	_	6 inch	Float Activated Press. Transducer
	St. A	Well Locked?	-		- Transcade
Water Level/Well Data	.16 Gal/Ft. (2 in		Gal/Vol.	Well Integrity:	Yes No
\$	Height of Water Column X65 Gal/Ft. (4 in.	.) =		Prot. Casing Secure	
	Ft1.5 GaVFt. (6 in GaVFt. (ir		Total Gal Purged	Concrete Collar Intact Other	
		, ,			
5	Purging/Sampling Equipment	Used:		Decontaminatio	n Fluids Used:
Equipment Documentation	(✔ If Used For)				
le l	Purging Sampling	Equipment ID	,	All That Apply at Lo	ootion)
Ä	Peristaltic Pump		`	Methanol (10	0%)
õ	Submersible Pump Bailer			25% Methano Deionized Wa	ol/75% ASTM Type II water
E	PVC/Silicon Tubing			Liquinox Solu	
E E	Teflor/Silicon Tubing			Hexane HNO ₃ /D.I. W	ater Solution
름	Hand Pump			Potable Wate	
ᇤ	Press/Vac Filter			None	
	T Stainles Stell				
				Sdranio	Observations:
æ	PID: Ambient Air O. ppm Well Mouth /	ppm Purge	Data Collected	In-line \ Turb	old Clear Cloudy
ysis Data				In ContainerCold	ored Odor
818	Purge Data @	Gal. @	Gal. @	Gal. @	_Gal. @Gal.
	Temperature, Deg. C				
An	pH, units Specific Conductivity (μmhos/cm)		$\overline{\chi} =$	7	
Field Anal	Turbidity (NTUS)	= (5		5	
ш	Oxidation - Reduction, +/- mv Dissolved Oxygen, ppm	<u>~~</u>			
Besterning accordance	Analytical Parameter				
m	Analytical Parameter ✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle IL	ot Nos.
ent:	VOCs	The state of the s			
9m	SVOCs	4°C 4°C	2x40 ml 2x1 liter AG	***	
uir atio	Metals Cyanide	HN0,,4°C	1x1 liter P		
leq.	Nitrate/Sulfate	NaOH,4°C H ₂ S0 ₄ ,4°C	1x500mLP 1x1 liter P	() 	440
H H	Nitrate/Phosphate Pest/PCB	H ₂ S0 ₂ ,4°C	1x1 liter P		
Ho dat	TPH	4°C H ₂ S0 ₄ ,4°C	3x1 liter AG 2x1 liter AG		
llec quire	_ TOC	H₂So,,4°C	1x1 liter P		
ole Collection Requirem	Sixpen 170 by	\checkmark			
<u>8</u> 2	Notes: DOY COVID 1	_0_		•	
Sample Collection Requirements	and meters of things	- - - · · ·			FIGURE 4-1
Ś	harry harry	Trandy	GROUNDW	ATER SAMPLE	DATA RECORD
	" M heary Sit.	NYSDE	C QUALITY	ASSURANCE F	PROGRAM PLAN
340401	4D 22				vironmental Services

FIELD DATA RECORD - LOW FLOW	GROUNDWATER S.	AMPLING	MS					
PROJECT Region 8 Group 2 Dry Cleaners	SAMPLE I.D. NUMBER	RCMW065023	OZXX SAMPLE TIME 1218					
EXPLORATION ID: MW - 05	SITE	RUDDICKS.	DATE 05/1607					
TIME START 109 END 138	JOB NUMBER	361206205910	FILE TYPE MSDEC					
	JREMENT POINT OP OF WELL RISER	PROTECTIVE	DDOTE OTIVE					
TC	P OF PROTECTIVE CASING	PROTECTIVE CASING STICKUP (FROM GROUND)	PROTECTIVE CASING / WELL DIFFERENCE O 12 FT					
TO WATER TO WELL	DEPTH 7 1	PID PID	WELL					
FINAL DEPTH TO WATER TO WATER FT SCREE		AMBIENT AIR PP	M DIAMETER 2 IN * String 1 cs; steet WELL YES NO N/A					
DRAWDOWN LENGT	reculent onk	MOUTH PP						
		PRESSURE TO PUMP P	SI COLLAR X					
TOTAL VOL. PURGED Z.G GAL		REFILL TIMER SECOND	DISCHARGE SECONDS					
(purge rate (milliliters per minute) x time duration (minute		SETTING	SETTING XCV F OCK					
PURGE DATA DEPTH TO PURGE TEMP.	SPECIFIC DH	DISS. 02 TURBIDITY REDOX	INTAKE					
PUMP ON (deg. c)	(ms/cm) (units)	(mg/L) (ntu) (mv)	DEPTH (ft) COMMENTS PUMP ON					
1122 NA 225 11.2	0.227 8.2	108 510 110						
1132 123	0.207 8.3.	88 180 100						
137 225 11-1	10,201 84	85 130 100						
172 225 11.8	0.205 8.4	85 110 100						
1151 225 11.1	0,202 8.4	8.4 70 100						
1131 225 11.	0.202 8.4	84 60 100						
1202 225 11:2	0.202 8.4	8.5 60 90						
1210 Sanole tameramin	-65	84 50 90	Shall time					
1213 Prvery off			700,000					
1227 Finished @ Well								
	1							
	<u> </u>							
EQUIPMENT DOCUMENTATION								
TYPE OF TUBIN	NG TYF	PE OF PUMP MATERIAL	TYPE OF BLADDER MATERIAL					
MARSCHALK BLADDER X SILASTIC SIMCO BLADDER X HIGH DEN	SITY POLYETHYLENE	POLYVINYL CHLORIDE	TEFLON OTHER NONE					
GEOPUMP OTHER_		OTHER NOVE	OHILIN					
ANALYTICAL PARAMETERS To Be Collected	ETHOD PF	RESERVATION VOLUME	SAMPLE					
X NOS MSO CONCORD HERE NI	<u>JMBER</u> 60B	METHOD REQUIRED HCL / 4 DEG. C 3 X 40 mL	COLLECTED X VOC					
PEST/PCBs CLI		4 DEG. C 2 X 1 L AG 4 DEG. C 2 X 1 L AG	SVOC PEST / PCBs					
TAL INORGANICS CLI	<u> </u>	HNO3 to pH <2 1 x 1 L P	TAL INORGANICS					
	Jay 0 1	LOCATION SKETCH	(tree long					
PURGE WATER NUMBER OF G CONTAINERIZED YES NO GENERATED	allons 24	1 18011 Office	The line 15 x Tis. mw-65					
NOTES * WILLNEST & bent;	10 DTW &		15/7/2					
All Equipment used either dedicated or deconned prior to AWV-65								
arrival on site. No rinseate/ field blank required		1 00 W	1 / 122					
65/		PI M	MACTEC					
SIGNATURE:	The second of th	IIINI	WACIEC					

APPENDIX C

SITE SURVEY



REVISIONS

DRAWING ALTERATION

WARNING: It is a violation of the New York State Education
Law, Article 145, Section 7209, Special Provision 2, for any
person unless he is acting under the direction of
Licensed Professional Engineer or Land Surveyor to
alter an item in any way. If an item bearing the seal
of an engineer or land surveyor is altered, the altering
engineer or land surveyor shall affix to the item his seal
and notation "attered by" followed by his signature and
date of such alteration, and a specific description of
the alteration.



JOSEPH C. LU ENGINEERING AND LAND SURVEYING, P.C. 2230 Penfield Road Penfield, New York 14526 (585) 377-1450 FAX: (585) 377-1266

FORMER RUDDICKS ELMIRA, NY

MACTEC ENGINEERING, INC. 511 CONGRESS STREET PORTLAND, ME 04101

Environmental MAP

ESIGNED BY: SCALE: 1" = 5 RAWN BY: AE) SHEET DRAWING No. 1 of 1 S-1

APPENDIX D

DATA USABILITY SUMMARY REPORT

DATA VALIDATION REPORT

Volatile & Semi-volatile Analyses

SDG No. X4586

Sampling Date: September 27 & 29, 2006

Submitted to:

MACTEC, Inc., 511 Congress Street Portland, ME 04112 207-775-5401

Submitted by:

EDV, Inc., 1326 Orangewood Avenue Pittsburgh, PA 15216 412-341-5281

December 26, 2006

Site: Ruddick Cleaners/NYSDEC

Client: MACTEC, Inc.

Analytical Laboratory: Chemtech

284 Sheffield Street Mountainside, NJ 07092

Sample Delivery Group (SDG): X4586

Sampling Date: September 27 & 29, 2006

Analyses: Volatile

Analytical Method: CLP OLM 4.3 and USEPA TO-15

Summary of Data Validation:

The adherence of laboratory analytical performance to CLP and USEPA TO-15 Analytical Specifications were evaluated during the data validation process. The USEPA Region II's data validation SOP Checklists (SOP HW-18 Rev 0, August 1994, SOP, HW-15 Rev 2, May 1993) and the National Functional Guidelines for Organic Data Review (October 1999), were used as guidelines for data qualifications.

Volatile: 1,1,1-Trichloroethane in some samples was qualified as a non-detect due to method blank contamination. Some compounds were qualified as estimated due to calibration issues. One acetone sample result was qualified as estimated due to calibration range exceedance.

Semi-volatile: Benzaldehyde, 2,4-dinitrophenol and bis (2-ethyl hexyl) phthalate were qualified as estimated due to calibration issues. Some other compounds were qualified as estimated due to internal standard area issues.

The sample qualifiers applied by the data validator are in section 15.0 and Attachment A- Form 1s. The detailed discussions can be found in the report.

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- A Validated and Qualified Data Sheets (Form 1s)
- B Case Narrative and Chain of Custody

1.0 Sample Identifications

The following table summarizes sample IDENTIFICATIONS, matrix of each sample and analyses present in the data package for each sample.

Client Sample ID	Matrix	Volatile	TO-15	Semi- volatile						
SDG X4586										
RCGW00901701XX	WATER	Х	-	Х						
RCGW00902701XX	WATER	Х	-	-						
RCGW00903701XX	WATER	Х	-	-						
RCGW01001701XX	WATER	Х	-	-						
RCGW01002701XX	WATER	Х	-	-						
RCGV00101001XX	AIR	-	Х	-						
RCGV00101001XD	AIR	-	Х	-						
RCGV00201001XX	AIR	-	Х	-						
RCGV00301001XX	AIR	-	х	-						
RCTB004XXX01XX	WATER	Х	-	-						
RCGW00103501XX	WATER	Х	-	-						
RCGW00201301XX	WATER	Х	-	-						
RCGW00201301XD	WATER	Х	-	-						
RCGW00202301XX	WATER	Х	-	-						
RCGW00401301XX	WATER	Х	-	-						
RCGW00402301XX	WATER	Х	-	-						
RCTB002XXX01XX	WATER	Х	-	-						
QC sample ID	Matrix									
LCS	WATER	Х	Х	Х						
LCSD	WATER	Х	Х	_						

2.0 **Completeness Checklist**

The following table identifies the summary form information and raw data found in the data package. Form numbers shown in parentheses refer to the current U.S. EPA CLP SOW equivalent reporting of results in an alternate summary format that has been determined to be acceptable. Analyses in this data package were performed in accordance with USEPA CLP and TO-15 Methods.

	Completeness Checklist
X	Case Narrative
X	Chain of Custody Records/Traffic Reports/Tracking Records
X	Preservation Information
X	Sample Cross Reference with Unique Identifiers
X	Sample Results Summary Form (Form 1/Form 1-TIC)
X	CLP Flagging used on Results Summary
X	SMC/Surrogate Results Summary (Form 2)
NR	Matrix Spike/Matrix Spike Duplicate Results Summary (Form 3)
X	Laboratory Control Sample (LCS)/ Blank Spike Results Summary (Form 3)
NR	Control Charts
X	Method/Preparation Blank Results Summary (Form 4)
X	Volatile Initial Calibration Summary (Forms 6)
X	Volatile Continuing Calibration Summary (Form 7)
X	Volatile Analytical Sequence (Form 8)
X	Internal Standard Area Summary (Form X11)
X	Raw Data (incl. IS, Surr/SMC, RT, quant. Reports, etc.)
X	Samples
X	Initial Calibration
NR	Clean-ups
X	Continuing Calibration
NR	Instrument Blanks
X	Preparation Blanks/Method Blanks
О	Other Blanks
X	LCS/Blank Spike
X	Matrix Spikes/Matrix Spike Duplicates
NR	Matrix Duplicates/Replicates
0	Field Blanks – Trip Blank
X	Field Duplicates
X	Extraction Log Benchsheets
X	Instrument Run Logs
X	Sample Descriptions
X	Legible Pages
X	Pages in Package Numbered and in Sequence
X	Electronic Data Deliverable (EDD)

X: Included in original Data Package

NR: Not Required

RS: Provided as a Resubmission

O: Not Included and/or Not Available

X/RS: Incomplete in original data package, completed as a resubmission

3.0 Detection Limits

All Contract Required Detection Limits (CRDLs) were met.

4.0 Holding Time

Holding times were acceptable.

4.1 Sample Preservation

Samples were appropriately preserved.

4.2 Percent Moisture

Percent moisture is not applicable.

4.3 Chain of Custody Record

Chain of Custody Record was present.

5.0 Calibration Quality Control

5.1 Initial Calibration

Air samples-Methylene chloride-35.34% recovery exceeded the 30 %RSD criterion. All results were qualified as estimated due to this anomaly.

SVOA: For ICAL done on instrument BNAA, the following compound exceed the 30% relative percent difference criterion.

Compound	%RSD-10/08/06
Benzaldehyde	30.8
2,4-dinitrophenol	37.0
Bis-2-ethyl hexyl phthalate	32.4

Detected results for these compounds in affected samples were qualified "J" to indicate the results are estimated and non-detected results were qualified "UJ" to indicate the results are estimated due to this anomaly.

5.2 Continuing Calibration (CCAL)

For water samples the following %D criteria were exceeded;

Compound	%D-10/04/06	%D-10/05/06
Dichlorodifluoromethane	37.4	-
Bromomethane	32.3	-
Chloroethane	31.9	-
Trichlorofluoromethane	28.5	40.3
1,1-Dichloroethene	29.6	-
1,2-Dichloroethane	-	29.4
Bromoform	-	31.0
1,2-Dibromo-3-chloropropane	-	46.6

6.0 Blanks Quality Control

VOA: Method blank reported 1,1,1-trichloroethane contamination. All affected detected acetone results were qualified as non-detects due to this anomaly.

SVOA: Method blank reported bis (2-ethyl hexyl) phthalate contamination at 10µg/L. This resulted in associated detected results for this compound being qualified as a non-detect at CRDL.

7.0 Surrogate Recoveries

Recoveries are acceptable.

8.0 Accuracy

8.1 Laboratory Control Samples (LCS)/Blank Spikes

LCS recoveries were acceptable.

8.2 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

8.2.1 Frequency

No MS/MSDs were analyzed.

8.2.2 Recovery

Recoveries are no applicable.

9.0 Precision

9.1 Matrix Spike Duplicates

The results were acceptable.

9.2 Matrix Duplicate

RPDs were acceptable.

10.0 Field QC

10.1 Field Blanks/Rinse Blanks

There were no field blanks associated with this SDG.

10.2 Trip Blanks

Trip blanks reported some contamination but there were no affected sample results thus no qualification was necessary.

10.3 Field Duplicate

Sample RCGW00201301XD was presented as a field duplicate. The original sample is identified as RCGW00201301XX. RPD for tetrachloroethene exceed the QC criterion. However, the compound was qualified by the laboratory as estimated "J" and therefore required no further qualification. Sample RCGV00101001XD was presented as a field duplicate. The original sample is identified as RCGV00101001XX. RPDs are calculated when both original and duplicate report detects. RPDs were acceptable.

11.0 Internal Standards (IS)

11.1 IS Area Counts

SVOA: IS area counts for perylene d-12 was below the required QC limits. All affected samples were qualified as non-detects.

11.2 Retention Time (RT)

All RTs were within the method accepted criteria.

12.0 Target Compound Identification

All target compounds identification is acceptable.

12.1 Tentatively Identified Compounds (TICs)

TICs were acceptable.

13.0 Calculations and Transcription

Raw data were accurately transcribed to summary data sheets.

14.0 Additional Comments

Acetone in sample RCGV00201001XX was qualified as estimated "J" due to calibration range exceedance. The sample was reanalyzed at 20X dilution in which acetone was reported as a non-detect. Based on professional judgment and technical information the validator determined that the compound was present in the sample, but an accurate concentration was not attainable at 2X dilution, thus an estimated concentration.

5

15.0 Data Qualifier Table

Volatile

Sample Identification	Compound	Qualifier	Section Reference
RCGW00201301XD,	Dichlorodifluoromethane,	UJ	5.2
RCGW00202301XX,	bromomethane, chloroethane,		
RCGW00401301XX,	trichlorofluoromethane, 1,1-		
RCGW00402301XX	dichloroethene		
RCTB002XXX01XX	Trichlorofluoromethane, 1,2-	UJ	5.2
	dichloroethane, bromoform, 1,2-		
	dibromo-3-chloropropane		
RCGV00101001XX	Methylene chloride	J	5.2
RCGV00101001XD,			
RCGV00301001XX			
RCGV00101001XX,	1,1,1-Trichloroethane	U	6.0
RCGV00301001XX			
RCGV00201001XX	Acetone	J	14.0

Semi-volatile

Sample Identification	Compound	Qualifier	Section Reference
RCGW00901701XX,	Benzaldehyde, 2,4-dinitrophenol, bis (2-ethyl hexyl) phthalate	UJ	5.1
	Benzo (b) fluoranthene, benzo (k) fluoranthene, benzo (a) pyrene, indeno (1,2,3-cd) pyrene, dibenz (a,h) anthracene, benzo (g,h,i) perylene	UJ	11.1

DATA VALIDATION REPORT

Volatile & Semi-volatile Analyses

SDG No. X4707

Sampling Date: September 26-27, 2006

Submitted to:

MACTEC, Inc., 511 Congress Street Portland, ME 04112 207-775-5401

Submitted by:

EDV, Inc., 1326 Orangewood Avenue Pittsburgh, PA 15216 412-341-5281

December 18, 2006

Site: Ruddick Dry Cleaners/NYSDEC

Client: MACTEC, Inc.

Analytical Laboratory: Chemtech

Sample Delivery Group (SDG): X4707

284 Sheffield Street Mountainside, NJ 07092

Sampling Date: September 26-27, 2006

Analyses: Volatile & semi-volatile

Analytical Method: CLP OLM 4.3

Summary of Data Validation:

The adherence of laboratory analytical performance to CLP Specifications was evaluated during the data validation process. The USEPA Region II's data validation SOP Checklists (HW-15 Rev 2, May 1993) and the National Functional Guidelines for Organic Data Review (October 1999), were used as guidelines for data qualifications.

Volatile: Acetone was qualified as a non-detect in sample RCGS00500201XX due to method blank contamination. Methyl acetate, trichlorofluoromethane, acetone and 2-butanone results in some samples were qualified as estimated due to calibration issues.

Semi-volatile: Di-n-butyl phthalate was qualified as a non-detect due to method blank contamination. Benzaldehyde, 2,4-dinitrophenol and bis (2-ethyl hexyl) phthalate were qualified as estimated due to calibration issues.

The sample qualifiers applied by the data validator are in section 15.0 and Attachment A- Form 1s. The detailed discussions can be found in the report.

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- B Case Narrative and Chain of Custody

1.0 Sample Identifications
The following table summarizes sample IDENTIFICATIONS, matrix of each sample and analyses present in the data package for each sample.

Client Sample ID	Matrix	Volatile	Semi-
			volatile
SI	OG X4707		
RCGW00501301XX	WATER	Х	_
RCGW00502301XX	WATER	Х	_
RCGW00602301XX	WATER	X	_
RCGW00601301XX	WATER	X	_
RCGW00702301XX	WATER	X	_
RCGW00701301XX	WATER	Х	-
RCGW01301101XX	WATER	Х	-
RCGW01302101XX	WATER	Х	-
RCGS00500201XX	SOIL	X	_
RCTB001XXX01XX	WATER	X	_
RCGS00100901XX	SOIL	Х	_
RCGS00200801XX	SOIL	Х	-
RCGS00400401XX	SOIL	Х	-
RCGS00400401XD	SOIL	Х	_
RCGW00101701XX	WATER	Х	X
RCGW00102701XX	WATER	Х	-
QC sample ID	Matrix		
RCGW00501301XX MS	WATER	Х	_
RCGW00501301XX MSD	WATER	Х	_
RCGS00100901XXMS	SOIL	Х	
RCGS00100901XXMSD	SOIL	Х	_

^{*}reanalysis, ** dilution

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2.0 Completeness Checklist

The following table identifies the summary form information and raw data found in the data package. Form numbers shown in parentheses refer to the current U.S. EPA CLP SOW equivalent reporting of results in an alternate summary format that has been determined to be acceptable. Analyses in this data package were performed in accordance with USEPA CLP Method.

Completeness Checklist

	Completeness Checklist
X	Case Narrative
X	Chain of Custody Records/Traffic Reports/Tracking Records
X	Preservation Information
X	Sample Cross Reference with Unique Identifiers
X	Sample Results Summary Form (Form 1/Form 1-TIC)
X	CLP Flagging used on Results Summary
X	SMC/Surrogate Results Summary (Form 2)
NR	Matrix Spike/Matrix Spike Duplicate Results Summary (Form 3)
X	Laboratory Control Sample (LCS)/ Blank Spike Results Summary (Form 3)
NR	Control Charts
X	Method/Preparation Blank Results Summary (Form 4)
X	Volatile Initial Calibration Summary (Forms 6)
X	Volatile Continuing Calibration Summary (Form 7)
X	Volatile Analytical Sequence (Form 8)
X	Internal Standard Area Summary (Form X11)
X	Raw Data (incl. IS, Surr/SMC, RT, quant. Reports, etc.)
X	Samples
X	Initial Calibration
NR	Clean-ups
X	Continuing Calibration
NR	Instrument Blanks
X	Preparation Blanks/Method Blanks
0	Other Blanks
X	LCS/Blank Spike
X	Matrix Spikes/Matrix Spike Duplicates
NR	Matrix Duplicates/Replicates
0	Field Blanks - Trip Blank
X	Field Duplicates
X	Extraction Log Benchsheets
X	Instrument Run Logs
X	Sample Descriptions
X	Legible Pages
X	Pages in Package Numbered and in Sequence
X	Electronic Data Deliverable (EDD)

X: Included in original Data Package

NR: Not Required RS: Provided as a Resubmission

O: Not Included and/or Not Available X/RS: Incomplete in original data package, completed as a resubmission

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3.0 Detection Limits

All Contract Required Detection Limits (CRDLs) were met.

4.0 Holding Time

Holding times were acceptable.

4.1 Sample Preservation

Samples were appropriately preserved.

4.2 Percent Moisture

Percent moisture results are acceptable.

4.3 Chain of Custody Record

Chain of Custody Record was present.

5.0 Calibration Quality Control

5.1 Initial Calibration

SVOA: For ICAL done on instrument BNAA, the following compound exceed the 30% relative percent difference criterion.

Compound	% RSD-10/08/06
Benzaldehyde	30.8
2,4-dinitrophenol	37.0
Bis (2-ethyl hexyl) phthalate	32.4

Detected results for these compounds in affected samples were qualified "J" to indicate the results are estimated and non-detected results were qualified "UJ" to indicate the results are estimated due to this anomaly.

5.2 Continuing Calibration (CCAL)

VOA: The following compounds exceeded the 25% CCAL criterion:

Compound	%D 9/30/06	%D-10/03/06
Methyl acetate	28.4	-
Trichlorofluromethane	-	26.1
Acetone	-	30.4
2-butanone	-	27.4

6.0 Blanks Quality Control

VOA: Method blank VBLK04 reported acetone and 2-butanone contamination at 17 and 7 μ g/L respectively. Method blank VBLK03 reported acetone contamination at 11 μ g/L. All associated detected results for these compounds were qualified as non-detects.

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SVOA: Method blank reported bis (2-ethyl hexyl) phthalate and di-n-butyl phthalate contamination at $10\mu g/L$ and $1.5\mu g/L$ respectively. This resulted in associated detected results for this compound being qualified as a non-detect at CRDL.

7.0 Surrogate Recoveries

Recoveries were acceptable.

8.0 Accuracy

8.1 Laboratory Control Samples (LCS)/Blank Spikes

LCS recoveries were acceptable.

8.2 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

8.2.1 Frequency

Frequency was met.

8.2.2 Recovery

Recoveries are acceptable.

9.0 Precision

9.1 Matrix Spike Duplicates

The results were acceptable.

9.2 Matrix Duplicate

RPDs were acceptable.

10.0 Field QC

10.1 Field Blanks/Rinse Blanks

No field blanks were reported with this SDG.

10.2 Trip Blanks

Trip blank reported no contamination.

10.3 Field Duplicate

Sample RCGS00400401XD was presented as a field duplicate. The original sample is identified as RCGS00400401XX. RPDs are calculated when both original and duplicate report detects. RPDs were acceptable.

11.0 Internal Standards (IS)

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11.1 IS Area Counts

IS area counts were within QC limit.

11.2 Retention Time (RT)

All RTs were within the method accepted criteria.

12.0 Target Compound Identification

All target compounds identification is acceptable.

12.1 Tentatively Identified Compounds (TICs)

SVOA: One TICs was rejected because it is a volatile target compounds and therefore cannot be reported as SVOA TICs.

13.0 Calculations and Transcription

Raw data were accurately transcribed to summary data sheets.

14.0 Additional Comments

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15.0 Data Qualifier Table

Volatile

Sample Identification	Compound	Qualifier	Section Reference
RCGW00501301XX, RCGW00502301XX,	Methyl acetate	UJ	5.2
RCGW00602301XX RCGW00601301XX,			
RCGW00702301XX,			
RCGW00701301XX, RCGS00500201XX	Acetone	U	6.0
RCGS00100901XX, RCGS00200801XX,	Trichlorofluoromethane, acetone, 2-butanone	UJ	5.2
RCGS00400401XX, RCGS00400401XD			

Semi-volatile

Sample Identification	Compound	Qualifier	Section Reference
RCGW00101701XX	Benzaldehyde, 2,4-dinitrophenol, bis (2-ethyl hexyl) phthalate	UJ	5.1
	Di-n-butyl phthalate	U	6.0

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DATA VALIDATION REPORT

Volatile & Semi-volatile Analyses

SDG No. X4752 Sampling Date: September 28, 2006

Submitted to:

MACTEC, Inc., 511 Congress Street Portland, ME 04112 207-775-5401

Submitted by:

EDV, Inc., 1326 Orangewood Avenue Pittsburgh, PA 15216 412-341-5281

December 18, 2006

Site: Ruddick Dry Cleaners/NYSDEC

Client: MACTEC, Inc.

Analytical Laboratory: Chemtech

284 Sheffield Street

Mountainside, NJ 07092

Sample Delivery Group (SDG): X4752

Sampling Date: September 28, 2006

Analyses: Volatile & semi-volatile

Analytical Method: CLP OLM 4.3

Summary of Data Validation:

The adherence of laboratory analytical performance to CLP Analytical Specifications was evaluated during the data validation process. The USEPA Region II's data validation SOP Checklists (HW-15 Rev 2, May 1993) and the National Functional Guidelines for Organic Data Review (October 1999), were used as guidelines for data qualifications.

Volatile: Several compounds were qualified as estimated due to calibration issues.

Semi-volatile: Several compounds were qualified as estimated due to calibration and or internal standard issues.

The sample qualifiers applied by the data validator are in section 15.0 and Attachment A- Form 1s. The detailed discussions can be found in the report.

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- B Case Narrative and Chain of Custody

1.0 Sample Identifications
The following table summarizes sample IDENTIFICATIONS, matrix of each sample and analyses present in the data package for each sample.

Client Sample ID	Matrix	Volatile	Semi- volatile
Cr	C V 4752		voiatile
SL	G X4752		
RCGS00300701XX	SOIL	Х	_
RCGW00301301XX	WATER	Х	_
RCGW00302301XX	WATER	Х	-
RCGW00801301XX	WATER	Х	-
RCGW00802301XX	WATER	Х	-
RCGW01101501XX	WATER	Х	_
RCGW01102501XX	WATER	х	_
RCGW01201301XX	WATER	х	_
RCGW01202301XX	WATER	Х	_
RCGW01401701XX	WATER	Х	_
RCGW01402701XX	WATER	Х	_
RCGW01501301XX	WATER	Х	х
RCGW01502301XX	WATER	Х	_
RCGW01600901XX	WATER	х	-
RCGW01601901XX	WATER	Х	_
RCGW01700901XX	WATER	Х	_
RCGW01701901XX	WATER	Х	_
RCGW01900901XX	WATER	Х	-
RCGW01901XX	WATER	Х	_
RCGW01501301XD	WATER	Х	х
RCTB003XXX01XX	WATER	Х	_
QC sample ID	Matrix		
RCGW01501301XX MS	WATER	Х	_
RCGW01501301XX MSD	WATER	Х	_

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2.0 Completeness Checklist

The following table identifies the summary form information and raw data found in the data package. Form numbers shown in parentheses refer to the current U.S. EPA CLP SOW equivalent reporting of results in an alternate summary format that has been determined to be acceptable. Analyses in this data package were performed in accordance with USEPA CLP Method.

Completeness Checklist

	Completeness Checknist
X	Case Narrative
X	Chain of Custody Records/Traffic Reports/Tracking Records
X	Preservation Information
X	Sample Cross Reference with Unique Identifiers
X	Sample Results Summary Form (Form 1/Form 1-TIC)
X	CLP Flagging used on Results Summary
X	SMC/Surrogate Results Summary (Form 2)
NR	Matrix Spike/Matrix Spike Duplicate Results Summary (Form 3)
X	Laboratory Control Sample (LCS)/ Blank Spike Results Summary (Form 3)
NR	Control Charts
X	Method/Preparation Blank Results Summary (Form 4)
X	Volatile Initial Calibration Summary (Forms 6)
X	Volatile Continuing Calibration Summary (Form 7)
X	Volatile Analytical Sequence (Form 8)
X	Internal Standard Area Summary (Form X11)
X	Raw Data (incl. IS, Surr/SMC, RT, quant. Reports, etc.)
X	Samples
X	Initial Calibration
NR	Clean-ups
X	Continuing Calibration
NR	Instrument Blanks
X	Preparation Blanks/Method Blanks
0	Other Blanks
X	LCS/Blank Spike
X	Matrix Spikes/Matrix Spike Duplicates
NR	Matrix Duplicates/Replicates
0	Field Blanks – Trip Blank
X	Field Duplicates
X	Extraction Log Benchsheets
X	Instrument Run Logs
X	Sample Descriptions
X	Legible Pages
X	Pages in Package Numbered and in Sequence
X	Electronic Data Deliverable (EDD)

X: Included in original Data Package

NR: Not Required RS: Provided as a Resubmission

O: Not Included and/or Not Available X/RS: Incomplete in original data package, completed as a resubmission

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3.0 Detection Limits

All Contract Required Detection Limits (CRDLs) were met.

4.0 Holding Time

Holding times were acceptable.

4.1 Sample Preservation

Samples were appropriately preserved.

4.2 Percent Moisture

Percent moisture results are acceptable.

4.3 Chain of Custody Record

Chain of Custody Record was present.

5.0 Calibration Quality Control

5.1 Initial Calibration

SVOA: For ICAL done on instrument BNAA, the following compound exceeded the 30% relative percent difference criterion.

Compound	% RSD-10/08/06
Benzaldehyde	30.8
2,4-dinitrophenol	37.0
Bis-2-ethyl hexyl phthalate	32.4

Detected results for these compounds in affected samples were qualified "J" to indicate the results are estimated and non-detected results were qualified "UJ" to indicate the results are estimated due to this anomaly.

5.2 Continuing Calibration (CCAL)

VOA: The following compounds exceeded the 25% difference criterion.

Compound	%D-10/04/06	%D-10/05/06	%D-10/08/06
Dichlorodifluoromethane	37.4	-	26.3
Chloromethane	-	-	29.8
Bromomethane	32.3	-	30.2
Chloroethane	31.9	-	30.8
Acetone	-	-	34.4
Trichlorofluoromethane	28.5	40.3	-
1,1-dichloroethene	29.6	-	-
1,2-dichloroethane	-	29.4	-
Bromoform	-	31.0	-
1,2-Dibromo-3-chloropropane	-	46.6	-

Detected results for these compounds in affected samples were qualified "J" to indicate the results are estimated and non-detected results were qualified "UJ" to indicate the results are estimated due to this

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anomaly.

6.0 Blanks Quality Control

Method blanks were acceptable.

7.0 Surrogate Recoveries

VOA: Surrogate recovery for toluene- d_8 in sample RCGW01701901XX was 113% which was above the 88-111% QC limits. There were no detects for this sample thus, no qualification was necessary.

8.0 Accuracy

8.1 Laboratory Control Samples (LCS)/Blank Spikes

LCS recoveries were acceptable.

8.2 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

8.2.1 Frequency

Frequency was met.

8.2.2 Recovery

Recoveries are acceptable.

9.0 Precision

9.1 Matrix Spike Duplicates

The results were acceptable.

9.2 Matrix Duplicate

RPDs were acceptable.

10.0 Field QC

10.1 Field Blanks/Rinse Blanks

No field blanks were reported with this SDG.

10.2 Trip Blanks

Trip blank reported no contamination.

10.3 Field Duplicate

Sample RCGW01501301XD was presented as a field duplicate. The original sample is identified as RCGW01501301XX. RPDs are calculated when both original and duplicate report detects. RPDs were

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acceptable.

11.0 Internal Standards (IS)

11.1 IS Area Counts

SVOA: IS area counts were below the required QC limits for perylene- d_{12} in samples RCGW01501301XX and RCGW01501301XD. All affected compounds were qualified as estimated due to this anomaly.

11.2 Retention Time (RT)

All RTs were within the method accepted criteria.

12.0 Target Compound Identification

All target compounds identification is acceptable.

12.1 Tentatively Identified Compounds (TICs)

TICs were acceptable.

13.0 Calculations and Transcription

Raw data were accurately transcribed to summary data sheets.

14.0 Additional Comments

VOA: Samples RCGW01700901XX and RCGW01701901XX were reanalyzed due to surrogate recovery issues. Based on professional judgment and technical information, the validator presented the reanalyses.

SVOA: Sample RCGW01501301XX and RCGW01501301XD were reanalyzed due to internal standard area issues. Based on professional judgment and technical information, the validator presented the original analyses.

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15.0 Data Qualifier Table

Volatile

Sample Identification	Compound	Qualifier	Section
			Reference
RCGS00300701XX,	Dichlorodifluoromethane,	UJ	5.2
RCGW01402701XX,	chloromethane, bromomethane,		
RCGW01900901XX	chloroethane,		
RCGW01402701XX,	Dichlorodifluoromethane,	UJ	5.2
RCGW01501301XX,	bromomethane, chloroethane,		
RCGW01502301XX,	trichlorofluoromethane, 1,1-		
RCGW01600901XX	dichloroethene		
RCGW00301301XX,	Trichlorofluoromethane, 1,2-	UJ	5.2
RCGW00302301XX,	dichloroethane, bromoform, 1,2-		
RCGW00801301XX,	dibromo-3-chloropropane		
RCGW00802302XX,			
RCGW01201301XX,			
RCGW01202301XX,			
RCGW01401701XX,			
RCGW01900901XX,			
RCTB003XXX01XX			

Semi-volatile

Sample Identification	Compound	Qualifier	Section Reference
RCGW01501301XX,	Benzaldehyde, 2,4-dinitrophenol, bis (2-	UJ	5.1
RCGW01501301XD	ethyl hexyl) phthalate		
	Benzo (b) fluoranthene, benzo (k)	UJ	11.1
	fluoranthene, benzo (a) pyrene, indeno		
	(1,2,3-cd) pyrene, dibenz (a,h)		
	anthracene, benzo (g,h,i) perylene		

D. V. Report X4752

DATA USABILITY SUMMARY REPORT SEPTEMBER 2006 SAMPLING EVENT RUDDICK CLEANERS ELMIRA, NY

1.0 Introduction:

Water, soil, and air samples were collected at the Ruddick Cleaner's site in September 2006 and submitted for off-site laboratory analyses. Samples were analyzed by CHEMTECH in Mountainside, New Jersey. A listing of samples included in this investigation is presented in Table 1. Samples were analyzed for the following parameters:

• Air: EPA Method TO-15 for VOCs

• Water: VOCs and SVOCs by CLP OLM04.3

• Soil: VOC by CLP OLM04.3

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 1995; NYSDEC, 2000).

Data validation was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) and USEPA Region II Guidelines (USEPA, 1993; USEPA, 1994). Samples were reported in lab sample delivery groups (SDG) X4586, X4707, and X4752. Validation was completed by EDV, Inc. in Pittsburgh, Pennsylvania. Validation reports for each SDG are presented in Attachment 1. With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory. The following qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit J = concentration is estimated UJ = target analyte is not detected at the reported detection limit and is estimated

A summary of final sample results is presented in Appendix E. Tentatively identified compounds (TICs) were reported in accordance with the CLP methods if detected. A summary of detected TICs is provided in Appendix E.

2.0 Water Samples

2.1 VOCs

X4707

The continuing calibration had percent differences that were greater than the control limit of 25 for methyl acetate (28.4). The results for methyl acetate in samples RCGW00501301XX, RCGW00502301XX, RCGW00602301XX, RCGW00601301XX, RCGW00702301XX, and RCGW00701301XX were non-detect and were qualified as estimated (UJ).

X4586

The continuing calibration had percent differences that were greater than the control limit of 25 for dichlorodifluoromethane (37.4), bromomethane (32.3), chloroethane (31.9), trichlorofluoromethane (28.5), and 1,1-dichloroethene (29.6). The results for these compounds in samples RCGW00201301XD, RCGW00202301XX, RCGW00401301XX, and RCGW00402301XX were non-detect and were qualified as estimated (UJ).

Sample RCGW00201301XD was presented as the field duplicate. The original sample is identified as RCGW00201301XX. The relative percent difference for tetrachloroethene exceeds the QC criterion. However, the compound was qualified by the laboratory as estimated "J" and therefore required no further qualification.

X4752

The initial calibration had relative standard deviations that were greater than the control limit of 30 for chloroethane (44.9) and trichlorofluoromethane (40.1). The results for these compounds in samples RCGW01101501XX, RCGW01102501XX, RCGW01700901XX, RCGW01701901XX, RCGW01901XX, and RCGW01501301XD were non-detect and were qualified as estimated (UJ).

The continuing calibration had percent differences that were greater than the control limit of 25 for dichlorodifluoromethane (37.4), bromomethane (32.3), chloroethane (31.9), trichlorofluoromethane (28.5), and 1,1-dichloroethene (29.6). The results for these compounds in samples RCGW01402701XX, RCGW01501301XX, RCGW01502301XX, and RCGW01600901XX were non-detect and were qualified as estimated (UJ).

The continuing calibration had percent differences that were greater than the control limit of 25 for trichlorofluoromethane (40.3), 1,2-dichloroethane (29.4), bromoform (31.0), 1,2-dibromo-3-chloropropane (46.6) and chloroethane (44.9). The results for these compounds in samples RCGW00301301XX, RCGW00302301XX, RCGW00801301XX, RCGW00802302XX, RCGW01201301XX, RCGW01202301XX, RCGW01401701XX, and RCGW01900901XX were non-detect and were qualified as estimated (UJ).

Samples RCGW01700901XX and RXGW01701901XX were reanalyzed due to surrogate recovery issues. Based on professional judgment and technical information, the validator presented the reanalyses.

2.2 SVOCs

X4707

The initial calibration had relative standard deviations that were greater than the control limit of 30 for benzaldehyde (30.8), 2,4-dinitrophenol (37.0), and bis(2-ethyl-hexyl)phthalate (32.4). The results for these compounds in sample RCGW00101701XX were non-detect and were qualified as estimated (UJ).

The method blank had detections of bis(2-ethyl-hexyl)phthalate ($10 \mu g/L$) and di-n-butyl phthalate ($1.5 \mu g/L$). An action level was calculated at ten times the detections reported in the

blank. The results for these two compounds in sample RCGW00101701XX were less than the action level and were qualified as non-detect (U).

X4586

The initial calibration had relative standard deviations that were greater than the control limit of 30 for benzaldehyde (30.8), 2,4-dinitrophenol (37.0), and bis (2-ehtyl-hexyl)phthalate (32.4). The results for these compounds in sample RCGW00901701XX were non-detect and were qualified as estimated (UJ).

The method blank reported detections of bis(2-ethyl-hexyl)phthalate (10 μ g/L). An action level was calculated at ten times the detection reported in the blank. The result for bis(2-ethyl-hexyl)phthalate in sample RCGW00901701XX was less than the action level and was qualified as non-detect (U).

Sample RCGW00901701XX had area counts for the internal standard perylene d-12 that were low and outside of control limits. The compounds associated with this internal standard were qualified as estimated (J/UJ) and include: benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, benzo(ghi)perylene, and dinoctyl phthalate.

X4752

The initial calibration had relative standard deviations that were greater than the control limit of 30 for benzaldehyde (30.8), 2,4-dinitrophenol (37.0), and bis(2-ethyl-hexyl)phthalate (32.4). The results for these compounds in samples RCGW01501301XX and RCGW01501301XD were non-detect and were qualified as estimated (UJ).

The method blank reported detections of di-n-butyl phthalate (1.5 μ g/L) and bis(2-ethyl-hexyl)phthalate (10 μ g/L). An action level was calculated at ten times the detections reported in the blanks. The results for di-n-butyl phthalate in sample RCGW01501301XD was less than the action level and was qualified as non-detect (U). In addition, the results for bis(2-ethyl-hexyl)phthalate in samples RCGW01501301XX and RCGW01501301XD were both less than the action level and were qualified as non-detect (U).

Samples RCGW01501301XX and RCGW01501301XD had area counts that were less than control limits for the internal standard perylene d-12. The compounds associated with this internal standard were qualified as estimated (J/UJ) and include: benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, benzo(ghi)perylene, and di-n-octyl phthalate.

Samples RCGW01501301XX and RCGW01501301XD were reanalyzed due to internal standard area issues. Based on professional judgment and technical information, the validator presented the original analyses.

3.0 Soil Samples

3.1 VOCs

X4707

The continuing calibration had percent differences that were greater than the control limit of 25 for trichlorofluoromethane (26.1), acetone (30.4), and 2-butanone (27.4). The results for these compounds in samples RCGS00100901XX, RCGS00200801XX, RCGS00400401XX, and RCGS00400401XD were non-detect and were qualified as estimated (UJ).

The method blank VBLK04 reported detections of acetone (17 μ g/L) and 2-butanone (7 μ g/L). In addition, a detection of acetone (11 μ g/L) was detected in another method blank. An action level was calculated at ten times the detections reported in the blanks. The result for acetone in sample RCGS00500201XX was less than the action level and was qualified as non-detect (U). In addition, the detections for acetone and 2-butanone in samples RCGS00100901XX, RCGS00200801XX, RCGS00400401XX, and RCGS00400401XD were less than the action level and were qualified as non-detect (U).

X4752

The continuing calibration had percent differences that were greater than the control limit of 25 for dichlorodifluoromethane (26.3), chloromethane (29.8), bromomethane (30.2), and chloroethane (30.8). The results for these compounds in sample RCGS00300701XX were non-detect and were qualified as estimated (UJ).

4.0 Air Samples

4.1 VOCs

X4586

The initial calibration had relative standard deviations that were greater than the control limit of 30 for methylene chloride (35.3). The results for methylene chloride in samples RCGV00101001XX, RCGV0010100XD, and RCGV00301001XX were positive and were qualified as estimated (J).

The method blank reported a detection of 1,1,1-trichloroethane. An action level was calculated at five times the detection reported in the blank. The results for 1,1,1-trichloroethane in samples RCGV001001XX and RCGV00301001XX were less than the action level and were qualified as non-detect (U).

Acetone in sample RCGV00201001XX was qualified as estimated "J" due to calibration range exceedence. The sample was reanalyzed at 20X dilution in which acetone was reported as a non-detect. Based on professional judgment and technical information the validator determined that the compound was present in the sample, but an accurate concentration was not attainable at 2X dilution, thus an estimated concentration.

Table 1

SDG	Lab ID	Field Sample ID	Sample Date	Method	Media	QC Code
X4586	X4586-01	RCGW00901701XX	9/29/2006	OLM04.3_SVOA	GW	FS
X4586	X4586-01RE	RCGW00901701XX	9/29/2006	OLM04.3_SVOA	GW	FS
X4586	X4586-11	RCGW00103501XX	9/27/2006	OLM04.3_VOA	GW	FS
X4586	X4586-13	RCGW00201301XD	9/27/2006	OLM04.3_VOA	GW	FD
X4586	X4586-12	RCGW00201301XX	9/27/2006	OLM04.3_VOA	GW	FS
X4586	X4586-14	RCGW00202301XX	9/27/2006	OLM04.3_VOA	GW	FS
X4586	X4586-15	RCGW00401301XX	9/27/2006	OLM04.3_VOA	GW	FS
X4586	X4586-16	RCGW00402301XX	9/27/2006	OLM04.3_VOA	GW	FS
X4586	X4586-01	RCGW00901701XX	9/29/2006	OLM04.3_VOA	GW	FS
X4586	X4586-02	RCGW00902701XX	9/29/2006	OLM04.3_VOA	GW	FS
X4586	X4586-03	RCGW00903701XX	9/29/2006	OLM04.3_VOA	GW	FS
X4586	X4586-04	RCGW01001701XX	9/29/2006	OLM04.3_VOA	GW	FS
X4586	X4586-05	RCGW01002701XX	9/29/2006	OLM04.3_VOA	GW	FS
X4586	X4586-17	RCTB002XXX01XX	9/27/2006	OLM04.3_VOA	BW	ТВ
X4586	X4586-10	RCTB004XXX01XX	9/29/2006	OLM04.3_VOA	BW	ТВ
X4586	X4586-07	RCGV00101001XD	9/29/2006	TO-15	Air	FD
X4586	X4586-07DL	RCGV00101001XD	9/29/2006	TO-15	Air	FD
X4586	X4586-06	RCGV00101001XX	9/29/2006	TO-15	Air	FS
X4586	X4586-06DL	RCGV00101001XX	9/29/2006	TO-15	Air	FS
X4586	X4586-08	RCGV00201001XX	9/29/2006	TO-15	Air	FS
X4586	X4586-08DL	RCGV00201001XX	9/29/2006	TO-15	Air	FS
X4586	X4586-09	RCGV00301001XX	9/29/2006	TO-15	Air	FS
X4586	X4586-09DL	RCGV00301001XX	9/29/2006	TO-15	Air	FS
X4707	X4707-19	RCGW00101701XX	9/27/2006	OLM04.3_SVOA	GW	FS
X4707	X4707-13	RCGS00100901XX	9/27/2006	OLM04.3_VOA	Soil	FS
X4707	X4707-16	RCGS00200801XX	9/27/2006	OLM04.3_VOA	Soil	FS
X4707	X4707-18	RCGS00400401XD	9/27/2006	OLM04.3_VOA	Soil	FD
X4707	X4707-17	RCGS00400401XX	9/27/2006	OLM04.3_VOA	Soil	FS
X4707	X4707-11	RCGS00500201XX	9/26/2006	OLM04.3_VOA	Soil	FS
X4707	X4707-19	RCGW00101701XX	9/27/2006	OLM04.3_VOA	GW	FS
X4707	X4707-20	RCGW00102701XX	9/27/2006	OLM04.3_VOA	GW	FS
X4707	X4707-01	RCGW00501301XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-04	RCGW00502301XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-06	RCGW00601301XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-05	RCGW00602301XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-08	RCGW00701301XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-07	RCGW00702301XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-09	RCGW01301101XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-10	RCGW01302101XX	9/26/2006	OLM04.3_VOA	GW	FS
X4707	X4707-12	RCTB001XXX01XX	9/26/2006	OLM04.3_VOA	BW	TB
X4752	X4752-22	RCGW01501301XD	9/28/2006	OLM04.3_SVOA	GW	FD

X4752	X4752-22RE	RCGW01501301XD	9/28/2006	OLM04.3_SVOA	GW	FD
X4752	X4752-12	RCGW01501301XX	9/28/2006	OLM04.3_SVOA	GW	FS
X4752	X4752-12RE	RCGW01501301XX	9/28/2006	OLM04.3_SVOA	GW	FS
X4752	X4752-01	RCGS00300701XX	9/28/2006	OLM04.3_VOA	Soil	FS
SDG	Lab ID	Field Sample ID	Sample Date	Method	Media	QC Code
X4752	X4752-02	RCGW00301301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-03	RCGW00302301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-04	RCGW00801301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-05	RCGW00802301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-06	RCGW01101501XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-07	RCGW01102501XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-08	RCGW01201301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-09	RCGW01202301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-10	RCGW01401701XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-11	RCGW01402701XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-22	RCGW01501301XD	9/28/2006	OLM04.3_VOA	GW	FD
X4752	X4752-12	RCGW01501301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-13	RCGW01502301XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-14	RCGW01600901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-15	RCGW01601901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-16	RCGW01700901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-16RE	RCGW01700901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-17	RCGW01701901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-17RE	RCGW01701901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-18	RCGW01900901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-19	RCGW01901XX	9/28/2006	OLM04.3_VOA	GW	FS
X4752	X4752-23	RCTB003XXX01XX	9/28/2006	OLM04.3_VOA	BW	TB

Reference:

New York State Department of Environmental Conservation (NYSDEC), 1995. "Analytical Services Protocols"; 10/95 Edition; October 1995.

New York State Department of Environmental Conservation (NYSDEC), 2000. "Analytical Services Protocols"; June 2000.

New York State Department of Environmental Conservation (NYSDEC), 1997. "Guidance for the Development of Data Usability Reports"; Division of Environmental Remediation; September 1997.

U.S. Environmental Protection Agency (USEPA), 1993. "USEPA Region II Checklist SOP HW-15"; Revision 2; May 1993.

U.S. Environmental Protection Agency (USEPA), 1994. "USEPA Region II Checklist SOP HW-18"; Revision 0; August 1994.

Data Validation Review: Amanda Zeidler

Quality Assurance Officer: Chris Ricardi, NRCC-EAC

hus Ricardo Date: 3/30/07

ATTACHMENT 1 DATA VALIDATION REPORTS

SDG X4586 SDG X4707 SDG X4752

Lab Sample Id	X458	86-01	X470	7-19	X475	52-12	X475	52-22
Lab Sample Delivery Group	X4	586	X4707		X4752		X4752	
Loc Name	GV	V-9	GV	GW-1		/ -15	GW-15	
Field Sample Id	RCGW00	901701XX	RCGW00	101701XX	RCGW01	501301XX	RCGW01501301XI	
Field Sample Date	9/29/	2006	9/27/	2006	9/28/	2006	9/28/2006	
Qc Code	F	S	F	S	F	S	F	D
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
2,4,5-Trichlorophenol	10		10		10		10	U
2,4,6-Trichlorophenol	10		10		10		10	U
2,4-Dichlorophenol	10		10		10		10	U
2,4-Dimethylphenol	10	,	10)	10)	10	-
2,4-Dinitrophenol		UJ	21	UJ	20	UJ	20	UJ
2,4-Dinitrotoluene	10		10	U	10		10	U
2,6-Dinitrotoluene	10		10	U	10	U	10	U
2-Chloronaphthalene	10		10	U	10	U	10	U
2-Chlorophenol	10	U	10	U	10	U	10	U
2-Methylnaphthalene	10	U	10	U	10	U	10	U
2-Methylphenol	10		10	U	10	U	10	U
2-Nitroaniline	10	U	10	U	10	U	10	U
2-Nitrophenol	10		10		10	-	10	U
3,3`-Dichlorobenzidine	20		21	U	20	U	20	U
3-Nitroaniline	10		10		10	-	10	U
4,6-Dinitro-2-methylphenol	20		21	U	20	U	20	U
4-Bromophenyl phenyl ether	10		10		10	-	10	U
4-Chloro-3-methylphenol	10		10		10		10	U
4-Chloroaniline	10		10		10		10	U
4-Chlorophenyl phenyl ether	10		10		10		10	U
4-Methylphenol	10	-	10		10	U	10	,
4-Nitroaniline	10	U	10	U	10	U	10	U
4-Nitrophenol	20	U	21	U	20	U	20	U
Acenaphthene	10		10		10		10	U
Acenaphthylene	10		10	U	10	•	10	U
Acetophenone	10	U	10	U	10	U	10	U
Anthracene	10		10	U	10	U	10	U
Atrazine	10		10		10		10	
Benzaldehyde		UJ	10		10		10	UJ
Benzo(a)anthracene	10			U	10	-	10	-
Benzo(a)pyrene	10	UJ	10	U	10	UJ	10	UJ
Benzo(b)fluoranthene	10	UJ	10	U	10	UJ	10	UJ
Benzo(ghi)perylene		UJ	10)	10	UJ	10	UJ
Benzo(k)fluoranthene	10	UJ	10	U	10	UJ	10	UJ

Lab Sample Id	X458	36-01	X47	07-19	X475	52-12	X475	52-22
Lab Sample Delivery Group	X4	586	X4707		X4752		X4	752
Loc Name	GV	V-9	GW-1		GW-15		GW-15	
Field Sample Id	RCGW00	901701XX	RCGW00	101701XX	RCGW01	501301XX	RCGW015013012	
Field Sample Date	9/29/	2006	9/27	/2006	9/28/	2006	9/28/	2006
Qc Code	F	'S	F	rs	F	'S	F	D
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Biphenyl	10		10		10		10	
Bis(2-Chloroethoxy)methane	10		10	U	10	U	10	U
Bis(2-Chloroethyl)ether	10		10		10		10	
Bis(2-Chloroisopropyl)ether	10		10	U	10	U	10	U
Bis(2-Ethylhexyl)phthalate	10	UJ	13	UJ		UJ	14	UJ
Butylbenzylphthalate	4.5	J	10	U	10	U	10	U
Caprolactum	10	U	10	U	10	U	10	U
Carbazole	10	U	10	U	10	U	10	U
Chrysene	10	U	10	U	10	U	10	U
Di-n-butylphthalate	10	U	10	U	10	U	10	U
Di-n-octylphthalate	1.1	J	10	U	1.4	J	10	UJ
Dibenz(a,h)anthracene	10	UJ	10	U	10	UJ	10	UJ
Dibenzofuran	10		10	U	10	U	10	
Diethylphthalate	10	U	10	U	10	U	10	U
Dimethylphthalate	10	U	10	U	10	U	10	U
Fluoranthene	10	U	10	U	10	U	10	U
Fluorene	10	U	10	U	10	U	10	U
Hexachlorobenzene	10		10	U	10		10	U
Hexachlorobutadiene	10	U	10	U	10	U	10	U
Hexachlorocyclopentadiene	10		10	U	10	U	10	U
Hexachloroethane	10	U	10	U	10	U	10	U
Indeno(1,2,3-cd)pyrene	10	UJ	10	U	10	UJ	10	UJ
Isophorone	10		10	U	10	U	10	U
N-Nitrosodi-n-propylamine	10		10	U	10	U	10	U
N-Nitrosodiphenylamine	10		10	U	10	U	10	U
Naphthalene	10	U	10	U	10		10	U
Nitrobenzene	10	U	10	U	10	U	10	U
Pentachlorophenol	20	-	21	U	20	U	20	-
Phenanthrene	10	U	10	U	10	U	10	U
Phenol	10		10	U	10	U	10	U
Pyrene	10	U	10	U	10	U	10	U

Lab Sample Id	X4586-01		X4707-19		X4752-12		X475	52-22		
Lab Sample Delivery Group	X4586		X4707		X4752		X4	752		
Loc Name	GW-9		GW-1		GW-15		GW-1 GW-15		GV	V-15
Field Sample Id	RCGW00901701XX		RCGW00101701XX		RCGW01501301XX		X RCGW01501301			
Field Sample Date	9/29	/2006	9/27/2006		9/28/2006		9/28/2006			
Qc Code	FS		I	7S	I	FS .	F	D		
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier		

Notes:

Results in micrograms per liter (µg/L)

Samples analyzed for SVOCs by EPA Method OLM04.3

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the RL

J = Estimated value

B = Analyte was detected in the method blank

Lab Sample Id	X4586-01	X4586-02	X4586-03	X4586-04	X4586-05	X4586-10
Lab Sample Delivery Group		X4586	X4586	X4586	X4586	X4586
Loc Name	GW-9	GW-9	GW-9	GW-10	GW-10	OC
Field Sample Id	RCGW00901701XX	RCGW00902701XX	RCGW00903701XX	RCGW01001701XX	RCGW01002701XX	RCTB004XXX01XX
Field Sample Date	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006
Qc Code	FS	FS	FS	FS	FS	TB
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
1,1,1-Trichloroethane	10 U					
1,1,2,2-Tetrachloroethane	10 U					
1,1,2-Trichloro-1,2,2-Trifluoroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U					
1,1-Dichloroethane	10 U					
1,1-Dichloroethene	10 U					
1,2,4-Trichlorobenzene	10 U					
1,2-Dibromo-3-chloropropane	10 U					
1,2-Dibromoethane	10 U					
1,2-Dichlorobenzene	10 U					
1,2-Dichloroethane	10 U					
1,2-Dichloropropane	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
2-Butanone	50 U					
2-Hexanone	50 U					
4-Methyl-2-pentanone	50 U					
Acetic acid, methyl ester	10 U					
Acetone	50 U	18 J				
Benzene	10 U					
Bromodichloromethane	10 U					
Bromoform	10 U					
Bromomethane	10 U					
Carbon disulfide	10 U					
Carbon tetrachloride	10 U					
Chlorobenzene	10 U					
Chlorodibromomethane	10 U					
Chloroethane	10 U					
Chloroform	10 U					
Chloromethane	10 U					
Cis-1,2-Dichloroethene	10 U	3.2 J	2.3 J	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U					
Cyclohexane	10 U					
Dichlorodifluoromethane	10 U					

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Lab Sample Id	X4586-01	X4586-02	X4586-03	X4586-04	X4586-05	X4586-10
Lab Sample Delivery Group	X4586	X4586	X4586	X4586	X4586	X4586
Loc Name	GW-9	GW-9	GW-9	GW-10	GW-10	QC
Field Sample Id	RCGW00901701XX	RCGW00902701XX	RCGW00903701XX	RCGW01001701XX	RCGW01002701XX	RCTB004XXX01XX
Field Sample Date	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006	9/29/2006
Qc Code	FS	FS	FS	FS	FS	TB
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
Ethyl benzene	10 U					
Isopropylbenzene	10 U					
Methyl cyclohexane	10 U					
Methyl Tertbutyl Ether	10 U					
Methylene chloride	2.1 J	10 U	10 U	3.2 J	2.6 J	10 U
o-Xylene	10 U					
Styrene	10 U					
Tetrachloroethene	1.9 J	10 U				
Toluene	10 U					
trans-1,2-Dichloroethene	10 U	2.2 J	1.5 J	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U					
Trichlorofluoromethane	10 U					
Vinyl chloride	10 U					
Xylene, m/p	10 U					

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Notes:

Results in micrograms per liter ($\mu g/L$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

FS = Field Sample FD = Field Duplicate

TB = Trip Blank

Qualifiers:

U = Not detected at a concentration greater than the RL

Lab Sample Id	X4586-11	X4586-12	X4586-13	X4586-14	X4586-15	X4586-16
Lab Sample Delivery Group		X4586	X4586	X4586	X4586	X4586
Loc Name	GW-1	GW-2	GW-2	GW-2	GW-4	GW-4
Field Sample Id	RCGW00103501XX	RCGW00201301XX	RCGW00201301XD	RCGW00202301XX	RCGW00401301XX	RCGW00402301XX
Field Sample Date	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006
Qc Code	FS	FS	FD	FS	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
1,1,1-Trichloroethane	10 U					
1,1,2,2-Tetrachloroethane	10 U					
1,1,2-Trichloro-1,2,2-Trifluoroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U					
1,1-Dichloroethane	10 U					
1,1-Dichloroethene	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ
1,2,4-Trichlorobenzene	10 U					
1,2-Dibromo-3-chloropropane	10 U					
1,2-Dibromoethane	10 U					
1,2-Dichlorobenzene	10 U					
1,2-Dichloroethane	10 U					
1,2-Dichloropropane	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
2-Butanone	50 U					
2-Hexanone	50 U					
4-Methyl-2-pentanone	50 U					
Acetic acid, methyl ester	10 U					
Acetone	50 U					
Benzene	10 U					
Bromodichloromethane	10 U					
Bromoform	10 U					
Bromomethane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Carbon disulfide	10 U					
Carbon tetrachloride	10 U					
Chlorobenzene	10 U					
Chlorodibromomethane	10 U					
Chloroethane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ
Chloroform	10 U					
Chloromethane	10 U					
Cis-1,2-Dichloroethene	10 U	10 U	10 U	2.8 J	10 U	5.7 J
cis-1,3-Dichloropropene	10 U					
Cyclohexane	10 U					
Dichlorodifluoromethane	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ

Lab Sample Id	X4586-11	X4586	5-12	X4586-13	X4586-14	X45	86-15	X458	86-16
Lab Sample Delivery Group	X4586	X458	86	X4586	X4586	X4586		X4	586
Loc Name	GW-1	GW	-2	GW-2	GW-2	G'	W-4	GW-4	
Field Sample Id	RCGW00103501	XX RCGW002	01301XX	RCGW00201301XD	RCGW00202301XX	RCGW00	0401301XX	RCGW00	402301XX
Field Sample Date	9/27/2006	9/27/2	006	9/27/2006	9/27/2006	9/27	/2006	9/27/	/2006
Qc Code	FS	FS		FD	FS	I	FS	F	rs
Parameter	Result Qualif	er Result (Qualifier	Result Qualifier	Result Qualifier	Result	Qualifier	Result	Qualifier
Ethyl benzene	10 U	10 U	J	10 U	10 U	10	U	10	U
Isopropylbenzene	10 U	10 U	J	10 U	10 U	10	U	10	U
Methyl cyclohexane	10 U	10 U	J	10 U	10 U	10	U	10	U
Methyl Tertbutyl Ether	10 U	10 U	J	10 U	10 U	10	U	10	U
Methylene chloride	2 J	10 U	J	10 U	10 U	4.2	J	2.4	J
o-Xylene	10 U	10 U	J	10 U	10 U	10	U	10	U
Styrene	10 U	10 U	J	10 U	10 U	10	U	10	U
Tetrachloroethene	1.2 J	8.2 J		9.6 J	3.4 J	14		7.4	J
Toluene	10 U	10 U	J	10 U	10 U	10	U	10	U
trans-1,2-Dichloroethene	10 U	10 U	J	10 U	10 U	10	U	2.1	J
trans-1,3-Dichloropropene	10 U	10 U	J	10 U	10 U	10	U	10	U
Trichloroethene	10 U	10 U	J	10 U	10 U	10	U	10	U
Trichlorofluoromethane	10 U	10 U	J	10 UJ	10 UJ	10	UJ	10	UJ
Vinyl chloride	10 U	10 U	J	10 U	10 U	10	U	10	U
Xylene, m/p	10 U	10 U	J	10 U	10 U	10	U	10	U

Notes:

Results in micrograms per liter ($\mu g/L$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

FS = Field Sample FD = Field Duplicate

TB = Trip Blank

Qualifiers:

U = Not detected at a concentration greater than the RL

Lab Sample Id	X4586-17	X4707-01	X4707-04	X4707-05	X4707-06	X4707-07
Lab Sample Delivery Group		X4707	X4707	X4707	X4707	X4707
Loc Name	OC	GW-5	GW-5	GW-6	GW-6	GW-7
Field Sample Id	RCTB002XXX01XX	RCGW00501301XX	RCGW00502301XX	RCGW00602301XX	RCGW00601301XX	RCGW00702301XX
Field Sample Date	9/27/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/26/2006
Qc Code	TB	FS	FS	FS	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
1,1,1-Trichloroethane	10 U					
1,1,2,2-Tetrachloroethane	10 U					
1,1,2-Trichloro-1,2,2-Trifluoroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U					
1,1-Dichloroethane	10 U					
1,1-Dichloroethene	10 U					
1,2,4-Trichlorobenzene	10 U					
1,2-Dibromo-3-chloropropane	10 U					
1,2-Dibromoethane	10 U					
1,2-Dichlorobenzene	10 U					
1,2-Dichloroethane	10 U					
1,2-Dichloropropane	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
2-Butanone	2.3 J	50 U				
2-Hexanone	50 U					
4-Methyl-2-pentanone	50 U					
Acetic acid, methyl ester	10 U	10 UJ				
Acetone	15 J	50 U				
Benzene	10 U					
Bromodichloromethane	10 U					
Bromoform	10 U					
Bromomethane	10 U					
Carbon disulfide	10 U					
Carbon tetrachloride	10 U					
Chlorobenzene	10 U					
Chlorodibromomethane	10 U					
Chloroethane	10 U					
Chloroform	10 U					
Chloromethane	10 U					
Cis-1,2-Dichloroethene	10 U	10 U	6.3 J	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U					
Cyclohexane	10 U					
Dichlorodifluoromethane	10 U					

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	Lab Sample Id	X45	X4586-17 X470		07-01	X47	07-04	X47	07-05	X47	07-06	X47	07-07
Lab S	Sample Delivery Group	X4	1586	X4707									
	Loc Name	Ç)C	G'	W-5	G	W-5	G'	W-6	G	W-6	G	W-7
	Field Sample Id	RCTB002	XXX01XX	RCGW00	501301XX	RCGW00	0502301XX	RCGW00	0602301XX	RCGW00	0601301XX	RCGW00)702301XX
	Field Sample Date	9/27	/2006	9/26	/2006	9/26	5/2006	9/26	/2006	9/26	/2006	9/26	/2006
	Qc Code	1	ГВ]	FS]	FS]	FS	1	FS]	FS
Parameter		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Ethyl benzene		10	U	10	U	10	U	10	U	10	U	10	U
Isopropylbenzene		10	U	10	U	10	U	10	U	10	U	10	U
Methyl cyclohexane		10	U	10	U	10	U	10	U	10	U	10	U
Methyl Tertbutyl Ether		10	U	10	U	10	U	10	U	10	U	10	U
Methylene chloride		10	U	10	U	10	U	10	U	10	U	10	U
o-Xylene		10	U	10	U	10	U	10	U	10	U	10	U
Styrene		10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene		10	U	7.6	J	16		4	J	10	U	10	U
Toluene		10	U	10	U	10	U	10	U	10	U	10	U
trans-1,2-Dichloroethene		10	U	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene		10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene	·	10	U	10	U	2.9	J	10	U	10	U	10	U
Trichlorofluoromethane		10	U	10	U	10	U	10	U	10	U	10	U
Vinyl chloride		10	U	10	U	10	U	10	U	10	U	10	U
Xylene, m/p		10	U	10	U	10	U	10	U	10	U	10	U

Notes:

Results in micrograms per liter ($\mu g/L$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

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Qualifiers:

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Lab Sample Id	X4707-08	X4707-09	X4707-10	X4707-12	X4707-19	X4707-20
Lab Sample Delivery Group		X4707	X4707	X4707	X4707	X4707
Loc Name	GW-7	GW-13	GW-13	OC	GW-1	GW-1
Field Sample Id	RCGW00701301XX	RCGW01301101XX	RCGW01302101XX	RCTB001XXX01XX	RCGW00101701XX	RCGW00102701XX
Field Sample Date	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/27/2006	9/27/2006
Qc Code	FS	FS	FS	TB	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
1,1,1-Trichloroethane	10 U					
1,1,2,2-Tetrachloroethane	10 U					
1,1,2-Trichloro-1,2,2-Trifluoroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U					
1,1-Dichloroethane	10 U					
1,1-Dichloroethene	10 U					
1,2,4-Trichlorobenzene	10 U					
1,2-Dibromo-3-chloropropane	10 U					
1,2-Dibromoethane	10 U					
1,2-Dichlorobenzene	10 U					
1,2-Dichloroethane	10 U					
1,2-Dichloropropane	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
2-Butanone	50 U					
2-Hexanone	50 U					
4-Methyl-2-pentanone	50 U					
Acetic acid, methyl ester	10 UJ	10 U				
Acetone	50 U					
Benzene	10 U					
Bromodichloromethane	10 U					
Bromoform	10 U					
Bromomethane	10 U					
Carbon disulfide	10 U					
Carbon tetrachloride	10 U					
Chlorobenzene	10 U					
Chlorodibromomethane	10 U					
Chloroethane	10 U					
Chloroform	10 U					
Chloromethane	10 U					
Cis-1,2-Dichloroethene	10 U	1.8 J				
cis-1,3-Dichloropropene	10 U					
Cyclohexane	10 U					
Dichlorodifluoromethane	10 U					

Lab Sample Id	X4707-08	X4707-09	X4707-10	X4707-12	X4707-19	X4707-20
Lab Sample Delivery Group	X4707	X4707	X4707	X4707	X4707	X4707
Loc Name	GW-7	GW-13	GW-13	QC	GW-1	GW-1
Field Sample Id	RCGW00701301XX	RCGW01301101XX	RCGW01302101XX	RCTB001XXX01XX	RCGW00101701XX	RCGW00102701XX
Field Sample Date	9/26/2006	9/26/2006	9/26/2006	9/26/2006	9/27/2006	9/27/2006
Qc Code	FS	FS	FS	TB	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
Ethyl benzene	10 U					
Isopropylbenzene	10 U					
Methyl cyclohexane	10 U					
Methyl Tertbutyl Ether	10 U					
Methylene chloride	10 U					
o-Xylene	10 U					
Styrene	10 U					
Tetrachloroethene	6.4 J	10 U	10 U	10 U	6.4 J	3.8 J
Toluene	10 U					
trans-1,2-Dichloroethene	10 U					
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U					
Trichlorofluoromethane	10 U					
Vinyl chloride	10 U					
Xylene, m/p	10 U					

Notes:

Results in micrograms per liter ($\mu g/L$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

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Lab Sample Id	X4752-02	X4752-03	X4752-04	X4752-05	X4752-06	X4752-07
Lab Sample Delivery Group		X4752	X4752	X4752	X4752	X4752
Loc Name		GW-3	GW-8	GW-8	GW-11	GW-11
	RCGW00301301XX					
Field Sample Date		9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Oc Code		FS	FS	FS	FS	FS
Parameter	Result Qualifier	Result Qualifier			Result Qualifier	Result Qualifier
1.1.1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U
1,2-Dibromoethane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	50 U	50 U	50 U	50 U	50 U	50 U
2-Hexanone	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone	50 U	50 U	50 U	50 U	50 U	50 U
Acetic acid, methyl ester	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Chlorodibromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,2-Dichloroethene	10 U	1.4 J	10 U	1.8 J	10 U	3.5 J
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Cyclohexane	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorodifluoromethane	10 U	10 U	10 U	10 U	10 U	10 U

Lab Sample Id	X4752-02	X4752-03	X4752-04	X4752-05	X4752-06	X4752-07
Lab Sample Delivery Group	X4752	X4752	X4752	X4752	X4752	X4752
Loc Name	GW-3	GW-3	GW-8	GW-8	GW-11	GW-11
Field Sample Id	RCGW00301301XX	RCGW00302301XX	RCGW00801301XX	RCGW00802301XX	RCGW01101501XX	RCGW01102501XX
Field Sample Date	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Qc Code	FS	FS	FS	FS	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
Ethyl benzene	10 U					
Isopropylbenzene	10 U					
Methyl cyclohexane	10 U					
Methyl Tertbutyl Ether	10 U					
Methylene chloride	10 U					
o-Xylene	10 U					
Styrene	10 U					
Tetrachloroethene	4 J	4.1 J	4.6 J	7.5 J	10 U	4.9 J
Toluene	10 U					
trans-1,2-Dichloroethene	10 U	10 U	10 U	1.6 J	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	3.4 J				
Trichlorofluoromethane	10 UJ					
Vinyl chloride	10 U					
Xylene, m/p	10 U					

Notes:

Results in micrograms per liter ($\mu g/L$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

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Lab Sample Id	X4752-08	X4752-09	X4752-10	X4752-11	X4752-12	X4752-13
Lab Sample Delivery Group		X4752	X4752	X4752	X4752	X4752
Loc Name	GW-12	GW-12	GW-14	GW-14	GW-15	GW-15
Field Sample Id	RCGW01201301XX		RCGW01401701XX	RCGW01402701XX	RCGW01501301XX	
Field Sample Date	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Qc Code	FS	FS	FS	FS	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
1,1,1-Trichloroethane	10 U					
1,1,2,2-Tetrachloroethane	10 U					
1,1,2-Trichloro-1,2,2-Trifluoroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U					
1,1-Dichloroethane	10 U					
1,1-Dichloroethene	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ
1,2,4-Trichlorobenzene	10 U					
1,2-Dibromo-3-chloropropane	10 UJ	10 UJ	10 UJ	10 U	10 U	10 U
1,2-Dibromoethane	10 U					
1,2-Dichlorobenzene	10 U					
1,2-Dichloroethane	10 UJ	10 UJ	10 UJ	10 U	10 U	10 U
1,2-Dichloropropane	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
2-Butanone	50 U					
2-Hexanone	50 U					
4-Methyl-2-pentanone	50 U					
Acetic acid, methyl ester	10 U					
Acetone	50 U					
Benzene	10 U					
Bromodichloromethane	10 U					
Bromoform	10 UJ	10 UJ	10 UJ	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ
Carbon disulfide	10 U					
Carbon tetrachloride	10 U					
Chlorobenzene	10 U					
Chlorodibromomethane	10 U					
Chloroethane	10 UJ					
Chloroform	10 U					
Chloromethane	10 U					
Cis-1,2-Dichloroethene	10 U					
cis-1,3-Dichloropropene	10 U					
Cyclohexane	10 U					
Dichlorodifluoromethane	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ

Lab Sample Id	X4752-08	X4752-09	X4752-10	X4752-11	X4752-12	X4752-13
Lab Sample Delivery Group	X4752	X4752	X4752	X4752	X4752	X4752
Loc Name	GW-12	GW-12	GW-14	GW-14	GW-15	GW-15
Field Sample Id	RCGW01201301XX	RCGW01202301XX	RCGW01401701XX	RCGW01402701XX	RCGW01501301XX	RCGW01502301XX
Field Sample Date	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Qc Code	FS	FS	FS	FS	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
Ethyl benzene	10 U					
Isopropylbenzene	10 U					
Methyl cyclohexane	10 U					
Methyl Tertbutyl Ether	10 U					
Methylene chloride	10 U					
o-Xylene	10 U					
Styrene	10 U					
Tetrachloroethene	10 U					
Toluene	10 U					
trans-1,2-Dichloroethene	10 U					
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	6.4 J	19	10 U	10 U
Trichlorofluoromethane	10 UJ					
Vinyl chloride	10 U					
Xylene, m/p	10 U					

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Notes:

Results in micrograms per liter ($\mu g/L$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

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Lab Sample Id	X4752-14	X4752-15	X4752-16RE	X4752-17RE	X4752-18	X4752-19
Lab Sample Delivery Group		X4752	X4752	X4752	X4752	X4752
Loc Name	GW-16	GW-16	GW-17	GW-17	GW-19	GW-19
	RCGW01600901XX				RCGW01900901XX	RCGW01901XX
Field Sample Date	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006	9/28/2006
Qc Code		FS	FS	FS	FS	FS
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
1,1,1-Trichloroethane	10 U					
1,1,2,2-Tetrachloroethane	10 U					
1,1,2-Trichloro-1,2,2-Trifluoroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U					
1,1-Dichloroethane	10 U					
1,1-Dichloroethene	10 UJ	10 UJ	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U					
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	10 UJ	10 U
1,2-Dibromoethane	10 U					
1,2-Dichlorobenzene	10 U					
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 UJ	10 U
1,2-Dichloropropane	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
2-Butanone	50 U					
2-Hexanone	50 U					
4-Methyl-2-pentanone	50 U					
Acetic acid, methyl ester	10 U					
Acetone	50 U					
Benzene	10 U					
Bromodichloromethane	10 U					
Bromoform	10 U	10 U	10 U	10 U	10 UJ	10 U
Bromomethane	10 UJ	10 UJ	10 U	10 U	10 U	10 U
Carbon disulfide	10 U					
Carbon tetrachloride	10 U					
Chlorobenzene	10 U					
Chlorodibromomethane	10 U					
Chloroethane	10 UJ					
Chloroform	10 U					
Chloromethane	10 U					
Cis-1,2-Dichloroethene	10 U					
cis-1,3-Dichloropropene	10 U					
Cyclohexane	10 U					
Dichlorodifluoromethane	10 UJ	10 UJ	10 U	10 U	10 U	10 U

Lab Sample Id	X47.	52-14	X47	52-15	X4752	2-16RE	X4752	-17RE	X47	52-18	X47	52-19
Lab Sample Delivery Group	X4	752	X4	X4752		X4752		752	X4752		X 4	1752
Loc Name	GV	V-16	GV	V-16	GV	W-17	GV	V- 17	GV	V-19	GW-19	
Field Sample Id	RCGW01	600901XX	RCGW01	601901XX	RCGW01	1700901XX	RCGW01	701901XX	RCGW01	1900901XX	RCGW	01901XX
Field Sample Date	9/28/	/2006	9/28	/2006	9/28	3/2006	9/28/	2006	9/28	/2006	9/28	/2006
Qc Code	F	rs	I	FS	l	FS	F	'S	I	FS	I	FS
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Ethyl benzene	10	U	10	U	10	U	10	U	10	U	10	U
Isopropylbenzene	10	U	10	U	10	U	10	U	10	U	10	U
Methyl cyclohexane	10	U	10	U	10	U	10	U	10	U	10	U
Methyl Tertbutyl Ether	10	U	10	U	10	U	10	U	10	U	10	U
Methylene chloride	10	U	10	U	10	U	10	U	10	U	10	U
o-Xylene	10	U	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	10	U	10	U	10	U	10	U	10	U	10	U
Toluene	10	U	10	U	10	U	10	U	10	U	10	U
trans-1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	10	U	10	U	10	U
Trichlorofluoromethane	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ	10	UJ
Vinyl chloride	10	U	10	U	10	U	10	U	10	U	10	U
Xylene, m/p	10	U	10	U	10	U	10	U	10	U	10	U

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Notes:

Results in micrograms per liter ($\mu g/L$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

FS = Field Sample FD = Field Duplicate

TB = Trip Blank

Qualifiers:

U = Not detected at a concentration greater than the RL

Lab Sample Id	Y47	52-22	Y47	52-23
Lab Sample Delivery Group	X4752			752
Loc Name		V-15		OC
Field Sample Id	•			
Field Sample Date		/2006		/2006
Oc Code		D	7	ГВ
Parameter	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	10	U	10	U
1,1,2-Trichloroethane	10	U	10	U
1,1-Dichloroethane	10	U	10	U
1,1-Dichloroethene	10	U	10	U
1,2,4-Trichlorobenzene	10	U	10	U
1,2-Dibromo-3-chloropropane	10	U	10	U
1,2-Dibromoethane	10	U	10	U
1,2-Dichlorobenzene	10	U	10	U
1,2-Dichloroethane	10	U	10	U
1,2-Dichloropropane	10	U	10	U
1,3-Dichlorobenzene	10	U	10	U
1,4-Dichlorobenzene	10	U	10	U
2-Butanone	50	U	50	U
2-Hexanone	50	U	50	U
4-Methyl-2-pentanone	50	U	50	U
Acetic acid, methyl ester	71		10	U
Acetone	50	U	50	U
Benzene	10		10	
Bromodichloromethane	10	U	10	U
Bromoform	10	U	10	U
Bromomethane	10	U	10	U
Carbon disulfide	10	U	10	U
Carbon tetrachloride	10	U	10	U
Chlorobenzene	10		10	
Chlorodibromomethane	10	U	10	
Chloroethane	10	UJ	10	U
Chloroform	10	-	10	
Chloromethane	10	-	10	U
Cis-1,2-Dichloroethene	10	_	10	U
cis-1,3-Dichloropropene	10	U	10	U
Cyclohexane	10	_	10	_
Dichlorodifluoromethane	10	U	10	U

	Lab Sample Id	X47	52-22	X47	52-23
	Lab Sample Delivery Group			X 4	1752
	Loc Name	GV	W-15	(QC
	Field Sample Id	RCGW0	1501301XD	RCTB003	3XXX01XX
	Field Sample Date	9/28	3/2006	9/28	/2006
	Qc Code]	FD	7	ГВ
Parameter		Result	Qualifier	Result	Qualifier
Ethyl benzene		10	U	10	U
Isopropylbenzene		10	U	10	U
Methyl cyclohexane		10	U	10	U
Methyl Tertbutyl Ether		10	U	10	U
Methylene chloride		10	U	10	U
o-Xylene		10	U	10	U
Styrene		10	U	10	U
Tetrachloroethene		10	U	10	U
Toluene		1.4	J	10	U
trans-1,2-Dichloroethene		10	U	10	U
trans-1,3-Dichloropropene		10	U	10	U
Trichloroethene		10	U	10	U
Trichlorofluoromethane		10	UJ	10	U
Vinyl chloride		10	U	10	U
Xylene, m/p		10	U	10	U

Notes:

Results in micrograms per liter $(\mu g/L)$

Samples analyzed for VOCs by EPA Method OLM04.3

QC Code:

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

Qualifiers:

U = Not detected at a concentration greater than the RL

Appendix D Table 1.3 Soil VOC Results

Lab Sample Id	X4707-11	X4707-13	X4707-16	X4707-17	X4707-18	X4752-01	
Lab Sample Delivery Group	X4707	X4707	X4707	X4707	X4707	X4752	
Loc Name	GS-5	GS-1	GS-2	GS-4	GS-4	GS-3	
Field Sample Id			RCGS00200801XX	RCGS00400401XX		RCGS00300701XX	
Field Sample Date	9/26/2006	9/27/2006	9/27/2006	9/27/2006	9/27/2006	9/28/2006	
Qc Code	FS	FS	FS	FS	FD	FS	
Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	
1,1,1-Trichloroethane	11 U	11 U	10 U	11 U	11 U	11 U	
1,1,2,2-Tetrachloroethane	11 U	11 U	10 U	11 U	11 U	11 U	
1,1,2-Trichloro-1,2,2-Trifluoroethane	11 U	11 U	10 U	11 U	11 U	11 U	
1,1,2-Trichloroethane	11 U	11 U	10 U	11 U	11 U	11 U	
1,1-Dichloroethane	11 U	11 U	10 U	11 U	11 U	11 U	
1,1-Dichloroethene	11 U	11 U	10 U	11 U	11 U	11 U	
1,2,4-Trichlorobenzene	11 U	11 U	10 U	11 U	11 U	11 U	
1,2-Dibromo-3-chloropropane	11 U	11 U	10 U	11 U	11 U	11 U	
1,2-Dibromoethane	11 U	11 U	10 U	11 U	11 U	11 U	
1,2-Dichlorobenzene	11 U	11 U	10 U	11 U	11 U	11 U	
1,2-Dichloroethane	11 U	11 U	10 U	11 U	11 U	11 U	
1,2-Dichloropropane	11 U	11 U	10 U	11 U	11 U	11 U	
1,3-Dichlorobenzene	11 U	11 U	10 U	11 U	11 U	11 U	
1,4-Dichlorobenzene	11 U	11 U	10 U	11 U	11 U	11 U	
2-Butanone	5.2 J	53 UJ	52 UJ	54 UJ	54 UJ	54 U	
2-Hexanone	55 U	53 U	52 U	54 U	54 U	54 U	
4-Methyl-2-pentanone	55 U	53 U	52 U	54 U	54 U	54 U	
Acetic acid, methyl ester	11 U	11 U	10 U	11 U	11 U	11 U	
Acetone	55 U	53 UJ	52 UJ	54 UJ	54 UJ	12 J	
Benzene	11 U	11 U	10 U	11 U	11 U	11 U	
Bromodichloromethane	11 U	11 U	10 U	11 U	11 U	11 U	
Bromoform	11 U	11 U	10 U	11 U	11 U	11 U	
Bromomethane	11 U	11 U	10 U	11 U	11 U	11 UJ	
Carbon disulfide	11 U	11 U	10 U	11 U	11 U	11 U	
Carbon tetrachloride	11 U	11 U	10 U	11 U	11 U	11 U	
Chlorobenzene	11 U	11 U	10 U	11 U	11 U	11 U	
Chlorodibromomethane	11 U	11 U	10 U	11 U	11 U	11 U	
Chloroethane	11 U	11 U	10 U	11 U	11 U	11 UJ	
Chloroform	11 U	11 U	10 U	11 U	11 U	11 U	
Chloromethane	11 U	11 U	10 U	11 U	11 U	11 UJ	
Cis-1,2-Dichloroethene	11 U	11 U	10 U	11 U	11 U	11 U	
cis-1,3-Dichloropropene	11 U	11 U	10 U	11 U	11 U	11 U	
Cyclohexane	11 U	11 U	10 U	11 U	11 U	11 U	
Dichlorodifluoromethane	11 U	11 U	10 U	11 U	11 U	11 UJ	

Appendix D Table 1.3 Soil VOC Results

Lab Sample Id	X4707-11		X4707-13		X4707-16		X4707-17		X4707-18		X4752-01	
Lab Sample Delivery Group	X	1707	X4707		X4707		X4707		X 4	1707	X4752	
Loc Name	G	S-5	G	S-1	G	S-2	G	S-4	G	S-4	G	S-3
Field Sample Id	RCGS00	500201XX	RCGS00	100901XX	RCGS00	200801XX	RCGS00	400401XX	RCGS00	400401XD	RCGS00	300701XX
Field Sample Date	9/26	5/2006	9/27	//2006	9/27	//2006	9/27	//2006	9/27	//2006	9/28/2006	
Qc Code		FS		FS]	FS		FS	I	FD		FS
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Ethyl benzene	2.2	J	11	U	10	U	11	U	11	U	11	U
Isopropylbenzene	11	U	11	U	10	U	11	U	11	U	11	U
Methyl cyclohexane	11	U	11	U	10	U	11	U	11	U	11	U
Methyl Tertbutyl Ether	11	U	11	U	10	U	11	U	11	U	11	U
Methylene chloride	0.99	J	11	U	10	U	11	U	11	U	1	J
o-Xylene	4	J	11	U	10	U	11	U	11	U	11	U
Styrene	11	U	11	U	10	U	11	U	11	U	11	U
Tetrachloroethene	3.5	J	5.6	J	3.2		1.1	J	0.63			U
Toluene	0.61	J	11	U	10	U	11	U	11	U	11	U
trans-1,2-Dichloroethene	11	_	11	U	10	_	11		11	_		U
trans-1,3-Dichloropropene	11	U	11	U	10	U	11	U	11	U	11	U
Trichloroethene	11	U	11	U	10	U	11	U	11	U	11	U
Trichlorofluoromethane	11		11	UJ		UJ		UJ		UJ		U
Vinyl chloride	11	_	11	U	10	U	11	U	11			U
Xylene, m/p	8.3	J	11	U	10	U	11	U	11	U	11	U
Hexachlorobutadiene												

Notes:

Results in micrograms per kilogram ($\mu g/kg$) Samples analyzed for VOCs by EPA Method OLM04.3 QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the RL

Appendix D Table 1.4 Air VOC Results

Lab Sample Id	X4586-06		X4586-07		X45	86-08	X4586-09		
Lab Sample Delivery Group			X4586		X4586		X4586		
Loc Name			GV-01		GV-02		GV-03		
Field Sample Id	RCGV00	101001XX	RCGV00	101001XD	RCGV00	201001XX	RCGV00301001X		
Field Sample Date	9/29	/2006	9/29	/2006	9/29	/2006	9/29	/2006	
Qc Code]	FS	I	FD	I	FS]	FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
Hexachlorobutadiene	1.07	U	1.07	U	2.13	U	1.07	U	
1,1,1-Trichloroethane	3.32	U	3.05		2.18		2.12	U	
1,1,2,2-Tetrachloroethane	0.69	U	0.69	U	1.37	U	0.76		
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.07		1.15		1.53	U	1.07		
1,1,2-Trichloroethane	0.54	U	0.54	U	1.09	U	0.54	U	
1,1-Dichloroethane	0.81	U	0.81	U	1.62		0.81	U	
1,1-Dichloroethene	0.79	U	0.79	U	1.59		0.79	U	
1,2,4-Trichlorobenzene	1.26		1.48		1.48	U	1.48		
1,2,4-Trimethylbenzene	4.96		5.1		11.2		4.96		
1,2-Dibromoethane	0.77	U	0.77	U	1.54	U	0.77	U	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.7	U	0.7	U	1.4	U	0.7	U	
1,2-Dichlorobenzene	0.78		0.84		1.2	U	0.9		
1,2-Dichloroethane	0.4	U	0.53		0.81	U	0.4	U	
1,2-Dichloropropane	0.46	U	0.46	U	0.92	U	0.46	U	
1,3,5-Trimethylbenzene	1.72		1.72		4.52		1.67		
1,3-Dichlorobenzene	0.96		0.9		1.2	U	0.84		
1,4-Dichlorobenzene	0.72		0.78		1.2	U	0.84		
1,4-Dioxane	0.72	U	0.72	U	1.44	U	0.72	U	
2-Butanone	6.71		5.48		1.18	U	4.15		
2-Hexanone	0.82	U	0.82	U	1.64	U	0.82	U	
2-Propanol	2.82		3.44		0.98	U	4.74		
4-Ethyltoluene	1.87		1.77		4.32		1.72		
4-Methyl-2-pentanone	0.82	U	0.82	U	1.64	U	0.82	U	
Acetone	0.47	U	0.47	U	152	J	79.3	D	
Allyl chloride	0.63	U	15.5		1.26	U	0.63	U	
Benzene	10.2		11.1		46.2		3.16		
Benzyl chloride	0.58	U	0.58		1.15	U	0.58	U	
Bromodichloromethane	0.67	U	0.67	U	1.34	U	0.67	U	
Bromoform	1.03	U	1.03	U	2.07	U	1.03	U	
Bromomethane	0.78	U	0.78	U	1.55	U	0.78	U	
Butadiene, 1,3-	0.44		0.44		0.88	U	0.44		
Carbon disulfide	4.23		4.82		7.9		1.03		
Carbon tetrachloride	0.88		0.88		1.26	U	0.94		
Chlorobenzene	0.46	J	0.51		0.92		0.46	J	

Appendix D Table 1.4 Air VOC Results

Lab Sample Id		86-06	X4586-07			86-08	X4586-09		
Lab Sample Delivery Group			X4586			586	X4586 GV-03		
Loc Name		V-01	GV-01		GV-02				
Field Sample Id						201001XX	RCGV00301001X		
Field Sample Date		/2006		/2006		/2006		/2006	
Qc Code		FS		FD		FS		FS	
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	
Chlorodibromomethane	0.85		0.85		1.7		0.85		
Chloroethane	0.53		0.53		1.06		0.53		
Chloroform	0.97	U	0.97	U	1.95	U	0.97	U	
Chloromethane	0.76		0.92		2.17		0.92		
Cis-1,2-Dichloroethene	0.4		0.4	_	0.79		0.4	U	
cis-1,3-Dichloropropene	0.45	U	0.45	U	0.91		0.45	U	
Cyclohexane	22.5		26.4		180	D	3.25		
Dichlorodifluoromethane	2.47		3.17		3.27		2.47		
Ethyl acetate	0.36	U	42.5		0.72	U	0.36	U	
Ethyl benzene	3.29		2.69		7.46		2.73		
Heptane	26.7		30.4		198	D	2.99		
Hexane	141	D	159	D	645	D	10.9		
Isooctane	0.47	U	0.47	U	0.93	U	0.47	U	
Methyl Tertbutyl Ether	0.36	U	0.36	U	0.72	U	0.36	U	
Methylene chloride	1.6	J	1.36	J	6.19		1.67	J	
o-Xylene	4.73		3.86		4.16		3.64		
Propylene	365	D	439	D	1.72	U	56.6	D	
Styrene	0.6		0.64		0.85	U	0.64		
Tetrachloroethene	3.87		4.21		6.79		2.1		
Tetrahydrofuran	0.59	U	0.59	U	1.18	U	0.59	U	
Toluene	11.5		11.1		28		10.2		
trans-1,2-Dichloroethene	0.79	U	0.79	U	1.59	U	0.79	U	
trans-1,3-Dichloropropene	0.91	U	0.91	U	1.82	U	0.91	U	
Trichloroethene	0.96		0.91		1.61		0.75		
Trichlorofluoromethane	1.85		2.07		2.24	U	2.19		
Vinyl acetate	0.35	U	19.9		0.7	U	0.35	U	
Vinyl bromide	0.88		0.88	U	1.75	U	0.88	U	
Vinyl chloride	0.51	U	0.51	U	1.02	U	0.51	U	
Xylene, m/p	11.7		8.8		44.1		9.58		

Appendix D Table 1.4 Air VOC Results

Lab Sample Id	X4586-06		X4586-07		X4586-08		X45	86-09
Lab Sample Delivery Group	X4586		X4586		X4586		X 4	1586
Loc Name	GV-01		GV-01		GV-02		GV-03	
Field Sample Id	RCGV00101001XX		RCGV00101001XD		RCGV00201001XX		RCGV00301001	
Field Sample Date	9/29/2006		9/29/2006		9/29/2006		9/29	/2006
Qc Code	FS		FD		FS]	FS
Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier

Notes:

Results in micrograms per cubic meter $(\mu g/m^3)$ Samples analyzed for VOCs by EPA Method TO-15

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the RL

J = Estimated value

D = Result was reported from a diluted analytical run

Field Sample ID	Lab ID	SDG	Method	Chemical_name	Result	Final Qualifier	Unit
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	Phenol, 2,4-bis(1-phenylethyl)-	12	NJ	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	2,6,10-Dodecatrien-1-ol, 3,7,11-tr	5.7	NJ	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	unknown22.57	2.2	J	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	Phthalic acid, bis(7-methyloctyl)	3.4	NJ	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	Didodecyl phthalate	2.5	NJ	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	1,2-Benzenedicarboxylic acid, buty	7.9	NJ	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	Unknown23.39	22	J	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	unknown23.92	3.0	J	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	unknown24.54	4.1	J	ug/L
RCGW00901701XX	X4586-01	X4586	OLM04.2_SVOA	unknown24.72	2.9	J	ug/L
RCGW00903701XX	X4586-03	X4586	OLM04.2_VOA	1-Butene	7.0	NJ	ug/L
RCTB002XXX01XX	X4586-17	X4586	OLM04.2_SVOA	unknown3.29	8.8	J	ug/L
RCGW01302101XX	X4707-10	X4707	OLM04.2_VOA	1-Propene, 2-methyl-	9.0	NJ	ug/L
RCGW00101701XX	X4707-19	X4707	OLM04.2_VOA	1-Tetracosanol	4.0	NJ	ug/L
RCGW01401701XX	X4752-10	X4752	OLM04.2_SVOA	unknown1.39	5.2	J	ug/L
RCGW01501301XX	X4752-12	X4752	OLM04.2_SVOA	Phenol, 2,4-bis(1-phenylethyl)-	16	NJ	ug/L
RCGW01501301XX	X4752-12	X4752	OLM04.2_VOA	Squalene	16	NJ	ug/L
RCGW01501301XX	X4752-12	X4752	OLM04.2_SVOA	unknown24.52	16	J	ug/L
RCGW01501301XX	X4752-12	X4752	OLM04.2_SVOA	unknown24.71	12	J	ug/L
RCGW01501301XD	X4752-22	X4752	OLM04.2_VOA	Silanol, trimethyl-	30	NJ	ug/L
RCGW01501301XD	X4752-22	X4752	OLM04.2_VOA	Ethyl Acetate	18	NJ	ug/L
RCGW01501301XD	X4752-22	X4752	OLM04.2_VOA	Squalene	18	NJ	ug/L
RCTB003XXX01XX	X4752-23	X4752	OLM04.2_SVOA	unknown3.30	5.6	J	ug/L

Qualifiers:

NJ = Analyte was tenatively identified and the value is estimated