

**Voluntary On-Site Investigation Report
Coral Graphics Site
840 Broadway
Hicksville, New York
Site Number #V00383-1
August 2003**

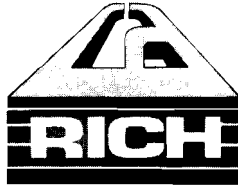
Volume 1

Prepared for:

**F.C. Properties
500 North Broadway
Suite 103
Jericho, NY 11753**

Prepared by:

**CA RICH CONSULTANTS, INC.
17 Dupont Street
Plainview, New York 11803**



CA RICH CONSULTANTS, INC.

CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

August 12, 2003

NYSDEC

Division of Hazardous Waste Remediation
Building 40 - SUNY
Stony Brook, New York 11790-2356

Attention: Robert R. Stewart

Re: **Voluntary On-Site Investigation Report
Coral Graphics Site
840 Broadway
Hicksville, New York
Site Number #V00383-1**

Dear Mr. Stewart:

Attached is a copy of the Voluntary On-Site Investigation Report for the above-referenced site. We believe that this Report defines the nature and extent of soil, soil vapor and groundwater contamination on-site. It is recommended that the project be separated into on-site and off-site components. An on-site remediation work plan should be prepared to address remediation of the areas of known contamination. In addition an off-site groundwater investigation should be performed. The results of this investigation should be used to develop a strategy to address contaminants that have migrated beyond the Coral Graphics property.

If you have any questions please do not hesitate to call.

Sincerely,

CA RICH CONSULTANTS, INC.

Linda Ross
Staff Geologist

Eric A. Weinstock
Associate

cc: Tim LaBaron, NYSDEC

CA RICH CONSULTANTS, INC.

Frank Cappel, F.C. Properties
John Lovejoy, NCDH
Ian Ushe, NYSDOH
Lawrence P. Schnapf, Esq.
Eric Woldenberg, Esq.
Denise J. D'Ambrosio, Esq., NYSDEC
Bea Grossman, Esq.

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**Voluntary On-Site Investigation Report
Coral Graphics Site
840 Broadway
Hicksville, New York
Site # V00383-1**

1.0 INTRODUCTION

The following Voluntary Investigation Report has been prepared by CA RICH Consultants, Inc. (CA RICH) on behalf of F.C. Properties, Inc. in accordance with an Order On Consent, Index Number W1-0872-00-10.

The goal of this Voluntary Investigation Report is to determine the horizontal and vertical extent of contamination in the soil and groundwater on-site at the Coral Graphics, 840 South Broadway, Hicksville ("site"), which is illustrated on Figure 1.

1.1 Contaminants of Concern

For the purposes of this Investigation, the contaminants of concern (COCs) are as follows:

Volatile Organic Compounds (VOCs): tetrachloroethene (PCE), toluene, xylene, isopropylbenzene, n-propylbenzene, trimethylbenzene and n-butylbenzene

Semivolatile Organic Compounds (SVOCs): benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene and indeno(1,2,3-cd)pyrene.

Inorganic Compounds: copper and zinc.

1.2 Suspect Source Areas

The suspect source areas consist of a former waste storage area, 11 former sanitary cesspools and 6 active storm water drains. The contaminants of concern were detected in two general areas of the property as illustrated on Figure 2:

Existing Storm Water Drains – A total of 6 active storm drains were sampled as part of this Investigation. These drains are labeled with the designations I, J, L, K, M and N. A clean out of the bottom of all of these drains is planned. The contaminants of concerns in these drains are VOCs, SVOCs, and – in the case of drain M – copper and zinc.

A Former Waste Storage Area – A former waste storage area exists in the rear of the plant. The contaminants of concern at this location consist of VOCs.

A total of 11 former sanitary cesspools that exist at this property were sampled as well. None of the 11 former sanitary cesspools require a clean out. The building is currently sewered.

1.3 Groundwater Investigation

Groundwater samples were collected as part of this Investigation. The results of the analyses of these samples indicate that the shallow groundwater in the vicinity of the former waste storage area is impacted with PCE at a level of 940 ug/L. Also, the downgradient off-site shallow

monitoring well had elevated detections of PCE. There were no semi-volatile exceedances and metals contamination were minor.

1.4 Soil Vapor Survey

The two soil vapor surveys consisted of the monitoring of fourteen (14) soil vapor points. The results of the vapor analyses of these samples indicate that there is elevated PCE on the Coral Graphics site in the soil vapor. The highest concentration on the property was 170,000 ug/m³ (25 ppm). The highest concentration on the neighboring property was 310 ug/m³ (0.045 ppm).

2.0 PHYSICAL SITE CHARACTERISTICS

2.1 Site History

The Coral Graphics site is located at 840 Broadway (aka Route 107) in Hicksville, Nassau County, New York (Figure 1) and has operated there since 1995. The property is currently owned by F.C. Properties and operated by Coral Graphics, a printing facility. Previous operators at this site included manufacturing by the Grumman Aerospace Corporation, operations of other printing facilities and warehousing.

Coral Graphics currently operates printing presses, U.V. finishers and coaters. The facility presently employs the use of soy-based inks. Previous operations at the plant included the use of solvent-based inks that contained VOCs, which were removed from the rollers with solvents. Historically, used rags from the press cleaning process were stored in the rear of the facility. The former rag storage area is believed to be the source of the soil contamination in the rear of the plant.

The building was connected to the Nassau County Department of Public Works (NCDPW) municipal sewer system on April 14, 1995 (Permit #S14108). The former sanitary cesspools have not been used since the building connected to the municipal sewer system.

2.2 Physical Layout of Property

The 840 Broadway facility consists of a two-story, concrete block building used for office space and printing. The 4-acre site includes parking lots on the north, east and west sides of the property and topographically is relatively level. A map showing the location of the site is included as Figure 1.

2.3 Previous Sampling at this Site

Previous Investigations at the Coral Graphics site are summarized on the following table. Details of these Investigations and the results of any samples collected are included in the reports cited in the References section of this document.

<u>Investigations</u>	<u>Date</u>
Voluntary Investigation Work Plan, (Ref.1) Nelson, Pope & Voorhis, LLC	May, 2002
Limited Phase II ESA, (Ref.2) Nelson, Pope & Voorhis, LLC	August, 2000
Limited Phase II ESA, (Ref.3) Malcolm Pirnie	August, 2000

Phase I ESA, (Ref.4)
Malcolm Pirnie

May, 2000

2.4 Geological Setting

Coral Graphics is situated upon the glacial outwash soil deposits of Long Island at an elevation of approximately 110 feet above mean sea level (MSL). The elevation of the water table occurring within the underlying Upper Glacial aquifer is approximately 50 feet below the land surface. Based upon measurements collected during on February 22, 2003, the direction of groundwater flow is to the south-southeast. Based upon measurements collected on July 31, 2003 the direction of groundwater flow is to the west-southwest. This difference in groundwater flow is probably due to the active cooling water ponds to the west of Coral Graphics, which are used in the summer.

The Upper Glacial Formation, according to the USGS, is approximately 120 feet thick (Ref. 5) and is underlain by the Magothy Formation, the principal water supply aquifer for most of Nassau County. The Magothy Aquifer consists of material deposited in marine and fluvial or deltaic environments during the Cretaceous Period. These deposits consist of beds and lenses of sandy clay, clayey sand, silt, and sand and gravel; the coarsest sediments generally are within the basal portion of the unit (Ref. 5). The Magothy Formation is, in turn, underlain by the Raritan Formation. The Raritan Formation is composed of the upper Raritan Clay, a regional confining layer, followed by the more permeable Lloyd Sand. The Lloyd Sand lies directly upon crystalline bedrock.

3.0 VOLUNTARY INVESTIGATION

In accordance with the Voluntary Investigation Work Plan, CA RICH completed the tasks described below. All validated laboratory data results are included in Appendix A.

3.1 Records Search

During the first week in July 2002, CA RICH performed a Freedom of Information search (FOIL) records search for any pertinent environmental records contained in the files of the Town of Oyster Bay Building Department and the Nassau County Department of Health. Files found in the Town of Oyster Bay Building Department showed the location of the septic systems and documented the removal of a 5,000-gallon fuel oil tank. Files found at the Nassau County Department of Health documented Coral Graphics submittal of an Article 11 permit, which would allow Coral Graphics to store toxic and hazardous materials.

3.2 Geophysical Survey

On August 6, 2002 NAEVA Geophysics, under the supervision of CA RICH, performed a geophysical investigation to delineate septic systems in the northeast corner of the property. Septic systems were suspected because there were two ventilation "goosenecks" in the area of the front asphalt parking lot.

NAEVA Geophysics used an Electro-Magnetic (EM) utility equipment, a radio-frequency metal detector and ground penetrating radar (GPR). The EM utility equipment was used as the initial investigative tools in an effort to trace conductive piping. A radio-frequency signal was applied onto the piping, allowing the line to be detected at the surface by an operator using a specialized receiver.

A metal-detector and GPR were used to search for pools at the location where the piping is found to terminate. The metal detector was carried over the area in a series of closely spaced traverses. The metal detector proved to be the most useful tool by detecting the tops of the septic pools.

Through the use of these geophysical tools, three cesspools were uncovered and identified as O, P and Q. They were later sampled on August 13, 2002.

3.3 Storm Drain and Former Cesspool Sampling

On August 13, 2002 CA RICH sampled the storm drains and the former cesspools at Coral Graphics. The upper two feet of storm drains I, K, L, M and N were sampled using a hand operated bucket auger. Storm drain J was not sampled at this time because it was believed to have a solid bottom and was later sampled on September 26, 2002. Cesspools O, P and Q had been backfilled during the abandonment of the cesspools. Clearwater Drilling, using a Geoprobe, drilled down to approximately 13.5 feet below land surface at the three former cesspools (O, P and Q); and a CA RICH employee collected a sample at the former sludge layer. Boring logs are included in Appendix B. The locations of the storm drains and former cesspools are shown on Figure 2.

All samples were sent to ChemTech for analysis. The soil analyses consisted of volatile organic compounds (VOCs) plus tentatively identified compounds (TICs) as well as isopropyl alcohol and 1,2,3,4 tetramethylbenzene via EPA test method 8260, semi volatile (base neutral) compounds (SVOCs) plus TICs via EPA test method 8270 and TAL metals (Tables 1 through 3).

The analytical results of the storm drain and former cesspool sampling were compared to New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM #4046) January 24, 1994. Only the sample from Leaching Pool I (VLP-I) exceeded the TAGM for VOCs (PCE, 3400 ug/Kg). All the leaching pools except Leaching Pool Q exceeded the TAGM for benzo(a)pyrene. Leaching Pools L and M had several additional exceedances for SVOCs. The metals were all below the TAGM values except for the sample from Leaching Pool M (VLP-M), which had exceedances of copper and zinc. Storm drain J was sampled at 3 feet and the soil had exceedances of semi-volatiles and metals as shown on Tables 4 through 6.

Cesspools O, P and Q are located in an active, landscaped walkway of the facility. Based on the laboratory results obtained from the bottom of these three abandoned pools, the NCDH, NYSDEC and USEPA agreed that these pools could be properly closed in accordance with NCDPW regulations without the removal of additional soil. On October 24 and 25, 2002 the covers to these pools were removed and they were filled with clean, imported sand backfill provided by Low Pro of East Farmingdale, New York. A concrete cover was then placed over the pools and the covers were overlain with either topsoil or paving bricks.

3.4 Geoprobe Soil Sampling

Five Geoprobe soil borings were installed in the former drum/rag storage area. VGP-1 was installed on August 13, 2002, during Phase I of the field program. The remaining four Geoprobe soil borings surrounding VGP-1 were installed on September 27 and 30, 2002, during Phase II and labeled VGP-2 through VGP-5. The locations of the Geoprobe soil borings are shown on Figure 3 and the boring logs are in Appendix B. The results are presented in cross-sectional format on Figures 4 and 5.

All samples were sent to ChemTech for analysis. The soil analyses for VGP-1 consisted of volatile organic compounds (VOCs) plus tentatively identified compounds (TICs) as well as isopropyl alcohol and 1,2,3,4-tetramethylbenzene via EPA test method 8260, semi volatile (base neutral) compounds (SVOCs) plus TICs via EPA test method 8270 and TAL metals. The soil analyses for the remaining four Geoprobe soil samples (VGP-2 through VGP-5) were analyzed for VOCs plus tentatively identified compounds (TICs) as well as isopropyl alcohol and 1,2,3,4-tetramethylbenzene via EPA test method 8260. The results are included on Tables 7 through 9.

VGP-1 was advanced to a depth of 19 feet. The sample from 0 to 5 feet was heavily impacted with VOCs such as PCE, toluene, xylene, isopropylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene and n-butylbenzene. The interval from 0 to 5 feet did

not have any exceedances for SVOCs or metals. VGP-1 also was sampled from 5 to 9 ft and from 14 to 19 feet. There was only one exceedance of the TAGM in these intervals. VGP-1 (5-9 ft) had 81 ug/kg of benzo(a)pyrene with a cleanup objective of 61 ug/kg.

VGP-2 and VGP-4 had no analytical compounds which exceeded the TAGM. VGP-3 and VGP-5 had exceedances of the TAGM only for the interval from 0 to 5 feet for compounds such as xylene, 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene. In summary, the soil from the former drum/rag storage area is heavily impacted from 0 to 5 feet only in the area of VGP-1, VGP-3 and VGP-5.

Additional Geoprobe soil samples were collected from inside the bottom of leaching pool I at intervals of two feet from 20 to 26 feet below land surface on September 26, 2002 as shown on Tables 4 and 5. The soil from leaching pool I had an exceedance of PCE at 8,300 ug/Kg at the interval of 20 to 22 feet below land surface and also had exceedances of three semi-volatiles. Soil from directly beneath the bottom of leaching pool I had no exceedances of the TAGM below 22 feet below land surface.

3.5 Soil Sampling

Two soil samples were collected on May 19, 2003 in the former debris pile. This debris pile was identified by NYSDEC from the March 4, 2000 aerial photograph. The soil was collected using a hand operated bucket auger from the depths 0 to 3 feet. The soil was composited and placed in a laboratory issued jar. The two soil samples (VSB-1 and VSB-2) were analyzed for VOCs plus tentatively identified compounds (TICs) as well as isopropyl alcohol and 1,2,3,4-tetramethylbenzene via EPA test method 8260. The results are included on Table 16, which show there were no exceedances of the TAGM. Figure 8 shows the location of the two samples.

3.6 Waste Characterization Sampling

Two waste characterization samples were collected on August 13, 2002. One sample was collected from storm drain I (VLP-I) and the other was collected from boring VGP-1 (0-5 ft). These samples were analyzed by EcoTest Laboratories, Inc. for TCLP VOCs, TCLP SVOCs, TCLP Pesticides, TCLP Herbicides, TCLP metals plus copper, nickel and zinc, PCB, TOX, TPHC, Flash Point, Reactivity and Corrosivity.

Based on these results, two waste streams were profiled by Innovative Recycling Technologies. The sediments from the bottom of the pools (VLP-I) were classified as a non-hazardous waste. The soil sample collected from the former waste storage area (VGP-1) was classified as hazardous due to the concentration of solvents in the material.

3.7 Geoprobe Groundwater Sampling

Ten (10) Geoprobe groundwater sampling locations were installed in October, 2002 as shown on Figures 6 and 7. Groundwater samples were collected at the water table and at approximately fifteen feet below the water table for all ten Geoprobe groundwater locations. The groundwater samples were sent to ChemTech for analysis. The analyses for Geoprobe groundwater samples consisted of volatile organic compounds (VOCs) plus tentatively identified compounds (TICs) as well as isopropyl alcohol and 1,2,3,4-tetramethylbenzene via EPA test method 8260 (Table 10).

The results of the analysis showed that the upgradient groundwater Geoprobe samples did not have PCE, however all the downgradient groundwater Geoprobe samples did have exceedances of PCE ranging from 37 ug/L to 510 ug/L. The upgradient groundwater Geoprobe samples did have 1,2,3,4-tetramethylbenzene slightly above the TOGS.

3.8 Soil Vapor Survey

Fourteen (14) soil vapor probes were installed as part of the Investigation. The locations are shown on Figure 10. Eleven of the probes were installed on the Coral Graphics property and

three were installed on the adjacent property owned by Spiegel Associates. The soil probes, VMP-1 through VMP-6 were constructed of one (1) inch PVC and were screened from eight (8) to ten (10) feet below grade. Vapor point VMP-7 was screened from 5.5 ft to 7.5 feet, because of refusal. Vapor points VMP-8 through VMP-14 were screened from 2 to 3 feet below grade. Appendix C contains the construction details.

The initial soil vapor survey was performed on February 3 and February 8, 2003. The second day of sampling was necessary for the first soil vapor survey because of the constraints to only work on weekends placed on CA Rich by the neighboring property owner. A second round of soil vapor survey was performed during the spring and summer of 2003. This second round of soil vapor survey included a screening round and a sampling round. On May 20 and 21, 2003 temporary one-inch vapor points were installed. These temporary points were screened from 2 to 3 feet and were sampled using a HNu PID. The results of the screening round are shown on Figure 9. After discussions with NYSDEC temporary points TVP-1, 3, 5, 13, 14 and 15 were converted to VMP-8 to VMP-13 with the addition of a surface casing on May 28, 2003. These points were sampled on May 29, 2003. After obtaining the results it appeared that the northern boundary of the PCE in the soil gas was not delineated and so vapor point VMP-14 was installed.

During both soil vapor surveys, three volumes of vapor were purged before the sample was taken and the air sampling pump ran until at least 60 liters of vapor was sampled at flow rate of approximately one (1) liter per minute. The sorbent tubes were taken to EcoTest Laboratories for analysis. Vapor points VMP-1 through VMP-4 and VMP-8 through VMP-14 were analyzed for Method 8260 plus Tentatively Identified Compounds (TICs), alcohol and ketones. According to the request of the neighboring property and guidance by NYSDEC vapor point VMP-5 through VMP-7 were sampled for the following compounds: PCE, TCE, cis-1,2 DCE, trans-1,2-DCE, vinyl chloride, 1,2,3,4-tetramethylbenzene, 1,2,4-trimethylbenzene, 1,35-trimethylbenzene, acetone, naphthalene, isopropyl alcohol, xylene, toluene, p-isopropyltoluene, n-butylbenene and isopropylbenzene.

The results of both soil vapor surveys are found on Table 11 and Figure 10. The vapor results were elevated for PCE with the highest reading found in VMP-12 at 170,000 ug/m³ (25 ppm). The soil vapor concentrations on the neighboring property were reduced by approximately three orders of magnitude. The other compounds were either detected at very low levels or were not detected at all. It appears that based on the PCE detections the soil vapor concentrations are fully delineated on the Coral Graphics property and that no additional soil vapor points are needed.

3.9 Groundwater Monitoring Well Installation

Eleven (11) 2-inch diameter groundwater monitoring wells were installed as part of this investigation. The locations of the monitoring wells are shown on Figures 11 and 12. Monitoring wells, VMW-1 through VMW-5 were installed during the months of December 2002 and January 2003. Upgradient monitoring well VMW-1 is a water table well. Monitoring wells VMW-2 through VMW-5 were installed as couplets. In general, the shallow monitoring well was screened five (5) feet above the water table and ten (10) feet below the water table. The deeper well was screened from twenty (20) feet below the water table to thirty (30) feet below the water table. On June 8, 2003 VMW-6 shallow and deep were installed as a couplet. The shallow monitoring well was screened five (5) feet above the water table and ten (10) feet below the water table. The deep well was screened fifteen (15) feet below the water table to twenty five (25) feet below the water table because of difficulty in drilling. The monitoring well construction details are found in Appendix D.

3.10 Groundwater Monitoring Well Sampling

The monitoring wells were sampled on February 4, February 8, 2003 June 19, 2003 and June 25, 2003 for VOCs by Method 8260 plus isopropyl alcohol and 1,2,3,4 tetramethylbenzene, SVOCs Base-Neutrals only by Method 8270 and TAL metals.

As directed by the NYSDEC, the groundwater monitoring wells were purged four (4) well volumes for the shallow wells and five (5) well volumes for the deeper wells. The wells were purged until the turbidity was below 50 NTUs and sampled with a Grunfos Redi-Flo 2.

The results of the groundwater monitoring sampling are included on Tables 12 through 14 and Figures 11 and 12. PCE was detected in all wells except for VMW-1. The highest PCE concentration was in the off-site downgradient shallow monitoring well VMW-5S (1000 ppb) and the shallow groundwater on-site in the waste disposal area well, VMW-4S (940 ppb). VMW-3S, which lies west of VMW-4S, had a PCE concentration of 590 ppb. The upgradient monitoring well to the north had 9.5 ppb of PCE. The deeper monitoring wells also had detections of PCE but the deep zone was not as impacted as the shallow monitoring wells. The range of PCE concentration in the deep zone ranged from 6.7 (upgradient monitoring well to the north) to 240 ppb (near southwestern property boundary). There were no semi-volatile exceedances in either the shallow or deep monitoring wells. Several metals, except for sodium, just slightly exceeded their NYSDEC TOGS water quality standards and guidance values. Sodium was elevated above TOGs in the upgradient well and in several other wells with no apparent pattern.

3.11 Groundwater Elevation Measurement and Mapping

On February 22, 2003, CA RICH measured the nine monitoring wells. Depth to water measurement were performed to determine the groundwater elevations in each well. The surveyor data is found in Appendix E. The "chalked steel tape" method was used to determine the groundwater elevations and hence the direction of groundwater flow for the area. The results are found in the attached Table 15. The contour maps for the water table and deep potentiometric maps are found on Figures 13 and 14. From this data, the direction of groundwater flow was determined to be to the south-southeast.

On July 31, 2003, CA RICH measured the eleven monitoring wells. The results are found in Table 17. The contour maps for the water table and deep potentiometric maps are found on Figures 15 and 16. The direction of groundwater flow was determined to be west-southwest. This difference in groundwater flow is probably due to the active cooling water ponds to the west of Coral Graphics which are used in the summer at the former Northrop-Grumman Facility.

4.0 NATURE AND EXTENT OF CONTAMINATION

4.1 Soil

Storm Drains I, J, K, L, M, N were sampled and all had exceedances for SVOCs. Leaching pool I exceeded the TAGM for PCE (3,400 ug/Kg), as well. These storm drains are all impacted and should be cleaned out.

Five Geoprobe soil borings were installed in the former drum/rag storage area. The contaminants of concern in this area are PCE, toluene, xylene, isopropylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene and n-butylbenzene. The soil from the former drum/rag storage area is heavily impacted from 0 to 5 feet in the area of VGP-1, VGP-3 and VGP-5. Contamination is not found below the 5 foot interval above the TAGM.

4.2 Soil Vapor

The soil vapor results showed elevated concentrations of PCE on the Coral Graphics property. The concentrations on the Coral Graphics property ranged from 170,000 ug/m³ to 44 ug/m³. On the adjacent Spiegel property the concentrations of PCE ranged from 310 ug/m³ to 280 ug/m³. The extent of contamination of the soil vapor probes is now fully delineated on the Coral Graphics property.

4.3 Groundwater

The groundwater results showed elevated concentrations of PCE on the Coral Graphics property and the neighboring Spiegel property. The shallow groundwater PCE concentrations ranged non-detect to 1000 ppb. The deep groundwater PCE concentrations ranged from 6.7 ppb to 240 ppb. There were no semi-volatile organic compound exceedances. Several metals just slightly exceeded their standards and guidelines. Sodium, which is considered a metal for reporting purposes, had larger exceedance. The highest concentration of sodium is 80,400 ppb.

Based upon these results it appears that the downgradient extent of PCE contamination has not yet been delineated in a southerly and western direction.

5.0 EXPOSURE ASSESSMENT

5.1 Introduction

The purpose of this human health Exposure Assessment (EA) is to evaluate whether concentrations of VOCs, SVOCs, TAL metals in soil, groundwater and soil gas could pose a potential risk to present and future receptors from the site. This Exposure Assessment was prepared in accordance with guidance provided in the:

- New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Remediation, Draft Voluntary Cleanup Program Guide, May 2002, Appendix C.

In addition supplemental guidance was also provided by:

- United States Environmental Protection Agency (USEPA), Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A) Interim Final, 1989.

This qualitative Exposure Assessment will characterize whether the site poses an existing or future hazard to the exposed or potentially exposed population. The sampling data for the environmental media for both on-site and off-site was reviewed in order to determine whether there is an additional health risk to the community from the site. This was accomplished by characterizing the exposure setting, identifying exposure pathways and evaluating contaminant fate and transport.

The five elements of an exposure pathway are: (1) a contaminant source; (2) contaminant release and transport mechanisms; (3) a point of exposure; (4) a route of exposure; and (5) a receptor population. An exposure pathway is considered complete when all five element of an exposure pathway are documented. A potential exposure pathway exists when the absence of any one or more of the five elements stated above cannot be confirmed. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present, and will never exist in the future.

5.2 Land Use of Coral Graphics and Neighboring Properties-Current and Future Exposure Setting

The area immediately surrounding Coral Graphics is industrial. There are several light industrial buildings to the north and south of Coral Graphics. Further south there is a retail shopping plaza. There are three federal and state Superfund sites within a mile of the site: Hooker/Ruco, US Department of Navy and the Grumman site. Within 500 feet west of the Coral Graphics site lies a residential neighborhood of Hicksville.

It is expected that the future use of the Coral Graphics facility would remain industrial because the surrounding land use is industrial and the area is zoned industrial. The residential land use in the surrounding area is zoned residential and is anticipated to remain residential since the neighborhood is well developed and established.

5.3 Potentially Exposed Population- Potential Human Receptors

The following is a list of potential human receptors that are likely to be present at the site or in the surrounding environment. It is based on the history of past and current industrial and residential use in the surrounding area, and can be projected to a future of continued industrial and residential uses.

- On-site workers (current/future)
- Off-site workers (current/future)
- On-site visitor (current/future)
- Trespassers (current/future)
- Area resident (current/future)
- On-site construction workers (current/future)
- Off-site construction workers (current/future)

Trespassers and on-site visitors would have much less exposure than on-site workers and so they will be deleted from further consideration.

5.4 Exposure Routes

An exposure route is the mechanism by which a receptor comes into contact with a chemical. Three potential primary routes exist by which chemicals can enter the body:

- Ingestion of water and/or soil;
- Inhalation of vapors and particulates and
- Dermal contact with water or soil.

5.5 Identification of Exposure Pathways (Contaminants source, Contaminant release and transport mechanism, Point of exposure, Route of Exposure, Receptor Population)

The potential exposure pathway from soil for the present and future use would be during an excavation, performed by an on-site construction worker. These workers could potential ingest, inhale or have dermal contact with the chemicals of concern. It is not reasonable to expect that any of the other potential receptor would have contact with the soil because the soil, cesspool and storm drains are all below grade. The soil from the former drum/rage storage area is covered with an asphalt parking lot. The cesspools have solid covers overlying the pools. The storm drain contamination is not accessible by any receptors, which might be in the area of the storm drain.

Soil gas is derived from contaminated soil and/or groundwater off gassing into the vapor phase. Because of the high levels of PCE in the soil vapor, there is the potential for the migration of the soil vapor to migrate into the Coral Graphics facility and the neighboring Spiegel building. The exposure route for the soil gas would be inhalation. The potential receptors would be on-site building worker, off-site building workers, area residents, on-site construction worker and off-site construction workers.

There is a potential exposure pathway for groundwater for both present and future use. There are exceedances of PCE in the groundwater both on-site and off-site, which could migrate to a public supply well. The supply wells in the area in a south-southwest direction are: 3194, 3618

and 7076. They are all in the northeast corner of the intersection of Hempstead Turnpike and Jerusalem Avenue. These supply wells are located 1.5 miles from the site. The supply wells in the area in a west-southwest direction are: 3488, 4451 and 8525. They are located approximately one mile from Coral Graphics. The potential receptors to this PCE impacted groundwater are area residents who would be exposed by ingestion, inhalation and dermal contact.

5.6 Evaluation of Potential Exposure Pathways

The pathway from subsurface soils is potentially only complete for the on-site construction workers performing excavation. Having an appropriate Health and Safety Plan for the construction workers can mitigate this potential pathway. The surface soils are all covered by an asphalt parking lot, which should remain in place in the future, if the building remains intact.

Soil vapor is a potential exposure pathway to the on-site workers in the Coral Graphics facility. The concentration for the off-site worker would be less than to on-site workers since the highest off-site concentration is 310 ug/m³ as compared to 170,000 ug/m³. Based on the data received to date we would not expect the high soil vapor reading to migrate to the residential area. On-site and off-site construction workers can be protected by a comprehensive Health and Safety plan when they are performing excavations.

Groundwater contamination distribution has not been fully delineated. There are public supply wells within 1.5 miles of the Coral Graphics facility, however it is unlikely that the contamination levels, up to 1 ppm off-site, would reach the public supply wells. This pathway is not considered to be a complete pathway although there are exceedances of PCE in the groundwater attributable to the site.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions from the extensive testing of the Coral Graphics site is that soil, soil gas and groundwater are impacted by PCE. The soil is contaminated by PCE and other volatile compounds. The storm drains were impacted by volatiles and semi-volatile compounds.

6.1 Conclusions

- The soil contamination in the former waste storage area has been delineated horizontally and vertically, as shown by the contamination distribution in VGP-1 through VGP-5. There is a potential exposure pathway to on-site construction workers. The recommendation for the soil contamination is to excavate the heavily contaminated soils found above the five (5) foot level. The recommendation for the storm drains is to clean them out, especially leaching pool I (VLP-I) which had PCE down to the 22 foot interval. This work should be done as an Interim Remedial Measure (IRM).
- The extent of the soil gas has been delineated on-site. Elevated readings were found in ten on-site vapor points. There is a potential exposure pathway to on-site workers from the soil gas. Since the area impacted by soil gas is delineated on-site, a soil vapor extraction (SVE) system should be installed.
- Based upon measurements collected during on February 22, 2003, the direction of groundwater flow is to the south-southeast. Based upon measurements collected on July 31, 2003 the direction of groundwater flow is to the west-southwest. This difference in groundwater flow is probably due to the active cooling water ponds to the west of Coral Graphics which are used in the summer. The off-site investigation will be modified to incorporate an investigation to the west-southwest.
- The groundwater contamination was delineated on-site by examining the groundwater Geoprobe and the monitoring well sample results. Although there are no potential exposure pathways from the groundwater directly, the on-site groundwater should be remediated using

an available methodology such as air sparging to assist in remediating the groundwater at the source.

- The off-site groundwater contamination has not been fully delineated. Additional off-site monitoring wells are needed to complete the delineation of the PCE plume. These off-site wells should be monitored to determine the effectiveness of the air sparging system as it operates over time.

6.2 Recommendations

- The project should be separated into on-site and off-site components.
- An on-site Remediation Work Plan should be prepared to address the known areas of soil, soil vapor and groundwater contamination on the property.
- The extent of off-site groundwater contamination should be defined as part of an off-site groundwater investigation. The results of the off-site investigation should be used to develop a remediation strategy to address the contaminants that have migrated beyond the Coral Graphics property.

7.0 REFERENCES

1. Nelson, Pope & Voorhis, LLC, Voluntary Investigation Work Plan, May, 2002
2. Nelson, Pope & Voorhis, LLC, Limited Phase II ESA, August, 2000
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4. Malcolm Pirnie, Phase I ESA, May, 2000
5. Smolensky, D. A. and Feldman, S.M. 1988. Geohydrology of the Bethpage-Hicksville-Levittown Area, Long Island, New York, WRI Report 88-4135.
6. NYSDEC, October 22, 1993, Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values.
7. NYSDEC, January 24, 1994, Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels.

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TABLES

Validated Summary of Detections - Volatile Organic Compounds
Surficial Leaching Pool Soil Samples
Coral Graphics
Hicksville, New York

Notes:	
Dup- Duplicate Sample;	* NYSDEC Technical and Administrative Guidance
Re- Reanalysis due to laboratory critieria	Memorandum: Determination of Soil Cleanup
NGV-No given value	Objectives and Cleanup Levels; January 24, 1994.
J-Estimated value when the result was less than the specified detection limit but greater than zero	
Shaded value exceeds TAGM	
< Indicates that the method detection limit for specific compound.	
All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.	
Soil cleanup objective: total VOCs less than or equal to 10,000 parts per billion	Users/Projects/Coral Graphics/Phase I Tables/VOC soil leaching pool

TABLE 1 Cont.

**Validated Summary of Detections - Volatile Organic Compounds
Surficial Leaching Pool Soil Samples
Coral Graphics
Hicksville, New York**

Sample ID Matrix Date Sampled Location	VLP-MRE Soil 8/13/02 Leaching Pool M	VLP-N Soil 8/13/02 Leaching Pool N	VLP-O Soil 8/13/02 Leaching Pool O	VLP-P Soil 8/13/02 Leaching Pool P	VLP-Q Soil 8/13/02 Leaching Pool Q	*NYSDEC TAGM #4046 Cleanup Objective
Volatile Organic Compounds (USEPA Method 8260)						
Parameters	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
124-Trimethylbenzene	5.9	< 1.5	< 1.5	< 1.6	< 1.5	10,000
135-Trimethylbenzene	2.8	< 1.4	< 1.4	< 1.5	< 1.4	3,300
p-Isopropyltoluene	3.1	< 1.9	< 1.9	< 2	< 1.9	10,000
Tetrachloroethene	< 1.9	< 1.3	< 1.3	< 1.4	< 1.3	1,400
Toluene	6.5	< 1.2	< 1.2	< 1.2	< 1.2	1,500
Isopropyl Alcohol	< 78	< 53 J	< 54 J	< 57 J	< 53 J	10,000
* NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994. Notes: J-Estimated value when the result was less than the specified detection limit but greater than zero Re-Reanalysis due to laboratory critieria < Indicates that the method detection limit for specific compound. All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion. Soil cleanup objective: total VOCs less than or equal to 10,000 parts per billion						

TABLE 2
Validated Summary of Detections - Semi-Volatile Organic Compounds
Surficial Leaching Pool Soil Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location	VLP-I Soil 8/13/02 Leaching Pool I	VLP-I Dup Soil 8/13/02 Leaching Pool I	VLP-K Soil 8/13/02 Leaching Pool K	VLP-L Soil 8/13/02 Leaching Pool L	VLP-M Soil 8/13/02 Leaching Pool M	*NYSDEC TAGM #4046 Cleanup Objective
Semi-Volatile Organic Compounds (USEPA Method 8270)						
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Acenaphthene	< 42	< 43	< 47	< 47	850	50,000
Diethylphthalate	< 35	< 36	69	< 40	< 510	7,100
Fluorene	< 39	< 40	57	49	1000	50,000
Hexachlorobenzene	< 39	< 40	< 44	< 44	< 560	410
Phenanthrene	< 35	65	270	810	15000	50,000
Anthracene	< 46	< 47	< 52	66	1700	50,000
Carbazole	< 14	< 15	45	170	1900	NGV
Di-n-Butyl Phthalate	83	71	140	< 47	2700	8,100
Fluoranthene	< 35	140	460	1600	29000	50,000
Pyrene	< 35	130	370	1400	23000	50,000
Butylbenzylphthalate	650	170	770	45	2600	50,000
3,3-Dichlorobenzidine	< 35	< 36	< 40	< 40	< 510	50,000
Benzo(a)anthracene	< 35	78	140	520	11000	224
Chrysene	< 56	110	270	1200	18000	400
Bis(2-ethylhexyl)phthalate	230	< 36	1500	920	13000	50,000
Di-n-octyl Phthalate	< 53	< 54	380	510	50000 E	50,000
Benzo(b)fluoranthene	64	150	290	1400	16000	1,100
Benzo(k)fluoranthene	< 91	< 94	190	800	11000	1,100
Benzo(a)pyrene	< 53	110	180	840	14000	61
Indeno(1,2,3-cd)pyrene	< 56	60	97	440	8700	3,200
Dibenz(a,h)anthracene	< 53	< 54	< 60	< 60	< 770	14
Benzo (g,h,i) perylene	< 46	68	93	430	7100	50,000
Total TICS	10690 J	10690 J	10980 J	8540 J	112000 J	500,000

Notes:

Shaded values exceed TAGM

NGV - No Given Value

E-Indicate the analyte's concentration exceeds the calibrated range

J-Estimated value

Soil cleanup objective: total SVOCs are less than or equal to 500 parts per million

< Indicates that the method detection limit for specific compound.

All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.

Dup - Duplicate Sample

* NYSDEC Technical and Administrative Guidance

Memorandum: Determination of Soil Cleanup

Objectives and Cleanup Levels; January 24, 1994.

TABLE 2 cont.

Validated Summary of Detections - Semi-Volatile Organic Compounds
 Surficial Leaching Pool Soil Samples
 Coral Graphics
 Hicksville, New York

Sample ID Matrix Date Sampled Location	VLP-M Soil-Diluted 8/13/02 Leaching Pool M	VLP-N Soil 8/13/02 Leaching Pool N	VLP-O Soil 8/13/02 Leaching Pool O	VLP-P Soil 8/13/02 Leaching Pool P	VLP-Q Soil 8/13/02 Leaching Pool Q	*NYSDEC TAGM #4046 Cleanup Objective
Semi-Volatile Organic Compounds (USEPA Method 8270)						
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Acenaphthene	< 3000	< 41	< 42	< 44	< 41	50,000
Diethylphthalate	2900	220	39	190	< 35	7,100
Fluorene	< 2800	< 38	< 39	< 41	< 38	50,000
Hexachlorobenzene	< 2800	< 38	< 39	< 41	< 38	410
Phenanthrene	14000	360	170	210	< 35	50,000
Anthracene	< 3300	< 45	< 46	< 48	< 45	50,000
Carbazole	< 1000	120	< 14	40	< 14	NGV
Di-n-Butyl Phthalate	< 3000	< 41	< 42	< 44	< 41	8,100
Fluoranthene	24000	1300	420	380	< 35	50,000
Pyrene	23000	1400	380	370	< 35	50,000
Butylbenzylphthalate	2900	< 35	86	81	< 35	50,000
3,3-Dichlorobenzidine	< 2500	< 35	< 35	< 37	< 35	50,000
Benzo(a)anthracene	11000	310	180	170	< 35	224
Chrysene	17000	920	210	270	< 55	400
Bis(2-ethylhexyl)phthalate	15000	77	71	140	61	50,000
Di-n-octyl Phthalate	50000	< 52	< 53	< 56	< 52	50,000
Benzo(b)fluoranthene	20000	1300	220	300	< 35	1,100
Benzo(k)fluoranthene	10000	700	150	220	< 90	1,100
Benzo(a)pyrene	15000	790	210	260	< 52	61
Indeno(1,2,3-cd)pyrene	7700	830	130	110	< 55	3,200
Dibenz(a,h)anthracene	< 3800	< 52	< 53	< 56	< 52	14
Benzo (g,h,i) perylene	7600	920	130	140	< 45	50,000
Total TICS	0	10560 J	7370 J	7000 J	6720 J	500,000
Notes: NGV - No Given Value Shaded values exceed TAGM < Indicates that the method detection limit for specific compound. J-Estimated value Soil cleanup objective: total SVOCs are less than or equal to 500 parts per million All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion.						
* NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.						

TABLE 3

Validated Summary of Detections - Metals
Surficial Leaching Pool Soil Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location	VLP-A Soil 8/13/02 Leaching Pool A	VLP-I Soil 8/13/02 Leaching Pool I	VLP-ID Soil 8/13/02 Leaching Pool I	VLP-K Soil 8/13/02 Leaching Pool K	VLP-L Soil 8/13/02 Leaching Pool L	VLP-M Soil 8/13/02 Leaching Pool M	*NYSDEC TAGM #4046 Eastern US Background	*NYSDEC TAGM #4046 Cleanup Objective
TAL Metals Compounds								
<u>Parameters</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>
Aluminum	810	2240 R	1720 R	943 R	1480 R	3010 R	33,000	SB
Antimony	< 0.24	0.65 BU	1.2 BU	0.62 BU	0.98 BU	2.2 B	NGV	SB
Arsenic	0.72 B	0.8 BU	1.2 U	0.4 BU	0.87 BU	2.8	3 to 12	7.5 or SB
Barium	3 B	12.8 B	15 B	4.7 B	13 B	29.1 B	15 to 600	300 or SB
Beryllium	0.1 B	0.06 BU	0.07 B	0.1 B	0.09 B	0.14 B	0 to 1.75	0.16 or SB
Cadmium	< 0.05	< 0.05	< 0.05	< 0.06	< 0.06	1.1	0.1 to 1	1 or SB
Calcium	402 B	982	3320	336 B	531 B	2760	130 to 35,000	SB
Chromium	2.3	3	5	2.4	3.6	26.7	1.5 to 40	10 or SB
Cobalt	0.29 BU	13	15.3	0.87 B	1.3 B	2.7 B	2.5 to 60	30 or SB
Copper	3.4	29.7	22.6	4.3	6.7	64.4	1 to 50	25 or SB
Iron	3320 J	8830 J	5190 J	1830 J	2610 J	4470 J	2,000 to 550,000	2000 or SB
Lead	0.95 J	7.1 J	15.3 J	3.2 J	6.1 J	49.5 J	NGV	SB
Magnesium	197 B	1180	829	217 B	470 B	1270	100 to 5,000	SB
Manganese	10.4	56.7 J	56.7 J	7.5 J	22.6 J	30 J	50 to 5,000	SB
Mercury	< 0.01	0.05 J	0.05 J	0.01 J	0.02 J	0.16 J	0.001 to 0.2	0.1
Nickel	2.1 B	0.28 B	< 0.24	< 0.26	< 0.26	8.4	0.5 to 25	13 or SB
Potassium	99.3 B	117 B	159 B	66.1 B	114 B	167 B	8,500 to 43,000	SB
Selenium	< 0.34	< 0.35	< 0.36	< 0.39	< 0.39	< 0.52	0.1 to 3.9	2 or SB
Silver	< 0.38	0.51B	< 0.4	< 0.44	< 0.43	2.4	NGV	SB
Sodium	93.1 B	147 BJ	156 BJ	135 BJ	141 BJ	236 BJ	6,000 to 8,000	SB
Thallium	< 0.6	< 0.62	< 0.62	< 0.69	< 0.68	< 0.91	NGV	SB
Vanadium	1.9 B	11.2	5.9	< 3.4	4.5 B	12.4	1 to 300	150 or SB
Zinc	10.6	19.7 J	11.2 J	29.5 J	0.62 BJ	450 J	9 to 50	20 or SB

Notes:

Shaded values exceed TAGM and Eastern US Background

SB-Site background.

NGV-No given value.

B-The reported value is less than the Contract Required Detection Limit

R-The sample results are unreliable/unuseable.

J-Estimated value when the results was less than the specified detection limit but greater than zero.

U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

< Indicates that the method detection limit for specific compound.

All concentrations are reported in micrograms per kilogram (mg/kg) or parts per million.

* NYSDEC Technical and Administrative Guidance
 Memorandum: Determination of Soil Cleanup
 Objectives and Cleanup Levels; January 24, 1994.

User/Projects/Coral Graphic/ Phase I Tables/Metals Leaching Pool

TABLE 3 cont.

Validated Summary of Detections - Metals
 Surficial Leaching Pool Soil Samples
 Coral Graphics
 Hicksville, New York

Sample ID Matrix Date Sampled Location	VLP-N Soil 8/13/02 Leaching Pool N	VLP-O Soil 8/13/02 Leaching Pool O	VLP-P Soil 8/13/02 Leaching Pool P	VLP-Q Soil 8/13/02 Leaching Pool Q	*NYSDEC TAGM #4046 Eastern US Background	*NYSDEC TAGM #4046 Cleanup Objective
TAL Metals Compounds						
<u>Parameters</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>
Aluminum	714 R	2180 R	2750 R	1080 R	33,000	SB
Antimony	0.5 BU	0.91 BU	0.65 BU	< 0.24 U	NGV	SB
Arsenic	0.75 BU	5.7	5.7	0.97 BU	3 to 12	7.5 or SB
Barium	4.2 B	11.1 B	29.9	9.8 B	15 to 600	300 or SB
Beryllium	0.06 BU	0.11 B	0.16 B	0.09 B	0 to 1.75	0.16 or SB
Cadmium	< 0.05	0.34 B	0.17 B	< 0.05	0.1 to 1	1 or SB
Calcium	263 B	9650	6680	823	130 to 35,000	SB
Chromium	1.3	19.8	22.3	8.8	1.5 to 40	10 or SB
Cobalt	0.75 B	1.3 B	2.4 B	0.43 B	2.5 to 60	30 or SB
Copper	3.3	39.2	14.2	9.6	1 to 50	25 or SB
Iron	2210 J	4790 J	6650 J	5440 J	2,000 to 550,000	2000 or SB
Lead	1.7 J	55.7 J	24.2 J	3.5 J	NGV	SB
Magnesium	175 B	977	2470	363 B	100 to 5,000	SB
Manganese	37.9 J	45.7 J	155 J	11.2 J	50 to 5,000	SB
Mercury	< 0.01 UJ	0.07 J	0.06 J	0.04 J	0.001 to 0.2	0.1
Nickel	1.1 B	2.4 B	1 B	1.5 B	0.5 to 25	13 or SB
Potassium	61.9 B	123 B	168 B	111 B	8,500 to 43,000	SB
Selenium	< 0.35	< 0.35	0.52 B	< 0.34	0.1 to 3.9	2 or SB
Silver	< 0.39	3.5	< 0.42	< 0.39	NGV	SB
Sodium	104 BJ	91 B J	98 BJ	124 BJ	6,000 to 8,000	SB
Thallium	< 0.61	< 0.62	< 0.65	< 0.6	NGV	SB
Vanadium	2.5 B	8.6	11.7	3.6 B	1 to 300	150 or SB
Zinc	11.8 J	8 J	0.07 BJ	6.5 J	9 to 50	20 or SB

Notes:

Shaded values exceed TAGM and Eastern US Background

SB-Site background.

NGV-No given value.

B-The reported value is less than the Contract Required Detection

R-The sample results are unreliable/unuseable.

J-Estimated value when the results was less than the specified
detection limit but greater than zero

U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

< Indicates that the method detection limit for specific compound.

All concentrations are reported in micrograms per kilogram (mg/kg) or parts per million.

* NYSDEC Technical and Administrative Guidance

Memorandum: Determination of Soil Cleanup

Objectives and Cleanup Levels; January 24, 1994.

User/Projects/Coral Graphics/Phase I Tables/Metal leaching Pool2

TABLE 4

**Validated Summary of Detections- Volatile Organic Compounds
Leaching Pool I and J
Coral Graphics
Hicksville, New York**

Sample ID Matrix Date Sampled Location Depth	VLP-I 20-22' Soil 9/26/02 Leaching Pool I 20 to 22 ft	VLP-I 20-22' Dup Soil-Duplicate 9/27/2002 Leaching Pool I 20 to 22 ft	VLP-I 20-22' Dup Dil Soil-Duplicate-Dilute 9/27/2002 Leaching Pool I 20 to 22 ft	VLP-I 22-24' Soil 9/26/02 Leaching Pool I 22 to 24 ft	VLP-I 24-26' Soil 9/26/2002 Leaching Pool I 24 to 26 ft	VLP-J 3' Soil 9/26/02 Leaching Pool J 3 ft	*NYSDEC TAGM #4046 Cleanup Objective
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Methylene Chloride	4 U	6.5 UJ	< 260	3.4 U	3.5 JB	< 1.5	100
Trichloroethene	< 1	7.2 J	< 100	< 1	< 1	< 1.1	700
Tetrachloroethene	110	9200 EJ	8300	3.2 J	21	42	1,400
Isopropyl Alcohol	< 5.3	44 J	< 730	< 5.2	6.5	< 5.6	10,000
Notes: J-Estimated value when the result was less than the specified detection limit but greater than zero. E-Indicates that the analyte concentration exceeds the calibrate range B-The analyte has been found in the blank U-The analyte was analyzed for but not detected above the reported sample quantitation limit NGV-No given value Shaded value exceeds TAGM < Not Detected. Value shown indicates analytical method detection limit. All concentrations are reported in micrograms per kilogram (µg/Kg) or parts per billion. Soil cleanup objective: total VOCs less than or equal to 10,000 parts per billion. * NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994. Users/Projects/Coral/Phase II Tables/VOC VLP-I and VLP-J							

TABLE 5

Validated Summary of Detections -Semi-Volatile Organic Compounds
Leaching Pool I and J
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VLP-I 20-22 Soil 9/27/02 Leaching Pool I 20 to 22 ft	VLP-I 20-22' Dup Soil-Duplicate 9/27/2002 Leaching Pool I 20 to 22 ft	VLP-I 22-24' Soil 9/26/02 Leaching Pool I 22 to 24 ft	VLP-I 24-26' Soil 9/26/02 Leaching Pool I 24 to 26 ft	VLP-J 3' Soil 9/26/02 Leaching Pool J 3 ft	VLP-J 3' Dil Soil-Diluted 9/26/02 Leaching Pool J 3 ft	*NYSDEC TAGM #4046 Cleanup Objective
Semi-Volatile Organic Compounds (USEPA Method 8270)							
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Phenanthrene	400 J	380 J	< 34 J	< 34 J	780 J	780 J	50,000
Anthracene	53 J	< 49	< 44 J	< 44 J	92 J	< 480	50,000
Carbazole	110 J	98 J	< 14 J	< 14 J	150 J	< 150	NGV
Di-n-Butyl Phthalate	54 J	53 J	< 40 J	< 40 J	110 J	< 430	8,100
Fluoranthene	940 J	820 J	< 34 J	< 34 J	1700 J	1300 J	50,000
Pyrene	990 J	890	< 34 J	< 34 J	1700 J	1400 UJ	50,000
Butylbenzylphthalate	620 J	610	< 34 J	< 34 J	510 J	540 J	50,000
Benzo(a)anthracene	410 J	350 J	< 34 J	< 34 J	710 J	640 J	224
Chrysene	700 J	610	< 54 J	< 54 J	1200 J	1000 J	400
Bis(2-ethylhexyl)phthalate	730 J	670	< 43 J	< 39 J	17000 EJ	9400	50,000
Benzo(b)fluoranthene	580 J	610 J	< 34 J	< 34 J	1200 J	1300 J	1,100
Benzo(k)fluoranthene	940 J	510 J	< 88 J	< 88 J	1200 J	< 950	1,100
Benzo(a)pyrene	610 J	490 J	< 51 J	< 51 J	1100 J	< 550	61
Indeno(1,2,3-cd)pyrene	< 61 J	120 J	< 54 J	< 54 J	130 J	< 590	3,200
Benzo (g,h,i) perylene	220 J	200 J	< 44 J	< 44 J	350 J	< 480	50,000
Total TICS	12180 J	16800 J	4217 J	5110 J	5750 J	0	500,000

Notes:

J-Estimated value when the result was less than the specified
detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

U-The analyte was analyzed for but not detected above the reported sample quantitation limit

NGV-No given value

Shaded value exceeds TAGM

< Not Detected. Value shown indicates analytical method detection limit.

Soil cleanup objective: total SVOCs are less than or equal to 500 parts per million

All concentrations are reported in micrograms per kilogram (µg/Kg) or parts per billion.

* NYSDEC Technical and Administrative Guidance

Memorandum: Determination of Soil Cleanup

Objectives and Cleanup Levels; January 24, 1994.

Users/Projects/Coral/Phase II Tables/SVOC VLP-I and VLP-J

TABLE 6

Validated Summary of Detections - Metals
Leaching Pool J
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VLP-J 3' Soil 9/26/02 Leaching Pool J 3 ft	*NYSDEC TAGM #4046 Eastern US Background	*NYSDEC TAGM #4046 Cleanup Objective
TAL Metals Compounds			
<u>Parameters</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>
Aluminum	1290	33,000	SB
Antimony	1.1 BU	NGV	SB
Arsenic	3.3	3 to 12	7.5 or SB
Barium	25	15 to 600	300 or SB
Beryllium	0.1 BU	0 to 1.75	0.16 or SB
Calcium	3680	130 to 35,000	SB
Chromium	30.4	1.5 to 40	10 or SB
Cobalt	26.3	2.5 to 60	30 or SB
Copper	59.3	1 to 50	25 or SB
Iron	30000	2,000 to 550,000	2000 or SB
Lead	49	NGV	SB
Magnesium	1320	100 to 5,000	SB
Manganese	246	50 to 5,000	SB
Mercury	0.82	0.001 to 0.2	0.1
Nickel	16.9	0.5 to 25	13 or SB
Potassium	133 B	8,500 to 43,000	SB
Thallium	2.3	NGV	SB
Vanadium	6.2	1 to 300	150 or SB
Zinc	94.9	9 to 50	20 or SB
Notes: Shaded values exceed TAGM and Eastern US Background NGV - No Given Value SB-Site background B- The analyte has been found in the blank. U-The analyte was analyzed for but not detected above the sample quantitation limit. <Not detected. Value shown indicates analytical method detection limit All concentrations are reported in micrograms per kilogram (mg/Kg) or parts per million. * NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994. User/Projects/Coral Graphic/ Phase II Tables/Metals VLP-J			

TABLE 7

Validated Summary of Detections - Volatile Organic Compounds
Geoprobe Soil Borings
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGP-1 0-5' Soil 8/13/02 Geoprobe VGP-1 0 to 5 ft	VGP-1 0-5 Soil-Diluted 8/13/02 Geoprobe VGP-1 0 to 5 ft	VGP-1 0-5' Dup Soil 8/13/02 Geoprobe VGP-1 0 to 5 ft	VGP-1 0-5 Dup Soil-Diluted 8/13/02 Geoprobe VGP-1 0 to 5 ft	VGP-1 5-9' Soil 8/13/02 Geoprobe VGP-1 5 to 9 ft	VGP-1 14-19' Soil 8/13/02 Geoprobe VGP-1 14 to 19 ft	*NYSDEC TAGM #4046 Cleanup Objective
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Methylene Chloride	< 490	< 49000	< 230	< 23000	< 2.7	< 1.4	100
Tetrachloroethene	6500	< 20000	3900	< 9200	63	< 1.2	1,400
Toluene	270000 E	300000	63000 E	82000	< 2.2	< 1.1	1,500
m & p xylenes	5700	< 42000	2700	< 20000	< 5.7	< 2.9	1200**
o-xylene	69000 E	74000 J	30000 E	39000 J	< 2.2	< 1.1	1200**
Isopropylbenzene	85000 E	89000 J	20000	29000 J	< 2.2	< 1.1	2,300
1,2,4-Trichlorobenzene	< 360	< 36000	< 170	< 17000	< 3.1	< 1.6	3,400
n-Propylbenzene	210000 E	200000	40000 E	48000 J	< 2.7	< 1.4	3,700
1,3,5-Trimethylbenzene	1600000 E	870000	720000 E	480000	6.9 J	< 1.4	3,300
1,2,4-Trimethylbenzene	920000 E	3000000	430000 E	1600000	3.7 J	< 1.5	10,000
n-Butylbenzene	58000 E	79000 J	23000	37000 J	< 4.9	< 2.5	10,000
1,2,3-Trichlorobenzene	< 290	< 29000	< 140	< 14000	< 3.9	< 2.0	10,000
Naphthalene(v)	4400	< 25000	2000	< 12000	< 2.4	< 1.2	13,000
p-Isopropyltoluene	50000	56000 J	21000	29000 J	< 3.7	< 1.9	NGV
1,2,3,4-Tetramethylbenzene	19000	< 140000	7500	< 66000	< 10	< 5.2	NGV
Isopropyl Alcohol	< 5600	< 560000	< 2600	< 260000	< 100	< 52	10,000

Notes:

J-Estimated value when the result was less than the specified detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

NGV-No given value

Shaded value exceeds TAGM

< Not Detected. Value shown indicates analytical method detection limit.

**Total xylenes=1200 ppb

Soil cleanup objective: total VOCs less than or equal to 10,000 parts per billion.

All concentrations are reported in micrograms per kilogram (µg/Kg) or parts per billion.

* NYSDEC Technical and Administrative Guidance

Memorandum: Determination of Soil Cleanup

Objectives and Cleanup Levels; January 24, 1994.

Users/Projects/Coral/Phase II Tables/Geoprobe Soil VOC

TABLE 7 cont.

Validated Summary of Detections - Volatile Organic Compounds
Geoprobe Soil Borings
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGP-2 0-5' Soil 9/30/02 Geoprobe VGP-2 0 to 5 ft	VGP-2 8-10' Soil 9/30/02 Geoprobe VGP-2 8 to 10 ft	VGP-3 0-5' Soil 9/30/02 Geoprobe VGP-3 0 to 5 ft	VGP-3 0-5 Dil Soil-Diluted 9/30/02 Geoprobe VGP-3 0 to 5 ft	VGP-3 0-5' Dup Soil 9/30/02 Geoprobe VGP-3 0 to 5 ft	VGP-3 5-10' Soil 9/30/02 Geoprobe VGP-3 5 to 10 ft	*NYSDEC TAGM #4046 Cleanup Objective
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Methylene Chloride	5.9 B	5.3 JB	< 230	< 2300	340 J	< 1.3	100
Tetrachloroethene	13	< 1.3	350 J	1700 J	840	< 1.2	1,400
Toluene	< 1.1	< 1.2	< 92	< 920	520 J	< 1.1	1,500
m & p xylenes	< 2.9	< 3.0	210 J	< 2000	< 200	< 2.9	1200**
o-xylene	< 1.1	< 1.2	2000	3000 J	940	< 1.1	1200**
Isopropylbenzene	< 1.1	< 1.2	< 97	< 970	< 97	< 1.1	2,300
1,2,4-Trichlorobenzene	< 1.5	< 1.6	< 170	< 1700	< 170	< 1.5	3,400
n-Propylbenzene	< 1.3	< 1.4	< 100	< 1000	< 100	< 1.3	3,700
1,3,5-Trimethylbenzene	6.7	2.5 J	38000 E	52000	24000	2 J	3,300
1,2,4-Trimethylbenzene	5.8	2.2 J	98000 E	160000	13000	4.7 J	10,000
n-Butylbenzene	< 2.5	< 2.6	< 160	< 1600	< 160	< 2.5	10,000
1,2,3-Trichlorobenzene	< 2.0	< 2	< 140	< 1400	< 140	< 1.9	10,000
Naphthalene(v)	< 1.2	< 1.3	250 J	< 1200	200 J	< 1.2	13,000
p-Isopropyltoluene	< 1.9	< 1.9	2100	2800 J	1400	< 1.8	NGV
1,2,3,4-Tetramethylbenzene	< 5.2	< 5.3	1300	< 6500	870	< 5.1	NGV
Isopropyl Alcohol	< 52	< 53	< 2600	< 26000	< 2600	< 51	10,000

Notes:

J-Estimated value when the result was less than the specified
detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

NGV-No given value

Shaded value exceeds TAGM

< Not Detected. Value shown indicates analytical method detection limit.

**Total xylenes=1200 ppb

Soil cleanup objective: total VOCs less than or equal to 10,000 parts per billion

All concentrations are reported in micrograms per kilogram (µg/Kg) or parts per billion.

* NYSDEC Technical and Administrative Guidance

Memorandum: Determination of Soil Cleanup

Objectives and Cleanup Levels; January 24, 1994.

Users/Projects/Coral/Phase II Tables/Geoprobe Soil VOC2

TABLE 7 cont.

Validated Summary of Detections - Volatile Organic Compounds
Geoprobe Soil Borings
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGP-4 0-5' Soil 9/27/02 Geoprobe VGP-4 0 to 5 ft	VGP-4 10-15' Soil 9/27/02 Geoprobe VGP-4 10 to 15 ft	VGP-5 0-5' Soil 9/30/02 Geoprobe VGP-5 0 to 5 ft	VGP-5 0-5 Dil Soil-Diluted 9/30/02 Geoprobe VGP-5 0 to 5 ft	VGP-5 7-10' Soil 9/30/02 Geoprobe VGP-5 7 to 10 ft	*NYSDEC TAGM #4046 Cleanup Objective
Volatile Organic Compounds (USEPA Method 8260)						
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Methylene Chloride	4.3 U	< 1.4	< 230	< 1100	< 1.3	100
Tetrachloroethene	9.1	2.1 J	180 J	< 450	< 1.2	1,400
Toluene	< 1.2	< 1.2	560 J	< 460	< 1.1	1,500
m & p xylenes	< 3.2	< 2.9	1400	1200 J	< 2.8	1200**
o-xylene	< 1.2	< 1.2	2500	2100 J	< 1.1	1200**
Isopropylbenzene	< 1.2	< 1.2	690	< 480	< 1.1	2,300
1,2,4-Trichlorobenzene	< 1.7	< 1.6	210 J	< 830	< 1.5	3,400
n-Propylbenzene	< 1.5	< 1.4	820	< 510	< 1.3	3,700
1,3,5-Trimethylbenzene	14	7.2	22000	20000	< 1.3	3,300
1,2,4-Trimethylbenzene	11	< 1.5	75000 E	71000	< 1.4	10,000
n-Butylbenzene	< 2.7	< 2.5	< 160	< 790	< 2.4	10,000
1,2,3-Trichlorobenzene	< 2.1	< 2.0	260 J	< 680	< 1.9	10,000
Naphthalene(v)	< 1.4	< 1.3	510 J	< 580	< 1.2	13,000
p-Isopropyltoluene	< 2.0	< 1.9	1400	1400 J	< 1.8	NGV
1,2,3,4-Tetramethylbenzene	< 5.7	< 5.3	800	< 3200	< 5.1	NGV
Isopropyl Alcohol	< 5.7	< 5.3	< 2600	< 13000	< 51	10,000
Notes:						
J-Estimated value when the result was less than the specified detection limit but greater than zero.			* NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.			
E-Indicates that the analyte concentration exceeds the calibrate range						
B-The analyte has been found in the blank						
U-The analyte was analyzed for but not detected above the reported sample quantitation limit.						
NGV-No given value						
Shaded value exceeds TAGM						
< Not Detected. Value shown indicates analytical method detection limit.						
**Total xylenes=1200 ppb						
Soil cleanup objective: total VOCs less than or equal to 10,000 parts per billion.						
All concentrations are reported in micrograms per kilogram (µg/Kg) or parts per billion.			Users/Projects/Coral/Phase II Table/Geoprobe Soil VOC3			

TABLE 8

Validated Summary of Detections - Semi-Volatile Organic Comounds
Geoprobe Soil Boring VGP-1
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGP-1 0-5' Soil 8/13/02 Geoprobe VGP-1 0 to 5 feet	VGP-1 0-5' Dup Soil 8/13/02 Geoprobe VGP-1 0 to 5 feet	VGP-1 5-9' Soil 8/13/02 Geoprobe VGP-1 5 to 9 feet	VGP-1 14-19' Soil 8/13/02 Geoprobe VGP-1 14 to 19 feet	*NYSDEC TAGM #4046 Cleanup Objective
Semi-Volatile Organic Compounds (USEPA Method 8270)					
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Naphthalene(sv)	1000	340	< 40	< 40	13,000
Phenanthrene	< 360	< 170	170	< 34	50,000
Fluoranthene	< 360	190	200	< 34	50,000
Pyrene	< 360	180	160	< 34	50,000
Benzo(a)anthracene	< 360	< 170	84	< 34	224
Chrysene	< 580	< 280	96	< 55	400
Bis(2-ethylhexyl)phthalate	6800	5200	63	43	50,000
Benzo(b)fluoranthene	< 360	< 170	82	< 34	1,100
Benzo(a)pyrene	< 550	< 260	81	< 51	61
Benzo(g,h,i,)perylene	< 470	< 220	44	< 44	50,000
Total TICs	160200	130800	9150	6910	500,000
Notes: Shaded values exceed TAGM NGV - No Given Value No detections in field blank for semi-volatiles < Indicates that the method detection limit for specific compound. All concentrations are reported in micrograms per kilogram (µg/kg) or parts per billion. Soil cleanup objective: total SVOCs are less than or equal to 50 parts per million. Dup - Duplicate sample * NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.					

TABLE 9

Validated Summary of Detections - Metals
Geoprobe Boring VGP-1
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGP-1 0-5' Soil 8/13/02 Geoprobe VGP-1 0 to 5 feet	VGP-1 0-5' Dup Soil 8/13/02 Geoprobe VGP-1 0 to 5 feet	VGP-1 5-9' Soil 8/13/02 Geoprobe VGP-1 5 to 9 feet	VGP-1 14-19' Soil 8/13/02 Geoprobe VGP-1 14 to 19 feet	*NYSDEC TAGM #4046 Eastern US Background	*NYSDEC TAGM #4046 Cleanup Objective
TAL Metals Compounds						
<u>Parameters</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>	<u>mg/Kg</u>
Aluminum	3730	2180	1100	843	33,000	SB
Antimony	< 0.25	< 0.24	< 0.23	0.25 BU	NGV	SB
Arsenic	6.5	4.5	1.7	1.3	3 to 12	7.5 or SB
Barium	27.1	13.9 B	5.1 B	2.4 B	15 to 600	300 or SB
Beryllium	0.19 B	0.11 B	0.05 B	0.08 B	0 to 1.75	0.16 or SB
Cadmium	0.17 B	0.08 B	< 0.05	< 0.05	0.1 to 1	1 or SB
Calcium	2250	1120	513	285 B	130 to 35,000	SB
Chromium	5.1	6.2	1.9	3	1.5 to 40	10 or SB
Cobalt	3.1 B	1.8 B	0.39 BU	0.64 BU	2.5 to 60	30 or SB
Copper	17.6	8.5	6.3	4	1 to 50	25 or SB
Iron	7590 J	4220 J	2960 U	4960 J	2,000 to 550,000	2000 or SB
Lead	40.9 J	13 J	3.2 J	0.62 J	NGV	SB
Magnesium	1060	672	210 B	318 B	100 to 5,000	SB
Manganese	123	49	10.1	22.2	50 to 5,000	SB
Mercury	0.04	0.04	0.08	0.01	0.001 to 0.2	0.1
Nickel	4.8	3.1 B	1.4 B	1.9 B	0.5 to 25	13 or SB
Potassium	139 B	109 B	69.6 B	90 B	8,500 to 43,000	SB
Selenium	0.57	< 0.34	< 0.33	< 0.34	0.1 to 3.9	2 or SB
Silver	2.4	1.4	2.2	< 0.39	NGV	SB
Sodium	114 B	100 B	116 B	121 B	6,000 to 8,000	SB
Thallium	< 0.64	< 0.6	< 0.59	< 0.6	NGV	SB
Vanadium	17	6.7	2.9 B	3.5 B	1 to 300	150 or SB
Zinc	26.6	19.5	12.1	8.9	9 to 50	20 or SB
Notes: Shaded values exceed TAGM and Eastern US Background NGV - No Given Value B-The reported value is less than the Contract Required Limit J-Estimated value when the results was less than the specified detection limit but greater than zero U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit SB=Site background. < Indicates that the method detection limit for specific compound. All concentrations are reported in milligrams per kilogram (mg/kg) or parts per million. * NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994. Users/Projects/Coral Graphics/Phase I Tables/Metals VGP-1						

TABLE 10

Validated Summary of Detections - Volatile Organic Compounds
Groundwater Geoprobe Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGW-1 57-60' Groundwater 10/10/2002 Geoprobe VGW-1 57 to 60 ft	VGW-1 67-70' Groundwater 10/10/2002 Geoprobe VGW-1 67-70 ft	VGW-2 57-60' Groundwater 10/10/2002 Geoprobe VGW-2 57 to 60 ft	VGW-2 67-70' Groundwater 10/10/2002 Geoprobe VGW-2 67 to 70 ft	VGW-3 55-58' Groundwater 10/11/2002 Geoprobe VGW-3 55 to 58 ft	VGW-3 70-73' Groundwater 10/11/2002 Geoprobe VGW-3 70 to 73 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Methylene Chloride	2.2 JB	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	5
Acetone	< 3.5 UJ	< 3.5 UJ	< 3.5	< 3.5	< 3.5	< 3.5	50
Vinyl Chloride	< 0.79	< 0.79	< 0.79 UJ	< 0.79 UJ	< 0.79	< 0.79	2
cis-1,2 Dichloroethene	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	5
Trichloroethene	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	5
Tetrachloroethene	< 0.7	< 0.7	< 0.7	< 0.7	37	48	5
1,3,5-Trimethylbenzene	< 0.97	3.5 J	< 0.97	< 0.97	< 0.97	< 0.97	5
1,2,4-Trimethylbenzene	< 0.83	3.5 J	1.5 J	< 0.83	< 0.83	< 0.83	5
Naphthalene(v)	4.4 J	2.1 J	< 0.91	2.1 J	< 0.91	< 0.91	10
1,2,3,4-Tetramethylbenzene	18	5.9	< 5.0	6.3	< 5.0	< 5.0	5

Notes:

J-Estimated value when the result was less than the specified detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

NGV-No given value

Shaded value exceeds TOGs

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (µg/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
 Series (1.1.1) Ambient Water Quality Standards
 and Guidance Values, June 1998

Users/Projects/Coral/ Phase II/Groundwater Geoprobe

TABLE 10 Cont.

Validated Summary of Detections - Volatile Organic Compounds
Groundwater Geoprobe Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGW-3 70-73' Dup Groundwater-Duplicate 10/11/2002 Geoprobe VGW-3 70 to 73 ft	VGW-4 55-58' Groundwater 10/11/2002 Geoprobe VGW-3 55 to 58 ft	VGW-4 70-73' Groundwater 10/11/2002 Geoprobe VGW-4 70 to 73 ft	VGW-5 55-58' Groundwater 10/14/2002 Geoprobe VGW-5 55 to 58 ft	VGW-5 70-73' Groundwater 10/14/2002 Geoprobe VGW-5 70-73 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8260)						
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Methylene Chloride	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	5
Acetone	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	50
Vinyl Chloride	< 0.79	< 0.79	< 0.79	< 0.79	< 0.79	2
cis-1,2 Dichloroethene	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	5
Trichloroethene	< 0.72	< 0.72	< 0.72	< 0.72	< 0.72	5
Tetrachloroethene	48	170	76	100	48	5
1,3,5-Trimethylbenzene	< 0.97	< 0.97	< 0.97	< 0.97	< 0.97	5
1,2,4-Trimethylbenzene	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	5
Naphthalene(v)	< 0.91	< 0.91	< 0.91	< 0.91	< 0.91	10
1,2,3,4-Tetramethylbenzene	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5
Notes: <i>J-Estimated value when the result was less than the specified detection limit but greater than zero.</i> <i>E-Indicates that the analyte concentration exceeds the calibrate range.</i> <i>B-The analyte has been found in the blank.</i> <i>NGV-No given value.</i> Shaded value exceeds TOGs <i>< Not Detected. Value shown indicates analytical method detection limit.</i> <i>All concentrations are reported in micrograms per liter (ug/L) or parts per billion.</i>						
			*NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998			

TABLE 10 cont.

Validated Summary of Detections - Volatile Organic Compounds
Groundwater Geoprobe Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGW-6 52-55' Groundwater 10/10/2002 Geoprobe VGW-6 52 to 55 ft	VGW-6 52-55' Dil Groundwater-Dilute 10/10/2002 Geoprobe VGW-6 52 to 55 ft	VGW-6 67-70' Groundwater 10/10/2002 Geoprobe VGW-6 67 to 70 ft	VGW-6 67-70 Dup Groundwater-Duplicate 10/10/2002 Geoprobe VGW-6 67 to 70 ft	VGW-7 52-55' Groundwater 10/10/2002 Geoprobe VGW-7 52 to 55 ft	VGW-7 62-70' Groundwater 10/10/2002 Geoprobe VGW-7 62 to 70 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Methylene Chloride	< 1.8	< 8.8	< 1.8	< 1.8	< 1.8	< 1.8	5
Acetone	21	23 J	< 3.5	< 3.5	< 3.5	< 3.5	50
Vinyl Chloride	< 0.79	< 4.0	< 0.79	< 0.79	< 0.79	< 0.79	2
cis-1,2 Dichloroethene	5 J	< 3.1	< 0.62	< 0.62	< 0.62	< 0.62	5
Trichloroethene	1.3 J	< 3.6	< 0.72	< 0.72	< 0.72	< 0.72	5
Tetrachloroethene	430 E	510	190	170	41	210 E	5
1,3,5-Trimethylbenzene	< 0.97	< 4.8	< 0.97	< 0.97	< 0.97	< 0.97	5
1,2,4-Trimethylbenzene	< 0.83	< 4.2	< 0.83	< 0.83	< 0.83	< 0.83	5
Naphthalene(v)	< 0.91	< 4.6	< 0.91	< 0.91	< 0.91	< 0.91	10
1,2,3,4-Tetramethylbenzene	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 5.0	5

Notes:

J-Estimated value when the result was less than the specified detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

NGV-No given value

Shaded value exceeds TOGs

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (µg/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
Series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998

Users/Projects/Coral/Phase II Tables/Groundwater Geoprobe 3

TABLE 10 cont.
Validated Summary of Detections - Volatile Organic Compounds
Groundwater Geoprobe Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGW-7 62-70'	VGW-8 52-55'	VGW-8 67-70'	VGW-9 55-58'	VGW-9 55-58' Dil	VGW-9 70-73'	*NYSDEC TOGs Water Quality Standards and Guidance
	Groundwater-Diluted 10/10/2002 Geoprobe VGW-7 62 to 70 ft	Groundwater 10/10/2002 Geoprobe VGW-8 52 to 55 ft	Groundwater 10/10/2002 Geoprobe VGW-8 67 to 70 ft	Groundwater 10/11/2002 Geoprobe VGW-9 55 to 58 ft	Groundwater-Diluted 10/11/2002 Geoprobe VGW-9 55 to 58 ft	Groundwater 10/11/2002 Geoprobe VGW-9 70 to 73 ft	
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Methylene Chloride	< 8.8	< 1.8	< 1.8	< 1.8	< 8.8	< 1.8	5
Acetone	< 18	< 3.5	< 3.5	< 3.5	< 18	< 3.5	50
Vinyl Chloride	< 4	< 0.79	< 0.79	< 0.79	< 4	< 0.79	2
cis-1,2 Dichloroethene	< 3.1	< 0.62	< 0.62	< 0.62	< 3.1	< 0.62	5
Trichloroethene	< 3.6	< 0.72	< 0.72	< 0.72	< 3.6	< 0.72	5
Tetrachloroethene	210	13	10	230 E	270	55	5
1,3,5-Trimethylbenzene	< 4.8	< 0.97	< 0.97	3.2 J	< 4.8	1.3 J	5
1,2,4-Trimethylbenzene	< 4.2	< 0.83	< 0.83	12	14 J	3.4 J	5
Naphthalene(v)	< 4.6	< 0.91	< 0.91	< 0.91	< 4.6	< 0.91	10
1,2,3,4-Tetramethylbenzene	< 25	< 5.0	< 5.0	< 5.0	< 25	< 5.0	5

Notes:

J-Estimated value when the result was less than the specified detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

NGV-No given value

Shaded value exceeds TOGs

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (µg/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
Series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998

Users/Projets/Coral/Phase II Tables/Groundwater Geoprobe 4

TABLE 10 cont.
Validated Summary of Detections - Volatile Organic Compounds
Groundwater Geoprobe Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VGW-I 55-58' Groundwater 10/14/2002 Geoprobe VGW-I 55 to 58 ft	VGW-I 70-73' Groundwater 10/14/2002 Geoprobe VGW-I 70 to 73 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8260)			
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Methylene Chloride	< 1.8	< 1.8	5
Acetone	< 3.5	< 3.5	50
Vinyl Chloride	< 0.79	< 0.79	2
cis-1,2 Dichloroethene	< 0.62	< 0.62	5
Trichloroethene	< 0.72	< 0.72	5
Tetrachloroethene	130	54	5
1,3,5-Trimethylbenzene	< 0.97	< 0.97	5
1,2,4-Trimethylbenzene	< 0.83	< 0.83	5
Naphthalene(v)	< 0.91	< 0.91	10
1,2,3,4-Tetramethylbenzene	< 5.0	< 5.0	5
Notes: <i>J-Estimated value when the result was less than the specified detection limit but greater than zero.</i> <i>E-Indicates that the analyte concentration exceeds the calibrate range.</i> <i>B-The analyte has been found in the blank.</i> <i>NGV-No given value.</i> Shaded value exceeds TOGs <i>*NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998</i> <i>< Not Detected. Value shown indicates analytical method detection limit.</i> <i>All concentrations are reported in micrograms per liter (ug/L) or parts per billion.</i>			

TABLE 11

**Detections of Volatile Organic Compounds
Soil Vapor Probes
Coral Graphics
Hicksville, New York**

Sample ID Matrix Date Sampled Location Depth	VMP-1 Soil Vapor 2/3/2003 Point VMP-1 8 to 10 ft	VMP-2 Soil Vapor 2/3/2003 Point VMP-2 8 to 10 ft	VMP-3 Soil Vapor 2/3/2003 Point VMP-3 8 to 10 ft	VMP-4 Soil Vapor 2/3/2003 Point VMP-4 8 to 10 ft	VMP-5 Soil Vapor 2/8/2003 Point VMP-5 8 to 10 ft	VMP-6 Soil Vapor 2/8/2003 Point VMP-6 8 to 10 ft	VMP-7 Soil Vapor 2/8/2003 Point VMP-7 5.5 to 7.5 ft
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>
Dichlorodifluomethane	4.4	5.5	6.2	6.1	NA	NA	NA
terButylMethylEther	< 2.9	< 3.3	< 3.2	< 3.1	NA	NA	NA
Toluene	< 2.9	< 3.3	< 3.2	< 3.1	< 3.2	< 3.3	< 3.2
c-1,2-Dichloroethene	< 2.9	< 3.3	< 3.2	< 3.1	< 3.2	< 3.3	< 3.2
Trichloroethylene	40	37	34	12	< 3.2	< 3.3	< 3.2
Tetrachloroethene	120,000	67,000	57,000	27,000	310	290	280
Freon 113	7.8	4.4	< 3.2	< 3.1	NA	NA	NA
1,2,4,5 Tetramethylbenzene	< 2.9	< 3.3	< 3.2	< 3.1	NA	NA	NA
Notes: < Not Detected. Value shown indicates analytical method detection limit. All concentrations are reported in micrograms per meter cubed (ug/m ³) or parts per billion. NA-Not analyzed for as per NYSDEC concurrence.							
Users/Projects/Coral/ Tables/ Table 11. Soil Vapor Probes							

TABLE 11 cont.

**Detections of Volatile Organic Compounds
Soil Vapor Probes
Coral Graphics
Hicksville, New York**

Sample ID Matrix Date Sampled Location Depth	VMP-8 Soil Vapor 5/29/2003 Point VMP-8 2 to 3 ft	VMP-9 Soil Vapor 5/29/2003 Point VMP-9 2 to 3 ft	VMP-10 Soil Vapor 5/29/2003 Point VMP-10 2 to 3 ft	VMP-11 Soil Vapor 5/29/2003 Point VMP-11 2 to 3 ft	VMP-12 Soil Vapor 5/29/2003 Point VMP-12 2 to 3 ft	VMP-13 Soil Vapor 5/29/2003 Point VMP-13 2 to 3 ft	VMP-14 Soil Vapor 6/30/2003 Point VMP-14 2 to 3 ft
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>	<u>µg/m³</u>
Dichlorodifluoromethane	< 3	< 3	< 3	< 3	< 3	< 3	< 3.4
terButylMethylEther	9	< 3	< 3	< 3	20	47	< 3.4
Toluene	7	< 3	< 3	< 3	< 3	< 3	< 3.4
c-1,2-Dichloroethene	< 3	9	< 3	< 3	19	< 3	< 3.4
Trichloroethylene	< 3	39	< 3	< 3	280	67	< 3.4
Tetrachloroethene	1,000	59,000	4,000	6,700	170,000	73,000	44
Freon 113	< 3	< 3	< 3	< 3	< 113	< 3	< 3.4
1,2,4,5 Tetramethylbenzene	< 3	< 3	< 3	< 3	< 3	< 3	22
Notes: < Not Detected. Value shown indicates analytical method detection limit. All concentrations are reported in micrograms per meter cubed (ug/m ³) or parts per billion. NA-Not analyzed for as per NYSDEC concurrence.							
Users/Projects/Coral/ Tables/ Table 11. Soil Vapor Probes							

TABLE 12

Validated Summary of Detections - Volatile Organic Compounds
Groundwater Monitoring Well Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VMW-1 Groundwater 2/4/2003 Well VMW-1 51 to 66 ft	VMW-2S Groundwater 2/4/2003 Well VMW-2S 46 to 61 ft	VMW-2D Groundwater 2/4/2003 Well VMW-2D 71 to 81 ft	VMW-3S Groundwater 2/4/2003 Well VMW-3S 45 to 60 ft	VMW-3S DL Groundwater-Diluted 2/4/2003 Well VMW-3S 45 to 60 ft	VMW-3D Groundwater 2/4/2003 Well VMW-3D 70 to 80 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Isopropyl Alcohol	< 100 UJ	< 100 UJ	< 100 UJ	< 100 UJ	< 500 UJ	600 EJ	NGV
Acetone	< 3.5	< 3.5	< 3.5	< 3.5	< 18	48	50
Carbon disulfide	< 0.72	< 0.72	< 0.72	< 0.72	< 3.6	1.8 J	60
Methyl tert-butyl Ether	< 1.0	1.2 J	4.5 J	< 1.0	< 5.2	< 1.0	10
1,1-Dichloroethane	< 0.66	< 0.66	1.5 J	< 0.66	< 3.3	< 0.66	5
cis-1,2 Dichloroethene	< 0.62	3.4 J	< 0.62	1.7 J	< 3.1	< 0.62	5
1,1,1-Trichloroethane	< 0.75	< 0.75	2.0 J	< 0.75	< 3.8	< 0.75	5
Trichloroethene	< 0.72	1.1 J	< 0.72	< 0.72	< 3.6	< 0.72	5
Tetrachloroethene	< 0.7	9.5	6.7	460 E	590	220 E	5

Notes:

J-Estimated value when the result was less than the specified detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

NGV-No given value

Shaded value exceeds TOGs

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (ug/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
Series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998

TABLE 12 cont.

Validated Summary of Detections - Volatile Organic Compounds
Groundwater Monitoring Well Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VMW-3D DL Groundwater Diluted 2/4/2003 Well VMW-1 70 to 80 ft	VMW-4S Groundwater 2/4/2003 Well VMW-4S 45 to 60 ft	VMW-4S DL Groundwater Diluted 2/4/2003 Well VMW-4S 45 to 60 ft	VMW-4S DUP Groundwater-Duplicate 2/4/2003 Well VMW-4S 45 to 60 ft	VMW-4S DUP DL Groundwater-Duplicate-Dilute 2/4/2003 Well VMW-4S 45 to 60 ft	VMW-4D Groundwater 2/4/2003 Well VMW-4D 70 to 80 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8260)							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Isopropyl Alcohol	660 J	< 100 UJ	< 2500 UJ	< 100 UJ	< 5000 UJ	< 100 UJ	NGV
Acetone	100 B	15 U	< 88	12 U	180	< 3.5	50
Carbon disulfide	< 3.6	< 0.72	< 18	< 0.72	< 36	< 0.72	60
Methyl tert-butyl Ether	< 5.2	< 1.0	< 26	< 1.0	< 52	< 1.0	10
1,1-Dichloroethane	< 3.3	< 0.66	< 16	< 0.66	< 33	< 0.66	5
cis-1,2 Dichloroethene	< 3.1	1.4 J	< 16	1.6 J	< 31	< 0.62	5
1,1,1-Trichloroethane	< 3.8	< 0.75	< 19	< 0.75	< 38	< 0.75	5
Trichloroethene	< 3.6	2.1 J	< 18	10 J	< 36	< 0.72	5
Tetrachloroethene	240	930 E	940	860 E J	890	30	5
Notes: <i>J-Estimated value when the result was less than the specified detection limit but greater than zero.</i> <i>E-Indicates that the analyte concentration exceeds the calibrate range</i> <i>B-The analyte has been found in the blank</i> <i>U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.</i> <i>NGV-No given value</i> <i>Shaded value exceeds TOGs</i> <i>< Not Detected. Value shown indicates analytical method detection limit.</i> <i>All concentrations are reported in micrograms per liter (ug/L) or parts per billion.</i>							

TABLE 12 cont.

Validated Summary of Detections - Volatile Organic Compounds
Groundwater Monitoring Well Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VMW-5S Groundwater 2/8/2003 Well VMW-5S 44 to 59 ft	VMW-5S DL Groundwater Diluted 2/8/2003 Well VMW-5S 44 to 59 ft	VMW-5D Groundwater 2/8/2003 VMW-5D 69 to 79 ft	VMW-5D DL Groundwater Dilute 2/8/2003 Well VMW-5D 69 to 79 ft	VMW-6S Groundwater 6/19/2003 VMW-6S 45 to 60 ft	VMW-6S DUP Groundwater Duplicate 6/19/2003 Well VMW-6S 45 to 60 ft	VMW-6D Groundwater 6/19/2003 VMW-6D 65 to 75 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8260)								
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Isopropyl Alcohol	< 100 UJ	< 2500 UJ	< 100 UJ	< 1000 UJ	< 100 UJ	< 100 UJ	< 100 UJ	NGV
Acetone	< 3.5 R	< 88 R	< 3.5 R	< 35 R	< 3.5 UJ	< 3.5 UJ	< 3.5 UJ	50
Carbon disulfide	NA	NA	NA	NA	< 0.72	< 0.72	< 0.72	60
Methyl tert-butyl Ether	NA	NA	NA	NA	3.5 J	3.7 J	3.5 J	10
1,1-Dichloroethane	NA	NA	NA	NA	< 0.66	< 0.66	< 0.66	5
cis-1,2 Dichloroethane	< 0.62	< 16	< 0.62	< 6.2	< 0.62	< 0.62	< 0.62	5
1,1,1-Trichloroethane	NA	NA	NA	NA	< 0.75	< 0.75	< 0.75	5
Trichloroethene	2.3 J	< 18	14	14 J	< 0.72	< 0.72	< 0.72	5
Tetrachloroethene	860 E	1000	200 E	180	60	60	19	5

Notes:

NA-Not analyzed for as per NYSDEC agreement.

J-Estimated value when the result was less than the specified detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

R-The sample results are unreliable. The presence or absence of the analyte cannot be verified

NGV-No given value

Shaded value exceeds TOGs

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (µg/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
Series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998

TABLE 13

**Validated Summary of Detections - Semi-Volatile Organic Compounds
Groundwater Monitoring Well Samples
Coral Graphics
Hicksville, New York**

Sample ID Matrix Date Sampled Location Depth	VMW-1 Groundwater 2/4/2003 Well VMW-1 51 to 66 ft	VMW-2S Groundwater 2/4/2003 Well VMW-2S 46 to 61 ft	VMW-2D Groundwater 2/4/2003 Well VMW-2D 71 to 81 ft	VMW-3S Groundwater 2/4/2003 Well VMW-3S 45 to 60 ft	VMW-3S RE Groundwater-Reanalysis 2/4/2003 Well VMW-3S 45 to 60 ft	VMW-3D Groundwater 2/4/2003 Well VMW-3D 70 to 80 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8270)							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Fluoranthene	< 1.0	< 1.0	1.1 J	< 1.0	< 1.0	< 1.0	50
bis(2-Ethylhexyl)phthalate	< 1.0	< 1.0	2.6 U	< 1 UJ	< 1.0	< 1.0	5

Notes:

J-Estimated value when the result was less than the specified detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

NGV-No given value

Shaded value exceeds TOGs

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (ug/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
Series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998

TABLE 13 cont.

**Validated Summary of Detections - Semi-Volatile Organic Compounds
Groundwater Monitoring Well Samples
Coral Graphics
Hicksville, New York**

Sample ID Matrix Date Sampled Location Depth	VMW-4S Groundwater 2/4/2003 Well VMW-4S 45 to 60 ft	VMW-4S DUP Groundwater Duplicate 2/4/2003 Well VMW-4S 45 to 60 ft	VMW-4D Groundwater 2/4/2003 Well VMW-4D 70 to 80 ft	VMW-6S Groundwater 6/19/2003 Well VMW-6S 45 to 60 ft	VMW-6S DUP Groundwater Duplicate 6/19/2003 Well VMW-6S 45 to 60 ft	VMW-6D Groundwater 6/19/2003 Well VMW-6D 65 to 75 ft	*NYSDEC TOGs Water Quality Standards and Guidance
Volatile Organic Compounds (USEPA Method 8270)							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Fluoranthene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.1	50
bis(2-Ethylhexyl)phthalate	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.1	5

Notes:

VMW-5S and VMW-5D were not analyzed for semi-volatiles as per NYSDEC agreement.

J-Estimated value when the result was
less than the specified
detection limit but greater than zero.

E-Indicates that the analyte concentration exceeds the calibrate range

B-The analyte has been found in the blank

U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

NGV-No given value

Shaded value exceeds TOGs

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (ug/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
Series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998

TABLE 14

Validated Summary of Detections - Metals Compounds
Groundwater Monitoring Well Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VMW-1 Groundwater 2/4/2003 Well VMW-1 51 to 66 ft	VMW-2S Groundwater 2/4/2003 Well VMW-2S 46 to 61 ft	VMW-2D Groundwater 2/4/2003 Well VMW-2D 71 to 81 ft	VMW-3S Groundwater 2/4/2003 Well VMW-3S 45 to 60 ft	VMW-3D Groundwater 2/4/2003 Well VMW-3D 70 to 80 ft	VMW-4S Groundwater 2/4/2003 Well VMW-4S 45 to 60 ft	*NYSDEC TOGs Water Quality Standards and Guidance
TAL Metals							
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Aluminum	35.8 B	92.8 B	90.1 B	116 B	43.4 B	53.1 B	NGV
Barium	82.5 B	32.9 B	23.7 B	52.0 B	55.0 B	71.8 B	1,000
Cadmium	< 0.80	< 0.8	< 0.80	5.8	2.8 B	1.2 B	5
Calcium	22100	22300	14800	18500	15100	17000	NGV
Chromium	2.2 B	6.8 B	< 1.4	3.6 B	< 1.4	2.6 B	50
Cobalt	< 2.3	< 2.3	< 2.3	3.3 B	< 2.3	5.1 B	NGV
Copper	2.6 B	< 2.0	7.1 B	3.0 B	< 2.0	< 2.0	200
Iron	< 34.9	139	162	61.1 B	76.1 B	< 34.9	300
Lead	< 3.0	< 3.0	3.0	< 3.0	< 3.0	< 3.0	25
Magnesium	4020 B	3230 B	2890 B	3680 B	2350 B	3030 B	35,000
Manganese	7.1 B	7.2 B	12.2 B	360	20.7	318	300
Nickel	< 2.0	2.9 B	< 2.0	5.1 B	2.3 B	2.8 B	100
Potassium	2660 BNJ	2030 BNJ	2090 BNJ	1670 BNJ	1550 BNJ	5270 NJ	NGV
Selenium	3.5 B	1.8 B	3.0 B	< 1.3	4.1 B	2.1 B	10
Sodium	80400 EJ	10000 EJ	26100 EJ	11600 EJ	18500 EJ	18600 EJ	20,000
Zinc	17.4 B	11.9 B	33.9	22.6	13.2 B	17.8 B	2,000

Notes:*J-Estimated value, biased high based on laboratory Quality Control**N-Spiked sample recovery not within control limits.**B-Estimated value when the result was less than the specified detection limit but greater than zero.**E-The reported value is estimated because of interference**U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**NGV-No given value***Shaded value exceeds TOGs**

< Not Detected. Value shown indicates analytical method detection limit.

All concentrations are reported in micrograms per liter (µg/L) or parts per billion.

*NYSDEC Technical and Operational Guidance
Series (1.1.1) Ambient Water Quality Standards
and Guidance Values, June 1998

TABLE 14 cont.

Validated Summary of Detections - Metals Compounds
Groundwater Monitoring Well Samples
Coral Graphics
Hicksville, New York

Sample ID Matrix Date Sampled Location Depth	VMW-4D Groundwater 2/4/2003 Well VMW-4D 70 to 80 ft	VMW-4D DUP Groundwater- Duplicate 2/4/2003 Well VMW-4D 70 to 80 ft	VMW-5S Groundwater 2/8/2003 Well VMW-5S 44 to 59 ft	VMW-5D Groundwater 2/8/2003 Well VMW-5D 69 to 79 ft	VMW-6S Groundwater 6/19/2003 Well VMW-6S 45 to 60 ft	VMW-6S DUP Groundwater Duplicate 6/19/2003 Well VMW-6S 45 to 60 ft	VMW-6D Groundwater 6/19/2003 Well VMW-6D 65 to 75 ft	*NYSDEC TOGs Water Quality Standards and Guidance
TAL Metals								
<u>Parameters</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>	<u>µg/L</u>
Aluminum	90.4 B	58.6 B	NA	NA	70.8 J	58.9 J	54.0 J	NGV
Barium	68.2 B	73.5 B	NA	NA	38.6 J	37.3 J	72.8 J	1,000
Cadmium	< 0.80	1.3 B	NA	NA	0.80 U	0.80 U	0.80 U	5
Calcium	16600	17300	NA	NA	27200	26800	23200	NGV
Chromium	4.8 B	2.3 B	NA	NA	3.8 J	3.7 J	5.6 J	50
Cobalt	5.8 B	5.1 B	NA	NA	7.2 J	7.0 J	1.6 J	NGV
Copper	2.9 B	< 2.0	< 2.0	13.9 B	3.6 U	3.6 U	3.8 J	200
Iron	60.8 B	< 34.9	NA	NA	73.2 J	69.5	73.2 J	300
Lead	< 3.0	< 3.0	NA	NA	5.7 U	4.1 U	4.5 U	25
Magnesium	4360 B	3030 B	NA	NA	4600 J	4530 J	4070 J	35,000
Manganese	350	312	NA	NA	552	546	129 J	300
Nickel	5.8 B	3.3 B	NA	NA	4.3 J	4.0 J	4.8 J	100
Potassium	3530 BNJ	5340 NJ	NA	NA	7560 J	7460 J	4270 J	NGV
Selenium	1.8 B	< 1.3	NA	NA	1.3 U	1.3 U	2.2 U	10
Sodium	35600 EJ	18700 EJ	NA	NA	89700	86000	91200	20,000
Zinc	20.7	19.2 B	NA	NA	26 U	22.4 U	21.9 U	2,000
Notes: NA-Not analyzed for as per NYSDEC agreement. J-Estimated value, biased high based on laboratory Quality Control. N-Spiked sample recovery not within control limits. B-Estimated value when the result was less than the specified detection limit but greater than zero. E-The reported value is estimated because of interference U-The analyte was analyzed for, but was not detected above the reported sample quantitation limit. NGV-No given value Shaded value exceeds TOGs < Not Detected. Value shown indicates analytical method detection limit. All concentrations are reported in micrograms per liter (µg/L) or parts per billion.								
*NYSDEC Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values, June 1998								

TABLE 15

SUMMARY OF WATER LEVEL MEASUREMENTS AND ELEVATIONS

Coral Graphics

Hicksville, NY

Monitoring Well ID	Casing Elevation* Above MSL (Ft.)	Depth to Top of Well Screen in feet	Depth to Bottom of Well Screen in feet	Elevation of top of screen in feet (MSL)	Elevation of bottom of screen in feet (MSL)	2/22/2003	
						Depth to Water	GW Elevation
Shallow Wells							
VMW-1S	116.55	51	66	65.55	50.55	54.81	61.74
VMW-2S	111.38	46	61	65.38	50.38	49.43	61.95
VMW-3S	109.93	45	60	64.93	49.93	48.18	61.75
VMW-4S	111.17	45	60	66.17	51.17	49.59	61.58
VMW-5S	108.43	44	59	64.43	49.43	47.5	60.93
Deep Wells							
VMW-2D	111.24	71	81	40.24	30.24	49.26	61.98
VMW-3D	109.92	70	80	39.92	29.92	48.22	61.70
VMW-4D	111.13	70	80	41.13	31.13	49.51	61.62
VMW-5D	109.09	69	79	40.09	30.09	48.27	60.82

Notes:

Elevation performed by American Engineering Services December 2002 and January 2003

TABLE 16

**Validated Summary of Detections- Volatile Organic Compounds
Former Debris Pile
Coral Graphics
Hicksville, New York**

Sample ID Matrix Date Sampled Type Depth	VS-1 Soil 5/19/2003 Composite 0 to 3 ft	VS-99 Soil-Duplicate VS-1 5/19/2003 Composite 0 to 3 ft	VS-2 Soil 5/19/2003 Composite 0 to 3 ft	VS-2 Dil Soil Diluted 5/19/2003 Composite 0 to 3 ft	*NYSDEC TAGM #4046 Cleanup Objective
Volatile Organic Compounds (USEPA Method 8260)					
<u>Parameters</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>	<u>µg/Kg</u>
Methylene Chloride	8.8 U	6.8 U	6.1 U J	15 U	10,000
Tetrachloroethene	36	48	400 E J	310	1,400
Notes: <i>J-Estimated value when the result was less than the specified detection limit but greater than zero.</i> <i>E-Indicates that the analyte concentration exceeds the calibrate range</i> <i>B-The analyte has been found in the blank</i> <i>U-The analyte was analyzed for but not detected above the reported sample quantitation limit</i> <i>NGV-No given value</i> Shaded value exceeds TAGM <i>< Not Detected. Value shown indicates analytical method detection limit.</i> <i>All concentrations are reported in micrograms per kilogram (µg/Kg) or parts per billion.</i> <i>* NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels; January 24, 1994.</i>					

TABLE 17

SUMMARY OF WATER LEVEL MEASUREMENTS AND ELEVATIONS

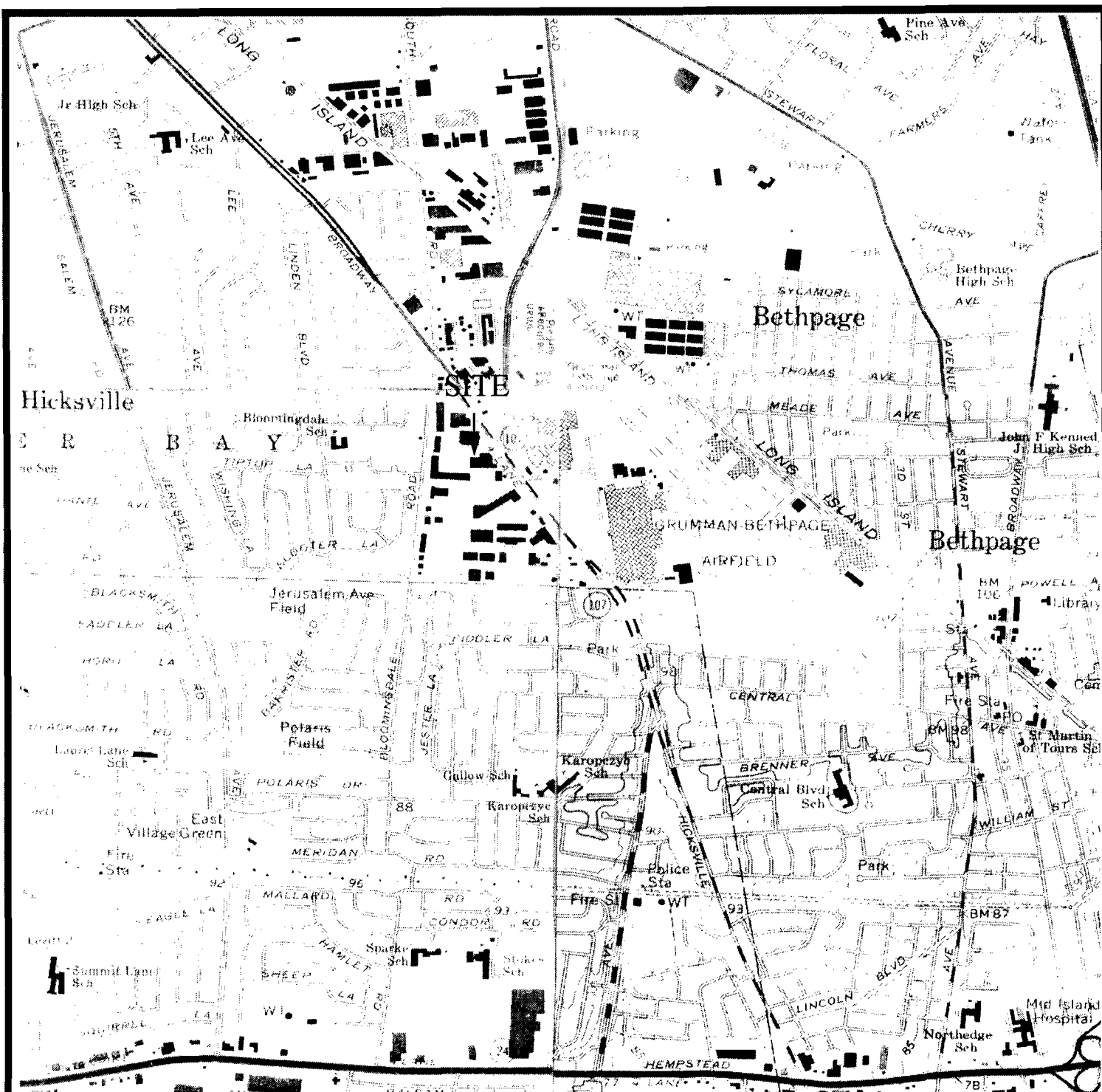
Coral Graphics

Hicksville, NY

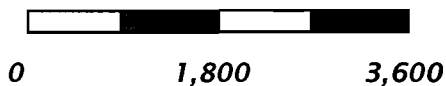
Monitoring Well ID	Casing Elevation* Above MSL (Ft.)	Depth to Top of Well Screen in feet	Depth to Bottom of Well Screen in feet	Elevation of top of screen in feet (MSL)	Elevation of bottom of screen in feet (MSL)	7/31/2003	
						Depth to Water	GW Elevation
Shallow Wells							
VMW-1S	116.55	51	66	65.55	50.55	50.29	66.26
VMW-2S	111.38	46	61	65.38	50.38	45.72	65.66
VMW-3S	109.93	45	60	64.93	49.93	44.44	65.49
VMW-4S	111.17	45	60	66.17	51.17	45.33	65.84
VMW-5S	108.43	44	59	64.43	49.43	42.67	65.76
VMW-6S	114.28	45	60	69.28	54.28	48.29	65.99
Deep Wells							
VMW-2D	111.24	71	81	40.24	30.24	45.60	65.64
VMW-3D	109.92	70	80	39.92	29.92	44.47	65.45
VMW-4D	111.13	70	80	41.13	31.13	45.36	65.77
VMW-5D	109.09	69	79	40.09	30.09	43.41	65.68
VMW-6D	114.74	65	75	49.74	39.74	48.78	65.96

*Notes:**Elevation performed by American Engineering Services December 2002, January 2003 and July 2003*

FIGURES



APPROX. SCALE (ft.)



North

Adapted from USGS Hicksville (1967 photorevised 1979), Huntington (1967 photorevised 1979), Freeport (1969 photorevised 1979) and Amityville (1969 photorevised 1979) Quadrangles



CA RICH CONSULTANTS, INC.

Certified Groundwater and Environmental Specialists
17 Dupont Street, Plainville, NY 11803

TITLE:

Location of Coral Graphics

DATE:

1/6/03

SCALE:

AS SHOWN

FIGURE:

1

DRAWING:

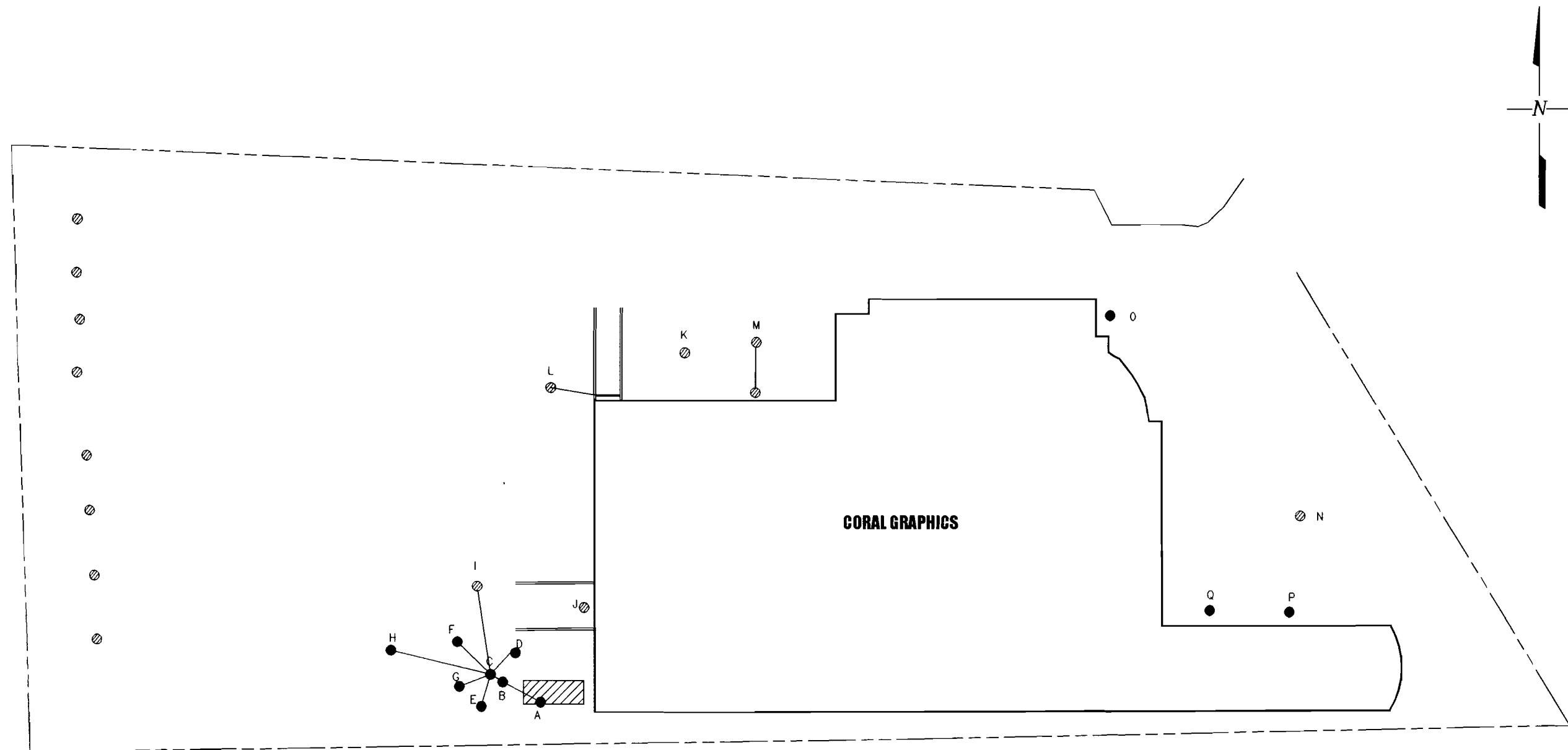
**840 South Broadway
Hicksville, New York**

DRAWN BY:

LCR

APPR. BY:

EAW



LEGEND

- A ● FORMER LEACHING POOL
- L ☉ ACTIVE STORM DRAINS
- ▨ FORMER WASTE STORAGE AREA

0 20 40 60 80 100



Graphic Scale In Feet

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17 Dupont Street, Plainview, New York 11803

TITLE: Leaching Pool, Storm Drain
and Former Waste Storage
Area Layout

DATE:
1/30/03

SCALE:
1" = 60'

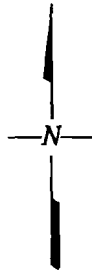
FIGURE:
2

CORAL GRAPHICS FACILITY
840 SOUTH BROADWAY
HICKSVILLE, NEW YORK

DRAWN BY:
L.C.R./S.T.M.

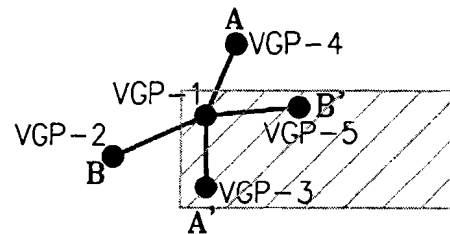
DRAWING NO:
1156-1A.SD

APPR BY:
E.A.W.

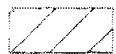


EXTERIOR
COMPACTORS

**CORAL GRAPHICS
FACILITY**



LEGEND



FORMER WASTE STORAGE AREA

VGP-1 ● BORING

----- SOUTHERN PROPERTY BOUNDARY

A' — A CROSS SECTIONS

0 10 20 30 40 50

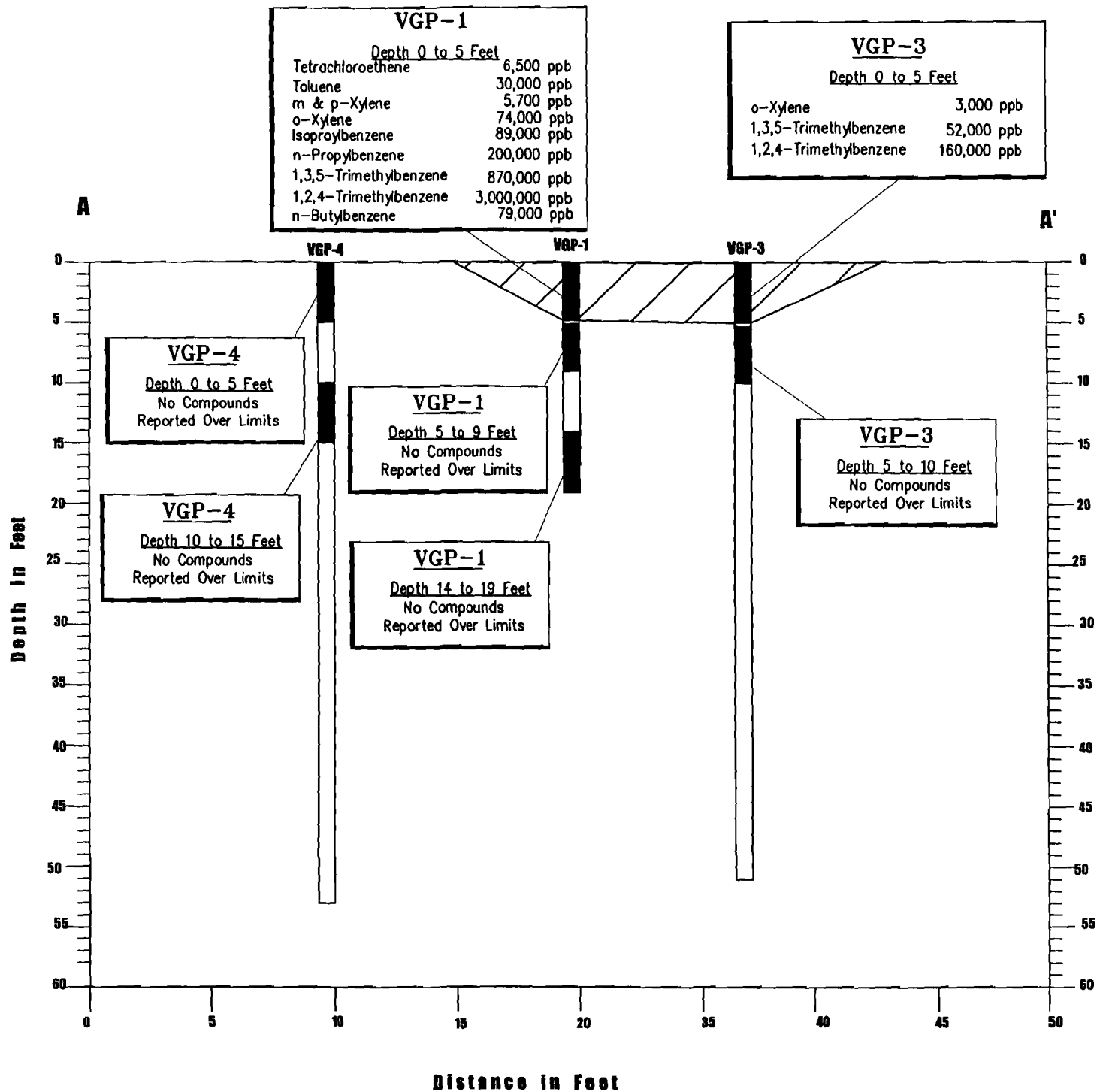


Graphic Scale In Feet

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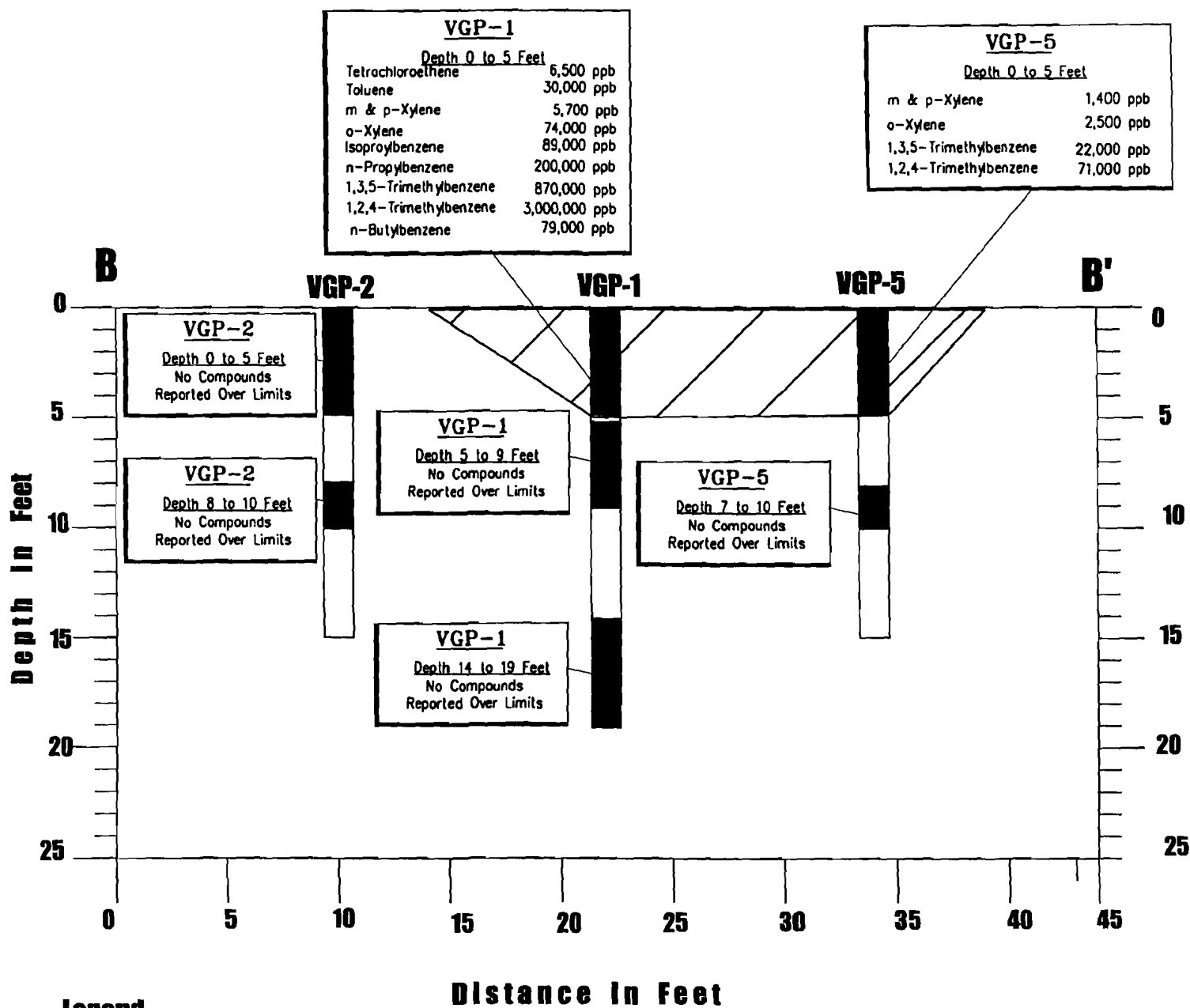
TITLE: LOCATION OF CONTAMINANT CROSS SECTIONS		DATE: 10/30/02
FIGURE: 3		DRAWN BY: S.T.M.
DRAWING NO: 1156-1C		APPR. BY: L.C.R.
CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK		



CA RICH CONSULTANTS, INC.

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17 Dupont Street, Plainview, New York 11803

TITLE Profile of Volatile Organic Compounds in Soil Borings above TAGM		DATE 10/29/02
FIGURE 4		SCALE AS SHOWN
DRAWING NO. 1162-1B	CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK	DRAWN BY: S.T.M./L.C.R. APPR. BY: E.A.W.

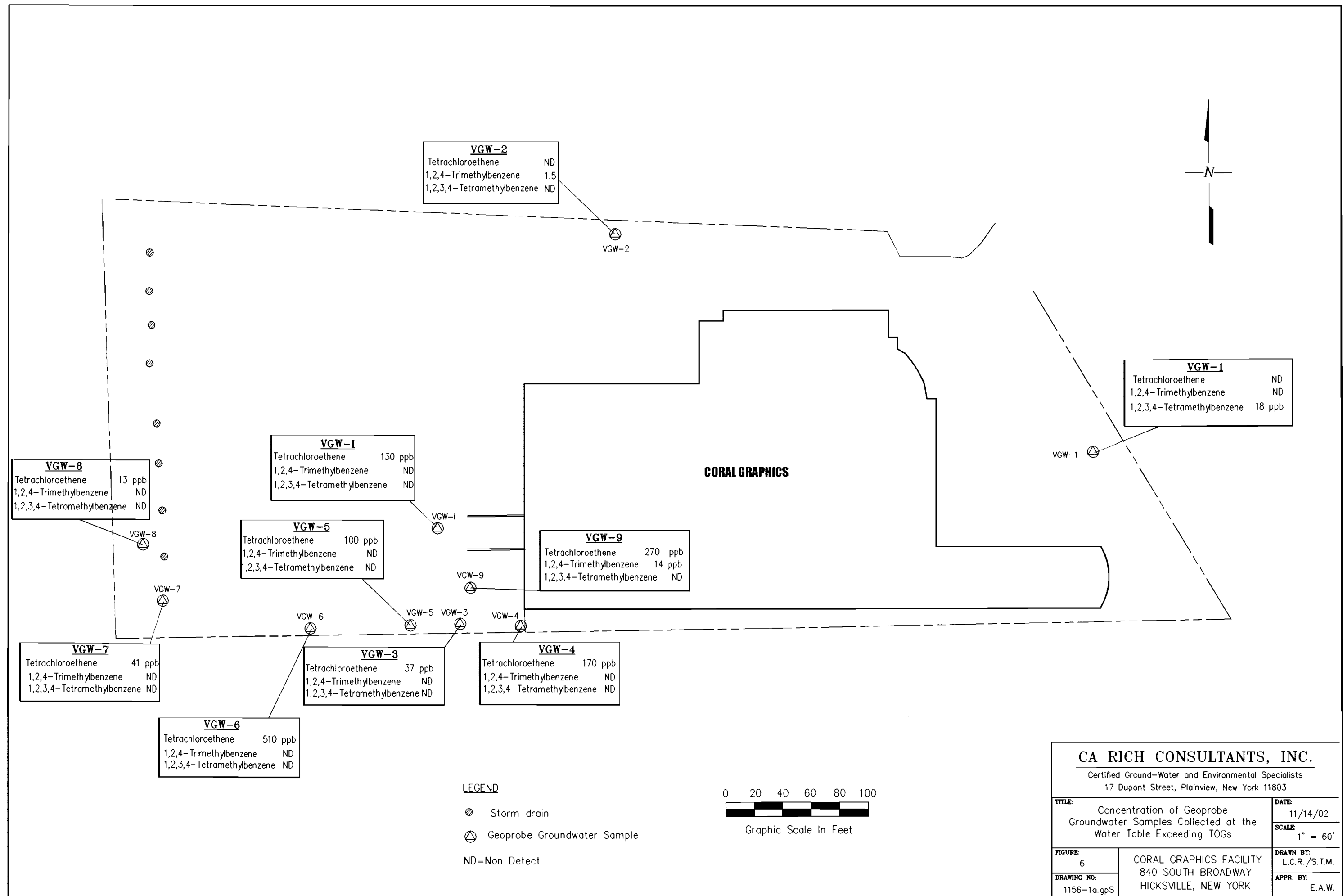


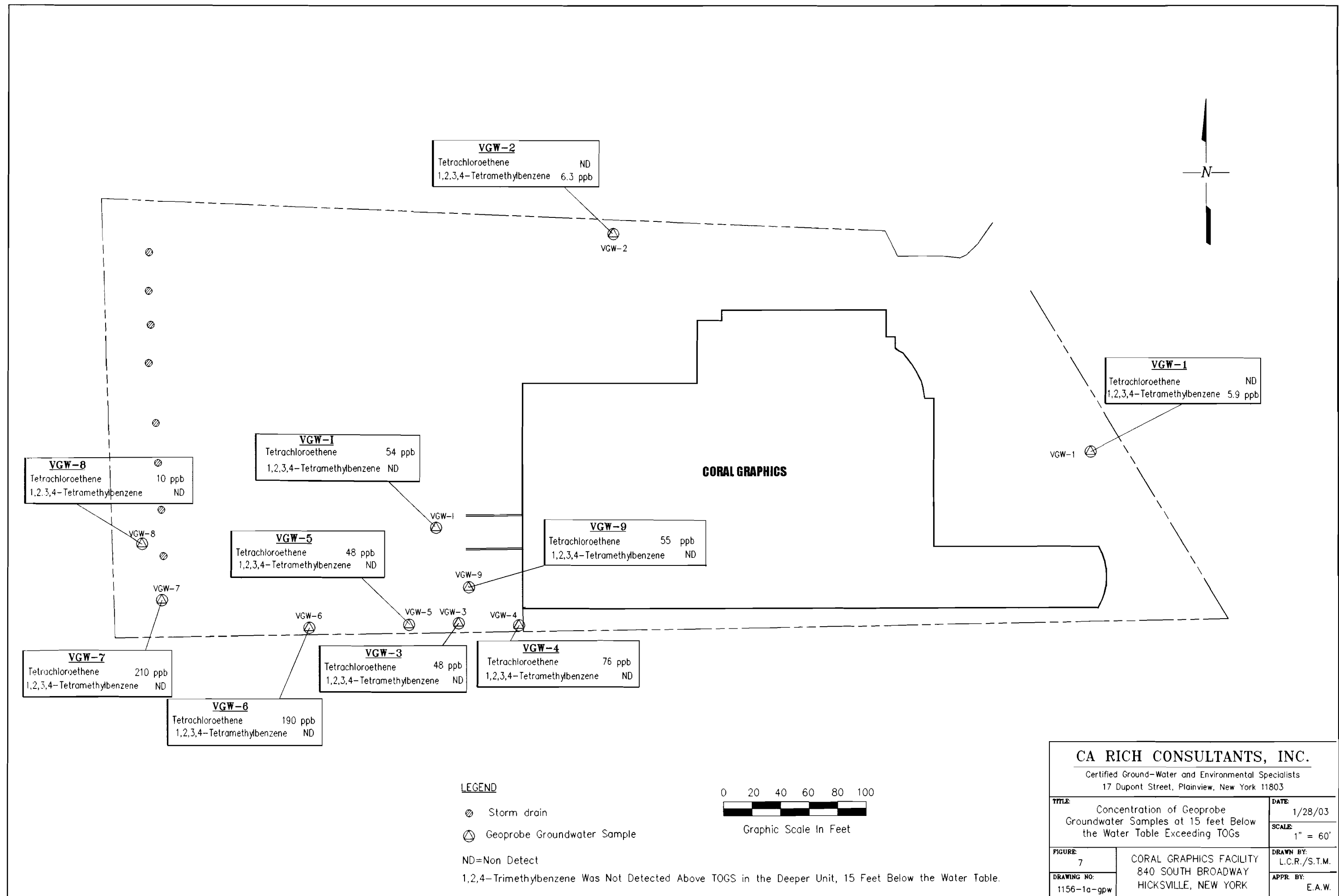
CA RICH CONSULTANTS, INC.

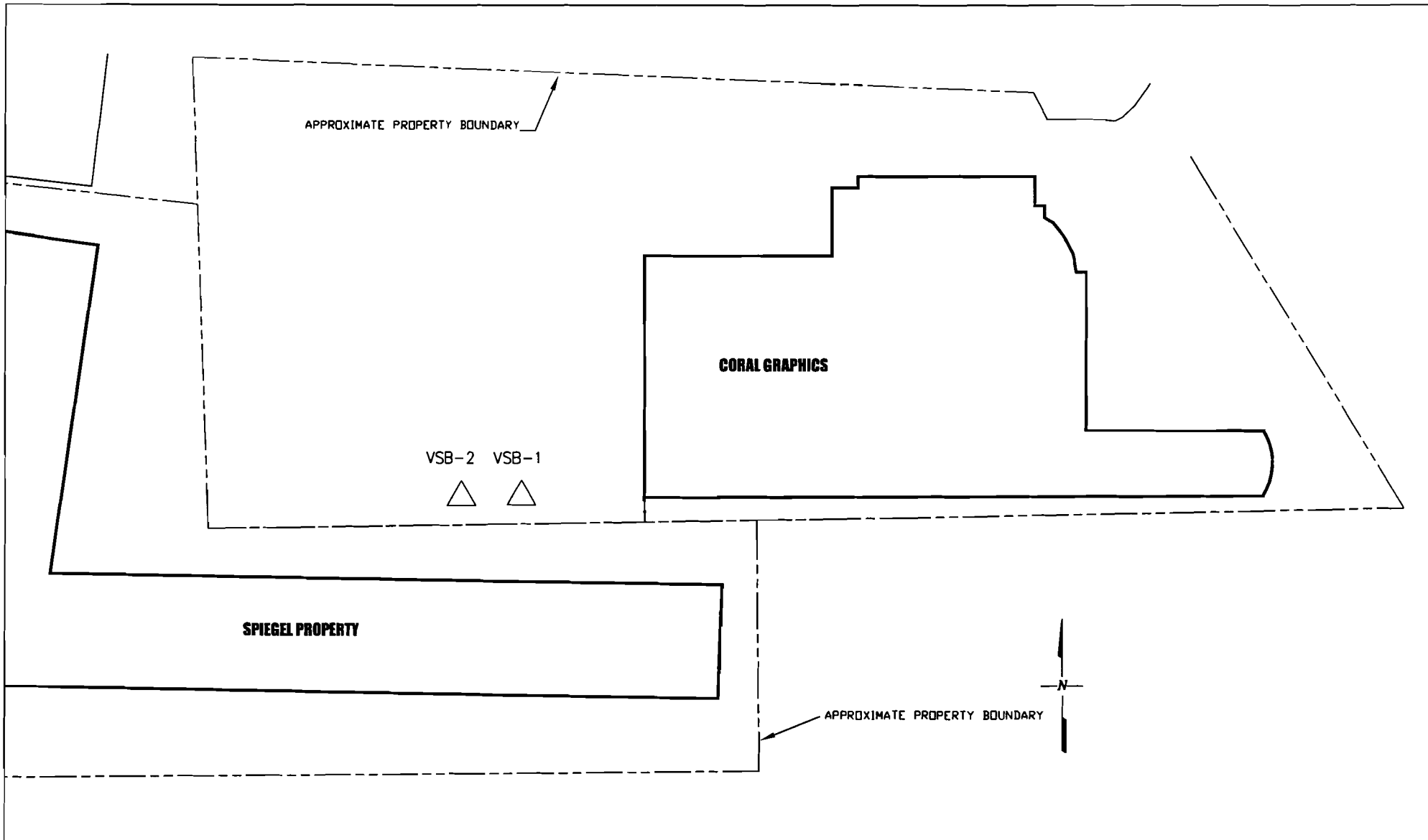
Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

TITLE Profile of Volatile Organic Compounds In Soil Borings above TAGM		DATE 10/29/02
FIGURE 5		SCALE As Shown
DRAWING NO. 1162-1A		DRAWN BY: S.T.M./L.C.R. APPR BY: E.A.W.

CORAL GRAPHICS FACILITY
840 SOUTH BROADWAY
HICKSVILLE, NEW YORK







LEGEND



Soil Sample Location

0 20 40 60 80 100

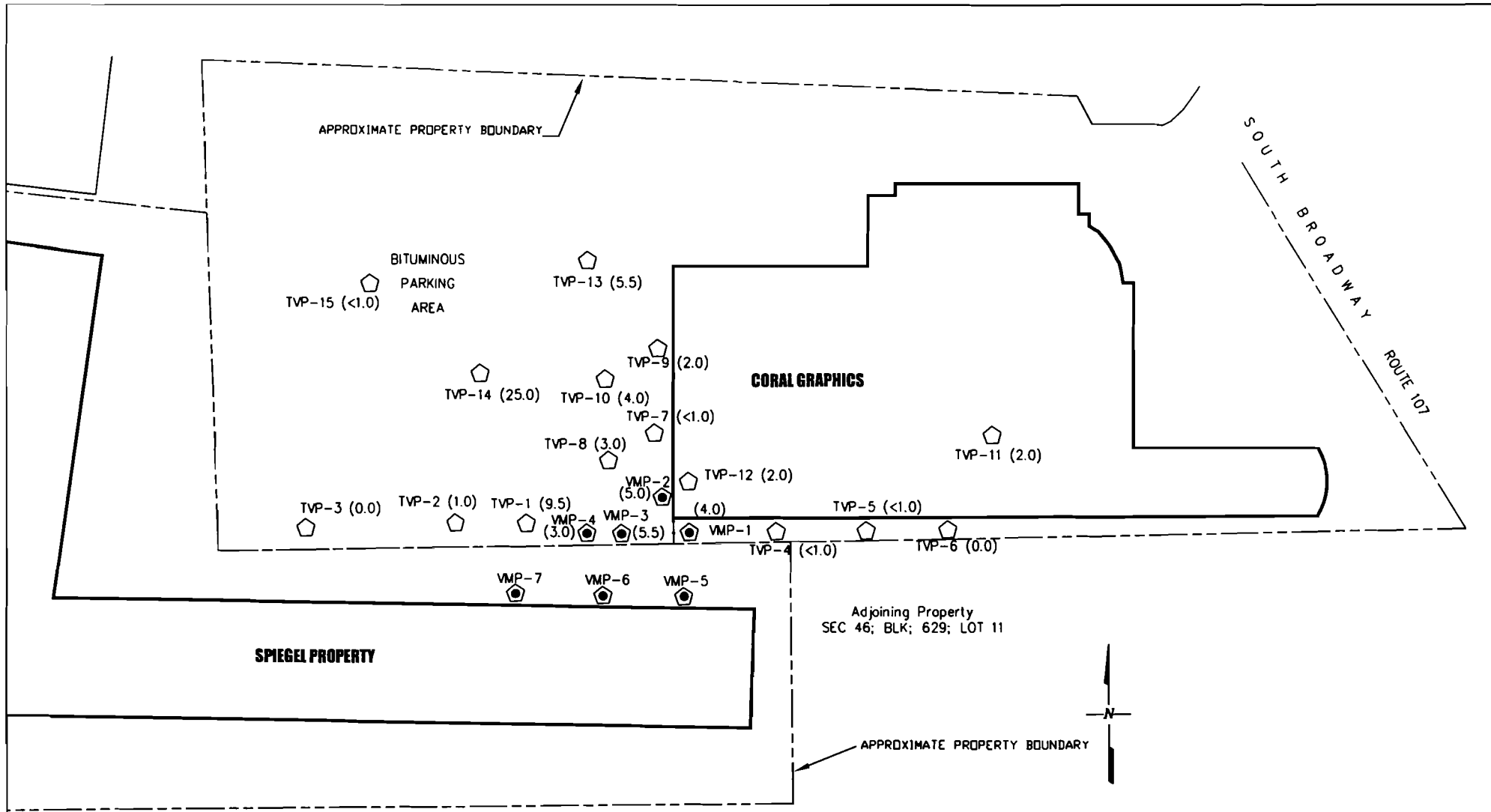


Graphic Scale In Feet

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TITLE: LOCATION OF FORMER DEBRIS PILE SOIL SAMPLING		DATE: 7/29/03
		SCALE: As Shown
FIGURE: 8	CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK	DRAWN BY: L.C.R.
DRAWING NO.: 1156-1B		APPR. BY: E.A.W.



NOTE:
ADAPTED FROM AERIAL PHOTOGRAPH DATED MARCH 4, 2000.

LEGEND

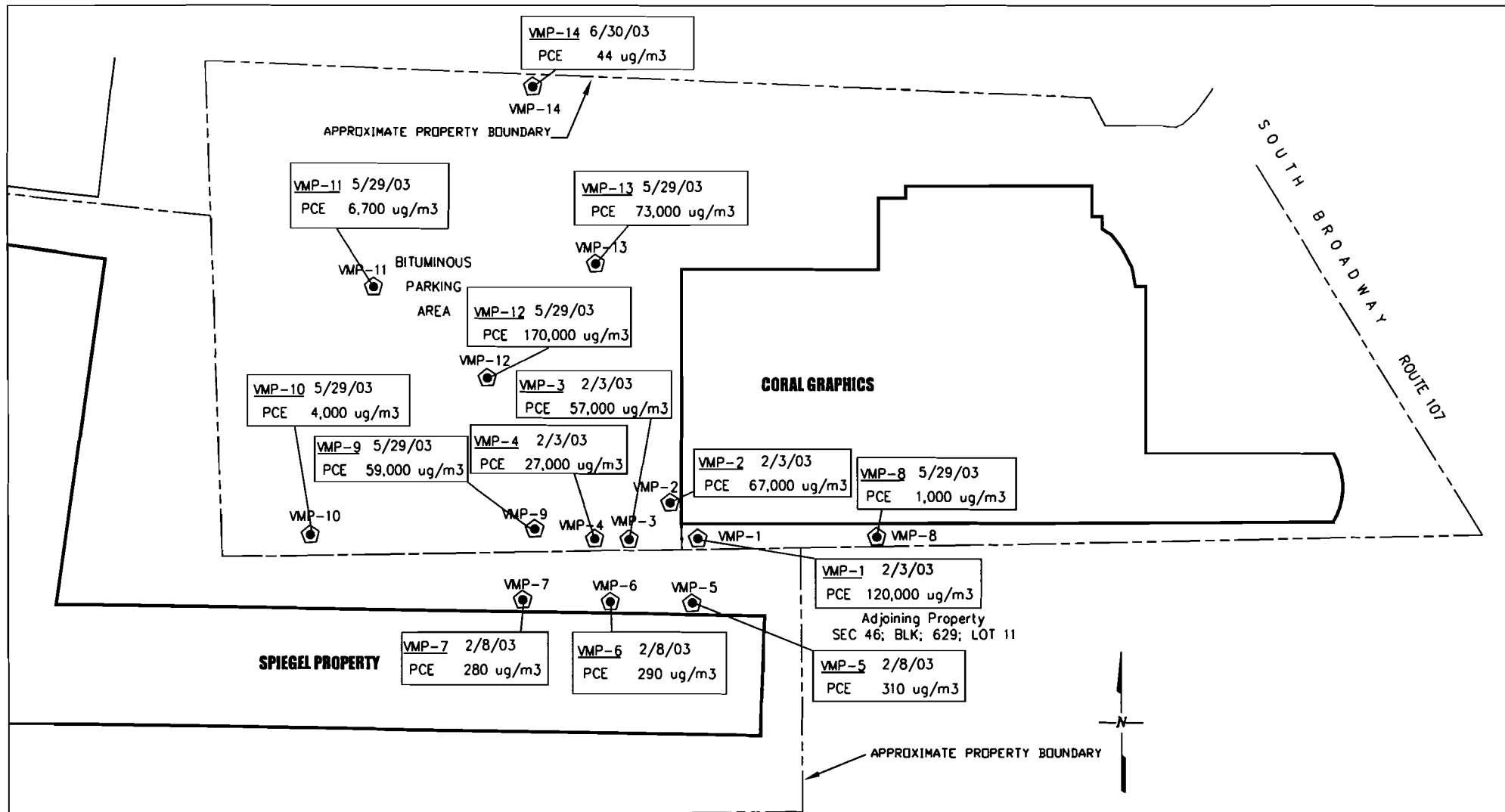
0 20 40 60 80 100
Graphic Scale In Feet

-  Vapor Probes, the PID reading is in parentheses in parts per million (ppm)
 VMP-1(4.0)
-  Temporary Vapor Probes, the PID reading is in parentheses in parts per million (ppm)
 TVP-6 (0.0)

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TITLE SOIL VAPOR READINGS FOR TEMPORARY AND PERMANENT VAPOR PROBES		DATE 7/29/03
FIGURE 9		SCALE As Shown
DRAWING NO. 1156-1B		DRAWN BY: L.C.R.
CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK		APPR. BY: E.A.W.



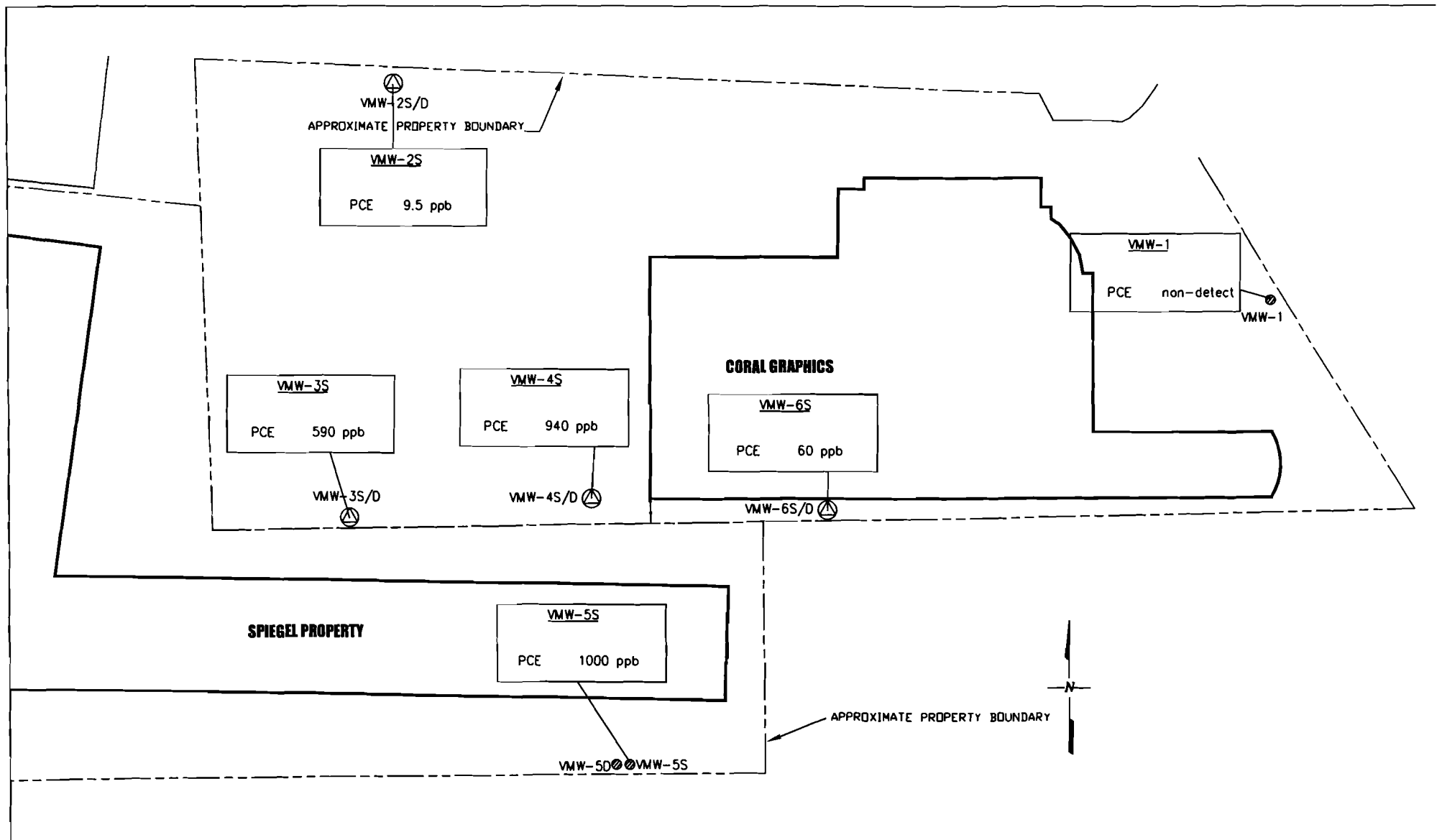
NOTE:
ADAPTED FROM AERIAL PHOTOGRAPH DATED MARCH 4, 2000.

LEGEND

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17 Dupont Street, Plainview, New York 11803

TITLE: CONCENTRATION OF PCE IN VAPOR PROBES		DATE: 7/29/03
FIGURE: 10		SCALE: As Shown
DRAWING NO: 1156-1B	CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK	DRAWN BY: L.C.R.
		APPR. BY: E.A.W.



LEGEND

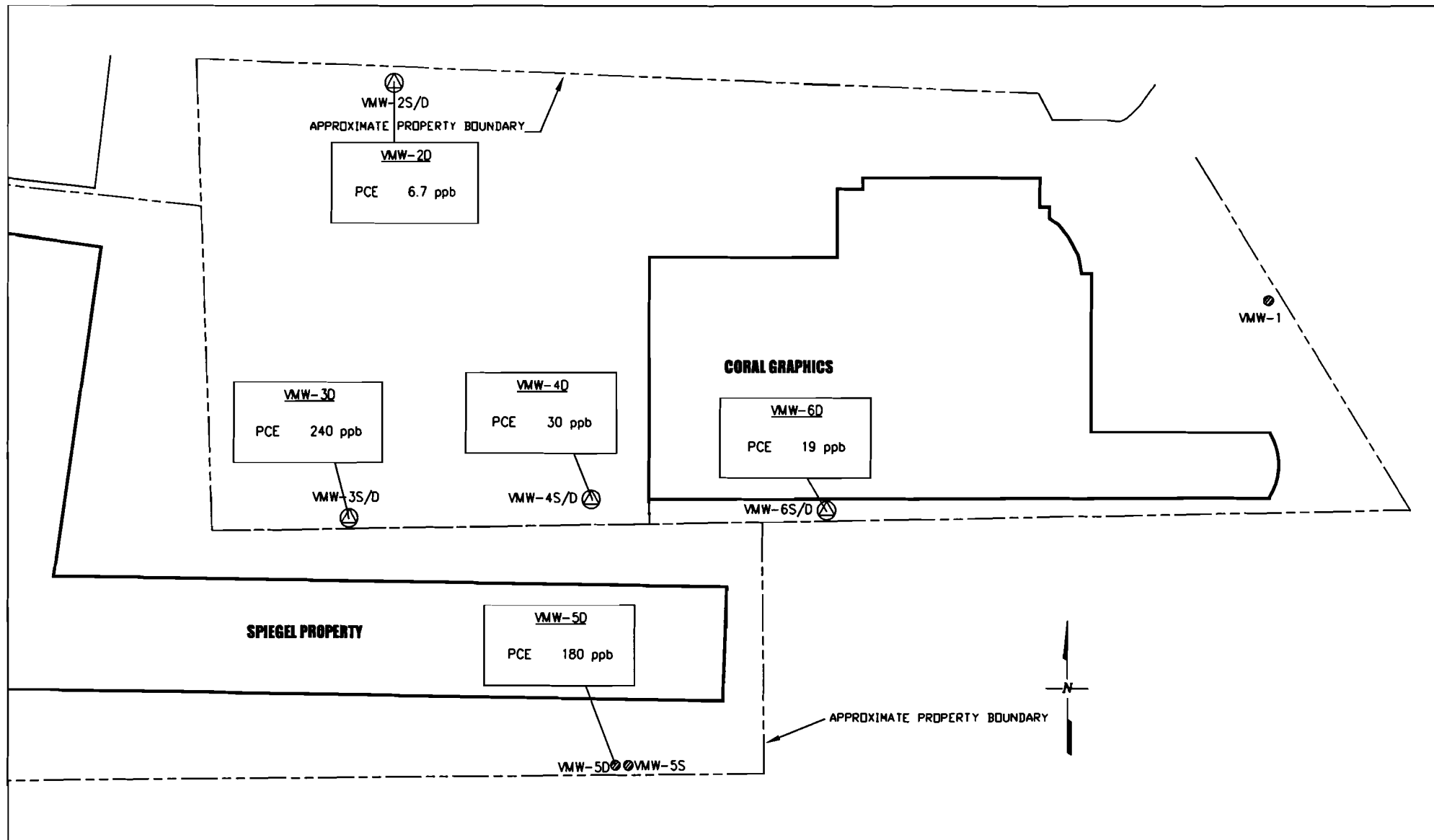
0 20 40 60 80 100
Graphic Scale In Feet

- ⊗ Cluster Well
- ⊙ Single Well

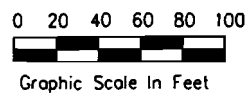
CA RICH CONSULTANTS, INC.

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17 Dupont Street, Plainville, New York 11803

TITLE: CONCENTRATION OF TETRACHLORETHENE IN SHALLOW MONITORING WELLS		DATE: 7/29/03
		SCALE: As Shown
FIGURE: 11	CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK	DRAWN BY: L.C.R.
DRAWING NO.: 1156-1B		APPR. BY: E.A.W.



LEGEND

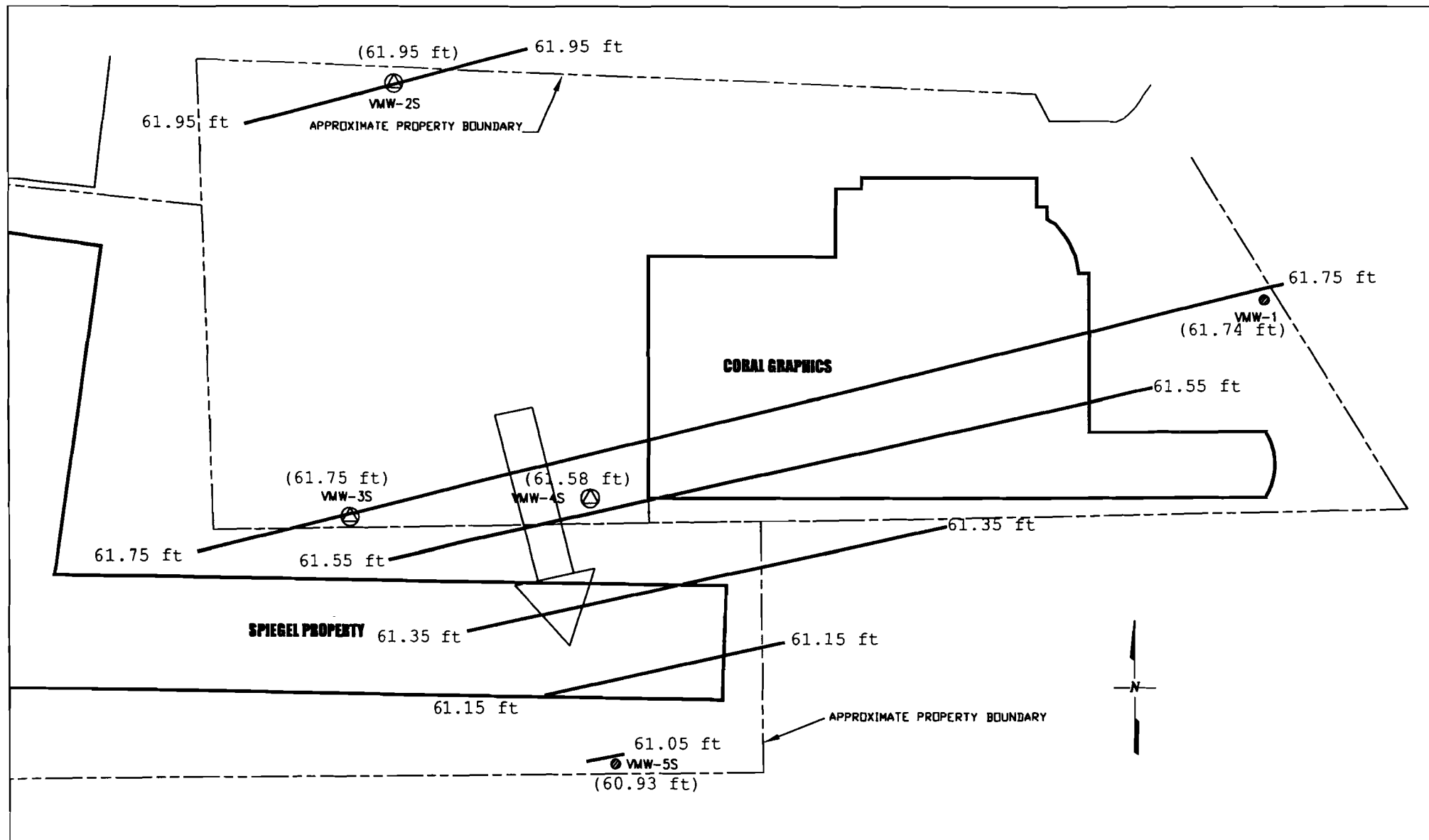


-  Cluster Well
-  Single Well

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17 Dupont Street, Plainview, New York 11803

TITLE: CONCENTRATION OF TETRACHLOROETHENE IN DEEP MONITORING WELLS		DATE: 7/17/03
FIGURE: 12		SCALE: As Shown
DRAWING NO: 1156-1B	CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK	DRAWN BY: L.C.R.
		APPR. BY: E.A.W.



LEGEND

⊗ Cluster Well

● Single Well

— Contour of Equal Elevation of Water Table



Inferred Direction of Groundwater Flow

(60.93 ft) Groundwater Elevation in Feet Above Mean Sea Level

0 20 40 60 80 100



Graphic Scale in Feet

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17 Dupont Street, Plainview, New York 11803

TITLE
WATER TABLE CONTOUR ELEVATION

FEBRUARY 22, 2003

DATE
2/26/03

SCALE
As Shown

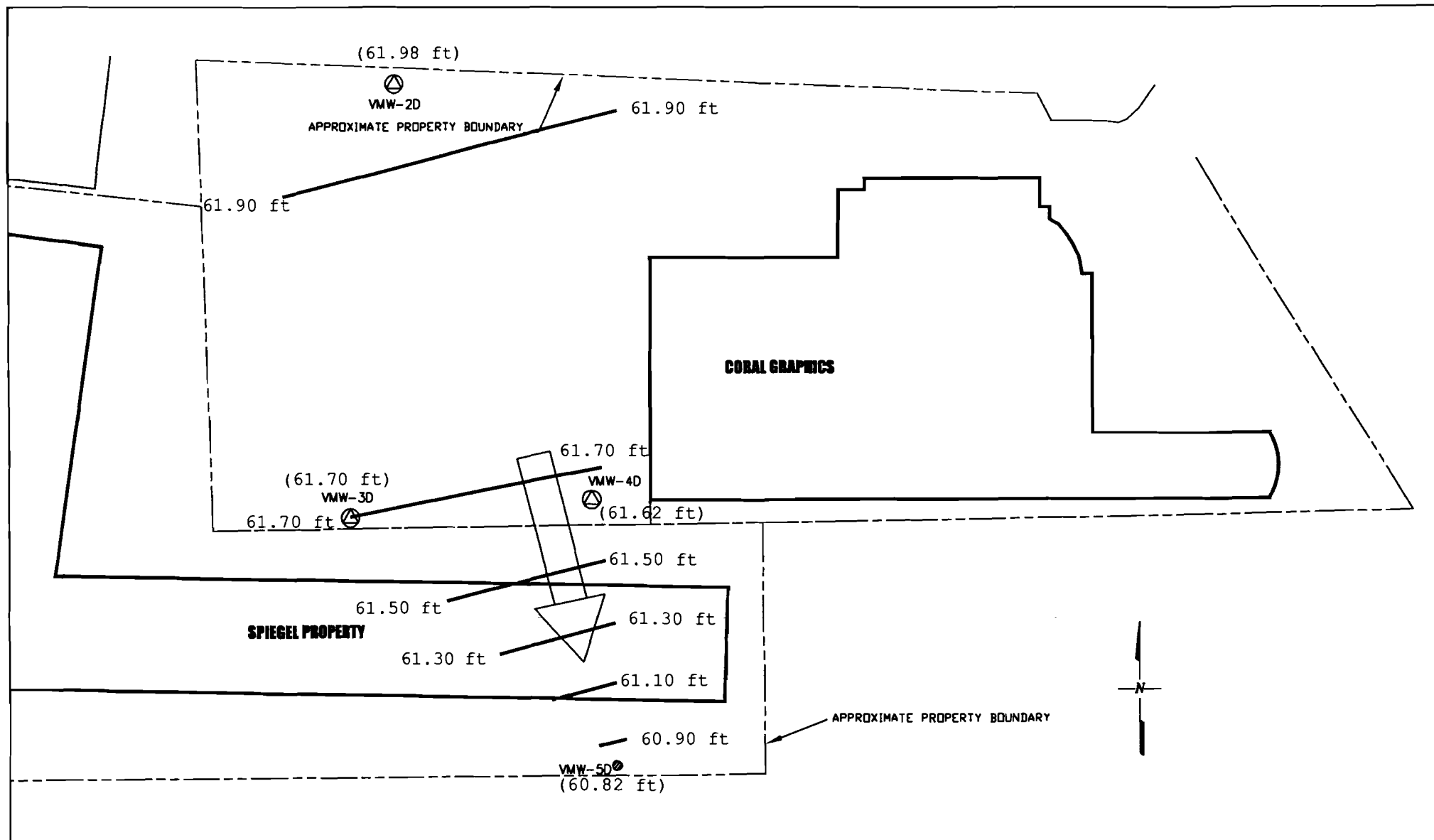
FIGURE
13

DRAWING NO.
1156-1E

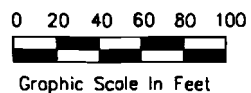
CORAL GRAPHICS FACILITY
840 SOUTH BROADWAY
HICKSVILLE, NEW YORK

DRAWN BY:
L.C.R.

APPR. BY:
E.W.



LEGEND



- ⊗ Cluster Well
- Single Well

— Contour of Equal Elevation of Potentiometric Surface



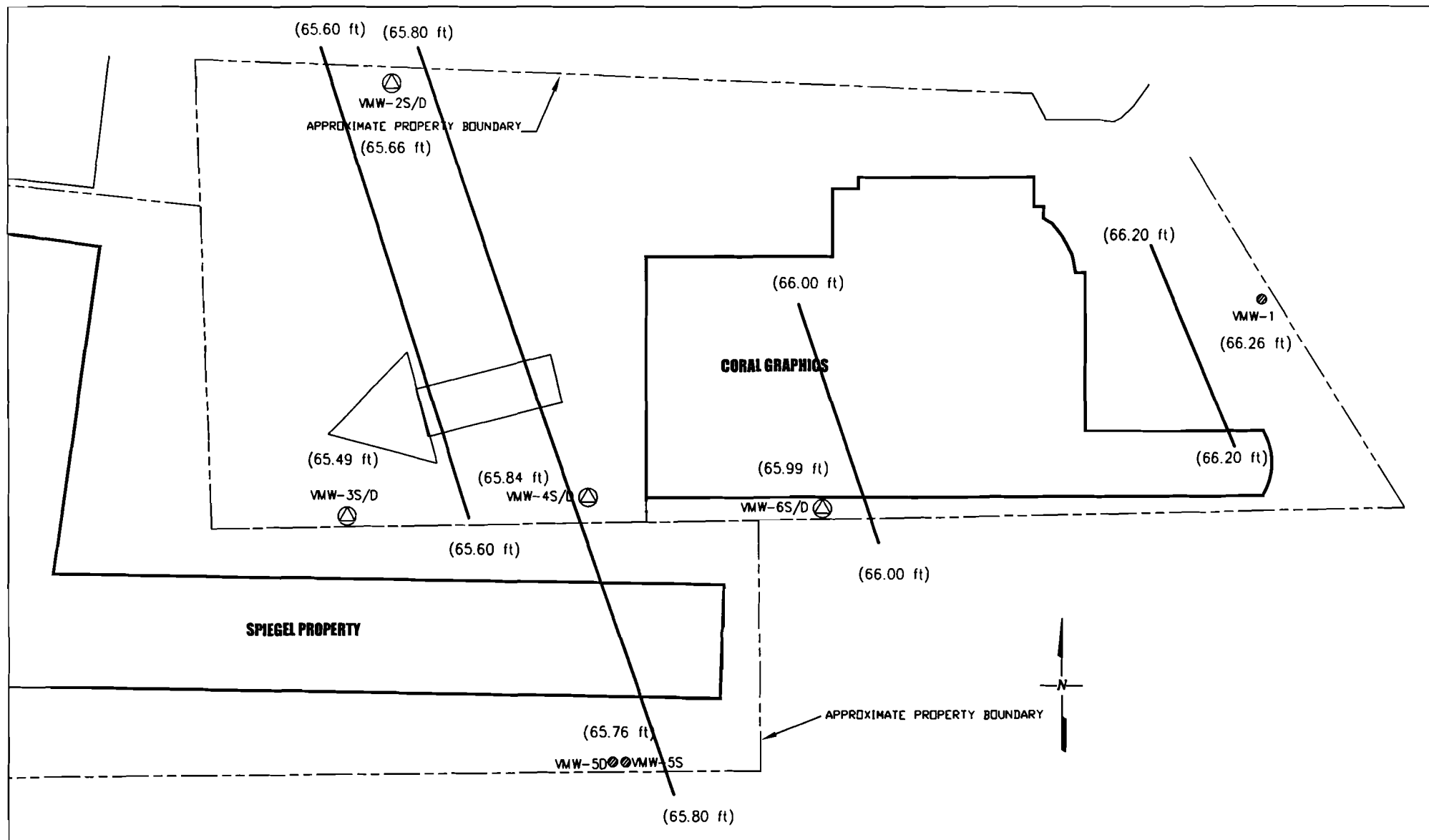
Inferred Direction of Groundwater Flow

(60.93 ft) Groundwater Elevation in Feet Above Mean Sea Level

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainville, New York 11803

TITLE DEEP WELLS POTENTIOMETRIC CONTOUR MAP FEBRUARY 22, 2003		DATE 2/26/03
FIGURE 14		SCALE As Shown
DRAWING NO. 1156-1F	CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK	DRAWN BY: L.C.R. APPR. BY: E.W.



LEGEND

0 20 40 60 80 100
 Graphic Scale In Feet

⊗ Cluster Well
 ● Single Well

— Contour of Equal
 Elevation of
 Water Table



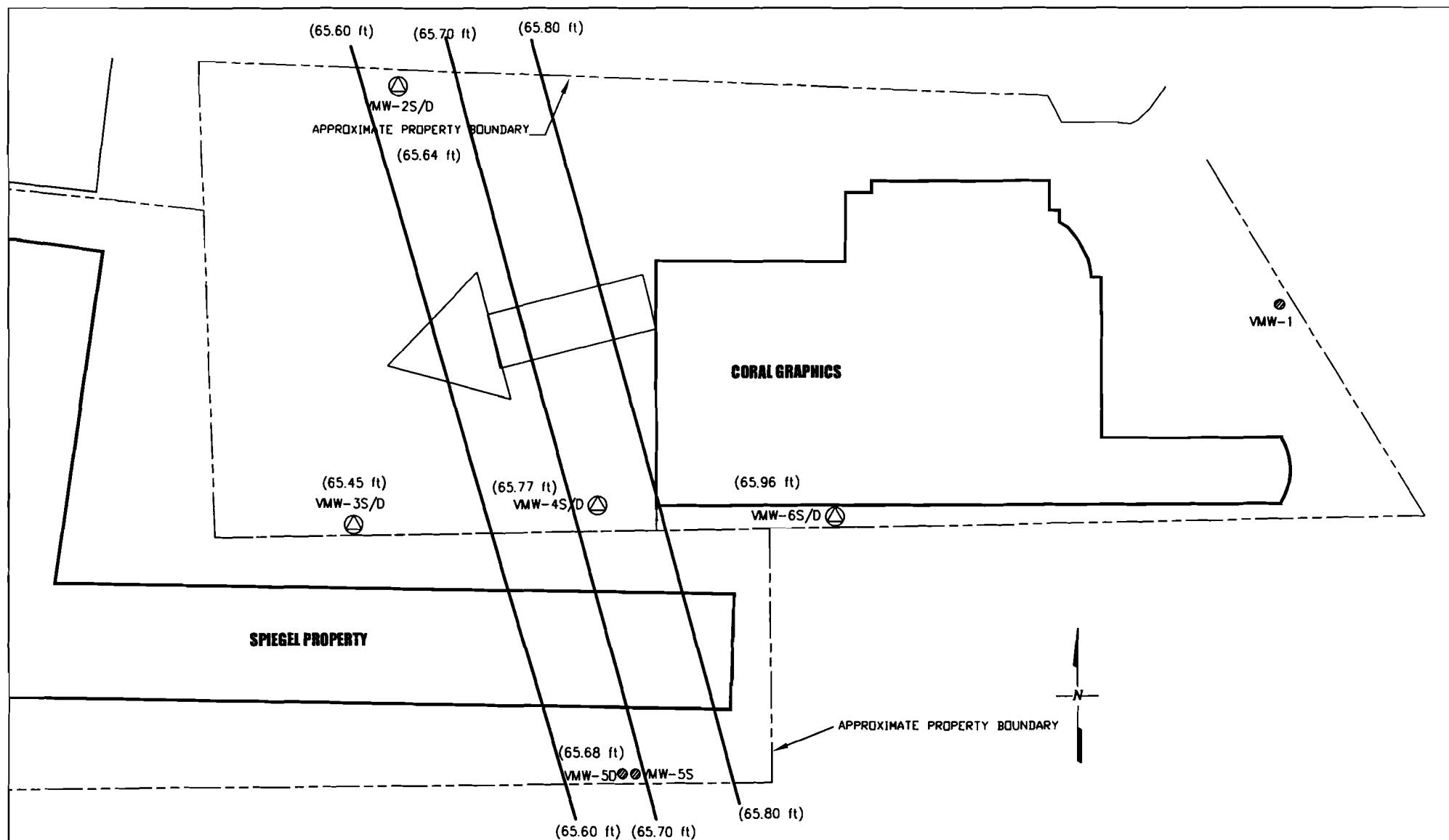
Inferred Direction
 of Groundwater Flow

(65.80 ft) Groundwater
 Elevation in Feet
 Above Mean Sea Level

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
 17 Dupont Street, Plainview, New York 11803

TITLE: WATER TABLE CONTOUR ELEVATION JULY 31, 2003		DATE: 7/31/03
FIGURE: 15		SCALE: As Shown
DRAWING NO: 1156-1B	CORAL GRAPHICS FACILITY 840 SOUTH BROADWAY HICKSVILLE, NEW YORK	DRAWN BY: L.C.R. APPR. BY: E.A.W.



LEGEND

0 20 40 60 80 100
Graphic Scale In Feet

- ⊙ Cluster Well
- Single Well
- Contour of Equal Elevation of Water Table

- ◀ Inferred Direction of Groundwater Flow
- (65.80 ft) Groundwater Elevation in Feet Above Mean Sea Level

CA RICH CONSULTANTS, INC.

Certified Ground-Water and Environmental Specialists
17 Dupont Street, Plainview, New York 11803

TITLE: DEEP WELLS POTENTIOMETRIC CONTOUR MAP		DATE: 7/31/03
FIGURE: 16		SCALE: As Shown
DRAWING NO.: 1156-1B		DRAWN BY: L.C.R.
APPR BY: E.A.W.		DATE: JULY 31, 2003

CORAL GRAPHICS FACILITY
840 SOUTH BROADWAY
HICKSVILLE, NEW YORK

**APPENDIX A.
LABORATORY DATA**

Premier Environmental Services.

DATA USABILITY SUMMARY REPORT (DUSR)
OF THE
CORAL GRAPHICS SITE

ORGANIC AND INORGANIC ANALYSES
IN NON-AQUEOUS SAMPLES

CHEMTECH CONSULTING GROUP
MOUNTAINSIDE, NJ

REPORT NUMBER: P3793

October, 2002

Prepared for
C.A. Rich Consultants, Inc.
Plainview, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566
(516) 223-9761 • FAX (516) 223-0983

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses, Base Neutral Semivolatile Organic Analyses

SITE: Coral Graphics

CONTRACT LAB: Chemtech Consulting Group
Mountainside, New Jersey

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: October, 2002

MATRIX: Non-Aqueous, Aqueous

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('95).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unreliable/unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for fourteen (14) soil samples, one (1) Field Blank and one (1) Trip Blank sample. The samples were collected on August 13, 2002 and shipped to Chemtech Consulting Group located in Mountainside, New Jersey. Samples were received at the laboratory on August 15, 2002. The samples were analyzed for Volatile Organic Analytes (EPA Method 8260) and Base Neutral Semivolatile Organic Analytes (BN SVOA-EPA Method 8270) as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory. In addition the samples were analyzed for Total Metals. The inorganic data review is located in the Inorganic Data Usability Summary Report.

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A list of definitions that may be used in this report is located in Appendix A. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C. Appendix D of this report contains a copy of Chemtech correspondence dated 8/22/02 that cites the method utilized for the reporting of the additional analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

1. OVERVIEW:

The fourteen (14) soil samples, one (1) Field Blank and one (1) Trip Blank Sample were submitted to the laboratory for the analyses requested on the Chain of Custody (COC) documentation. The samples were analyzed for the organic analytes using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260/8270. CA Rich requested that the analytes Isopropyl Alcohol and 1,2,3,4-Tetramethylbenzene also be calibrated/quantitated and reported with the Volatile Organic Analyses. These analytes were reported on the result pages. Proper custody transfer of the samples was documented in the laboratory report. The laboratory provided a deliverables package in accordance with the guidelines in the NYSDEC ASP, Rev '95, Category B.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly preserved aqueous and non-aqueous samples is 14 days from collection. Base Neutral Semivolatile Organic Analyses are to be prepared/extracted within five (5) days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly samples is to prepare the aqueous samples within 7 days of collection and the soil samples within fourteen days of collection.

Volatile Organic Analyses - The soil and aqueous samples associated with this data set were analyzed beyond the ten (10) days of VTSR, however, all samples were analyzed within the method holding time. The data results associated with this sampling event were not qualified based on this anomaly.

Base Neutral Semivolatile Organic Analyses – The soil samples in this data set were prepared on August 20, 2002. The Field Blank sample was prepared on August 19, 2002. All samples were prepared and analyzed within the NYSDEC ASP holding time.

3. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Volatile Organic Analyses – Each sample was spiked with the surrogate compounds 1,2-Dichloroethane-d4, 4-Bromofluorobenzene, Toluene-d8 and Dibromofluoromethane. In-house surrogate recovery limits were utilized by the laboratory. The percent recovery of each surrogate met QC criteria in all field and QC samples associated with each data set with the exception of samples VLP-L and VLP-M. Each was reanalyzed and comparable data results were obtained. In addition, the surrogate recovery of 1,2-Dichloroethane-d4 exceeded QC limits in sample VLP-N MS. All surrogate recoveries met QC criteria in the sample and MSD, therefore, no action was taken. The results in samples VLP-L and VLP-M have been qualified "J/UJ" estimated.

Qualified data result pages are located in Appendix B of this report.

Base Neutral Semivolatile Organic Analyses – Each sample was spiked with the base neutral surrogate compounds Nitrobenzene-d5, 2-Fluorobiphenyl and Terphenyl-d14. The surrogate recovery of all soil, aqueous and QC samples in this data set met QC criteria.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Volatile Organic Analyses – Samples VGP-114-19 and VLP-N were utilized for the MS/MSD analyses. All percent recoveries and Relative Percent Differences (RPD's) met QC criteria in each MS/MSD sample set.

Base Neutral Semivolatile Organic Analyses – Samples VLP-N and VGP-114-19 were utilized for the MS/MSD analysis. A full component spike was analyzed and reported in accordance with the method. In house matrix spike recovery limits of 20-150% were utilized. An RPD limit of 50% was listed on the summary forms. All recoveries met QC criteria in sample VGP-114-19 with the exception of 3,3'-Dichlorobenzidine (48%/25%). The RPD was 63%. All QC criteria was met in sample VLP-N with the exception of the recovery of 3,3'-Dichlorobenzidine (13%/14%) and Benzo(b)fluoranthene (153%). No action was taken based on the results of the MS/MSD analysis.

5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

Volatile Organic Analytes – The laboratory performed one blank spike analysis with this data set. The sample was spiked with all reported analytes. All spike recoveries in the blank spike sample met QC criteria.

Base Neutral Semivolatile Organic Analytes – The laboratory performed one blank spike analysis with this data set. The sample was spiked with all reported analytes. All spike recoveries in the blank spike sample met QC criteria.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

A) Method Blank contamination

Volatile Organic Analyses – Five (5) method blank analyses are associated with this data set. Each method blank was free from contamination.

Base Neutral Semivolatile Organic Analyses – One (1) non-aqueous and one (1) aqueous method blank analyses are associated with this data set. Each method blank was free from contamination.

B) Field Blank contamination

The Field Blank (FB-081302) sample was free from contamination of all organic analytes with the exception of Acetone (41 ug/l), Carbon Disulfide (5.4 ug/L), 2-Butanone (7.1 ug/L) and Toluene (1.7 J ug/l). These analytes were reviewed in associated low level soil samples. The concentration of these analytes, when detected was not less than the allowable limit, therefore, result data was not qualified based on Field Blank contamination.

C) Trip Blank contamination

The Trip Blank (TB-081302) sample was free from contamination.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance. USEPA and Region II criteria is the same for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria is not met in an initial calibration the positive results are qualified "J". Non detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, effected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria is set for these analytes. If the minimum criteria is not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses - One (1) soil calibration curve is associated with the low-level soil sample analyses. The laboratory performed an initial five (5) point multi level calibration using the standards 5 ppb through 200 ppb on August 23, 2002. The RRF for all compounds met QC criteria with the exception of Tert-Butyl Alcohol (TBA) (0.040), Acrolein (0.031) and 2-Chloroethylvinyl-ether (2-CEVE) (0.037). These analytes have been qualified "R" unuseable, due to the low response factor, in all low-level soil samples in this data set. Three (3) continuing calibration standards are associated with the low-level soil sample analyses. In addition to the analytes listed above, Acrylonitrile did not meet QC criteria for response factor. All results of Acrylonitrile were Not Detected, therefore, no additional action was taken. A five (5) point calibration curve was analyzed for both the Iso-propyl Alcohol and 1,2,3,4-Tetramethylbenzene. The response factor of Iso-propyl Alcohol in the soil calibration curve analyzed 8/23/02 was 0.043. The response factor over the calibration range of the analyte was consistent. Based on the slightly lower response factor, the analyte has been qualified "UJ" estimated by this validator.

One (1) aqueous calibration curve is associated with the aqueous and medium level soil samples. The laboratory performed an initial five (5) point multi level calibration using the standards 5 ppb through 200 ppb on August 25, 2002. The RRF for all compounds met QC criteria with the exception of the analytes, Tert-Butyl Alcohol (TBA) (0.037), Acrolein (0.026) and 2-Chloroethylvinyl-ether (2-CEVE) (0.028). These analytes have been qualified "R" unuseable, due to the low response factor, in all the medium level soil and aqueous samples in this data set. One (1) continuing calibration standard is associated with these samples. In addition to the analytes listed above, Acrylonitrile did not meet QC criteria for response factor. All results of Acrylonitrile were Not Detected, therefore, no additional action was taken. A five (5) point calibration curve was analyzed for both the Iso-propyl Alcohol and 1,2,3,4-Tetramethylbenzene. The response factor of Iso-propyl Alcohol in the soil calibration curve analyzed 8/25/02 was 0.039. The response factor over the calibration range of the analyte was consistent. Based on the slightly lower response factor, the analyte has been qualified "UJ" estimated by this validator.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION (cont'd)

Base Neutral Semivolatile Organic Analyses - Two (2) calibration curves are associated with this data set. The laboratory performed one initial multi level calibration on August 20, 2002 for the aqueous Field Blank sample analysis. The RRF for all compounds met QC criteria. One (1) continuing calibration standard was analyzed on August 21, 2002. The response factor of each analyte met QC criteria. The second initial calibration curve analysis was analyzed on August 21, 2002. This curve was utilized for the soil sample analyses. Five (5) continuing calibration standards were analyzed. The RRF of all analytes in each of these continuing calibration standards met QC criteria.

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgement. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unuseable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses – One (1) soil calibration curve is associated with this data set. All RSD% met QC criteria with the exception of Bromomethane (43.6%), Chloroethane (51.4%), Trichlorofluoromethane (61.0%), Methylene Chloride (50.3%) and 2-Chloroethylvinyl ether (43.9%).

Three (3) continuing calibration standards are associated with the low-level soil samples in this data set. The %Difference met QC criteria for all analytes with the exception of that listed below:

Date of Analysis	File ID	Analyte	%Difference
8/23/02	VAO82311	2-CEVE	32.4
8/24/02	VAO82401	2-CEVE	32.4
8/26/02	VAO82602	Dichlorodifluoromethane	38.9
		Vinyl Chloride	33.0
		Trichlorofluoromethane	57.4

One (1) aqueous calibration curve is associated with this data set. All %RSD criteria in the initial calibration curve met QC criteria with the exception of Trichlorofluoromethane (36.7%), Methylene Chloride (31.2%), Acetone (43.4%) and 2-Chloroethylvinyl ether (2-CEVE) (48.3%).

One (1) continuing calibration standard is associated with the aqueous and medium level soil samples in this data set. The %Difference met QC criteria with the exception of Chloroethane (25.7%) and Trichlorofluoromethane (50.2%).

All samples have been qualified "UJ/J" estimated for the analytes that did not meet %Difference QC criteria.

Qualified data result pages are located in Appendix B of this report.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D) (Cont'd)

Base Neutral Semivolatile Organic Analyses – All %RSD criteria was met in the initial calibration curve analyzed 8/20/02 with the exception of 4-Chlorophenyl phenyl ether (35.3%). This calibration is associated with the Field Blank sample. This analyte has been qualified "UJ" estimated. All QC criteria was met in the continuing calibration standard analysis with the exception of that listed below:

Date of Calibration	Standard File ID	Analyte	%Deviation
8/21/02	BC002350.D	Indeno (1,2,3-cd) pyrene	39.5
		Benzo (g,h,i) perylene	29.9

These analytes have been qualified "UJ" estimated in the Field Blank sample.

All %RSD criteria was met in the initial calibration analysis associated with the soil samples in this data set. The laboratory reported a %D of 189% for the analyte 3,3'-Dichlorobenzidine in the continuing calibration standard analyzed August 27, 2002. The raw data was reviewed by this valdiator and the %D is acceptable. No action was taken. All % Difference criteria was met in each of the continuing calibration standard analyses with the exception of that listed below:

Date of Calibration	Standard File ID	Analyte	%Deviation
8/27/02	BA001933.D	Hexachlorocyclopentadiene	26.4
8/28/02	BA001960.D	2,2'-Oxybis (1-chloropropane)	31.2

These analytes have been qualified "UJ" estimate in the associated soil sample analyses.

Qualified data result pages are located in Appendix B of this report.

8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). The tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses/Base Neutral Semivolatile Organic Analyses – All instrument Tuning criteria was met for these sample analyses.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard evaluation criteria is applied to all field and QC samples.

Volatile Organic Analyses – All Internal Standard QC criteria was met for these analyses with the exception of 1,4-Dichlorobenzene-d4 in sample VLP-L. The sample was reanalyzed and acceptable Internal Standard Area Counts were achieved.

Base Neutral Semivolatile Organic Analyses - All Internal Standard QC criteria was met for these analyses

10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

Volatile Organic Analyses – All samples reported the VOA 8260 analytes specified on the COC documents. In addition, the analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene were added. The laboratory reported these analytes to the determined method detection limit. All samples were initially analyzed without dilution, however, due to the concentration of target analytes some samples required additional dilution, based on the expected analyte concentration, some samples were extracted with Methanol and treated as medium level soil samples. All soil sample results are reported on a dry weight basis. All reporting limits reflect any dilution or additional preparation step performed.

Sample VLP-I was analyzed as a medium level soil sample due to the concentration of target analytes detected.

Sample VLP-ID was analyzed with a 1:5 dilution due to the concentration of Tetrachloroethene (640 ug/kg) detected in the sample.

Sample VGP-10-5 was analyzed as a medium level soil sample with an additional dilution of 1:2 due to the concentration of target analytes detected. A number of target analyte were still reported above the calibration range and qualified by the laboratory as "E". An additional dilution factor of 1:200 was utilized. All results were reported within the calibration range of the instrument.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

10. COMPOUND IDENTIFICATION (cont'd)

Volatile Organic Analyses (cont'd)

Sample VGP-15-9 was analyzed with a 1:2 dilution due to the concentration of Tetrachloroethene (63 ug/kg) detected in the sample.

Sample VGP-1AO-5 was analyzed as a medium level soil sample due to the concentration of target analytes detected. A number of target analyte were still reported above the calibration range and qualified by the laboratory as "E". An additional dilution factor of 1:100 was utilized. All results were within the calibration range of the instrument.

Base Neutral Semivolatile Organic Analyses – All samples with the exception of those listed below were reported without dilution. Chemtech Consulting Group reported all results at the laboratory Method Detection Limit. All soil sample results are reported on a dry weight basis.

Sample VLP-M was reported from a 1:10 dilution due to the concentration of Di-n-octyl phthalate (50000E ug/kg). This analyte was qualified "E" by the laboratory and reported as preliminary results. An additional dilution was performed (1:50) and the data was provided for review. No additional information was provided.

Sample VGP-10-5 was reported from a 1:10 dilution due to the concentration of Bis-2-ethylhexyl phthalate in the sample (6800 ug/kg).

Sample VGP-1AO-5 was reported from a 1:5 dilution due to the concentration of Bis-2-ethylhexyl phthalate (5200 ug/kg) in the sample.

11. OVERALL ASSESSMENT:

Analytical QC criteria was met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. All soil sample results are reported on a dry weight basis.

The additional Volatile Organic Analytes were reported using the criteria outlined in Chemtech correspondence dated 8/22/02. A copy of this is provided in Appendix D of this report.

The data provided for this data set is acceptable for use, with the noted data qualifiers.

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: TAL Metals

SITE: Coral Graphics

CONTRACT LAB: Chemtech Consulting Group
Mountainside, New Jersey

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: October, 2002

MATRIX: Non-Aqueous, Aqueous

This data assessment is for fourteen (14) soils and one (1) Field Blank sample as listed below. The samples were collected on August 13, 2002 and shipped to Chemtech Consulting Group, located in Mountainside, New Jersey via UPS. The COC did not indicate that all samples were to be analyzed for the TAL Metals group, however, the COC did note reference to a specific quote. All samples, with the exception of the Trip Blank were analyzed for the TAL Metals group. All samples with the exception of the Trip Blank were reviewed. Copies of the COC documents associated with this data set are located in Appendix C of this report.

The data evaluation was performed according to the guidelines noted in the "National Functional Guidelines for Inorganic Data Review, February 1994 and the NYSDEC ASP. A Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines of the Division of Environmental Remediation.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

Table 1 of this report contains a cross reference between the Field Sample ID's and the Laboratory Sample ID's.

Appendix A of this Data Usability Summary Report (DUSR) contains a summary of the data qualifiers that may be used in the report. Appendix B contains the qualified data result pages. Appendix C contains the Chain of Custody (COC) documents associated with this data set.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

1. HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Metals with the exception of Mercury, are required to be digested and analyzed within 180 days of Verified Time of Sample Receipt (VTSR). Mercury samples are to be digested and analyzed within 26 days of VTSR.

All sample analyses associated with Project ID: P3793 were prepared/digested and analyzed within the proper holding time.

2. CALIBRATION ANALYSIS

Inductively Coupled Plasma (ICP) was utilized for these analyses. The ICP was calibrated using a single point standard as required by the manufacturer. An initial calibration verification (ICV) standard was then analyzed to verify instrument calibration. The samples were analyzed in one analytical sequence August 26, 2002 through August 27, 2002. Recoveries of the ICV standard associated with the analytical sequence met QC criteria. One continuing calibration verification (CCV) standard was then analyzed after each ten (10) field samples. All CCV percent recoveries met QC criteria.

Analysis for Cold Vapor Mercury is calibrated using multi point standards and calculating the correlation coefficient of the curve. One of the calibrations standards must be analyzed at the CRDL. The Mercury analyses associated with this data set was performed on August 23, 2002. The initial calibration of each of these analyses met QC criteria. Continuing calibration standard analysis was performed using a mid point standard and calculating the concentration of the standard in terms of recovery from the initial calibration curve. All continuing calibration analyses associated with this data set met QC criteria.

3. CRDL STANDARD

The CRDL standard is used for the verification of instrument linearity near the CRDL. The CRDL standard control limits are 80%-120% recovery. If the CRDL standard falls outside of the control limits, associated data less than or equal to the 10X the CRDL are qualified estimated (J or UJ) or rejected (R) depending on the recovery of the CRDL standard and the concentration of the analyte in the sample. When the CRDL standard exceeds the control limit, indicating a high bias samples are qualified estimated (J or UJ).

All ICP CRDL standards associated with this data set met QC criteria with the exception of Iron. The analysis of a CRDL standard is not required for Iron, therefore, no action was taken based on the recovery of the CRDL standard.

4. INTERFERENCE CHECK STANDARD

The Interference Check Standard (ICS) is used to verify the laboratory interelement and background correction factors of the ICP. Two solutions comprise the ICS A and ICS AB. Solution A consists of the interferent metals while solution AB is the group of target analytes and the interferents metals. An ICS analysis consists of analyzing both solutions consecutively for all wavelengths used for each analyte reported by ICP.

All ICSA and ICSAB recoveries associated with these analyses met QC criteria.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

5. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are 75%-125% when the sample concentration is less than four (4) times the spike added. If the matrix spike recoveries fall in the range of 30%-74%, the sample results are may be biased low and are qualified as estimated (J or UJ). If the matrix spike recoveries fall in the range of 126%-200%, sample results may be biased high. Positive results are qualified estimated (J). If the spike recovery is greater than 125% and the reported sample results are less than the IDL the data point is acceptable for use. If the matrix spike recovery is greater than 200%, the associated sample data are unusable and are rejected (R). If matrix spike results are less than 30%, the associated non-detect results are qualified unusable and rejected (R), and the results reported above the IDL are qualified estimated (J).

MS/MSD analysis was performed on soil samples VLP-N and VGP-114-19. All percent recoveries met QC criteria in sample VGP-114-19. All percent recoveries met QC criteria in sample VLP-N with the exception of Aluminum (405.5%/348.1%) and Manganese (132.2%). Samples associated with MS/MSD sample VLP-N have been qualified "J" estimated for Manganese. Samples associated with MS/MSD VLP-N have been qualified "R" unreliable/unuseable for the analyte Aluminum. The Aluminum results associated with this data set may be biased high.

6. POST DIGESTION SPIKE ANALYSIS

The post digestion spike sample analysis provides additional information about the effect of the sample matrix upon the digestion and measurement methodology. The post digestion spike is performed for each analyte that the pre-digestion spike recovery falls outside the 75-125% control limit.

Chemtech Consulting Group did not perform post digestion spike analysis with this data set.

7. DUPLICATE SAMPLE ANALYSIS

The laboratory duplicate sample analysis is used to evaluate the laboratory precision of the method for each analyte. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD or +/- CRDL, whichever is appropriate depending upon the concentration of the sample, the associated sample results are qualified "J" estimated.

Duplicate sample analysis was performed on soil samples VLP-N and VGP-114-19. All duplicate analyte RPD's met QC criteria in sample VLP-N with the exception of Aluminum (27.5%), Iron (22.5%), Lead (39.1%), Manganese (24.0%), Zinc (39.7%) and Mercury (40.6%). These analytes have been qualified "UJ/J" estimated in associated soil samples. All RPD's met QC criteria in sample VGP-114-19 with the exception of Lead. Lead (70%) has been qualified "UJ/J" estimated in associated soil samples.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

8. ICP SERIAL DILUTION

The serial dilution analysis indicates whether significant physical or chemical interference's exist due to the sample matrix. If the concentration of any analyte in the original sample is greater than 50 times the instrument detection limit (IDL), an analysis of a 5-fold dilution samples must yield results which have a percent difference (%D) of less than or equal to 10 with the original sample results. If the %D of the serial dilution exceeds the 10% (and is not greater than 100%) for a particular analyte, all the associated sample results are qualified estimated (J).

Samples VLP-N and VGP-114-19 were utilized for the serial dilution analysis. All serial dilution results met QC criteria with the exception of Zinc (19.1%) in sample VGP-N. Zinc in the samples associated with this batch have been qualified "J" estimated.

9. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not affecting other data.

ICP Metals – The soil samples in this data set were prepared in two (2) batches on 8/2/02. Low-level contamination was detected in each of the preparation blanks. These analytes were then reviewed in the associated field sample results. If the concentration was less than five (5) times that detected in the preparation blank, the analyte was qualified "U" at the level of contamination on the data result page.

The aqueous Field Blank sample was prepared on 8/22/02. It was free from contamination.

10. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine if data should be qualified or rejected.

Chemtech prepared and analyzed an LCS sample with each of the soil and aqueous digestion batch associated with this data set. Commercial percent recoveries were used for the review of soil LCS data. Recovery limits of 80%-120% were utilized for review of the aqueous LCS sample. All soil LCS recoveries met QC limits with the exception of Sodium in LCS PB082202-05. The recovery was slightly higher than the acceptable units. Sodium has been qualified "J" estimated in each of the samples associated with this data set.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

11. INSTRUMENT QC DATA

The laboratory is required by the method to perform specific instrument verification tests on a specific timeframe. Based on a review of the QC summary forms included in the data report, Chemtech Consulting Group performed the required studies specified by the method.

12. FIELD DUPLICATE SAMPLE ANALYSIS

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Soil samples are also expected to have a greater variance due to the difficulties associated with collecting exact duplicate soil samples. Data was not qualified based on the results of the field duplicate sample data.

Samples VLP-I and VLP-ID are field duplicate samples. Below is a summary of these data results.

Sample VLP-I/VLP-ID (P3793-01/P3793-02)

<u>Analyte</u>	<u>Result</u> mg/kg	<u>Result</u> mg/kg	<u>RPD%</u>
%Total Solids	91%	82%	
Aluminum	2240	1720	26.3
Antimony	0.65	1.2	59.5
Arsenic	0.80	1.2	40.0
Barium	12.8	15.0	15.8
Beryllium	0.06	0.7	183
Calcium	982	3320	109
Chromium	3.0	5.0	50.0
Cobalt	13.0	15.3	16.3
Copper	29.7	22.6	27.2
Iron	8830	5190	51.9
Lead	7.1	15.3	73.2
Magnesium	1180	829	34.9
Manganese	56.7	56.7	0
Mercury	0.05	0.05	0
Nickel	0.28	0.24	15.4
Potassium	117	159	30.4
Silver	0.51	ND	NC
Sodium	147	156	5.94
Vanadium	11.2	5.9	9.13
Zinc	19.7	11.2	55.0

ND denotes Not Detected

NC denotes Not Calculated

**DATA USABILITY SUMMARY REPORT (DUSR)
CORAL GRAPHICS SITE**

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

This data set included the analysis of fourteen (14) soil samples and one (1) Field Blank sample. The data associated with this data set is acceptable for use with the noted data qualifiers. Data qualifiers have been applied to this data set based on the guidelines in the cited EPA documents. A description of the qualifiers and decision for them is detailed in the above report.

The Chain of Custody documentation associated with report P3793 did not indicate that all soil samples were to be analyzed for the TAL Metal set. Raw data and final results reported all samples. A review of all soil sample data was performed.

The data results associated with this sampling event are valid and acceptable for use with the noted data qualifiers.

Premier Environmental Services.

TABLE 1

Premier Environmental Services.

CLIENT SAMPLE ID

LABORATORY SAMPLE ID

VLP-I	P3793-01
VLP-ID	P3793-02
VLP-K	P3793-03
VLP-L	P3793-04
VLP-M	P3793-05
VLP-N	P3793-06
VLP-NMS	P3793-07
VLP-NMSD	P3793-08
VLP-013.5	P3793-09
VLP-P13.5	P3793-10
VLP-Q13.5	P3793-11
VGP-10-5	P3793-12
VGP-15-9	P3793-13
VGP-114-19	P3793-14
VGP-114-19MS	P3793-15
VGP-114-19MSD	P3793-16
VGP-1A0-5	P3793-17
VLP-A14-19	P3793-18
TB-081302	P3793-19
FB-081302	P3793-20

Premier Environmental Services.

APPENDIX A

Premier Environmental Services.

DATA QUALIFIER DEFINITIONS

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unuseable. The presence or absence of the analyte cannot be verified.

K - The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL - The analyte was not detected, and the reported quantitation limit is probably higher than reported.

Premier Environmental Services.

APPENDIX B

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-01

Client ID: VLP-I

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082621.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 95	U	670	95	ug/Kg
Chloromethane	74-87-3	< 69	U	670	69	ug/Kg
Vinyl chloride	75-01-4	< 110	U	670	110	ug/Kg
Bromomethane	74-83-9	< 51	U	670	51	ug/Kg
Chloroethane	75-00-3	< 330 UJ	U	670	330	ug/Kg
Trichlorofluoromethane	75-69-4	< 98 UJ	U	670	98	ug/Kg
1,1-Dichloroethene	75-35-4	< 93	U	670	93	ug/Kg
Acetone	67-64-1	< 470 UJ	U	670	470	ug/Kg
Carbon disulfide	75-15-0	< 97	U	670	97	ug/Kg
Methyl Acetate	79-20-9	< 110	U	670	110	ug/Kg
Methylene Chloride	75-09-2	< 240 UJ	U	670	240	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 110	U	670	110	ug/Kg
1,1-Dichloroethane	75-34-3	< 88	U	670	88	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 83	U	670	83	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 140	U	670	140	ug/Kg
2,2-Dichloropropane	594-20-7	< 84	U	670	84	ug/Kg
Chloroform	67-66-3	< 82	U	670	82	ug/Kg
Cyclohexane	110-82-7	< 130	U	670	130	ug/Kg
1,1-Dichloropropene	563-43-2	< 400	U	670	400	ug/Kg
2-Butanone	78-93-3	< 310	U	670	310	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 100	U	670	100	ug/Kg
Carbon Tetrachloride	56-23-5	< 63	U	670	63	ug/Kg
Dibromomethane	74-95-3	< 81	U	670	81	ug/Kg
Benzene	71-43-2	< 95	U	670	95	ug/Kg
1,2-Dichloroethane	107-06-2	< 76	U	670	76	ug/Kg
Trichloroethene	79-01-6	< 96	U	670	96	ug/Kg
Methylcyclohexane	108-87-7	< 90	U	670	90	ug/Kg
1,2-Dichloropropane	78-87-5	< 98	U	670	98	ug/Kg
Bromodichloromethane	75-27-4	< 98	U	670	98	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 89	U	670	89	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 89	U	670	89	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 84	U	670	84	ug/Kg
Dibromochloromethane	124-48-1	< 88	U	670	88	ug/Kg
1,2-Dibromoethane	106-93-4	< 85	U	670	85	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-01

Client ID: VLP-I

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082621.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 66	U	670	66	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 110	U	670	110	ug/Kg
2-Hexanone	591-78-6	< 80	U	670	80	ug/Kg
1,3-Dichloropropane	142-28-9	< 76	U	670	76	ug/Kg
Tetrachloroethene	127-18-4	3400		670	94	ug/Kg
Toluene	108-88-3	< 95	U	670	95	ug/Kg
Chlorobenzene	108-90-7	< 110	U	670	110	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 86	U	670	86	ug/Kg
Ethyl Benzene	100-41-4	< 100	U	670	100	ug/Kg
m&p-Xylenes	136777-61-2	< 210	U	1300	210	ug/Kg
o-Xylene	95-47-6	< 97	U	670	97	ug/Kg
Styrene	100-42-5	< 120	U	670	120	ug/Kg
Isopropylbenzene	98-82-8	< 100	U	670	100	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 95	U	670	95	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 99	U	670	99	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 120	U	670	120	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 120	U	670	120	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 120	U	670	120	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 170	U	670	170	ug/Kg
Bromobenzene	108-86-1	< 81	U	670	81	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 140	U	670	140	ug/Kg
n-propylbenzene	103-61-5	< 110	U	670	110	ug/Kg
2-Chlorotoluene	95-49-8	< 110	U	670	110	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 130	U	670	130	ug/Kg
4-Chlorotoluene	106-43-4	< 140	U	670	140	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 110	U	670	110	ug/Kg
Sec-butylbenzene	135-98-8	< 130	U	670	130	ug/Kg
tert-Butylbenzene	98-06-6	< 130	U	670	130	ug/Kg
n-Butylbenzene	104-51-8	< 160	U	670	160	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 140	U	670	140	ug/Kg
Hexachlorobutadiene	87-68-3	< 130	U	670	130	ug/Kg
Naphthalene	91-20-3	< 120	U	670	120	ug/Kg
tert-Butyl Alcohol	75-65-0	< 540 R	U	3400	540	ug/Kg
Acrolein	107-02-8	< 650 R	U	3400	650	ug/Kg
Acrylonitrile	107-13-1	< 470	U	3400	470	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-01

Client ID: VLP-I

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082621.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 350	U	3400	350	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 290 R	U	670	290	ug/Kg
p-Isopropyltoluene	99-87-6	< 150	U	670	150	ug/Kg
Isopropyl Alcohol	67-63-0	< 2700 U	U	2700	2700	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 670	U	670	670	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.35	97 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	42.03	84 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	46.44	93 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	49.88	100 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1043692	6.86			
1,4-Difluorobenzene	540-36-3	1107887	8.68			
Chlorobenzene-d5	3114-55-4	919108	14.97			
1,4-Dichlorobenzene-d4	3855-82-1	640944	20.46			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-02

Client ID: VLP-ID

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082606.D

Analytical Run ID: VA082502

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 9

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 4.9 UJ	U	27	4.9	ug/Kg
Chloromethane	74-87-3	< 9.3 UJ	U	27	9.3	ug/Kg
Bromomethane	74-83-9	< 5.5 UJ	U	27	5.5	ug/Kg
Vinyl chloride	75-01-4	< 5.5 UJ	U	27	5.5	ug/Kg
Chloroethane	75-00-3	< 7.1	U	27	7.1	ug/Kg
Trichlorofluoromethane	75-69-4	< 7.1 UJ	U	27	7.1	ug/Kg
Methyl Acetate	79-20-9	< 6.0	U	27	6.0	ug/Kg
Methylene Chloride	75-09-2	< 7.1 UJ	U	27	7.1	ug/Kg
Acetone	67-64-1	< 19	U	27	19	ug/Kg
Carbon disulfide	75-15-0	< 7.1	U	27	7.1	ug/Kg
1,1-Dichloroethene	75-35-4	< 6.0	U	27	6.0	ug/Kg
1,1-Dichloroethane	75-34-3	< 4.9	U	27	4.9	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 4.9	U	27	4.9	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 6.0	U	27	6.0	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 4.9	U	27	4.9	ug/Kg
2,2-Dichloropropane	594-20-7	< 4.4	U	27	4.4	ug/Kg
Chloroform	67-66-3	< 5.5	U	27	5.5	ug/Kg
1,2-Dichloroethane	107-06-2	< 6.0	U	27	6.0	ug/Kg
2-Butanone	78-93-3	< 30	U	27	30	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 5.5	U	27	5.5	ug/Kg
Cyclohexane	110-82-7	< 7.1	U	27	7.1	ug/Kg
Carbon Tetrachloride	56-23-5	< 12	U	27	12	ug/Kg
1,1-Dichloropropene	563-43-2	< 7.1	U	27	7.1	ug/Kg
Bromodichloromethane	75-27-4	< 4.4	U	27	4.4	ug/Kg
Methylcyclohexane	108-87-7	< 5.5	U	27	5.5	ug/Kg
1,2-Dichloropropane	78-87-5	< 4.4	U	27	4.4	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 4.9	U	27	4.9	ug/Kg
Trichloroethene	79-01-6	< 5.5	U	27	5.5	ug/Kg
Dibromochloromethane	124-48-1	< 4.9	U	27	4.9	ug/Kg
Dibromomethane	74-95-3	< 5.5	U	27	5.5	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 6.0	U	27	6.0	ug/Kg
Benzene	71-43-2	< 5.5	U	27	5.5	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 5.5	U	27	5.5	ug/Kg
1,2-Dibromoethane	106-93-4	< 5.5	U	27	5.5	ug/Kg

08/28/02
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Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-02

Client ID:

VLP-ID

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082606.D

Analytical Run ID: VA082502

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 9

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 6.0	U	27	6.0	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 22	U	27	22	ug/Kg
2-Hexanone	591-78-6	< 33	U	27	33	ug/Kg
Tetrachloroethene	127-18-4	640		27	6.6	ug/Kg
Isopropylbenzene	98-82-8	< 6.0	U	27	6.0	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 5.5	U	27	5.5	ug/Kg
Toluene	108-88-3	< 6.0	U	27	6.0	ug/Kg
1,3-Dichloropropane	142-28-9	< 5.5	U	27	5.5	ug/Kg
Chlorobenzene	108-90-7	< 6.0	U	27	6.0	ug/Kg
Ethyl Benzene	100-41-4	< 5.5	U	27	5.5	ug/Kg
Styrene	100-42-5	< 7.7	U	27	7.7	ug/Kg
m/p-Xylenes	136777-61-2	< 15	U	27	15	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 6.0	U	27	6.0	ug/Kg
o-Xylene	95-47-6	< 6.0	U	27	6.0	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 5.5	U	27	5.5	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 4.4	U	27	4.4	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 4.9	U	27	4.9	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 5.5	U	27	5.5	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 8.2	U	27	8.2	ug/Kg
Bromobenzene	108-86-1	< 4.9	U	27	4.9	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 8.2	U	27	8.2	ug/Kg
N-propylbenzene	103-61-5	< 7.1	U	27	7.1	ug/Kg
2-Chlorotoluene	95-49-8	< 9.3	U	27	9.3	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 7.1	U	27	7.1	ug/Kg
4-Chlorotoluene	106-43-4	< 7.7	U	27	7.7	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 7.7	U	27	7.7	ug/Kg
Sec-butylbenzene	135-98-8	< 9.9	U	27	9.9	ug/Kg
tert-Butylbenzene	98-06-6	< 9.3	U	27	9.3	ug/Kg
n-Butylbenzene	104-51-8	< 13	U	27	13	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 10	U	27	10	ug/Kg
Hexachlorobutadiene	87-68-3	< 14	U	27	14	ug/Kg
Naphthalene	91-20-3	< 6.6	U	27	6.6	ug/Kg
Vinyl Acetate	108-05-4	< 25	U	27	25	ug/Kg
tert-Butyl Alcohol	75-65-0	< 23 R	U	27	23	ug/Kg
Acrolein	107-02-8	< 37 R	U	27	37	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-02

Client ID: VLP-ID

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082606.D

Analytical Run ID: VA082502

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 9

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 42	U	27	42	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 7.7 R	U	27	7.7	ug/Kg
p-Isopropyltoluene	99-87-6	< 9.9	U	27	9.9	ug/Kg
Isopropyl Alcohol	67-63-0	< 270 U J	U	110	270	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 27	U	27	27	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	56.41	113 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	46.03	92 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	37.28	75 %	74 - 121		SPK: 50
Dibromofluoromethane		58.62	117 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	864339	6.84			
1,4-Difluorobenzene	540-36-3	891199	8.67			
Chlorobenzene-d5	3114-55-4	672402	14.94			
1,4-Dichlorobenzene-d4	3855-82-1	388038	20.45			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-03

Client ID: VLP-K

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082607.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 18

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 1.1 UJ	U	6.1	1.1	ug/Kg
Chloromethane	74-87-3	< 2.1 UJ	U	6.1	2.1	ug/Kg
Bromomethane	74-83-9	< 1.2 UJ	U	6.1	1.2	ug/Kg
Vinyl chloride	75-01-4	< 1.2 UJ	U	6.1	1.2	ug/Kg
Chloroethane	75-00-3	< 1.6	U	6.1	1.6	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.6 UJ	U	6.1	1.6	ug/Kg
Methyl Acetate	79-20-9	< 1.3	U	6.1	1.3	ug/Kg
Methylene Chloride	75-09-2	< 1.6 UJ	U	6.1	1.6	ug/Kg
Acetone	67-64-1	< 4.3	U	6.1	4.3	ug/Kg
Carbon disulfide	75-15-0	< 1.6	U	6.1	1.6	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.3	U	6.1	1.3	ug/Kg
1,1-Dichloroethane	75-34-3	< 1.1	U	6.1	1.1	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 1.1	U	6.1	1.1	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.3	U	6.1	1.3	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.1	U	6.1	1.1	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.98	U	6.1	0.98	ug/Kg
Chloroform	67-66-3	< 1.2	U	6.1	1.2	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.3	U	6.1	1.3	ug/Kg
2-Butanone	78-93-3	< 6.6	U	6.1	6.6	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.2	U	6.1	1.2	ug/Kg
Cyclohexane	110-82-7	< 1.6	U	6.1	1.6	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.6	U	6.1	2.6	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.6	U	6.1	1.6	ug/Kg
Bromodichloromethane	75-27-4	< 0.98	U	6.1	0.98	ug/Kg
Methylcyclohexane	108-87-7	< 1.2	U	6.1	1.2	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.98	U	6.1	0.98	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.1	U	6.1	1.1	ug/Kg
Trichloroethene	79-01-6	< 1.2	U	6.1	1.2	ug/Kg
Dibromochloromethane	124-48-1	< 1.1	U	6.1	1.1	ug/Kg
Dibromomethane	74-95-3	< 1.2	U	6.1	1.2	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.3	U	6.1	1.3	ug/Kg
Benzene	71-43-2	< 1.2	U	6.1	1.2	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.2	U	6.1	1.2	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.2	U	6.1	1.2	ug/Kg

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Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-03

Client ID: VLP-K

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082607.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 18

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.3	U	6.1	1.3	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.9	U	6.1	4.9	ug/Kg
2-Hexanone	591-78-6	< 7.3	U	6.1	7.3	ug/Kg
Tetrachloroethene	127-18-4	< 1.5	U	6.1	1.5	ug/Kg
Isopropylbenzene	98-82-8	< 1.3	U	6.1	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.2	U	6.1	1.2	ug/Kg
Toluene	108-88-3	10		6.1	1.3	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.2	U	6.1	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.3	U	6.1	1.3	ug/Kg
Ethyl Benzene	100-41-4	< 1.2	U	6.1	1.2	ug/Kg
Styrene	100-42-5	< 1.7	U	6.1	1.7	ug/Kg
m/p-Xylenes	136777-61-2	< 3.4	U	6.1	3.4	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.3	U	6.1	1.3	ug/Kg
o-Xylene	95-47-6	< 1.3	U	6.1	1.3	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.2	U	6.1	1.2	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.98	U	6.1	0.98	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 1.1	U	6.1	1.1	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.2	U	6.1	1.2	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.8	U	6.1	1.8	ug/Kg
Bromobenzene	108-86-1	< 1.1	U	6.1	1.1	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.8	U	6.1	1.8	ug/Kg
N-propylbenzene	103-61-5	< 1.6	U	6.1	1.6	ug/Kg
2-Chlorotoluene	95-49-8	< 2.1	U	6.1	2.1	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.6	U	6.1	1.6	ug/Kg
4-Chlorotoluene	106-43-4	< 1.7	U	6.1	1.7	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	1.9	J	6.1	1.7	ug/Kg
Sec-butylbenzene	135-98-8	< 2.2	U	6.1	2.2	ug/Kg
tert-Butylbenzene	98-06-6	< 2.1	U	6.1	2.1	ug/Kg
n-Butylbenzene	104-51-8	< 2.9	U	6.1	2.9	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.3	U	6.1	2.3	ug/Kg
Hexachlorobutadiene	87-68-3	< 3.0	U	6.1	3.0	ug/Kg
Naphthalene	91-20-3	< 1.5	U	6.1	1.5	ug/Kg
Vinyl Acetate	108-05-4	< 5.6	U	6.1	5.6	ug/Kg
tert-Butyl Alcohol	75-65-0	< 5.1	U	6.1	5.1	ug/Kg
Acrolein	107-02-8	< 8.2	U	6.1	8.2	ug/Kg

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-03

Client ID: VLP-K

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082607.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 18

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 9.3	U	6.1	9.3	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.7 R	U	6.1	1.7	ug/Kg
p-Isopropyltoluene	99-87-6	< 2.2	U	6.1	2.2	ug/Kg
Isopropyl Alcohol	67-63-0	< 61 U J	U	24	61	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 6.1	U	6.1	6.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	57.81	116 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	48.55	97 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	40.36	81 %	74 - 121		SPK: 50
Dibromofluoromethane		58.24	116 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	804887	6.87			
1,4-Difluorobenzene	540-36-3	870920	8.69			
Chlorobenzene-d5	3114-55-4	652150	14.97			
1,4-Dichlorobenzene-d4	3855-82-1	419272	20.46			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-04

Client ID: VLP-L

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

File ID: VA082316.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0823S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 17

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 1.1	U	6.0	1.1	ug/Kg
Chloromethane	74-87-3	< 2.0	U	6.0	2.0	ug/Kg
Bromomethane	74-83-9	< 1.2	U	6.0	1.2	ug/Kg
Vinyl chloride	75-01-4	< 1.2	U	6.0	1.2	ug/Kg
Chloroethane	75-00-3	< 1.6	U	6.0	1.6	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.6	U	6.0	1.6	ug/Kg
Methyl Acetate	79-20-9	< 1.3	U	6.0	1.3	ug/Kg
Methylene Chloride	75-09-2	< 1.6	U	6.0	1.6	ug/Kg
Acetone	67-64-1	< 4.2	U	6.0	4.2	ug/Kg
Carbon disulfide	75-15-0	< 1.6	U	6.0	1.6	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.3	U	6.0	1.3	ug/Kg
1,1-Dichloroethane	75-34-3	< 1.1	U	6.0	1.1	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 1.1	U	6.0	1.1	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.3	U	6.0	1.3	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.1	U	6.0	1.1	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.96	U	6.0	0.96	ug/Kg
Chloroform	67-66-3	< 1.2	U	6.0	1.2	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.3	U	6.0	1.3	ug/Kg
2-Butanone	78-93-3	< 6.5	U	6.0	6.5	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.2	U	6.0	1.2	ug/Kg
Cyclohexane	110-82-7	< 1.6	U	6.0	1.6	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.5	U	6.0	2.5	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.6	U	6.0	1.6	ug/Kg
Bromodichloromethane	75-27-4	< 0.96	U	6.0	0.96	ug/Kg
Methylcyclohexane	108-87-7	< 1.2	U	6.0	1.2	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.96	U	6.0	0.96	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.1	U	6.0	1.1	ug/Kg
Trichloroethene	79-01-6	< 1.2	U	6.0	1.2	ug/Kg
Dibromochloromethane	124-48-1	< 1.1	U	6.0	1.1	ug/Kg
Dibromomethane	74-95-3	< 1.2	U	6.0	1.2	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.3	U	6.0	1.3	ug/Kg
Benzene	71-43-2	< 1.2	U	6.0	1.2	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.2	U	6.0	1.2	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.2	U	6.0	1.2	ug/Kg

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Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-04

Client ID: VLP-L

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

File ID: VA082316.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0823S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol: _____

Soil Aliquot Vol: _____

% Moisture: 17

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.3 UJ	U	6.0	1.3	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.8	U	6.0	4.8	ug/Kg
2-Hexanone	591-78-6	< 7.2	U	6.0	7.2	ug/Kg
Tetrachloroethene	127-18-4	< 1.4	U	6.0	1.4	ug/Kg
Isopropylbenzene	98-82-8	< 1.3	U	6.0	1.3	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.2	U	6.0	1.2	ug/Kg
Toluene	108-88-3	9.7 J		6.0	1.3	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.2 UJ	U	6.0	1.2	ug/Kg
Chlorobenzene	108-90-7	< 1.3	U	6.0	1.3	ug/Kg
Ethyl Benzene	100-41-4	< 1.2	U	6.0	1.2	ug/Kg
Styrene	100-42-5	< 1.7	U	6.0	1.7	ug/Kg
m/p-Xylenes	136777-61-2	< 3.4	U	6.0	3.4	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.3	U	6.0	1.3	ug/Kg
o-Xylene	95-47-6	< 1.3	U	6.0	1.3	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.2	U	6.0	1.2	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.96	U	6.0	0.96	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 1.1	U	6.0	1.1	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.2	U	6.0	1.2	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.8	U	6.0	1.8	ug/Kg
Bromobenzene	108-86-1	< 1.1	U	6.0	1.1	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.8	U	6.0	1.8	ug/Kg
N-propylbenzene	103-61-5	< 1.6	U	6.0	1.6	ug/Kg
2-Chlorotoluene	95-49-8	< 2.0	U	6.0	2.0	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.6	U	6.0	1.6	ug/Kg
4-Chlorotoluene	106-43-4	< 1.7	U	6.0	1.7	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 1.7	U	6.0	1.7	ug/Kg
Sec-butylbenzene	135-98-8	< 2.2	U	6.0	2.2	ug/Kg
tert-Butylbenzene	98-06-6	< 2.0	U	6.0	2.0	ug/Kg
n-Butylbenzene	104-51-8	< 2.9	U	6.0	2.9	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.3	U	6.0	2.3	ug/Kg
Hexachlorobutadiene	87-68-3	< 3.0	U	6.0	3.0	ug/Kg
Naphthalene	91-20-3	< 1.4	U	6.0	1.4	ug/Kg
Vinyl Acetate	108-05-4	< 5.5	U	6.0	5.5	ug/Kg
tert-Butyl Alcohol	75-65-0	< 5.1 R	U	6.0	5.1	ug/Kg
Acrolein	107-02-8	< 8.1 R	U	6.0	8.1	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-04

Client ID: VLP-L

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

File ID: VA082316.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0823S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 17

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 9.2 <u>UJ</u>	U	6.0	9.2	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.7 <u>R</u>	U	6.0	1.7	ug/Kg
p-Isopropyltoluene	99-87-6	< 2.2 <u>UJ</u>	U	6.0	2.2	ug/Kg
Isopropyl Alcohol	67-63-0	< 60	U	24	60	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 6.0 <u>↓</u>	U	6.0	6.0	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	60.74	121 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	36.83	74 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	24.05	48 %	74 - 121		SPK: 50
Dibromofluoromethane		59.09	118 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	742480	6.82			
1,4-Difluorobenzene	540-36-3	804330	8.64			
Chlorobenzene-d5	3114-55-4	442727	14.89			
1,4-Dichlorobenzene-d4	3855-82-1	171642	20.40			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-05

Client ID: VLP-M

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

File ID: VA082317.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0823S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 36

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 1.4	U	7.8	1.4	ug/Kg
Chloromethane	74-87-3	< 2.7	U	7.8	2.7	ug/Kg
Bromomethane	74-83-9	< 1.6	U	7.8	1.6	ug/Kg
Vinyl chloride	75-01-4	< 1.6	U	7.8	1.6	ug/Kg
Chloroethane	75-00-3	< 2.0	U	7.8	2.0	ug/Kg
Trichlorofluoromethane	75-69-4	< 2.0	U	7.8	2.0	ug/Kg
Methyl Acetate	79-20-9	< 1.7	U	7.8	1.7	ug/Kg
Methylene Chloride	75-09-2	< 2.0	U	7.8	2.0	ug/Kg
Acetone	67-64-1	< 5.5	U	7.8	5.5	ug/Kg
Carbon disulfide	75-15-0	< 2.0	U	7.8	2.0	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.7	U	7.8	1.7	ug/Kg
1,1-Dichloroethane	75-34-3	< 1.4	U	7.8	1.4	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 1.4	U	7.8	1.4	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.7	U	7.8	1.7	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.4	U	7.8	1.4	ug/Kg
2,2-Dichloropropane	594-20-7	< 1.2	U	7.8	1.2	ug/Kg
Chloroform	67-66-3	< 1.6	U	7.8	1.6	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.7	U	7.8	1.7	ug/Kg
2-Butanone	78-93-3	< 8.4	U	7.8	8.4	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.6	U	7.8	1.6	ug/Kg
Cyclohexane	110-82-7	< 2.0	U	7.8	2.0	ug/Kg
Carbon Tetrachloride	56-23-5	< 3.3	U	7.8	3.3	ug/Kg
1,1-Dichloropropene	563-43-2	< 2.0	U	7.8	2.0	ug/Kg
Bromodichloromethane	75-27-4	< 1.2	U	7.8	1.2	ug/Kg
Methyleyclohexane	108-87-7	< 1.6	U	7.8	1.6	ug/Kg
1,2-Dichloropropane	78-87-5	< 1.2	U	7.8	1.2	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.4	U	7.8	1.4	ug/Kg
Trichloroethene	79-01-6	< 1.6	U	7.8	1.6	ug/Kg
Dibromochloromethane	124-48-1	< 1.4	U	7.8	1.4	ug/Kg
Dibromomethane	74-95-3	< 1.6	U	7.8	1.6	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.7	U	7.8	1.7	ug/Kg
Benzene	71-43-2	< 1.6	U	7.8	1.6	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.6	U	7.8	1.6	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.6	U	7.8	1.6	ug/Kg

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Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-05

Client ID: VLP-M

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

File ID: VA082317.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0823S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 36

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.7 U	U	7.8	1.7	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 6.2	U	7.8	6.2	ug/Kg
2-Hexanone	591-78-6	< 9.4	U	7.8	9.4	ug/Kg
Tetrachloroethene	127-18-4	< 1.9	U	7.8	1.9	ug/Kg
Isopropylbenzene	98-82-8	< 1.7	U	7.8	1.7	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.6	U	7.8	1.6	ug/Kg
Toluene	108-88-3	< 1.7	U	7.8	1.7	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.6	U	7.8	1.6	ug/Kg
Chlorobenzene	108-90-7	< 1.7	U	7.8	1.7	ug/Kg
Ethyl Benzene	100-41-4	< 1.6	U	7.8	1.6	ug/Kg
Styrene	100-42-5	< 2.2	U	7.8	2.2	ug/Kg
m/p-Xylenes	136777-61-2	< 4.4	U	7.8	4.4	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.7	U	7.8	1.7	ug/Kg
o-Xylene	95-47-6	< 1.7	U	7.8	1.7	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.6	U	7.8	1.6	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 1.2	U	7.8	1.2	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 1.4	U	7.8	1.4	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.6	U	7.8	1.6	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 2.3	U	7.8	2.3	ug/Kg
Bromobenzene	108-86-1	< 1.4	U	7.8	1.4	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 2.3	U	7.8	2.3	ug/Kg
N-propylbenzene	103-61-5	< 2.0	U	7.8	2.0	ug/Kg
2-Chlorotoluene	95-49-8	< 2.7	U	7.8	2.7	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 2.0	U	7.8	2.0	ug/Kg
4-Chlorotoluene	106-43-4	< 2.2	U	7.8	2.2	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 2.2	U	7.8	2.2	ug/Kg
Sec-butylbenzene	135-98-8	< 2.8	U	7.8	2.8	ug/Kg
tert-Butylbenzene	98-06-6	< 2.7	U	7.8	2.7	ug/Kg
n-Butylbenzene	104-51-8	< 3.8	U	7.8	3.8	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 3.0	U	7.8	3.0	ug/Kg
Hexachlorobutadiene	87-68-3	< 3.9	U	7.8	3.9	ug/Kg
Naphthalene	91-20-3	< 1.9	U	7.8	1.9	ug/Kg
Vinyl Acetate	108-05-4	< 7.2	U	7.8	7.2	ug/Kg
tert-Butyl Alcohol	75-65-0	< 6.6 R	U	7.8	6.6	ug/Kg
Acrolein	107-02-8	< 10 R	U	7.8	10	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-05

Client ID: VLP-M

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

File ID: VA082317.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0823S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 36

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 12 UJ	U	7.8	12	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	7.8	2.2	ug/Kg
p-Isopropyltoluene	99-87-6	< 2.8 UJ	U	7.8	2.8	ug/Kg
Isopropyl Alcohol	67-63-0	< 78	U	31	78	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 7.8 ↓	U	7.8	7.8	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	54.79	110 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	40.36	81 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	36.39	73 %	74 - 121		SPK: 50
Dibromofluoromethane		53.92	108 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	960946	6.79			
1,4-Difluorobenzene	540-36-3	993743	8.62			
Chlorobenzene-d5	3114-55-4	660188	14.89			
1,4-Dichlorobenzene-d4	3855-82-1	440141	20.40			

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-06

Client ID: VLP-N

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082610.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.95 UJ	U	5.3	0.95	ug/Kg
Chloromethane	74-87-3	< 1.8 UJ	U	5.3	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1 UJ	U	5.3	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1 UJ	U	5.3	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4 UJ	U	5.3	1.4	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.4 UJ	U	5.3	1.4	ug/Kg
Methyl Acetate	79-20-9	< 1.2 UJ	U	5.3	1.2	ug/Kg
Methylene Chloride	75-09-2	< 1.4 UJ	U	5.3	1.4	ug/Kg
Acetone	67-64-1	< 3.7	U	5.3	3.7	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.3	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.3	1.2	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.95	U	5.3	0.95	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.95	U	5.3	0.95	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.3	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.95	U	5.3	0.95	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.84	U	5.3	0.84	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.3	1.2	ug/Kg
2-Butanone	78-93-3	< 5.7	U	5.3	5.7	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.3	1.1	ug/Kg
Cyclohexane	110-82-7	< 1.4	U	5.3	1.4	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.3	2.2	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.4	U	5.3	1.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.84	U	5.3	0.84	ug/Kg
Methylcyclohexane	108-87-7	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.84	U	5.3	0.84	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.95	U	5.3	0.95	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.3	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.95	U	5.3	0.95	ug/Kg
Dibromomethane	74-95-3	< 1.1	U	5.3	1.1	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.3	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.3	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.1	U	5.3	1.1	ug/Kg

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Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-06

Client ID: VLP-N

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082610.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.2	U	5.3	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.3	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.3	U	5.3	6.3	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.3	1.3	ug/Kg
Isopropylbenzene	98-82-8	< 1.2	U	5.3	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.3	1.1	ug/Kg
Toluene	108-88-3	< 1.2	U	5.3	1.2	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.1	U	5.3	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.3	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.3	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.3	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.3	2.9	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.2	U	5.3	1.2	ug/Kg
o-Xylene	95-47-6	< 1.2	U	5.3	1.2	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.1	U	5.3	1.1	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.84	U	5.3	0.84	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.95	U	5.3	0.95	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.1	U	5.3	1.1	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.6	U	5.3	1.6	ug/Kg
Bromobenzene	108-86-1	< 0.95	U	5.3	0.95	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.6	U	5.3	1.6	ug/Kg
N-propylbenzene	103-61-5	< 1.4	U	5.3	1.4	ug/Kg
2-Chlorotoluene	95-49-8	< 1.8	U	5.3	1.8	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.4	U	5.3	1.4	ug/Kg
4-Chlorotoluene	106-43-4	< 1.5	U	5.3	1.5	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 1.5	U	5.3	1.5	ug/Kg
Sec-butylbenzene	135-98-8	< 1.9	U	5.3	1.9	ug/Kg
tert-Butylbenzene	98-06-6	< 1.8	U	5.3	1.8	ug/Kg
n-Butylbenzene	104-51-8	< 2.5	U	5.3	2.5	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.0	U	5.3	2.0	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.6	U	5.3	2.6	ug/Kg
Naphthalene	91-20-3	< 1.3	U	5.3	1.3	ug/Kg
Vinyl Acetate	108-05-4	< 4.8	U	5.3	4.8	ug/Kg
tert-Butyl Alcohol	75-65-0	< 4.4 R	U	5.3	4.4	ug/Kg
Acrolein	107-02-8	< 7.1 R	U	5.3	7.1	ug/Kg

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-06

Client ID: VLP-N

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082610.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 8.0	U	5.3	8.0	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.5 R	U	5.3	1.5	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.9	U	5.3	1.9	ug/Kg
Isopropyl Alcohol	67-63-0	< 53	U	21	53	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.3	U	5.3	5.3	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	58.79	118 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	50.74	101 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	43.5	87 %	74 - 121		SPK: 50
Dibromofluoromethane		58.66	117 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	865124	6.84			
1,4-Difluorobenzene	540-36-3	886480	8.67			
Chlorobenzene-d5	3114-55-4	724285	14.91			
1,4-Dichlorobenzene-d4	3855-82-1	467555	20.42			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-09

Client ID: VLP-O13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082611.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.97 <i>UJ</i>	U	5.4	0.97	ug/Kg
Chloromethane	74-87-3	< 1.8 <i>UJ</i>	U	5.4	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1 <i>UJ</i>	U	5.4	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1 <i>UJ</i>	U	5.4	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.4	1.4	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.4 <i>UJ</i>	U	5.4	1.4	ug/Kg
Methyl Acetate	79-20-9	< 1.2	U	5.4	1.2	ug/Kg
Methylene Chloride	75-09-2	< 1.4 <i>UJ</i>	U	5.4	1.4	ug/Kg
Acetone	67-64-1	< 3.8	U	5.4	3.8	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.4	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.4	1.2	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.97	U	5.4	0.97	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.97	U	5.4	0.97	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.4	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.97	U	5.4	0.97	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.86	U	5.4	0.86	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.4	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.4	1.2	ug/Kg
2-Butanone	78-93-3	< 5.8	U	5.4	5.8	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.4	1.1	ug/Kg
Cyclohexane	110-82-7	< 1.4	U	5.4	1.4	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.3	U	5.4	2.3	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.4	U	5.4	1.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.86	U	5.4	0.86	ug/Kg
Methylcyclohexane	108-87-7	< 1.1	U	5.4	1.1	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.86	U	5.4	0.86	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.97	U	5.4	0.97	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.4	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.97	U	5.4	0.97	ug/Kg
Dibromomethane	74-95-3	< 1.1	U	5.4	1.1	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.4	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.4	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.4	1.1	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.1	U	5.4	1.1	ug/Kg

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Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-09

Client ID: VLP-O13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082611.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.2	U	5.4	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.4	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.5	U	5.4	6.5	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.4	1.3	ug/Kg
Isopropylbenzene	98-82-8	< 1.2	U	5.4	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.4	1.1	ug/Kg
Toluene	108-88-3	< 1.2	U	5.4	1.2	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.1	U	5.4	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.4	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.4	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.4	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.4	3.0	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.2	U	5.4	1.2	ug/Kg
o-Xylene	95-47-6	< 1.2	U	5.4	1.2	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.1	U	5.4	1.1	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.86	U	5.4	0.86	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.97	U	5.4	0.97	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.1	U	5.4	1.1	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.6	U	5.4	1.6	ug/Kg
Bromobenzene	108-86-1	< 0.97	U	5.4	0.97	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.6	U	5.4	1.6	ug/Kg
N-propylbenzene	103-61-5	< 1.4	U	5.4	1.4	ug/Kg
2-Chlorotoluene	95-49-8	< 1.8	U	5.4	1.8	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.4	U	5.4	1.4	ug/Kg
4-Chlorotoluene	106-43-4	< 1.5	U	5.4	1.5	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 1.5	U	5.4	1.5	ug/Kg
Sec-butylbenzene	135-98-8	< 1.9	U	5.4	1.9	ug/Kg
tert-Butylbenzene	98-06-6	< 1.8	U	5.4	1.8	ug/Kg
n-Butylbenzene	104-51-8	< 2.6	U	5.4	2.6	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.0	U	5.4	2.0	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.7	U	5.4	2.7	ug/Kg
Naphthalene	91-20-3	< 1.3	U	5.4	1.3	ug/Kg
Vinyl Acetate	108-05-4	< 4.9	U	5.4	4.9	ug/Kg
tert-Butyl Alcohol	75-65-0	< 4.5	U	5.4	4.5	ug/Kg
Acrolein	107-02-8	< 7.2	U	5.4	7.2	ug/Kg

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-09

Client ID: VLP-O13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082611.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 7

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 8.2	U	5.4	8.2	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.5 R	U	5.4	1.5	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.9	U	5.4	1.9	ug/Kg
Isopropyl Alcohol	67-63-0	< 54 UJ	U	22	54	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.4	U	5.4	5.4	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	57.46	115 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	48.98	98 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	42.1	84 %	74 - 121		SPK: 50
Dibromofluoromethane		53.03	106 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	875441	6.78			
1,4-Difluorobenzene	540-36-3	910464	8.64			
Chlorobenzene-d5	3114-55-4	727633	14.91			
1,4-Dichlorobenzene-d4	3855-82-1	470563	20.39			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-10

Client ID: VLP-P13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082612.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 12

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 1.0 UJ	U	5.7	1.0	ug/Kg
Chloromethane	74-87-3	< 1.9 UJ	U	5.7	1.9	ug/Kg
Bromomethane	74-83-9	< 1.1 UJ	U	5.7	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1 UJ	U	5.7	1.1	ug/Kg
Chloroethane	75-00-3	< 1.5	U	5.7	1.5	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.5 UJ	U	5.7	1.5	ug/Kg
Methyl Acetate	79-20-9	< 1.2	U	5.7	1.2	ug/Kg
Methylene Chloride	75-09-2	< 1.5 UJ	U	5.7	1.5	ug/Kg
Acetone	67-64-1	< 4.0	U	5.7	4.0	ug/Kg
Carbon disulfide	75-15-0	< 1.5	U	5.7	1.5	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.7	1.2	ug/Kg
1,1-Dichloroethane	75-34-3	< 1.0	U	5.7	1.0	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.7	1.0	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.7	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.0	U	5.7	1.0	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.91	U	5.7	0.91	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.7	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.7	1.2	ug/Kg
2-Butanone	78-93-3	< 6.1	U	5.7	6.1	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.7	1.1	ug/Kg
Cyclohexane	110-82-7	< 1.5	U	5.7	1.5	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.4	U	5.7	2.4	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.5	U	5.7	1.5	ug/Kg
Bromodichloromethane	75-27-4	< 0.91	U	5.7	0.91	ug/Kg
Methylcyclohexane	108-87-7	< 1.1	U	5.7	1.1	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.91	U	5.7	0.91	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.0	U	5.7	1.0	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.7	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 1.0	U	5.7	1.0	ug/Kg
Dibromomethane	74-95-3	< 1.1	U	5.7	1.1	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.7	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.7	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.7	1.1	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.1	U	5.7	1.1	ug/Kg

OS/pest
54

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-10

Client ID: VLP-P13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082612.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 12

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.2	U	5.7	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.5	U	5.7	4.5	ug/Kg
2-Hexanone	591-78-6	< 6.8	U	5.7	6.8	ug/Kg
Tetrachloroethene	127-18-4	< 1.4	U	5.7	1.4	ug/Kg
Isopropylbenzene	98-82-8	< 1.2	U	5.7	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.7	1.1	ug/Kg
Toluene	108-88-3	< 1.2	U	5.7	1.2	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.1	U	5.7	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.7	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.7	1.1	ug/Kg
Styrene	100-42-5	< 1.6	U	5.7	1.6	ug/Kg
m/p-Xylenes	136777-61-2	< 3.2	U	5.7	3.2	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.2	U	5.7	1.2	ug/Kg
o-Xylene	95-47-6	< 1.2	U	5.7	1.2	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.1	U	5.7	1.1	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.91	U	5.7	0.91	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 1.0	U	5.7	1.0	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.1	U	5.7	1.1	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.7	U	5.7	1.7	ug/Kg
Bromobenzene	108-86-1	< 1.0	U	5.7	1.0	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.7	U	5.7	1.7	ug/Kg
N-propylbenzene	103-61-5	< 1.5	U	5.7	1.5	ug/Kg
2-Chlorotoluene	95-49-8	< 1.9	U	5.7	1.9	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.5	U	5.7	1.5	ug/Kg
4-Chlorotoluene	106-43-4	< 1.6	U	5.7	1.6	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 1.6	U	5.7	1.6	ug/Kg
Sec-butylbenzene	135-98-8	< 2.0	U	5.7	2.0	ug/Kg
tert-Butylbenzene	98-06-6	< 1.9	U	5.7	1.9	ug/Kg
n-Butylbenzene	104-51-8	< 2.7	U	5.7	2.7	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.2	U	5.7	2.2	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.8	U	5.7	2.8	ug/Kg
Naphthalene	91-20-3	< 1.4	U	5.7	1.4	ug/Kg
Vinyl Acetate	108-05-4	< 5.2	U	5.7	5.2	ug/Kg
tert-Butyl Alcohol	75-65-0	< 4.8 R	U	5.7	4.8	ug/Kg
Acrolein	107-02-8	< 7.6 R	U	5.7	7.6	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-10

Client ID: VLP-P13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082612.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 12

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 8.6	U	5.7	8.6	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.6 R	U	5.7	1.6	ug/Kg
p-Isopropyltoluene	99-87-6	< 2.0	U	5.7	2.0	ug/Kg
Isopropyl Alcohol	67-63-0	< 57 UJ	U	23	57	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.7	U	5.7	5.7	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	58.78	118 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	49.16	98 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	37.62	75 %	74 - 121		SPK: 50
Dibromofluoromethane		53.16	106 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	817620	6.79			
1,4-Difluorobenzene	540-36-3	852401	8.62			
Chlorobenzene-d5	3114-55-4	645710	14.89			
1,4-Dichlorobenzene-d4	3855-82-1	372906	20.40			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-11

Client ID: VLP-Q13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082613.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.96 UJ	U	5.3	0.96	ug/Kg
Chloromethane	74-87-3	< 1.8 UJ	U	5.3	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1 UJ	U	5.3	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1 UJ	U	5.3	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.3	1.4	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.4 UJ	U	5.3	1.4	ug/Kg
Methyl Acetate	79-20-9	< 1.2	U	5.3	1.2	ug/Kg
Methylene Chloride	75-09-2	< 1.4 UJ	U	5.3	1.4	ug/Kg
Acetone	67-64-1	< 3.7	U	5.3	3.7	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.3	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.3	1.2	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.96	U	5.3	0.96	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.96	U	5.3	0.96	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.3	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.96	U	5.3	0.96	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.85	U	5.3	0.85	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.3	1.2	ug/Kg
2-Butanone	78-93-3	< 5.7	U	5.3	5.7	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.3	1.1	ug/Kg
Cyclohexane	110-82-7	< 1.4	U	5.3	1.4	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.3	2.2	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.4	U	5.3	1.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.85	U	5.3	0.85	ug/Kg
Methylcyclohexane	108-87-7	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.85	U	5.3	0.85	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.96	U	5.3	0.96	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.3	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.96	U	5.3	0.96	ug/Kg
Dibromomethane	74-95-3	< 1.1	U	5.3	1.1	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.3	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.3	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.1	U	5.3	1.1	ug/Kg

08/28/02
CY

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-11

Client ID: VLP-O13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082613.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.2	U	5.3	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.3	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.4	U	5.3	6.4	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.3	1.3	ug/Kg
Isopropylbenzene	98-82-8	< 1.2	U	5.3	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.3	1.1	ug/Kg
Toluene	108-88-3	< 1.2	U	5.3	1.2	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.1	U	5.3	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.3	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.3	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.3	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.3	3.0	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.2	U	5.3	1.2	ug/Kg
o-Xylene	95-47-6	< 1.2	U	5.3	1.2	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.1	U	5.3	1.1	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.85	U	5.3	0.85	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.96	U	5.3	0.96	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.1	U	5.3	1.1	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.6	U	5.3	1.6	ug/Kg
Bromobenzene	108-86-1	< 0.96	U	5.3	0.96	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.6	U	5.3	1.6	ug/Kg
N-propylbenzene	103-61-5	< 1.4	U	5.3	1.4	ug/Kg
2-Chlorotoluene	95-49-8	< 1.8	U	5.3	1.8	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.4	U	5.3	1.4	ug/Kg
4-Chlorotoluene	106-43-4	< 1.5	U	5.3	1.5	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 1.5	U	5.3	1.5	ug/Kg
Sec-butylbenzene	135-98-8	< 1.9	U	5.3	1.9	ug/Kg
tert-Butylbenzene	98-06-6	< 1.8	U	5.3	1.8	ug/Kg
n-Butylbenzene	104-51-8	< 2.6	U	5.3	2.6	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.0	U	5.3	2.0	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.7	U	5.3	2.7	ug/Kg
Naphthalene	91-20-3	< 1.3	U	5.3	1.3	ug/Kg
Vinyl Acetate	108-05-4	< 4.9	U	5.3	4.9	ug/Kg
tert-Butyl Alcohol	75-65-0	< 4.5 R	U	5.3	4.5	ug/Kg
Acrolein	107-02-8	< 7.1 R	U	5.3	7.1	ug/Kg

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-11

Client ID: VLP-Q13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082613.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 8.1	U	5.3	8.1	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.5 R	U	5.3	1.5	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.9	U	5.3	1.9	ug/Kg
Isopropyl Alcohol	67-63-0	< 53 UJ	U	21	53	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.3	U	5.3	5.3	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	58.09	116 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	48.72	97 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	42.05	84 %	74 - 121		SPK: 50
Dibromofluoromethane		59.2	118 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	843245	6.82			
1,4-Difluorobenzene	540-36-3	879677	8.64			
Chlorobenzene-d5	3114-55-4	708062	14.92			
1,4-Dichlorobenzene-d4	3855-82-1	447134	20.40			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-12

Client ID: VGP-10-5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082627.D

Analytical Run ID: VA082502

Dilution: 2

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 200	U	1400	200	ug/Kg
Chloromethane	74-87-3	< 140	U	1400	140	ug/Kg
Vinyl chloride	75-01-4	< 220	U	1400	220	ug/Kg
Bromomethane	74-83-9	< 110	U	1400	110	ug/Kg
Chloroethane	75-00-3	< 670	U	1400	670	ug/Kg
Trichlorofluoromethane	75-69-4	< 200	U	1400	200	ug/Kg
1,1-Dichloroethene	75-35-4	< 190	U	1400	190	ug/Kg
Acetone	67-64-1	< 980	U	1400	980	ug/Kg
Carbon disulfide	75-15-0	< 200	U	1400	200	ug/Kg
Methyl Acetate	79-20-9	< 220	U	1400	220	ug/Kg
Methylene Chloride	75-09-2	< 490	U	1400	490	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 230	U	1400	230	ug/Kg
1,1-Dichloroethane	75-34-3	< 180	U	1400	180	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 170	U	1400	170	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 290	U	1400	290	ug/Kg
2,2-Dichloropropane	594-20-7	< 170	U	1400	170	ug/Kg
Chloroform	67-66-3	< 170	U	1400	170	ug/Kg
Cyclohexane	110-82-7	< 270	U	1400	270	ug/Kg
1,1-Dichloropropene	563-43-2	< 830	U	1400	830	ug/Kg
2-Butanone	78-93-3	< 640	U	1400	640	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 210	U	1400	210	ug/Kg
Carbon Tetrachloride	56-23-5	< 130	U	1400	130	ug/Kg
Dibromomethane	74-95-3	< 170	U	1400	170	ug/Kg
Benzene	71-43-2	< 200	U	1400	200	ug/Kg
1,2-Dichloroethane	107-06-2	< 160	U	1400	160	ug/Kg
Trichloroethene	79-01-6	< 200	U	1400	200	ug/Kg
Methylcyclohexane	108-87-7	< 190	U	1400	190	ug/Kg
1,2-Dichloropropane	78-87-5	< 200	U	1400	200	ug/Kg
Bromodichloromethane	75-27-4	< 200	U	1400	200	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 180	U	1400	180	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 180	U	1400	180	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 170	U	1400	170	ug/Kg
Dibromochloromethane	124-48-1	< 180	U	1400	180	ug/Kg
1,2-Dibromoethane	106-93-4	< 170	U	1400	170	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-12

Client ID: VGP-10-5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082627.D

Analytical Run ID: VA082502

Dilution: 2

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 140	U	1400	140	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 220	U	1400	220	ug/Kg
2-Hexanone	591-78-6	< 170	U	1400	170	ug/Kg
1,3-Dichloropropane	142-28-9	< 160	U	1400	160	ug/Kg
Tetrachloroethene	127-18-4	6500		1400	200	ug/Kg
Toluene	108-88-3	270000	E	1400	200	ug/Kg
Chlorobenzene	108-90-7	< 220	U	1400	220	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 180	U	1400	180	ug/Kg
Ethyl Benzene	100-41-4	< 210	U	1400	210	ug/Kg
m&p-Xylenes	136777-61-2	5700		2800	420	ug/Kg
o-Xylene	95-47-6	69000	E	1400	200	ug/Kg
Styrene	100-42-5	< 260	U	1400	260	ug/Kg
Isopropylbenzene	98-82-8	85000	E	1400	210	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 200	U	1400	200	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 200	U	1400	200	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 260	U	1400	260	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 240	U	1400	240	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 250	U	1400	250	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 360	U	1400	360	ug/Kg
Bromobenzene	108-86-1	< 170	U	1400	170	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 290	U	1400	290	ug/Kg
n-propylbenzene	103-61-5	210000	E	1400	220	ug/Kg
2-Chlorotoluene	95-49-8	< 230	U	1400	230	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	1600000	E	1400	270	ug/Kg
4-Chlorotoluene	106-43-4	< 280	U	1400	280	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	920000	E	1400	230	ug/Kg
Sec-butylbenzene	135-98-8	< 270	U	1400	270	ug/Kg
tert-Butylbenzene	98-06-6	< 260	U	1400	260	ug/Kg
n-Butylbenzene	104-51-8	58000	E	1400	340	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 290	U	1400	290	ug/Kg
Hexachlorobutadiene	87-68-3	< 260	U	1400	260	ug/Kg
Naphthalene	91-20-3	4400		1400	250	ug/Kg
tert-Butyl Alcohol	75-65-0	< 1100	U	6900	1100	ug/Kg
Acrolein	107-02-8	< 1400	U	6900	1400	ug/Kg
Acrylonitrile	107-13-1	< 980	U	6900	980	ug/Kg

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-12

Client ID: VGP-10-5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082627.D

Analytical Run ID: VA082502

Dilution: 2

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 730	U	6900	730	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 600 R	U	1400	600	ug/Kg
p-Isopropyltoluene	99-87-6	50000		1400	300	ug/Kg
Isopropyl Alcohol	67-63-0	< 5600 UJ	U	5600	5600	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	19000		1400	1400	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	110.26	110 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	90.04	90 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	107.72	108 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	111.46	111 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	999678	6.84			
1,4-Difluorobenzene	540-36-3	1052993	8.67			
Chlorobenzene-d5	3114-55-4	916653	14.95			
1,4-Dichlorobenzene-d4	3855-82-1	510582	20.48			

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-12DL

Client ID: VGP-10-5DL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082628.D

Analytical Run ID: VA082502

Dilution: 200

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 20000	UD	140000	20000	ug/Kg
Chloromethane	74-87-3	< 14000	UD	140000	14000	ug/Kg
Vinyl chloride	75-01-4	< 22000	UD	140000	22000	ug/Kg
Bromomethane	74-83-9	< 11000	UD	140000	11000	ug/Kg
Chloroethane	75-00-3	< 67000	UD	140000	67000	ug/Kg
Trichlorofluoromethane	75-69-4	< 20000	UD	140000	20000	ug/Kg
1,1-Dichloroethene	75-35-4	< 19000	UD	140000	19000	ug/Kg
Acetone	67-64-1	< 98000	UD	140000	98000	ug/Kg
Carbon disulfide	75-15-0	< 20000	UD	140000	20000	ug/Kg
Methyl Acetate	79-20-9	< 22000	UD	140000	22000	ug/Kg
Methylene Chloride	75-09-2	< 49000	UD	140000	49000	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 23000	UD	140000	23000	ug/Kg
1,1-Dichloroethane	75-34-3	< 18000	UD	140000	18000	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 17000	UD	140000	17000	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 29000	UD	140000	29000	ug/Kg
2,2-Dichloropropane	594-20-7	< 17000	UD	140000	17000	ug/Kg
Chloroform	67-66-3	< 17000	UD	140000	17000	ug/Kg
Cyclohexane	110-82-7	< 27000	UD	140000	27000	ug/Kg
1,1-Dichloropropene	563-43-2	< 83000	UD	140000	83000	ug/Kg
2-Butanone	78-93-3	< 64000	UD	140000	64000	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 21000	UD	140000	21000	ug/Kg
Carbon Tetrachloride	56-23-5	< 13000	UD	140000	13000	ug/Kg
Dibromomethane	74-95-3	< 17000	UD	140000	17000	ug/Kg
Benzene	71-43-2	< 20000	UD	140000	20000	ug/Kg
1,2-Dichloroethane	107-06-2	< 16000	UD	140000	16000	ug/Kg
Trichloroethene	79-01-6	< 20000	UD	140000	20000	ug/Kg
Methylcyclohexane	108-87-7	< 19000	UD	140000	19000	ug/Kg
1,2-Dichloropropane	78-87-5	< 20000	UD	140000	20000	ug/Kg
Bromodichloromethane	75-27-4	< 20000	UD	140000	20000	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 18000	UD	140000	18000	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 18000	UD	140000	18000	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 17000	UD	140000	17000	ug/Kg
Dibromochloromethane	124-48-1	< 18000	UD	140000	18000	ug/Kg
1,2-Dibromoethane	106-93-4	< 17000	UD	140000	17000	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-12DL

Client ID: VGP-10-5DL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082628.D

Analytical Run ID: VA082502

Dilution: 200

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 14000	UD	140000	14000	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 22000	UD	140000	22000	ug/Kg
2-Hexanone	591-78-6	< 17000	UD	140000	17000	ug/Kg
1,3-Dichloropropane	142-28-9	< 16000	UD	140000	16000	ug/Kg
Tetrachloroethene	127-18-4	< 20000	UD	140000	20000	ug/Kg
Toluene	108-88-3	300000	D	140000	20000	ug/Kg
Chlorobenzene	108-90-7	< 22000	UD	140000	22000	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 18000	UD	140000	18000	ug/Kg
Ethyl Benzene	100-41-4	< 21000	UD	140000	21000	ug/Kg
m&p-Xylenes	136777-61-2	< 42000	UD	280000	42000	ug/Kg
o-Xylene	95-47-6	74000	JD	140000	20000	ug/Kg
Styrene	100-42-5	< 26000	UD	140000	26000	ug/Kg
Isopropylbenzene	98-82-8	89000	JD	140000	21000	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 20000	UD	140000	20000	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 20000	UD	140000	20000	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 26000	UD	140000	26000	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 24000	UD	140000	24000	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 25000	UD	140000	25000	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 36000	UD	140000	36000	ug/Kg
Bromobenzene	108-86-1	< 17000	UD	140000	17000	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 29000	UD	140000	29000	ug/Kg
n-propylbenzene	103-61-5	200000	D	140000	22000	ug/Kg
2-Chlorotoluene	95-49-8	< 23000	UD	140000	23000	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	870000	D	140000	27000	ug/Kg
4-Chlorotoluene	106-43-4	< 28000	UD	140000	28000	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	3000000	D	140000	23000	ug/Kg
Sec-butylbenzene	135-98-8	< 27000	UD	140000	27000	ug/Kg
tert-Butylbenzene	98-06-6	< 26000	UD	140000	26000	ug/Kg
n-Butylbenzene	104-51-8	79000	JD	140000	34000	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 29000	UD	140000	29000	ug/Kg
Hexachlorobutadiene	87-68-3	< 26000	UD	140000	26000	ug/Kg
Naphthalene	91-20-3	< 25000	UD	140000	25000	ug/Kg
tert-Butyl Alcohol	75-65-0	< 110000	UD	690000	110000	ug/Kg
Acrolein	107-02-8	< 140000	UD	690000	140000	ug/Kg
Acrylonitrile	107-13-1	< 98000	UD	690000	98000	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-12DL

Client ID: VGP-10-5DL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082628.D

Analytical Run ID: VA082502

Dilution: 200

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 10

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 73000	UD	690000	73000	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 60000 R	UD	140000	60000	ug/Kg
p-Isopropyltoluene	99-87-6	56000	JD	140000	30000	ug/Kg
Isopropyl Alcohol	67-63-0	< 560000 UJ	UD	560000	560000	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 140000	UD	140000	140000	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	10066	101 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	8812	88 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	10214	102 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	10704	107 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	981354	6.87			
1,4-Difluorobenzene	540-36-3	1072274	8.69			
Chlorobenzene-d5	3114-55-4	888075	14.94			
1,4-Dichlorobenzene-d4	3855-82-1	596677	20.46			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-13

Client ID: VGP-15-9

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082615.D

Analytical Run ID: VA082502

Dilution: 2

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 1.8 UJ	U	10	1.8	ug/Kg
Chloromethane	74-87-3	< 3.5 UJ	U	10	3.5	ug/Kg
Bromomethane	74-83-9	< 2.0 UJ	U	10	2.0	ug/Kg
Vinyl chloride	75-01-4	< 2.0 UJ	U	10	2.0	ug/Kg
Chloroethane	75-00-3	< 2.7	U	10	2.7	ug/Kg
Trichlorofluoromethane	75-69-4	< 2.7 UJ	U	10	2.7	ug/Kg
Methyl Acetate	79-20-9	< 2.2	U	10	2.2	ug/Kg
Methylene Chloride	75-09-2	< 2.7 UJ	U	10	2.7	ug/Kg
Acetone	67-64-1	< 7.1	U	10	7.1	ug/Kg
Carbon disulfide	75-15-0	< 2.7	U	10	2.7	ug/Kg
1,1-Dichloroethene	75-35-4	< 2.2	U	10	2.2	ug/Kg
1,1-Dichloroethane	75-34-3	< 1.8	U	10	1.8	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 1.8	U	10	1.8	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 2.2	U	10	2.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 1.8	U	10	1.8	ug/Kg
2,2-Dichloropropane	594-20-7	< 1.6	U	10	1.6	ug/Kg
Chloroform	67-66-3	< 2.0	U	10	2.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 2.2	U	10	2.2	ug/Kg
2-Butanone	78-93-3	< 11	U	10	11	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 2.0	U	10	2.0	ug/Kg
Cyclohexane	110-82-7	< 2.7	U	10	2.7	ug/Kg
Carbon Tetrachloride	56-23-5	< 4.3	U	10	4.3	ug/Kg
1,1-Dichloropropene	563-43-2	< 2.7	U	10	2.7	ug/Kg
Bromodichloromethane	75-27-4	< 1.6	U	10	1.6	ug/Kg
Methylcyclohexane	108-87-7	< 2.0	U	10	2.0	ug/Kg
1,2-Dichloropropane	78-87-5	< 1.6	U	10	1.6	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 1.8	U	10	1.8	ug/Kg
Trichloroethene	79-01-6	< 2.0	U	10	2.0	ug/Kg
Dibromochloromethane	124-48-1	< 1.8	U	10	1.8	ug/Kg
Dibromomethane	74-95-3	< 2.0	U	10	2.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 2.2	U	10	2.2	ug/Kg
Benzene	71-43-2	< 2.0	U	10	2.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 2.0	U	10	2.0	ug/Kg
1,2-Dibromoethane	106-93-4	< 2.0	U	10	2.0	ug/Kg

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Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-13

Client ID: VGP-15-9

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082615.D

Analytical Run ID: VA082502

Dilution: 2

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826SI

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 2.2	U	10	2.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 8.2	U	10	8.2	ug/Kg
2-Hexanone	591-78-6	< 12	U	10	12	ug/Kg
Tetrachloroethene	127-18-4	63		10	2.4	ug/Kg
Isopropylbenzene	98-82-8	< 2.2	U	10	2.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 2.0	U	10	2.0	ug/Kg
Toluene	108-88-3	< 2.2	U	10	2.2	ug/Kg
1,3-Dichloropropane	142-28-9	< 2.0	U	10	2.0	ug/Kg
Chlorobenzene	108-90-7	< 2.2	U	10	2.2	ug/Kg
Ethyl Benzene	100-41-4	< 2.0	U	10	2.0	ug/Kg
Styrene	100-42-5	< 2.9	U	10	2.9	ug/Kg
m/p-Xylenes	136777-61-2	< 5.7	U	10	5.7	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 2.2	U	10	2.2	ug/Kg
o-Xylene	95-47-6	< 2.2	U	10	2.2	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 2.0	U	10	2.0	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 1.6	U	10	1.6	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 1.8	U	10	1.8	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 2.0	U	10	2.0	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 3.1	U	10	3.1	ug/Kg
Bromobenzene	108-86-1	< 1.8	U	10	1.8	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 3.1	U	10	3.1	ug/Kg
N-propylbenzene	103-61-5	< 2.7	U	10	2.7	ug/Kg
2-Chlorotoluene	95-49-8	< 3.5	U	10	3.5	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	6.9	J	10	2.7	ug/Kg
4-Chlorotoluene	106-43-4	< 2.9	U	10	2.9	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	3.7	J	10	2.9	ug/Kg
Sec-butylbenzene	135-98-8	< 3.7	U	10	3.7	ug/Kg
tert-Butylbenzene	98-06-6	< 3.5	U	10	3.5	ug/Kg
n-Butylbenzene	104-51-8	< 4.9	U	10	4.9	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 3.9	U	10	3.9	ug/Kg
Hexachlorobutadiene	87-68-3	< 5.1	U	10	5.1	ug/Kg
Naphthalene	91-20-3	< 2.4	U	10	2.4	ug/Kg
Vinyl Acetate	108-05-4	< 9.4	U	10	9.4	ug/Kg
tert-Butyl Alcohol	75-65-0	< 8.6 R	U	10	8.6	ug/Kg
Acrolein	107-02-8	< 14 R	U	10	14	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-13

Client ID: VGP-15-9

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082615.D

Analytical Run ID: VA082502

Dilution: 2

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 16	U	10	16	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 2.9 R	U	10	2.9	ug/Kg
p-Isopropyltoluene	99-87-6	< 3.7	U	10	3.7	ug/Kg
Isopropyl Alcohol	67-63-0	< 100 VJ	U	41	100	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 10	U	10	10	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	57.37	115 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	46.56	93 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	59.49	79 %	74 - 121		SPK: 50
Dibromofluoromethane		59.04	118 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	845426	6.79			
1,4-Difluorobenzene	540-36-3	872240	8.64			
Chlorobenzene-d5	3114-55-4	655096	14.92			
1,4-Dichlorobenzene-d4	3855-82-1	444880	20.43			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-14

Client ID: VGP-114-19

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082614.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.94 UJ	U	5.2	0.94	ug/Kg
Chloromethane	74-87-3	< 1.8 UJ	U	5.2	1.8	ug/Kg
Bromomethane	74-83-9	< 1.0 UJ	U	5.2	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0 UJ	U	5.2	1.0	ug/Kg
Chloroethane	75-00-3	< 1.4 UJ	U	5.2	1.4	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.4 UJ	U	5.2	1.4	ug/Kg
Methyl Acetate	79-20-9	< 1.1 UJ	U	5.2	1.1	ug/Kg
Methylene Chloride	75-09-2	< 1.4 UJ	U	5.2	1.4	ug/Kg
Acetone	67-64-1	< 3.6	U	5.2	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.2	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.2	1.1	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.94	U	5.2	0.94	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.94	U	5.2	0.94	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.2	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.94	U	5.2	0.94	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.83	U	5.2	0.83	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.2	1.1	ug/Kg
2-Butanone	78-93-3	< 5.6	U	5.2	5.6	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.2	1.0	ug/Kg
Cyclohexane	110-82-7	< 1.4	U	5.2	1.4	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.2	2.2	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.4	U	5.2	1.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.83	U	5.2	0.83	ug/Kg
Methylcyclohexane	108-87-7	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.83	U	5.2	0.83	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.94	U	5.2	0.94	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.2	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.94	U	5.2	0.94	ug/Kg
Dibromomethane	74-95-3	< 1.0	U	5.2	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.2	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.2	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.0	U	5.2	1.0	ug/Kg

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Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-14

Client ID: VGP-114-19

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082614.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.1	U	5.2	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.2	U	5.2	4.2	ug/Kg
2-Hexanone	591-78-6	< 6.2	U	5.2	6.2	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.2	1.2	ug/Kg
Isopropylbenzene	98-82-8	< 1.1	U	5.2	1.1	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.2	1.0	ug/Kg
Toluene	108-88-3	< 1.1	U	5.2	1.1	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.0	U	5.2	1.0	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.2	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.2	1.0	ug/Kg
Styrene	100-42-5	< 1.5	U	5.2	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.2	2.9	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.1	U	5.2	1.1	ug/Kg
o-Xylene	95-47-6	< 1.1	U	5.2	1.1	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.0	U	5.2	1.0	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.83	U	5.2	0.83	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.94	U	5.2	0.94	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.0	U	5.2	1.0	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.6	U	5.2	1.6	ug/Kg
Bromobenzene	108-86-1	< 0.94	U	5.2	0.94	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.6	U	5.2	1.6	ug/Kg
N-propylbenzene	103-61-5	< 1.4	U	5.2	1.4	ug/Kg
2-Chlorotoluene	95-49-8	< 1.8	U	5.2	1.8	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.4	U	5.2	1.4	ug/Kg
4-Chlorotoluene	106-43-4	< 1.5	U	5.2	1.5	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 1.5	U	5.2	1.5	ug/Kg
Sec-butylbenzene	135-98-8	< 1.9	U	5.2	1.9	ug/Kg
tert-Butylbenzene	98-06-6	< 1.8	U	5.2	1.8	ug/Kg
n-Butylbenzene	104-51-8	< 2.5	U	5.2	2.5	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.0	U	5.2	2.0	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.6	U	5.2	2.6	ug/Kg
Naphthalene	91-20-3	< 1.2	U	5.2	1.2	ug/Kg
Vinyl Acetate	108-05-4	< 4.8	U	5.2	4.8	ug/Kg
tert-Butyl Alcohol	75-65-0	< 4.4	U	5.2	4.4	ug/Kg
Acrolein	107-02-8	< 7.0	U	5.2	7.0	ug/Kg

PP

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-14

Client ID: VGP-114-19

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/26/02

Matrix: SOIL

File ID: VA082614.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826S1

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 7.9	U	5.2	7.9	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.5 R	U	5.2	1.5	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.9	U	5.2	1.9	ug/Kg
Isopropyl Alcohol	67-63-0	< 52 UJ	U	21	52	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.2	U	5.2	5.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	56.51	113 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	50.8	102 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	45.02	90 %	74 - 121		SPK: 50
Dibromofluoromethane		58.11	116 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	906148	6.82			
1,4-Difluorobenzene	540-36-3	911289	8.65			
Chlorobenzene-d5	3114-55-4	762787	14.89			
1,4-Dichlorobenzene-d4	3855-82-1	521089	20.40			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-17

Client ID: VGP-1A0-5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082625.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 93	U	660	93	ug/Kg
Chloromethane	74-87-3	< 67	U	660	67	ug/Kg
Vinyl chloride	75-01-4	< 100	U	660	100	ug/Kg
Bromomethane	74-83-9	< 50	U	660	50	ug/Kg
Chloroethane	75-00-3	< 320	U	660	320	ug/Kg
Trichlorofluoromethane	75-69-4	< 96	U	660	96	ug/Kg
1,1-Dichloroethene	75-35-4	< 91	U	660	91	ug/Kg
Acetone	67-64-1	< 460	U	660	460	ug/Kg
Carbon disulfide	75-15-0	< 95	U	660	95	ug/Kg
Methyl Acetate	79-20-9	< 100	U	660	100	ug/Kg
Methylene Chloride	75-09-2	< 230	U	660	230	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 110	U	660	110	ug/Kg
1,1-Dichloroethane	75-34-3	< 87	U	660	87	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 81	U	660	81	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 140	U	660	140	ug/Kg
2,2-Dichloropropane	594-20-7	< 82	U	660	82	ug/Kg
Chloroform	67-66-3	< 81	U	660	81	ug/Kg
Cyclohexane	110-82-7	< 130	U	660	130	ug/Kg
1,1-Dichloropropene	563-43-2	< 390	U	660	390	ug/Kg
2-Butanone	78-93-3	< 300	U	660	300	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 99	U	660	99	ug/Kg
Carbon Tetrachloride	56-23-5	< 62	U	660	62	ug/Kg
Dibromomethane	74-95-3	< 80	U	660	80	ug/Kg
Benzene	71-43-2	< 93	U	660	93	ug/Kg
1,2-Dichloroethane	107-06-2	< 74	U	660	74	ug/Kg
Trichloroethene	79-01-6	< 94	U	660	94	ug/Kg
Methylcyclohexane	108-87-7	< 88	U	660	88	ug/Kg
1,2-Dichloropropane	78-87-5	< 96	U	660	96	ug/Kg
Bromodichloromethane	75-27-4	< 96	U	660	96	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 87	U	660	87	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 87	U	660	87	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 82	U	660	82	ug/Kg
Dibromochloromethane	124-48-1	< 86	U	660	86	ug/Kg
1,2-Dibromoethane	106-93-4	< 83	U	660	83	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-17

Client ID: VGP-1A0-5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082625.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 65	U	660	65	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 110	U	660	110	ug/Kg
2-Hexanone	591-78-6	< 79	U	660	79	ug/Kg
1,3-Dichloropropane	142-28-9	< 75	U	660	75	ug/Kg
Tetrachloroethene	127-18-4	3900		660	92	ug/Kg
Toluene	108-88-3	63000	E	660	93	ug/Kg
Chlorobenzene	108-90-7	< 100	U	660	100	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 84	U	660	84	ug/Kg
Ethyl Benzene	100-41-4	< 99	U	660	99	ug/Kg
m&p-Xylenes	136777-61-2	2700		1300	200	ug/Kg
o-Xylene	95-47-6	30000	E	660	95	ug/Kg
Styrene	100-42-5	< 120	U	660	120	ug/Kg
Isopropylbenzene	98-82-8	20000		660	98	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 93	U	660	93	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 97	U	660	97	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 120	U	660	120	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 120	U	660	120	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 120	U	660	120	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 170	U	660	170	ug/Kg
Bromobenzene	108-86-1	< 79	U	660	79	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 140	U	660	140	ug/Kg
n-propylbenzene	103-61-5	40000	E	660	100	ug/Kg
2-Chlorotoluene	95-49-8	< 110	U	660	110	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	720000	E	660	130	ug/Kg
4-Chlorotoluene	106-43-4	< 130	U	660	130	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	430000	E	660	110	ug/Kg
Sec-butylbenzene	135-98-8	< 130	U	660	130	ug/Kg
tert-Butylbenzene	98-06-6	< 120	U	660	120	ug/Kg
n-Butylbenzene	104-51-8	23000		660	160	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 140	U	660	140	ug/Kg
Hexachlorobutadiene	87-68-3	< 120	U	660	120	ug/Kg
Naphthalene	91-20-3	2000		660	120	ug/Kg
tert-Butyl Alcohol	75-65-0	< 530 R	U	3300	530	ug/Kg
Acrolein	107-02-8	< 640 R	U	3300	640	ug/Kg
Acrylonitrile	107-13-1	< 460	U	3300	460	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-17

Client ID: VGP-1A0-5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082625.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 340	U	3300	340	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 280 R	U	660	280	ug/Kg
p-Isopropyltoluene	99-87-6	21000		660	140	ug/Kg
Isopropyl Alcohol	67-63-0	< 2600 JS	U	2600	2600	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	7500		660	660	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	56.58	113 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	45.91	92 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	54.92	110 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	54.82	110 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	893347	6.79			
1,4-Difluorobenzene	540-36-3	957083	8.64			
Chlorobenzene-d5	3114-55-4	825971	14.95			
1,4-Dichlorobenzene-d4	3855-82-1	519237	20.47			

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-17DL

Client ID: VGP-1A0-5DL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082629.D

Analytical Run ID: VA082502

Dilution: 100

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 9300	UD	66000	9300	ug/Kg
Chloromethane	74-87-3	< 6700	UD	66000	6700	ug/Kg
Vinyl chloride	75-01-4	< 10000	UD	66000	10000	ug/Kg
Bromomethane	74-83-9	< 5000	UD	66000	5000	ug/Kg
Chloroethane	75-00-3	< 32000	UD	66000	32000	ug/Kg
Trichlorofluoromethane	75-69-4	< 9600	UD	66000	9600	ug/Kg
1,1-Dichloroethene	75-35-4	< 9100	UD	66000	9100	ug/Kg
Acetone	67-64-1	< 46000	UD	66000	46000	ug/Kg
Carbon disulfide	75-15-0	< 9500	UD	66000	9500	ug/Kg
Methyl Acetate	79-20-9	< 10000	UD	66000	10000	ug/Kg
Methylene Chloride	75-09-2	< 23000	UD	66000	23000	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 11000	UD	66000	11000	ug/Kg
1,1-Dichloroethane	75-34-3	< 8700	UD	66000	8700	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 8100	UD	66000	8100	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 14000	UD	66000	14000	ug/Kg
2,2-Dichloropropane	594-20-7	< 8200	UD	66000	8200	ug/Kg
Chloroform	67-66-3	< 8100	UD	66000	8100	ug/Kg
Cyclohexane	110-82-7	< 13000	UD	66000	13000	ug/Kg
1,1-Dichloropropene	563-43-2	< 39000	UD	66000	39000	ug/Kg
2-Butanone	78-93-3	< 30000	UD	66000	30000	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 9900	UD	66000	9900	ug/Kg
Carbon Tetrachloride	56-23-5	< 6200	UD	66000	6200	ug/Kg
Dibromomethane	74-95-3	< 8000	UD	66000	8000	ug/Kg
Benzene	71-43-2	< 9300	UD	66000	9300	ug/Kg
1,2-Dichloroethane	107-06-2	< 7400	UD	66000	7400	ug/Kg
Trichloroethene	79-01-6	< 9400	UD	66000	9400	ug/Kg
Methylcyclohexane	108-87-7	< 8800	UD	66000	8800	ug/Kg
1,2-Dichloropropane	78-87-5	< 9600	UD	66000	9600	ug/Kg
Bromodichloromethane	75-27-4	< 9600	UD	66000	9600	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 8700	UD	66000	8700	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 8700	UD	66000	8700	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 8200	UD	66000	8200	ug/Kg
Dibromochloromethane	124-48-1	< 8600	UD	66000	8600	ug/Kg
1,2-Dibromoethane	106-93-4	< 8300	UD	66000	8300	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-17DL

Client ID: VGP-1A0-5DL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082629.D

Analytical Run ID: VA082502

Dilution: 100

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 6500	UD	66000	6500	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 11000	UD	66000	11000	ug/Kg
2-Hexanone	591-78-6	< 7900	UD	66000	7900	ug/Kg
1,3-Dichloropropane	142-28-9	< 7500	UD	66000	7500	ug/Kg
Tetrachloroethene	127-18-4	< 9200	UD	66000	9200	ug/Kg
Toluene	108-88-3	82000	D	66000	9300	ug/Kg
Chlorobenzene	108-90-7	< 10000	UD	66000	10000	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 8400	UD	66000	8400	ug/Kg
Ethyl Benzene	100-41-4	< 9900	UD	66000	9900	ug/Kg
m&p-Xylenes	136777-61-2	< 20000	UD	130000	20000	ug/Kg
o-Xylene	95-47-6	39000	JD	66000	9500	ug/Kg
Styrene	100-42-5	< 12000	UD	66000	12000	ug/Kg
Isopropylbenzene	98-82-8	29000	JD	66000	9800	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 9300	UD	66000	9300	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 9700	UD	66000	9700	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 12000	UD	66000	12000	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 12000	UD	66000	12000	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 12000	UD	66000	12000	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 17000	UD	66000	17000	ug/Kg
Bromobenzene	108-86-1	< 7900	UD	66000	7900	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 14000	UD	66000	14000	ug/Kg
n-propylbenzene	103-61-5	48000	JD	66000	10000	ug/Kg
2-Chlorotoluene	95-49-8	< 11000	UD	66000	11000	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	480000	D	66000	13000	ug/Kg
4-Chlorotoluene	106-43-4	< 13000	UD	66000	13000	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	1600000	D	66000	11000	ug/Kg
Sec-butylbenzene	135-98-8	< 13000	UD	66000	13000	ug/Kg
tert-Butylbenzene	98-06-6	< 12000	UD	66000	12000	ug/Kg
n-Butylbenzene	104-51-8	37000	JD	66000	16000	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 14000	UD	66000	14000	ug/Kg
Hexachlorobutadiene	87-68-3	< 12000	UD	66000	12000	ug/Kg
Naphthalene	91-20-3	< 12000	UD	66000	12000	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 28000	R UD	66000	28000	ug/Kg
p-Isopropyltoluene	99-87-6	29000	JD	66000	14000	ug/Kg
tert-Butyl Alcohol	75-65-0	< 53000	R UD	330000	53000	ug/Kg

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-17DL

Client ID: VGP-1A0-5DL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

File ID: VA082629.D

Analytical Run ID: VA082502

Dilution: 100

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0826W2

Sample Wt/Wol: 10.0 Units: g

Soil Extract Vol: 25000

Soil Aliquot Vol: 100

% Moisture: 5

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrolein	107-02-8	< 64000 R	UD	330000	64000	ug/Kg
Acrylonitrile	107-13-1	< 46000	UD	330000	46000	ug/Kg
Vinyl Acetate	108-05-4	< 34000	UD	330000	34000	ug/Kg
Isopropyl Alcohol	67-63-0	< 260000 UJ	UD	260000	260000	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 66000	UD	66000	66000	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	4877	98 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	4470	89 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	5107	102 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	5451	109 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1055756	6.87			
1,4-Difluorobenzene	540-36-3	1118998	8.69			
Chlorobenzene-d5	3114-55-4	928419	14.94			
1,4-Dichlorobenzene-d4	3855-82-1	645474	20.46			

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-19

Client ID: TB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/25/02

Matrix: WATER

File ID: VA082510.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0825W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-19

Client ID: TB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/25/02

Matrix: WATER

File ID: VA082510.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0825W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	5.0	2.6	ug/L
tert-Butyl Alcohol	75-65-0	< 4.0 R	U	5.0	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	5.0	4.9	ug/L

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-19

Client ID: TB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/25/02

Matrix: WATER

File ID: VA082510.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0825W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	5.0	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 50 JS	U	20	50	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	55.33	111 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	51.33	103 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	46.04	92 %	70 - 125		SPK: 50
Dibromofluoromethane		58.61	117 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	913239	6.79			
1,4-Difluorobenzene	540-36-3	941344	8.61			
Chlorobenzene-d5	3114-55-4	789676	14.89			
1,4-Dichlorobenzene-d4	3855-82-1	563274	20.37			

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-20

Client ID: FB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/25/02

Matrix: WATER

File ID: VA082511.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0825W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	41		5.0	3.5	ug/L
Carbon disulfide	75-15-0	5.4		5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	7.1		5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-20

Client ID: FB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/25/02

Matrix: WATER

File ID: VA082511.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0825W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	1.7	J	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	5.0	2.6	ug/L
tert-Butyl Alcohol	75-65-0	< 4.0	U	5.0	4.0	ug/L
Acrolein	107-02-8	< 4.9	U	5.0	4.9	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P3793

Client: Rich Consultants

Sample ID: P3793-20

Client ID: FB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/25/02

Matrix: WATER

File ID: VA082511.D

Analytical Run ID: VA082502

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA0825W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	5.0	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 50 UJ	U	20	50	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	53.71	107 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	50.5	101 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	45.38	91 %	70 - 125		SPK: 50
Dibromofluoromethane		57.08	114 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1051801	6.79			
1,4-Difluorobenzene	540-36-3	1083901	8.61			
Chlorobenzene-d5	3114-55-4	905070	14.89			
1,4-Dichlorobenzene-d4	3855-82-1	659036	20.37			

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-05

Client ID: VLP-M

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001895.D

Dilution: 10

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Wol: 30.4

Extract Vol: 1000

Injection Vol: 2

% Moisture: 36

Associated Blank: PB082002-07B

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

bis(2-Chloroethyl)ether	< 600	U	5100	600	ug/Kg
1,2-Dichlorobenzene	< 510	U	5100	510	ug/Kg
1,3-Dichlorobenzene	< 600	U	5100	600	ug/Kg
1,4-Dichlorobenzene	< 510	U	5100	510	ug/Kg
2,2'-oxybis(1-chloropropane)	< 510	U	5100	510	ug/Kg
N-Nitroso-di-n-propylamine	< 510	U	5100	510	ug/Kg
Hexachloroethane	< 560	U	5100	560	ug/Kg
Nitrobenzene	< 510	U	5100	510	ug/Kg
Isophorone	< 510	U	5100	510	ug/Kg
bis(2-Chloroethoxy)methane	< 510	U	5100	510	ug/Kg
1,2,4-Trichlorobenzene	< 600	U	5100	600	ug/Kg
Naphthalene	< 600	U	5100	600	ug/Kg
4-Chloroaniline	< 600	U	5100	600	ug/Kg
Hexachlorobutadiene	< 760	U	5100	760	ug/Kg
2-Methylnaphthalene	< 600	U	5100	600	ug/Kg
Hexachlorocyclopentadiene	< 1900	U	5100	1900	ug/Kg
2-Chloronaphthalene	< 600	U	5100	600	ug/Kg
2-Nitroaniline	< 510	U	13000	510	ug/Kg
Dimethylphthalate	< 510	U	5100	510	ug/Kg
Acenaphthylene	< 600	U	5100	600	ug/Kg
2,6-Dinitrotoluene	< 510	U	5100	510	ug/Kg
3-Nitroaniline	< 600	U	13000	600	ug/Kg
Acenaphthene	350	J	5100	600	ug/Kg
Dibenzofuran	< 510	U	5100	510	ug/Kg
2,4-Dinitrotoluene	< 560	U	5100	560	ug/Kg
Diethylphthalate	< 510	U	5100	510	ug/Kg
4-Chlorophenyl-phenylether	< 600	U	5100	600	ug/Kg
Fluorene	1000	J	5100	560	ug/Kg
4-Nitroaniline	< 1200	U	13000	1200	ug/Kg
N-Nitrosodiphenylamine	< 1000	U	5100	1000	ug/Kg
4-Bromophenyl-phenylether	< 660	U	5100	660	ug/Kg

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-05

Client ID: VLP-M

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001895.D

Dilution: 10

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Wol: 30.4

Extract Vol: 1000

Injection Vol: 2

% Moisture: 36

Associated Blank: PB082002-07B

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

Hexachlorobenzene	< 560	U	5100	560	ug/Kg
Phenanthrene	15000		5100	510	ug/Kg
Anthracene	1700	J	5100	660	ug/Kg
Carbazole	1900	J	5100	210	ug/Kg
Di-n-butylphthalate	2700	J	5100	600	ug/Kg
Fluoranthene	29000		5100	510	ug/Kg
Pyrene	23000		5100	510	ug/Kg
Butylbenzylphthalate	2600	J	5100	510	ug/Kg
3,3'-Dichlorobenzidine	< 510	U	5100	510	ug/Kg
Benzo(a)anthracene	11000		5100	510	ug/Kg
Chrysene	18000		5100	810	ug/Kg
bis(2-Ethylhexyl)phthalate	13000		5100	510	ug/Kg
Di-n-octyl phthalate	50000	E	5100	760	ug/Kg
Benzo(b)fluoranthene	16000		5100	510	ug/Kg
Benzo(k)fluoranthene	11000		5100	1300	ug/Kg
Benzo(a)pyrene	14000		5100	760	ug/Kg
Indeno(1,2,3-cd)pyrene	8700		5100	810	ug/Kg
Dibenz(a,h)anthracene	< 770	U	5100	770	ug/Kg
Benzo(g,h,i)perylene	7100		5100	660	ug/Kg

SURROGATES

Nitrobenzene-d5	97.4	49 %	23 - 120	SPK: 200
2-Fluorobiphenyl	121.7	61 %	30 - 116	SPK: 200
Terphenyl-d14	138.8	69 %	18 - 137	SPK: 200

INTERNAL STANDARDS

1,4-Dichlorobenzene-d4	126019	6.43
Naphthalene-d8	446167	9.26
Acenaphthene-d10	257849	13.58
Phenanthrene-d10	394270	17.25
Chrysene-d12	394820	23.95
Perylene-d12	445645	27.32

PRELIMINARY RESULTS

Subject to change upon further data quality review

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-05

Client ID: VLP-M

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/24/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001895.D

Dilution: 10

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Vol: 30.4

Extract Vol: 1000

Injection Vol: 2

% Moisture: 36

Associated Blank: PB082002-07B

Parameter	Concentration	C	RDL	MDL	Units
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TENTATIVE IDENTIFIED COMPOUNDS

ACP	33000	A	3.65		ug/Kg
Phenol, 4-(1,1,3,3-tetramethylbutyl)	6300	J	16.33		ug/Kg
Phenol, nonyl-	6400	J	16.43		ug/Kg
1-(6-Methyl-2-pyridyl)propan-2-on	5800	J	16.77		ug/Kg
11H-Benzo[a]fluorene	6800	J	21.76		ug/Kg
Ethanol, 2-butoxy-, phosphate (3:1)	18000	J	23.24		ug/Kg
1,2-Benzenedicarboxylic acid, buty	9400	J	24.34		ug/Kg
2-Propen-1-one, 1-(2-hydroxyphen	6200	J	25.19		ug/Kg
1,2-Benzenedicarboxylic acid, dihe	14000	J	25.29		ug/Kg
1,2-Benzenedicarboxylic acid, decy	6100	J	25.37		ug/Kg

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-05DL

Client ID: VLP-MDL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001935.D

Dilution: 50

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Wol: 30.4

Extract Vol: 1000

Injection Vol: 2

% Moisture: 36

Associated Blank: PB082002-07B

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

bis(2-Chloroethyl)ether	< 3000	UD	25000	3000	ug/Kg
1,2-Dichlorobenzene	< 2500	UD	25000	2500	ug/Kg
1,3-Dichlorobenzene	< 3000	UD	25000	3000	ug/Kg
1,4-Dichlorobenzene	< 2500	UD	25000	2500	ug/Kg
2,2'-oxybis(1-chloropropane)	< 2500	UD	25000	2500	ug/Kg
N-Nitroso-di-n-propylamine	< 2500	UD	25000	2500	ug/Kg
Hexachloroethane	< 2800	UD	25000	2800	ug/Kg
Nitrobenzene	< 2500	UD	25000	2500	ug/Kg
Isophorone	< 2500	UD	25000	2500	ug/Kg
bis(2-Chloroethoxy)methane	< 2500	UD	25000	2500	ug/Kg
1,2,4-Trichlorobenzene	< 3000	UD	25000	3000	ug/Kg
Naphthalene	< 3000	UD	25000	3000	ug/Kg
4-Chloroaniline	< 3000	UD	25000	3000	ug/Kg
Hexachlorobutadiene	< 3800	UD	25000	3800	ug/Kg
2-Methylnaphthalene	< 3000	UD	25000	3000	ug/Kg
Hexachlorocyclopentadiene	< 9700	UD	25000	9700	ug/Kg
1-Chloronaphthalene	< 3000	UD	25000	3000	ug/Kg
2-Nitroaniline	< 2500	UD	64000	2500	ug/Kg
Dimethylphthalate	< 2500	UD	25000	2500	ug/Kg
Acenaphthylene	< 3000	UD	25000	3000	ug/Kg
2,6-Dinitrotoluene	< 2500	UD	25000	2500	ug/Kg
-Nitroaniline	< 3000	UD	64000	3000	ug/Kg
Acenaphthene	< 3000	UD	25000	3000	ug/Kg
Dibenzofuran	< 2500	UD	25000	2500	ug/Kg
,4-Dinitrotoluene	< 2800	UD	25000	2800	ug/Kg
Diethylphthalate	2900	JD	25000	2500	ug/Kg
4-Chlorophenyl-phenylether	< 3000	UD	25000	3000	ug/Kg
luorene	< 2800	UD	25000	2800	ug/Kg
4-Nitroaniline	< 6100	UD	64000	6100	ug/Kg
N-Nitrosodiphenylamine	< 5100	UD	25000	5100	ug/Kg
-Bromophenyl-phenylether	< 3300	UD	25000	3300	ug/Kg

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-05DL

Client ID: VLP-MDL

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001935.D

Dilution: 50

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Wol: 30.4

Extract Vol: 1000

Injection Vol: 2

% Moisture: 36

Associated Blank: PB082002-07B

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

Hexachlorobenzene	< 2800	UD	25000	2800	ug/Kg
Phenanthrene	14000	JD	25000	2500	ug/Kg
Anthracene	< 3300	UD	25000	3300	ug/Kg
Carbazole	< 1000	UD	25000	1000	ug/Kg
Di-n-butylphthalate	< 3000	UD	25000	3000	ug/Kg
Fluoranthene	24000	JD	25000	2500	ug/Kg
Pyrene	23000	JD	25000	2500	ug/Kg
Butylbenzylphthalate	2900	JD	25000	2500	ug/Kg
3,3'-Dichlorobenzidine	< 2500	UD	25000	2500	ug/Kg
Benzo(a)anthracene	11000	JD	25000	2500	ug/Kg
Chrysene	17000	JD	25000	4100	ug/Kg
bis(2-Ethylhexyl)phthalate	15000	JD	25000	2500	ug/Kg
Di-n-octyl phthalate	50000	D	25000	3800	ug/Kg
Benzo(b)fluoranthene	20000	JD	25000	2500	ug/Kg
Benzo(k)fluoranthene	10000	JD	25000	6600	ug/Kg
Benzo(a)pyrene	15000	JD	25000	3800	ug/Kg
Indeno(1,2,3-cd)pyrene	7700	JD	25000	4100	ug/Kg
Dibenz(a,h)anthracene	< 3800	UD	25000	3800	ug/Kg
Benzo(g,h,i)perylene	7600	JD	25000	3300	ug/Kg

SURROGATES

Nitrobenzene-d5	1.93	48 %	23 - 120	SPK: 200
2-Fluorobiphenyl	2.27	57 %	30 - 116	SPK: 200
Terphenyl-d14	2.69	67 %	18 - 137	SPK: 200

INTERNAL STANDARDS

1,4-Dichlorobenzene-d4	100880	6.39
Naphthalene-d8	359663	9.21
Acenaphthene-d10	212445	13.53
Phenanthrene-d10	327284	17.19
Chrysene-d12	273691	23.90
Perylene-d12	254382	27.25

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-06

Client ID: VLP-N

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/23/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001876.D

Dilution: 1

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Wol: 30.2

Extract Vol: 1000

Injection Vol: 2

% Moisture: 5

Associated Blank: PB082002-07B

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

bis(2-Chloroethyl)ether	< 41	U	350	41	ug/Kg
1,2-Dichlorobenzene	< 35	U	350	35	ug/Kg
1,3-Dichlorobenzene	< 41	U	350	41	ug/Kg
1,4-Dichlorobenzene	< 35	U	350	35	ug/Kg
2,2'-oxybis(1-chloropropane)	< 35	U	350	35	ug/Kg
N-Nitroso-di-n-propylamine	< 35	U	350	35	ug/Kg
Hexachloroethane	< 38	U	350	38	ug/Kg
Nitrobenzene	< 35	U	350	35	ug/Kg
Isophorone	< 35	U	350	35	ug/Kg
bis(2-Chloroethoxy)methane	< 35	U	350	35	ug/Kg
1,2,4-Trichlorobenzene	< 41	U	350	41	ug/Kg
Naphthalene	< 41	U	350	41	ug/Kg
4-Chloroaniline	< 41	U	350	41	ug/Kg
Hexachlorobutadiene	< 52	U	350	52	ug/Kg
2-Methylnaphthalene	< 41	U	350	41	ug/Kg
Hexachlorocyclopentadiene	< 130	U	350	130	ug/Kg
2-Chloronaphthalene	< 41	U	350	41	ug/Kg
2-Nitroaniline	< 35	U	870	35	ug/Kg
Dimethylphthalate	< 35	U	350	35	ug/Kg
Acenaphthylene	< 41	U	350	41	ug/Kg
2,6-Dinitrotoluene	< 35	U	350	35	ug/Kg
3-Nitroaniline	< 41	U	870	41	ug/Kg
Acenaphthene	< 41	U	350	41	ug/Kg
Dibenzofuran	< 35	U	350	35	ug/Kg
2,4-Dinitrotoluene	< 38	U	350	38	ug/Kg
Diethylphthalate	220	J	350	35	ug/Kg
4-Chlorophenyl-phenylether	< 41	U	350	41	ug/Kg
Fluorene	< 38	U	350	38	ug/Kg
4-Nitroaniline	< 83	U	870	83	ug/Kg
N-Nitrosodiphenylamine	< 69	U	350	69	ug/Kg
4-Bromophenyl-phenylether	< 45	U	350	45	ug/Kg

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-10

Client ID: VLP-P13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001934.D

Dilution: 1

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: BA082702

Sample Wt/Wol: 30.3

Extract Vol: 1000

Injection Vol: 2

% Moisture: 12

Associated Blank:

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

bis(2-Chloroethyl)ether	< 44	U	370	44	ug/Kg
1,2-Dichlorobenzene	< 37	U	370	37	ug/Kg
1,3-Dichlorobenzene	< 44	U	370	44	ug/Kg
1,4-Dichlorobenzene	< 37	U	370	37	ug/Kg
2,2'-oxybis(1-chloropropane)	< 37	U	370	37	ug/Kg
N-Nitroso-di-n-propylamine	< 37	U	370	37	ug/Kg
Hexachloroethane	< 41	U	370	41	ug/Kg
Nitrobenzene	< 37	U	370	37	ug/Kg
Isophorone	< 37	U	370	37	ug/Kg
bis(2-Chloroethoxy)methane	< 37	U	370	37	ug/Kg
1,2,4-Trichlorobenzene	< 44	U	370	44	ug/Kg
Naphthalene	< 44	U	370	44	ug/Kg
4-Chloroaniline	< 44	U	370	44	ug/Kg
Hexachlorobutadiene	< 56	U	370	56	ug/Kg
2-Methylnaphthalene	< 44	U	370	44	ug/Kg
Hexachlorocyclopentadiene	< 140	U UJ	370	140	ug/Kg
2-Chloronaphthalene	< 44	U	370	44	ug/Kg
2-Nitroaniline	< 37	U	930	37	ug/Kg
Dimethylphthalate	< 37	U	370	37	ug/Kg
Acenaphthylene	< 44	U	370	44	ug/Kg
2,6-Dinitrotoluene	< 37	U	370	37	ug/Kg
3-Nitroaniline	< 44	U	930	44	ug/Kg
Acenaphthene	< 44	U	370	44	ug/Kg
Dibenzofuran	< 37	U	370	37	ug/Kg
2,4-Dinitrotoluene	< 41	U	370	41	ug/Kg
Diethylphthalate	190	J	370	37	ug/Kg
4-Chlorophenyl-phenylether	< 44	U	370	44	ug/Kg
Fluorene	< 41	U	370	41	ug/Kg
4-Nitroaniline	< 89	U	930	89	ug/Kg
N-Nitrosodiphenylamine	< 74	U	370	74	ug/Kg
4-Bromophenyl-phenylether	< 48	U	370	48	ug/Kg

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-10

Client ID: VLP-P13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001934.D

Dilution: 1

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: BA082702

Sample Wt/Wol: 30.3

Extract Vol: 1000

Injection Vol: 2

% Moisture: 12

Associated Blank:

Parameter	Concentration	C	RDL	MDL	Units
TARGETS					
Hexachlorobenzene	< 41	U	370	41	ug/Kg
Phenanthrene	210	J	370	37	ug/Kg
Anthracene	< 48	U	370	48	ug/Kg
Carbazole	40	J	370	15	ug/Kg
Di-n-butylphthalate	< 44	U	370	44	ug/Kg
Fluoranthene	380		370	37	ug/Kg
Pyrene	370		370	37	ug/Kg
Butylbenzylphthalate	81	J	370	37	ug/Kg
3,3'-Dichlorobenzidine	< 37	U	370	37	ug/Kg
Benzo(a)anthracene	170	J	370	37	ug/Kg
Chrysene	270	J	370	59	ug/Kg
bis(2-Ethylhexyl)phthalate	140	J	370	37	ug/Kg
Di-n-octyl phthalate	< 56	U	370	56	ug/Kg
Benzo(b)fluoranthene	300	J	370	37	ug/Kg
Benzo(k)fluoranthene	220	J	370	97	ug/Kg
Benzo(a)pyrene	260	J	370	56	ug/Kg
Indeno(1,2,3-cd)pyrene	110	J	370	59	ug/Kg
Dibenz(a,h)anthracene	< 56	U	370	56	ug/Kg
Benzo(g,h,i)perylene	140	J	370	48	ug/Kg
SURROGATES					
Nitrobenzene-d5	130.5	65 %	23 - 120		SPK: 200
2-Fluorobiphenyl	163.14	82 %	30 - 116		SPK: 200
Terphenyl-d14	191.44	96 %	18 - 137		SPK: 200

INTERNAL STANDARDS

1,4-Dichlorobenzene-d4	101144	6.39
Naphthalene-d8	361628	9.21
Acenaphthene-d10	205341	13.54
Phenanthrene-d10	304157	17.19
Chrysene-d12	280994	23.90
Perylene-d12	244542	27.25

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-10

Client ID: VLP-P13.5

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/27/02

Matrix: SOIL

Date Extracted: 8/20/02

File ID: BA001934.D

Dilution: 1

Instrument ID: 5971A

Analytical Method: 8270

Analytical Run ID: BA082702

Sample Wt/Wol: 30.3

Extract Vol: 1000

Injection Vol: 2

% Moisture: 12

Associated Blank:

Parameter	Concentration	C	RDL	MDL	Units
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TENTITIVE IDENTIFIED COMPOUNDS

ACP	7000	A	3.69		ug/Kg
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SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-20

Client ID: FB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/21/02

Matrix: WATER

Date Extracted: 8/19/02

File ID: BC002359.D

Dilution: 1

Instrument ID: 5970C

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Vol: 1000.0

Extract Vol: 1000

Injection Vol: 2

% Moisture: 100

Associated Blank: PB081902-11B

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

bis(2-Chloroethyl)ether	< 1.2	U	10	1.2	ug/L
1,2-Dichlorobenzene	< 1.0	U	10	1.0	ug/L
1,3-Dichlorobenzene	< 1.2	U	10	1.2	ug/L
1,4-Dichlorobenzene	< 1.0	U	10	1.0	ug/L
2,2'-oxybis(1-chloropropane)	< 1.0	U	10	1.0	ug/L
N-Nitroso-di-n-propylamine	< 1.0	U	10	1.0	ug/L
Hexachloroethane	< 1.1	U	10	1.1	ug/L
Nitrobenzene	< 1.0	U	10	1.0	ug/L
Isophorone	< 1.0	U	10	1.0	ug/L
bis(2-Chloroethoxy)methane	< 1.0	U	10	1.0	ug/L
1,2,4-Trichlorobenzene	< 1.2	U	10	1.2	ug/L
Naphthalene	< 1.2	U	10	1.2	ug/L
4-Chloroaniline	< 1.2	U	10	1.2	ug/L
Hexachlorobutadiene	< 1.5	U	10	1.5	ug/L
2-Methylnaphthalene	< 1.2	U	10	1.2	ug/L
Hexachlorocyclopentadiene	< 3.8	U	10	3.8	ug/L
2-Chloronaphthalene	< 1.2	U	10	1.2	ug/L
2-Nitroaniline	< 1.0	U	10	1.0	ug/L
Dimethylphthalate	< 1.0	U	10	1.0	ug/L
Acenaphthylene	< 1.2	U	10	1.2	ug/L
2,6-Dinitrotoluene	< 1.0	U	10	1.0	ug/L
3-Nitroaniline	< 1.2	U	10	1.2	ug/L
Acenaphthene	< 1.0	U	10	1.0	ug/L
Dibenzofuran	< 1.0	U	10	1.0	ug/L
2,4-Dinitrotoluene	< 1.1	U	10	1.1	ug/L
Diethylphthalate	< 1.0	U	10	1.0	ug/L
4-Chlorophenyl-phenylether	< 1.2	U	10	1.2	ug/L
Fluorene	< 1.1	U	10	1.1	ug/L
4-Nitroaniline	< 2.4	U	10	2.4	ug/L
N-Nitrosodiphenylamine	< 2.0	U	10	2.0	ug/L
4-Bromophenyl-phenylether	< 1.3	U	10	1.3	ug/L

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-20

Client ID: FB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/21/02

Matrix: WATER

Date Extracted: 8/19/02

File ID: BC002359.D

Dilution: 1

Instrument ID: 5970C

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Wol: 1000.0

Extract Vol: 1000

Injection Vol: 2

% Moisture: 100

Associated Blank: PB081902-11B

Parameter	Concentration	C	RDL	MDL	Units
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TARGETS

Hexachlorobenzene	< 1.1	U	10	1.1	ug/L
Phenanthrene	< 1.0	U	10	1.0	ug/L
Anthracene	< 1.3	U	10	1.3	ug/L
Carbazole	< 0.420	U	10	0.420	ug/L
Di-n-butylphthalate	< 1.2	U	10	1.2	ug/L
Fluoranthene	< 1.0	U	10	1.0	ug/L
Pyrene	< 1.0	U	10	1.0	ug/L
Butylbenzylphthalate	< 1.0	U	10	1.0	ug/L
3,3'-Dichlorobenzidine	< 1.0	U	20	1.0	ug/L
Benzo(a)anthracene	< 1.0	U	10	1.0	ug/L
Chrysene	< 1.6	U	10	1.6	ug/L
bis(2-Ethylhexyl)phthalate	< 1.0	U	10	1.0	ug/L
Di-n-octyl phthalate	< 1.5	U	10	1.5	ug/L
Benzo(b)fluoranthene	< 1.0	U	10	1.0	ug/L
Benzo(k)fluoranthene	< 2.6	U	10	2.6	ug/L
Benzo(a)pyrene	< 1.5	U	10	1.5	ug/L
Indeno(1,2,3-cd)pyrene	< 1.6	U 5	10	1.6	ug/L
Dibenz(a,h)anthracene	< 1.5	U	10	1.5	ug/L
Benzo(g,h,i)perylene	< 1.3	U 5	10	1.3	ug/L

SURROGATES

Nitrobenzene-d5	133.09	67 %	35 - 114	SPK: 200
2-Fluorobiphenyl	118.19	59 %	43 - 116	SPK: 200
Terphenyl-d14	121.42	61 %	33 - 141	SPK: 200

INTERNAL STANDARDS

1,4-Dichlorobenzene-d4	56564	7.07
Naphthalene-d8	166822	9.26
Acenaphthene-d10	126452	12.50
Phenanthrene-d10	261233	15.27
Chrysene-d12	273781	20.28
Perylene-d12	259134	23.35

SVOC-TCL BN

SDG No.: P3793-01

Client: Rich Consultants

Sample ID: P3793-20

Client ID: FB-081302

Date Collected: 8/13/02

Date Received: 8/15/02

Date Analyzed: 8/21/02

Matrix: WATER

Date Extracted: 8/19/02

File ID: BC002359.D

Dilution: 1

Instrument ID: 5970C

Analytical Method: 8270

Analytical Run ID: 1

Sample Wt/Wol: 1000.0

Extract Vol: 1000

Injection Vol: 2

% Moisture: 100

Associated Blank: PB081902-11B

Parameter	Concentration	C	RDL	MDL	Units
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TENTATIVE IDENTIFIED COMPOUNDS

ACP	17	A	4.70		ug/L
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METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-01

Client ID: VLP-1

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 93

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	2240 R	mg/Kg		N*	P	0.69	P1	P182602
7440-36-0	Antimony	0.65 U	mg/Kg	B		P	0.24	P1	P182602
7440-38-2	Arsenic	0.80 U	mg/Kg	B		P	0.28	P1	P182602
7440-39-3	Barium	12.8	mg/Kg	B		P	0.15	P1	P182602
7440-41-7	Beryllium	0.06 U	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.05	mg/Kg	U		P	0.05	P1	P182602
7440-70-2	Calcium	982	mg/Kg			P	2.4	P1	P182602
7440-47-3	Chromium	3.0	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	13.0	mg/Kg			P	0.07	P1	P182602
7440-50-8	Copper	29.7	mg/Kg			P	0.16	P1	P182602
7439-89-6	Iron	8830 J	mg/Kg		*	P	1.7	P1	P182602
7439-92-1	Lead	7.1 J	mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	1180	mg/Kg			P	1.5	P1	P182602
7439-96-5	Manganese	56.7 J	mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.05 J	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	0.28	mg/Kg	B		P	0.23	P1	P182602
7440-09-7	Potassium	117	mg/Kg	B		P	3.8	P1	P182602
7782-49-2	Selenium	0.35	mg/Kg	U		P	0.35	P1	P182602
7440-22-4	Silver	0.51	mg/Kg	B		P	0.39	P1	P182602
7440-23-5	Sodium	147 J	mg/Kg	B		P	42.2	P1	P182602
7440-28-0	Thallium	0.62	mg/Kg	U		P	0.62	P1	P182602
7440-62-2	Vanadium	11.2	mg/Kg			P	0.11	P1	P182602
7440-66-6	Zinc	19.7 J	mg/Kg		*E	P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-02

Client ID: VLP-ID

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 91

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	1720 R	mg/Kg		N*	P	0.70	P1	P182602
7440-36-0	Antimony	1.2 U	mg/Kg	B		P	0.25	P1	P182602
7440-38-2	Arsenic	1.2 U	mg/Kg			P	0.28	P1	P182602
7440-39-3	Barium	15.0	mg/Kg	B		P	0.15	P1	P182602
7440-41-7	Beryllium	0.07	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.05	mg/Kg	U		P	0.05	P1	P182602
7440-70-2	Calcium	3320	mg/Kg			P	2.5	P1	P182602
7440-47-3	Chromium	5.0	mg/Kg			P	0.08	P1	P182602
7440-48-4	Cobalt	15.3	mg/Kg			P	0.08	P1	P182602
7440-50-8	Copper	22.6	mg/Kg			P	0.16	P1	P182602
7439-89-6	Iron	5190 J	mg/Kg		*	P	1.7	P1	P182602
7439-92-1	Lead	15.3 J	mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	829	mg/Kg			P	1.5	P1	P182602
7439-96-5	Manganese	56.7 J	mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.05 J	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	0.24	mg/Kg	U		P	0.24	P1	P182602
7440-09-7	Potassium	159	mg/Kg	B		P	3.9	P1	P182602
7782-49-2	Selenium	0.36	mg/Kg	U		P	0.36	P1	P182602
7440-22-4	Silver	0.40	mg/Kg	U		P	0.40	P1	P182602
7440-23-5	Sodium	156 J	mg/Kg	B		P	42.7	P1	P182602
7440-28-0	Thallium	0.62	mg/Kg	U		P	0.62	P1	P182602
7440-62-2	Vanadium	5.9	mg/Kg			P	0.11	P1	P182602
7440-66-6	Zinc	11.2 J	mg/Kg		*E	P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-03

Client ID: VLP-K

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 82

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	943 R	mg/Kg		N*	P	0.78	P1	P182602
7440-36-0	Antimony	0.62 U	mg/Kg	B		P	0.27	P1	P182602
7440-38-2	Arsenic	0.40 U	mg/Kg	B		P	0.31	P1	P182602
7440-39-3	Barium	4.7	mg/Kg	B		P	0.17	P1	P182602
7440-41-7	Beryllium	0.10	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.06	mg/Kg	U		P	0.06	P1	P182602
7440-70-2	Calcium	336	mg/Kg	B		P	2.7	P1	P182602
7440-47-3	Chromium	2.4	mg/Kg			P	0.08	P1	P182602
7440-48-4	Cobalt	0.87	mg/Kg	B		P	0.08	P1	P182602
7440-50-8	Copper	4.3	mg/Kg			P	0.18	P1	P182602
7439-89-6	Iron	1830 J	mg/Kg		*	P	1.9	P1	P182602
7439-92-1	Lead	3.2 J	mg/Kg		*	P	0.22	P1	P182602
7439-95-4	Magnesium	217	mg/Kg	B		P	1.7	P1	P182602
7439-96-5	Manganese	7.5 J	mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.01 UJ	mg/Kg	U	*	CV	0.01	CV1	082202B
7440-02-0	Nickel	0.26	mg/Kg	U		P	0.26	P1	P182602
7440-09-7	Potassium	66.1	mg/Kg	B		P	4.3	P1	P182602
7782-49-2	Selenium	0.39	mg/Kg	U		P	0.39	P1	P182602
7440-22-4	Silver	0.44	mg/Kg	U		P	0.44	P1	P182602
7440-23-5	Sodium	135 J	mg/Kg	B		P	47.3	P1	P182602
7440-28-0	Thallium	0.69	mg/Kg	U		P	0.69	P1	P182602
7440-62-2	Vanadium	3.4	mg/Kg	B		P	0.12	P1	P182602
7440-66-6	Zinc	29.5 J	mg/Kg		*E	P	0.07	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-04

Client ID: VLP-L

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 83

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	1480 R	mg/Kg		N*	P	0.76	P1	P182602
7440-36-0	Antimony	0.98 U	mg/Kg	B		P	0.27	P1	P182602
7440-38-2	Arsenic	0.87 U	mg/Kg	B		P	0.30	P1	P182602
7440-39-3	Barium	13.0	mg/Kg	B		P	0.16	P1	P182602
7440-41-7	Beryllium	0.09	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.06	mg/Kg	U		P	0.06	P1	P182602
7440-70-2	Calcium	531	mg/Kg	B		P	2.7	P1	P182602
7440-47-3	Chromium	3.6	mg/Kg			P	0.08	P1	P182602
7440-48-4	Cobalt	1.3	mg/Kg	B		P	0.08	P1	P182602
7440-50-8	Copper	6.7	mg/Kg			P	0.18	P1	P182602
7439-89-6	Iron	2610 J	mg/Kg		*	P	1.9	P1	P182602
7439-92-1	Lead	6.1 J	mg/Kg		*	P	0.21	P1	P182602
7439-95-4	Magnesium	470	mg/Kg	B		P	1.6	P1	P182602
7439-96-5	Manganese	22.6 J	mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.02 J	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	0.26	mg/Kg	U		P	0.26	P1	P182602
7440-09-7	Potassium	114	mg/Kg	B		P	4.2	P1	P182602
7782-49-2	Selenium	0.39	mg/Kg	U		P	0.39	P1	P182602
7440-22-4	Silver	0.43	mg/Kg	U		P	0.43	P1	P182602
7440-23-5	Sodium	141 J	mg/Kg	B		P	46.3	P1	P182602
7440-28-0	Thallium	0.68	mg/Kg	U		P	0.68	P1	P182602
7440-62-2	Vanadium	4.5	mg/Kg	B		P	0.12	P1	P182602
7440-66-6	Zinc	0.62 B J	mg/Kg	B	*E	P	0.07	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-05

Client ID: VLP-M

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 64

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	3010 R	mg/Kg		N*	P	1.0	P1	P182602
7440-36-0	Antimony	2.2	mg/Kg	B		P	0.36	P1	P182602
7440-38-2	Arsenic	2.8	mg/Kg			P	0.41	P1	P182602
7440-39-3	Barium	29.1	mg/Kg	B		P	0.22	P1	P182602
7440-41-7	Beryllium	0.14	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	1.1	mg/Kg			P	0.08	P1	P182602
7440-70-2	Calcium	2760	mg/Kg			P	3.6	P1	P182602
7440-47-3	Chromium	26.7	mg/Kg			P	0.11	P1	P182602
7440-48-4	Cobalt	2.7	mg/Kg	B		P	0.11	P1	P182602
7440-50-8	Copper	64.4	mg/Kg			P	0.23	P1	P182602
7439-89-6	Iron	4470 J	mg/Kg		*	P	2.5	P1	P182602
7439-92-1	Lead	49.5 J	mg/Kg		*	P	0.28	P1	P182602
7439-95-4	Magnesium	1270	mg/Kg			P	2.2	P1	P182602
7439-96-5	Manganese	30.0 J	mg/Kg		N*	P	0.02	P1	P182602
7439-97-6	Mercury	0.16 J	mg/Kg		*	CV	0.02	CV1	082202B
7440-02-0	Nickel	8.4	mg/Kg			P	0.34	P1	P182602
7440-09-7	Potassium	167	mg/Kg	B		P	5.6	P1	P182602
7782-49-2	Selenium	0.52	mg/Kg	U		P	0.52	P1	P182602
7440-22-4	Silver	2.4	mg/Kg			P	0.58	P1	P182602
7440-23-5	Sodium	236 J	mg/Kg	B		P	61.9	P1	P182602
7440-28-0	Thallium	0.91	mg/Kg	U		P	0.91	P1	P182602
7440-62-2	Vanadium	12.4	mg/Kg			P	0.16	P1	P182602
7440-66-6	Zinc	450 J	mg/Kg		*E	P	0.09	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-06

Client ID: VLP-N

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 95

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	714 R	mg/Kg		N*	P	0.68	P1	P182602
7440-36-0	Antimony	0.50 U	mg/Kg	B		P	0.24	P1	P182602
7440-38-2	Arsenic	0.75 U	mg/Kg	B		P	0.27	P1	P182602
7440-39-3	Barium	4.2	mg/Kg	B		P	0.15	P1	P182602
7440-41-7	Beryllium	0.06 U	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.05	mg/Kg	U		P	0.05	P1	P182602
7440-70-2	Calcium	263	mg/Kg	B		P	2.4	P1	P182602
7440-47-3	Chromium	1.3	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	0.75	mg/Kg	B		P	0.07	P1	P182602
7440-50-8	Copper	3.3	mg/Kg			P	0.16	P1	P182602
7439-89-6	Iron	2210 J	mg/Kg		*	P	1.7	P1	P182602
7439-92-1	Lead	1.7 J	mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	175	mg/Kg	B		P	1.5	P1	P182602
7439-96-5	Manganese	37.9 J	mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.01 U J	mg/Kg	U	*	CV	0.01	CV1	082202B
7440-02-0	Nickel	1.1	mg/Kg	B		P	0.23	P1	P182602
7440-09-7	Potassium	61.9	mg/Kg	B		P	3.8	P1	P182602
7782-49-2	Selenium	0.35	mg/Kg	U		P	0.35	P1	P182602
7440-22-4	Silver	0.39	mg/Kg	U		P	0.39	P1	P182602
7440-23-5	Sodium	104 J	mg/Kg	B		P	41.7	P1	P182602
7440-28-0	Thallium	0.61	mg/Kg	U		P	0.61	P1	P182602
7440-62-2	Vanadium	2.5	mg/Kg	B		P	0.11	P1	P182602
7440-66-6	Zinc	11.8 J	mg/Kg		*E	P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-09

Client ID: VLP-013.5

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 93

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	2180 R	mg/Kg		N*	P	0.69	P1	P182602
7440-36-0	Antimony	0.91 U	mg/Kg	B		P	0.24	P1	P182602
7440-38-2	Arsenic	5.7	mg/Kg			P	0.28	P1	P182602
7440-39-3	Barium	11.1	mg/Kg	B		P	0.15	P1	P182602
7440-41-7	Beryllium	0.11	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.34	mg/Kg	B		P	0.05	P1	P182602
7440-70-2	Calcium	9650	mg/Kg			P	2.4	P1	P182602
7440-47-3	Chromium	19.8	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	1.3	mg/Kg	B		P	0.07	P1	P182602
7440-50-8	Copper	39.2	mg/Kg			P	0.16	P1	P182602
7439-89-6	Iron	4790 J	mg/Kg		*	P	1.7	P1	P182602
7439-92-1	Lead	55.7 J	mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	977	mg/Kg			P	1.5	P1	P182602
7439-96-5	Manganese	45.7 J	mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.07 J	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	2.4	mg/Kg	B		P	0.23	P1	P182602
7440-09-7	Potassium	123	mg/Kg	B		P	3.8	P1	P182602
7782-49-2	Selenium	0.35	mg/Kg	U		P	0.35	P1	P182602
7440-22-4	Silver	3.5	mg/Kg			P	0.39	P1	P182602
7440-23-5	Sodium	91.0 J	mg/Kg	B		P	42.2	P1	P182602
7440-28-0	Thallium	0.62	mg/Kg	U		P	0.62	P1	P182602
7440-62-2	Vanadium	8.6	mg/Kg			P	0.11	P1	P182602
7440-66-6	Zinc	8.0 J	mg/Kg		*E	P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-10

Client ID: VLP-P13.5

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 88

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	2750 R	mg/Kg		N*	P	0.73	P1	P182602
7440-36-0	Antimony	0.65 U	mg/Kg	B		P	0.26	P1	P182602
7440-38-2	Arsenic	5.7	mg/Kg			P	0.29	P1	P182602
7440-39-3	Barium	29.9	mg/Kg			P	0.16	P1	P182602
7440-41-7	Beryllium	0.16	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.17	mg/Kg	B		P	0.06	P1	P182602
7440-70-2	Calcium	6680	mg/Kg			P	2.6	P1	P182602
7440-47-3	Chromium	22.3	mg/Kg			P	0.08	P1	P182602
7440-48-4	Cobalt	2.4	mg/Kg	B		P	0.08	P1	P182602
7440-50-8	Copper	14.2	mg/Kg			P	0.17	P1	P182602
7439-89-6	Iron	6650 J	mg/Kg		*	P	1.8	P1	P182602
7439-92-1	Lead	24.2 J	mg/Kg		*	P	0.20	P1	P182602
7439-95-4	Magnesium	2470	mg/Kg			P	1.6	P1	P182602
7439-96-5	Manganese	155 J	mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.06 J	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	1.0	mg/Kg	B		P	0.25	P1	P182602
7440-09-7	Potassium	168	mg/Kg	B		P	4.1	P1	P182602
7782-49-2	Selenium	0.52	mg/Kg	B		P	0.37	P1	P182602
7440-22-4	Silver	0.42	mg/Kg	U		P	0.42	P1	P182602
7440-23-5	Sodium	98.0 J	mg/Kg	B		P	44.6	P1	P182602
7440-28-0	Thallium	0.65	mg/Kg	U		P	0.65	P1	P182602
7440-62-2	Vanadium	11.7	mg/Kg			P	0.11	P1	P182602
7440-66-6	Zinc	0.07 B J	mg/Kg	B	*E	P	0.07	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-11

Client ID: VLP-Q13.5

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 94

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	1080	R mg/Kg		N*	P	0.68	P1	P182602
7440-36-0	Antimony	0.24	U mg/Kg	U		P	0.24	P1	P182602
7440-38-2	Arsenic	0.97	U mg/Kg	B		P	0.27	P1	P182602
7440-39-3	Barium	9.8	mg/Kg	B		P	0.15	P1	P182602
7440-41-7	Beryllium	0.09	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.05	mg/Kg	U		P	0.05	P1	P182602
7440-70-2	Calcium	823	mg/Kg			P	2.4	P1	P182602
7440-47-3	Chromium	8.8	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	0.43	mg/Kg	B		P	0.07	P1	P182602
7440-50-8	Copper	9.6	mg/Kg			P	0.16	P1	P182602
7439-89-6	Iron	5440	J mg/Kg		*	P	1.7	P1	P182602
7439-92-1	Lead	3.5	J mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	363	mg/Kg	B		P	1.5	P1	P182602
7439-96-5	Manganese	11.2	J mg/Kg		N*	P	0.01	P1	P182602
7439-97-6	Mercury	0.04	J mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	1.5	mg/Kg	B		P	0.23	P1	P182602
7440-09-7	Potassium	111	mg/Kg	B		P	3.8	P1	P182602
7782-49-2	Selenium	0.34	mg/Kg	U		P	0.34	P1	P182602
7440-22-4	Silver	0.39	mg/Kg	U		P	0.39	P1	P182602
7440-23-5	Sodium	124	J mg/Kg	B		P	41.3	P1	P182602
7440-28-0	Thallium	0.60	mg/Kg	U		P	0.60	P1	P182602
7440-62-2	Vanadium	3.6	mg/Kg	B		P	0.10	P1	P182602
7440-66-6	Zinc	6.5	J mg/Kg		*E	P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-12

Client ID: VGP-10-5

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 90

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	3730	mg/Kg			P	0.72	P1	P182602
7440-36-0	Antimony	0.25	mg/Kg	U		P	0.25	P1	P182602
7440-38-2	Arsenic	6.5	mg/Kg			P	0.29	P1	P182602
7440-39-3	Barium	27.1	mg/Kg			P	0.15	P1	P182602
7440-41-7	Beryllium	0.19	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.17	mg/Kg	B		P	0.06	P1	P182602
7440-70-2	Calcium	2250	mg/Kg			P	2.5	P1	P182602
7440-47-3	Chromium	5.1	mg/Kg			P	0.08	P1	P182602
7440-48-4	Cobalt	3.1	mg/Kg	B		P	0.08	P1	P182602
7440-50-8	Copper	17.6	mg/Kg			P	0.17	P1	P182602
7439-89-6	Iron	7590	mg/Kg			P	1.8	P1	P182602
7439-92-1	Lead	40.9	mg/Kg		*	P	0.20	P1	P182602
7439-95-4	Magnesium	1060	mg/Kg			P	1.5	P1	P182602
7439-96-5	Manganese	123	mg/Kg			P	0.01	P1	P182602
7439-97-6	Mercury	0.04	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	4.8	mg/Kg			P	0.24	P1	P182602
7440-09-7	Potassium	139	mg/Kg	B		P	4.0	P1	P182602
7782-49-2	Selenium	0.57	mg/Kg			P	0.36	P1	P182602
7440-22-4	Silver	2.4	mg/Kg			P	0.41	P1	P182602
7440-23-5	Sodium	114	mg/Kg	B		P	43.6	P1	P182602
7440-28-0	Thallium	0.64	mg/Kg	U		P	0.64	P1	P182602
7440-62-2	Vanadium	17.0	mg/Kg			P	0.11	P1	P182602
7440-66-6	Zinc	26.6	mg/Kg			P	0.07	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-13

Client ID: VGP-15-9

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 98

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	1100	mg/Kg			P	0.66	P1	P182602
7440-36-0	Antimony	0.23	mg/Kg	U		P	0.23	P1	P182602
7440-38-2	Arsenic	1.7	mg/Kg			P	0.26	P1	P182602
7440-39-3	Barium	5.1	mg/Kg	B		P	0.14	P1	P182602
7440-41-7	Beryllium	0.05	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.05	mg/Kg	U		P	0.05	P1	P182602
7440-70-2	Calcium	513	mg/Kg			P	2.3	P1	P182602
7440-47-3	Chromium	1.9	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	0.39 U	mg/Kg	B		P	0.07	P1	P182602
7440-50-8	Copper	6.3	mg/Kg			P	0.15	P1	P182602
7439-89-6	Iron	2960 J	mg/Kg			P	1.6	P1	P182602
7439-92-1	Lead	3.2 J	mg/Kg		*	P	0.18	P1	P182602
7439-95-4	Magnesium	210	mg/Kg	B		P	1.4	P1	P182602
7439-96-5	Manganese	10.1	mg/Kg			P	0.01	P1	P182602
7439-97-6	Mercury	0.08	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	1.4	mg/Kg	B		P	0.22	P1	P182602
7440-09-7	Potassium	69.6	mg/Kg	B		P	3.6	P1	P182602
7782-49-2	Selenium	0.33	mg/Kg	U		P	0.33	P1	P182602
7440-22-4	Silver	2.2	mg/Kg			P	0.37	P1	P182602
7440-23-5	Sodium	116	mg/Kg	B		P	40.0	P1	P182602
7440-28-0	Thallium	0.59	mg/Kg	U		P	0.59	P1	P182602
7440-62-2	Vanadium	2.9	mg/Kg	B		P	0.10	P1	P182602
7440-66-6	Zinc	12.1	mg/Kg			P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-14

Client ID: VGP-114-19

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 96

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	843	mg/Kg			P	0.68	P1	P182602
7440-36-0	Antimony	0.25 U	mg/Kg	B		P	0.24	P1	P182602
7440-38-2	Arsenic	1.3	mg/Kg			P	0.27	P1	P182602
7440-39-3	Barium	2.4	mg/Kg	B		P	0.15	P1	P182602
7440-41-7	Beryllium	0.08	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.05	mg/Kg	U		P	0.05	P1	P182602
7440-70-2	Calcium	285	mg/Kg	B		P	2.4	P1	P182602
7440-47-3	Chromium	3.0	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	0.64 U	mg/Kg	B		P	0.07	P1	P182602
7440-50-8	Copper	4.0	mg/Kg			P	0.16	P1	P182602
7439-89-6	Iron	4960 J	mg/Kg			P	1.7	P1	P182602
7439-92-1	Lead	0.62 J	mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	318	mg/Kg	B		P	1.5	P1	P182602
7439-96-5	Manganese	22.2	mg/Kg			P	0.01	P1	P182602
7439-97-6	Mercury	0.01	mg/Kg	U	*	CV	0.01	CV1	082202B
7440-02-0	Nickel	1.9	mg/Kg	B		P	0.23	P1	P182602
7440-09-7	Potassium	90.0	mg/Kg	B		P	3.8	P1	P182602
7782-49-2	Selenium	0.34	mg/Kg	U		P	0.34	P1	P182602
7440-22-4	Silver	0.39	mg/Kg	U		P	0.39	P1	P182602
7440-23-5	Sodium	121	mg/Kg	B		P	41.2	P1	P182602
7440-28-0	Thallium	0.60	mg/Kg	U		P	0.60	P1	P182602
7440-62-2	Vanadium	3.5	mg/Kg	B		P	0.10	P1	P182602
7440-66-6	Zinc	8.9	mg/Kg			P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-17

Client ID: VGP-1A0-5

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 95

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	2180	mg/Kg			P	0.67	P1	P182602
7440-36-0	Antimony	0.24	mg/Kg	U		P	0.24	P1	P182602
7440-38-2	Arsenic	4.5	mg/Kg			P	0.27	P1	P182602
7440-39-3	Barium	13.9	mg/Kg	B		P	0.14	P1	P182602
7440-41-7	Beryllium	0.11	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.08	mg/Kg	B		P	0.05	P1	P182602
7440-70-2	Calcium	1120	mg/Kg			P	2.4	P1	P182602
7440-47-3	Chromium	6.2	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	1.8	mg/Kg	B		P	0.07	P1	P182602
7440-50-8	Copper	8.5	mg/Kg			P	0.15	P1	P182602
7439-89-6	Iron	4220	mg/Kg			P	1.7	P1	P182602
7439-92-1	Lead	13.0	mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	672	mg/Kg			P	1.4	P1	P182602
7439-96-5	Manganese	49.0	mg/Kg			P	0.01	P1	P182602
7439-97-6	Mercury	0.04	mg/Kg		*	CV	0.01	CV1	082202B
7440-02-0	Nickel	3.1	mg/Kg	B		P	0.23	P1	P182602
7440-09-7	Potassium	109	mg/Kg	B		P	3.7	P1	P182602
7782-49-2	Selenium	0.34	mg/Kg	U		P	0.34	P1	P182602
7440-22-4	Silver	1.4	mg/Kg			P	0.38	P1	P182602
7440-23-5	Sodium	100	mg/Kg	B		P	40.9	P1	P182602
7440-28-0	Thallium	0.60	mg/Kg	U		P	0.60	P1	P182602
7440-62-2	Vanadium	6.7	mg/Kg			P	0.10	P1	P182602
7440-66-6	Zinc	19.5	mg/Kg			P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-18

Client ID: VLP-A14-19

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: SOIL

Date Received: 8/15/02

Level: LOW

% Solids: 95

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	810	mg/Kg			P	0.67	P1	P182602
7440-36-0	Antimony	0.24	mg/Kg	U		P	0.24	P1	P182602
7440-38-2	Arsenic	0.72	mg/Kg	B		P	0.27	P1	P182602
7440-39-3	Barium	3.0	mg/Kg	B		P	0.14	P1	P182602
7440-41-7	Beryllium	0.10	mg/Kg	B		P	0.01	P1	P182602
7440-43-9	Cadmium	0.05	mg/Kg	U		P	0.05	P1	P182602
7440-70-2	Calcium	402	mg/Kg	B		P	2.4	P1	P182602
7440-47-3	Chromium	2.3	mg/Kg			P	0.07	P1	P182602
7440-48-4	Cobalt	0.29	mg/Kg	B		P	0.07	P1	P182602
7440-50-8	Copper	3.4	mg/Kg			P	0.15	P1	P182602
7439-89-6	Iron	3320	mg/Kg			P	1.7	P1	P182602
7439-92-1	Lead	0.95	mg/Kg		*	P	0.19	P1	P182602
7439-95-4	Magnesium	197	mg/Kg	B		P	1.4	P1	P182602
7439-96-5	Manganese	10.4	mg/Kg			P	0.01	P1	P182602
7439-97-6	Mercury	0.01	mg/Kg	U	*	CV	0.01	CV1	082202B
7440-02-0	Nickel	2.1	mg/Kg	B		P	0.23	P1	P182602
7440-09-7	Potassium	99.3	mg/Kg	B		P	3.7	P1	P182602
7782-49-2	Selenium	0.34	mg/Kg	U		P	0.34	P1	P182602
7440-22-4	Silver	0.38	mg/Kg	U		P	0.38	P1	P182602
7440-23-5	Sodium	93.1	mg/Kg	B		P	40.9	P1	P182602
7440-28-0	Thallium	0.60	mg/Kg	U		P	0.60	P1	P182602
7440-62-2	Vanadium	1.9	mg/Kg	B		P	0.10	P1	P182602
7440-66-6	Zinc	10.6	mg/Kg			P	0.06	P1	P182602

METALS

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Rich Consultants

SDG No.: P3793

Method Type: SW846

Sample ID: P3793-20

Client ID: FB-081302

Contract: Rich Consultants

Lab Code: CHEMED

Case No.:

SAS No.: P3793

Matrix: WATER

Date Received: 8/15/02

Level: LOW

% Solids:

CAS No.	Analyte	Concentration	Units	C	Qual	M	DL	Instrument ID	Analytical Run
7429-90-5	Aluminum	18.4	ug/L	U		P	18.4	P1	P182602
7440-36-0	Antimony	3.8	ug/L	U		P	3.8	P1	P182602
7440-38-2	Arsenic	4.5	ug/L	U		P	4.5	P1	P182602
7440-39-3	Barium	9.9	ug/L	U		P	9.9	P1	P182602
7440-41-7	Beryllium	0.10	ug/L	U		P	0.10	P1	P182602
7440-43-9	Cadmium	0.80	ug/L	U		P	0.80	P1	P182602
7440-70-2	Calcium	36.2	ug/L	U		P	36.2	P1	P182602
7440-47-3	Chromium	1.4	ug/L	U		P	1.4	P1	P182602
7440-48-4	Cobalt	0.70	ug/L	U		P	0.70	P1	P182602
7440-50-8	Copper	3.6	ug/L	U		P	3.6	P1	P182602
7439-89-6	Iron	22.2	ug/L	U		P	22.2	P1	P182602
7439-92-1	Lead	3.0	ug/L	U		P	3.0	P1	P182602
7439-95-4	Magnesium	7.0	ug/L	U		P	7.0	P1	P182602
7439-96-5	Manganese	0.20	ug/L	U		P	0.20	P1	P182602
7439-97-6	Mercury	0.20	ug/L	U		CV	0.20	CV1	082202B
7440-02-0	Nickel	2.0	ug/L	U		P	2.0	P1	P182602
7440-09-7	Potassium	27.3	ug/L	U		P	27.3	P1	P182602
7782-49-2	Selenium	0.90	ug/L	U		P	0.90	P1	P182602
7440-22-4	Silver	3.7	ug/L	U		P	3.7	P1	P182602
7440-23-5	Sodium	217	ug/L	U		P	217	P1	P182602
7440-28-0	Thallium	5.3	ug/L	U		P	5.3	P1	P182602
7440-62-2	Vanadium	1.4	ug/L	U		P	1.4	P1	P182602
7440-66-6	Zinc	1.8	ug/L	U		P	1.8	P1	P182602

Premier Environmental Services.

APPENDIX C



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH JOB NO.:

P3793 A58

CHEMTECH QUOTE NO.:

CLIENT INFORMATION				PROJECT INFORMATION				BILLING INFORMATION											
REPORT TO BE SENT TO:				PROJECT NAME:				BILL TO:											
COMPANY: CA Rich Consultants, Inc.				PROJECT NO.:				PO #:											
ADDRESS: 17 Dupont Street				PROJECT MANAGER: ERIC Weinstock				ADDRESS:											
CITY: Plainview STATE: NY ZIP: 11803				LOCATION: Hicksville, NY				CITY: STATE: ZIP:											
ATTENTION: ERIC Weinstock				PHONE:				PHONE:											
PHONE: 516-8844 FAX: 516-576-0093				FAX:				ANALYSIS											
DATA TURNAROUND INFORMATION				DATA DELIVERABLE INFORMATION															
FAX: DAYS *				☐ RESULTS ONLY ☐ NY STATE CATEGORY A ☐ RESULTS PLUS QC ☒ NY STATE CATEGORY B ☐ REGULATORY FORMAT, STATE: ☐ NEW JERSEY REDUCED DELIVERABLES ☐ CLP ☐ EDD FORMAT:															
HARD COPY: STD DAYS *																			
EDD: DAYS *																			
* TO BE APPROVED BY CHEMTECH																			
** NORMAL TURNAROUND TIME - 14 DAYS																			
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS		
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9			
1. 01	VLP-I	Soil	X		8/13/02	12:27	2	1	1									See Attached letter for Special Analytical Requirements	
2. 02	VLP-ID	Soil	X			12:30	2	1	1										
3. 03	VLP-K	Soil	X			11:40	2	1	1										
4. 04	VLP-L	Soil	X			11:25	2	1	1										
5. 05	VLP-M	Soil	X			12:32	2	1	1										
6. 06	VLP-N	Soil	X			12:59	2	1	1										
7. 07, 08	VLP-N M/MSD	Soil	X			12:59	2	1	1										
8.																			
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY																			
RELINQUISHED BY SAMPLER:				DATE/TIME:				RECEIVED BY:				Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☐ Temp. of Cooler							
1.								1.				Comments:							
RELINQUISHED BY:				DATE/TIME:				RECEIVED BY:				AS per Quote # Q0207071 -							
2.								2.											
RELINQUISHED BY:				DATE/TIME:				RECEIVED FOR LAB BY:				SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT							
3. UPS				8/15/02				3. Sunny Patel				CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT							
												Shipment Complete: ☐ YES ☐ NO							



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH JOB NO.:

P3793ASP

CHEMTECH QUOTE NO.:

CLIENT INFORMATION				PROJECT INFORMATION				BILLING INFORMATION										
REPORT TO BE SENT TO:				PROJECT NAME: <u>Coral Graphics</u>				BILL TO: <u>Client</u> PO #:										
COMPANY: <u>CA Rich Consultants, Inc.</u>				PROJECT NO.:				ADDRESS:										
ADDRESS: <u>17 Dupont Street</u>				PROJECT MANAGER: <u>ERIC Weinstock</u>				CITY: STATE: ZIP:										
CITY: <u>Plainview</u> STATE: <u>NY</u> ZIP: <u>11803</u>				LOCATION: <u>Hicksville, NY</u>				ATTENTION: PHONE:										
ATTENTION: <u>ERIC Weinstock</u>				PHONE: <u>516 576-8844</u> FAX: <u>516 576-0093</u>				ANALYSIS										
DATA TURNAROUND INFORMATION				DATA DELIVERABLE INFORMATION				<u>1 9260 + Isopropyl Alcohol</u> <u>2 12.34 - Tetramethylammonium</u> <u>3 8270 + TAL Metals</u>										
FAX: <u>STD</u> DAYS * HARD COPY: <u>STD</u> DAYS * EDD: <u>STD</u> DAYS * * TO BE APPROVED BY CHEMTECH ** NORMAL TURNAROUND TIME - 14 DAYS				☐ RESULTS ONLY ☐ NY STATE CATEGORY A ☐ RESULTS PLUS QC ☒ NY STATE CATEGORY B ☐ REGULATORY FORMAT, STATE: _____ ☐ NEW JERSEY REDUCED DELIVERABLES ☐ CLP ☒ EDD FORMAT: <u>EXCEL</u>														
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9		
1. 09	VLP-O (13.5')	Soil		X	8/13/02	10:25	2	1				1						See Attached Letter for Special Analytical Requirements
2. 10	VLP-P (13.5')	Soil		X	8/13/02	8:50	2	1				1						
3. 11	VLP-Q (13.5')	Soil		X	8/13/02	9:22	2	1				1						
4.																		
5.																		
6.																		
7.																		
8.																		
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY																		
RELINQUISHED BY SAMPLER:		DATE/TIME:		RECEIVED BY:		Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☐ Temp. of Cooler _____												
1. <u>Stephen M. M...</u>		8/14/02		1. <u>[Signature]</u>		Comments: <u>AS PER Quote # Q0207071</u>												
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		Page <u>2</u> of <u>4</u> SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☐ OVERNIGHT ☐ PICKED UP ☐ OVERNIGHT												
2. <u>[Signature]</u>				2. <u>[Signature]</u>		Shipment Complete: ☐ YES ☐ NO												
RELINQUISHED BY:		DATE/TIME:		RECEIVED FOR LAB BY:														
3. <u>UPS</u>		8/15/02 10:00		3. <u>Sunny R...</u>														



(908) 789-8900 Fax (908) 789-8922

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CHEMTECH JOB NO.:

CHEMTECH QUOTE NO.:

P3793 ASF

Ver. 7/2001

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

24244

Premier Environmental Services.

APPENDIX D

Q0207071

Coral Graphics

VOC Approach

VOC-~~8260~~/8260B (soils)

VOC-~~8260~~/8260B (waters)

8/22/02

Thank you for your continuing support as we look forward to supplying the analytical support services to your project. To accomplish the data objectives, Chemtech can undertake several modifications to our Volatile Chemtech Full (8260B) runs.

Those modifications include starting the analytical run at 30-degree Celsius. Chemtech will adjust the start of the (8260) VOC run at 30 degree C which is outside of the method definition to identify isopropyl alcohol.

Add additional standards i) isopropyl alcohol and ii) 1,2,3,4 Tetramethylbenzene (CAS# 95-93-2) to the mix of standards. The sample matrixes for this round of your project: Coral Graphics are water and soil matrixes.

The data objectives for trimethylbenzene will be address by the compounds 1,3,5-trimethylbenzene and 1,2,4 trimethylbenzene that are in our mix of standards.

Those modifications that expand the method definition for your project data objectives must have site specific matrix spike/matrix spike duplicate selection on your chain of Custody for each Sample Delivery Group (SDG) for analysis. Further, CA Rich Inc., it's client or the controlling Regulatory Agency (NYSDEC) will hold Chemtech without fault or harmless during any subsequent examinations of our data under any Data Usability Summary Report (DUSR) or data validation that identifies the Volatile analysis as non-compliant with the method due to these project specific data objectives.

Chemtech unit price with this program for the volatile analysis will help defer the added costs incurred with standards and QA/QC associated with these modifications. The per sample based upon the schedule quantities to be performed. If significant variance occurs with the projected quantities, Chemtech will adjust it's price to adequately recover our time, materials and services rendered with these modifications.

Chemtech will require a lead-time (unspecified) to obtain the standards and prepare for the project specific data objectives. If you have any additional questions, please call me to discuss and confirm the project specific data objectives.

Premier Environmental Services.

DATA USABILITY SUMMARY REPORT (DUSR)
OF THE
CORAL GRAPHICS SITE

ORGANIC ANALYSES
AQUEOUS SAMPLES

CHEMTECH CONSULTING GROUP
MOUNTAINSIDE, NJ

REPORT NUMBER: P4640

November, 2002

Prepared for
C.A. Rich Consultants, Inc.
Plainview, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566
(516) 223-9761 • FAX (516) 223-0983

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses

SITE: Coral Graphics

CONTRACT LAB: Chemtech Consulting Group
Mountainside, New Jersey

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: November, 2002

MATRIX: Aqueous

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('95).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unreliable/unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for fourteen (14) aqueous samples and one (1) Trip Blank sample. The samples were collected October 10, 2002 and October 11, 2002 and shipped to Chemtech Consulting Group located in Mountainside, New Jersey. Samples were received at the laboratory on October 12, 2002. The samples were analyzed for Volatile Organic Analytes (EPA Method 8260) as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A list of definitions that may be used in this report is located in Appendix A. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C. Appendix D of this report contains a copy of Chemtech correspondence dated 8/22/02 that cites the method utilized for the reporting of the additional analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

1. OVERVIEW:

The fourteen (14) aqueous samples and one (1) Trip Blank Sample were submitted to the laboratory for the analyses requested on the Chain of Custody (COC) documentation. The samples were analyzed for the organic analytes using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260. CA Rich requested that the analytes Isopropyl Alcohol and 1,2,3,4-Tetramethylbenzene also be calibrated/quantitated and reported with the Volatile Organic Analyses. These analytes are reported on the result pages. Proper custody transfer of the samples was documented in the laboratory report. The laboratory provided a deliverables package in accordance with the guidelines in the NYSDEC ASP, Rev '95, Category B.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly preserved aqueous and non-aqueous samples is 14 days from collection.

Volatile Organic Analyses - The aqueous samples associated with this data set were analyzed within the ten (10) days of VTSR. All samples were analyzed within the method holding time.

3. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Volatile Organic Analyses – Each sample was spiked with the surrogate compounds 1,2-Dichloroethane-d4, 4-Bromofluorobenzene, Toluene-d8 and Dibromofluoromethane. In-house surrogate recovery limits were utilized by the laboratory. The percent recovery of each surrogate met QC criteria in all field and QC samples associated with each data set.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Volatile Organic Analyses – Sample VGW-867-70 was utilized for the MS/MSD analyses. All percent recoveries and Relative Percent Differences (RPD's) met QC criteria in the MS/MSD sample set.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

Volatile Organic Analytes – The laboratory performed one blank spike analysis with this data set. The sample was spiked with all reported analytes. All spike recoveries in the blank spike sample met QC criteria.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

A) Method Blank contamination

Volatile Organic Analyses – Three (3) method blank analyses are associated with this data set. Each method blank was free from contamination.

B) Field Blank contamination

A Field Blank was not associated with this data set.

C) Trip Blank contamination

The Trip Blank (TB-GW101102) sample was free from contamination.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria is not met in an initial calibration the positive results are qualified "J". Non detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, effected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria is set for these analytes. If the minimum criteria is not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses - One (1) soil calibration curve is associated with the aqueous samples in this data set. The laboratory performed an initial five (5) point multi level calibration using the standards 5 ppb through 200 ppb on October 18, 2002. The RRF for all compounds met QC criteria with the exception of Tert-Butyl Alcohol (TBA) (0.042), Acrolein (0.021) and 2-Chloroethylvinyl-ether (2-CEVE) (0.032). These analytes have been qualified "R" unuseable, due to the low response factor, in the aqueous samples in this data set. Two (2) continuing calibration standards are associated with the aqueous samples in this data set.

A five (5) point calibration curve was analyzed for both the Iso-propyl Alcohol and 1,2,3,4-Tetramethylbenzene. The response factor of these analytes met QC criteria in both the initial calibration curve and all continuing calibration analyses associated with this data set.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgement. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unuseable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses – One (1) aqueous calibration curve is associated with this data set. All RSD% met QC criteria.

Two (2) continuing calibration standards are associated with the samples in this data set. The %Difference met QC criteria for all analytes with the exception of that listed below:

Date of Analysis	File ID	Analyte	%Difference
10/21/02	VA102118	2-CEVE	40.6

This standard is associated with all dilution analyses. This analyte was not detected in the samples, therefore, no additional action was taken.

8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). The tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses – All instrument Tuning criteria was met for these sample analyses.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non-detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard evaluation criteria is applied to all field and QC samples.

Volatile Organic Analyses – All Internal Standard QC criteria was met for these analyses

10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

Volatile Organic Analyses – All samples reported the VOA 8260 analytes specified on the COC documents. In addition, the analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene were analyzed for and reported. The laboratory reported these analytes to the determined method detection limit. All samples were initially analyzed without dilution, however, due to the concentration of Tetrachloroethene some samples required additional dilution.

All samples were reported with both the initial analysis (no dilutions) as well as the dilution analysis. Reporting limits in the dilution analysis reflect the dilution utilized.

Sample VGW-762-70 was analyzed using a 1:5 dilution due to the presence of Tetrachloroethene (210 ug/l) in the sample.

Sample VGW-662-55 was analyzed using a 1:5 dilution due to the presence of Tetrachloroethene (510 ug/l) in the sample.

Sample VGW-955-58 was analyzed using a 1:5 dilution due to the presence of Tetrachloroethene (270 ug/l) in the sample.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

11. OVERALL ASSESSMENT:

Analytical QC criteria was met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

The additional Volatile Organic Analytes were reported using the criteria outlined in Chemtech correspondence dated 8/22/02. A copy of this is provided in Appendix D of this report.

The data provided for this data set is acceptable for use, with the noted data qualifiers.

Premier Environmental Services.

TABLE 1

Premier Environmental Services.

CLIENT SAMPLE ID

LABORATORY SAMPLE ID

VGW-867-70	P4640-01
VGW-867-70 MS	P4640-02
VGW-867-70 MSD	P4640-03
VGW-852-55	P4640-04
VGW-762-70	P4640-05
VGW-752-55	P4640-06
VGW-667-70	P4640-07
VGW-6D67-70	P4640-08
VGW-652-55	P4640-09
VGW-370-73	P4640-10
VGW-3D70-73	P4640-11
VGW-355-58	P4640-12
VGW-470-73	P4640-13
VGW-455-58	P4640-14
VGW-970-73	P4640-15
VGW-955-58	P4640-16
TB-GW101102	P4640-17

Premier Environmental Services.

APPENDIX A

Premier Environmental Services.

DATA QUALIFIER DEFINITIONS

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unuseable. The presence or absence of the analyte cannot be verified.

K - The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL - The analyte was not detected, and the reported quantitation limit is probably higher than reported.

Premier Environmental Services.

APPENDIX B

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-01

Client ID: VGW-867-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101822.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
-----------	------------	---------------	---	-----	-----	-------

TARGETS

Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
cis-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
trans-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
1,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
trans-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

10/25/02
SC

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-01

Client ID: VGW-867-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101822.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acetone	75-25-2	< 0.49	U	5.0	0.49	ug/L
2-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	10		5.0	0.70	ug/L
o-Propylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-01

Client ID: VGW-867-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101822.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1,1-Dichloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
DEROGATES						
1,1-Dichloroethane-d4	79-00-5	48.41	97 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	53.55	107 %	70 - 125		SPK: 50
Bromofluorobenzene	460-00-4	47.72	95 %	70 - 125		SPK: 50
Dibromofluoromethane		55.39	111 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1975965	6.08			
1,4-Difluorobenzene	540-36-3	2147068	7.88			
Chlorobenzene-d5	3114-55-4	1863234	14.10			
1,4-Dichlorobenzene-d4	3855-82-1	1175459	19.64			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-04

Client ID: VGW-852-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101823.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
trans-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-04

Client ID: VGW-852-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101823.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Compound	CAS Number	Concentration	C	RDL	MDL	Units
Chloroform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	13		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-04

Client ID: VGW-852-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101823.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.21	98 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	51.52	103 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	44.97	90 %	70 - 125		SPK: 50
Dibromofluoromethane		51.92	104 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1889166	6.08			
1,4-Difluorobenzene	540-36-3	2124125	7.88			
Chlorobenzene-d5	3114-55-4	1832458	14.10			
1,4-Dichlorobenzene-d4	3855-82-1	1104809	19.63			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-05

Client ID: VGW-762-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101824.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
1,4-Dihydrocyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
1,1-Dichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
1,1-Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
1,1-Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
cis-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

10/25/02
JY

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-05

Client ID: VGW-762-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101824.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoforn	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	210	E	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Bromobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m,p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,4-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,3-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-Propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-05

Client ID: VGW-762-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101824.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
n-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.24	98 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	55.08	110 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	49.39	99 %	70 - 125		SPK: 50
Dibromofluoromethane		54.03	108 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1786762	6.10			
1,2-Difluorobenzene	540-36-3	2015415	7.88			
Fluorobenzene-d5	3114-55-4	1811268	14.10			
1,4-Dichlorobenzene-d4	3855-82-1	1133286	19.61			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-05DL

Client ID: VGW-762-70DL

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102123.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol: 100

Soil Aliquot Vol:

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chlorodifluoromethane	75-71-8	< 3.6	UD	25	3.6	ug/L
Chloromethane	74-87-3	< 2.6	UD	25	2.6	ug/L
Bromomethane	74-83-9	< 1.9	UD	25	1.9	ug/L
Vinyl chloride	75-01-4	< 4.0	UD	25	4.0	ug/L
Chloroethane	75-00-3	< 12	UD	25	12	ug/L
Trichlorofluoromethane	75-69-4	< 3.6	UD	25	3.6	ug/L
Methyl Acetate	79-20-9	< 3.9	UD	25	3.9	ug/L
Methylene Chloride	75-09-2	< 8.8	UD	25	8.8	ug/L
Acetone	67-64-1	< 18	UD	25	18	ug/L
Carbon disulfide	75-15-0	< 3.6	UD	25	3.6	ug/L
1,1-Dichloroethene	75-35-4	< 3.4	UD	25	3.4	ug/L
1,1-Dichloroethane	75-34-3	< 3.3	UD	25	3.3	ug/L
Methyl tert-butyl Ether	1634-04-4	< 5.2	UD	25	5.2	ug/L
trans-1,2-Dichloroethene	156-60-5	< 4.0	UD	25	4.0	ug/L
cis-1,2-Dichloroethene	156-59-2	< 3.1	UD	25	3.1	ug/L
2,2-Dichloropropane	594-20-7	< 3.2	UD	25	3.2	ug/L
Chloroform	67-66-3	< 3.0	UD	25	3.0	ug/L
1,2-Dichloroethane	107-06-2	< 2.8	UD	25	2.8	ug/L
2-Butanone	78-93-3	< 12	UD	25	12	ug/L
1,1,1-Trichloroethane	71-55-6	< 3.8	UD	25	3.8	ug/L
Cyclohexane	110-82-7	< 4.9	UD	25	4.9	ug/L
Carbon Tetrachloride	56-23-5	< 2.4	UD	25	2.4	ug/L
1,1-Dichloropropene	563-43-2	< 15	UD	25	15	ug/L
Bromodichloromethane	75-27-4	< 3.6	UD	25	3.6	ug/L
Methylcyclohexane	108-87-7	< 3.4	UD	25	3.4	ug/L
1,2-Dichloropropane	78-87-5	< 3.6	UD	25	3.6	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 3.3	UD	25	3.3	ug/L
Trichloroethene	79-01-6	< 3.6	UD	25	3.6	ug/L
Dibromochloromethane	124-48-1	< 3.3	UD	25	3.3	ug/L
Dibromomethane	74-95-3	< 3.0	UD	25	3.0	ug/L
1,1,2-Trichloroethane	79-00-5	< 3.1	UD	25	3.1	ug/L
Benzene	71-43-2	< 3.6	UD	25	3.6	ug/L
1,3-Dichloropropene	10061-02-6	< 3.3	UD	25	3.3	ug/L
1,2-Dibromoethane	106-93-4	< 3.2	UD	25	3.2	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-05DL

Client ID: VGW-762-70DL

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102123.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acetone	75-25-2	< 2.4	UD	25	2.4	ug/L
1-Methyl-2-Pentanone	108-10-1	< 4.0	UD	25	4.0	ug/L
Hexanone	591-78-6	< 3.0	UD	25	3.0	ug/L
1,1-Dichloroethene	127-18-4	210	D	25	3.5	ug/L
Isopropylbenzene	98-82-8	< 3.8	UD	25	3.8	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 3.5	UD	25	3.5	ug/L
Toluene	108-88-3	< 3.6	UD	25	3.6	ug/L
1,3-Dichloropropane	142-28-9	< 2.8	UD	25	2.8	ug/L
Chlorobenzene	108-90-7	< 3.9	UD	25	3.9	ug/L
Ethyl Benzene	100-41-4	< 3.8	UD	25	3.8	ug/L
Styrene	100-42-5	< 4.6	UD	25	4.6	ug/L
m/p-Xylenes	136777-61-2	< 7.6	UD	25	7.6	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 3.2	UD	25	3.2	ug/L
o-Xylene	95-47-6	< 3.6	UD	25	3.6	ug/L
1,3-Dichlorobenzene	541-73-1	< 3.7	UD	25	3.7	ug/L
1,4-Dichlorobenzene	106-46-7	< 4.6	UD	25	4.6	ug/L
1,2-Dichlorobenzene	95-50-1	< 4.4	UD	25	4.4	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 4.6	UD	25	4.6	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 6.4	UD	25	6.4	ug/L
Bromobenzene	108-86-1	< 3.0	UD	25	3.0	ug/L
1,2,3-Trichloropropane	96-18-4	< 5.2	UD	25	5.2	ug/L
N-propylbenzene	103-61-5	< 4.0	UD	25	4.0	ug/L
2-Chlorotoluene	95-49-8	< 4.2	UD	25	4.2	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 4.8	UD	25	4.8	ug/L
4-Chlorotoluene	106-43-4	< 5.1	UD	25	5.1	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 4.2	UD	25	4.2	ug/L
Sec-butylbenzene	135-98-8	< 4.8	UD	25	4.8	ug/L
Tert-Butylbenzene	98-06-6	< 4.7	UD	25	4.7	ug/L
n-Butylbenzene	104-51-8	< 6.2	UD	25	6.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 5.2	UD	25	5.2	ug/L
Hexachlorobutadiene	87-68-3	< 4.7	UD	25	4.7	ug/L
Naphthalene	91-20-3	< 4.6	UD	25	4.6	ug/L
Vinyl Acetate	108-05-4	< 13	UD	120	13	ug/L
Tert butyl alcohol	75-65-0	< 20 R	UD	120	20	ug/L
Acrolein	107-02-8	< 24 R	UD	120	24	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-05DL

Client ID: VGW-762-70DL

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102123.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 18	UD	120	18	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 11 R	UD	25	11	ug/L
n-Isopropyltoluene	99-87-6	< 5.4	UD	25	5.4	ug/L
Isopropyl Alcohol	67-63-0	< 25	UD	25	25	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 25	UD	25	25	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.75	98 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.53	97 %	70 - 125		SPK: 50
p-Bromofluorobenzene	460-00-4	43.14	86 %	70 - 125		SPK: 50
Dibromofluoromethane		56.27	113 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1968450	6.02			
1,4-Difluorobenzene	540-36-3	2132786	7.80			
Chlorobenzene-d5	3114-55-4	1623126	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1127333	19.55			

Volatiles

LOG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-06

Client ID: VGW-752-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101825.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropene	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,2-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-06

Client ID: VGW-752-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101825.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Formaldehyde	75-25-2	< 0.49	U	5.0	0.49	ug/L
1-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	41		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,1,1-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
Isopropylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
o-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
p-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
tert-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
n-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acetolcin	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-06

Client ID: VGW-752-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101825.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1-Chlorooctyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	51.11	102 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	51.14	102 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	45.54	91 %	70 - 125		SPK: 50
Dibromofluoromethane		56.7	113 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1721604	6.08			
1,4-Difluorobenzene	540-36-3	1962812	7.88			
Chlorobenzene-d5	3114-55-4	1599959	14.10			
1,4-Dichlorobenzene-d4	3855-82-1	995696	19.61			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-07

Client ID: VGW-667-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101826.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
1,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
1,1,1-Trichloroethene	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
1,1-Dichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
trans-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-07

Client ID: VGW-667-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101826.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Formaldehyde	75-25-2	< 0.49	U	5.0	0.49	ug/L
Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
1,1-Dichloroethene	127-18-4	190		5.0	0.70	ug/L
n-Propylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Benzene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,1-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
o-Toluenes	108-90-7	< 0.78	U	5.0	0.78	ug/L
Phenyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
p-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
o-Toluenes	108-86-1	< 0.60	U	5.0	0.60	ug/L
2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-Propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
sec-Butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-07

Client ID: VGW-667-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VAI01826.D

Analytical Run ID: VAI01802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 5.5	U	25	5.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
PROGATES						
1,1-Dichloroethane-d4	79-00-5	50.34	101 %	68 - 135		SPK: 50
1,2-Dichloroethane-d8	2037-26-5	51.23	102 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	45.19	90 %	70 - 125		SPK: 50
1-Bromofluoromethane		55.71	111 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
1,2,3,4-Tetrafluorobenzene	363-72-4	1680544	6.10			
1,3-Difluorobenzene	540-36-3	1903991	7.88			
1,4-Difluorobenzene	3114-55-4	1508662	14.12			
1,2-Dichlorobenzene-d4	3855-82-1	974286	19.63			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-08

Client ID: VGW-6D67-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101827.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
1,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-08

Client ID: VGW-6D67-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101827.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chloroform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	170		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Aroclor	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-08

Client ID: VGW-6D67-70

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101827.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	52.32	105 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	49.64	99 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	40.96	82 %	70 - 125		SPK: 50
Dibromofluoromethane		52.33	105 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1707638	6.08			
1,4-Difluorobenzene	540-36-3	1996431	7.88			
Chlorobenzene-d5	3114-55-4	1565106	14.10			
1,4-Dichlorobenzene-d4	3855-82-1	934777	19.63			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-09

Client ID: VGW-652-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101828.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Dichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Ethyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	21		5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	5.0	J	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
1,2-Dichloroethene	79-01-6	1.3	J	5.0	0.72	ug/L
Bromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Bromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-09

Client ID: VGW-652-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101828.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Monochloroform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	430	E	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Bromobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
o-Xylol Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
m-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
o-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
p-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
o-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-Propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
o-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
p-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
sec-Butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-09

Client ID: VGW-652-55

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/19/02

Matrix: WATER

File ID: VA101828.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1018W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
n-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	63.16	126 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	49.29	99 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	48.77	98 %	70 - 125		SPK: 50
1-Bromofluoromethane		58.37	117 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1231692	6.10			
1,4-Difluorobenzene	540-36-3	1493263	7.88			
1,3,5-Trifluorobenzene-d5	3114-55-4	1292212	14.12			
1,2-Dichlorobenzene-d4	3855-82-1	846792	19.61			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-09DL

Client ID: VGW-652-55DL

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102133.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
HALOGENATEDS						
Dichlorodifluoromethane	75-71-8	< 3.6	UD	25	3.6	ug/L
Dibromomethane	74-87-3	< 2.6	UD	25	2.6	ug/L
Bromomethane	74-83-9	< 1.9	UD	25	1.9	ug/L
Ethyl chloride	75-01-4	< 4.0	UD	25	4.0	ug/L
Chloroethane	75-00-3	< 12	UD	25	12	ug/L
Trichlorofluoromethane	75-69-4	< 3.6	UD	25	3.6	ug/L
Methyl Acetate	79-20-9	< 3.9	UD	25	3.9	ug/L
Methylene Chloride	75-09-2	< 8.8	UD	25	8.8	ug/L
Acetone	67-64-1	23	JD	25	18	ug/L
Carbon disulfide	75-15-0	< 3.6	UD	25	3.6	ug/L
1,1-Dichloroethene	75-35-4	< 3.4	UD	25	3.4	ug/L
1,1-Dichloroethane	75-34-3	< 3.3	UD	25	3.3	ug/L
Methyl tert-butyl Ether	1634-04-4	< 5.2	UD	25	5.2	ug/L
trans-1,2-Dichloroethene	156-60-5	< 4.0	UD	25	4.0	ug/L
cis-1,2-Dichloroethene	156-59-2	< 3.1	UD	25	3.1	ug/L
2,2-Dichloropropane	594-20-7	< 3.2	UD	25	3.2	ug/L
Chloroform	67-66-3	< 3.0	UD	25	3.0	ug/L
1,2-Dichloroethane	107-06-2	< 2.8	UD	25	2.8	ug/L
2-Butanone	78-93-3	< 12	UD	25	12	ug/L
1,1,1-Trichloroethane	71-55-6	< 3.8	UD	25	3.8	ug/L
Cyclohexane	110-82-7	< 4.9	UD	25	4.9	ug/L
Carbon Tetrachloride	56-23-5	< 2.4	UD	25	2.4	ug/L
1,1-Dichloropropene	563-43-2	< 15	UD	25	15	ug/L
Bromodichloromethane	75-27-4	< 3.6	UD	25	3.6	ug/L
Methylcyclohexane	108-87-7	< 3.4	UD	25	3.4	ug/L
1,2-Dichloropropane	78-87-5	< 3.6	UD	25	3.6	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 3.3	UD	25	3.3	ug/L
Trichloroethene	79-01-6	< 3.6	UD	25	3.6	ug/L
Dibromochloromethane	124-48-1	< 3.3	UD	25	3.3	ug/L
Dibromomethane	74-95-3	< 3.0	UD	25	3.0	ug/L
1,1,2-Trichloroethane	79-00-5	< 3.1	UD	25	3.1	ug/L
Benzene	71-43-2	< 3.6	UD	25	3.6	ug/L
1,3-Dichloropropene	10061-02-6	< 3.3	UD	25	3.3	ug/L
1,2-Dibromoethane	106-93-4	< 3.2	UD	25	3.2	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-09DL

Client ID: VGW-652-55DL

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102133.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chloroform	75-25-2	< 2.4	UD	25	2.4	ug/L
Methyl-2-Pentanone	108-10-1	< 4.0	UD	25	4.0	ug/L
Hexanone	591-78-6	< 3.0	UD	25	3.0	ug/L
Trichloroethene	127-18-4	510	D	25	3.5	ug/L
Propylbenzene	98-82-8	< 3.8	UD	25	3.8	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 3.5	UD	25	3.5	ug/L
Toluene	108-88-3	< 3.6	UD	25	3.6	ug/L
1,2-Dichloropropane	142-28-9	< 2.8	UD	25	2.8	ug/L
Chlorobenzene	108-90-7	< 3.9	UD	25	3.9	ug/L
Ethyl Benzene	100-41-4	< 3.8	UD	25	3.8	ug/L
Styrene	100-42-5	< 4.6	UD	25	4.6	ug/L
m,p-Xylenes	136777-61-2	< 7.6	UD	25	7.6	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 3.2	UD	25	3.2	ug/L
o-Xylene	95-47-6	< 3.6	UD	25	3.6	ug/L
1,3-Dichlorobenzene	541-73-1	< 3.7	UD	25	3.7	ug/L
1,4-Dichlorobenzene	106-46-7	< 4.6	UD	25	4.6	ug/L
1,2-Dichlorobenzene	95-50-1	< 4.4	UD	25	4.4	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 4.6	UD	25	4.6	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 6.4	UD	25	6.4	ug/L
Bromobenzene	108-86-1	< 3.0	UD	25	3.0	ug/L
1,2,3-Trichloropropane	96-18-4	< 5.2	UD	25	5.2	ug/L
n-Propylbenzene	103-61-5	< 4.0	UD	25	4.0	ug/L
2-Chlorotoluene	95-49-8	< 4.2	UD	25	4.2	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 4.8	UD	25	4.8	ug/L
4-Chlorotoluene	106-43-4	< 5.1	UD	25	5.1	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 4.2	UD	25	4.2	ug/L
Sec-butylbenzene	135-98-8	< 4.8	UD	25	4.8	ug/L
tert-Butylbenzene	98-06-6	< 4.7	UD	25	4.7	ug/L
n-Butylbenzene	104-51-8	< 6.2	UD	25	6.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 5.2	UD	25	5.2	ug/L
Hexachlorobutadiene	87-68-3	< 4.7	UD	25	4.7	ug/L
Naphthalene	91-20-3	< 4.6	UD	25	4.6	ug/L
Vinyl Acetate	108-05-4	< 13	UD	120	13	ug/L
tert butyl alcohol	75-65-0	< 20 R	UD	120	20	ug/L
Acrolein	107-02-8	< 24 R	UD	120	24	ug/L

Volatiles

ADG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-09DL

Client ID: VGW-652-55DL

Date Collected: 10/10/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VAI02133.D

Analytical Run ID: VAI01802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 18	UD	120	18	ug/L
1-Chlorooctyl vinyl ether	110-75-8	< 11.2	UD	25	11	ug/L
o-Isopropyltoluene	99-87-6	< 5.4	UD	25	5.4	ug/L
Isopropyl Alcohol	67-63-0	< 25	UD	25	25	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 25	UD	25	25	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	46.82	94 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	46.14	92 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	39.52	79 %	70 - 125		SPK: 50
1,1-Dibromofluoromethane		52.42	105 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1903121	6.08			
1,1-Difluorobenzene	540-36-3	2136553	7.88			
Chlorobenzene-d5	3114-55-4	1674166	14.12			
1,4-Dichlorobenzene-d4	3855-82-1	1025667	19.66			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-10

Client ID: VGW-370-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102106.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
1,1-Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,1-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-10

Client ID: VGW-370-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102106.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Formoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	48		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,1-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-10

Client ID: VGW-370-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102106.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
n-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	46.59	93 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.82	98 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	44.51	89 %	70 - 125		SPK: 50
Dibromofluoromethane		55.57	111 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1906826	6.05			
1,4-Difluorobenzene	540-36-3	2015431	7.82			
Chlorobenzene-d5	3114-55-4	1678494	14.04			
1,1-Dichlorobenzene-d4	3855-82-1	1113613	19.55			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-11

Client ID: VGW-3D70-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102107.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Trichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Bromomethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Dichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-11

Client ID: VGW-3D70-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102107.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acetone	75-25-2	< 0.49	U	5.0	0.49	ug/L
1-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	48		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-11

Client ID: VGW-3D70-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102107.D

Analytical Run ID: VAI01802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
n-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	46.93	94 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	46.24	92 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	39.14	78 %	70 - 125		SPK: 50
1,1-Dibromofluoromethane		53.78	108 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1563913	6.05			
1,4-Difluorobenzene	540-36-3	1737666	7.82			
Chlorobenzene-d5	3114-55-4	1344380	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	802135	19.55			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-12

Client ID: VGW-355-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102108.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-12

Client ID: VGW-355-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102108.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Formaldehyde	50-35-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	37		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
Isopropylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
o-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
p-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acetolcin	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-12

Client ID: VGW-355-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102108.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
n-Propyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	47.49	95 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.84	98 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	43.87	88 %	70 - 125		SPK: 50
Dibromofluoromethane		54.81	110 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1895147	6.05			
1,4-Difluorobenzene	540-36-3	2092655	7.85			
Chlorobenzene-d5	3114-55-4	1771504	14.07			
1,4-Dichlorobenzene-d4	3855-82-1	1136221	19.55			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-13

Client ID: VGW-470-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102109.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Methyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Bromoethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Dichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Ethyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Ethylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-13

Client ID: VGW-470-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102109.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	76		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,2-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Bromobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m,p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-Propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
tert butyl alcohol	75-65-0	< 4.0	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-13

Client ID: VGW-470-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102109.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1,2-Chloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
n-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.31	99 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.42	97 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	42.44	85 %	70 - 125		SPK: 50
Dibromofluoromethane		55.73	111 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1918784	6.05			
1,4-Difluorobenzene	540-36-3	2134624	7.82			
Chlorobenzene-d5	3114-55-4	1702131	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1085537	19.55			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-14

Client ID: VGW-455-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102110.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Bromomethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Bromoethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
trans-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-14

Client ID: VGW-455-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102110.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	170		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
n-Butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
1,2-Dichlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Amyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
tert butyl alcohol	75-65-0	< 4.0	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-14

Client ID: VGW-455-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102110.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
n-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	50.73	101 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	51.88	104 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	46.24	92 %	70 - 125		SPK: 50
Dibromofluoromethane		55.75	112 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1969860	6.05			
1,4-Difluorobenzene	540-36-3	2199944	7.85			
Chlorobenzene-d5	3114-55-4	1818408	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1141097	19.55			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-15

Client ID: VGW-970-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102111.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
1,1-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
trans-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-15

Client ID: VGW-970-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102111.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Formaldehyde	50-30-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	55		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Bromobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
p-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
2,4-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,1-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
Isopropylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
p-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	1.3	J	5.0	0.97	ug/L
p-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	3.4	J	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Anthralene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-15

Client ID: VGW-970-73

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102111.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acetone	107-13-1	< 3.5	U	25	3.5	ug/L
1,1-Dichloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
INTEROGATES						
1,2-Dichloroethane-d4	79-00-5	50.08	100 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	50.6	101 %	70 - 125		SPK: 50
Bromofluorobenzene	460-00-4	46.18	92 %	70 - 125		SPK: 50
Dibromofluoromethane		54.2	108 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1899268	6.05			
1,4-Difluorobenzene	540-36-3	2138902	7.82			
Chlorobenzene-d5	3114-55-4	1736626	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1162841	19.53			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-16

Client ID: VGW-955-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102112.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Bromomethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Fluoromethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Methyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Bromoethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Ethyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Ethylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
1,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

10/15/02
SY

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-16

Client ID: VGW-955-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102112.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Formaldehyde	50-30-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	230	E	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	3.2	J	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	12		5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Anthralene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acetolcin	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

LOG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-16

Client ID: VGW-955-58

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102112.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
n-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.03	98 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	47.88	96 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	42.9	86 %	70 - 125		SPK: 50
Dibromofluoromethane		53.82	108 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
1-Fluorobenzene	363-72-4	1943613	6.05			
1,4-Difluorobenzene	540-36-3	2174741	7.82			
Chlorobenzene-d5	3114-55-4	1749479	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1126526	19.55			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-16DL

Client ID: VGW-955-58DL

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102132.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 3.6	UD	25	3.6	ug/L
Chloromethane	74-87-3	< 2.6	UD	25	2.6	ug/L
Bromomethane	74-83-9	< 1.9	UD	25	1.9	ug/L
Vinyl chloride	75-01-4	< 4.0	UD	25	4.0	ug/L
Chloroethane	75-00-3	< 12	UD	25	12	ug/L
Trichlorofluoromethane	75-69-4	< 3.6	UD	25	3.6	ug/L
Methyl Acetate	79-20-9	< 3.9	UD	25	3.9	ug/L
Methylene Chloride	75-09-2	< 8.8	UD	25	8.8	ug/L
Acetone	67-64-1	< 18	UD	25	18	ug/L
Carbon disulfide	75-15-0	< 3.6	UD	25	3.6	ug/L
1,1-Dichloroethene	75-35-4	< 3.4	UD	25	3.4	ug/L
1,1-Dichloroethane	75-34-3	< 3.3	UD	25	3.3	ug/L
Methyl tert-butyl Ether	1634-04-4	< 5.2	UD	25	5.2	ug/L
trans-1,2-Dichloroethene	156-60-5	< 4.0	UD	25	4.0	ug/L
cis-1,2-Dichloroethene	156-59-2	< 3.1	UD	25	3.1	ug/L
2,2-Dichloropropane	594-20-7	< 3.2	UD	25	3.2	ug/L
Chloroform	67-66-3	< 3.0	UD	25	3.0	ug/L
1,2-Dichloroethane	107-06-2	< 2.8	UD	25	2.8	ug/L
2-Butanone	78-93-3	< 12	UD	25	12	ug/L
1,1,1-Trichloroethane	71-55-6	< 3.8	UD	25	3.8	ug/L
1,2-Dichlorobenzene	110-82-7	< 4.9	UD	25	4.9	ug/L
Carbon Tetrachloride	56-23-5	< 2.4	UD	25	2.4	ug/L
1,1-Dichloropropene	563-43-2	< 15	UD	25	15	ug/L
Bromodichloromethane	75-27-4	< 3.6	UD	25	3.6	ug/L
Methylcyclohexane	108-87-7	< 3.4	UD	25	3.4	ug/L
1,2-Dichloropropane	78-87-5	< 3.6	UD	25	3.6	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 3.3	UD	25	3.3	ug/L
Trichloroethene	79-01-6	< 3.6	UD	25	3.6	ug/L
Dibromochloromethane	124-48-1	< 3.3	UD	25	3.3	ug/L
Dibromomethane	74-95-3	< 3.0	UD	25	3.0	ug/L
1,1,2-Trichloroethane	79-00-5	< 3.1	UD	25	3.1	ug/L
Benzene	71-43-2	< 3.6	UD	25	3.6	ug/L
trans-1,3-Dichloropropene	10061-02-6	< 3.3	UD	25	3.3	ug/L
1,2-Dibromoethane	106-93-4	< 3.2	UD	25	3.2	ug/L

10/25/02
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Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-16DL

Client ID: VGW-955-58DL

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102132.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoforn	75-25-2	< 2.4	UD	25	2.4	ug/L
4-Methyl-2-Pentanone	108-10-1	< 4.0	UD	25	4.0	ug/L
2-Hexanone	591-78-6	< 3.0	UD	25	3.0	ug/L
Tetrachloroethene	127-18-4	270	D	25	3.5	ug/L
Isopropylbenzene	98-82-8	< 3.8	UD	25	3.8	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 3.5	UD	25	3.5	ug/L
Toluene	108-88-3	< 3.6	UD	25	3.6	ug/L
1,3-Dichloropropane	142-28-9	< 2.8	UD	25	2.8	ug/L
Chlorobenzene	108-90-7	< 3.9	UD	25	3.9	ug/L
Ethyl Benzene	100-41-4	< 3.8	UD	25	3.8	ug/L
Styrene	100-42-5	< 4.6	UD	25	4.6	ug/L
m/p-Xylenes	136777-61-2	< 7.6	UD	25	7.6	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 3.2	UD	25	3.2	ug/L
o-Xylene	95-47-6	< 3.6	UD	25	3.6	ug/L
1,3-Dichlorobenzene	541-73-1	< 3.7	UD	25	3.7	ug/L
1,4-Dichlorobenzene	106-46-7	< 4.6	UD	25	4.6	ug/L
1,2-Dichlorobenzene	95-50-1	< 4.4	UD	25	4.4	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 4.6	UD	25	4.6	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 6.4	UD	25	6.4	ug/L
Bromobenzene	108-86-1	< 3.0	UD	25	3.0	ug/L
1,2,3-Trichloropropane	96-18-4	< 5.2	UD	25	5.2	ug/L
Isopropylbenzene	103-61-5	< 4.0	UD	25	4.0	ug/L
Chlorotoluene	95-49-8	< 4.2	UD	25	4.2	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 4.8	UD	25	4.8	ug/L
p-Chlorotoluene	106-43-4	< 5.1	UD	25	5.1	ug/L
1,2,4-Trimethylbenzene	95-63-6	14	JD	25	4.2	ug/L
Sec-butylbenzene	135-98-8	< 4.8	UD	25	4.8	ug/L
tert-Butylbenzene	98-06-6	< 4.7	UD	25	4.7	ug/L
n-Butylbenzene	104-51-8	< 6.2	UD	25	6.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 5.2	UD	25	5.2	ug/L
Hexachlorobutadiene	87-68-3	< 4.7	UD	25	4.7	ug/L
Naphthalene	91-20-3	< 4.6	UD	25	4.6	ug/L
Vinyl Acetate	108-05-4	< 13	UD	120	13	ug/L
Tert butyl alcohol	75-65-0	< 20 R	UD	120	20	ug/L
Acrolein	107-02-8	< 24 R	UD	120	24	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-16DL

Client ID: VGW-955-58DL

Date Collected: 10/11/02

Date Received: 10/12/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102132.D

Analytical Run ID: VA101802

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 18	UD	120	18	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 11	UD	25	11	ug/L
Isopropyltoluene	99-87-6	< 5.4	UD	25	5.4	ug/L
Isopropyl Alcohol	67-63-0	< 25	UD	25	25	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 25	UD	25	25	ug/L
PEROGATES						
1,2-Dichloroethane-d4	79-00-5	47.32	95 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	47.03	94 %	70 - 125		SPK: 50
Bromofluorobenzene	460-00-4	42.36	85 %	70 - 125		SPK: 50
Dibromofluoromethane		53.09	106 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1920236	6.06			
1,4-Difluorobenzene	540-36-3	2151496	7.84			
Fluorobenzene-d5	3114-55-4	1783196	14.06			
1,4-Dichlorobenzene-d4	3855-82-1	1139715	19.59			

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-17

Client ID: TB-GW101102

Date Collected: 9/16/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102113.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Methyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Dichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Ethyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Ethylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Benzene	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
1,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

10/25/02
54

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-17

Client ID: TB-GW101102

Date Collected: 9/16/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102113.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Formoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	25	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	25	4.9	ug/L

Volatiles

SDG No.: P4640-01

Client: Rich Consultants

Sample ID: P4640-17

Client ID: TB-GW101102

Date Collected: 9/16/02

Date Received: 10/12/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102113.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1,2-Dichloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	47.39	95 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	46.6	93 %	70 - 125		SPK: 50
1-Bromofluorobenzene	460-00-4	40.61	81 %	70 - 125		SPK: 50
1,2-Dibromofluoromethane		52.78	106 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2028312	6.05			
1,4-Difluorobenzene	540-36-3	2238401	7.82			
Chlorobenzene-d5	3114-55-4	1755622	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1163720	19.58			

Premier Environmental Services.

APPENDIX C



CHAIN OF CUSTODY RECORD

(908) 789-8900 Fax (908) 789-8922

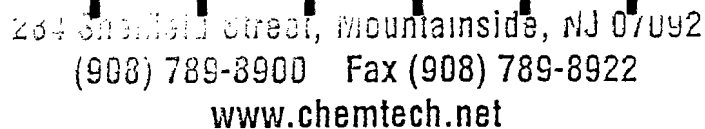
www.chemtech.net

O ECH 100

CHEMTECH QUOTE NO.:

P4640

CLIENT INFORMATION				PROJECT INFORMATION				BILLING INFORMATION										
REPORT TO BE SENT TO:																		
COMPANY: <u>CA RICH CONSULTANTS, INC.</u>				PROJECT NAME: <u>FCL CORAL GRAPHICS</u>				BILL TO: <u>CA RICH CONSULTANTS</u>										
ADDRESS: <u>17 DUPONT STREET</u>				PROJECT NO.:				PO #:										
CITY: <u>PLAINVIEW</u> STATE: <u>NY</u> ZIP: <u>11803</u>				PROJECT MANAGER: <u>E. WEINSTECK / L. ROND</u>				ADDRESS: <u>17 DUPONT STREET</u>										
ATTENTION: <u>ERIC WEINSTECK</u>				LOCATION: <u>HICKSVILLE, NEW YORK</u>				CITY: <u>PLAINVIEW</u> STATE: <u>NY</u> ZIP: <u>11803</u>										
PHONE: <u>516-576-8844</u> FAX: <u>516-576-0083</u>				PHONE: <u>516-576-8844</u> FAX: <u>516-576-0083</u>				ATTENTION: <u>E. WEINSTECK</u> PHONE: <u>516-576-8844</u>										
DATA TURNAROUND INFORMATION				DATA DELIVERABLE INFORMATION				ANALYSIS										
FAX: _____ DAYS * HARD COPY: _____ DAYS * EDD: _____ DAYS * * TO BE APPROVED BY CHEMTECH ** NORMAL TURNAROUND TIME - 14 DAYS				☐ RESULTS ONLY ☐ NY STATE CATEGORY A ☐ RESULTS PLUS QC ☐ NY STATE CATEGORY B ☐ REGULATORY FORMAT, STATE: _____ ☐ NEW JERSEY REDUCED DELIVERABLES ☐ CLP ☐ EDD FORMAT: _____				VOLS 1, 2, 3, 4, 5, 6, 7, 8, 9 1. 1, 2, 3, 4, 5, 6, 7, 8, 9 2. 1, 2, 3, 4, 5, 6, 7, 8, 9 3. 1, 2, 3, 4, 5, 6, 7, 8, 9 4. 1, 2, 3, 4, 5, 6, 7, 8, 9 5. 1, 2, 3, 4, 5, 6, 7, 8, 9 6. 1, 2, 3, 4, 5, 6, 7, 8, 9 7. 1, 2, 3, 4, 5, 6, 7, 8, 9 8. 1, 2, 3, 4, 5, 6, 7, 8, 9 9. 1, 2, 3, 4, 5, 6, 7, 8, 9										
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9		
1. 01 05	V13W-8(67-70)	WATER			10/10	1000	2	2										VOLS ONLY
2. 02 09	V13W-8(67-70) M1/M2					1002												
3. 03 14	V13W-8(52-55)					1015												
4. 05 16	V13W-7(67-70)					1132												
5. 05 13	V13W-7(52-55)					1218												
6. 07 14	V13W-6(67-70)					1312												
7. 08 15	V13W-6(67-70)					1415												
8. 08 16	V13W-6(52-55)					1510												
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY																		
RELINQUISHED BY SAMPLER:		DATE/TIME:		RECEIVED BY:		Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☐ Temp. of Cooler <u>4°C</u> Comments:												
1. <u>CHRIS BONE</u>		10/11/02		1. _____														
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:														
2. _____		_____		2. _____														
RELINQUISHED BY:		DATE/TIME:		RECEIVED FOR LAB BY:		SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☒ OVERNIGHT CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT												
3. <u>UPS</u>		10/17/02		3. <u>Reuben</u>		Page <u>1</u> of <u>2</u> Shipment Complete: ☒ YES ☐ NO												



CHEMTECH JOB NO.:

PL 640

CHEMTECH QUOTE NO.:

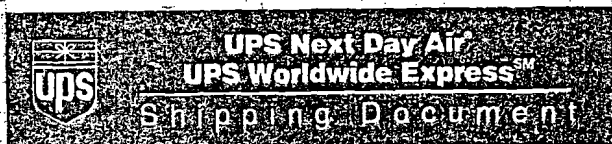
Ver. 7/2001

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT

YELLOW - CHEMTECH COPY

PINK - SAMPLER COPY

25211



SHIPMENT FROM
UPS ACCOUNT NO. **F07E90**
REFERENCE NUMBER

TELEPHONE
516-576-8844

C A RICH CONSULTANTS
17 DUPONT STREET

PLAINVIEW NY 11803-1602

DELIVERY TO TELEPHONE

1/2/08
5-45

0101911202809 11/00 W WAL19.0A 07/2002 United Parcel Service, Louisville, KY

WEIGHT	WEIGHT	DIMENSIONAL WEIGHT
	4.5 LB	

The shipper authorizes UPS to act as forwarding agent for export control and Customs purposes.
The shipper certifies that these commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Deviation contrary to U.S. law is prohibited.

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SATURDAY DELIVERY

1Z F07 E90 22 1000 284 6



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EXPORT



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1Z F07 E90 22 1000 284 6

DATE OF SHIPMENT

SHIPMENT ID NUMBER **F07E 9079 XRK**

Premier Environmental Services.

APPENDIX D

00207071

Coral Graphics

VOC Approach

VOC-5000/8260B (soils)

VOC-5000/8260B (waters)

8/2/02

Thank you for your continuing support as we look forward to supplying the analytical support services to your project. To accomplish the data objectives, Chemtech can undertake several modifications to our Volatile Chemtech Full (8260B) runs.

Those modifications include starting the analytical run at 30-degree Celsius. Chemtech will adjust the start of the (8260) VOC run at 30 degree C which is outside of the method definition to identify isopropyl alcohol.

Add additional standards i) isopropyl alcohol and ii) 1,2,3,4 Tetramethylbenzene (CAS# 95-93-2) to the mix of standards. The sample matrixes for this round of your project: Coral Graphics are water and soil matrixes.

The data objectives for trimethylbenzene will be address by the compounds 1,3,5-trimethylbenzene and 1,2,4 trimethylbenzene that are in our mix of standards.

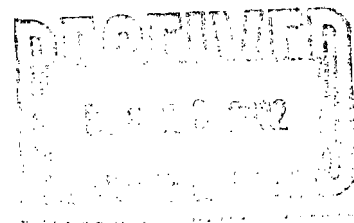
These modifications that expand the method definition for your project data objectives must have site specific matrix spike/matrix spike duplicate selection on your chain of Custody for each Sample Delivery Group (SDG) for analysis. Further, CA Rich Inc., it's client or the controlling Regulatory Agency (NYSDEC) will hold Chemtech without fault or harmless during any subsequent examinations of our data under any Data Usability Summary Report (DUSR) or data validation that identifies the Volatile analysis as non-compliant with the method due to these project specific data objectives.

Chemtech unit price with this program for the volatile analysis will help defer the added costs incurred with standards and QA/QC associated with these modifications. The per sample based upon the schedule quantities to be performed. If significant variance occurs with the projected quantities, Chemtech will adjust it's price to adequately recover our time, materials and services rendered with these modifications.

Chemtech will require a lead-time (unspecified) to obtain the standards and prepare for the project specific data objectives. If you have any additional questions, please call me to discuss and confirm the project specific data objectives.

Premier Environmental Services.

DATA USABILTY SUMMARY REPORT (DUSR)
OF THE
CORAL GRAPHICS SITE



ORGANIC ANALYSES
IN AQUEOUS AND
NON-AQUEOUS SAMPLES

CHEMTECH CONSULTING GROUP
MOUNTAINSIDE, NJ

REPORT NUMBER: P4481

November, 2002

Prepared for
C.A. Rich Consultants, Inc.
Plainview, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566
(516) 223-9761 • FAX (516) 223-0983

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses

SITE: Coral Graphics

CONTRACT LAB: Chemtech Consulting Group
Mountainside, New Jersey

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: November, 2002

MATRIX: Aqueous

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('95).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unreliable/unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for seven (7) soil samples, four (4) aqueous samples and one (1) Trip Blank sample. The samples were collected September 30, 2002 and October 1, 2002 and shipped to Chemtech Consulting Group located in Mountainside, New Jersey. Samples were received at the laboratory on October 2, 2002. The samples were received in good condition. They were analyzed for Volatile Organic Analytes (EPA Method 8260) as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A list of definitions that may be used in this report is located in Appendix A. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C. Appendix D contains copies of any correspondence between this validator and the laboratory. In addition, Appendix D contains a copy of Chemtech correspondence dated 8/22/02 that cites the method utilized for the reporting of the additional analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

1. OVERVIEW:

Seven (7) soil samples, four (4) aqueous samples one (1) Trip Blank Sample were submitted to the laboratory for the analyses requested on the Chain of Custody (COC) documentation. The samples were analyzed for the organic analytes using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260. CA Rich requested that the analytes Isopropyl Alcohol and 1,2,3,4-Tetramethylbenzene also be calibrated/quantitated and reported with the Volatile Organic Analyses. These analytes are reported on the result pages. Proper custody transfer of the samples was documented in the laboratory report. The laboratory provided a deliverables package in accordance with the guidelines in the NYSDEC ASP, Rev '95, Category B.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly preserved aqueous and non-aqueous samples is 14 days from collection.

Volatile Organic Analyses - The aqueous and soil samples associated with this data set were analyzed within the ten (10) days of VTSR. All samples were analyzed within the method holding time.

3. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Volatile Organic Analyses – Each sample was spiked with the surrogate compounds 1,2-Dichloroethane-d4, 4-Bromofluorobenzene, Toluene-d8 and Dibromofluoromethane. In-house surrogate recovery limits were utilized by the laboratory. The percent recovery of each surrogate met QC criteria in all field and QC samples associated with each data set with the exception of Toluene-d8 (58%) in sample VGW-267-70MS. All surrogate recoveries met QC criteria in the un-spiked sample and MSD sample, therefore, no action was taken based on this outlier.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Volatile Organic Analyses – Soil sample VGP-28-10 was utilized for the MS MSD sample. This sample MS/MSD was requested on the Chain of Custody documents. All percent recoveries and Relative Percent differences (RPD's) met QC criteria. Sample VGW-267-70 was utilized for the aqueous MS/MSD analyses. All percent recoveries and Relative Percent Differences (RPD's) met QC criteria in the MS/MSD sample set with the exception of Toluene in both the MS and MSD. The recovery of the surrogate Toluene-d8 did not meet QC criteria in this sample. This may be indicative of a matrix interference that affects this analyte.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

Volatile Organic Analytes – The laboratory performed one aqueous blank spike and one soil blank spike analysis with this data set. The sample was spiked with all reported analytes. All spike recoveries each of the blank spike samples met QC criteria.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

A) Method Blank contamination

Volatile Organic Analyses – One (1) aqueous method blank sample is associated with this data set. It was free from contamination of all target analytes with the exception of Methylene Chloride (1.8 ug/L). When detected in associated aqueous samples the Methylene Chloride has been qualified in accordance with the validation guidelines.

Qualified data result pages are located in Appendix B of this report.

Two (2) low-level soil method blank analyses are associated with this data set. Each method blank was free from contamination above the laboratory method detection limit. Two (2) medium-level soil method blank analyses are associated with this data set. Each method blank was free from contamination above the laboratory method detection limit.

B) Field Blank contamination

A Field Blank sample was not submitted with this data set.

C) Trip Blank contamination

The Trip Blank (TB-GW10012) sample was free from contamination of all analytes with the exception of Methylene Chloride at a concentration of (2.8 JB ug/L).

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria is not met in an initial calibration the positive results are qualified "J". Non detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, effected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria is set for these analytes. If the minimum criteria is not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses - One (1) low level soil calibration curve is associated with the low-level soil samples in this data set. The laboratory performed an initial five (5) point multi level calibration using the standards 5 ppb through 200 ppb on October 4, 2002. The RRF for all compounds met QC criteria with the exception of Tert-Butyl Alcohol (TBA) (0.040) and Acrolein (0.016). These analytes have been qualified "R" unuseable, due to the low response factor, in the low level soil samples in this data set. Two (2) continuing calibration standards are associated with the low level soil samples in this data set. The RRF of each compound met QC criteria with the exception of that listed below:

Date of Analysis	File ID	Analyte	Response Factor
10/7/02	VA100702	Tert-Butyl Alcohol	0.048
		Acrolein	0.018
		2-Chloroethylvinyl ether	0.049
10/8/02	VA100802	Tert-Butyl Alcohol	0.037
		Acrolein	0.016
		Acrylonitrile	0.044

The analytes in which the response factor was less than 0.05 have been qualified "R" unuseable/unreliable in the effected samples.

Qualified data result pages are located in Appendix B of this report.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION (cont'd)

A) RESPONSE FACTOR

One (1) aqueous/medium level soil calibration curve is associated with the aqueous and medium level soil samples in this data set. The laboratory performed an initial five (5) point multi level calibration using the standards 5 ppb through 200 ppb on October 8, 2002. The RRF for all compounds met QC criteria with the exception of Tert-Butyl Alcohol (TBA) (0.049) and Acrolein (0.022). These analytes have been qualified "R" unuseable, due to the low response factor, in the aqueous/medium level soil samples in this data set. Two (2) continuing calibration standards are associated with the aqueous/medium level soil samples in this data set. The RRF of each compound met QC criteria with the exception of that listed below:

Date of Analysis	File ID	Analyte	Response Factor
10/9/02	VA100902	Tert-Butyl Alcohol	0.042
		Acrolein	0.018
		2-Chloroethylvinyl ether	0.044
10/9/02	VA100918	Tert-Butyl Alcohol	0.042
		Acrolein	0.016
		2-Chloroethylvinyl ether	0.049

The analytes in which the response factor was less than 0.05 have been qualified "R" unuseable/unreliable in the effected samples.

Qualified data result pages are located in Appendix B of this report.

A five (5) point calibration curve was analyzed for both the Iso-propyl Alcohol and 1,2,3,4-Tetramethylbenzene. The response factor of these analytes met QC criteria in both the initial calibration curve and all continuing calibration analyses associated with this data set.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION (cont'd)

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgement. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unuseable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses – One (1) low-level soil calibration curve is associated with this data set. All RSD% met QC criteria with the exception of Bromomethane (37.8%) and 2-Hexanone (48.7%). These analytes have been qualified "UJ" estimated in all low-level soil samples.

Two (2) continuing calibration standards are associated with the samples in this data set. The %Difference met QC criteria for all analytes with the exception of that listed below:

Date of Analysis	File ID	Analyte	%Difference
10/7/02	VA100702	Dichlorodifluoromethane	30.4
		Bromomethane	33.3
		Acetone	72.2
		2-Butanone	40.8
		2-Hexanone	68.0

These analytes have been qualified "UJ/J" estimated in associated soil samples.

One (1) aqueous/medium level soil calibration curve is associated with this data set. All RSD% met QC criteria with the exception of Bromomethane (36.4%), Acetone (33.9%) and 2-Hexanone (54.2%). These analytes have been qualified "UJ" estimated in associated aqueous and medium level soil samples in this data set.

Two (2) continuing calibration standards are associated with the samples in this data set. The %Difference met QC criteria for all analytes with the exception of that listed below:

Date of Analysis	File ID	Analyte	%Difference
10/9/02	VA100902	Acetone	25.5
		2-Hexanone	31.5
		2-Chloroethylvinyl ether	33.3
10/9/02	VA100918	Dichlorodifluoromethane	29.4
		Trichlorofluoromethane	25.9

Qualified data result pages are located in Appendix B of this report

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). The tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses – All instrument BFB tuning criteria was met for these sample analyses.

9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard evaluation criteria is applied to all field and QC samples.

Volatile Organic Analyses – All Internal Standard QC criteria was met for these analyses

10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

Volatile Organic Analyses – All samples reported the VOA 8260 analytes specified on the COC documents. In addition, the analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene were analyzed for and reported. The laboratory reported all analytes to the determined method detection limit. All of the aqueous samples are reported without dilution. All results are reported to the laboratory method detection limit. All soil samples with the exception of samples VGP-30-5, VGP-3D0-5 and VGP-50-5 were reported as low-level soil samples. The low-level soil samples were reported to the laboratory method detection limit. Samples VGP-30-5, VGP-3D0-5 and VGP-50-5 were analyzed and reported as medium level soil samples.

Sample VGP-30-5 was initially reported as a medium level soil sample. The concentration of 1,3,5-Trimethylbenzene and 1,2,4-Trimethylbenzene exceeded the calibration range of the instrument. An additional dilution of 1: 10 was performed. The data from both analyses was reported with the data report.

Sample VGP-50-5 was initially reported as a medium level soil sample. The concentration of 1,2,4-Trimethylbenzene exceeded the calibration range of the instrument. An additional dilution of 1: 5 was performed. The data from both analyses was reported with the data report.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

11. OVERALL ASSESSMENT:

Analytical QC criteria was met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

Reporting notes on the BFB Tune Summary Form were initially reported inaccurately. The laboratory was contacted and revised pages were provided. The additional Volatile Organic Analytes were reported using the criteria outlined in Chemtech correspondence dated 8/22/02. A copy of all correspondence is provided in Appendix D of this report.

The data provided for this data set is acceptable for use, with the noted data qualifiers.

Premier Environmental Services.

TABLE 1

Premier Environmental Services.

CLIENT SAMPLE ID

LABORATORY SAMPLE ID

VGP-30-5	P4481-01
VGP-35-10	P4481-02
VGP-3D05	P4481-03
VGP-50-5	P4481-04
VGP-57-10	P4481-05
VGP-20-5	P4481-06
VGP-28-10	P4481-07
VGP-28-10MS	P4481-08
VGP-28-10MSD	P4481-09
VGW-267-70	P4481-10
VGW-257-60	P4481-11
VGW-167-70	P4481-12
VGW-157-60	P4481-13
TB-GW100102	P4481-14

Premier Environmental Services.

APPENDIX A

Premier Environmental Services.

DATA QUALIFIER DEFINITIONS

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unuseable. The presence or absence of the analyte cannot be verified.

K - The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL - The analyte was not detected, and the reported quantitation limit is probably higher than reported.

Premier Environmental Services.

APPENDIX B

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-01

Client ID: VGP-30-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100907.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 92	U	650	92	ug/Kg
Chloromethane	74-87-3	< 66	U	650	66	ug/Kg
Vinyl chloride	75-01-4	< 100	U	650	100	ug/Kg
Bromomethane	74-83-9	< 50 UJ	U	650	50	ug/Kg
Chloroethane	75-00-3	< 320	U	650	320	ug/Kg
Trichlorofluoromethane	75-69-4	< 95	U	650	95	ug/Kg
1,1-Dichloroethene	75-35-4	< 90	U	650	90	ug/Kg
Acetone	67-64-1	< 460 UJ	U	650	460	ug/Kg
Carbon disulfide	75-15-0	< 94	U	650	94	ug/Kg
Methyl Acetate	79-20-9	< 100	U	650	100	ug/Kg
Methylene Chloride	75-09-2	< 230	U	650	230	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 110	U	650	110	ug/Kg
1,1-Dichloroethane	75-34-3	< 86	U	650	86	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 80	U	650	80	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 140	U	650	140	ug/Kg
2,2-Dichloropropane	594-20-7	< 82	U	650	82	ug/Kg
Chloroform	67-66-3	< 80	U	650	80	ug/Kg
Cyclohexane	110-82-7	< 130	U	650	130	ug/Kg
1,1-Dichloropropene	563-43-2	< 390	U	650	390	ug/Kg
2-Butanone	78-93-3	< 300	U	650	300	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 98	U	650	98	ug/Kg
Carbon Tetrachloride	56-23-5	< 61	U	650	61	ug/Kg
Dibromomethane	74-95-3	< 79	U	650	79	ug/Kg
Benzene	71-43-2	< 92	U	650	92	ug/Kg
1,2-Dichloroethane	107-06-2	< 73	U	650	73	ug/Kg
Trichloroethene	79-01-6	< 93	U	650	93	ug/Kg
Methylcyclohexane	108-87-7	< 87	U	650	87	ug/Kg
1,2-Dichloropropane	78-87-5	< 95	U	650	95	ug/Kg
Bromodichloromethane	75-27-4	< 95	U	650	95	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 86	U	650	86	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 86	U	650	86	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 81	U	650	81	ug/Kg
Dibromochloromethane	124-48-1	< 85	U	650	85	ug/Kg
1,2-Dibromoethane	106-93-4	< 82	U	650	82	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-01

Client ID: VGP-30-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100907.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 64	U	650	64	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 110	U	650	110	ug/Kg
2-Hexanone	591-78-6	< 78 UJ	U	650	78	ug/Kg
1,3-Dichloropropane	142-28-9	< 74	U	650	74	ug/Kg
Tetrachloroethene	127-18-4	350	J	650	91	ug/Kg
Toluene	108-88-3	< 92	U	650	92	ug/Kg
Chlorobenzene	108-90-7	< 100	U	650	100	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 83	U	650	83	ug/Kg
Ethyl Benzene	100-41-4	< 98	U	650	98	ug/Kg
m&p-Xylenes	136777-61-2	210	J	1300	200	ug/Kg
o-Xylene	95-47-6	2000		650	94	ug/Kg
Styrene	100-42-5	< 120	U	650	120	ug/Kg
Isopropylbenzene	98-82-8	< 97	U	650	97	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 92	U	650	92	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 96	U	650	96	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 120	U	650	120	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 110	U	650	110	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 120	U	650	120	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 170	U	650	170	ug/Kg
Bromobenzene	108-86-1	< 79	U	650	79	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 130 UJ	U	650	130	ug/Kg
n-propylbenzene	103-61-5	< 100	U	650	100	ug/Kg
2-Chlorotoluene	95-49-8	< 110	U	650	110	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	38000	E	650	130	ug/Kg
4-Chlorotoluene	106-43-4	< 130	U	650	130	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	98000	E	650	110	ug/Kg
Sec-butylbenzene	135-98-8	< 130	U	650	130	ug/Kg
tert-Butylbenzene	98-06-6	< 120	U	650	120	ug/Kg
n-Butylbenzene	104-51-8	< 160	U	650	160	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 140	U	650	140	ug/Kg
Hexachlorobutadiene	87-68-3	< 120	U	650	120	ug/Kg
Naphthalene	91-20-3	250	J	650	120	ug/Kg
tert-Butyl Alcohol	75-65-0	< 520 R	U	3300	520	ug/Kg
Acrolein	107-02-8	< 630 R	U	3300	630	ug/Kg
Acrylonitrile	107-13-1	< 460	U	3300	460	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-01

Client ID: VGP-30-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100907.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 340	U	3300	340	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 280	U	650	280	ug/Kg
p-Isopropyltoluene	99-87-6	2100		650	140	ug/Kg
Isopropyl Alcohol	67-63-0	< 2600	U	2600	2600	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	1300		650	650	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	51.23	102 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	47.34	95 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	50.24	100 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	49.14	98 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2076194	6.05			
1,4-Difluorobenzene	540-36-3	2389929	7.82			
Chlorobenzene-d5	3114-55-4	2146682	14.07			
1,4-Dichlorobenzene-d4	3855-82-1	1321946	19.57			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-01DL

Client ID: VGP-30-5DL

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100908.D

Analytical Run ID: VA1008102

Dilution: 10

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 920	UD	6500	920	ug/Kg
Chloromethane	74-87-3	< 660	UD	6500	660	ug/Kg
Vinyl chloride	75-01-4	< 1000	UD	6500	1000	ug/Kg
Bromomethane	74-83-9	< 500 <i>UD</i>	UD	6500	500	ug/Kg
Chloroethane	75-00-3	< 3200	UD	6500	3200	ug/Kg
Trichlorofluoromethane	75-69-4	< 950	UD	6500	950	ug/Kg
1,1-Dichloroethene	75-35-4	< 900	UD	6500	900	ug/Kg
Acetone	67-64-1	< 4600 <i>UD</i>	UD	6500	4600	ug/Kg
Carbon disulfide	75-15-0	< 940	UD	6500	940	ug/Kg
Methyl Acetate	79-20-9	< 1000	UD	6500	1000	ug/Kg
Methylene Chloride	75-09-2	< 2300	UD	6500	2300	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1100	UD	6500	1100	ug/Kg
1,1-Dichloroethane	75-34-3	< 860	UD	6500	860	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 800	UD	6500	800	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 1400	UD	6500	1400	ug/Kg
2,2-Dichloropropane	594-20-7	< 820	UD	6500	820	ug/Kg
Chloroform	67-66-3	< 800	UD	6500	800	ug/Kg
Cyclohexane	110-82-7	< 1300	UD	6500	1300	ug/Kg
1,1-Dichloropropene	563-43-2	< 3900	UD	6500	3900	ug/Kg
2-Butanone	78-93-3	< 3000	UD	6500	3000	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 980	UD	6500	980	ug/Kg
Carbon Tetrachloride	56-23-5	< 610	UD	6500	610	ug/Kg
Dibromomethane	74-95-3	< 790	UD	6500	790	ug/Kg
Benzene	71-43-2	< 920	UD	6500	920	ug/Kg
1,2-Dichloroethane	107-06-2	< 730	UD	6500	730	ug/Kg
Trichloroethene	79-01-6	< 930	UD	6500	930	ug/Kg
Methylcyclohexane	108-87-7	< 870	UD	6500	870	ug/Kg
1,2-Dichloropropane	78-87-5	< 950	UD	6500	950	ug/Kg
Bromodichloromethane	75-27-4	< 950	UD	6500	950	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 860	UD	6500	860	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 860	UD	6500	860	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 810	UD	6500	810	ug/Kg
Dibromochloromethane	124-48-1	< 850	UD	6500	850	ug/Kg
1,2-Dibromoethane	106-93-4	< 820	UD	6500	820	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-01DL

Client ID: VGP-30-5DL

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100908.D

Analytical Run ID: VA1008102

Dilution: 10

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 640	UD	6500	640	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 1100	UD	6500	1100	ug/Kg
2-Hexanone	591-78-6	< 780 <i>UD</i>	UD	6500	780	ug/Kg
1,3-Dichloropropane	142-28-9	< 740	UD	6500	740	ug/Kg
Tetrachloroethene	127-18-4	1700	JD	6500	910	ug/Kg
Toluene	108-88-3	< 920	UD	6500	920	ug/Kg
Chlorobenzene	108-90-7	< 1000	UD	6500	1000	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 830	UD	6500	830	ug/Kg
Ethyl Benzene	100-41-4	< 980	UD	6500	980	ug/Kg
m&p-Xylenes	136777-61-2	< 2000	UD	13000	2000	ug/Kg
o-Xylene	95-47-6	3000	JD	6500	940	ug/Kg
Styrene	100-42-5	< 1200	UD	6500	1200	ug/Kg
Isopropylbenzene	98-82-8	< 970	UD	6500	970	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 920	UD	6500	920	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 960	UD	6500	960	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 1200	UD	6500	1200	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 1100	UD	6500	1100	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1200	UD	6500	1200	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1700	UD	6500	1700	ug/Kg
Bromobenzene	108-86-1	< 790	UD	6500	790	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1300 <i>UD</i>	UD	6500	1300	ug/Kg
n-propylbenzene	103-61-5	< 1000	UD	6500	1000	ug/Kg
2-Chlorotoluene	95-49-8	< 1100	UD	6500	1100	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	52000	D	6500	1300	ug/Kg
4-Chlorotoluene	106-43-4	< 1300	UD	6500	1300	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	160000	D	6500	1100	ug/Kg
Sec-butylbenzene	135-98-8	< 1300	UD	6500	1300	ug/Kg
tert-Butylbenzene	98-06-6	< 1200	UD	6500	1200	ug/Kg
n-Butylbenzene	104-51-8	< 1600	UD	6500	1600	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 1400	UD	6500	1400	ug/Kg
Hexachlorobutadiene	87-68-3	< 1200	UD	6500	1200	ug/Kg
Naphthalene	91-20-3	< 1200	UD	6500	1200	ug/Kg
tert-Butyl Alcohol	75-65-0	< 5200 <i>R</i>	UD	33000	5200	ug/Kg
Acrolein	107-02-8	< 6300 <i>R</i>	UD	33000	6300	ug/Kg
Acrylonitrile	107-13-1	< 4600	UD	33000	4600	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-01DL

Client ID: VGP-30-5DL

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100908.D

Analytical Run ID: VA1008102

Dilution: 10

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 3400	UD	33000	3400	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 2800	UD	6500	2800	ug/Kg
p-Isopropyltoluene	99-87-6	2800	JD	6500	1400	ug/Kg
Isopropyl Alcohol	67-63-0	< 26000	UD	26000	26000	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 6500	UD	6500	6500	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	499.3	100 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	459.3	92 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	459.5	92 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	513.5	103 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2335564	6.05			
1,4-Difluorobenzene	540-36-3	2602671	7.82			
Chlorobenzene-d5	3114-55-4	2153168	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1404180	19.53			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-02

Client ID: VGP-35-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/8/02

Matrix: SOIL

File ID: VA100807.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1008S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 0.92	U	5.1	0.92	ug/Kg
Chloromethane	74-87-3	< 1.7	U	5.1	1.7	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.1	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.1	1.0	ug/Kg
Chloroethane	75-00-3	< 1.3	U	5.1	1.3	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.3	U	5.1	1.3	ug/Kg
Methyl Acetate	79-20-9	< 1.1	U	5.1	1.1	ug/Kg
Methylene Chloride	75-09-2	< 1.3	U	5.1	1.3	ug/Kg
Acetone	67-64-1	< 3.6	U	5.1	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.3	U	5.1	1.3	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.1	1.1	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.92	U	5.1	0.92	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.92	U	5.1	0.92	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.1	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.92	U	5.1	0.92	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.82	U	5.1	0.82	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.1	1.1	ug/Kg
2-Butanone	78-93-3	< 5.5	U	5.1	5.5	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.1	1.0	ug/Kg
Cyclohexane	110-82-7	< 1.3	U	5.1	1.3	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.1	2.2	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.3	U	5.1	1.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.82	U	5.1	0.82	ug/Kg
Methylcyclohexane	108-87-7	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.82	U	5.1	0.82	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.92	U	5.1	0.92	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.1	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.92	U	5.1	0.92	ug/Kg
Dibromomethane	74-95-3	< 1.0	U	5.1	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.1	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.1	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.0	U	5.1	1.0	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-02

Client ID: VGP-35-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/8/02

Matrix: SOIL

File ID: VA100807.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1008S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.1	U	5.1	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.1	U	5.1	4.1	ug/Kg
2-Hexanone	591-78-6	< 6.1 U J	U	5.1	6.1	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.1	1.2	ug/Kg
Isopropylbenzene	98-82-8	< 1.1	U	5.1	1.1	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.1	1.0	ug/Kg
Toluene	108-88-3	< 1.1	U	5.1	1.1	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.0	U	5.1	1.0	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.1	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.1	1.0	ug/Kg
Styrene	100-42-5	< 1.4	U	5.1	1.4	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.1	2.9	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.1	U	5.1	1.1	ug/Kg
o-Xylene	95-47-6	< 1.1	U	5.1	1.1	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.0	U	5.1	1.0	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.82	U	5.1	0.82	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.92	U	5.1	0.92	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.0	U	5.1	1.0	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.5	U	5.1	1.5	ug/Kg
Bromobenzene	108-86-1	< 0.92	U	5.1	0.92	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.5 U J	U	5.1	1.5	ug/Kg
N-propylbenzene	103-61-5	< 1.3	U	5.1	1.3	ug/Kg
2-Chlorotoluene	95-49-8	< 1.7	U	5.1	1.7	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	2.0	J	5.1	1.3	ug/Kg
4-Chlorotoluene	106-43-4	< 1.4	U	5.1	1.4	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	4.7	J	5.1	1.4	ug/Kg
Sec-butylbenzene	135-98-8	< 1.8	U	5.1	1.8	ug/Kg
tert-Butylbenzene	98-06-6	< 1.7	U	5.1	1.7	ug/Kg
n-Butylbenzene	104-51-8	< 2.5	U	5.1	2.5	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 1.9	U	5.1	1.9	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.6	U	5.1	2.6	ug/Kg
Naphthalene	91-20-3	< 1.2	U	5.1	1.2	ug/Kg
Vinyl Acetate	108-05-4	< 4.7	U	5.1	4.7	ug/Kg
Tert butyl alcohol	75-65-0	< 4.3 R	U	5.1	4.3	ug/Kg
Acrolein	107-02-8	< 6.9 R	U	5.1	6.9	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-02

Client ID: VGP-35-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/8/02

Matrix: SOIL

File ID: VA100807.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1008S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 7.8 <i>R</i>	U	5.1	7.8	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.4	U	5.1	1.4	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.8	U	5.1	1.8	ug/Kg
Isopropyl Alcohol	67-63-0	< 51	U	20	51	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.1	U	5.1	5.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	55.99	112 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	51.44	103 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	47.45	95 %	74 - 121		SPK: 50
Dibromofluoromethane		52.18	104 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2044936	6.05			
1,4-Difluorobenzene	540-36-3	2370098	7.82			
Chlorobenzene-d5	3114-55-4	1918147	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1221684	19.56			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-03

Client ID: VGP-3D0-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100927.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009M2

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 92 UJ	U	650	92	ug/Kg
Chloromethane	74-87-3	< 66	U	650	66	ug/Kg
Vinyl chloride	75-01-4	< 100	U	650	100	ug/Kg
Bromomethane	74-83-9	< 50 UJ	U	650	50	ug/Kg
Chloroethane	75-00-3	< 320	U	650	320	ug/Kg
Trichlorofluoromethane	75-69-4	< 95 UJ	U	650	95	ug/Kg
1,1-Dichloroethene	75-35-4	< 90	U	650	90	ug/Kg
Acetone	67-64-1	< 460 UJ	U	650	460	ug/Kg
Carbon disulfide	75-15-0	< 94	U	650	94	ug/Kg
Methyl Acetate	79-20-9	< 100	U	650	100	ug/Kg
Methylene Chloride	75-09-2	340	J	650	230	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 110	U	650	110	ug/Kg
1,1-Dichloroethane	75-34-3	< 86	U	650	86	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 80	U	650	80	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 140	U	650	140	ug/Kg
2,2-Dichloropropane	594-20-7	< 82	U	650	82	ug/Kg
Chloroform	67-66-3	< 80	U	650	80	ug/Kg
Cyclohexane	110-82-7	< 130	U	650	130	ug/Kg
1,1-Dichloropropene	563-43-2	< 390	U	650	390	ug/Kg
2-Butanone	78-93-3	< 300	U	650	300	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 98	U	650	98	ug/Kg
Carbon Tetrachloride	56-23-5	< 61	U	650	61	ug/Kg
Dibromomethane	74-95-3	< 79	U	650	79	ug/Kg
Benzene	71-43-2	< 92	U	650	92	ug/Kg
1,2-Dichloroethane	107-06-2	< 73	U	650	73	ug/Kg
Trichloroethene	79-01-6	< 93	U	650	93	ug/Kg
Methylcyclohexane	108-87-7	< 87	U	650	87	ug/Kg
1,2-Dichloropropane	78-87-5	< 95	U	650	95	ug/Kg
Bromodichloromethane	75-27-4	< 95	U	650	95	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 86	U	650	86	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 86	U	650	86	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 81	U	650	81	ug/Kg
Dibromochloromethane	124-48-1	< 85	U	650	85	ug/Kg
1,2-Dibromoethane	106-93-4	< 82	U	650	82	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-03

Client ID: VGP-3D0-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100927.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009M2

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 64	U	650	64	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 110	U	650	110	ug/Kg
2-Hexanone	591-78-6	< 78	U	650	78	ug/Kg
1,3-Dichloropropane	142-28-9	< 74	U	650	74	ug/Kg
Tetrachloroethene	127-18-4	840		650	91	ug/Kg
Toluene	108-88-3	520	J	650	92	ug/Kg
Chlorobenzene	108-90-7	< 100	U	650	100	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 83	U	650	83	ug/Kg
Ethyl Benzene	100-41-4	< 98	U	650	98	ug/Kg
m&p-Xylenes	136777-61-2	< 200	U	1300	200	ug/Kg
o-Xylene	95-47-6	940		650	94	ug/Kg
Styrene	100-42-5	< 120	U	650	120	ug/Kg
Isopropylbenzene	98-82-8	< 97	U	650	97	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 92	U	650	92	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 96	U	650	96	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 120	U	650	120	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 110	U	650	110	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 120	U	650	120	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 170	U	650	170	ug/Kg
Bromobenzene	108-86-1	< 79	U	650	79	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 130	U	650	130	ug/Kg
n-propylbenzene	103-61-5	< 100	U	650	100	ug/Kg
2-Chlorotoluene	95-49-8	< 110	U	650	110	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	24000		650	130	ug/Kg
4-Chlorotoluene	106-43-4	< 130	U	650	130	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	13000		650	110	ug/Kg
Sec-butylbenzene	135-98-8	< 130	U	650	130	ug/Kg
tert-Butylbenzene	98-06-6	< 120	U	650	120	ug/Kg
n-Butylbenzene	104-51-8	< 160	U	650	160	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 140	U	650	140	ug/Kg
Hexachlorobutadiene	87-68-3	< 120	U	650	120	ug/Kg
Naphthalene	91-20-3	200	J	650	120	ug/Kg
tert-Butyl Alcohol	75-65-0	< 520	U	3300	520	ug/Kg
Acrolein	107-02-8	< 630	U	3300	630	ug/Kg
Acrylonitrile	107-13-1	< 460	U	3300	460	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-03

Client ID: VGP-3D0-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100927.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009M2

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 4

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 340	U	3300	340	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 280 UJ	U	650	280	ug/Kg
p-Isopropyltoluene	99-87-6	1400		650	140	ug/Kg
Isopropyl Alcohol	67-63-0	< 2600	U	2600	2600	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	870		650	650	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.17	98 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	40.84	82 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	44.75	90 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	48.87	98 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1951376	6.02			
1,4-Difluorobenzene	540-36-3	2214311	7.82			
Chlorobenzene-d5	3114-55-4	1788105	14.05			
1,4-Dichlorobenzene-d4	3855-82-1	1250303	19.54			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-04

Client ID: VGP-50-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100911.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 91	U	640	91	ug/Kg
Chloromethane	74-87-3	< 66	U	640	66	ug/Kg
Vinyl chloride	75-01-4	< 100	U	640	100	ug/Kg
Bromomethane	74-83-9	< 49 UJ	U	640	49	ug/Kg
Chloroethane	75-00-3	< 310	U	640	310	ug/Kg
Trichlorofluoromethane	75-69-4	< 94	U	640	94	ug/Kg
1,1-Dichloroethene	75-35-4	< 89	U	640	89	ug/Kg
Acetone	67-64-1	< 450 UJ	U	640	450	ug/Kg
Carbon disulfide	75-15-0	< 93	U	640	93	ug/Kg
Methyl Acetate	79-20-9	< 100	U	640	100	ug/Kg
Methylene Chloride	75-09-2	< 230	U	640	230	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 100	U	640	100	ug/Kg
1,1-Dichloroethane	75-34-3	< 85	U	640	85	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 79	U	640	79	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 130	U	640	130	ug/Kg
2,2-Dichloropropane	594-20-7	< 81	U	640	81	ug/Kg
Chloroform	67-66-3	< 79	U	640	79	ug/Kg
Cyclohexane	110-82-7	< 130	U	640	130	ug/Kg
1,1-Dichloropropene	563-43-2	< 390	U	640	390	ug/Kg
2-Butanone	78-93-3	< 300	U	640	300	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 97	U	640	97	ug/Kg
Carbon Tetrachloride	56-23-5	< 60	U	640	60	ug/Kg
Dibromomethane	74-95-3	< 78	U	640	78	ug/Kg
Benzene	71-43-2	< 91	U	640	91	ug/Kg
1,2-Dichloroethane	107-06-2	< 73	U	640	73	ug/Kg
Trichloroethene	79-01-6	< 92	U	640	92	ug/Kg
Methylcyclohexane	108-87-7	< 86	U	640	86	ug/Kg
1,2-Dichloropropane	78-87-5	< 94	U	640	94	ug/Kg
Bromodichloromethane	75-27-4	< 94	U	640	94	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 85	U	640	85	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 86	U	640	86	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 80	U	640	80	ug/Kg
Dibromochloromethane	124-48-1	< 85	U	640	85	ug/Kg
1,2-Dibromoethane	106-93-4	< 81	U	640	81	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-04

Client ID: VGP-50-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100911.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromotorm	75-25-2	< 63	U	640	63	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 100	U	640	100	ug/Kg
2-Hexanone	591-78-6	< 77 UJ	U	640	77	ug/Kg
1,3-Dichloropropane	142-28-9	< 73	U	640	73	ug/Kg
Tetrachloroethene	127-18-4	180	J	640	90	ug/Kg
Toluene	108-88-3	560	J	640	91	ug/Kg
Chlorobenzene	108-90-7	< 100	U	640	100	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 82	U	640	82	ug/Kg
Ethyl Benzene	100-41-4	< 97	U	640	97	ug/Kg
m&p-Xylenes	136777-61-2	1400		1300	200	ug/Kg
o-Xylene	95-47-6	2500		640	93	ug/Kg
Styrene	100-42-5	< 120	U	640	120	ug/Kg
Isopropylbenzene	98-82-8	690		640	96	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 91	U	640	91	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 95	U	640	95	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 120	U	640	120	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 110	U	640	110	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 120	U	640	120	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	210	J	640	170	ug/Kg
Bromobenzene	108-86-1	< 78	U	640	78	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 130 UJ	U	640	130	ug/Kg
n-propylbenzene	103-61-5	820		640	100	ug/Kg
2-Chlorotoluene	95-49-8	< 110	U	640	110	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	22000		640	120	ug/Kg
4-Chlorotoluene	106-43-4	< 130	U	640	130	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	75000	E	640	110	ug/Kg
Sec-butylbenzene	135-98-8	< 120	U	640	120	ug/Kg
tert-Butylbenzene	98-06-6	< 120	U	640	120	ug/Kg
n-Butylbenzene	104-51-8	< 160	U	640	160	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	260	J	640	140	ug/Kg
Hexachlorobutadiene	87-68-3	< 120	U	640	120	ug/Kg
Naphthalene	91-20-3	510	J	640	120	ug/Kg
tert-Butyl Alcohol	75-65-0	< 520 R	U	3200	520	ug/Kg
Acrolein	107-02-8	< 630 R	U	3200	630	ug/Kg
Acrylonitrile	107-13-1	< 450	U	3200	450	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-04

Client ID: VGP-50-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100911.D

Analytical Run ID: VA1008102

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 340	U	3200	340	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 280 UJ	U	640	280	ug/Kg
p-Isopropyltoluene	99-87-6	1400		640	140	ug/Kg
Isopropyl Alcohol	67-63-0	< 2600	U	2600	2600	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	800		640	640	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	57.85	116 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	48.33	97 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	50.04	100 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	50.87	102 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1581585	6.02			
1,4-Difluorobenzene	540-36-3	2083893	7.82			
Chlorobenzene-d5	3114-55-4	1691304	14.07			
1,4-Dichlorobenzene-d4	3855-82-1	1089691	19.57			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-04DL

Client ID: VGP-50-SDL

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100912.D

Analytical Run ID: VA1008102

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 450	UD	3200	450	ug/Kg
Chloromethane	74-87-3	< 330	UD	3200	330	ug/Kg
Vinyl chloride	75-01-4	< 510	UD	3200	510	ug/Kg
Bromomethane	74-83-9	< 250	UD	3200	250	ug/Kg
Chloroethane	75-00-3	< 1600	UD	3200	1600	ug/Kg
Trichlorofluoromethane	75-69-4	< 470	UD	3200	470	ug/Kg
1,1-Dichloroethene	75-35-4	< 440	UD	3200	440	ug/Kg
Acetone	67-64-1	< 2300	UD	3200	2300	ug/Kg
Carbon disulfide	75-15-0	< 460	UD	3200	460	ug/Kg
Methyl Acetate	79-20-9	< 510	UD	3200	510	ug/Kg
Methylene Chloride	75-09-2	< 1100	UD	3200	1100	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 520	UD	3200	520	ug/Kg
1,1-Dichloroethane	75-34-3	< 420	UD	3200	420	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 400	UD	3200	400	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 670	UD	3200	670	ug/Kg
2,2-Dichloropropane	594-20-7	< 400	UD	3200	400	ug/Kg
Chloroform	67-66-3	< 390	UD	3200	390	ug/Kg
Cyclohexane	110-82-7	< 630	UD	3200	630	ug/Kg
1,1-Dichloropropene	563-43-2	< 1900	UD	3200	1900	ug/Kg
2-Butanone	78-93-3	< 1500	UD	3200	1500	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 480	UD	3200	480	ug/Kg
Carbon Tetrachloride	56-23-5	< 300	UD	3200	300	ug/Kg
Dibromomethane	74-95-3	< 390	UD	3200	390	ug/Kg
Benzene	71-43-2	< 450	UD	3200	450	ug/Kg
1,2-Dichloroethane	107-06-2	< 360	UD	3200	360	ug/Kg
Trichloroethene	79-01-6	< 460	UD	3200	460	ug/Kg
Methylcyclohexane	108-87-7	< 430	UD	3200	430	ug/Kg
1,2-Dichloropropane	78-87-5	< 470	UD	3200	470	ug/Kg
Bromodichloromethane	75-27-4	< 470	UD	3200	470	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 420	UD	3200	420	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 430	UD	3200	430	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 400	UD	3200	400	ug/Kg
Dibromochloromethane	124-48-1	< 420	UD	3200	420	ug/Kg
1,2-Dibromoethane	106-93-4	< 410	UD	3200	410	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-04DL

Client ID: VGP-50-SDL

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100912.D

Analytical Run ID: VA1008102

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 320	UD	3200	320	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 520	UD	3200	520	ug/Kg
2-Hexanone	591-78-6	< 380 UJ	UD	3200	380	ug/Kg
1,3-Dichloropropane	142-28-9	< 370	UD	3200	370	ug/Kg
Tetrachloroethene	127-18-4	< 450	UD	3200	450	ug/Kg
Toluene	108-88-3	< 460	UD	3200	460	ug/Kg
Chlorobenzene	108-90-7	< 510	UD	3200	510	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 410	UD	3200	410	ug/Kg
Ethyl Benzene	100-41-4	< 490	UD	3200	490	ug/Kg
m&p-Xylenes	136777-61-2	1200	JD	6400	980	ug/Kg
o-Xylene	95-47-6	2100	JD	3200	460	ug/Kg
Styrene	100-42-5	< 590	UD	3200	590	ug/Kg
Isopropylbenzene	98-82-8	< 480	UD	3200	480	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 450	UD	3200	450	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 480	UD	3200	480	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 600	UD	3200	600	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 570	UD	3200	570	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 590	UD	3200	590	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 830	UD	3200	830	ug/Kg
Bromobenzene	108-86-1	< 390	UD	3200	390	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 660 UJ	UD	3200	660	ug/Kg
n-propylbenzene	103-61-5	< 510	UD	3200	510	ug/Kg
2-Chlorotoluene	95-49-8	< 540	UD	3200	540	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	20000	D	3200	620	ug/Kg
4-Chlorotoluene	106-43-4	< 660	UD	3200	660	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	71000	D	3200	530	ug/Kg
Sec-butylbenzene	135-98-8	< 620	UD	3200	620	ug/Kg
tert-Butylbenzene	98-06-6	< 600	UD	3200	600	ug/Kg
n-Butylbenzene	104-51-8	< 790	UD	3200	790	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 680	UD	3200	680	ug/Kg
Hexachlorobutadiene	87-68-3	< 600	UD	3200	600	ug/Kg
Naphthalene	91-20-3	< 580	UD	3200	580	ug/Kg
tert-Butyl Alcohol	75-65-0	< 2600 R	UD	16000	2600	ug/Kg
Acrolein	107-02-8	< 3100 R	UD	16000	3100	ug/Kg
Acrylonitrile	107-13-1	< 2300	UD	16000	2300	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-04DL

Client ID: VGP-50-SDL

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: SOIL

File ID: VA100912.D

Analytical Run ID: VA1008102

Dilution: 5

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1009M1

Sample Wt/Wol: 4.0 Units: g

Soil Extract Vol: 10000

Soil Aliquot Vol: 100

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Vinyl Acetate	108-05-4	< 1700	UD	16000	1700	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1400	UD	3200	1400	ug/Kg
p-Isopropyltoluene	99-87-6	1400	JD	3200	700	ug/Kg
Isopropyl Alcohol	67-63-0	< 13000	UD	13000	13000	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 3200	UD	3200	3200	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	260.15	104 %	43 - 177		SPK: 50
4-Bromofluorobenzene	460-00-4	232.4	93 %	58 - 154		SPK: 50
Toluene-d8	2037-26-5	242.85	97 %	65 - 159		SPK: 50
Dibromofluoromethane	75-71-8	272.65	109 %	70 - 130		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1991859	6.05			
1,4-Difluorobenzene	540-36-3	2307937	7.85			
Chlorobenzene-d5	3114-55-4	1926127	14.07			
1,4-Dichlorobenzene-d4	3855-82-1	1223492	19.56			

Volatiles

SDG No.: P4481
Client: Rich Consultants

Sample ID:	P4481-05	Client ID:	VGP-57-10
Date Collected:	9/30/02	Date Received:	10/2/02
Date Analyzed:	10/8/02	Matrix:	SOIL
File ID:	VA100808.D	Analytical Run ID:	VA100402
Dilution:	1	Instrument ID:	MSVOAA
Analytical Method:	8260	Associated Blank:	VBB1008S2
Sample Wt/Wol:	5.0	Soil Extract Vol:	
Soil Aliquot Vol:		% Moisture:	2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.91	U	5.1	0.91	ug/Kg
Chloromethane	74-87-3	< 1.7	U	5.1	1.7	ug/Kg
Bromomethane	74-83-9	< 1.0	U	5.1	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.1	1.0	ug/Kg
Chloroethane	75-00-3	< 1.3	U	5.1	1.3	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.3	U	5.1	1.3	ug/Kg
Methyl Acetate	79-20-9	< 1.1	U	5.1	1.1	ug/Kg
Methylene Chloride	75-09-2	< 1.3	U	5.1	1.3	ug/Kg
Acetone	67-64-1	< 3.6	U	5.1	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.3	U	5.1	1.3	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.1	1.1	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.91	U	5.1	0.91	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.91	U	5.1	0.91	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.1	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.91	U	5.1	0.91	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.81	U	5.1	0.81	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.1	1.1	ug/Kg
2-Butanone	78-93-3	< 5.5	U	5.1	5.5	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.1	1.0	ug/Kg
Cyclohexane	110-82-7	< 1.3	U	5.1	1.3	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.1	U	5.1	2.1	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.3	U	5.1	1.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.81	U	5.1	0.81	ug/Kg
Methylcyclohexane	108-87-7	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.81	U	5.1	0.81	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.91	U	5.1	0.91	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.1	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.91	U	5.1	0.91	ug/Kg
Dibromomethane	74-95-3	< 1.0	U	5.1	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.1	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.1	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.1	1.0	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.0	U	5.1	1.0	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-05

Client ID: VGP-57-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/8/02

Matrix: SOIL

File ID: VA100808.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1008S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromotorm	75-25-2	< 1.1	U	5.1	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.1	U	5.1	4.1	ug/Kg
2-Hexanone	591-78-6	< 6.1 U J	U	5.1	6.1	ug/Kg
Tetrachloroethene	127-18-4	< 1.2	U	5.1	1.2	ug/Kg
Isopropylbenzene	98-82-8	< 1.1	U	5.1	1.1	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.1	1.0	ug/Kg
Toluene	108-88-3	< 1.1	U	5.1	1.1	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.0	U	5.1	1.0	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.1	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.1	1.0	ug/Kg
Styrene	100-42-5	< 1.4	U	5.1	1.4	ug/Kg
m/p-Xylenes	136777-61-2	< 2.8	U	5.1	2.8	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.1	U	5.1	1.1	ug/Kg
o-Xylene	95-47-6	< 1.1	U	5.1	1.1	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.0	U	5.1	1.0	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.81	U	5.1	0.81	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.91	U	5.1	0.91	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.0	U	5.1	1.0	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.5	U	5.1	1.5	ug/Kg
Bromobenzene	108-86-1	< 0.91	U	5.1	0.91	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.5 U J	U	5.1	1.5	ug/Kg
N-propylbenzene	103-61-5	< 1.3	U	5.1	1.3	ug/Kg
2-Chlorotoluene	95-49-8	< 1.7	U	5.1	1.7	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	< 1.3	U	5.1	1.3	ug/Kg
4-Chlorotoluene	106-43-4	< 1.4	U	5.1	1.4	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	< 1.4	U	5.1	1.4	ug/Kg
Sec-butylbenzene	135-98-8	< 1.8	U	5.1	1.8	ug/Kg
tert-Butylbenzene	98-06-6	< 1.7	U	5.1	1.7	ug/Kg
n-Butylbenzene	104-51-8	< 2.4	U	5.1	2.4	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 1.9	U	5.1	1.9	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.5	U	5.1	2.5	ug/Kg
Naphthalene	91-20-3	< 1.2	U	5.1	1.2	ug/Kg
Vinyl Acetate	108-05-4	< 4.7	U	5.1	4.7	ug/Kg
Tert butyl alcohol	75-65-0	< 4.3 R	U	5.1	4.3	ug/Kg
Acrolein	107-02-8	< 6.8 R	U	5.1	6.8	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-05

Client ID: VGP-57-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/8/02

Matrix: SOIL

File ID: VA100808.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBB1008S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 2

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 1.1 R	U	5.1	1.1	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.4	U	5.1	1.4	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.8	U	5.1	1.8	ug/Kg
Isopropyl Alcohol	67-63-0	< 51	U	20	51	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.1	U	5.1	5.1	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.13	96 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	53.57	107 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	50	100 %	74 - 121		SPK: 50
Dibromofluoromethane		55.6	111 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1715601	6.05			
1,4-Difluorobenzene	540-36-3	1870613	7.82			
Chlorobenzene-d5	3114-55-4	1580800	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1052301	19.55			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-06

Client ID: VGP-20-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/7/02

Matrix: SOIL

File ID: VA100713.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1007S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.93 UJ	U	5.2	0.93	ug/Kg
Chloromethane	74-87-3	< 1.8	U	5.2	1.8	ug/Kg
Bromomethane	74-83-9	< 1.0 UJ	U	5.2	1.0	ug/Kg
Vinyl chloride	75-01-4	< 1.0	U	5.2	1.0	ug/Kg
Chloroethane	75-00-3	< 1.3	U	5.2	1.3	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.3	U	5.2	1.3	ug/Kg
Methyl Acetate	79-20-9	< 1.1	U	5.2	1.1	ug/Kg
Methylene Chloride	75-09-2	5.9	B	5.2	1.3	ug/Kg
Acetone	67-64-1	< 3.6 UJ	U	5.2	3.6	ug/Kg
Carbon disulfide	75-15-0	< 1.3	U	5.2	1.3	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.1	U	5.2	1.1	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.93	U	5.2	0.93	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.93	U	5.2	0.93	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.1	U	5.2	1.1	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.93	U	5.2	0.93	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.83	U	5.2	0.83	ug/Kg
Chloroform	67-66-3	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.1	U	5.2	1.1	ug/Kg
2-Butanone	78-93-3	< 5.6 UJ	U	5.2	5.6	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.0	U	5.2	1.0	ug/Kg
Cyclohexane	110-82-7	< 1.3	U	5.2	1.3	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.2	2.2	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.3	U	5.2	1.3	ug/Kg
Bromodichloromethane	75-27-4	< 0.83	U	5.2	0.83	ug/Kg
Methylcyclohexane	108-87-7	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.83	U	5.2	0.83	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.93	U	5.2	0.93	ug/Kg
Trichloroethene	79-01-6	< 1.0	U	5.2	1.0	ug/Kg
Dibromochloromethane	124-48-1	< 0.93	U	5.2	0.93	ug/Kg
Dibromomethane	74-95-3	< 1.0	U	5.2	1.0	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.1	U	5.2	1.1	ug/Kg
Benzene	71-43-2	< 1.0	U	5.2	1.0	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.0	U	5.2	1.0	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.0	U	5.2	1.0	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-06

Client ID: VGP-20-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/7/02

Matrix: SOIL

File ID: VA100713.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1007S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.1	U	5.2	1.1	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.1	U	5.2	4.1	ug/Kg
2-Hexanone	591-78-6	< 6.2	U	5.2	6.2	ug/Kg
Tetrachloroethene	127-18-4	13		5.2	1.2	ug/Kg
Isopropylbenzene	98-82-8	< 1.1	U	5.2	1.1	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	U	5.2	1.0	ug/Kg
Toluene	108-88-3	< 1.1	U	5.2	1.1	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.0	U	5.2	1.0	ug/Kg
Chlorobenzene	108-90-7	< 1.1	U	5.2	1.1	ug/Kg
Ethyl Benzene	100-41-4	< 1.0	U	5.2	1.0	ug/Kg
Styrene	100-42-5	< 1.4	U	5.2	1.4	ug/Kg
m/p-Xylenes	136777-61-2	< 2.9	U	5.2	2.9	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.1	U	5.2	1.1	ug/Kg
o-Xylene	95-47-6	< 1.1	U	5.2	1.1	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.0	U	5.2	1.0	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.83	U	5.2	0.83	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.93	U	5.2	0.93	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.0	U	5.2	1.0	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.5	U	5.2	1.5	ug/Kg
Bromobenzene	108-86-1	< 0.93	U	5.2	0.93	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.5	U	5.2	1.5	ug/Kg
N-propylbenzene	103-61-5	< 1.3	U	5.2	1.3	ug/Kg
2-Chlorotoluene	95-49-8	< 1.8	U	5.2	1.8	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	6.7		5.2	1.3	ug/Kg
4-Chlorotoluene	106-43-4	< 1.4	U	5.2	1.4	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	5.8		5.2	1.4	ug/Kg
Sec-butylbenzene	135-98-8	< 1.9	U	5.2	1.9	ug/Kg
tert-Butylbenzene	98-06-6	< 1.8	U	5.2	1.8	ug/Kg
n-Butylbenzene	104-51-8	< 2.5	U	5.2	2.5	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.0	U	5.2	2.0	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.6	U	5.2	2.6	ug/Kg
Naphthalene	91-20-3	< 1.2	U	5.2	1.2	ug/Kg
Vinyl Acetate	108-05-4	< 4.8	U	5.2	4.8	ug/Kg
Tert butyl alcohol	75-65-0	< 4.3	U	5.2	4.3	ug/Kg
Acrolein	107-02-8	< 6.9	U	5.2	6.9	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-06

Client ID: VGP-20-5

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/7/02

Matrix: SOIL

File ID: VA100713.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1007S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 3

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 7.9	U	5.2	7.9	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.4	U	5.2	1.4	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.9	U	5.2	1.9	ug/Kg
Isopropyl Alcohol	67-63-0	< 52	U	21	52	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.2	U	5.2	5.2	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	50.17	100 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	50.67	101 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	37.31	75 %	74 - 121		SPK: 50
Dibromofluoromethane		48.37	97 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1870909	6.05			
1,4-Difluorobenzene	540-36-3	2274857	7.85			
Chlorobenzene-d5	3114-55-4	1635241	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	803883	19.53			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-07

Client ID: VGP-28-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/7/02

Matrix: SOIL

File ID: VA100714.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1007S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.96 UJ	U	5.3	0.96	ug/Kg
Chloromethane	74-87-3	< 1.8	U	5.3	1.8	ug/Kg
Bromomethane	74-83-9	< 1.1 UJ	U	5.3	1.1	ug/Kg
Vinyl chloride	75-01-4	< 1.1	U	5.3	1.1	ug/Kg
Chloroethane	75-00-3	< 1.4	U	5.3	1.4	ug/Kg
Trichlorofluoromethane	75-69-4	< 1.4	U	5.3	1.4	ug/Kg
Methyl Acetate	79-20-9	< 1.2	U	5.3	1.2	ug/Kg
Methylene Chloride	75-09-2	5.3	JB	5.3	1.4	ug/Kg
Acetone	67-64-1	< 3.7 UJ	U	5.3	3.7	ug/Kg
Carbon disulfide	75-15-0	< 1.4	U	5.3	1.4	ug/Kg
1,1-Dichloroethene	75-35-4	< 1.2	U	5.3	1.2	ug/Kg
1,1-Dichloroethane	75-34-3	< 0.96	U	5.3	0.96	ug/Kg
Methyl tert-butyl Ether	1634-04-4	< 0.96	U	5.3	0.96	ug/Kg
trans-1,2-Dichloroethene	156-60-5	< 1.2	U	5.3	1.2	ug/Kg
cis-1,2-Dichloroethene	156-59-2	< 0.96	U	5.3	0.96	ug/Kg
2,2-Dichloropropane	594-20-7	< 0.85	U	5.3	0.85	ug/Kg
Chloroform	67-66-3	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloroethane	107-06-2	< 1.2	U	5.3	1.2	ug/Kg
2-Butanone	78-93-3	< 5.7 UJ	U	5.3	5.7	ug/Kg
1,1,1-Trichloroethane	71-55-6	< 1.1	U	5.3	1.1	ug/Kg
Cyclohexane	110-82-7	< 1.4	U	5.3	1.4	ug/Kg
Carbon Tetrachloride	56-23-5	< 2.2	U	5.3	2.2	ug/Kg
1,1-Dichloropropene	563-43-2	< 1.4	U	5.3	1.4	ug/Kg
Bromodichloromethane	75-27-4	< 0.85	U	5.3	0.85	ug/Kg
Methylcyclohexane	108-87-7	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dichloropropane	78-87-5	< 0.85	U	5.3	0.85	ug/Kg
cis-1,3-Dichloropropene	10061-01-5	< 0.96	U	5.3	0.96	ug/Kg
Trichloroethene	79-01-6	< 1.1	U	5.3	1.1	ug/Kg
Dibromochloromethane	124-48-1	< 0.96	U	5.3	0.96	ug/Kg
Dibromomethane	74-95-3	< 1.1	U	5.3	1.1	ug/Kg
1,1,2-Trichloroethane	79-00-5	< 1.2	U	5.3	1.2	ug/Kg
Benzene	71-43-2	< 1.1	U	5.3	1.1	ug/Kg
t-1,3-Dichloropropene	10061-02-6	< 1.1	U	5.3	1.1	ug/Kg
1,2-Dibromoethane	106-93-4	< 1.1	U	5.3	1.1	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-07

Client ID: VGP-28-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/7/02

Matrix: SOIL

File ID: VA100714.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1007S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 1.2	U	5.3	1.2	ug/Kg
4-Methyl-2-Pentanone	108-10-1	< 4.3	U	5.3	4.3	ug/Kg
2-Hexanone	591-78-6	< 6.4	U	5.3	6.4	ug/Kg
Tetrachloroethene	127-18-4	< 1.3	U	5.3	1.3	ug/Kg
Isopropylbenzene	98-82-8	< 1.2	U	5.3	1.2	ug/Kg
1,1,2,2-Tetrachloroethane	79-34-5	< 1.1	U	5.3	1.1	ug/Kg
Toluene	108-88-3	< 1.2	U	5.3	1.2	ug/Kg
1,3-Dichloropropane	142-28-9	< 1.1	U	5.3	1.1	ug/Kg
Chlorobenzene	108-90-7	< 1.2	U	5.3	1.2	ug/Kg
Ethyl Benzene	100-41-4	< 1.1	U	5.3	1.1	ug/Kg
Styrene	100-42-5	< 1.5	U	5.3	1.5	ug/Kg
m/p-Xylenes	136777-61-2	< 3.0	U	5.3	3.0	ug/Kg
1,1,1,2-Tetrachloroethane	630-20-6	< 1.2	U	5.3	1.2	ug/Kg
o-Xylene	95-47-6	< 1.2	U	5.3	1.2	ug/Kg
1,3-Dichlorobenzene	541-73-1	< 1.1	U	5.3	1.1	ug/Kg
1,4-Dichlorobenzene	106-46-7	< 0.85	U	5.3	0.85	ug/Kg
1,2-Dichlorobenzene	95-50-1	< 0.96	U	5.3	0.96	ug/Kg
1,2-Dibromo-3-Chloropropane	96-12-8	< 1.1	U	5.3	1.1	ug/Kg
1,2,4-Trichlorobenzene	120-82-1	< 1.6	U	5.3	1.6	ug/Kg
Bromobenzene	108-86-1	< 0.96	U	5.3	0.96	ug/Kg
1,2,3-Trichloropropane	96-18-4	< 1.6	U	5.3	1.6	ug/Kg
N-propylbenzene	103-61-5	< 1.4	U	5.3	1.4	ug/Kg
2-Chlorotoluene	95-49-8	< 1.8	U	5.3	1.8	ug/Kg
1,3,5-Trimethylbenzene	108-67-8	2.5	J	5.3	1.4	ug/Kg
4-Chlorotoluene	106-43-4	< 1.5	U	5.3	1.5	ug/Kg
1,2,4-Trimethylbenzene	95-63-6	2.2	J	5.3	1.5	ug/Kg
Sec-butylbenzene	135-98-8	< 1.9	U	5.3	1.9	ug/Kg
tert-Butylbenzene	98-06-6	< 1.8	U	5.3	1.8	ug/Kg
n-Butylbenzene	104-51-8	< 2.6	U	5.3	2.6	ug/Kg
1,2,3-Trichlorobenzene	87-61-6	< 2.0	U	5.3	2.0	ug/Kg
Hexachlorobutadiene	87-68-3	< 2.7	U	5.3	2.7	ug/Kg
Naphthalene	91-20-3	< 1.3	U	5.3	1.3	ug/Kg
Vinyl Acetate	108-05-4	< 4.9	U	5.3	4.9	ug/Kg
Tert butyl alcohol	75-65-0	< 4.5	U	5.3	4.5	ug/Kg
Acrolein	107-02-8	< 7.1	U	5.3	7.1	ug/Kg

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-07

Client ID: VGP-28-10

Date Collected: 9/30/02

Date Received: 10/2/02

Date Analyzed: 10/7/02

Matrix: SOIL

File ID: VA100714.D

Analytical Run ID: VA100402

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1007S2

Sample Wt/Wol: 5.0 Units: g

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 6

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 8.1	U	5.3	8.1	ug/Kg
2-Chloroethyl vinyl ether	110-75-8	< 1.5	U	5.3	1.5	ug/Kg
p-Isopropyltoluene	99-87-6	< 1.9	U	5.3	1.9	ug/Kg
Isopropyl Alcohol	67-63-0	< 53	U	21	53	ug/Kg
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.3	U	5.3	5.3	ug/Kg
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.76	98 %	70 - 121		SPK: 50
Toluene-d8	2037-26-5	56.72	113 %	81 - 117		SPK: 50
4-Bromofluorobenzene	460-00-4	49.76	100 %	74 - 121		SPK: 50
Dibromofluoromethane		56.63	113 %	80 - 120		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2469766	6.05			
1,4-Difluorobenzene	540-36-3	2715922	7.82			
Chlorobenzene-d5	3114-55-4	2259918	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1400385	19.53			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-10

Client ID: VGW-267-70

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100922.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 0.71 UJ	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38 UJ	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73 UJ	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5 UJ	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-10

Client ID: VGW-267-70

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100922.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	2.1	J	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	5.0	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0	U	5.0	4.0	ug/L
Acrolein	107-02-8	< 4.9	U	5.0	4.9	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-10

Client ID: VGW-267-70

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100922.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	5.0	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 UJ	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 50	U	20	50	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	6.3		5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	52.62	105 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.39	97 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	48.08	96 %	70 - 125		SPK: 50
Dibromofluoromethane		55.67	111 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1884145	6.05			
1,4-Difluorobenzene	540-36-3	2082260	7.82			
Chlorobenzene-d5	3114-55-4	1751981	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1246724	19.53			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-11

Client ID: VGW-257-60

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100923.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71 UJ	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38 UJ	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73 UJ	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5 UJ	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-11

Client ID: VGW-257-60

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100923.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60 <i>UJ</i>	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	1.5	J	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	5.0	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 <i>R</i>	U	5.0	4.0	ug/L
Acrolein	107-02-8	< 4.9 <i>R</i>	U	5.0	4.9	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-11

Client ID: VGW-257-60

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100923.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	5.0	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 UJ	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 50	U	20	50	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	53.22	106 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	47.19	94 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	46.31	93 %	70 - 125		SPK: 50
Dibromofluoromethane		55.15	110 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1949156	6.05			
1,4-Difluorobenzene	540-36-3	2219479	7.82			
Chlorobenzene-d5	3114-55-4	1865281	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1240716	19.53			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-12

Client ID: VGW-167-70

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100924.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 0.71 <i>UJ</i>	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38 <i>UJ</i>	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73 <i>UJ</i>	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5 <i>UJ</i>	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-12

Client ID: VGW-167-70

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100924.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	3.5	J	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	3.5	J	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	2.1	J	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	5.0	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0	U	5.0	4.0	ug/L
Acrolein	107-02-8	< 4.9	U	5.0	4.9	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-12

Client ID: VGW-167-70

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100924.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	5.0	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 U	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 50	U	20	50	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	5.9		5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	51.84	104 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	46.11	92 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	45.46	91 %	70 - 125		SPK: 50
Dibromofluoromethane		54.78	110 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1979310	6.05			
1,4-Difluorobenzene	540-36-3	2258524	7.85			
Chlorobenzene-d5	3114-55-4	1872878	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1282439	19.55			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-13

Client ID: VGW-157-60

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100925.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71 <i>UJ</i>	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38 <i>UJ</i>	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73 <i>UJ</i>	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	2.2	JB	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5 <i>UJ</i>	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-13

Client ID: VGW-157-60

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100925.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60 U J	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzenè	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	4.4	J	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	5.0	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0 R	U	5.0	4.0	ug/L
Acrolein	107-02-8	< 4.9 R	U	5.0	4.9	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-13

Client ID: VGW-157-60

Date Collected: 10/1/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100925.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	5.0	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 50	U	20	50	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	18		5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	51.54	103 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	46.38	93 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	47.11	94 %	70 - 125		SPK: 50
Dibromofluoromethane		55.01	110 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1820437	6.08			
1,4-Difluorobenzene	540-36-3	2045550	7.85			
Chlorobenzene-d5	3114-55-4	1769744	14.07			
1,4-Dichlorobenzene-d4	3855-82-1	1199782	19.55			

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-14

Client ID: TB-GW100102

Date Collected: 9/16/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100921.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
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TARGETS

Dichlorodifluoromethane	75-71-8	< 0.71 UJ	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38 UJ	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73 UJ	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	2.8	JB	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5 UJ	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L
1,2-Dibromoethane	106-93-4	< 0.63	U	5.0	0.63	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-14

Client ID: TB-GW100102

Date Collected: 9/16/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100921.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromofom	75-25-2	< 0.49	U	5.0	0.49	ug/L
4-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	5.0	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0	U	5.0	4.0	ug/L
Acrolein	107-02-8	< 4.9	U	5.0	4.9	ug/L

Volatiles

SDG No.: P4481

Client: Rich Consultants

Sample ID: P4481-14

Client ID: TB-GW100102

Date Collected: 9/16/02

Date Received: 10/2/02

Date Analyzed: 10/9/02

Matrix: WATER

File ID: VA100921.D

Analytical Run ID: VA100802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1009W2

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	5.0	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 <i>UJ</i>	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 50	U	20	50	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	52.41	105 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.71	97 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	46.8	94 %	70 - 125		SPK: 50
Dibromofluoromethane		54.13	108 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1788558	6.05			
1,4-Difluorobenzene	540-36-3	2049496	7.82			
Chlorobenzene-d5	3114-55-4	1707450	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1146752	19.55			

Premier Environmental Services.

APPENDIX C

CHEMTECH

SHIPPING AND RECEIVING DOCUMENTATION

25208



CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH JOB NO.:

P4481

CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: CA RICH CONSULTANTS, INC.

ADDRESS: 17 DURANT STREET

CITY: PLAINVIEW STATE: NY ZIP: 11803

ATTENTION: ERIC WEINSTOCK

PHONE: 516.576.8844 FAX: 516.576.8083

PROJECT INFORMATION

PROJECT NAME: FCP CORAL GRAPHICS

PROJECT NO.:

PROJECT MANAGER: E. WEINSTOCK / L. RAN

LOCATION: CORAL GRAPHICS
HICKSVILLE, NEW YORK

PHONE: 516.576.8844 FAX: 516.576.8083

BILLING INFORMATION

BILL TO: CA RICH CONSULTANTS PO #:

ADDRESS: 17 DURANT STREET

CITY: PLAINVIEW STATE: NY ZIP: 11803

ATTENTION: ERIC WEINSTOCK PHONE: 516.576.8844

ANALYSIS

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH

** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ NY STATE CATEGORY A☐ RESULTS PLUS QC ☒ NY STATE CATEGORY B☐ REGULATORY FORMAT, STATE:☐ NEW JERSEY REDUCED DELIVERABLES☐ CLP☐ EDD FORMAT: _____

1 2 3 4 5 6 7 8 9
VOCs ONLY
VOCs ONLY
VOCs ONLY
VOCs ONLY
VOCs ONLY
VOCs ONLY
VOCs ONLY
VOCs ONLY
VOCs ONLY

PRESERVATIVES

COMMENTS

← Specify Preservatives
A - HCl B - HNO₃
C - H₂SO₄ D - NaOH
E - ICE F - Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS		
			COMP	GRAB	DATE	TIME		A	1	2	3	4	5	6	7	8		9	
1. 10/14	V13W-2 (67-70)	WATER			10/14	1046	2	2											VOCs ONLY
2. 11/12	V13W-2 (57-60)					11/14	2	2											
3. 12/13	V13W-1 (67-70)					12/15	2	2											
4. 13/14	V13W-1 (57-60)					13/50	2	2											
5. 14/15	TB-13W (10101102)					11/15	2	2											
6.																			
7.																			
8.																			

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. CHEN JONE	DATE/TIME: 10/14/02	RECEIVED BY: 1. UPS	Conditions of bottles or coolers at receipt: ☒ Compliant ☐ Non-Compliant ☒ Temp. of Cooler 6.0 Comments:
RELINQUISHED BY: 2.	DATE/TIME:	RECEIVED BY: 2.	
RELINQUISHED BY: 3. UPS	DATE/TIME: 10/22/02	RECEIVED FOR LAB BY: 3. George Fisher	

Page 2 of 2

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☒ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☐ YES ☐ NO

Coral Graphics

VOC Approach

VOC-5035/8260B (soils)
VOC-5030/8260B (waters)

Thank you for your continuing support as we look forward to supplying the analytical support services to your project. To accomplish the data objectives, Chemtech can undertake several modifications to our Volatile Chemtech Full (8260B) runs.

Those modifications include starting the analytical run at 30-degree Celsius. Chemtech will adjust the start of the (8260) VOC run at 30 degree C which is outside of the method definition to identify isopropyl alcohol.

Add additional standards i) isopropyl alcohol and ii) 1,2,3,4 Tetramethylbenzene (CAS# 95-93-2) to the mix of standards. The sample matrixes for this round of your project: Coral Graphics are water and soil matrixes.

The data objectives for trimethylbenzene will be address by the compounds 1,3,5-trimethylbenzene and 1,2,4 trimethylbenzene that are in our mix of standards.

These modifications that *expand* the method definition for your project data objectives must have site specific matrix spike/matrix spike duplicate selection on your chain of Custody for each Sample Delivery Group (SDG) for analysis. Further, CA Rich Inc., it's client or the controlling Regulatory Agency (NYSDEC) will hold Chemtech without fault or harmless during any subsequent examinations of our data under any Data Usability Summary Report (DUSR) or data validation that identifies the Volatile analysis as non-compliant with the method due to these project specific data objectives.

Chemtech unit price with this program for the volatile analysis will help defer the added costs incurred with standards and QA/QC associated with these modifications. The per sample based upon the schedule quantities to be performed. If significant variance occurs with the projected quantities, Chemtech will adjust it's price to adequately recover our time, materials and services rendered with these modifications.

Chemtech will require a lead-time (unspecified) to obtain the standards and prepare for the project specific data objectives. If you have any additional questions, please call me to discuss and confirm the project specific data objectives.

Chemtech Consulting Group

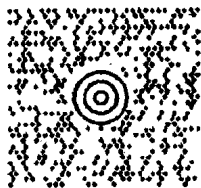
LINDA ROSS
(516) 576-8844
RICH CONSULTANTS
17 DUPONT STREET
PLAINVIEW NY 11803-1602

20 LBS 2 OF 5

RS

SHIP TO:

SHIPPING DEPARTMENT
(908) 789-8900
CHEMTECH CONSULTING
284 SHEFFIELD STREET
MOUNTAINSIDE NJ 07092-2319

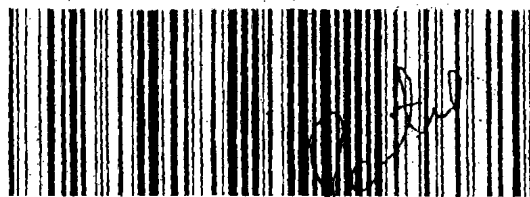


NJ 078 9-61



UPS GROUND

TRACKING #: 1Z A17 04V 90 4824 6764



BILLING: P/P
DESC: GLASSWARE
RETURN SERVICE

Sunny 10/02/02 12:00

UOM 41.16 UPS Ther 19.0A 07/2002

Premier Environmental Services.

APPENDIX D

00207071

Coral Graphics

VOC Approach

VOC-8260B/8260B (soils)

VOC-8260B/8260B (waters) *8/2/02*

Thank you for your continuing support as we look forward to supplying the analytical support services to your project. To accomplish the data objectives, Chemtech can undertake several modifications to our Volatile Chemtech Full (8260B) runs.

Those modifications include starting the analytical run at 30-degree Celsius. Chemtech will adjust the start of the (8260) VOC run at 30 degree C which is outside of the method definition to identify isopropyl alcohol.

Add additional standards i) isopropyl alcohol and ii) 1,2,3,4 Tetramethylbenzene (CAS# 95-93-2) to the mix of standards. The sample matrixes for this round of your project: Coral Graphics are water and soil matrixes.

The data objectives for trimethylbenzene will be address by the compounds 1,3,5-trimethylbenzene and 1,2,4 trimethylbenzene that are in our mix of standards.

These modifications that expand the method definition for your project data objectives must have site specific matrix spike/matrix spike duplicate selection on your chain of Custody for each Sample Delivery Group (SDG) for analysis. Further, CA Rich Inc., it's client or the controlling Regulatory Agency (NYSDEC) will hold Chemtech without fault or harmless during any subsequent examinations of our data under any Data Usability Summary Report (DUSR) or data validation that identifies the Volatile analysis as non-compliant with the method due to these project specific data objectives.

Chemtech unit price with this program for the volatile analysis will help defer the added costs incurred with standards and QA/QC associated with these modifications. The per sample based upon the schedule quantities to be performed. If significant variance occurs with the projected quantities, Chemtech will adjust it's price to adequately recover our time, materials and services rendered with these modifications.

Chemtech will require a lead-time (unspecified) to obtain the standards and prepare for the project specific data objectives. If you have any additional questions, please call me to discuss and confirm the project specific data objectives.

Premier Environmental Services.

November 25, 2002

Kurt Hummler
Project Manager
Chemtech Consulting Group
284 Sheffield Street
Mountainside, NJ 07092

Dear Mr. Hummler,

Premier Environmental Services is performing the data review for the CA Rich samples collected at the Coral Graphics Site. The samples were collected September 30, 2002. Below are questions associated with the cited data set.

Project P4481-Volatile Organic Analyses

The method blanks (aqueous, soil and medium level soil) contain low levels of Methylene Chloride. The Form I's for the VBLK's at the end of the data report do not indicate the presence of the Methylene Chloride, however, the quant reports report low levels. Please review and revise the Form I's for the method blanks. In addition, please add the "B" qualifier where necessary to the associated result forms.

Thank you in advance for your prompt response to these data issues. If there are any additional questions associated with this data set, please do not hesitate to contact me at 516-223-9761.

Sincerely,



Renee Cohen

Cc: Eric Weinstock – CA Rich Consultants

Premier Environmental Services.

November 26 2002

Kurt Hummler
Project Manager
Chemtech Consulting Group
284 Sheffield Street
Mountainside, NJ 07092

Dear Mr. Hummler,

Premier Environmental Services is performing the data review for the CA Rich samples collected at the Coral Graphics Site. The samples were collected September 30, 2002 and October 1, 2002. Below are questions associated with the cited data set.

Project P4481-Volatile Organic Analyses

Please review the Form V that is associated with the analysis on 10/9/02 (CCV VA100902.D). The Form V indicates that the Purge and Trap was heated, however, these samples are medium level soil samples. The Form 7 associated with the CCV indicates that the run was not heated. Please clarify the discrepancy and if necessary change the Form V (manual changes are acceptable). Please resubmit for the data report.

Please review the Form V that is associated with the analysis on 10/9/02 (CCV VA100918.D). The Form V indicates that the Purge and Trap was heated, however, these samples are medium level soil samples. The Form 7 associated with the CCV indicates that the run was not heated. Please clarify the discrepancy and if necessary change the Form V (manual changes are acceptable). Please resubmit for the data report.

Thank you in advance for your prompt response to these data issues. If there are any additional questions associated with this data set, please do not hesitate to contact me at 516-223-9761.

Sincerely,



Renee Cohen

Cc: Eric Weinstock – CA Rich Consultants

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)Lab Name: Chemtech Consulting GroupContract: richLab Code: CTECHCase No.: P4481SAS No.: P4481SDG NO.: P4481Lab File ID VA100813.DBFB Injection Date: 10/8/02Instrument ID: MSVOAABFB Injection Time: 18:44GC Column: RTX624 ID: 0.53 (mm)Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	32.0
75	30.0 - 60.0% of mass 95	59.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.6
173	Less than 2.0% of mass 174	0.0 (0.0 1
174	50.0 - 100.0% of mass 95	76.7
175	5.0 - 9.0% of mass 174	6.4 (8.4 1
176	95.0 - 101.0% of mass 174	74.4 (97.1 1
177	5.0 - 9.0% of mass 176	4.6 (6.2 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD200	200 PPB ICC	VA100814.D	10/8/02	19:15
VSTD100	100 PPB ICC	VA100815.D	10/8/02	19:59
VSTD050	50 PPB ICC	VA100816.D	10/8/02	20:44
VSTD020	20 PPB ICC	VA100817.D	10/8/02	21:28
VSTD005	5 PPB ICC	VA100818.D	10/8/02	22:13

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)Lab Name: Chemtech Consulting GroupContract: richLab Code: CTECHCase No.: P4481SAS No.: P4481SDG NO.: P4481Lab File ID VA100901.DBFB Injection Date: 10/9/02Instrument ID: MSVOAABFB Injection Time: 00:30GC Column: RTX624 ID: 0.53 (mm)Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	34.7
75	30.0 - 60.0% of mass 95	58.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.5
173	Less than 2.0% of mass 174	0.9 (1.2 1
174	50.0 - 100.0% of mass 95	68.9
175	5.0 - 9.0% of mass 174	5.6 (8.2 1
176	95.0 - 101.0% of mass 174	67.3 (97.6 1
177	5.0 - 9.0% of mass 176	5.2 (7.7 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD050	50 PPB CCC	VA100902.D	10/9/02	01:00
VBLK01	VBB1009M1	VA100904.D	10/9/02	02:29
VGP-30-5	P4481-01	VA100907.D	10/9/02	04:42
VGP-30-5DL	P4481-01DL	VA100908.D	10/9/02	05:27
VGP-50-5	P4481-04	VA100911.D	10/9/02	07:40
VGP-50-5DL	P4481-04DL	VA100912.D	10/9/02	08:25

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)Lab Name: Chemtech Consulting GroupContract: richLab Code: CTECH Case No.: P4481SAS No.: P4481SDC NO.: P4481Lab File ID VA100917.DBFB Injection Date: 10/9/02Instrument ID: MSVOAABFB Injection Time: 12:12GC Column: RTX624 ID: 0.53 (mm)Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.0
75	30.0 - 60.0% of mass 95	53.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0 1
174	50.0 - 100.0% of mass 95	74.5
175	5.0 - 9.0% of mass 174	6.2 (8.3 1
176	95.0 - 101.0% of mass 174	71.6 (96.2 1
177	5.0 - 9.0% of mass 176	4.3 (6.0 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD050	50 PPB CCC	VA100918.D	10/9/02	12:41
VBK02	VBA1009M2	VA100920.D	10/9/02	14:10
VGP-3D0-5	P4481-03	VA100927.D	10/9/02	19:22

Premier Environmental Services.

DATA USABILITY SUMMARY REPORT (DUSR) OF THE CORAL GRAPHICS SITE

ORGANIC ANALYSES IN AQUEOUS SAMPLES

CHEMTECH CONSULTING GROUP
MOUNTAINSIDE, NJ

REPORT NUMBER: P4668

November, 2002

Prepared for
C.A. Rich Consultants, Inc.
Plainview, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566
(516) 223-9761 • FAX (516) 223-0983

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses

SITE: Coral Graphics

CONTRACT LAB: Chemtech Consulting Group
Mountainside, New Jersey

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: November, 2002

MATRIX: Aqueous

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('95).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unreliable/unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data assessment is for four (4) aqueous samples, one (1) Field Blank and one (1) Trip Blank sample. The samples were collected October 14, 2002 and shipped to Chemtech Consulting Group located in Mountainside, New Jersey. Samples were received at the laboratory on October 16, 2002. The samples were received in good condition. They were analyzed for Volatile Organic Analytes (EPA Method 8260) as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. A list of definitions that may be used in this report is located in Appendix A. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C. Appendix D of this report contains a copy of Chemtech correspondence dated 8/22/02 that cites the method utilized for the reporting of the additional analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

1. OVERVIEW:

The four (4) aqueous samples, one (1) Field Blank and one (1) Trip Blank Sample were submitted to the laboratory for the analyses requested on the Chain of Custody (COC) documentation. The samples were analyzed for the organic analytes using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260. CA Rich requested that the analytes Isopropyl Alcohol and 1,2,3,4-Tetramethylbenzene also be calibrated/quantitated and reported with the Volatile Organic Analyses. These analytes are reported on the result pages. Proper custody transfer of the samples was documented in the laboratory report. The laboratory provided a deliverables package in accordance with the guidelines in the NYSDEC ASP, Rev '95, Category B.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly preserved aqueous and non-aqueous samples is 14 days from collection.

Volatile Organic Analyses - The aqueous samples associated with this data set were analyzed within the ten (10) days of VTSR. All samples were analyzed within the method holding time.

3. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Volatile Organic Analyses – Each sample was spiked with the surrogate compounds 1,2-Dichloroethane-d4, 4-Bromofluorobenzene, Toluene-d8 and Dibromofluoromethane. In-house surrogate recovery limits were utilized by the laboratory. The percent recovery of each surrogate met QC criteria in all field and QC samples associated with each data set.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Volatile Organic Analyses – Sample VGW-555-58 was utilized for the MS/MSD analyses. All percent recoveries and Relative Percent Differences (RPD's) met QC criteria in the MS/MSD sample set.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

Volatile Organic Analytes – The laboratory performed one blank spike analysis with this data set. The sample was spiked with all reported analytes. All spike recoveries in the blank spike sample met QC criteria.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

A) Method Blank contamination

Volatile Organic Analyses – Two (2) method blank analyses are associated with this data set. Each method blank was free from contamination.

B) Field Blank contamination

The Field Blank 101402 (P4668-05) was free from contamination.

C) Trip Blank contamination

The Trip Blank (TB-101402) sample was free from contamination.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria is not met in an initial calibration the positive results are qualified "J". Non detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, effected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria is set for these analytes. If the minimum criteria is not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses - One (1) soil calibration curve is associated with the aqueous samples in this data set. The laboratory performed an initial five (5) point multi level calibration using the standards 5 ppb through 200 ppb on October 18, 2002. The RRF for all compounds met QC criteria with the exception of Tert-Butyl Alcohol (TBA) (0.042), Acrolein (0.021) and 2-Chloroethylvinyl-ether (2-CEVE) (0.032). These analytes have been qualified "R" unuseable, due to the low response factor, in the aqueous samples in this data set. Two (2) continuing calibration standards are associated with the aqueous samples in this data set. The RRF of each of the cited compounds above exceeded QC criteria in the continuing calibration analyses. No additional qualification was required.

A five (5) point calibration curve was analyzed for both the Iso-propyl Alcohol and 1,2,3,4-Tetramethylbenzene. The response factor of these analytes met QC criteria in both the initial calibration curve and all continuing calibration analyses associated with this data set.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgement. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unuseable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses – One (1) aqueous calibration curve is associated with this data set. All RSD% met QC criteria with the exception of 2-Butanone (41.6%) and 2-Chloroethylvinyl ether (43.9). 2-Butanone data in each of the samples has been qualified "UJ" estimated.

Qualified data result pages are located in Appendix B of this report.

Two (2) continuing calibration standards are associated with the samples in this data set. The %Difference met QC criteria for all analytes with the exception of that listed below:

Date of Analysis	File ID	Analyte	%Difference
10/21/02	VA102118	2-CEVE	40.6

2-CEVE has already been qualified "R" due to low response factor throughout the analytical sequence, therefore, no additional action has been taken.

8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). The tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses – All instrument Tuning criteria was met for these sample analyses.

DATA USABILITY SUMMARY REPORT (DUSR) CORAL GRAPHICS SITE

9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard evaluation criteria is applied to all field and QC samples.

Volatile Organic Analyses – All Internal Standard QC criteria was met for these analyses

10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. Target compounds are identified on the GC by using the analytes retention time. Concentration is quantitated from the initial calibration curve.

Volatile Organic Analyses – All samples reported the VOA 8260 analytes specified on the COC documents. In addition, the analytes Iso-Propyl Alcohol and 1,2,3,4-Tetramethylbenzene were analyzed for and reported. The laboratory reported these analytes to the determined method detection limit. All samples are reported without dilution. All results are reported to the laboratory method detection limit.

11. OVERALL ASSESSMENT:

Analytical QC criteria was met for these analyses. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

The additional Volatile Organic Analytes were reported using the criteria outlined in Chemtech correspondence dated 8/22/02. A copy of this is provided in Appendix D of this report.

The data provided for this data set is acceptable for use, with the noted data qualifiers.

Premier Environmental Services.

TABLE 1

Premier Environmental Services.

CLIENT SAMPLE ID

LABORATORY SAMPLE ID

VGW-I (70-73)

P4668-01

VGW-I (55-58)

P4668-02

VGW-5 (70-73)

P4668-03

VGW-5 (55-58)

P4668-04

Field Blank 10/14/02

P4668-05

Trip Blank 10/14/02

P4668-06

Premier Environmental Services.

APPENDIX A

Premier Environmental Services.

DATA QUALIFIER DEFINITIONS

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unuseable. The presence or absence of the analyte cannot be verified.

K - The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL - The analyte was not detected, and the reported quantitation limit is probably higher than reported.

Premier Environmental Services.

APPENDIX B

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-01

Client ID: VGW-I70-73

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102125.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-01

Client ID: VGW-I70-73

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102125.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Chloroform	75-25-2	< 0.49	U	5.0	0.49	ug/L
1-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	54		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
1-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
tert butyl alcohol	75-65-0	< 4.0	U	25	4.0	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-01

Client ID: VGW-I70-73

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102125.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
2-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	48.56	97 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	46.66	93 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	40.73	81 %	70 - 125		SPK: 50
Bromofluoromethane		54.46	109 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1876904	6.02			
1,4-Difluorobenzene	540-36-3	2104807	7.80			
Chlorobenzene-d5	3114-55-4	1599455	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1047850	19.55			

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-02

Client ID: VGW-I55-58

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102126.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Ethyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-02

Client ID: VGW-I55-58

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102126.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromotorm	75-25-2	< 0.49	U	5.0	0.49	ug/L
-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	130		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
p-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
Isopropylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
1-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
1-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
sec-Butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
tert butyl alcohol	75-65-0	< 4.0	R U	25	4.0	ug/L
Isobutyl alcohol	107-02-8	< 4.0	R U	25	4.0	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-02

Client ID: VGW-I55-58

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102126.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
1-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	51.97	104 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.36	97 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	45.03	90 %	70 - 125		SPK: 50
1,1-Dibromofluoromethane		53.52	107 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1732925	6.05			
1,4-Difluorobenzene	540-36-3	2009498	7.82			
1-Chlorobenzene-d5	3114-55-4	1752545	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1127301	19.55			

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-03

Client ID: VGW-570-73

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102127.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Ethyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Ethyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
1,1-Dichloroethene	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethane	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,2-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3 UJ	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
2,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-03

Client ID: VGW-570-73

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VAI02127.D

Analytical Run ID: VAI01802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Trichloroform	75-25-2	< 0.49	U	5.0	0.49	ug/L
2-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	48		5.0	0.70	ug/L
n-Propylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,2-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
p-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-Propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
1-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
sec-Butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Acrolein	107-02-8	< 4.9	U	25	4.9	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-03

Client ID: VGW-570-73

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102127.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Tert butyl alcohol	75-65-0	< 4.0 <i>R</i>	U	25	4.0	ug/L
Chloroethyl vinyl ether	110-75-8	< 2.2 <i>R</i>	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0 <i>/</i>	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	52.93	106 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	48.91	98 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	45.93	92 %	70 - 125		SPK: 50
Dibromofluoromethane		56.07	112 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1606750	6.02			
1,4-Difluorobenzene	540-36-3	1823848	7.82			
Chlorobenzene-d5	3114-55-4	1588333	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1035863	19.52			

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-04

Client ID: VGW-555-58

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102128.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Chlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Ethyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Ethyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
1,1-Dichloroethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
2,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Bromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
1,1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-04

Client ID: VGW-555-58

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102128.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
1-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	100		5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
1-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0	U	25	4.0	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-04

Client ID: VGW-555-58

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102128.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	45.51	91 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	47.4	95 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	41.9	84 %	70 - 125		SPK: 50
Dibromofluoromethane		54.14	108 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	2091381	6.02			
1,4-Difluorobenzene	540-36-3	2295618	7.82			
Chlorobenzene-d5	3114-55-4	1841538	14.02			
1,4-Dichlorobenzene-d4	3855-82-1	1113536	19.53			

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-05

Client ID: FIELDBLANK101402

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102122.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
1,1-Dichloroethene	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethane	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-05

Client ID: FIELDBLANK101402

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102122.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoform	75-25-2	< 0.49	U	5.0	0.49	ug/L
1-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
N-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
4-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
Sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
Hexachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Naphthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Vinyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
Tert butyl alcohol	75-65-0	< 4.0	U	25	4.0	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-05

Client ID: FIELDBLANK101402

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/22/02

Matrix: WATER

File ID: VA102122.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acetone	107-13-1	< 3.5	U	25	3.5	ug/L
Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	49.94	100 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	53.7	107 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	46.9	94 %	70 - 125		SPK: 50
Dibromofluoromethane		57.04	114 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1812392	6.05			
1,4-Difluorobenzene	540-36-3	2000700	7.82			
Chlorobenzene-d5	3114-55-4	1718238	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	1097520	19.55			

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-06

Client ID: TRIPBLANK101402

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102121.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
TARGETS						
Dichlorodifluoromethane	75-71-8	< 0.71	U	5.0	0.71	ug/L
Chloromethane	74-87-3	< 0.51	U	5.0	0.51	ug/L
Bromomethane	74-83-9	< 0.38	U	5.0	0.38	ug/L
Vinyl chloride	75-01-4	< 0.79	U	5.0	0.79	ug/L
Chloroethane	75-00-3	< 2.4	U	5.0	2.4	ug/L
Trichlorofluoromethane	75-69-4	< 0.73	U	5.0	0.73	ug/L
Methyl Acetate	79-20-9	< 0.78	U	5.0	0.78	ug/L
Methylene Chloride	75-09-2	< 1.8	U	5.0	1.8	ug/L
Acetone	67-64-1	< 3.5	U	5.0	3.5	ug/L
Carbon disulfide	75-15-0	< 0.72	U	5.0	0.72	ug/L
1,1-Dichloroethene	75-35-4	< 0.69	U	5.0	0.69	ug/L
1,1-Dichloroethane	75-34-3	< 0.66	U	5.0	0.66	ug/L
Methyl tert-butyl Ether	1634-04-4	< 1.0	U	5.0	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	< 0.81	U	5.0	0.81	ug/L
cis-1,2-Dichloroethene	156-59-2	< 0.62	U	5.0	0.62	ug/L
2,2-Dichloropropane	594-20-7	< 0.63	U	5.0	0.63	ug/L
Chloroform	67-66-3	< 0.61	U	5.0	0.61	ug/L
1,2-Dichloroethane	107-06-2	< 0.56	U	5.0	0.56	ug/L
2-Butanone	78-93-3	< 2.3	U	5.0	2.3	ug/L
1,1,1-Trichloroethane	71-55-6	< 0.75	U	5.0	0.75	ug/L
Cyclohexane	110-82-7	< 0.98	U	5.0	0.98	ug/L
Carbon Tetrachloride	56-23-5	< 0.47	U	5.0	0.47	ug/L
1,1-Dichloropropene	563-43-2	< 3.0	U	5.0	3.0	ug/L
Bromodichloromethane	75-27-4	< 0.73	U	5.0	0.73	ug/L
Methylcyclohexane	108-87-7	< 0.67	U	5.0	0.67	ug/L
1,2-Dichloropropane	78-87-5	< 0.73	U	5.0	0.73	ug/L
cis-1,3-Dichloropropene	10061-01-5	< 0.66	U	5.0	0.66	ug/L
Trichloroethene	79-01-6	< 0.72	U	5.0	0.72	ug/L
Dibromochloromethane	124-48-1	< 0.66	U	5.0	0.66	ug/L
Dibromomethane	74-95-3	< 0.61	U	5.0	0.61	ug/L
1,1,2-Trichloroethane	79-00-5	< 0.62	U	5.0	0.62	ug/L
Benzene	71-43-2	< 0.71	U	5.0	0.71	ug/L
t-1,3-Dichloropropene	10061-02-6	< 0.66	U	5.0	0.66	ug/L

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-06

Client ID: TRIPBLANK101402

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102121.D

Analytical Run ID: VA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Bromoforn	75-25-2	< 0.49	U	5.0	0.49	ug/L
1-Methyl-2-Pentanone	108-10-1	< 0.81	U	5.0	0.81	ug/L
2-Hexanone	591-78-6	< 0.60	U	5.0	0.60	ug/L
Tetrachloroethene	127-18-4	< 0.70	U	5.0	0.70	ug/L
Isopropylbenzene	98-82-8	< 0.75	U	5.0	0.75	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	< 0.70	U	5.0	0.70	ug/L
Toluene	108-88-3	< 0.71	U	5.0	0.71	ug/L
1,3-Dichloropropane	142-28-9	< 0.57	U	5.0	0.57	ug/L
Chlorobenzene	108-90-7	< 0.78	U	5.0	0.78	ug/L
Ethyl Benzene	100-41-4	< 0.76	U	5.0	0.76	ug/L
Styrene	100-42-5	< 0.92	U	5.0	0.92	ug/L
m/p-Xylenes	136777-61-2	< 1.5	U	5.0	1.5	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	< 0.64	U	5.0	0.64	ug/L
o-Xylene	95-47-6	< 0.72	U	5.0	0.72	ug/L
1,3-Dichlorobenzene	541-73-1	< 0.74	U	5.0	0.74	ug/L
1,4-Dichlorobenzene	106-46-7	< 0.93	U	5.0	0.93	ug/L
1,2-Dichlorobenzene	95-50-1	< 0.88	U	5.0	0.88	ug/L
1,2-Dibromo-3-Chloropropane	96-12-8	< 0.91	U	5.0	0.91	ug/L
1,2,4-Trichlorobenzene	120-82-1	< 1.3	U	5.0	1.3	ug/L
Bromobenzene	108-86-1	< 0.60	U	5.0	0.60	ug/L
1,2,3-Trichloropropane	96-18-4	< 1.0	U	5.0	1.0	ug/L
n-propylbenzene	103-61-5	< 0.80	U	5.0	0.80	ug/L
2-Chlorotoluene	95-49-8	< 0.85	U	5.0	0.85	ug/L
1,3,5-Trimethylbenzene	108-67-8	< 0.97	U	5.0	0.97	ug/L
1-Chlorotoluene	106-43-4	< 1.0	U	5.0	1.0	ug/L
1,2,4-Trimethylbenzene	95-63-6	< 0.83	U	5.0	0.83	ug/L
sec-butylbenzene	135-98-8	< 0.96	U	5.0	0.96	ug/L
tert-Butylbenzene	98-06-6	< 0.94	U	5.0	0.94	ug/L
n-Butylbenzene	104-51-8	< 1.2	U	5.0	1.2	ug/L
1,2,3-Trichlorobenzene	87-61-6	< 1.0	U	5.0	1.0	ug/L
1,2,3,4-Tetrachlorobutadiene	87-68-3	< 0.94	U	5.0	0.94	ug/L
Phthalene	91-20-3	< 0.91	U	5.0	0.91	ug/L
Ethyl Acetate	108-05-4	< 2.6	U	25	2.6	ug/L
tert-butyl alcohol	75-65-0	< 4.0	U	25	4.0	ug/L
Diethyl ether	109-87-1	< 1.0	U	25	1.0	ug/L

Chemtech Consulting Group

Volatiles

SDG No.: P4668-01

Client: Rich Consultants

Sample ID: P4668-06

Client ID: TRIPBLANK101402

Date Collected: 10/14/02

Date Received: 10/16/02

Date Analyzed: 10/21/02

Matrix: WATER

File ID: VA102121.D

Analytical Run ID: YA101802

Dilution: 1

Instrument ID: MSVOAA

Analytical Method: 8260

Associated Blank: VBA1021W4

Sample Wt/Wol: 5.0 Units: mL

Soil Extract Vol:

Soil Aliquot Vol:

% Moisture: 100

Parameter	CAS Number	Concentration	C	RDL	MDL	Units
Acrylonitrile	107-13-1	< 3.5	U	25	3.5	ug/L
1-Chloroethyl vinyl ether	110-75-8	< 2.2 R	U	5.0	2.2	ug/L
p-Isopropyltoluene	99-87-6	< 1.1	U	5.0	1.1	ug/L
Isopropyl Alcohol	67-63-0	< 5.0	U	5.0	5.0	ug/L
1,2,3,4-Tetramethylbenzene	488-23-3	< 5.0	U	5.0	5.0	ug/L
SURROGATES						
1,2-Dichloroethane-d4	79-00-5	54.65	109 %	68 - 135		SPK: 50
Toluene-d8	2037-26-5	52.57	105 %	70 - 125		SPK: 50
4-Bromofluorobenzene	460-00-4	42.57	85 %	70 - 125		SPK: 50
Dibromofluoromethane		55.68	111 %	70 - 125		SPK: 50
INTERNAL STANDARDS						
Pentafluorobenzene	363-72-4	1768444	6.05			
1,4-Difluorobenzene	540-36-3	2035632	7.82			
Chlorobenzene-d5	3114-55-4	1548942	14.04			
1,4-Dichlorobenzene-d4	3855-82-1	937558	19.55			

Premier Environmental Services.

APPENDIX C



(908) 789-8900 Fax (908) 789-8922

www.chemtech.net

CHEMTECH JOB NO.:

CHEMTECH QUOTE NO.:

P4668

CLIENT INFORMATION			PROJECT INFORMATION			BILLING INFORMATION					
REPORT TO BE SENT TO:											
COMPANY: CA RICH CONSULTANTS, INC.			PROJECT NAME: ECP COAL GRAPHICS			BILL TO: CA RICH CONSULTANTS					
ADDRESS: 17 DUPONT STREET			PROJECT NO.:			PO #:					
CITY: PLAINVIEW STATE: NY ZIP: 11803			PROJECT MANAGER: E. WEINSTECK / L. RDS			ADDRESS: 17 DUPONT STREET					
ATTENTION: ERIC WEINSTECK			LOCATION: HICKSVILLE, NEW YORK			CITY: PLAINVIEW STATE: NY ZIP: 11803					
PHONE: 516.576.5844 FAX: 516.576.0083			PHONE: 516.576.5844 FAX: 516.576.0083			ATTENTION: E. WEINSTECK PHONE: 516.576.5844					
DATA TURNAROUND INFORMATION			DATA DELIVERABLE INFORMATION			ANALYSIS					
FAX: _____ DAYS *			☐ RESULTS ONLY ☐ NY STATE CATEGORY A			1 VOCs 5260 + MARCH 10/15/02 2 + 1, 2, 3, 4 TETRAPHENYL 3 4 5 6 7 8 9					
HARD COPY: _____ DAYS *			☐ RESULTS PLUS QC ☒ NY STATE CATEGORY B								
EDD: _____ DAYS *			☐ REGULATORY FORMAT, STATE: _____								
* TO BE APPROVED BY CHEMTECH			☐ NEW JERSEY REDUCED DELIVERABLES								
** NORMAL TURNAROUND TIME - 14 DAYS			☐ CLP								
			☐ EDD FORMAT: _____								
CHEMTECH SAMPLE ID		PROJECT SAMPLE IDENTIFICATION		SAMPLE TYPE		SAMPLE COLLECTION		PRESERVATIVES		COMMENTS	
				COMP GRAB		DATE TIME				← Specify Preservatives A - HCl B - HNO ₃ C - H ₂ SO ₄ D - NaOH E - ICE F - Other	
1. 01		VGW-I (70-73)		water		10/14/02 9:50		2 2		VOC see attached letter	
2. 02		VGW-I (55-58)				10/14/02 10:05		2 2		VOC	
3. 03		VGW-5 (70-73)				10/14/02 12:05		2 2		VOC	
4. 04		VGW-5 (55-58)				10/14/02 12:25		2 2		VOC	
5. 05		Field Blank 10/14/02				10/14/02 1:00		2 2		VOC	
6. 06		Trip Blank 10/14/02		✓		10/14/02 1:00		2 2		VOC	
7.											
8.											
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY											
RELINQUISHED BY SAMPLER:		DATE/TIME:		RECEIVED BY:		Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☒ Temp. of Cooler 30					
1. Jane R...		10/15/02 12:30		1. _____		Comments:					
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:							
2. _____				2. _____							
RELINQUISHED BY:		DATE/TIME:		RECEIVED FOR LAB BY:		SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☒ OVERNIGHT					
3. VPS		10/16/02 10:05		3. Sunny Party		CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT					
Page _____ of _____						Shipment Complete: ☒ YES ☐ NO					

UPS Next Day Air
UPS Worldwide ExpressSM
Shipping Document

SHIPMENT FROM
 UPS ACCOUNT NO. **F07E90**
 REFERENCE NUMBER

TELEPHONE
 516-576-8844

C A RICH CONSULTANTS
 17 DUPONT STREET

PLAINVIEW NY 11803-1602

DELIVERY TO
 TELEPHONE

WEIGHT	WEIGHT	DIMENSIONAL WEIGHT

The proper classification of goods is the responsibility of the shipper. The shipper certifies that these goods are not controlled, restricted, or prohibited under applicable laws, regulations, or executive orders. The shipper also certifies that these goods are not counterfeit, stolen, or otherwise illegal.

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☐ DOCUMENTS ONLY

SATURDAY DELIVERY

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1Z F07 E90 22 1000 286 4

EXPORT

UPS Next Day Air
 EXTREMELY URGENT

1Z F07 E90 22 1000 286 4



1Z F07 E90 22 1000 286 4

DELIVERY

DATE OF SHIPMENT

SHIPMENT ID NUMBER **F07E9079 XRM**

Premier Environmental Services.

APPENDIX D

00207071

Coral Graphics

VOC Approach

VOC-8888/8260B (soils)

VOC-8888/8260B (waters) *AS 8/22/02*

Thank you for your continuing support as we look forward to supplying the analytical support services to your project. To accomplish the data objectives, Chemtech can undertake several modifications to our Volatile Chemtech Full (8260B) runs.

Those modifications include starting the analytical run at 90-degree Celsius. Chemtech will adjust the start of the (8260) VOC run at 30 degree C which is outside of the method definition to identify isopropyl alcohol.

Add additional standards i) isopropyl alcohol and ii) 1,2,3,4 Tetramethylbenzene (CAS# 95-93-2) to the mix of standards. The sample matrixes for this round of your project: Coral Graphics are water and soil matrixes.

The data objectives for trimethylbenzene will be address by the compounds 1,3,5-trimethylbenzene and 1,2,4 trimethylbenzene that are in our mix of standards.

These modifications that expand the method definition for your project data objectives must have site specific matrix spike/matrix spike duplicate selection on your chain of Custody for each Sample Delivery Group (SDG) for analysis. Further, CA Rich Inc., it's client or the controlling Regulatory Agency (NYSDEC) will hold Chemtech without fault or harmless during any subsequent examinations of our data under any Data Usability Summary Report (DUSR) or data validation that identifies the Volatile analysis as non-compliant with the method due to these project specific data objectives.

Chemtech unit price with this program for the volatile analysis will help defer the added costs incurred with standards and QA/QC associated with these modifications. The per sample based upon the schedule quantities to be performed. If significant variance occurs with the projected quantities, Chemtech will adjust it's price to adequately recover our time, materials and services rendered with these modifications.

Chemtech will require a lead-time (unspecified) to obtain the standards and prepare for the project specific data objectives. If you have any additional questions, please call me to discuss and confirm the project specific data objectives.