Remedial Action Report
Tishcon Corporation
125 State Street
Westbury, New York

September 1998

Prepared for:

Tishcon Corporation
30 New York Avenue
Westbury, New York 11590

Prepared by:

CA RICH CONSULTANTS, INC.
404 Glen Cove Avenue
Sea Cliff, New York 11579

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CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

September 29, 1998

NYSDEC
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, New York 10591-5805

Attention: Jeffrey Trad, P.E.

Re: **Remedial Action Final Report**
Tishcon Corporation, Site No.: 130043C
125 State Street
Agreement Index No.: W1-0757-95-05

Dear Mr. Trad:

1.0 INTRODUCTION

In accordance with the above-referenced Agreement, CA RICH is pleased to provide you with the following Remedial Action (RA) Report. This Report includes the following items.

- BACKGROUND
- SUMMARY OF WORK PERFORMED
- SUMMARY AND CONCLUSIONS
- CERTIFICATION
- REFERENCES

2.0 BACKGROUND

Tishcon leased the space at 125 State Street from 1984 to October 31, 1996. The tenant at this building prior to Tishcon was a manufacturer of aluminum furniture. The Tishcon facility at 125 State Street produced two basic dietary supplement and vitamin products - powders and tablets. The powders were produced in a dry blending process and were shipped off-site to customers for packaging and distribution. The tablets began similarly but the blended powders were compressed into tablets. The finished tablets were boxed and shipped to other locations for distribution. In addition to blending and tableting, coating of tablets was also performed at this facility. For a detailed description of the processes performed at this facility, refer to the Remedial Investigation (R.I.) Report, (Ref.1).

CA RICH was retained by Tishcon in October, 1994 to prepare a storm drain remediation plan for the NCDH and to complete the clean out of these drains in response to the NCDH's letter of March 25, 1994. A copy of the NCDH letter and the NCDH-approved Plan are included in Soil samples were retrieved and analyzed in the field using a portable organic vapor meter. This procedure was continued until no detections were recorded with the field meter.

At least one sample from each boring was placed in a sample bottle and analyzed by a NYS-certified laboratory for VOCs using EPA methods 8010/8020 and for the eight RCRA metals. The results of these samples were used to determine the depths and volumes of soil for removal. Waste characterization samples were collected of the storm water and the underlying sediments in the pools. This information is presented in our March, 1995 report which is included in the R.I. Work Plan (Ref. 2).

During June and July, 1994 a NYSDEC contractor collected soil samples at the 17-19, 27-29 and 47-49 foot depth horizons from several locations on the 125 State Street property. These borings were designated as SGP-76, 77, 78 and 79 in the NYSDEC report (Ref. 3). The results of these sample analyses are included in the R.I. Report (Ref. 1).

On October 28, 1997, storm water and soils from the bottom of storm drains 2, 4 and distribution box 5 were excavated, as part of an Interim Remedial Measure (IRM), using a vacuum truck and a high vacuum excavator or "super sucker". An estimated 1,227 gallons of storm water was removed from storm drain 2 and soils were excavated until the soil was visibly clean and the meter readings were less than 5 ppm. Approximatley 18 tons of contaminated, non-hazardous soils were removed from storm drains 2, 4 and distributuin box 5. The information is presented in our March 1998 Interim Remedial Measure Final Report (Ref. 4). As indicated in the NCDH's March 25, 1994 letter (included in Ref. 2), no action was required at storm drain 3 based on American Consulting's post-remediation, end-point sample.

2.3 Geologic Setting

Tishcon is situated upon the glacial outwash soil deposits of Long Island at an elevation of approximately 130 feet above mean sea level. Based upon field measurements from the NYSDEC, the direction of shallow groundwater flow is to the south-southwest. The elevation of the water table occurring within the underlying upper glacial aquifer is approximately 50 feet below land surface.

The Upper Glacial Formation is underlain by the Magothy Formation, the principal water supply aquifer for most of Nassau County. 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 sits directly upon crystalline bedrock.

2.4 Identification of Potential Source Areas

Based on our review of files at the NCDH, previous sample results collected from this property, company records, employee interviews, engineering knowledge, site inspections, chemical analyses and previous soil removal activites. Storm drain 1 was the lonly remaining source area at this site, after completion of the IRM, and is the subject of this report.

The clean out of storm drains 2, 4 and the sanitary distribution box 5 were completed during a separate IRM conducted on October 28, 1998 (Ref 4).

During the years 1985 through 1993, the chemicals methylene chloride, 1,1,1-trichloroethane (TCA) and methanol were also used at this facility in the tablet coating process. They were used in the process of applying coatings to the tablets and then discharged either through vents to the atmosphere as an air discharge or as fugitive emissions. As of 1993, these chemicals were no longer used at the State Street Facility.

As of October 31, 1996, the Tishcon Corporation has terminated their lease and vacated the Facility at 125 State Street. The equipment and processes have been moved to other locations outside of the State of New York.

2.1 Physical Layout of Building

The Tishcon Corporation Facility at 125 State Street consisted of a two-story building built in 1966. The property includes a driveway that is underlain by four storm drains. An illustration of these pools is included as Figure 1. Plans on file at the Town of North Hempstead Building Department indicate that the original construction included on-site cesspool(s) for wastewater disposal. The number and location of the cesspools were not recorded in the file, however, available records indicate the presence of one cesspool located on the east side of the building. According to the Nassau County Department of Public Works (NCDPW), the building was connected to municipal sewers in 1985, shortly after Tishcon occupied the building. The NCDH conducted dye tests of the floor drains in the Facility during the Summer of 1995 and determined that all of the floor drains tested discharge to the municipal sewer.

Roof drains were not included on any of the reviewed building plans, although a building survey dated June, 1967, states that roof leaders and gutters are connected to drywells. A drum storage area was located in the southwest corner of the property (see Figure 1) for storage of the ethyl alcohol-based shellac. The drums were stored on spill pallets in a masonry shed.

2.2 Previous Soil Sampling and Removals at this Site

In the past, equipment used in the process of blending raw materials and forming vitamin tablets was rinsed out in the driveway where the storm drains are located (see Figure 1). Rinse water used during this process subsequently entered storm drain 1. During 1993, the Nassau County Department of Health (NCDH) requested that sediment contaminated with volatile organics & metals be removed from the four storm drains and one sanitary distribution box in the driveway and that the material removed be properly disposed.

During August of 1993, a partial removal of the leaching pool sediments was performed. The removal of contaminated sediments from storm drain 3 was completed and the results of the end-point samples were acceptable to NCDH. Soil was also removed from storm drain 1, however, the end-point sample indicated that the compounds chloroform, ethyl benzene, methylene chloride and xylene remained at concentrations above the NCDH action levels.

Soil removal from storm drains 2, 4 and distribution box 5 had not been completed during the 1993 effort. Copies of the sample results are included in the R.I. Work Plan (Ref. 2).

3.0 SUMMARY OF WORK PERFORMED

3.1 Waste Characterization Analyses

A waste characterization sample was collected on February 10, 1998 for the purposes of selecting a waste disposal facility. One soil and one water sample were collected from storm drain 1. These results and the waste disposal approval are included in Appendix A. These results were used to obtain approval for disposal prior to beginning the excavations at Clean Rock Industries located in Hagerstown, Maryland. Based on the results of the waste characterization analysis, this material was approved as non-hazardous waste for thermal distruction and recycling as asphalt aggregate.

The bottom of storm drain 1 was filled with storm water that had to be pumped prior to excavation of the drain. The water was sampled for waste characterization purposes and to obtain approval for disposal of this water at the NCDPW Cedar Creek treatment plant. The waste characterization analyses and disposal approval are included in Appendix B.

3.2 Clean Out of Storm Drain 1

On May 11, 1998, a vacuum truck was used to remove the storm water from storm drain 1. Approximately 565 gallons of storm water were removed and transported to the NCDPW treatment plant for disposal.

Soil excavation and removal of the concrete rings was then performed on storm drain 1 using a backhoe and truck-mounted crane. Soil was excavated from the bottom of the structure and screened using a hand auger and an HNu meter. The excavation extended until the soil was visibly clean and the meter reading was less than 5 ppm. Once this depth was acheived, the concrete rings were demolished and removed from the excavation. Any discolored soils remaining on the wall or floor of the excavation were scraped using the backhoe and crane. New 10 foot wide by 3 foot high conrete rings and dome were placed inside the excavation. Clean fill from Oyster Bay Sand and Gravel Co., Inc., was then used to bring the excavation back up to grade.

The excavated soils were temporarily stored on 6 millimeter plastic sheeting and covered prior to removal from the site.

The following table summarizes the excavation activities at this site.

	SD-01
Date:	5/11/98
Approx. Diameter:	12 foot (from 0 to 15 feet below grade) 8 foot (from 15 to 27.5 feet blow grade)
Starting depth of water:	13.5 feet
Ending depth of water:	15 feet
Est. volume of water:	565 gals.
Disposal facility:	NCDPW
Starting depth of soil:	15 feet
Ending depth of soil:	27.5 feet
Est. volume of soil:	70 cu.yd.
Classification:	Non-Hazardous
Disposal facility:	Clean Rock Industries

All excavated soil was removed and transported by R.J.T. Transport under non-hazardous waste manifest to Clean Rock Industries recycling facility in Hagerstown, Maryland. A copy of the manifest for 85 tons of soil is attached to this Report as Appendix C.

4.0 SUMMARY AND CONCLUSIONS

End point samples were collected from the bottom of the excavated structure. The results indicate that volatile organic compounds including 1,1,1-TCA were undetected at all points with the exception of 3 to 7 ug/kg of methylene chloride and acetone, common laboratory cleaning agents. Similarly, all of the metal results were either below the NYSDEC Cleanup objectives or below the established eastern USA background levels (Ref. 5). A summary of these results are included on Tables 1 and 2 of this Report.

Based the volume of soil removed and the results of the end-point sample analysis, storm drain 1 has been effectively remediated. With the completion of this RA, we recommend monitoring of the identified upgradient (NC-13) and downgradient (UN-11) shallow monitoring wells (Ref. 6). The monitoring should indicate a downward trend in the concentration of TCA in the downgradient monitoring well.

5.0 CERTIFICATION

We certify that to the best of our knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this Report, that the information submitted in this Report is true, accurate and complete.

Eric A. Weinstock
Associate

9/29/98
Date

Chris Guides
Project Geologist

9-29-98
Date

Stephen J. Osmundsen, P.E.
Project Engineer

9/29/98
Date

6.0 REFERENCES

1. CA RICH, (1996), Focused Remedial Investigation Report, Tishcon Corp., 125 State Street, Westbury, NY

2. CA RICH, (1996), Focused Remedial Investigation Work Plan, Tishcon Corp., 125 State Street, Westbury, NY

3. NYSDEC, (1995), Site Investigation Report, New Cassel Industrial Area, North Hempstead, Nassau County.

4. CA RICH, (1998), Interim Remedial Measures Final Report, Tishcon Corp., 125 State Street, Westbury, NY

5. NYSDEC, January 24, 1994, Technical and Administrative Guidance Memorandum No. HWR 94-4046

6. NYSDEC, (1997), Post-Remediation Groundwater Plan, Tishcon Corp., 125 State Street, Westbury, NYTechnical and Administrative Guidance Memorandum No. HWR 94-4046

Tables

TABLE 1

Summary of Soil Analysis
After Data Validation
Tishcon Corporation
State Street Facility

Sample ID	SS-SD1EP	SS-SD6EP**	FIELD BLANK	TRIP BLANK	NYSDEC TAGM *
Date Sampled	5/11/98	5/11/98	5/11/98	5/11/98	Cleanup Objectives
Volatile Organics (NYSDOH Method 91-1)					
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Chloromethane	10 U	11 U	10 R	10 R	NV
Bromomethane	10 U	11 U	10 R	10 R	NV
Vinyl chloride	10 U	11 U	10 R	10 R	200
Chloroethane	10 U	11 U	10 R	10 R	1,900
Methylene chloride	10 U	11 U	10 R	10 R	100
Acetone	4.0 J	7.0 J	10 R	10 R	200
Carbon Disulfide	10 U	11 U	10 R	10 R	2,700
1,1-Dichloroethene	10 U	11 U	10 R	10 R	400
1,1-Dichloroethane	10 U	11 U	10 R	10 R	200
1,2- Dichloroethene (total)	10 U	11 U	10 R	10 R	300
Chloroform	10 U	11 U	10 R	10 R	300
1,2-Dichloroethane	10 U	11 U	10 R	10 R	100
2-Butanone	10 U	11 U	10 R	10 R	300
1,1,1-Trichloroethane	10 U	11 U	10 R	10 R	800
Carbon Tetrachloride	10 U	11 U	10 R	10 R	600
Bromodichloromethane	10 U	11 U	10 R	10 R	NV
1,2-Dichloropropane	10 U	11 U	10 R	10 R	NV
cis-1,3-Dichloropropene	10 U	11 U	10 R	10 R	NV
Trichloroethene	10 U	11 U	10 R	10 R	700
Dibromochloromethane	10 U	11 U	10 R	10 R	NV
1,1,2-Trichloroethane	10 U	11 U	10 R	10 R	NV
Benzene	10 U	11 U	10 R	10 R	60
trans-1,3-Dichloropropene	10 U	11 U	10 R	10 R	NV
Bromoform	10 U	11 U	10 R	10 R	NV
4-Methyl-2-Pentanone	10 U	11 U	10 R	10 R	1,000
2-Hexanone	10 UJ	11 UJ	10 R	10 R	NV
Tetrachloroethene	10 U	11 U	10 R	10 R	1,400
1,1,2,2-Tetrachloroethane	10 U	11 U	10 R	10 R	600
Toluene	10 U	11 U	10 R	10 R	1,500
Chlorobenzene	10 U	11 U	10 R	10 R	1,700
Ethylbenzene	10 U	11 U	10 R	10 R	5,500
Styrene	10 U	11 U	10 R	10 R	NV
Xylene (total)	10 U	11 U	10 R	10 R	1,200

Notes:

ug/Kg: micrograms per Kilogram - parts per billion.

** Sample SS-SD6EP is a duplicate of SS-SD1EP

U: compound not detected at or above detection limit. Number represents compound detection limit.

J: estimated concentration.

R: sample results were rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

Prepared by CA RICH CONSULTANTS, INC.

Users\Chris\Gone\Tables\Tishcon\StateSt.\5/11/98\VOC A.V.

TABLE 2

Summary of Soil Analysis
After Data Validation
Tishcon Corporation
State Street Facility

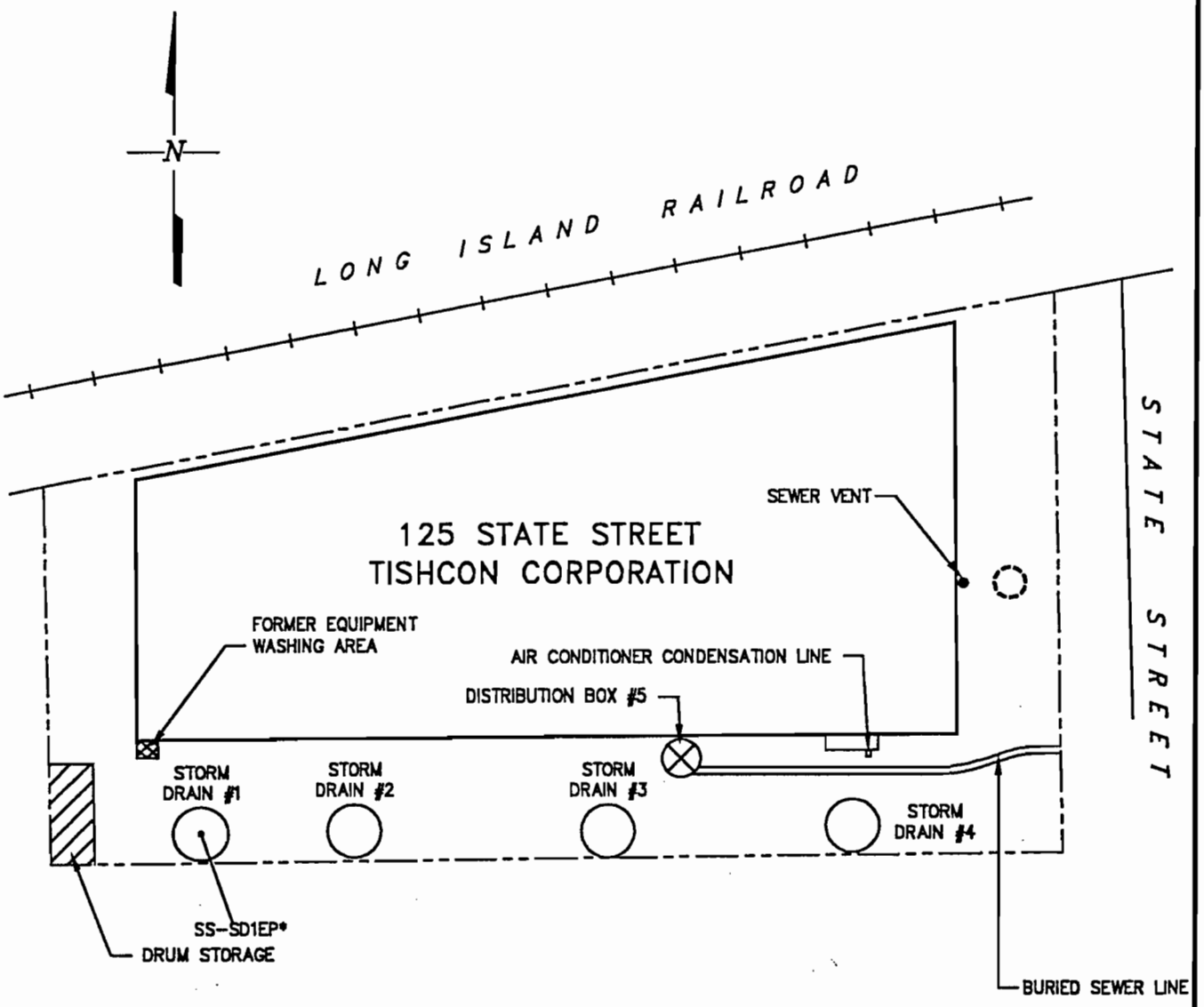
Sample ID	SS-SD1EP		SS-SD6EP**		FIELD BLANK		NYSDEC TAGM* Cleanup Objectives for Soil Containing 1% Carbon	Eastern USA Background
Date Sampled	5/11/98		5/11/98		5/11/98			
RCRA METALS								
Units	mg/Kg		mg/Kg		mg/Kg		mg/Kg	mg/Kg
Arsenic	0.83		0.64		1.8		7.5	3.0-12
Barium	16.4		3.6		0.42		300	15-600
Cadmium	0.97		0.99		0.94		1	0.1-1
Chromium	2.9	J	2.6	J	1.5		10	1.5-40
Lead	2.9	NJ	2.9	NJ	1	N	200-500	200-500
Mercury	0.09		0.10		0.2		0.1	0.001-0.2
Selenium	0.43	W	0.8		2.9		2	0.1-3.9
Silver	0.62		0.63		0.6		SB	NA

Notes:

mg/kg: milligrams per kilogram - parts per million.
N: Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
NJ: Indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its aproximate concentration.
W: post digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
SB: site background
NA: not available
** NYSDEC Division Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels, January 14, 1994*

*** Sample SS-SD6EP is a duplicate of SS-SD1EP*

Figures



LEGEND

APPROXIMATE LOCATION OF STORM DRAIN

FORMER CESSPOOL

* *Note : Sample number SS-SD5 is a duplicate of sample number SS-SD1EP, that was collected for QA/QC purposes.*

0 20 40 60 80

Scale In Feet

CA RICH CONSULTANTS, INC. Certified Ground-Water and Environmental Specialists 404 Glen Cove Avenue, Sea Cliff, NY 11579		
TITLE: SITE PLAN		DATE: 7/27/98 SCALE: AS SHOWN
FIGURE: 1 DRAWING NO: 3237-01D	TISHCON CORPORATION 125 STATE STREET WESTBURY, NEW YORK	DRAWN BY: C.G. APPR. BY: E.A.W.

Appendix A

Clean Rock

1469 Oak Ridge Place • Hagerstown, MD 21740-7485 • (301) 791-6220 • Fax (301) 790-1825

April 21, 1998

Mr. Steve Sanders
Allied Waste Services, Inc.
2163 Merrick Avenue
Merrick, New York 11566

RE: CRI Approval Number - 98296-AE

Dear Mr. Sanders:

Clean Rock Industries, Inc. has received and approved an application for recycling services from the following agent/customer:

ALLIED WASTE SERVICES, INC.

2163 MERRICK AVENUE

MERRICK, NEW YORK 11566

for 100 tons (+/- 100%) of contaminated soil from the following site for recycling as asphalt road base, construction aggregate, etc., at our Hagerstown, Md. facility; provided that the soil has been accurately represented by the agent/customer. Subject recycling will be performed under MDE permit numbers Air-21-6-0214M, Oil operations- 97-OPS-3065.

TISHCON CORPORATION, INC.

125 STATE STREET

WESTBURY, NEW YORK

The soils will be recycled within 35 days of receipt at the facility if received within forty five days of this letter. A Certificate of Recycling will be issued upon payment in full.

Sincerely,

Lawrence R. Eisenhart

Lawrence R. Eisenhart
LRE/mb

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO:980543.01 04/09/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon, TCLPSV
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945
UNITS: ug/L*

ANALYTICAL PARAMETERS		ANALYTICAL PARAMETERS	
Lindane	<0.5	b BHC	<0.5
Endrin	<0.5	d BHC	<0.5
Methoxychlor	<1	Aldrin	<0.5
Toxaphene	<10	Endosulfan 1	<1
Chlordane	<2	Dieldrin	<0.5
Heptachlor	<0.5	p,p-DDE	<0.5
Heptachlor Epoxide	<0.5	Endosulfan 2	<1
2,4-D	<2	p,p-DDD	<0.5
2,4,5-TP	<1	Endosulfan Sulfate	<3
2-Methylphenol (o-cresol)	<10	Endrin Ketone	<0.5
3-Methylphenol (m-cresol)	<10	Endrin Aldehyde	<3
4-Methylphenol (p-cresol)	<10	alpha Chlordane	<0.5
Pentachlorophenol	<100	gamma Chlordane	<0.5
2,4,5-Trichlorophenol	<10		
2,4,6-Trichlorophenol	<10		
2,4-Dinitrotoluene	<10		
Hexachlorobenzene	<10		
Hexachlorobutadiene	<10		
Hexachloroethane	<10		
Nitrobenzene	<10		
Pyridine	<100		
a BHC	<0.5		

cc:

REMARKS: * Analysis performed on TCLP Leachate according to USEPA Method 1311.
Amended Report.

DIRECTOR

rn= 3129 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.01 04/10/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945

ANALYTICAL PARAMETERS		ANALYTICAL PARAMETERS
Passing 1" Sieve	100.0	
Passing 0.5" Sieve	96.7	
Passing #4 Sieve	79.1	
Passing #16 Sieve	57.6	
Passing #40 Sieve	27.6	
Passing #100 Sieve	8.3	
Passing #200 Sieve	6.3	

% Gravel	20.9
% Sand	72.8
% Silt + Clay	6.3

cc:

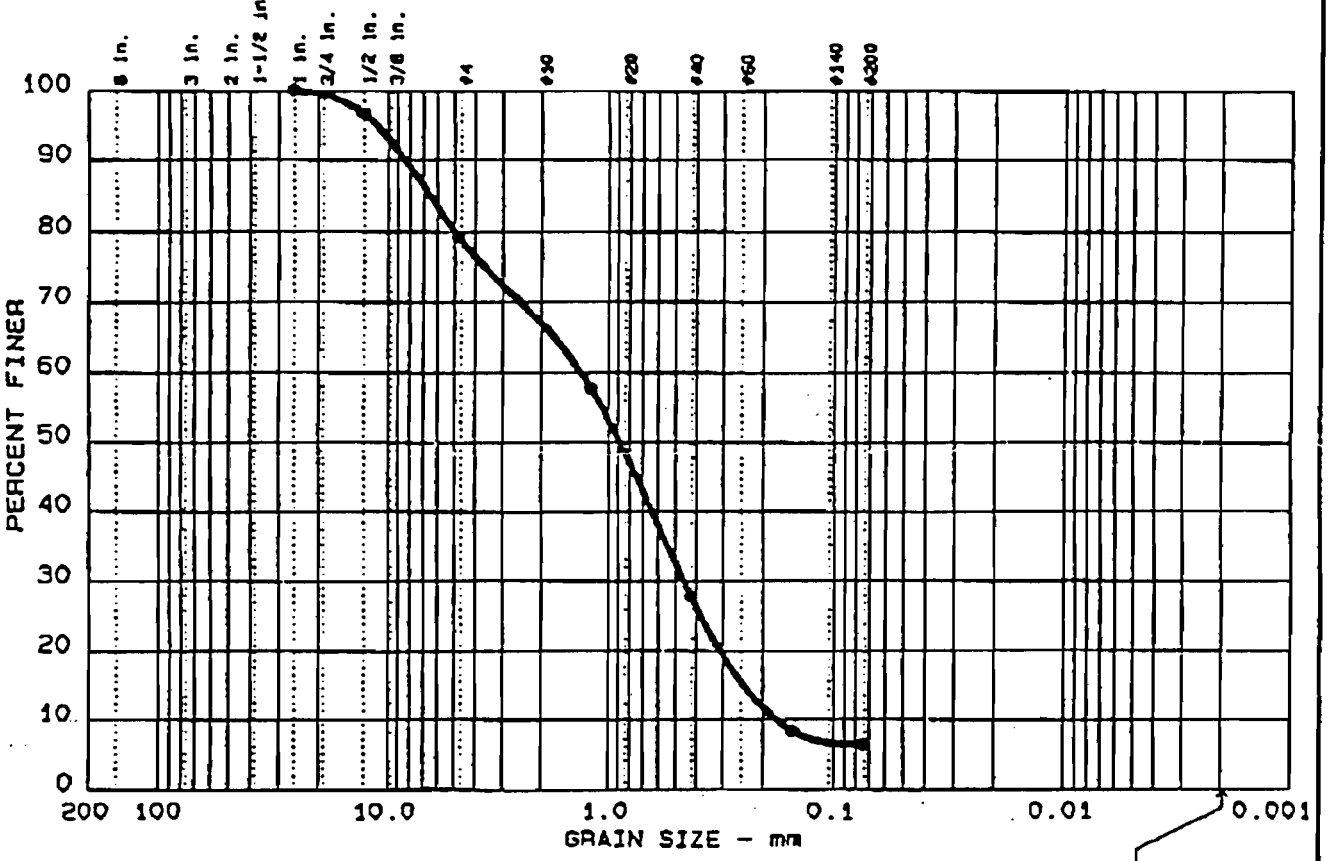
REMARKS: Grain size was performed by Soil Mechanics, Seaford. Report is attached.

DIRECTOR

rn= 7388 NYSDOH ID# 10320

SOIL MECHANICS DRILLING CORP.
3770 MERRICK ROAD • SEAFORD, L.I., NEW YORK 11783
(516) 221-2333 • FAX (516) 679-4373

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	1	0.0	20.9	72.8	6.3	

SIEVE SIZES

	1"	0.5"	#4	#16	#40	#100	#200			
●	100.0	96.7	79.1	57.6	27.6	8.3	6.3			

SPECIFICATIONS

●										

Project No.: 97-028 Date: 4-9-98
Project: 980543.01
● Location: Ecotest Labs
Material: Gravelly sand, trace silt-grey

Remarks:

Figure No.1

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO:980543.01 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945

ANALYTICAL PARAMETERS	UNITS:	ANALYTICAL PARAMETERS
2-Methylphenol (o-cresol)	<300	
3-Methylphenol (m-cresol)	<300	
4-Methylphenol (p-cresol)	<300	
Nitrobenzene	<300	
Pyridine	<300	

cc:

REMARKS: Elevated detection limits due to interference in sample.

DIRECTOR

rn= 3126 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.01 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945

ANALYTICAL PARAMETERS		
Vinyl Chloride	ug/Kg	<20
Freon 113	ug/Kg	<20
Methylene Chloride	ug/Kg	<20
1,1 Dichloroethane	ug/Kg	21
1,2 Dichloroethene	ug/Kg	<20
Chloroform	ug/Kg	<20
111 Trichloroethane	ug/Kg	<20
Carbon Tetrachloride	ug/Kg	<20
1,2 Dichloroethane	ug/Kg	<20
Trichloroethylene	ug/Kg	<40
1,2 Dichloropropane	ug/Kg	<20
Bromodichloromethane	ug/Kg	<20
Tetrachloroethene	ug/Kg	<20
Chlorodibromomethane	ug/Kg	<20
Bromoform	ug/Kg	<20
Benzene	ug/Kg	<20
Toluene	ug/Kg	130
Ethyl Benzene	ug/Kg	2100
m + p Xylene	ug/Kg	6500
o Xylene	ug/Kg	820
m Dichlorobenzene	ug/Kg	<20
o Dichlorobenzene	ug/Kg	<20
p Dichlorobenzene	ug/Kg	<20
Acetone	ug/Kg	<200
Methyl Ethyl Ketone	ug/Kg	<200

ANALYTICAL PARAMETERS		
Methylisobutylketone	ug/Kg	<200
Trichlorofluomethane	ug/Kg	<20
Chlorodifluoromethan	ug/Kg	<20
Dichlordifluomethane	ug/Kg	<20
Chlorobenzene	ug/Kg	<20
Ethyl Acetate	ug/Kg	<20
Ethyl Ether	ug/Kg	<20
N-Butyl Alcohol	ug/Kg	<500
Cyclohexanone	ug/Kg	<20
Carbon disulfide	ug/Kg	<20
Isobutyl Alcohol	ug/Kg	<500
Methanol	mg/Kg	<5

cc:

REMARKS:

DIRECTOR

rn= 3127 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.01 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon, TCLPZHE
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Carbon Tetrachloride	ug/L*	<1	
Chlorobenzene	ug/L*	<1	
Chloroform	ug/L*	<1	
1,4 Dichlorobenzene	ug/L*	<2	
1,2 Dichloroethane	ug/L*	<1	
1,1 Dichloroethene	ug/L*	<1	
Methyl Ethyl Ketone	ug/L*	<20	
Tetrachloroethene	ug/L*	<1	
Trichloroethylene	ug/L*	<1	
Vinyl Chloride	ug/L*	<1	
Benzene	ug/L*	<1	

cc:

REMARKS: * Analysis performed on TCLP Leachate according to USEPA Method 1311.

DIRECTOR

rn= 3128 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO:980543.01 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon, TCLPSV
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945
UNITS: ug/L*

ANALYTICAL PARAMETERS		ANALYTICAL PARAMETERS
Lindane	<0.5	
Endrin	<0.5	
Methoxychlor	<1	
Toxaphene	<10	
Chlordane	<2	
Heptachlor	<0.5	
Heptachlor Epoxide	<0.5	
2,4-D	<2	
2,4,5-TP	<1	
2-Methylphenol (o-cresol)	<10	
3-Methylphenol (m-cresol)	<10	
4-Methylphenol (p-cresol)	<10	
Pentachlorophenol	<100	
2,4,5-Trichlorophenol	<10	
2,4,6-Trichlorophenol	<10	
2,4-Dinitrotoluene	<10	
Hexachlorobenzene	<10	
Hexachlorobutadiene	<10	
Hexachloroethane	<10	
Nitrobenzene	<10	
Pyridine	<100	

cc:

REMARKS: * Analysis performed on TCLP Leachate according to USEPA Method 1311.

DIRECTOR

rn= 3129 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.01 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon, TCLPMET
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Arsenic as As	mg/L*	<0.05	
Barium as Ba	mg/L*	<0.5	
Cadmium as Cd	mg/L*	<0.3	
Chromium as Cr	mg/L*	<0.2	
Lead as Pb	mg/L*	<3	
Mercury as Hg	mg/L*	<0.001	
Selenium as Se	mg/L*	<0.05	
Silver as Ag	mg/L*	<0.04	
Copper as Cu	mg/L*	<0.04	
Zinc as Zn	mg/L*	0.81	

cc:

REMARKS: * Analysis performed on TCLP Leachate according to USEPA Method 1311.

DIRECTOR

rn= 3130 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.01 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Soil sample, SD-1, soil, 0945

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Aroclor 1016	ug/Kg	<40	
Aroclor 1221	ug/Kg	<40	
Aroclor 1232	ug/Kg	<40	
Aroclor 1242	ug/Kg	<40	
Aroclor 1248	ug/Kg	<40	
Aroclor 1254	ug/Kg	<40	
Aroclor 1260	ug/Kg	<40	
% Solids		85	
Petrol. Hydrocarbons	mg/Kg	1400	
Flash Point deg C		>100	
Reactive cyanide	mg/Kg	<2	
Sulfide as S	mg/Kg	8.4	
pH (lab) units		7.5	

cc:

REMARKS:

DIRECTOR

rn= 3131 NYSDOH ID# 10320

Appendix B

THOMAS S. GULOTTA
COUNTY EXECUTIVE

JOHN H. WALTZ, P.E.
COMMISSIONER

COUNTY OF NASSAU
DEPARTMENT OF PUBLIC WORKS
MINEOLA, NEW YORK 11501-4822

March 6, 1998

Mr. Eric A. Weinstock
CA Rich Consultants Inc.
404 Glen Cove Avenue
Sea Cliff, New York 11579

Re: Tishcon Corporation
125 State Street
Westbury, New York

Dear Mr. Weinstock:

Your request to dispose of approximately 1,000 gallons of dry well wastewater from the above referenced site to the "Bay Park Scavenger Waste Disposal Facility" has been reviewed and is accepted.

This determination is based on the lab analysis of the wastewater and the non-hazardous nature of the subject wastes. This approval is limited to the liquid phase only.

The wastewater must be pumped and transported by a New York State Department of Environmental Conservation approved and Nassau County permitted company.

Thank you for your concern and cooperation. If you have any additional questions, please feel free to call me at (516) 571-7352.

Very truly yours,

Vincent J. Allonge for
Maurice J. Osman
Chief Chemist

MJO:sm

cc: Richard Cotugno, NCDPW
Matthew Reilly, Bay Park Sewage Treatment Plant
Victor Farina, Bay Park Sewage Treatment Plant

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.02 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Water sample, SD-1, water, 0930

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
Vinyl Chloride	ug/L	<1	1112Tetrachloroethan	ug/L	<1
Trichlorofluomethane	ug/L	<1	Chlorobenzene	ug/L	<1
1,1 Dichloroethene	ug/L	<1	Ethyl Benzene	ug/L	<1
Methylene Chloride	ug/L	2			
t-1,2-Dichloroethene	ug/L	<1			
1,1 Dichloroethane	ug/L	9			
2,2-Dichloropropane	ug/L	<1			
c-1,2-Dichloroethene	ug/L	2			
Bromochloromethane	ug/L	<1			
Chloroform	ug/L	<1			
111 Trichloroethane	ug/L	16			
1,1-Dichloropropene	ug/L	<1			
Carbon Tetrachloride	ug/L	<1			
Benzene	ug/L	<1			
1,2 Dichloroethane	ug/L	<1			
Trichloroethylene	ug/L	1			
1,2 Dichloropropane	ug/L	<1			
Bromodichloromethane	ug/L	<1			
Dibromomethane	ug/L	<1			
Toluene	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Tetrachloroethene	ug/L	3			
1,3-Dichloropropane	ug/L	<1			
Chlorodibromomethane	ug/L	<1			
1,2 Dibromoethane	ug/L	<1			

cc:

REMARKS: Analysis was performed by GC/MS, EPA Method 8260.
Page 1 of 2.

DIRECTOR

rn= 3132 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.02 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Water sample, SD-1, water, 0930

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS		
m + p Xylene	ug/L	<2	t-1,3Dichloropropene	ug/L	<1
o Xylene	ug/L	<1	Acetone	ug/L	<10
Styrene	ug/L	<1			
Bromoform	ug/L	<1			
Isopropylbenzene	ug/L	<1			
1122Tetrachloroethan	ug/L	<1			
Bromobenzene	ug/L	<1			
123-Trichloropropane	ug/L	<1			
n-Propylbenzene	ug/L	<1			
2-Chlorotoluene	ug/L	<1			
135-Trimethylbenzene	ug/L	<1			
4-Chlorotoluene	ug/L	<1			
tert-Butylbenzene	ug/L	<1			
124-Trimethylbenzene	ug/L	<1			
sec-Butylbenzene	ug/L	<1			
p-Isopropyltoluene	ug/L	<1			
1,2 Dichlorobenzene	ug/L	<1			
1,3 Dichlorobenzene	ug/L	<1			
1,4 Dichlorobenzene	ug/L	<1			
DBCP	ug/L	<1			
124-Trichlorobenzene	ug/L	<1			
Hexachlorobutadiene	ug/L	<1			
Naphthalene	ug/L	<1			
123-Trichlorobenzene	ug/L	<1			
c-1,3Dichloropropene	ug/L	<1			

cc:

REMARKS: Analysis was performed by GC/MS, EPA Method 8260.
Page 2 of 2.

DIRECTOR

rn= 3133 NYSDOH ID# 10320

ECOTEST LABORATORIES, INC. ENVIRONMENTAL TESTING

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (516) 422-5777 • FAX (516) 422-5770

LAB NO.980543.02 02/25/98

C.A. Rich Consultants, Incorporated
404 Glen Cove Avenue
Sea Cliff, NY 11579
ATTN: Eric Weinstock

SOURCE OF SAMPLE: Tishcon
COLLECTED BY: Client DATE COL'D:02/10/98 RECEIVED:02/10/98

SAMPLE: Water sample, SD-1, water, 0930

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS
Arsenic as As	mg/L	<0.005	
Barium as Ba	mg/L	<0.05	
Cadmium as Cd	mg/L	<0.001	
Chromium as Cr	mg/L	<0.02	
Lead as Pb	mg/L	<0.005	
Mercury as Hg	mg/L	<0.001	
Selenium as Se	mg/L	<0.005	
Silver as Ag	mg/L	<0.02	
pH (lab)	units	6.5	

cc:

REMARKS:

DIRECTOR

rn= 3134 NYSDOH ID# 10320

Appendix C

Log Number

ALLIED WASTE SERVICES, INC.

2163 MERRICK AVE., MERRICK, NY 11566 • TEL: 1-800-969-DIRT • FAX: 516-867-6480

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name: Tishcon Corp.
Address: 30 New York Avenue, Westbury, NY

Shipping Location: Tischon Vacant Bldg
Address: 125 State Street, Westbury, NY

Phone No.

Phone No.

Approval Number	Description of Material	Codes	Gross Weight	Tare Weight	Net Weight	Net Weight (Tons)
98296 AE	NON HAZARDOUS PETROL CONTAMINATED SOIL DESTINED FOR RECYCLING		89100	30420	58680	29.34

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to applicable regulations.

Christopher Gaides — 5/13/98

Generator Authorized Agent Name — Signature — Shipment Date

TRANSPORTER

Transporter Name: R.J.T. TRANSPORT
Address: CRANBURY N.J.

Driver Name (Print): [illegible]
Vehicle License No./State: AC5044 NJ.
Truck Number: TV1C 3566

State Permit #

I hereby certify that the above named material was picked up at the generator site listed above.

5/13/98

Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

5/14/98

Driver Signature — Delivery Date

DESTINATION

Site Name: CLEAN ROCK INDUSTRIES
Address: HAGERSTOWN M.D. 21740

Phone No.: 21-00213
State Permit #

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

C. Zambo — 5/14/98

Name of Authorized Agent — Signature — Receipt Date

TRUCKING COMPANY

Log Number

ALLIED WASTE SERVICES, INC.

2163 MERRICK AVE., MERRICK, NY 11566 • TEL: 1-800-969-DIRT • FAX: 516-867-6480

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name Tishcon Corp. 30 New York Avenue

Address Westbury, NY

Phone No.

Shipping Location Tischon Vacant Bldg 135 State Street

Address Westbury. NY

Phone No.

Approval Number	Description of Material	Codes	Gross Weight	Tare Weight	Net Weight	Net Weight (Tons)
	NON HAZARDOUS PETROL CONTAMINATED SOIL DESTINED FOR RECYCLING		88920	29620	29.65	

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to applicable regulations.

Christopher Gruden — 5/13/98

Generator Authorized Agent Name — Signature — Shipment Date

TRANSPORTER

Transporter Name R.J.T. TRANSPORT

Address CRANBURY N.J.

JA 418

State Permit #

Driver Name (Print) JEFF BOEKHOUT

Vehicle License No./State ATA510N NJ

Truck Number 387

I hereby certify that the above named material was picked up at the generator site listed above.

5/13/98

Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Tishcon

5/14/98

Driver Signature — Delivery Date

DESTINATION

Site Name CLEAN ROCK INDUSTRIES

HAGERSTOWN M.D. 21740

Phone No. 21-00213

Address

State Permit #

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

C. Zambo — 5/14/98

Name of Authorized Agent — Signature — Receipt Date

TRUCKING COMPANY

Log Number 01

ALLIED WASTE SERVICES, INC.

2163 MERRICK AVE., MERRICK, NY 11566 • TEL: 1-800-969-DIRT • FAX: 516-867-6480

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Generator Name: Tisheon Corp.
Address: 30 New York Avenue Westbury NY
Phone No.:

Shipping Location: Tischen Vacant Bldg
Address: 125 State Street Westbury, NY
Phone No.:

Approval Number: 98296NE

Description of Material: NON HAZARDOUS PETROL CONTAMINATED SOIL DESTINED FOR RECYCLING

Codes:

Gross Weight: 85740
Tare Weight: 33560
Net Weight: 52180

Net Weight (Tons): 26.09

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to applicable regulations.

Christopher Guides — 5-12-98
Generator Authorized Agent Name / Signature / Shipment Date

TRANSPORTER

Transporter Name: R.J.T. TRANSPORT
Address: CRANBURY N.J.
IA 118
State Permit #:

Driver Name (Print): Stephen J Ross
Vehicle License No./State: T9K 821 NJ
Truck Number: 25

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — Shipment Date: 5-12-98

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — Delivery Date: 5-12-98

DESTINATION

Site Name: CLEAN ROCK INDUSTRIES
Address: HAGERSTOWN M.D. 21740
Phone No.:
State Permit #: 21-4

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

CRI — R. Coyle — 5/12
Name of Authorized Agent / Signature / Receipt Date

TRUCKING COMPANY

Appendix D

CA RICH CONSULTANTS, INC.
CERTIFIED GROUND-WATER AND
ENVIRONMENTAL SPECIALISTS

August 11, 1998

NYSDEC
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, New York 12233-7010

Attention: Jeffrey Trad, P.E.

Re: **Remedial Action Final Report - Data Validation Report**
Tishcon Corporation, Site No.: 130043C
125 State Street
Agreement Index No.: W1-0757-95-05

Dear Mr. Trad:

Attached is a copy of the data validation report for the end-point samples collected as part of the Remedial Action of Storm Drain SD-1. Please note the following with respect to this Report.

- Sample SS-SD6EP is a duplicate of sample SS-SD1EP. The data validator was not aware of this during her review.

- The laboratory analyzed the VOC field and trip blanks using a heated purge procedure. As such, these samples were rejected during the validation review. Since there were no detections in the end-point sample analyses, the rejected blank analyses should not affect these results.

A copy of our Field Quality Control check list is also included for your review. If there are any questions regarding this Report, please do not hesitate to call our office.

Sincerely,

CA RICH CONSULTANTS, INC.

Eric Weinstock

Eric A. Weinstock
Associate

Attachments

Comax C:\1-ew-98\tishcon\dv-rpt.doc

404 GLEN COVE AVENUE, SEA CLIFF, NEW YORK 11579 • TEL 516/674-3889 • FAX 516/674-3901

CA RICH CONSULTANTS, INC.
Field Quality Control Checks

Date: 5/13/95 By: Chris Cairoles

Check List	Were the following performed (Yes or No)
• **Field Measurements** - To verify the quality of data collected using field instrumentation, at least one duplicate measurement will be obtained per day and reported for all field analytical measurements.	Yes
• **Equipment Calibration** - Meters should be calibrated within 24-hours prior to use.	Yes
• **Equipment Decon** - Sampling equipment should be deconed as stated in the Sampling & Analysis Plan	Yes
• **Sample Containers** - Certified-clean sample containers in accordance with Exhibit I of the NYSDEC ASP (Dec. 1991) will be supplied by the NEI.	Yes
• **Field Duplicates** - Field duplicates will be collected to check reproducibility of the sampling methods. Field duplicates will be prepared as discussed in the FSP. In general, field duplicates will be analyzed at a five percent frequency (every 20 samples). Table 1 provides an estimated number of field duplicates for each applicable parameter and matrix.	Yes
• **Field Rinse Blanks** - Field rinse blanks are used to monitor the cleanliness of the sampling equipment and the effectiveness of the cleaning procedures. Laboratory-demonstrated, analyte-free water shall be passed through or over the sampling equipment being used on that particular day. The water shall be collected in the laboratory-cleaned containers at a frequency of one per sampling day and analyzed for the same parameters as the field samples. Table 1 provides an estimated number of rinse blanks collected during the field work.	Yes
• **Trip Blanks** - Trip blanks will be used to assess whether site samples have been exposed to non-site-related volatile constituents during storage and transport. Trip blanks will be analyzed at a frequency of once per day, and will be analyzed for volatile organic constituents. A trip blank will consist of a container filled with analyte-free water (supplied by the laboratory) which remains unopened with field samples throughout the sampling event. Trip blanks will only be analyzed for volatile organic constituents. Table 1 provides an estimated number of trip blanks collected for each matrix and parameter during the field activities.	Yes

L.A.B. Validation Corp. 14 West Point Drive East Northport, NY 11731

DATA VALIDATION REPORT

ORGANIC/INORGANIC ANALYSIS
VOLATILES
RCRA METALS

For Samples Collected on May 11, 1998 at Tishcon - State Street, Westbury, NY

SAMPLE DELIVERY GROUP NUMBER : 186468

SUBMITTED TO

C.A. Rich Consultants
404 Glen Cove Avenue
Sea Cliff, NY 11579

JULY 1998

PREPARED BY

LORI A. BEYER
L.A.B. VALIDATION CORP.
14 WEST POINT DRIVE
EAST NORTHPORT, NY 11731

Tishcon - State Street, Westbury, NY
Data Validation Report: Volatile and RCRA Metals Analysis

Table of Contents

INTRODUCTION:

A validation was performed on 2 soil samples and the associated quality control samples for organic (volatile) analyses and RCRA Metals analyses for Sample Delivery Group # 186468. The samples were collected on May 11, 1998.

The samples were analyzed by Severn-Trent Envirotest Laboratories (NY Cert. # 10142), utilizing the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) 1995. The analytical testing consisted of TCL volatile organic analyses by purge and trap GC/MS utilizing NYSDEC 95 protocols and for RCRA metals analyses using the same document.

The data were evaluated in accordance with the United States Environmental Protection Agency (USEPA) Region II Data Validation Checklists, CLP Functional Guidelines for Data Validation and NYSDEC ASP Guidelines, where applicable and relevant.

The Validation Report pertains to the following samples:
SS-SD6EP
SS-SD1EP

The data summary forms (Form I's) included in Appendix A include all usable (qualified) results for the samples. Note that the laboratory identified and reported sample SS-SD1EP as SS-SDIEP on all applicable reporting forms. See Appendix F for an updated narrative statement from the laboratory to indicate this error in sample identification.

1.0 Volatile Organics by GC/MS

The following method criteria were reviewed: holding times, SMCs, MS, MSD, MSB, blanks, tunes, calibrations, internal standards, target and non target component identification, quantitation, reported quantitation limits and overall system performance. The volatile results were considered to be valid and usable with the appropriate qualifiers for the soil samples. The water QC samples; field and trip blank results were rejected due to non compliant initial calibration as noted on the data summary forms in Appendix A and within the following text:

1.1 HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

ALL SAMPLES WERE ANALYZED WITHIN SEVEN DAYS OF VALIDATED TIME OF SAMPLE RECEIPT AT THE LABORATORY AND NO QUALIFICATIONS WERE APPLIED BASED UPON HOLDING TIME CRITERIA.

Additionally, technical holding times are validated based on proper preservation of samples. The aqueous QC samples were properly preserved with HCL and HNO3 as required. There is no indication in the SDG Narrative or the sample records that there was a problem with the samples (i.e. received or not maintained at 4 degrees celcius) for volatile organics and, consequently, the integrity of the volatile samples has been assumed to be good. The data user should use caution since there is no documentation that samples were maintained at 4 degrees celcius for this particular analysis.

1.2 SYSTEM MONITORING COMPOUND (SURROGATE) RECOVERY

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations were outside contract specifications, qualifications are required to be applied to associated samples and analytes.

ALL SYSTEM MONITORING COMPOUND RECOVERIES (%R) WERE FOUND TO BE GENERATED WITHIN ACCEPTABLE LIMITS FOR THE THREE SURROGATE COMPOUNDS.

1.3 MATRIX SPIKE (MS), MATRIX SPIKE DUPLICATE (MSD) & MATRIX SPIKE BLANK (MSB)

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. Sample SS-SD1EP was analyzed for MS/MSD analysis for the volatile organics as requested on the chain of custody document. The MSB was performed as required by the NYSDEC ASP.

ALL SPIKE RECOVERIES (%R) AND RELATIVE PERCENT DIFFERENCES (RPDs) MET THE REQUIREMENTS OF THE ANALYTICAL METHOD AND NO QUALIIFICATIONS ARE REQUIRED.

1.4 BLANK CONTAMINATION

Quality assurance (QA) blanks; i.e., method, trip, field and storage blanks are prepared to identify any contamination which 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. Storage blanks measure cross-contamination

of samples during storage at the laboratory.

The following table was utilized to qualify TCL results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is needed when:
Methylene Chloride, Acetone, Toluene & 2-Butanone	Sample Conc. Is >CRQL, but </= 10x blank value	Sample Conc. Is < CRQL and </= 10x blank value	Sample Conc. Is > CRQL and >10x blank value
Other Contaminants	Sample Conc. Is > CRQL, but </= 5x blank value	Sample Conc. Is <CRQL and </= 5x blank value	Sample Conc. Is >CRQL and >5x blank value

Below is a summary of the compounds in the samples and the associated qualifications that have been applied:

A) Method Blank Contamination

No target analytes were detected in the associated method blank, VBLK044 applicable to this analysis and therefore no qualifications are required.

B) Field Blank Contamination

No target analytes were detected in the associated field blank and therefore no qualifications are required based on the criteria above. It should be noted that the laboratory did not correctly perform the analysis for the field blank (i.e. analyzed utilizing a heated purge) and therefore it is possible that no analytes were detected as a result of the heating. All results for the field blank analysis are consequently rejected. See discussion under Section 1.6 of this report.

C) Trip Blank Contamination

No target analytes were detected in the associated trip blank and therefore no qualifications are required based on the criteria above. It should be noted that the laboratory did not correctly

perform the analysis for the trip blank (i.e. analyzed utilizing a heated purge) and therefore it is possible that no analytes were detected as a result of the heating. All results for the trip blank analysis are consequently rejected. See discussion under Section 1.6 of this report.

D) Storage Blank Contamination

The laboratory did not submit the required storage blank with the initial data package. As part of the resubmission response, the laboratory provided the "refrigerator blank" results, however, this analysis was performed by a different method (502/503). Additionally, it should be noted that the refrigerator blank was analyzed prior to the transfer of the samples to the volatile laboratory and is consequently not a valid storage blank per NYSDEC ASP Method 95-1. Exhibit D-II-16, Section 8.2.4 of NYSDEC ASP Method 95-1 states, "Storage blanks shall be stored with samples until all samples are analyzed." The acetone concentrations reported in soil samples SS-SD1EP and SS-SD6EP must be qualified as "J" estimated and should be considered suspect since it can not be concluded if the acetone was picked up as part of the storage of the samples in the laboratory's refrigerator. Since the concentrations were reported less than the CRQL they were previously qualified as "J", estimated as required.

1.5 GC/MS INSTRUMENT PERFORMANCE CHECK

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).

INSTRUMENT PERFORMANCE WAS GENERATED WITHIN ACCEPTABLE LIMITS AND FREQUENCY FOR BROMOFLUOROBENZENE (BFB).

1.6 INITIAL AND CONTINUING CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing aceptable 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 checks document that the instrument is giving satisfactory daily performance.

Exhibit D-II-22, Section 9.3.3.4 of the NYSDEC ASP Method 95-1 requires that "Separate initial and continuing calibrations must be performed for water samples and low level soil/sediment samples (unheated purge vs. heated purge)." The laboratory did not correctly perform the method and consequently the results for the field blank and trip blank analysis are invalid. The data summary forms are qualified, "R", unusable.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected, "R".

ALL THE RESPONSE FACTORS WERE FOUND TO BE WITHIN ACCEPTABLE LIMITS (<0.05), FOR INITIAL AND CONTINUING CALIBRATION.

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 concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <30% and %D must be <25%. 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 are flagged"UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified, "R", unusable.

Initial Calibration: The initial calibration provided and the %RSD were within acceptable limit (30%) for all compounds.

Continuing Calibration: The following compounds - positive results are qualified as estimated, "J" and non-detects are qualified as "UJ" due to exceedence of Percent Difference (%D) - limit 25%:

Acetone (39.4%), 2-Hexanone (27.9%)

Acetone was previously qualified "J" due to the lack of certainty of presence as a result of the storage blank (see Section 1.4 - D; above).

Non-detects for all samples analyzed under the continuing calibration on 5/19/98 for 2-Hexanone

have been qualified, "UJ" as required.

Please note that the laboratory was method compliant based upon %D criteria. The evaluation criteria for data validation uses different criteria than method compliance for initial calibration. Also, acetone and 2-hexanone can be identified as "poor responders" (poor purge efficiency) and qualifications are not a result of non compliance by the laboratory.

1.7 INTERNAL STANDARDS

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. 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 retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. 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 as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgement will be used to determine either partial or total rejection of the data for that sample fraction.

ALL INTERNAL STANDS WERE GENERATED WITHIN ACCEPTABLE SPECIFICATIONS FOR AREA COUNTS AND RETENTION TIME VARIATION.

NOTE: The primary ion should be used for all sample quantitation and corresponding internal standard responses unless interferences are present, in which case, a secondary ion may be used. It should be noted that the laboratory used m/e 49 (secondary ion) to quantitate area responses for internal standard Bromochloromethane for all sample and calibration runs. The laboratory should be using m/e 128 (primary ion). No qualifications were performed based on this deviation.

1.8 TARGET COMPOUND LIST (TCL) IDENTIFICATION

TCL 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 m/e intensities within 20% of that in the standard compound.

GC/MS QUALITATIVE ANALYSIS ARE CONSIDERED TO BE ACCEPTABLE. RETENTION TIMES AND MASS SPECTRA WERE GENERATED WITHIN REQUIRED

SPECIFICATION.

1.9 TENTATIVELY IDENTIFIED COMPOUNDS (ticS)

TICs were generated in accordance with protocol requirements. Copies of the Form I's are included in Appendix A. 1-Propanol was identified in soil samples SS-SD1EP and SS-SD6EP and has been qualified, "N" indicating presumptive evidence. Since no calibration standard is required to be analyzed for TICs the qualitative identification of this component is tentative. The review of the spectrum indicates that m/e 31 is not present (most likely because the MS is required to start scanning at 35 amu).

NO ADDITIONAL QUALIFICATIONS ARE REQUIRED BECAUSE THIS TIC WAS NOT DETECTED IN ANY OF THE CORRESPONDING BLANKS.

1.10 COMPOUND QUANTITATION & REPORTED DETECTION LIMITS

GC/MS quantitative analysis are considered to be acceptable. Correct internal standards and response factors were used to calculate Form I results. As indicated in Section 1.7 of this report the laboratory did not use the correct primary ion to quantitate area responses for Bromochloromethane. The reported concentrations for acetone could be affected, however, no additional qualifications were applied since the acetone hits have already been determined to be estimated.

1.11 FIELD DUPLICATES

Field duplicate samples were not collected for Volatile Organic analysis.

1.12 SYSTEM PERFORMANCE

Acceptable system performance was maintained throughout the analysis of all the samples. Good resolution and chromatographic performance were observed.

Validator's Signature Lori A. Beyer

2.0 RCRA Metals Analysis

The following method criteria were reviewed: holding times, calibration, CRDL standards for ICP, blanks, ICP Interference Check, MS, laboratory duplicates, LCS, ICP Serial Dilution, IDLs and sample result verification. The metals results were considered to be valid and usable with the appropriate qualifiers, as noted on the data summary forms in Appendix A and within the following text:

2.1 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. Those analytes detected in the samples whose holdint time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

ALL HOLDING TIMES WERE MET WITHIN THE ACCEPTABLE TIME FRAME FROM VALIDATED TIME OF SAMPLE RECEIPT (VTSR) UNTIL ANALYSIS FOR METALS (180 DAYS; EXCEPT MERCURY 28 DAYS).

2.2 CALIBRATION

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

THE INSTRUMENTS WERE CALIBRATED PROPERLY. INITIAL AND CONTINUING CALIBRATIONS WERE PERFORMED WITHIN ACCEPTABLE LIMITS OF 90-110% FOR ICP AND AA. MERCURY FELL WITHIN THE CONTROL LIMITS OF 80-120% AS REQUIRED.

2.3 CRDL STANDARD FOR ICP

Satisfactory instrument performance near the Contract Required Detection Limit (CRDL) must be demonstrated by analyzing a CRDL standard at the beginning and end of the analytical run.

THE CRDL (CRA) SOLUTION WAS PREPARED AT THE CORRECT LEVELS AND ANALYZED AT THE REQUIRED FREQUENCY AT THE BEGINNING AND END OF

EACH ANALYTICAL RUN FOR ICP. THE CRDL (CRI) SOLUTION WAS PREPARED AT THE CORRECT LEVELS AND ANALYZED AT THE REQUIRED FREQUENCY AT THE BEGINNING OF EACH SAMPLE ANALYSIS RUN FOR AA ANALYSES. SPECIFIC ACCEPTANCE CRITERIA HAVE NOT BEEN ESTABLISHED BY NYSDEC.

2.4 BLANKS

Quality assurance (QA) blanks, i.e. preparation, field or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Preparation blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations.

ALL INITIAL CALIBRATION BLANK (ICB) AND CONTINUING CALIBRATION BLANKS (CCBS) WERE GENERATED WITHIN ACCEPTABLE CRITERIA. THE ABSOLUTE VALUES OF THESE BLANKS DID NOT EXCEED THE CRDLS. PREPARATION BLANK RESULTS WERE GENERATED IN ACCORDANCE WITH ACCEPTABLE CRITERIA.

It should be noted that the laboratory reported on the Form III lead was listed as 33 ug/l for CCB3. Review of the raw data indicates that this value should be listed as 0.33 ug/l (or 1.0U). Sample results that are >IDL but <5 times the amount in any blank should be qualified, "U". No qualifications are required based upon blank results.

2.5 ICP INTERFERENCE CHECK

The Interference Check Sample (ICS) verifies the laboratory's interelement and background correction factors. The ICS consists of two solutions A and AB. Solution A consists of interference, and solution AB consists of the analytes mixed with interferents.

THE RECOVERIES FOR THE ICP INTERFERENCE CHECK SAMPLES WERE WITHIN THE ACCEPTABLE 80-120% LIMIT.

2.6 SPIKED SAMPLE RECOVERY

The spike data are generated to determine the long term precision and accuracy of the analytical method in various matrices.

THE MATRIX SPIKE RECOVERIES FOR THE MATRIX SPIKE SAMPLE WERE FOUND TO BE WITHIN THE ACCEPTABLE LIMITS OF 75-125% EXCLUDING LEAD WHICH WAS RECOVERED AT 125.6%. SINCE SAMPLE RESULTS ARE >IDL, LEAD RESULTS IN SAMPLES SS-SD1EP AND SS-SD6EP MUST BE QUALIFIED, "J", ESTIMATED.

2.7 LABORATORY DUPLICATES

The laboratory uses duplicate sample determinations to demonstrate acceptable method precision at the time of analysis. Duplicate analyses are also performed to generate data in order to determine the long-term precision of the analytical method on various matrices.

PRECISION AS DEFINED BY RELATIVE PERCENT DIFFERENCE (RPD) WAS FOUND TO BE WITHIN ACCEPTABLE LIMITS EXCLUDING CHROMIUM. DETECTED CONCENTRATIONS FOR CHROMIUM IN BOTH SOIL SAMPLES MUST BE CONSIDERED, ESTIMATED, "J".

2.8 FIELD DUPLICATES

Field duplicate samples were not collected for Metals analysis.

2.9 LABORATORY CONTROL SAMPLE

The Laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous and solid Laboratory Control Samples shall be analyzed for each analyte utilizing the same sample preparation, analytical methods, and QA/QC procedures as employed for the sample.

THE LCS RESULTS GENERATED WERE WITHIN THE ACCEPTABLE LIMITS.

2.10 SERIAL DILUTION ANALYSIS

The serial dilution of samples quantitated by ICP determines whether or not significant physical or chemical interferences exist due to sample matrix. An ICP serial dilution analysis must be performed on a sample for each group of samples with a similar matrix type and concentration, or for each Sample Delivery Group (SDG) whichever is more frequent.

PERCENT DIFFERENCE (%D) WAS FOUND TO BE WITHIN ACCEPTABLE LIMITS FOR ICP SERIAL DILUTION ANALYSIS EXCEPT CHROMIUM (100%). THEREFORE, CHROMIUM RESULTS THAT WERE REPORTED AT GREATER THAN THE CRDL WERE QUALIFIED AS ESTIMATED, "J".

2.11 SYSTEM PERFORMANCE

Acceptable system performance was maintained throughout the analysis of all the samples. Good resolution and chromatographic performance was observed.

Validator's Signature Lori A. Beyer

APPENDIX A: DATA SUMMARY FORMS

VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID: SS-SDIEP
EnviroTest Lab No.: 186468-01
Client Name: CA Rich Consultants, Inc.
Project Name: Tishcon
% Solid: 97
Matrix: Soil
Sample Wt/Vol.: 5 g
Level: Low
Soil Extract Volume:

Date Collected: 5/11/98
Date Received: 5/12/98
Date Extracted:
Date Analyzed: 5/19/98
Report Date: 7/7/98
Column: DB-624
Lab File ID: X0398.D
Dilution Factor: 1
Soil Aliquot Volume:

CAS No.	Compound	Detection Limit ug/kg	Conc ug/kg
74-87-3	Chloromethane	10.0	U
74-83-9	Bromomethane	10.0	U
75-01-4	Vinyl Chloride	10.0	U
75-00-3	Chloroethane	10.0	U
75-09-2	Methylene Chloride	10.0	U
67-64-1	Acetone	10.0	4.0 J
75-15-0	Carbon Disulfide	10.0	U
75-35-4	1,1-Dichloroethene	10.0	U
75-34-3	1,1-Dichloroethane	10.0	U
540-59-0	1,2-Dichloroethene, Total	10.0	U
67-66-3	Chloroform	10.0	U
107-06-2	1,2-Dichloroethane	10.0	U
78-93-3	2-Butanone	10.0	U
71-55-6	1,1,1-Trichloroethane	10.0	U
56-23-5	Carbon Tetrachloride	10.0	U
75-27-4	Bromodichloromethane	10.0	U
78-87-5	1,2-Dichloropropane	10.0	U
10061-01-5	cis-1,3-Dichloropropene	10.0	U
79-01-6	Trichloroethene	10.0	U
124-48-1	Dibromochloromethane	10.0	U
79-00-5	1,1,2-Trichloroethane	10.0	U
71-43-2	Benzene	10.0	U
10061-02-6	trans-1,3-Dichloropropene	10.0	U
75-25-2	Bromoform	10.0	U
108-10-1	4-Methyl-2-Pentanone	10.0	U
591-78-6	2-Hexanone	10.0	U J
127-18-4	Tetrachloroethene	10.0	U
108-88-3	Toluene	10.0	U
79-34-5	1,1,2,2-Tetrachloroethane	10.0	U
108-90-7	Chlorobenzene	10.0	U
100-41-4	Ethylbenzene	10.0	U
100-42-5	Styrene	10.0	U
1330-20-7	Xylenes, Total	10.0	U

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EPA SAMPLE NO.

SS-SDIEP

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) SOIL Lab Sample ID:186468-01

Sample wt/vol: 5.00 (g/ml) G Lab File ID: X0398

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. 3 Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	71-23-8	1-Propanol	13.17	31.	JN
2.					
3.					
4.					
5.					
6.					
7.					
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NYSDOH 10142 NJDEP 79015 CTDOH-S PH-0564 EPA NY049 PA 68-379 M-NY049

VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID:	SS-SD6EP	Date Collected:	5/11/98
EnviroTest Lab No.:	186468-02	Date Received:	5/12/98
Client Name:	CA Rich Consultants, Inc.	Date Extracted:	
Project Name:	Tishcon	Date Analyzed:	5/19/98
% Solid:	95	Report Date:	7/7/98
Matrix:	Soil	Column:	DB-624
Sample Wt/Vol.:	5 g	Lab File ID:	X0399.D
Level:	Low	Dilution Factor:	1
Soil Extract Volume:		Soil Aliquot Volume:	

CAS No.	Compound	Detection Limit ug/kg	Conc ug/kg
74-87-3	Chloromethane	11.0	U
74-83-9	Bromomethane	11.0	U
75-01-4	Vinyl Chloride	11.0	U
75-00-3	Chloroethane	11.0	U
75-09-2	Methylene Chloride	11.0	U
67-64-1	Acetone	11.0	7.0 J
75-15-0	Carbon Disulfide	11.0	U
75-35-4	1,1-Dichloroethene	11.0	U
75-34-3	1,1-Dichloroethane	11.0	U
540-59-0	1,2-Dichloroethene, Total	11.0	U
67-66-3	Chloroform	11.0	U
107-06-2	1,2-Dichloroethane	11.0	U
78-93-3	2-Butanone	11.0	U
71-55-6	1,1,1-Trichloroethane	11.0	U
56-23-5	Carbon Tetrachloride	11.0	U
75-27-4	Bromodichloromethane	11.0	U
78-87-5	1,2-Dichloropropane	11.0	U
10061-01-5	cis-1,3-Dichloropropene	11.0	U
79-01-6	Trichloroethene	11.0	U
124-48-1	Dibromochloromethane	11.0	U
79-00-5	1,1,2-Trichloroethane	11.0	U
71-43-2	Benzene	11.0	U
10061-02-6	trans-1,3-Dichloropropene	11.0	U
75-25-2	Bromoform	11.0	U
108-10-1	4-Methyl-2-Pentanone	11.0	U
591-78-6	2-Hexanone	11.0	U J
127-18-4	Tetrachloroethene	11.0	U
108-88-3	Toluene	11.0	U
79-34-5	1,1,2,2-Tetrachloroethane	11.0	U
108-90-7	Chlorobenzene	11.0	U
100-41-4	Ethylbenzene	11.0	U
100-42-5	Styrene	11.0	U
1330-20-7	Xylenes, Total	11.0	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-SD6EP

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) SOIL Lab Sample ID:186468-02

Sample wt/vol: 5.00 (g/ml) G Lab File ID: X0399

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. 5 Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	71-23-8	1-Propanol	13.17	13.	JN
2.					
3.					
4.					
5.					
6.					
7.					
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10.					
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STL Envirotest
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VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID:	Field Blank	Date Collected:	5/11/98
EnviroTest Lab No.:	186468-03	Date Received:	5/12/98
Client Name:	CA Rich Consultants, Inc.	Date Extracted:	
Project Name:	Tishcon	Date Analyzed:	5/19/98
% Solid:		Report Date:	7/7/98
Matrix:	Water	Column:	DB-624
Sample Wt/Vol.:	5 ml	Lab File ID:	X0400.D
Level:	Low	Dilution Factor:	1
Soil Extract Volume:		Soil Aliquot Volume:	

CAS No.	Compound	Detection Limit ug/l	Conc ug/l
74-87-3	Chloromethane	10.0	U R
74-83-9	Bromomethane	10.0	U
75-01-4	Vinyl Chloride	10.0	U
75-00-3	Chloroethane	10.0	U
75-09-2	Methylene Chloride	10.0	U
67-64-1	Acetone	10.0	U
75-15-0	Carbon Disulfide	10.0	U
75-35-4	1,1-Dichloroethene	10.0	U
75-34-3	1,1-Dichloroethane	10.0	U
540-59-0	1,2-Dichloroethene, Total	10.0	U
67-66-3	Chloroform	10.0	U
107-06-2	1,2-Dichloroethane	10.0	U
78-93-3	2-Butanone	10.0	U
71-55-6	1,1,1-Trichloroethane	10.0	U
56-23-5	Carbon Tetrachloride	10.0	U
75-27-4	Bromodichloromethane	10.0	U
78-87-5	1,2-Dichloropropane	10.0	U
10061-01-5	cis-1,3-Dichloropropene	10.0	U
79-01-6	Trichloroethene	10.0	U
124-48-1	Dibromochloromethane	10.0	U
79-00-5	1,1,2-Trichloroethane	10.0	U
71-43-2	Benzene	10.0	U
10061-02-6	trans-1,3-Dichloropropene	10.0	U
75-25-2	Bromoform	10.0	U
108-10-1	4-Methyl-2-Pentanone	10.0	U
591-78-6	2-Hexanone	10.0	U
127-18-4	Tetrachloroethene	10.0	U
108-88-3	Toluene	10.0	U
79-34-5	1,1,2,2-Tetrachloroethane	10.0	U
108-90-7	Chlorobenzene	10.0	U
100-41-4	Ethylbenzene	10.0	U
100-42-5	Styrene	10.0	U
1330-20-7	Xylenes, Total	10.0	U

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7/31/98

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELD BLANK

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) WATER Lab Sample ID:186468-03

Sample wt/vol: 5.00 (g/ml) G Lab File ID: X0400

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

Client ID: Trip Blank
EnviroTest Lab No.: 186468-04
Client Name: CA Rich Consultants, Inc.
Project Name: Tishcon
% Solid:
Matrix: Water
Sample Wt/Vol.: 5 ml
Level: Low
Soil Extract Volume:

Date Collected: 5/11/98
Date Received: 5/12/98
Date Extracted:
Date Analyzed: 5/19/98
Report Date: 7/7/98
Column: DB-624
Lab File ID: X0401.D
Dilution Factor: 1
Soil Aliquot Volume:

CAS No.	Compound	Detection Limit ug/l	Conc ug/l
74-87-3	Chloromethane	10.0	U
74-83-9	Bromomethane	10.0	U
75-01-4	Vinyl Chloride	10.0	U
75-00-3	Chloroethane	10.0	U
75-09-2	Methylene Chloride	10.0	U
67-64-1	Acetone	10.0	U
75-15-0	Carbon Disulfide	10.0	U
75-35-4	1,1-Dichloroethene	10.0	U
75-34-3	1,1-Dichloroethane	10.0	U
540-59-0	1,2-Dichloroethene, Total	10.0	U
67-66-3	Chloroform	10.0	U
107-06-2	1,2-Dichloroethane	10.0	U
78-93-3	2-Butanone	10.0	U
71-55-6	1,1,1-Trichloroethane	10.0	U
56-23-5	Carbon Tetrachloride	10.0	U
75-27-4	Bromodichloromethane	10.0	U
78-87-5	1,2-Dichloropropane	10.0	U
10061-01-5	cis-1,3-Dichloropropene	10.0	U
79-01-6	Trichloroethene	10.0	U
124-48-1	Dibromochloromethane	10.0	U
79-00-5	1,1,2-Trichloroethane	10.0	U
71-43-2	Benzene	10.0	U
10061-02-6	trans-1,3-Dichloropropene	10.0	U
75-25-2	Bromoform	10.0	U
108-10-1	4-Methyl-2-Pentanone	10.0	U
591-78-6	2-Hexanone	10.0	U
127-18-4	Tetrachloroethene	10.0	U
108-88-3	Toluene	10.0	U
79-34-5	1,1,2,2-Tetrachloroethane	10.0	U
108-90-7	Chlorobenzene	10.0	U
100-41-4	Ethylbenzene	10.0	U
100-42-5	Styrene	10.0	U
1330-20-7	Xylenes, Total	10.0	U

R

FORM I - VOA

7/31/98

1E

EPA SAMPLE NO.

TRIP BLANK

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) WATER Lab Sample ID:186468-04

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: X0401

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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STL Envirotest
315 Fullerton Avenue
Newburgh, NY 12550
Tel: (914) 562-0880
Fax: (914) 562-0841
NYSDOH 10142 NJDEP 73015 CTDOHS PH-0554 EPA NY049 PA 68-378 M-NY049

ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SS-SDIEP

Lab Name: SEVERN TRENT ENVIROTEST Contract:

Lab Code: 10142 Case No.: SAS No.: SDG No.: CAR468

Matrix (soil/water): ~~WATER~~ SOIL Lab Sample ID: 186468-01

Level (low/med): LOW Date Received: 05/12/98

% Solids: 96.5

Concentration Units (ug/L or mg/kg dry weight) MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	0.83	B		F
7440-39-3	Barium	16.4	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	0.97	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.9		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	2.9		N J	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.43	B	W	F
7440-22-4	Silver	0.62	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

7/31/98

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Tel: (914) 562-0890
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ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SS-SD6EP

Lab Name: SEVERN TRENT ENVIROTEST Contract:

Lab Code: 10142 Case No.: SAS No.: SDG No.: CAR468

Matrix (soil/water): SOIL Lab Sample ID: 186468-02

Level (low/med): LOW Date Received: 05/12/98

% Solids: 94.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	0.64	B		F
7440-39-3	Barium	3.6	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	0.99	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.6		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	2.9		N J	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.80	B		F
7440-22-4	Silver	0.63	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

for 7/31/98

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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Newburgh, NY 12550
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ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

Field Blank

Lab Name: SEVERN TRENT ENVIROTEST Contract:

Lab Code: 10142 Case No.: SAS No.: SDG No.: CAR468

Matrix (soil/water): WATER Lab Sample ID: 18468-03

Level (low/med): LOW Date Received: 05/12/98

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	1.8	U		F
7440-39-3	Barium	0.42	U		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	0.94	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	1.5	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	1.0	U	N	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.9	B		F
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

STL Envirotest

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Newburgh, NY 12550
Tel: (914) 562-0890
Fax: (914) 562-0841

APPENDIX B: QUALIFIERS

DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process. If the Regions choose to use additional qualifiers, a complete explanation of those qualifiers should accompany the data review.

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 present 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 rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**

DATA REPORTING QUALIFIERS

Data qualifiers are used in the analytical report for organics and inorganics. The qualifiers are equivalent to those used by the USEPA in its Contract Laboratory Program.

ORGANIC QUALIFIERS

U - Indicates that the compound was analyzed for but not detected. The sample detection limit is corrected for dilution and percent moisture. This detection limit is not necessarily the instrument detection limit.

J - Indicates an estimated value. This qualifier is used when mass spectral data indicates the presence of a compound that meets the identification criteria and the result is less than the specified detection limit but greater than zero.

B - Indicates that the analyte was found in both the sample and its associated laboratory blank. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

C - This qualifier applies to pesticide parameters where the identification has been confirmed by gas chromatography/mass spectrometry.

E - This qualifier indicates compounds whose concentrations exceed the calibration range of the instrument for the specific analysis.

D - Indicates all compounds identified in an analysis at a secondary dilution factor.

DL - This suffix indicates a diluted sample and is appended to the sample number on the result form.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentration between the two GC columns (see Form X). The lower of the two values is reported on Form I and flagged with an "P".

A - This flag indicates that a TIC is a suspected aldol-condensation product.

RE - This suffix indicates a re-analyzed sample and is appended to the sample number on the result form.

RR - This suffix indicates a re-extracted and re-analyzed sample and is appended to the sample number on the result form.

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INORGANICS

Concentration Qualifiers (C)

U - Indicates that the analyte was analyzed for but not detected.

B - The reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit (IDL).

Quality Qualifiers (Q)

E - Indicates an estimated value because of the presence of interference.

M - Duplicate injection precision not met.

N - Spiked sample recovery not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

W - Post digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

* - Duplicate analysis not within control limits.

+ - Correlation coefficient for the MSA is less than 0.995.

Method Qualifiers (M)

P - for ICP.
A - for Flame AA.
F - for Furnace AA.
PM - for ICP when Microwave Digestion is used.
AM - for Flame AA when Microwave Digestion is used.
FM - for Furnace AA when Microwave Digestion is used.
CV - for Manual Cold Vapor AA.
AV - for Automated Cold Vapor AA.
AS - for Semi-Automated Spectrophotometric
C - for Manual Spectrophotometric
T - for Titrimetric.
NR - if the analyte is not required to be analyzed.

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APPENDIX C: NYSDEC ASP SUMMARY SHEETS

NEW YORK DEPARTMENT OF CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE ANALYSIS

Laboratory Sample ID	Matrix	Date Collected	Date Received at Laboratory	Date Analyzed
186468-01	Soil	5/11/98	5/12/98	5/19/98
186468-02	Soil	5/11/98	5/12/98	5/19/98
186468-03	Soil	5/11/98	5/12/98	5/19/98
186468-04	Water	5/11/98	5/12/98	5/19/98

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NEW YORK DEPARTMENT OF CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Received at Laboratory	Date Analyzed
186468-01	Soil	Ba, Cd, Cr, Ag	5/12/98	6/12/98
		As		5/27/98
		Pb		5/26/98
		Se		5/28/98
		Hg		5/15/98
		% Solid		5/12/98
186468-02	Soil	Ba, Cd, Cr, Ag	5/12/98	6/12/98
		As		5/27/98
		Pb		5/26/98
		Se		5/28/98
		Hg		5/15/98
		% Solid		5/12/98
186468-03	Water	Ba, Cd, Cr, Ag	5/12/98	6/12/98
		As		5/27/98
		Pb		5/26/98
		Se		5/28/98
		Hg		5/15/98

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APPENDIX D: CASE NARRATIVE

CASE NARRATIVE

Client: CA Rich Consultants
Date: 7/7/98
STE Lab No.: 186468
Page 1 of 1

Volatiles

No comments necessary.

Inorganics

Spike Recovery

The spike recovery for lead in sample number SS-SDIEP (186468-01S) is outside the established control limit with a percent recovery of 125.6%. The data is qualified accordingly.

Other

Due to a typographical error, client Id. SS-SD1EP (186468-01) was inadvertently typed as SS-SDIEP (186468-01) on several forms throughout the data package.

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APPENDIX E: CHAIN OF CUSTODY

CHAIN OF CUSTODY

STL Environtest
315 Fullerton Avenue
Newburgh, NY 12550
TEL (914) 562-0890
FAX (914) 562-0841

CUSTOMER NAME: CA Rich Consultants Inc.
ADDRESS: 404 O'Connor Ave
CITY, STATE, ZIP: Sea Cliff NY 11579 (516) 674-3589
NAME OF CONTACT: Eric Weinstock PHONE NO.
PROJECT LOCATION: Tishcon State Street Westbury NY
PROJECT NUMBER / PO NO.:

REPORT TYPE
STANDARD ☐ ISRA ☐
NYASP A ☐ B ☑ CLP ☐
OTHER ☐

TURNAROUND
☐ NORMAL
☐ QUICK
☑ VERBAL 10 BUS DUE 5/20

REPORT # (Lab Use Only)
V 9804168
TEMP BLANK Y ___ N ___ C ___
pH CHECK Y ___ N ___
REVIEWED BY: AM

NY PUBLIC WATER SUPPLIES
SOURCE ID ___ ___ ___
ELRP TYPE ___ ___ ___
FEDERAL ID ___ ___ ___ ___ ___ ___ ___ ___

DW = DRINKING WATER S = SOIL
WW = WASTE WATER SL = SLUDGE GW = GROUND WATER

STE#	SAMPLING DATE	SAMPLING TIME AM PM	COMP	GRAB	MATRIX	CLIENT I.D.	Total Number of Containers	40ml Glass HCL	Liter Amber Sulfuric Acid	Liter Amber Organic Washed	Liter Plastic Nitric Acid	Liter Plastic Sodium Hydroxide	Liter Plastic	Liter Plastic Sulfuric Acid	250ml Plastic	125ml Plastic Sterile	250ml Amber	2 oz. Qorpak	ANALYSIS REQUESTED
01	5/11/98	2:30 PM		✓	Soil	SS-SO1EP	2										1	1	95-1, RCRA Metals, PSOL
02	5/11/98	2:30 PM		✓	Soil	SS-SD6EP	2										1	1	95-1, RCRA Metals, PSOL
*01	5/11/98	2:30 PM		✓	Soil	MS/MSD	2										1	1	95-1, RCRA Metals
03	5/11/98				Water	Field Blank	3	2			1								95-1, RCRA Metals
04					Water	Trip Blank	2	2											95-1

LAB USE ONLY

000004

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
	STL	4/22/98			CA Rich	5/10/98	
RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
	CA Rich Consultants	5/11/98	5:00		STL	5/12/98	
RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME

COMMENTS: NYSDEC Category B, ASP Deliverables

APPENDIX F: LABORATORY RESUBMISSIONS

L.A.B. Validation Corp. 14 West Point Drive East Northport, NY 11731

July 19, 1998

Severn Trent Envirotest
315 Fullerton Avenue
Newburgh, NY 12550

Attention: Mr. Ronald Bayer
Subject : Site Number 186468

Dear Mr. Bayer;

I am in the process of validating the above referenced data package which was generated by your laboratory. There are a few minor deficiencies that require laboratory resubmissions and/or clarifications in order to complete the validation report for our mutual client. The items are summarized below.

1) The NYSDEC Sample Prep and Analysis Summary for Volatile Analysis lists sample 18646803 as a soil. When cross referenced to the chain of custody document this sample should be the field blank. Please resubmit this form to indicate the correct matrix.

2) All of the VOA TIC forms list the number of TICs as 16. In addition the forms require the "N" qualifier where 1-Propanol was reported. Please resubmit.

3) Please submit the results (Form I is sufficient) for the required storage blank pertaining to the volatile analysis.

4) Please resubmit page 16 of the volatile package to reflect the correct concentration for the continuing calibration.

5) Bromochloromethane has been quantitated for all analyses (including standards) utilizing the secondary ion m/e 49. Why?

6) For the metals analysis, sample SS-SD1EP was reported on the Form I in units of ug/l. Please correct and resubmit. Also, please verify the reported concentrations for this sample.

7) Page 112 of the metals package indicates that the IDLs were performed on 1/12/98. Please resubmit this form with the correct quarterly IDLs and verify that the correct limits are reported on the Form I's.

I appreciate your help on these items. Resubmissions can be faxed to (516) 757-0467. Manual edits are acceptable. Thanks again.

Sincerely,

Lori A. Beyer
L.A.B. Validation Corp.

Envirotest
a division of Severn Trent Laboratories Inc.

Severn Trent Envirotest
315 Fullerton Avenue
Newburgh
NY 12550

Tel: (914) 562-0890
Fax: (914) 562-0841

July 24, 1998

Lori A Beyer
L.A.B. Validation Corp.
14 West Point Drive
East Northport, New York 11731

Dear Ms. Beyer:

As a result of the data validation process conducted by L.A.B. Validation Corp. for Severn Trent Envirotest laboratory number 186468, a subsequent review of the analytical data was conducted. The following comments specifically address the subsequent data review.

1. The matrix for sample number 186468-03 on the NYSDEC Sample Prep and Analysis Summary for Volatile Analysis was inadvertently listed as a soil. This form was modified to indicate the correct sample matrix.
2. The VOA TIC FORM I's listed the number of TICS for each sample as 16. The forms have been modified to indicate the number of TICS reported.
3. The "N" qualifier for 1-Propanol was inadvertently omitted from the TIC FORM I's. The VOA TIC FORM I has been corrected.
4. The concentration of the continuing calibration standard on Volatile Organic Instrument Performance Check form (page 16) was inadvertently listed as VSTD10. The standard concentration has been modified to reflect the true concentration of the standard analyzed (VSTD50).
5. The secondary ion is used for quantitation because it is the ion with the greatest abundance when reviewing the spectrum for bromochloromethane.
6. The units have been corrected to mg/kg.
7. According to the protocol, the IDL must be performed at least semi-annually. The IDL's submitted appear to meet this protocol.

Please insert the modified pages as indicated by the page number. If you have any questions, or require any further information, please do not hesitate to contact me.

Sincerely,

Patricia Chany
QA/QC Director

NEW YORK DEPARTMENT OF CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE ANALYSIS

Laboratory Sample ID	Matrix	Date Collected	Date Received at Laboratory	Date Analyzed
186468-01	Soil	5/11/98	5/12/98	5/19/98
186468-02	Soil	5/11/98	5/12/98	5/19/98
186468-03	Water	5/11/98	5/12/98	5/19/98
186468-04	Water	5/11/98	5/12/98	5/19/98

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Fax: (914) 562-0841

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Lab File ID:TUN043 BFB Injection Date: 5/19/98

Instrument ID:MS3 BFB Injection Time:0901

GC Column:db-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	44.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.0
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50% of mass 95	80.9
175	5.0 - 9.0% of mass 174	5.2(6.4)1
176	95.0 - 101.0% of mass 174	78.5(97.0)1
177	5.0 - 9.0% of mass 176	5.3(6.7)2

1-Value is % mass 174 2-Value is % mass 176

7/7/98

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD 50	XS065	5/19/98	1200
02	VBLK044	VBLK044	X0397	5/19/98	1244
03	SS-SDIEP	186468-01	X0398	5/19/98	1329
04	SS-SD6EP	186468-02	X0399	5/19/98	1414
05	FIELD BLANK	186468-03	X0400	5/19/98	1503
06	TRIP BLANK	186468-04	X0401	5/19/98	1544
07	VBSPK19	VBSPK19	X0402	5/19/98	1626
08	SS-SDIEPMS	186468-01MS	X0403	5/19/98	1708
09	SS-SDIEPMSD	186468-01MSD	X0404	5/19/98	1750
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FORM V VOA 3/90

315 Fullerton Avenue
Newburgh, NY 12550
Tel: (914) 562-0890
Fax: (914) 562-0841

1E

EPA SAMPLE NO.

SS-SDIEP

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) SOIL Lab Sample ID:186468-01

Sample wt/vol: 5.00 (g/ml) G Lab File ID: X0398

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. 3 Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	71-23-8	1-Propanol	13.17	31.	JN
2.					
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STL Envirotest
Severn Trent Envirotest
NYSDOH 10142 NJDEP 73015 CTDOHS PH-0554 EPA NY049 PA 68-378 M-NY049
315 Fullerton Avenue
Newburgh, NY 12550
Tel: (914) 562-0890
Fax: (914) 562-0841

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SS-SD6EP

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) SOIL Lab Sample ID:186468-02

Sample wt/vol: 5.00 (g/ml) G Lab File ID: X0399

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. 5 Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	71-23-8	1-Propanol	13.17	13.	JN
2.					
3.					
4.					
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30.					

STL Envirotest
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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD BLANK

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) WATER Lab Sample ID:186468-03

Sample wt/vol: 5.00 (g/ml) G Lab File ID: X0400

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

7/24/98

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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30.					

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

TRIP BLANK

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) WATER Lab Sample ID:186468-04

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: X0401

Level: (low/med) LOW Date Received: 5/12/98

% Moisture: not dec. Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

7/24kr

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
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STL Envirotest
Severn Trent Laboratories
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1E

EPA SAMPLE NO.

VBLK044

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Envirotest Contract:#####

Lab Code:10142 Case No.:##### SAS No.:##### SDG No.:CA468

Matrix: (soil/water) SOIL Lab Sample ID:VBLK044

Sample wt/vol: 5.00 (g/ml) G Lab File ID: X0397

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. 0 Date Analyzed: 5/19/98

GC Column:DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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9.					
10.					
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29.					
30.					

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ENVIROFORMS/INORGANIC CLP

SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

SS-SDIEP

Lab Name: SEVERN TRENT ENVIROTEST Contract:

Lab Code: 10142 Case No.: SAS No.: SDG No.: CAR468

Matrix (soil/water): ~~WATER~~ SOIL Lab Sample ID: 186468-01

Level (low/med): LOW for R 7/31/98 Date Received: 05/12/98

% Solids: 96.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	0.83	B		F
7440-39-3	Barium	16.4	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	0.97	U		P
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	2.9		N	F
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.43	B	W	F
7440-22-4	Silver	0.62	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

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NYSDOH 10142 NJDEP 73015 CTDOHS PH-0554 EPA NY049 PA 68-378 M-NY049

Quantitation Report

Data File : J:\HPCHEM\5\DATA\A1356.D
Acq On : 12 May 98 09:15 PM
Sample : REF BLANK
Misc : 4/7/98
Quant Time: May 12 22:06 1998

Vial: 163
Operator:
Inst : GC#4
Multiplr: 1.00

Method : E:\HPCHEM\5\METHODS\503.M
Title : EPA 502/503
Last Update : Mon Jul 20 14:19:19 1998
Response via : Single Level Calibration

Volume Inj. : 5 ml
Signal Phase : RTX-502.2
Signal Info : 0.53 mm

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
15) s	SURR#1	17.70	251573173	6.706 UG/L
		Recovery =		67.06%
37) s	SURR #2	37.01	125240288	6.312 UG/L
		Recovery =		63.12%
	Target Compounds			
20)	TCE	21.71	40833137	0.437 UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

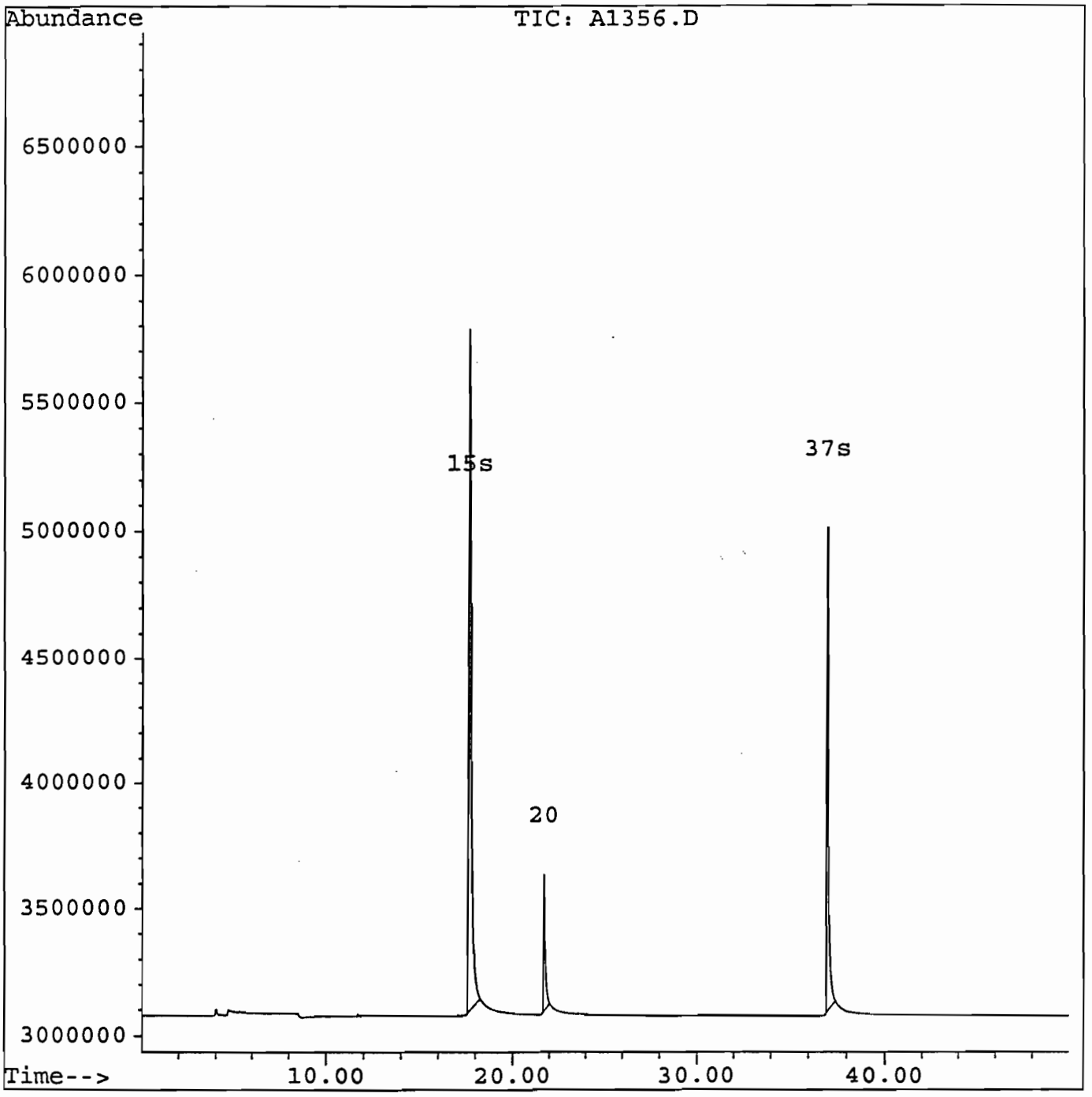
Quantitation Report

Data File : J:\HPCHEM\5\DATA\A1356.D
Acq On : 12 May 98 09:15 PM
Sample : REF BLANK
Misc : 4/7/98
Quant Time: May 12 22:06 1998

Vial: 163
Operator:
Inst : GC#4
Multiplr: 1.00

Method : E:\HPCHEM\5\METHODS\503.M
Title : EPA 502/503
Last Update : Mon Jul 20 14:19:19 1998
Response via : Single Level Calibration

Volume Inj. : 5 ml
Signal Phase : RTX-502.2
Signal Info : 0.53 mm



Quantitation Report

Data File : J:\HPCHEM\5\DATA\A1355.D Vial: 163
Acq On : 12 May 98 09:15 PM Operator:
Sample : REF BLANK Inst : GC#4
Misc : 4/7/98 Multiplr: 1.00
Quant Time: May 12 22:07 1998

Method : E:\HPCHEM\5\METHODS\503.M
Title : EPA 502/503
Last Update : Mon Jul 20 14:19:19 1998
Response via : Single Level Calibration

Volume Inj. : 5 ml
Signal Phase : RTX-502.2
Signal Info : 0.53 mm

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
12) s	SURR #2	37.00	584127427	10.041	UG/L
		Recovery =		100.41%	
	Target Compounds				
3)	TCE	21.69	33397019	0.735	UG/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report

Data File : J:\HPCHEM\5\DATA\A1355.D
Acq On : 12 May 98 09:15 PM
Sample : REF BLANK
Misc : 4/7/98
Quant Time: May 12 22:07 1998

Vial: 163
Operator:
Inst : GC#4
Multiplr: 1.00

Method : E:\HPCHEM\5\METHODS\503.M
Title : EPA 502/503
Last Update : Mon Jul 20 14:19:19 1998
Response via : Single Level Calibration

Volume Inj. : 5 ml
Signal Phase : RTX-502.2
Signal Info : 0.53 mm