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PHASE II
REMEDIAL INVESTIGATION REPORT
FORMER AVERY DENNISON / MONARCH SYSTEMS, INC. FACILITY
MAY 31, 2001

VOLUME 1

Submitted to:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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EXECUTIVE SUMMARY

Several phases of remedial investigation have been performed previously at the former Monarch Systems, Inc. site and adjacent properties. On-site, these included the drilling of 32 borings, associated soil sample analysis, and the installation and periodic sampling and analysis of ground water from 21 monitoring wells. Off-site, sampling and analysis of ground water was performed at over 40 locations within and adjacent to the Town of New Windsor wetland area located hydraulically down gradient of the facility.

The results of these investigations indicated that implementation of a Monitored Natural Attenuation (MNA) remedy would represent an appropriate strategy to effectively address remaining dissolved solvent contamination in ground water associated with the project site. However, since the time frame associated with implementation of MNA is directly linked to contaminant desorption from source area soils, NYSDEC and Avery Dennison concurred that a more comprehensive investigation of residual source area contamination was warranted, as well as the potential need to evaluate active remediation in the source area as a means to ultimately limit the MNA time frame. The Phase II Remedial Investigation was performed to provide the additional site characterization data necessary to address these issues.

The Phase II Remedial investigation consisted of two primary components: (1) passive soil vapor survey, and (2) targeted subsurface investigation. In addition, ambient air monitoring was performed in the production building, and off-site monitoring wells were installed in support of long-term monitoring associated with MNA implementation. The vapor survey consisted of the installation of 91 sampling points on a 25 ft grid within the production building and adjacent exterior area. The results of the vapor survey indicated the presence of three areas of elevated absorbed contaminant vapor mass within: (1) the main plant production area, (2) the plant "label printing area", and (3) the adjacent exterior parking area. This information formed the basis for identification of target areas for subsurface investigation and soil sampling. A total of 18 borings were advanced, six in each of the three areas, with soil sample collection for laboratory analysis performed at five foot intervals to the surface of an impermeable, basal lodgement till layer.

The results of the Phase II Remedial Investigation confirmed the findings of prior subsurface investigation, further delineating a small area of residual solvent contamination in saturated subsurface soils adjacent to the former location of sub-grade vapor degreasers within the facility production building. The residual contamination is limited to a depth of 20-25 ft below grade and a 25 ft radius around a single boring. There also appears to be some residual contamination within a narrow band of soils located hydraulically down gradient of the former source area at 20-25 ft below grade and 15-20 ft below grade (in the exterior parking area).

While the presence of some residual contamination has been confirmed, the results do not lead to a conclusion that this residual contamination is having a significant affect on groundwater quality, nor does it lead to a conclusion that an MNA remedy for the project site is not appropriate. Additional work is warranted to further understand the significance of these findings in the context of an appropriate remedy for the project site.

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Appendix D:	Ambient Air Monitoring Analytical Laboratory Report (STL, Pensacola, FL)

Volume 1:	Phase II Remedial Investigation Report
Volume 2:	Soil Sample Data Analytical Laboratory Report: SDG No. G6871 January 17, 2001 (STL Edison, NJ)
Volume 3:	Soil Sample Data Analytical Laboratory Report: SDG No. G7191 January 17, 2001 (STL Edison, NJ)
Volume 4:	Soil Sample Data Analytical Laboratory Report: SDG No. G7641 January 17, 2001 (STL Edison, NJ)
Volume 5:	Soil Sample Data Analytical Laboratory Report: SDG No. H8421 February 19, 2001(STL Edison, NJ)
Volume 6:	Soil Sample Data Analytical Laboratory Report: SDG No. H8961 February 21, 2001(STL Edison, NJ)
Volume 7:	Soil Sample Data Analytical Laboratory Report: SDG No. H9281 February 21, 2001 (STL Edison, NJ)
Volume 8:	Soil Sample Data Analytical Laboratory Report: SDG No. I2282 March 8, 2001 (STL Edison, NJ)
Volume 9:	Soil Sample Data Analytical Laboratory Report: SDG No. I1701 March 9, 2001 (STL Edison, NJ)
Volume 10:	Soil Sample Data Analytical Laboratory Report: SDG No. I2281 March 12, 2001 (STL Edison, NJ)

1.0 INTRODUCTION

This Phase II Remedial investigation was performed over the period August 2000 - February 2001 at the former Monarch Systems, Inc. site (the "project site"), located at 15-21 Ruscitti Road (MacArthur Avenue) in New Windsor, Orange County, New York (Figure 1-1). The purpose of the investigation was to supplement prior subsurface investigation data regarding the potential presence of a residual source area of trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) solvent contamination in saturated soils adjacent and hydraulically down gradient of two former sub-grade vapor degreasing units located within the production area of the facility. The investigation consisted of two phases: (1) a comprehensive passive soil vapor survey, and (2) subsequent subsurface sampling and laboratory analysis of soil samples in areas where the soil vapor survey had indicated elevated vapor concentrations. This work was performed both within the production facility and in adjacent exterior areas. In addition to documentation of these efforts, this report also includes the results of a series of ancillary investigations and data analyses, including: (1) ambient air monitoring within the production facility, and (2) a time series analysis of historical ground water quality monitoring data. This document also identifies the scope of work for supplemental off-site investigation activities and initiation of the Monitored Natural Attenuation ground water sampling program, both performed in April 2001, which will be documented in an addendum report.

1.1 CHRONOLOGY AND SUMMARY OF PROJECT INVESTIGATION ACTIVITIES

On behalf of Avery Dennison, AMEC Earth & Environmental (formerly Ogden Environmental & Energy Services) prepared a Draft Site Investigation Report (SIR) in May 1996 for the former Monarch Systems, Inc. facility. This work was performed to supplement prior subsurface investigations performed at the project site by Rizzo Associates, Inc. over the period 1991-1993 (Rizzo Associates, Inc., 1992, 1993). The Site Investigation was specifically designed to: (1) perform a preliminary surface/ground water use survey and risk evaluation relative to potential receptors, (2) characterize site geology; specifically, the nature and extent of a silt/clay glacial lodgement till confining layer encountered in two prior Rizzo soil borings, (3) characterize the presence and distribution of any residual chlorinated volatile organic compounds (VOCs) or dense non-aqueous phase liquids (DNAPLs) in soil through laboratory analysis of sample from selected target horizons within the soil column (water table interface and till interface), (4) monitor ground water quality and evaluate aquifer physical and hydraulic properties that control contaminant migration, (5) assess changes in the distribution of chlorinated VOCs in ground water relative to data obtained in the prior investigations, and (6) prepare a site boundary/topographic survey indicating pertinent site features as well as all soil boring/testing and monitoring well locations and elevations.

In the fall of 1997, Avery Dennison sold the Facility to Empire Properties, LLC (currently occupied by Quality Carton, Inc.). Avery Dennison continues to maintain responsibility for management of environmental concerns related to prior operations at the project site. In support of its desire to bring to closure its environmental obligations, Avery Dennison submitted a Voluntary Cleanup Program (VCP) Application to the New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Enforcement, Tarrytown, NY on June 10, 1997 (prior to the Quality Carton sale). That submission included a copy of the AMEC 1996 Draft Site Investigation Report for Department review. Following a series of negotiations between Avery Dennison and NYSDEC during 1998 and 1999, a VCP Agreement

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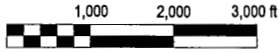

Source: U.S. Geological Survey Cornwall Quadrangle, NY
7.5 Minute Series (1957; photorevised 1981)

Figure 1-1
Site Location Map

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

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285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873

was executed by Dennison Monarch Systems, Inc. and the Commissioner of the Department on September 23, 1999.

Following completion of the Draft Site Investigation Report in May 1996, Avery Dennison initiated performance of quarterly or biannual monitoring of wells installed by Rizzo Associates, Inc. (1992-1993) and AMEC (1995-1996). These data were compiled in an updated Site Investigation Report and submitted by Avery Dennison to NYSDEC on April 20, 1998. Following review of the report by NYSDEC and consultation with the Department, AMEC submitted a Supplemental Site Investigation Work Plan (SSIWP) on August 25, 1998, primarily addressing performance of off-site subsurface investigation and sampling activities. Review of that document by NYSDEC, and discussion of ongoing sampling activities, resulted in minor modifications to the Work Plan, and submittal of a Revised SSIWP to the Department on May 7, 1999.

The results of the off-site investigation activities were documented in a Supplemental Site Investigation Report (SSIR) and submitted to NYSDEC on January 21, 2000. In addition, the report contained data analysis performed to evaluate contaminant source decay and available evidence of natural attenuation at and down gradient of the project site. Based on the results of those analyses, the SSIR was expanded to include a proposed Remedial Action Work Plan (RAWP). The RAWP consisted of additional off-site monitoring well installation and design of a monitored natural attenuation (MNA) program, which included specification of an on- and off-site monitoring well network, analytical protocol, monitoring schedule, reporting schedule, and MNA program duration.

Subsequent to review of the SSIR/RAWP report by NYSDEC, a scope of work for additional on-site and off-site investigation activities was developed by the Department in consultation with Avery Dennison. This scope of work was designed to: (1) supplement prior subsurface investigation data regarding the potential presence of a residual source area of solvent contamination in saturated soils below and adjacent to the former Monarch Systems, Inc. production facility (i.e., the subject of this Phase II Remedial Investigation Report), and (2) provide additional data regarding the potential for impact to ecological receptors in the down gradient wetlands area within which the solvent plume from the project site discharges and is apparently fully degraded by in-situ biodegradation processes. Performance of these Phase II Remedial Investigation and supplemental off-site investigation activities follow from: (1) receipt of Department comments regarding the SSIR/RAWP dated April 26, 2000; (2) AMEC correspondence to the Department dated July 17, 2000, in response to the April 26 comments; (3) a technical meeting held with Mr. Ramamand Pergadia of NYSDEC-New Paltz on July 28, 2000; (4) receipt of Department comments in response to that meeting dated September 8, 2000; (5) a technical meeting held with Mr. Pergadia on November 30, 2000, and (6) AMEC correspondence to the Department dated March 5, 2001. Copies of all cited correspondence are contained in Appendix A of this report.

2.0 PHASE II REMEDIAL INVESTIGATION

2.1 PASSIVE SOIL VAPOR SURVEY

In August and September of 2000, a comprehensive soil vapor survey was performed within the former Monarch Systems, Inc. production facility and adjacent exterior area. The primary objectives of this survey were to: (1) update the results of a limited soil vapor survey performed by Rizzo Associates in 1993 (summarized in Figure 2-1 of the ***Site Investigation Report*** (AMEC, 1998); and (2) more fully investigate the potential presence of residual source areas of contamination in saturated soils adjacent to and hydraulically down gradient of two sub-grade vapor degreasing units previously located within the production area of the facility. Previous subsurface investigation had indicated a limited area of elevated soil contamination at the till interface in the immediate vicinity of the former degreasing units, and to a lesser degree, at the down gradient production facility building exterior (***Site Investigation Report*** Figures 4-2 through 4-4 and Table 4-1).

Soil vapor measurements have been proven to be successful predictors of actual measurements of organic compounds in soil and ground water. Virtually all volatile organic and several semi-volatile organic compounds are present in the soil as a gas due to their vapor pressure and solubility. By measuring the amount and composition of these gases, source areas and ground water contaminant plumes can be delineated. Soil vapor investigations, used in conjunction with soil and ground water sampling, can provide a more thorough and cost-effective site investigation than borings and well samples alone. The intent of this approach is to shift the primary role of costly soil and ground water sampling to confirmation rather than investigation.

Historically, the most common type of soil vapor measurement has been made by actively pumping a sample from the subsurface, analyzing the vapor sample on-site, and mapping the results. Although this method can provide fast results, it is limited to detection of only the most volatile organic compounds at sites with relatively high soil permeability. In addition, this method may not provide representative data where preferential airflow pathways are extant; for example, within the shallow sub-base material underlying the production area building slab at the project site.

Passive soil vapor techniques provide a more sensitive and representative means of measuring soil gases. Typically, passive methods involve integrated sampling over time and collection of the sample on an absorbent material. This combination provides high sensitivity to volatile as well as semi-volatile organic compounds, allows for success on sites with varying soil textures, and minimizes fluctuations in soil vapor availability due to changing ambient and subsurface conditions. Also, passive soil vapor sampling does not disrupt the natural equilibrium of vapors in the subsurface as is the case with active sampling methods.

In light of the above, the passive soil vapor approach was implemented at the project site, using materials and laboratory analysis provided by W.L. Gore & Associates, Inc. of Elkton, MD. The efficacy of the Gore-Sorber® screening survey has been documented by the US Environmental Protection Agency in an Environmental Technology Verification Report (USEPA, 1998).

The Gore-Sorber® modules are constructed of Gore-Tex® expanded polytetraflouroethylene (ePTFE) hollow insertion/retrieval cords within which is contained a fixed quantity of sorbent material (polymeric and carbonaceous resins). The ePTFE membrane consists of a chemically

inert, microporous, hydrophobic structure. The pore sizes are designed to be smaller than a liquid droplet, which allows for high transfer of soil gases but prevents liquid water and soil particulates from penetrating the structure. The soil vapors transfer through the insertion/ retrieval cord into the sorbent-filled collectors.

A grid consisting of 91 sample points on 25 ft centers was established within the production facility and adjacent exterior area (Figure 2-1; Table 2-1). Forty-two of the sample points were located within the production facility (28 within the main production area and 21 within a "label printing area" lying between the production area and building exterior), and 49 were located in the parking area and lawn to the east of the facility. The grid was oriented normal to the production facility building foundation, with the grid centerline aligned through the center of the former sub-grade vapor degreasing units. The dimensions of the grid were 150 ft (north-south) by 300 ft (east-west).

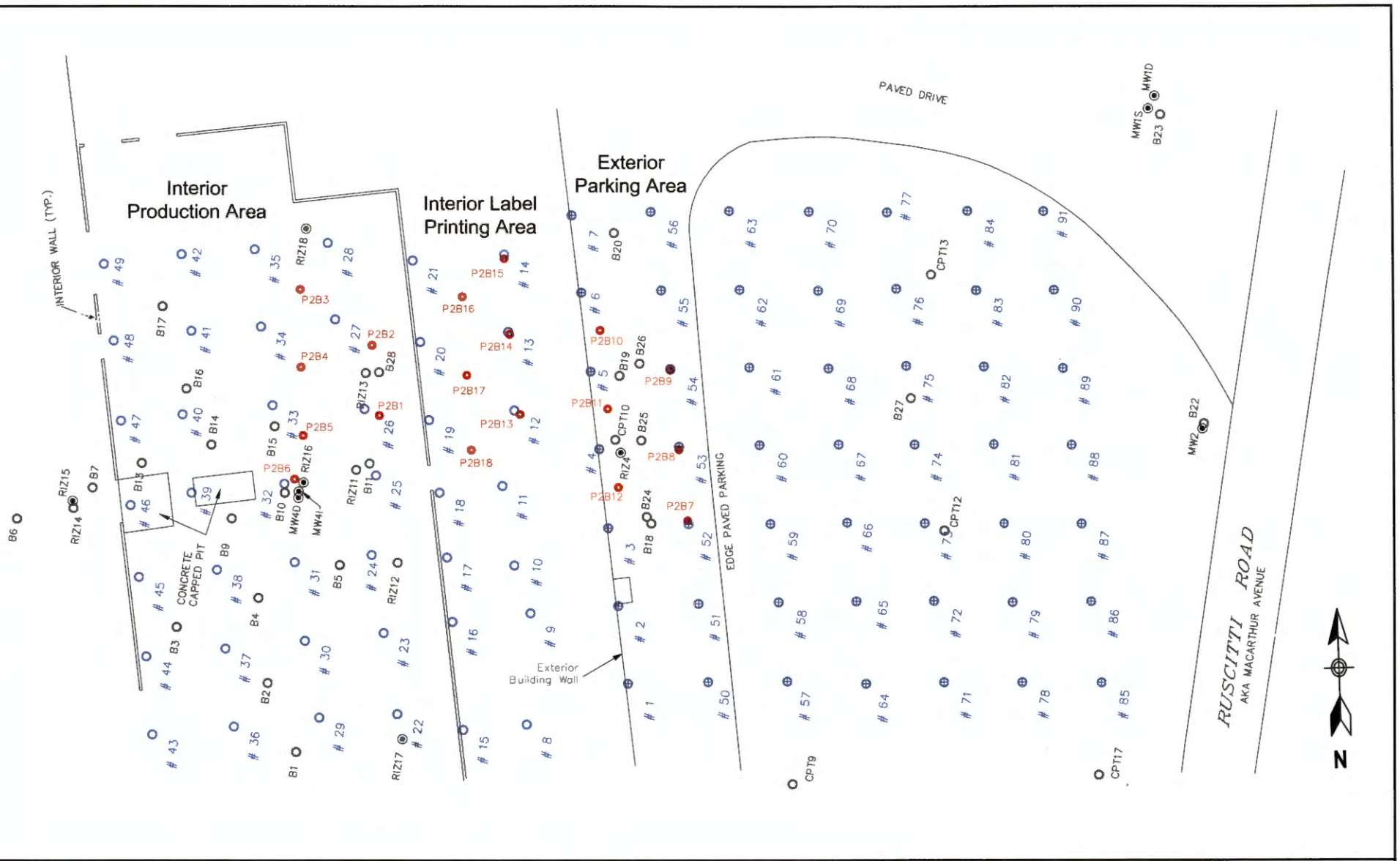
To allow for insertion of the Gore-Sorber® modules, coreholes were drilled through the production facility building slab and within the exterior paved parking area over the period August 28-31, 2000 by Groundwater Investigations Inc. of Pine Bush, NY (pre-drilling was not required in the lawn area). From September 05-08, 2000, a total of 105 Gore-Sorber® modules were installed by AMEC personnel. Ninety one modules were installed to the vendor specified depth of two to three feet below grade (within the production facility, two to three feet below the base of the building slab), and 14 additional modules were installed at selected grid locations at the soil surface immediately below the base of the building slab (i.e., locations 16, 18, 20, 24, 26, 30, 32, 34, 38, 39, 40, 44, 46, and 48). The additional modules were installed to evaluate potential differences in vapor concentration between the shallow (presumably more permeable) grading materials/soils lying directly below the slab, and the deeper soils.

At each sample location, a slam bar (slide hammer) was used to make a narrow pilot hole approximately ½-inch to ¾-inch in diameter to the target insertion depth. Within the production facility, the presence of very dense, compacted soils periodically required the use of a large diameter hammer drill to advance through the upper foot of soil prior to completion of the pilot hole with the slam bar. At each sample location one end of the Gore-Sorber® module was tied to a piece of cord three feet in length, and a cork was tied to the opposite end of the cord. A stainless steel insertion rod was used to place the modules approximately two to three feet into the pre-driven pilot hole. The hole was sealed at the surface with the cork; within the production facility, the concrete core was then reinserted into the corehole.

The sorbent modules were exposed in-situ to soil vapors for a period of 13 to 16 days. The modules were retrieved on September 21, 2000 and shipped to the W.L. Gore & Associates, Inc. Screening Modules Laboratory in Elkton, MD, and analyzed for chlorinated hydrocarbons using gas chromatography/mass spectroscopy. Core holes within the production facility were subsequently sealed with concrete patch.

2.2 SUBSURFACE INVESTIGATION

Following review of the results of the soil vapor survey (Section 3.1), several areas of elevated absorbed vapor mass were identified within the investigation area, representing target areas for subsequent subsurface soil sample collection and laboratory analysis. These areas were located within: (1) the interior main production area, (2) the interior "label printing area", and (3) the exterior parking area. Several phases of drilling activity were scheduled to address the differing access constraints and subsurface conditions associated with each area. Based on experience gained during the prior Site Investigation in 1996, the need for high torque auger



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- Phase II RI Vapor Survey Sample Point
- Phase II RI Soil Boring Location
- Previously Installed Boring
- Previously Installed Monitoring Well

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 ft

Figure 2-1

Site Survey
Vapor Survey Sample Points and
Soil Boring Locations
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

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Table 2-1: Survey Control- Soil Vapor Sample Points

Sample ID	Horizontal Control [a]		Sample ID	Horizontal Control [a]	
	Northing (ft)	Easting (ft)		Northing (ft)	Easting (ft)
1	966,551.6	620,112.6	47.0	966,635.1	619,953.0
2	966,576.3	620,109.5	48.0	966,660.7	619,950.8
3	966,601.0	620,106.4	49.0	966,685.0	619,947.8
4	966,626.1	620,103.7	50.0	966,552.1	620,137.7
5	966,650.8	620,101.0	51.0	966,577.0	620,134.8
6	966,675.8	620,098.2	52.0	966,602.3	620,131.8
7	966,700.4	620,095.2	53.0	966,626.8	620,128.9
8	966,538.7	620,080.7	54.0	966,651.6	620,126.2
9	966,574.0	620,081.9	55.0	966,676.5	620,123.4
10	966,589.3	620,076.9	56.0	966,701.5	620,120.2
11	966,614.5	620,073.2	57.0	966,552.3	620,162.6
12	966,638.4	620,077.0	58.0	966,577.4	620,160.0
13	966,663.3	620,075.1	59.0	966,602.4	620,157.5
14	966,688.0	620,074.0	60.0	966,627.3	620,154.2
15	966,536.9	620,060.7	61.0	966,652.0	620,151.1
16	966,571.3	620,057.3	62.0	966,676.6	620,148.0
17	966,591.7	620,055.6	63.0	966,701.7	620,144.9
18	966,612.3	620,053.3	64.0	966,551.5	620,187.4
19	966,635.4	620,050.1	65.0	966,577.7	620,184.4
20	966,660.2	620,047.3	66.0	966,602.7	620,181.6
21	966,686.1	620,045.0	67.0	966,627.5	620,179.0
22	966,541.8	620,039.8	68.0	966,651.7	620,175.9
23	966,567.7	620,035.6	69.0	966,676.4	620,172.7
24	966,592.5	620,031.8	70.0	966,701.5	620,169.9
25	966,617.7	620,033.3	71.0	966,552.0	620,212.1
26	966,638.9	620,029.7	72.0	966,577.8	620,209.0
27	966,667.3	620,020.5	73.0	966,602.5	620,206.1
28	966,691.7	620,018.2	74.0	966,627.5	620,203.0
29	966,540.8	620,015.2	75.0	966,652.4	620,200.4
30	966,565.2	620,010.7	76.0	966,677.0	620,197.4
31	966,590.2	620,007.5	77.0	966,701.2	620,194.5
32	966,615.1	620,004.4	78.0	966,552.0	620,237.1
33	966,640.1	620,000.8	79.0	966,577.5	620,234.1
34	966,665.1	619,997.1	80.0	966,602.5	620,231.4
35	966,689.5	619,995.3	81.0	966,627.6	620,228.0
36	966,538.0	619,988.3	82.0	966,652.2	620,224.9
37	966,562.7	619,985.6	83.0	966,676.5	620,222.6
38	966,587.8	619,983.0	84.0	966,701.7	620,219.9
39	966,612.3	619,975.1	85.0	966,551.8	620,262.3
40	966,637.3	619,972.4	86.0	966,577.7	620,259.2
41	966,663.8	619,975.2	87.0	966,602.4	620,256.2
42	966,688.1	619,972.2	88.0	966,627.4	620,253.1
43	966,535.4	619,962.6	89.0	966,651.8	620,250.5
44	966,560.3	619,960.8	90.0	966,676.6	620,247.6
45	966,585.0	619,958.4	91.0	966,701.7	620,244.3
46	966,608.3	619,955.9			

[a] NY State Plane Coordinate System

drilling equipment with the ability to accommodate "running sands" at depth was required in the production area. In the label printing area, low ceiling clearance and the presence of dense, compacted sands necessitated the use of specialized high compression Geoprobe® equipment. The exterior drilling activity was scheduled to allow for subsequent off-site well installation at the A&R Concrete, Inc. property and the Town of New Windsor wetlands property located to the east of the project site and MacArthur Avenue.

A total of 18 borings were advanced as part of the Phase II Remedial Investigation, six in each of the three areas identified above. The location of soil borings is indicated on Figure 2-1; completion depth and survey control data are contained in Table 2-2. At the majority of soil borings, soil samples were obtained continuously from ground surface to the interface of the lodgement till[1] using split-spoon or Geoprobe® Macrocore samplers. All recovered samples were screened for organic vapors using a Minirae 2000 Photo-Ionization Detector (PID). A summary of this screening data is contained in Table 2-3.

Table 2-2: Summary of Soil Boring Installation Details

Boring ID	Completion Date	Horizontal Control [a]		Ground Surface Elevation (ft-msl) [b]	Boring Depth (ft)
		Northing (ft)	Easting (ft)		
P2-B1	12/19/00	966,636.75	620,034.42	159.2	30
P2-B2	12/19/00	966,659.21	620,032.13	159.2	32
P2-B3	12/20/00	966,676.85	620,009.52	159.2	30
P2-B4	12/20/00	966,652.42	620,009.75	159.2	36
P2-B5	12/18/00	966,630.47	620,010.32	159.2	32
P2-B6	12/18/00	966,616.53	620,007.68	159.2	34
P2-B7	02/05/01	966,603.50	620,131.54	158.8	20
P2-B8	02/02/01	966,625.92	620,128.92	158.8	22
P2-B9	02/02/01	966,651.17	620,126.02	158.7	26
P2-B10	02/01/01	966,663.90	620,104.09	158.7	30
P2-B11	02/01/01	966,638.90	620,106.44	158.7	24
P2-B12	02/02/01	966,613.98	620,109.70	158.8	22
P2-B13	02/16/01	966,637.13	620,078.98	159.2	24
P2-B14	02/16/01	966,662.46	620,075.57	159.2	28
P2-B15	02/14/01	966,686.34	620,073.97	159.2	32
P2-B16	02/15/01	966,674.51	620,060.64	159.2	32
P2-B17	02/15/01	966,649.67	620,062.02	159.2	32
P2-B18	02/15/01	966,625.72	620,063.41	159.2	24

[a] NY State Plane Coordinate System

[b] ft msl = ft above mean sea level; vertical datum = NGVD; reference NYSDOT benchmark "VAC"

Samples for laboratory analysis were obtained at five foot intervals (approximate) within each boring, maintained on-site in iced sample coolers, and shipped on a daily basis to STL Envirotech, Edison, NJ, a NYSDOH ELAP-CLP certified laboratory. All samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs), with specification for data reporting in the NYSDEC Analytical Services Protocol (ASP) category B deliverables format.

[1] The lodgement till interface is very distinctive, with the till consisting primarily of blue-gray/gray silt and clay, and overlying sediments consisting of brown/tan sand and gravel (photo in Appendix B).

Table 2-3: PID Organic Vapor Concentration Screening of Soil Samples

Boring ID	Depth (ft)	PID (ppm) [a]	Boring ID	Depth (ft)	PID (ppm) [a]
P2-B1	0.0-5.0	10,000	P2-B10	0.0-5.0	2.9
P2-B1	5.0-10.0	550	P2-B10	5.0-10.0	3.1
P2-B1	10.0-15.0	2000	P2-B10	10.0-15.0	9.7
P2-B1	15.0-20.0	75	P2-B10	15.0-20.0	7.0
P2-B1	20.0-25.0	41	P2-B10	20.0-25.0	12.5
P2-B1	25.0-30.0	31	P2-B10	25.0-30.0	6.1
P2-B2	0.0-5.0	1.9	P2-B11	0.0-5.0	3.8
P2-B2	5.0-10.0	5	P2-B11	5.0-10.0	6.3
P2-B2	10.0-15.0	9.3	P2-B11	10.0-15.0	10.7
P2-B2	15.0-20.0	1.8	P2-B11	15.0-20.0	25.7
P2-B2	20.0-25.0	76	P2-B11	20.0-25.0	13.6
P2-B2	25.0-30.0	0.9	P2-B12	0.0-5.0	2.3
P2-B3	0.0-5.0	4.6	P2-B12	5.0-10.0	1.6
P2-B3	5.0-10.0	4.5	P2-B12	10.0-15.0	2.2
P2-B3	10.0-15.0	4.7	P2-B12	15.0-20.0	6.0
P2-B3	15.0-20.0	2.5	P2-B13	0.0-5.0	2.6
P2-B3	20.0-25.0	4.2	P2-B13	5.0-10.0	4.4
P2-B3	25.0-30.0	161	P2-B13	10.0-15.0	66
P2-B4	0.0-5.0	3.8	P2-B13	15.0-20.0	115
P2-B4	5.0-10.0	2.5	P2-B13	20.0-25.0	75
P2-B4	10.0-15.0	4.2	P2-B14	0.0-5.0	5.9
P2-B4	15.0-20.0	1.4	P2-B14	5.0-10.0	7.9
P2-B4	20.0-25.0	260	P2-B14	10.0-15.0	43
P2-B4	25.0-30.0	140	P2-B14	15.0-20.0	37
P2-B4	30.0-35.0	11	P2-B14	20.0-25.0	1.3
P2-B5	0.0-5.0	56	P2-B14	25.0-30.0	1.3
P2-B5	5.0-10.0	19	P2-B15	0.0-5.0	3.2
P2-B5	10.0-15.0	151	P2-B15	5.0-10.0	11.9
P2-B5	15.0-20.0	10.5	P2-B15	10.0-15.0	3.2
P2-B5	20.0-25.0	150	P2-B15	15.0-20.0	3.2
P2-B5	25.0-30.0	140	P2-B15	20.0-25.0	10.6
P2-B5	30.0-35.0	11	P2-B15	25.0-30.0	25.7
P2-B6	0.0-5.0	850	P2-B15	30.0-35.0	3.2
P2-B6	5.0-10.0	67	P2-B16	0.0-5.0	3.0
P2-B6	10.0-15.0	56	P2-B16	5.0-10.0	2.5
P2-B6	15.0-20.0	11.7	P2-B16	10.0-15.0	4.4
P2-B6	20.0-25.0	144	P2-B16	15.0-20.0	5.3
P2-B6	25.0-30.0	70	P2-B16	20.0-25.0	20
P2-B6	30.0-35.0	24	P2-B16	25.0-30.0	4.6
P2-B7	0.0-5.0	1.8	P2-B17	0.0-5.0	8.5
P2-B7	5.0-10.0	1.7	P2-B17	5.0-10.0	7.2
P2-B7	10.0-15.0	1.5	P2-B17	10.0-15.0	7.1
P2-B7	15.0-20.0	3.3	P2-B17	15.0-20.0	201
P2-B8	0.0-5.0	1.8	P2-B17	20.0-25.0	13.9
P2-B8	5.0-10.0	1.5	P2-B17	25.0-30.0	2.0
P2-B8	10.0-15.0	3.4	P2-B18	0.0-5.0	9.0
P2-B8	15.0-20.0	11.9	P2-B18	5.0-10.0	7.6
P2-B8	20.0-25.0	1.5	P2-B18	10.0-15.0	95
P2-B9	0.0-5.0	1.4	P2-B18	15.0-20.0	5.2
P2-B9	5.0-10.0	1.7	P2-B18	20.0-25.0	75
P2-B9	10.0-15.0	1.8			
P2-B9	15.0-20.0	4.7			
P2-B9	20.0-25.0	2.0			

[a] Maximum organic vapor concentration recorded in 5 ft increment

2.2.1 Interior Production Area

Six borings (P2-B1 through P2-B6) were advanced within the main production area of the facility by Advanced Drilling of Pittstown, New Jersey over the period December 18-20 2000. Borings were advanced by a hollow stem auger to the basal lodgment till, located at a depth of approximately 25-30 ft in this area. Split spoon samples were obtained continuously for geologic logging and visual/PID screening purposes.

A total of 38 samples were collected for laboratory analysis, as follows:

P2-B1: 3.5-4.0 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.5-20.0 ft, 24.5-25.0 ft, and 27.5-28.0 ft
P2-B2: 4.5-5.0 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.5-20.0 ft, 23.0-24.0 ft, and 29.5-30.0 ft
P2-B3: 4.5-5.0 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.5-20.0 ft, 24.5-25.0 ft, and 29.0-29.5 ft
P2-B4: 4.5-5.0 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.5-20.0 ft, 24.5-25.0 ft, 29.5-30.0 ft, and 34.5-35.0 ft
P2-B5: 4.5-5.0 ft, 10.0-10.5 ft, 15.0-15.5 ft, 19.5-20.0 ft, 24.5-25.0 ft, and 29.5-30.0 ft
P2-B6: 3.5-4.0 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.5-20.0 ft, 21.0-21.5 ft, 27.0-27.5 ft, and 31.5-32.0 ft

In addition, three trip blanks (TB121800, TB121900, TB122000), three field (rinsate) blanks (FB121800, FB121900, FB122000), two duplicate samples (P2-B5-10.0-10.5 and P2-B2-23.0-24.0), and two matrix spike/matrix spike duplicate samples (P2-B5-15.0-15.5 and P2-B2-23.0-24.0) were recovered in support of the field/laboratory QA/QC program.

2.2.2 Exterior Parking Area

Six borings (P2-B7 through P2-B12) were advanced by Kendrick Drilling of Chester, NY on February 1, 2, and 5, 2001 within the exterior parking area located immediately east of the production facility. Borings were advanced using water/mud rotary techniques to the basal lodgment till, located at a depth ranging from approximately 20-30 ft in this area. Split spoon samples were obtained continuously for geologic logging and visual/PID screening purposes.

A total of 29 samples were collected for laboratory analysis, as follows:

P2-B7: 3.5-4.0 ft, 9.5-10.0 ft, 14.0-16.0 ft, and 17.5-18.0 ft
P2-B8: 4.5-5.0 ft, 9.0-10.0 ft, 12.0-14.0 ft, 16.0-18.0 ft, and 19.5-20.5 ft
P2-B9: 4.5-5.0 ft, 9.5-10.0 ft, 15.0-15.5 ft, 19.5-20.0 ft, and 24.5-25.0 ft
P2-B10: 4.5-5.0 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.5-20.0 ft, 23.5-24.0 ft, and 28.0-28.5 ft
P2-B11: 4.5-5.0 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.0-19.5 ft, and 21.5-22.0 ft
P2-B12: 4.5-5.0 ft, 9.5-10.0 ft, 10.0-12.0 ft, and 19.5-20.0 ft

In addition, three trip blanks (TB020101, TB020201, TB020501), three field (rinsate) blanks (FB020101, FB020201, FB020501), two duplicate samples (P2-B12-10.0-12.0 and P2-B8-12.0-14.0), and two matrix spike/matrix spike duplicate samples (P2-B12-10.0-12.0 and P2-B7-14.0-16.0) were recovered in support of the field/laboratory QA/QC program.

2.2.3 Interior Label Printing Area

Six borings (P2-B13 through P2-B18) were installed by Subsurface Investigations of Asbury Park, NJ over the period February 14-16, 2001 within the label printing area (Sterling Label) of the production facility. This area is separated from the main production area by interior walls, and is adjacent to the exterior parking area. Borings were advanced using direct-push Geoprobe® equipment to the basal lodgment till, located at a depth of approximately 25-30 feet in this area. Macrocore (acetate tube) samples were obtained continuously for geologic logging and visual/PID screening purposes.

A total of 34 were collected for laboratory analysis, as follows:

P2-B13: 5.0-5.5 ft, 10.0-10.5 ft, 15.0-15.5 ft, 19.5-20.0 ft, and 13.0-23.5 ft
P2-B14: 5.0-5.5 ft, 9.5-10.0 ft, 14.5-15.0 ft, 19.0-20.0 ft, and 26.0-26.5 ft
P2-B15: 4.5-5.0 ft, 5.0-5.5, 10.5-11.0 ft, 14.5-15.0 ft, 19.5-20.0 ft, 25.5-26.0 ft, and 28.0-28.5 ft
P2-B16: 5.0-5.5 ft, 10.0-10.5 ft, 14.0-15.0 ft, 19.5-20.0 ft, 24.0-24.5 ft, and 29.5-30.5 ft
P2-B17: 5.0-5.5 ft, 10.0-10.5 ft, 13.0-13.5 ft, 19.5-20.0 ft, and 25.0-25.5 ft
P2-B18: 5.0-5.5 ft, 10.0-10.5 ft, 10.5-11.0 ft, 15.5-16.0 ft, 19.5-20.0 ft, and 22.5-23.0 ft

In addition, two trip blanks (TB021401, TB021601), three field (rinsate) blanks (FB021401, FB021501, FB021501-2), two duplicate samples (P2-B14-19.0-20.0 and P2-B16-14.0-15.0), and two matrix spike/matrix spike duplicate samples (P2-B14-25.5-26.0 and P2-B18-10.5-11.0) were recovered in support of the field/laboratory QA/QC program.

2.3 MONITORING WELL INSTALLATION

Off-site well installation was performed in accordance with the Monitored Natural Attenuation (MNA) program specified in the ***Supplemental Site Investigation Report/Remedial Action Workplan*** (SSIR/RAW; AMEC, 2000), as subsequently expanded and approved by NYSDEC. One shallow monitoring well (MW-4S) and one deep piezometer (P-1) were installed as a pair at the boundary of the A&R Concrete, Inc. property and the Town of New Windsor wetlands property, and one shallow monitoring well (MW-5) was installed within the Town of New Windsor wetlands property (Figure 2-2). Based on the configuration of the contaminant plume migrating from the project site (*e.g.*, SSIR/RAW Figure 3-1), MW-4S was installed along the plume centerline, and MW-5 was installed at the plume fringe. Piezometer P-1 was installed adjacent to MW-4S to document the vertical hydraulic gradient within and adjacent to the wetland area, in support of the conceptual ground water flow model for the project area[2]. All well installation was performed by Kendrick Drilling of Chester, NY; boring/well construction logs are contained in Appendix B. Summary well construction details are contained in Table 2-4.

Well MW-5 was installed on February 5, 2001. The well, consisting of a 2 in. diameter stainless steel well point, was hand driven to a depth of 6 ft (5 ft screen), and completed with a casing stick-up and locking cap encased in a concrete collar. MW-4S was installed on February 7, 2001 using water/mud rotary drilling techniques. The 4 in. diameter PVC well was installed to a depth of 15 ft, with 10 ft of 0.010 slot screen placed across the water table. The well was completed with a locking cap and a steel protective casing installed within a concrete apron. Piezometer P-1 was installed on February 6-7, 2001 using water/mud rotary drilling techniques. The 2 in. diameter PVC piezometer was installed to a depth of 40 ft, with 2 ft of 0.010 slot screen placed at the base. The piezometer was completed with a locking cap and a steel protective casing installed within a concrete apron.

[2] This model states that both lateral and vertical ground water hydraulic gradients in the project area are controlled by the wetlands discharge area; documentation of an upward vertical hydraulic gradient at wells MW-4S/P-1 would support this model. Ground water flow paths from the project site associated with this scenario would be shallow, and would not support deep (downward) migration of contaminants.

LEGEND

Monitoring Well Installation

Contaminant Plume Configuration
(Based on on-site monitoring well sampling, and off-site hydropunch and wetlands area ground water sampling, 1999)

100 — Total VOC concentration (ug/L)

Data Source for Contaminant Plume Configuration: Figure 3-1; Supplemental Site Investigation Report/Remedial Action Workplan; AMEC, 2000)

Well Location Survey: Grevas & Hildreth, P.C., Newburgh, NY February 2001

Aerial Photo Base: Robinson Aerial Surveys, Inc., Newton, NJ Exp. No. ORG-1-67; April 23, 1990

Figure 2-2
Location of Off-Site Well Installation
Phase 2 Remedial Investigation

Avery Dennison / Former Monarch Systems, Inc.
New Windsor, New York

amec
Earth & Environmental
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873

Table 2-4: Summary of Well Construction Details

Well ID	Completon Date	Total Depth (ft)	Horizontal Control [a]		Vertical Control [b]	Screen Interval		Screen/Casing
			Northing (ft)	Easting (ft)	TOC (ft-msl)	ft BGS [c]	ft-msl	Diameter (in.)
MW-4S	02/07/2001	15	966,667.6	620,475.5	148.33	5.0-15.0	140.83-130.83	4
MW-5	02/05/2001	6	966,722.0	620,580.4	140.67	1.0-6.0	138.67-133.67	2
P-1	02/07/2001	40	966,673.9	620,478.2	147.95	38.0-40.0	107.45-105.45	2

[a] NY State Plane Coordinate System

[b] ft-msl = ft above mean sea level; vertical datum = NGVD; reference NYSDOT benchmark "VAC"

[c] BGS = ft below ground surface

2.4 AMBIENT AIR MONITORING

As a result of the detection of elevated vapor mass distributions underlying the production facility building slab through performance of the passive soil vapor survey, field screening of organic vapor concentrations was performed in selected coreholes drilled during the survey. This screening was performed on October 13, 2000 at 11 vapor survey sample points representative of areas exhibiting the highest absorbed vapor mass. Screening was performed according to the following protocol: (1) the concrete plug was removed from the corehole, (2) the open corehole was sealed with a weighted piece of cardboard, (3) a four hour vapor equilibration period was observed, and (4) the cardboard cover was then shifted to expose the corner of the corehole, and a photoionization detector (PID) probe was inserted to a depth of 6 in. into the corehole to record the total organic vapor concentration. Screening data are provided below:

Sample Point ID	PID reading (ppm)	Sample Point ID	PID reading (ppm)
12	13.2	40	11.4
13	20.5	46a (vault cover)	0
20	10.5	52	7.1
24	0.8	53	21.9
25	38.3	54	44.7
26	23.9		

While these concentrations are below OSHA Permissible Exposure Limits (PELs)[3] for TCE and TCA (100 and 350 ppm, respectively), and are representative of conditions below the building slab rather than in the production area breathing zone, Avery Dennison determined that ambient air monitoring within the production facility would represent a prudent course of action. Consequently, two ambient air samples were obtained from the facility; one was obtained adjacent to vapor point sample location 19 in the label printing area on February 14, 2001, and one was obtained adjacent to vapor point sample location 38 in the production area on March 13, 2001. Both samples were obtained at an elevation of 4 ft above grade with an approximate flow rate of 12.5 mL/min over an eight hour period using pre-cleaned and evacuated 6-liter Summa canisters. Samples were shipped to the Severn Trent Services laboratory in Pensacola, Florida for chlorinated hydrocarbon analysis using USEPA method TO14 (volatile organic compounds in air).

[3] 8 hr/day over a 40 hr work week, time weighted average (TWA)

3.0 RESULTS AND DISCUSSION

3.1 PASSIVE SOIL VAPOR SURVEY

The analytical results of the vapor survey are summarized in Table 3-1; the laboratory data report is contained in Appendix C. Note that these results are reported in terms of absorbed mass of contaminant (ug), and not as a concentration. Mass distributions for the primary site contaminants and associated degradation products are illustrated on Figures 3-1 (TCE), Figure 3-2 (11DCE), Figure 3-3 (12DCE), Figure 3-4 (111TCA), Figure 3-5 (12DCA), and Figure 3-6 (11DCA). The sum of these constituents is plotted on Figure 3-7 (Total VOC). Approximately 76 percent of the total absorbed mass is associated with TCE, and 18 percent with 111TCA; the remaining 6 percent is distributed among the degradation products.

In terms of TCE and Total VOCs, and to a lesser degree 111TCA, the vapor survey results indicate a uniformly elevated vapor mass under the building slab. This distribution is not surprising, since the slab acts as a cap, largely precluding volatilization and limiting vapor migration. While this condition tends to mask subtle variations in contaminant distribution, review of all of the constituent plots allows for the identification of several "hot spots"; namely: (1) adjacent to and east-northeast of the location of the former sub-grade vapor degreasers within the plant production area; (2) extension of this area into the facility "label printing area"; and (3) within the paved parking area to the east of the aforementioned production areas. Relative to the latter, it should be noted that the magnitude of the observed constituent mass in this area is related to the presence of the asphalt surface (capping vapor migration, as with the building slab); the low mass distribution observed in a narrow band along the exterior edge of the production building on Figures 3-1 and 3-7 (sample points 1 through 7) is likely the result of vapor migration through open joints between the asphalt and the building wall.

The location of these "hotspots" correlates well with the results of prior subsurface investigation (***Site Investigation Report;*** AMEC, 1998); that investigation identified small areas of elevated soil contamination at the lodgement till interface adjacent to and east of the former vapor degreasers, and in the exterior parking area (borings B10 and B25, respectively, indicated on Figure 2-1). Due to access constraints, no subsurface investigation was performed in the label printing area as part of the prior site investigation.

The vapor survey data also provide valuable information in terms of the geometry of the ground water contaminant plume (primarily Figures 3-2, 3-4, and 3-5), and documentation of solvent dechlorination adjacent to MacArthur Avenue (Figures 3-3 and 3-6), where soil saturation and organic content increase in the vicinity of the adjacent wetlands discharge area.

3.2 SUBSURFACE INVESTIGATION

The results of the vapor survey (*i.e.*, the location of "hotspots") provided the basis for the identification of target areas for subsequent subsurface investigation and soil sampling for laboratory VOC analysis. Soil samples were obtained at approximate five foot intervals from a total of 18 borings distributed across the three investigation areas, as specified in correspondence to NYSDEC dated December 15, 2000 (Appendix A), and illustrated in that correspondence and on Figure 2-1.

Nine laboratory analytical data packages (sample delivery groups or SDGs) were prepared to document the results of soil VOC analyses, as follows:

- Interior Production Area: SDGs G6871, G7191, G7641 dated January 17, 2001;
- Exterior Parking Area: SDGs H8421 (February 19, 2001), and H8961, H9281 dated February 21, 2001; and
- Interior Label printing Area: SDGs I2282 (March 8, 2001), I1701 (March 9, 2001), and I2281 (March 12, 2001).

These data packages are contained under separate cover as attachments to this report document.

Summary analytical tabulations are contained in Tables 3-2 through 3-7 (interior production area borings P2-B1 through P2-B6), Tables 3-9 through 3-14 (exterior parking area borings P2-B7 through P2-B12), and Tables 3-16 through 3-21 (interior label printing area borings P2-B13 through P2-B18). The summary analytical data tabulations compare the concentrations of detected constituents to Recommended Soil Cleanup Objectives (RSCOs) defined in the NYSDEC ***Determination of Soil Cleanup Objectives and Cleanup Levels; NYSDEC Technical and Guidance Memorandum (TAGM) HWR-94-4046***, dated January 24, 1994.

A total of nine field (rinsate) blanks and eight trip blanks were processed for analysis. Summary tabulations of the results of these analyses are contained in Tables 3-8, 3-15, and 3-22 for the production area, parking area, and label printing area, respectively. With the exception of very low (< 1.0 ug/L) estimated concentrations of methylene chloride in two field blanks (FB121900, FB122000) and two trip blanks (TB121900, TB122000), no VOCs were detected in these QA/QC samples, indicating that sample collection, storage, and processing was performed consistently and appropriately.

The following sections discuss the results of soil sample analyses relative to NYSDEC RSCOs for each of the investigation areas. The RSCOs for TCE, 111TCA, and total volatile organic compounds (TVOC) are 700 ug/kg, 800 ug/kg, and 10,000 ug/kg, respectively. These data discussions are best interpreted with reference to Figures 3-8 through 3-13, which summarize all results in the form of stacked horizontal sections (corresponding to sample increments) across the project study area. Figure 3-8 depicts TCE concentration data across the 0-5 ft, 5-10 ft, and 10-15 ft sample increments, and Figure 3-9 depicts TCE concentration data across the 15-20 ft, 20-25 ft, and 25-30 ft sample increments. The same data presentations are provided in Figures 3-10 and 3-11 for 111TCA, and in Figures 3-12 and 3-13 for TVOC concentrations.

It should be noted that within the vadose zone, the results of the photoionization detector (PID) screening of soil samples (Table 2-3) reflect the concentration of organic vapors "trapped" under the building slab (similar to the results of the passive soil vapor survey), and are not reflective of soil sample concentrations. In some areas, these data are skewed (concentrated) by the presence of high permeability sand lenses; for example PID screening of the 0-5 ft and 10-15 ft sample increments at boring P2-B1 exhibited vapor readings in the thousands of ppm, while soil sample concentrations were uniformly low (< 100 ug/kg). In a general sense, these vadose zone data are useful to provide a relative assessment of the presence of contaminated sediments in the deeper saturated soil horizons. Within these deeper horizons, the PID screening data correlate fairly well (again, in a relative sense) with the results of the laboratory analysis of soil samples.

3.2.1 Interior Production Area

Across the 0-5 ft, 5-10 ft, 10-15 ft, and 15-20 ft sample increments (primarily representing the vadose zone[4] and water table interface), soil VOC concentrations were consistently low. Relative to TCE, a maximum (estimated) concentration of 140 ug/kg was detected at boring P2-B1 in the 5-10 ft sample increment (which also represents the TVOC maximum). With the exception of an estimated concentration of 2.0 ug/kg in the 15-20 ft increment of boring P2-B1, 111TCA was not detected across these sample increments.

Within the 20-25 ft sample increment, representing the zone at or immediately above the interface with the lodgement till, elevated concentrations of TCE (6,400 ug/kg) and 111TCA (8,900 ug/kg) were detected at boring P2-B5, located approximately 20 ft northeast of the location of the former sub-grade vapor degreasers. The TCE, 111TCA and TVOC (15,300 ug/kg) concentrations at this sample location are all in excess of RSCOs. Significantly, soils to the north, east, and south within the same sample increment, and within the lower 25-30 ft sample increment, exhibit concentrations one or more orders of magnitude lower than those observed at P2-B5. These data are consistent with the findings of the prior ***Site Investigation Report*** (AMEC, 1998), which documented only a small area of soil contamination in the vicinity of the vapor degreasers.

3.2.2 Exterior Parking Area

As observed within the production area, soil VOC concentrations were low (below RSCOs) in the 0-5 ft, 5-10 ft, and 10-15 ft vadose zone sample increments. A maximum TCE concentration of 580 ug/kg was detected in the 10-15 ft increment at boring P2-B10. The maximum 111TCA concentration (180 ug/kg) was also detected within that sample; otherwise, 111TCA was generally not detected. The maximum TVOC concentration (770 ug/kg) was also associated with the 10-15 ft sample increment of P2-B10.

Within the 15-20 ft sample increment, representing the interface with the lodgement till across a portion of this study area[5], elevated concentrations of TCE (slightly above the RSCO) were detected at borings P2-B8 (950 ug/kg), P2-B10 (900 ug/kg), and P2-B11 (1,000 ug/kg). A concentration of 700 ug/kg was detected at the 20-25 ft sample increment at boring P2-B8; TCE concentrations elsewhere in these two sample increments range from 24 ug/kg – 380 ug/kg. 111TCA was not detected at concentrations in excess of its RSCO across the deeper sample intervals; a maximum of 520 ug/kg was detected within the 15-20 ft increment at boring P2-B10. The distribution of TVOC concentration mirrors that of TCE, with maxima in the range of 1,164 ug/kg – 1,493 ug/kg at borings P2-B8, P2-B10, and P2-B11 in the 15-20 ft sample increment, and 1,138 ug/kg at boring P2-B8 within the 20-25 ft sample increment.

These data are also consistent with the findings of the prior ***Site Investigation Report*** (AMEC, 1998), which documented slightly elevated VOC concentrations at depth in borings B18, B19, and B25 (refer to Figure 2-1). The distribution of the Phase II RI data, as depicted on Figure 3-13, suggests preferential absorption of contaminants along the lodgement till interface in this area, where the surface of these low permeability sediments rises and alters the dynamics of the flow system.

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[4] The unsaturated zone above the water table.

[5] From the interior production area, the surface of the lodgement till slopes upwards (becomes shallower) to the southeast. Due to the fact that sample collection was terminated at the till interface, samples from only four borings were recovered within the 20-25 ft sample increment (P2-B8, P2-B9, P2-B10, P2-B1), and from only one boring in the 25-30 ft sample increment (P2-B10).

3.2.3 Interior Label Printing Area

Similar to the other two investigation areas, elevated concentrations of TCE, 111TCA, and TVOC were not detected in the vadose zone or at the water table interface within the label printing area. A maximum TCE concentration of 390 ug/kg was detected in the 10-15 ft sample increment at P2-B13. Concentrations of 280 ug/kg and 200 ug/kg were detected at the 15-20 ft sample increment at borings P2-B17 and P2-B14, respectively; elsewhere, TCE concentrations were below 110 ug/kg across the 0-20 ft zone. Within this zone, 111TCA was detected at maximum concentrations of 89 ug/kg and 62 ug/kg within the 15-20 ft sample increment at borings P2-B17 and P2-B14, respectively. Elsewhere, 111TCA was detected at low, estimated concentrations (maximum 32 ug/kg in the 10-15 ft increment of P2-B13), or was not detected. The TVOC concentration distribution across the 0-20 ft zone essentially mirrors that of TCE.

Within the 20-25 ft sample increment (at or directly above the till interface), TCE was detected at a maximum concentration of 1,300 ug/kg at boring P2-B18, in excess of the RSCO. All other samples in this increment and the deeper 25-30 ft increment exhibited concentrations one or two orders of magnitude below this value. 111TCA was not detected in the deeper sample increments above its RSCO. Maximum concentrations were 430 ug/kg in the 25-30 ft increment at boring P2-B15, and 260 ug/kg in the 20-25 ft increment at boring P2-B18. The maximum TVOC concentration within the label printing area (1,598 ug/kg) was associated with P2-B18; this value is roughly an order of magnitude below the RSCO.

It should be noted that within the label printing area, no soil samples were recovered in the 20-25 ft sample increment at borings P2-B14 and P2-B15 and in the 25-30 ft increment at borings P2-B13, P2-B16, and P2-B17. Based on visual observations in the field, samples from P2-B14 and P2-B15 were obtained slightly outside the 20-25 ft increment range (*e.g.*, 19.5-20.0 ft, 26.0-26.5 ft); the analytical data associated with these samples are consistent with the distributions plotted on Figures 3-8 through 3-13, with TVOC concentrations ranging from 4 – 269 ug/kg. Limited sample recovery in the deeper 25-30 ft increment was the result of the rising elevation of the surface of the till across this area, as noted in Section 3.2.2.

3.2.4 Discussion

The results of the subsurface investigation indicate the presence of a small residual source area of solvent contamination located within a limited thickness of saturated soils above the lodgement till in the vicinity of boring P2-B5. Review of Figure 3-13 suggests down gradient (west to east) migration of contaminants from this residual source within a narrow band located 20-25 ft below ground surface (bgs) across the entire investigation area, and including a zone 15-20 ft bgs in the exterior parking area[6]. Significantly, maximum down gradient soil concentrations within this band are an order of magnitude lower than those observed at the source. This suggests that the majority of mass flux from the source area over time has occurred in dissolved form through the more permeable soils overlying the till[7], and that the pattern of residual down gradient soil contamination reflects sorption and desorption between ground water and the fine grained soil materials comprising the surface of the till, *i.e.*, the

[6] As discussed in Section 3.2.2, preferential absorption of contaminants along the lodgement till interface in the exterior parking area (where the surface of these low permeability sediments rises and alters the dynamics of the flow system), appears to result in a widening (south to north) of the area of soil contamination in that area; this local widening is also observed in the passive soil vapor survey data plots (Figures 3-1 through 3-7).

[7] Documented through review of the location of the center of mass of the ground water contaminant plume over time (refer to Appendix E of the ***Supplemental Site Investigation Report/Remedial Action Workplan*** (AMEC, 2000).

pattern of down gradient soil contamination is incidental to the ground water migration pathway, and is not indicative of the migration of separate phase liquids (DNAPL).

The results of this subsurface investigation are consistent with the findings of prior site investigation, as documented in the ***Site Investigation Report*** (AMEC, 1998), in terms of both the dimensions of the residual source area and the lack of evidence of pooling or structurally controlled migration of DNAPL.

3.3 MONITORING WELL INSTALLATION

Monitoring wells installed off-site were sampled together with on site monitoring wells for TCL-VOC and natural attenuation indicator parameters during the week of April 2, 2001 per the specifications of Section 4.1 of the ***Supplemental Site Investigation Report/Remedial Action Workplan*** (AMEC, 2000). The results of these analyses will be described in an addendum report to this document. Water level measurements were obtained from wells MW-4S and P-1 on February 14, 2001; this well and piezometer represent a shallow-deep pair located at the boundary of the A&R Concrete, Inc. property and the Town of New Windsor wetlands property. Water level monitoring results are presented below:

Well/Piezometer	Top of PVC Elevation (ft-msl)	Depth to Water (ft)	Water Level Elevation (ft-msl)
MW-4S	148.33	8.85	139.48
P-1	147.95	6.90	141.05

These data indicate a strong upward vertical hydraulic gradient (1.57 ft; 0.05 ft/ft), consistent with the site conceptual ground water flow model. This model specifies that local flow paths are oriented laterally and vertically upwards to discharge into the wetlands, thereby constraining deep contaminant migration and controlling the fate and transport of contaminants in the shallow flow system.

3.4 AMBIENT AIR MONITORING

Analytical laboratory results for the ambient air monitoring performed in the facility production and label printing areas are contained in Appendix D, and summarized below. Trichloroethene and/or tetrachloroethene were the only constituents detected; the detection limit for all VOCs in air was 0.060 mg/m^3.

Volatile Organic Compound	Production Area (mg/m3)	Production Area (ppm) [b]	Label Printing Area (mg/m3)	Label Printing Area (ppm) [b]	OSHA PEL (ppm) [c]
TCE	0.09	0.017	0.14	0.026	100
PCE [a]	nd	nd	0.08	0.012	100

nd = not detected
[a] PCE = Tetrachloroethene (perchloroethene)
[b] 1 ppm = 5.37 mg/m3 (TCE); 1 ppm = 6.78 mg/m3 (PCE)
[c] OSHA Permissible Exposure Limit (8 hr time weighted average)

As indicated, detected concentrations of VOCs were approximately three orders of magnitude below OSHA PELs. The thickness and continuity of the concrete building slab underlying the facility precludes the migration of organic vapors into the production area breathing zone.

TABLE 3-1
PASSIVE VAPOR SURVEY ANALYTICAL DATA SUMMARY (ug)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Field Sample ID	Laboratory Sample ID	Tetrachloroethene (PCE)	Trichloroethene (TCE)	1,2-Dichloroethene (12DCE)	1,1-Dichloroethene (11DCE)	1,1,1-Trichloroethane (111TCA)	1,1-Dichloroethane (11DCA)
1	336954	nd	8.65	0.00	nd	0.32	nd
2	336953	0.22	79.58	0.00	0.40	2.75	nd
3	336955	0.06	13.94	0.00	0.29	1.64	nd
4	338715	0.07	13.21	0.00	0.15	1.49	nd
5	338716	0.59	62.29	0.00	10.28	75.98	nd
6	338717	nd	0.20	0.00	nd	0.17	nd
7	338718	nd	0.52	0.00	nd	0.21	nd
8	336930	0.22	222.43	0.00	2.78	26.27	nd
9	336946	1.16	401.65	0.08	2.64	22.25	nd
10	336933	5.10	798.12	0.05	5.18	60.29	nd
11	336935	9.27	836.40	0.05	8.10	101.71	nd
12	336939	36.21	>934.19	0.05	21.82	429.43	nd
13	336940	36.75	>1178.31	0.07	19.00	308.41	nd
14	336941	21.52	856.51	0.09	10.42	160.97	nd
15	336931	0.21	26.14	0.00	0.13	0.78	nd
16	336947	1.33	399.67	0.09	2.87	22.34	nd
16S [a]	336948	0.34	137.78	0.00	0.83	7.36	nd
17	336938	4.50	636.84	0.07	4.98	42.10	nd
18	336936	16.74	863.10	0.07	9.11	100.74	nd
18S [a]	336937	0.65	96.95	0.00	0.76	7.79	nd
19	336945	15.75	709.38	0.00	10.64	153.91	nd
20	336943	13.73	>1053.47	0.00	16.35	168.07	nd
20S [a]	336944	2.14	183.58	0.00	1.44	28.79	nd
21	336942	21.37	809.58	0.08	9.75	133.97	nd
22	336886	2.76	280.12	0.09	1.76	13.36	nd
23	336885	3.10	448.42	0.13	3.22	28.25	nd
24	336881	11.34	832.62	0.12	7.90	70.59	nd
24S [a]	336882	5.68	621.36	0.08	1.86	51.23	nd
25	336949	24.77	>980.42	0.09	14.54	145.12	nd
26	336875	46.80	>912.64	0.05	15.33	203.73	nd
26S [a]	336876	26.02	836.40	0.00	8.39	150.27	nd
27	338720	32.63	>982.35	0.06	8.75	173.55	nd
28	336874	21.14	737.45	0.12	7.74	76.66	nd
29	336887	13.10	461.64	0.26	2.61	20.69	nd
30	336883	4.47	383.67	0.00	4.25	31.02	nd
30S [a]	336884	1.14	115.51	0.00	0.77	14.33	nd
31	336880	22.03	815.98	0.00	7.95	63.43	nd
32	336878	13.03	776.89	0.00	7.42	61.72	nd
32S [a]	336879	9.37	599.06	0.00	2.30	29.36	nd
33	336877	24.28	836.85	0.00	6.98	76.28	nd
34	336892	20.84	716.70	0.00	5.09	62.02	nd
34S [a]	336893	22.17	676.16	0.00	3.27	53.92	nd
35	336873	22.91	793.97	0.28	4.83	69.38	nd
36	336888	25.15	538.08	0.14	3.50	32.47	nd
37	336889	27.42	777.31	0.00	4.20	47.16	nd
38	336890	5.55	547.11	0.00	4.63	33.27	nd
38S [a]	336891	2.45	157.00	0.00	0.65	4.90	nd
39	336866	19.20	709.32	0.00	1.75	39.81	nd
39S [a]	336867	22.80	622.50	0.00	1.36	39.70	nd
40	336950	67.54	>806.72	0.08	5.43	84.92	nd
40S [a]	336951	25.32	806.40	0.08	3.80	57.20	nd
41	336952	46.20	860.99	0.08	6.02	72.47	nd
42	336872	21.17	664.70	0.21	3.32	47.55	nd
43	336860	26.68	468.19	0.00	2.86	25.59	nd
44	336862	8.83	368.02	0.00	1.56	21.12	nd
44S [a]	336861	22.75	609.19	0.00	3.60	32.70	nd
45	336863	10.17	633.38	0.00	3.48	27.78	nd
46	336864	23.00	599.17	0.00	1.28	31.85	nd
46S [a]	336865	13.95	367.27	0.00	0.49	18.09	nd
47	336868	37.70	452.17	0.00	1.00	28.39	nd
48	336869	26.85	648.84	0.00	3.89	37.97	nd
48S [a]	336870	26.48	577.89	0.00	1.82	38.62	nd
49	336871	12.00	367.03	0.11	4.48	29.32	nd
50	338719	nd	23.16	0.00	1.37	6.26	nd

[a] Sub-slab surface sample
nd - Compound not detected

TABLE 3-1
PASSIVE VAPOR SURVEY ANALYTICAL DATA SUMMARY (ug)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Field Sample ID	Laboratory Sample ID	Tetrachloroethene (PCE)	Trichloroethene (TCE)	1,2-Dichloroethene (12DCE)	1,1-Dichloroethene (11DCE)	1,1,1-Trichloroethane (111TCA)	1,1-Dichloroethane (11DCA)
51	338712	0.89	327.62	0.00	3.87	22.39	nd
52	338711	8.40	>1123.79	0.08	9.10	91.60	nd
53	338713	28.47	>1001.00	0.49	33.24	581.80	0.40
54	338714	15.82	>1003.72	0.07	41.41	610.99	0.22
55	338710	1.29	252.23	0.00	7.31	50.55	nd
56	338721	nd	0.32	0.00	nd	nd	nd
57	336956	nd	0.33	0.00	nd	nd	nd
58	336957	nd	nd	0.00	nd	nd	nd
59	336958	0.38	55.52	0.00	0.27	2.83	nd
60	336959	0.85	90.91	0.00	9.48	69.35	nd
61	336960	nd	0.92	0.00	0.04	1.20	nd
62	336961	nd	nd	0.00	nd	nd	nd
63	336968	nd	nd	0.00	nd	nd	nd
64	336969	nd	0.60	0.00	nd	nd	nd
65	336970	nd	5.25	0.00	nd	0.12	nd
66	336971	1.74	157.42	0.00	1.55	13.92	nd
67	336972	6.42	555.35	0.00	22.63	262.12	nd
68	336973	0.09	13.24	0.00	0.63	8.06	nd
69	336974	nd	3.27	0.00	0.07	1.30	nd
70	336975	nd	nd	0.00	nd	nd	nd
71	336908	nd	1.01	0.22	nd	nd	nd
72	336909	nd	2.78	7.42	nd	0.10	0.35
73	336910	nd	4.76	13.35	nd	0.20	0.99
74	336911	nd	1.52	81.60	5.03	37.28	54.64
75	336912	nd	2.57	17.56	0.43	3.25	5.81
76	336913	nd	2.00	4.12	nd	nd	0.28
77	336914	nd	nd	0.00	nd	nd	nd
78	336915	nd	1.67	4.29	nd	nd	0.29
79	336916	nd	6.92	8.36	0.05	0.37	0.49
80	336917	nd	0.14	0.98	nd	0.30	0.20
81	336918	2.32	460.15	226.04	64.30	778.11	14.25
82	336919	nd	7.10	33.95	4.89	28.04	9.89
83	336920	nd	0.13	0.23	nd	nd	nd
84	336921	nd	nd	0.00	nd	nd	nd
85	336922	nd	0.34	0.11	nd	nd	0.30
86	336923	nd	2.07	8.92	3.49	27.22	3.78
87	336924	nd	3.88	2.76	0.44	4.43	1.60
88	336925	0.97	176.63	196.64	43.31	571.12	13.53
89	336926	nd	9.54	26.15	3.01	15.51	3.23
90	336927	nd	nd	0.00	nd	nd	nd
91	336928	nd	nd	0.00	nd	nd	nd

nd - Compound not detected

TABLE 3-2
INTERIOR PRODUCTION AREA: BORING P2-B1
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B1	P2-B1	P2-B1	P2-B1	P2-B1	P2-B1	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	3.5-4.0	9.5-10	14.5-15	19.5-20	24.5-25	27.5-28	
Laboratory Sample ID #	248243	248244	248245	248246	248247	248248	
Sample Date	12/19/00	12/19/00	12/19/00	12/19/00	12/19/00	12/19/00	
Chloromethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
Bromomethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
VinylChloride	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	200
Chloroethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	1,900
MethyleneChloride	-- U (10)	-- U (1400)	1.0 JB	3.0 JB	-- U (1500)	1.0 JB	100
Acetone	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	200
CarbonDisulfide	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	2,700
1,1-Dichloroethene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	400
1,1-Dichloroethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	300 [2]
Chloroform	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	300
1,2-Dichloroethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	100
2-Butanone	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	300
1,1,1-Trichloroethane	-- U (10)	-- U (1400)	-- U (13)	2.0 J	290 J	-- U (9.4)	800
CarbonTetrachloride	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	600
Bromodichloromethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
1,2-Dichloropropane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
Trichloroethene	12	140 J	20	13	470 J	2.0 J	700
Dibromochloromethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
Benzene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	300
Bromoform	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	1,000
2-Hexanone	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
Tetrachloroethene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	600
Toluene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	1,500
Chlorobenzene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	1,700
Ethylbenzene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	5,500
Styrene	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	NS
Xylenes(Total)	-- U (10)	-- U (1400)	-- U (13)	-- U (12)	-- U (1500)	-- U (9.4)	1,200
Total VOC	12	140	21	18	760	3	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-3
INTERIOR PRODUCTION AREA: BORING P2-B2
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B2	P2-B2	P2-B2	P2-B2	P2-B2	P2-B2 [3]	P2-B2	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	9.5-10	14.5-15	19.5-20	23.0-24.0	23.0-24.0	29.5-30	
Laboratory Sample ID #	248250	248251	248252	248253	248254	248255	248256	
Sample Date	12/19/00	12/19/00	12/19/00	12/19/00	12/19/00	12/19/00	12/19/00	
Chloromethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
Bromomethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
VinylChloride	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	200
Chloroethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	1,900
MethyleneChloride	1.0 JB	0.4 JB	2.0 JB	1.0 JB	1.0 JB	0.9 JB	1.0 JB	100
Acetone	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	200
CarbonDisulfide	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	2,700
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	400
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	300 [2]
Chloroform	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	300
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	100
2-Butanone	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	300
1,1,1-Trichloroethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	9.0 J	5.0 J	13	800
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	600
Bromodichloromethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
Trichloroethene	2.0 J	7.0 J	8.0 J	2.0 J	37	39	9.0 J	700
Dibromochloromethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
Benzene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	300
Bromoform	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	1,000
2-Hexanone	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
Tetrachloroethene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	0.6 J	0.7 J	-- U (12)	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	600
Toluene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	1,500
Chlorobenzene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	1,700
Ethylbenzene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	5,500
Styrene	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	NS
Xylenes(Total)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	1,200
Total VOC	3.0	7.4	10	3.0	48	46	23	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer
[3] - Sample Duplicate

TABLE 3-4
INTERIOR PRODUCTION AREA: BORING P2-B3
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B3	P2-B3	P2-B3	P2-B3	P2-B3	P2-B3	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	9.5-10.0	14.5-15	19.5-20	24.5-25	29-29.5	
Laboratory Sample ID #	248558	248559	248560	248561	248562	248563	
Sample Date	12/20/00	12/20/00	12/20/00	12/20/00	12/20/00	12/20/00	
Chloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
Bromomethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
VinylChloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	200
Chloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	1,900
MethyleneChloride	1.0 JB	1.0 JB	1.0 JB	1.0 JB	2.0 JB	-- U (1400)	100
Acetone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	200
CarbonDisulfide	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	2,700
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	76 J	400
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	300 [2]
Chloroform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	300
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	100
2-Butanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	300
1,1,1-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	630 J	800
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	600
Bromodichloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
Trichloroethene	58	56	10 J	3.0 J	-- U (12)	650 J	700
Dibromochloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
Benzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	300
Bromoform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	1,000
2-Hexanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
Tetrachloroethene	2.0 J	1.0 J	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	600
Toluene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	1,500
Chlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	1,700
Ethylbenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	5,500
Styrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	NS
Xylenes(Total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (1400)	1,200
Total VOC	61	58	11	4.0	2.0	1,356	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-5
INTERIOR PRODUCTION AREA: BORING P2-B4
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B4	P2-B4	P2-B4	P2-B4	P2-B4	P2-B4	P2-B4	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	9.5-10.0	14.5-15	19.5-20	24.5-25	29.5-30	24.5-35	
Laboratory Sample ID #	248257	248258	248552	248553	248554	248555	248556	
Sample Date	12/19/00	12/19/00	12/20/00	12/20/00	12/20/00	12/20/00	12/20/00	
Chloromethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
Bromomethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
VinylChloride	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	200
Chloroethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	1,900
MethyleneChloride	1.0 JB	0.9 JB	2.0 JB	2.0 JB	1.0 JB	1.0 JB	1.0 JB	100
Acetone	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	200
CarbonDisulfide	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	2,700
1,1-Dichloroethene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	2.0 J	0.7 J	400
1,1-Dichloroethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	8.0 J	-- U (11)	200
1,2-Dichloroethene(total)	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	300 [2]
Chloroform	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	300
1,2-Dichloroethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	100
2-Butanone	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	300
1,1,1-Trichloroethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	21	69	32	800
CarbonTetrachloride	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	600
Bromodichloromethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
1,2-Dichloropropane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
cis-1,3-Dichloropropene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
Trichloroethene	2.0 J	20	2.0 J	3.0 J	69	57	16	700
Dibromochloromethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
1,1,2-Trichloroethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
Benzene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	60
trans-1,3-Dichloropropene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	300
Bromoform	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
4-Methyl-2-Pentanone	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	1,000
2-Hexanone	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
Tetrachloroethene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	0.6 J	-- U (12)	-- U (11)	1,400
1,1,2,2-Tetrachloroethane	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	600
Toluene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	1,500
Chlorobenzene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	1,700
Ethylbenzene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	5,500
Styrene	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	NS
Xylenes(Total)	-- U (9.5)	-- U (10)	-- U (12)	-- U (12)	-- U (11)	-- U (12)	-- U (11)	1,200
Total VOC	3.0	21	4.0	5.0	92	137	50	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-6
INTERIOR PRODUCTION AREA: BORING P2-B5
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B5	P2-B5	P2-B5 [3]	P2-B5	P2-B5	P2-B5	P2-B5	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	10.0-10.5	10.0-10.5	15.0-15.5	19.5-20.0	24.5-25.0	29.5-30.0	
Laboratory Sample ID #	248039	248040	248041	248042	248043	248044	248045	
Sample Date	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
Chloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
Bromomethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
VinylChloride	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	200
Chloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	1,900
MethyleneChloride	-- U (10)	1.0 JB	1.0 JB	2.0 JB	0.8 JB	-- U (1500)	1.0 JB	100
Acetone	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	200
CarbonDisulfide	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	2,700
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	400
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	300 [2]
Chloroform	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	300
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	100
2-Butanone	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	300
1,1,1-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	***8,900***	-- U (12)	800
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	600
Bromodichloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
Trichloroethene	7.0 J	10 J	12	16	3.0 J	***6,400***	20	700
Dibromochloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
Benzene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	300
Bromoform	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	1,000
2-Hexanone	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
Tetrachloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	600
Toluene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	1,500
Chlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	1,700
Ethylbenzene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	5,500
Styrene	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	NS
Xylenes(Total)	-- U (10)	-- U (10)	-- U (10)	-- U (12)	-- U (11)	-- U (1500)	-- U (12)	1,200
Total VOC	7.0	11	13	18	3.8	***15,300***	21	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer
[3] - Sample Duplicate
BOLD - Value exceeds soil cleanup objective.

TABLE 3-7
INTERIOR PRODUCTION AREA: BORING P2-B6
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2B6	P2B6	P2B6	P2B6	P2B6	P2B6	P2B6	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	3.5-4.0	9.5-10.0	14.5-15.0	19.5-20.0	21.0-21.5	27.0-27.5	31.5-32.0	
Laboratory Sample ID #	248031	248032	248033	248034	248035	248036	248037	
Sample Date	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	12/18/00	
Chloromethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
Bromomethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
VinylChloride	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	200
Chloroethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	1,900
MethyleneChloride	-- U (10)	1.0 JB	1.0 JB	0.6 JB	0.7 JB	15 JB	2.0 JB	100
Acetone	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	200
CarbonDisulfide	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	2,700
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	3.0 J	-- U (10)	400
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	300 [2]
Chloroform	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	300
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	100
2-Butanone	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	300
1,1,1-Trichloroethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	220	7.0 J	800
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	600
Bromodichloromethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
Trichloroethene	-- U (10)	6.0 J	12 J	8.0 J	7.0 J	280	13	700
Dibromochloromethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
Benzene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	300
Bromoform	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	1,000
2-Hexanone	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
Tetrachloroethene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	6.0 J	-- U (10)	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	600
Toluene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	1,500
Chlorobenzene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	1,700
Ethylbenzene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	5,500
Styrene	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	NS
Xylenes(Total)	-- U (10)	-- U (10)	-- U (13)	-- U (13)	-- U (13)	-- U (22)	-- U (10)	1,200
Total VOC	--	7.0	13	8.6	7.7	524	22	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-8
INTERIOR PRODUCTION AREA: FIELD/TRIP BLANKS
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS (ug/L)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	FB121800	FB121900	FB122000	TB121800	TB121900	TB122000
Laboratory Sample ID #	248038	248249	248557	248046	248259	248564
Sample Date	12/18/00	12/19/00	12/20/00	12/18/00	12/19/00	12/20/00
Chloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromomethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
VinylChloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
MethyleneChloride	-- U (10)	1.0 J	0.8 J	-- U (10)	1.0 J	1.0 J
Acetone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
CarbonDisulfide	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chloroform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
2-Butanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,1-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromodichloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Trichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Dibromochloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Benzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromoform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
2-Hexanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Tetrachloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Toluene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Ethylbenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Styrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Xylenes(Total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.

TABLE 3-9
EXTERIOR PARKING AREA: BORING P2-B7
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B7	P2-B7	P2-B7	P2-B7	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	3.5-4.0	9.5-10.0	14.0-16.0	17.5-18.0	
Laboratory Sample ID #	255605	255606	255607	255609	
Sample Date	02/05/01	02/05/01	02/05/01	02/05/01	
Chloromethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
Bromomethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
VinylChloride	-- U (12)	-- U (11)	-- U (13)	-- U (13)	200
Chloroethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	1,900
MethyleneChloride	1.0 JB	0.8 JB	1.0 JB	1.0 JB	100
Acetone	-- U (12)	-- U (11)	-- U (13)	-- U (13)	200
CarbonDisulfide	-- U (12)	-- U (11)	-- U (13)	-- U (13)	2,700
1,1-Dichloroethene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	400
1,1-Dichloroethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	200
1,2-Dichloroethene(total)	-- U (12)	-- U (11)	-- U (13)	-- U (13)	300 [2]
Chloroform	-- U (12)	-- U (11)	-- U (13)	-- U (13)	300
1,2-Dichloroethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	100
2-Butanone	-- U (12)	-- U (11)	-- U (13)	-- U (13)	300
1,1,1-Trichloroethane	-- U (12)	-- U (11)	2.0 J	5.0 J	800
CarbonTetrachloride	-- U (12)	-- U (11)	-- U (13)	-- U (13)	600
Bromodichloromethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
1,2-Dichloropropane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
cis-1,3-Dichloropropene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
Trichloroethene	49	5.0 J	89	24	700
Dibromochloromethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
1,1,2-Trichloroethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
Benzene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	60
trans-1,3-Dichloropropene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	300
Bromoform	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
4-Methyl-2-Pentanone	-- U (12)	-- U (11)	-- U (13)	-- U (13)	1,000
2-Hexanone	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
Tetrachloroethene	0.6 J	-- U (11)	0.8 J	-- U (13)	1,400
1,1,2,2-Tetrachloroethane	-- U (12)	-- U (11)	-- U (13)	-- U (13)	600
Toluene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	1,500
Chlorobenzene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	1,700
Ethylbenzene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	5,500
Styrene	-- U (12)	-- U (11)	-- U (13)	-- U (13)	NS
Xylenes(Total)	-- U (12)	-- U (11)	-- U (13)	-- U (13)	1,200
Total VOC	51	5.8	93	30	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-10
EXTERIOR PARKING AREA: BORING P2-B8
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B8	P2-B8	P2-B8	P2-B8	P2-B8	Recommended
Sample Depth (feet)	4.5-5.0	9.0-10.0	12.0-14.0	16.0-18.0	19.5-20.5	Soil
Laboratory Sample ID #	255375	255376	255377	255379	255380	Cleanup
Sample Date	02/02/01	02/02/01	02/02/01	02/02/01	02/02/01	Objectives (ug/kg) [1]
Chloromethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
Bromomethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
VinylChloride	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	200
Chloroethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	1,900
MethyleneChloride	0.6 JB	0.7 JB	-- U (12)	6.0 JB	5.0 JB	100
Acetone	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	200
CarbonDisulfide	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	2,700
1,1-Dichloroethene	-- U (11)	-- U (11)	-- U (12)	1.0 J	10 J	400
1,1-Dichloroethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	17 J	200
1,2-Dichloroethene(total)	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	300 [2]
Chloroform	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	300
1,2-Dichloroethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	100
2-Butanone	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	300
1,1,1-Trichloroethane	1.0 J	-- U (11)	-- U (12)	200	400	800
CarbonTetrachloride	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	600
Bromodichloromethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
1,2-Dichloropropane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
cis-1,3-Dichloropropene	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
Trichloroethene	21	32	23	***950***	***700***	700
Dibromochloromethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
1,1,2-Trichloroethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
Benzene	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	60
trans-1,3-Dichloropropene	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	300
Bromoform	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
4-Methyl-2-Pentanone	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	1,000
2-Hexanone	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
Tetrachloroethene	-- U (11)	-- U (11)	-- U (12)	7.0 J	6.0 J	1,400
1,1,2,2-Tetrachloroethane	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	600
Toluene	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	1,500
Chlorobenzene	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	1,700
Ethylbenzene	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	5,500
Styrene	-- U (11)	-- U (11)	-- U (12)	-- U (51)	-- U (52)	NS
Xylenes(Total)	2 J	-- U (11)	-- U (12)	-- U (51)	-- U (52)	1,200
Total VOC	23	33	23	1,164	1,138	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer
BOLD - Value exceeds soil cleanup objective.

TABLE 3-11
EXTERIOR PARKING AREA: BORING P2-B9
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B9	P2-B9	P2-B9	P2-B9	P2-B9	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	9.5-10.0	15.0-15.5	19.5-20.0	24.5-25.0	
Laboratory Sample ID #	255369	255370	255371	255372	255373	
Sample Date	02/02/01	02/02/01	02/02/01	02/02/01	02/02/01	
Chloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
Bromomethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
VinylChloride	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	200
Chloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	1,900
MethyleneChloride	1.0 JB	1.0 JB	1.0 JB	3.0 JB	1.0 JB	100
Acetone	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	200
CarbonDisulfide	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	2,700
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (11)	3.0 J	-- U (12)	400
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	300 [2]
Chloroform	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	300
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	100
2-Butanone	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	300
1,1,1-Trichloroethane	-- U (10)	4.0 J	4.0 J	210	2.0 J	800
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	600
Bromodichloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
Trichloroethene	26	60	86	310	37	700
Dibromochloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
Benzene	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	300
Bromoform	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	1,000
2-Hexanone	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
Tetrachloroethene	-- U (10)	0.8 J	1.0 J	3.0 J	0.9 J	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	600
Toluene	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	1,500
Chlorobenzene	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	1,700
Ethylbenzene	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	5,500
Styrene	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	NS
Xylenes(Total)	-- U (10)	-- U (10)	-- U (11)	-- U (26)	-- U (12)	1,200
Total VOC	27	66	92	529	41	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-12
EXTERIOR PARKING AREA: BORING P2-B10
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B10	P2-B10	P2-B10	P2-B10	P2-B10	P2-B10	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	9.5-10.0	14.5-15.0	19.5-20.0	23.5-24.0	28.0-28.5	
Laboratory Sample ID #	255072	255073	255074	255075	255076	255077	
Sample Date	02/01/01	02/01/01	02/01/01	02/01/01	02/01/01	02/01/01	
Chloromethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
Bromomethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
VinylChloride	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	200
Chloroethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	1,900
MethyleneChloride	2.0 JB	2.0 JB	5.0 JB	6.0 JB	2.0 JB	2.0 JB	100
Acetone	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	200
CarbonDisulfide	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	2,700
1,1-Dichloroethene	-- U (12)	-- U (11)	-- U (54)	4.0 J	-- U (12)	1.0 J	400
1,1-Dichloroethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	200
1,2-Dichloroethene(total)	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	300 [2]
Chloroform	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	300
1,2-Dichloroethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	100
2-Butanone	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	300
1,1,1-Trichloroethane	3.0 J	-- U (11)	180	520	56	21	800
CarbonTetrachloride	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	600
Bromodichloromethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
1,2-Dichloropropane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
cis-1,3-Dichloropropene	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
Trichloroethene	17	8.0 J	580	***900***	160	120	700
Dibromochloromethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
1,1,2-Trichloroethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
Benzene	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	60
trans-1,3-Dichloropropene	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	300
Bromoform	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
4-Methyl-2-Pentanone	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	1,000
2-Hexanone	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
Tetrachloroethene	-- U (12)	-- U (11)	5.0 J	10 J	3.0 J	1.0 J	1,400
1,1,2,2-Tetrachloroethane	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	600
Toluene	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	1,500
Chlorobenzene	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	1,700
Ethylbenzene	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	5,500
Styrene	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	NS
Xylenes(Total)	-- U (12)	-- U (11)	-- U (54)	-- U (51)	-- U (12)	-- U (13)	1,200
Total VOC	22	10	770	1,440	221	145	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer
BOLD - Value exceeds soil cleanup objective.

TABLE 3-13
EXTERIOR PARKING AREA: BORING P2-B11
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B11	P2-B11	P2-B11	P2-B11	P2-B11	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	9.5-10.0	14.5-15.0	19.0-19.5	21.5-22.0	
Laboratory Sample ID #	255078	255079	255080	255082	255083	
Sample Date	02/01/01	02/01/01	02/01/01	02/01/01	02/01/01	
Chloromethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
Bromomethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
VinylChloride	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	200
Chloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	1,900
MethyleneChloride	1.0 JB	2.0 JB	11 U (11)	6.0 JB	-- U (50)	100
Acetone	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	200
CarbonDisulfide	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	2,700
1,1-Dichloroethene	-- U (12)	-- U (10)	-- U (11)	3.0 J	5.0 J	400
1,1-Dichloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	12 J	200
1,2-Dichloroethene(total)	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	300 [2]
Chloroform	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	300
1,2-Dichloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	100
2-Butanone	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	300
1,1,1-Trichloroethane	-- U (12)	1.0 J	2.0 J	460	50	800
CarbonTetrachloride	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	600
Bromodichloromethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
1,2-Dichloropropane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
cis-1,3-Dichloropropene	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
Trichloroethene	5.0 J	58	70	***1,000***	380	700
Dibromochloromethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
1,1,2-Trichloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
Benzene	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	60
trans-1,3-Dichloropropene	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	300
Bromoform	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
4-Methyl-2-Pentanone	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	1,000
2-Hexanone	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
Tetrachloroethene	-- U (12)	0.6 J	0.7 J	24 J	-- U (50)	1,400
1,1,2,2-Tetrachloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	600
Toluene	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	1,500
Chlorobenzene	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	1,700
Ethylbenzene	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	5,500
Styrene	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	NS
Xylenes(Total)	-- U (12)	-- U (10)	-- U (11)	-- U (55)	-- U (50)	1,200
Total VOC	6	61	84	1,493	447	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer
BOLD - Value exceeds soil cleanup objective.

TABLE 3-14
EXTERIOR PARKING AREA: BORING P2-B12
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B12	P2-B12	P2-B12	P2-B12	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	9.5-10.0	10.0-12	19.5-20.0	
Laboratory Sample ID #	255084	255085	255086	255368	
Sample Date	02/01/01	02/01/01	02/01/01	02/02/01	
Chloromethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
Bromomethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
VinylChloride	-- U (12)	-- U (10)	-- U (11)	-- U (24)	200
Chloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	1,900
MethyleneChloride	0.9 J	1.0 J	2.0 JB	3.0 JB	100
Acetone	-- U (12)	-- U (10)	-- U (11)	-- U (24)	200
CarbonDisulfide	-- U (12)	-- U (10)	-- U (11)	-- U (24)	2,700
1,1-Dichloroethene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	400
1,1-Dichloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	200
1,2-Dichloroethene(total)	-- U (12)	-- U (10)	-- U (11)	-- U (24)	300 [2]
Chloroform	-- U (12)	-- U (10)	-- U (11)	-- U (24)	300
1,2-Dichloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	100
2-Butanone	-- U (12)	-- U (10)	-- U (11)	-- U (24)	300
1,1,1-Trichloroethane	-- U (12)	-- U (10)	-- U (11)	5.0 J	800
CarbonTetrachloride	-- U (12)	-- U (10)	-- U (11)	-- U (24)	600
Bromodichloromethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
1,2-Dichloropropane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
cis-1,3-Dichloropropene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
Trichloroethene	7.0 J	70	35	160	700
Dibromochloromethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
1,1,2-Trichloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
Benzene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	60
trans-1,3-Dichloropropene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	300
Bromoform	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
4-Methyl-2-Pentanone	-- U (12)	-- U (10)	-- U (11)	-- U (24)	1,000
2-Hexanone	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
Tetrachloroethene	-- U (12)	0.5 J	-- U (11)	-- U (24)	1,400
1,1,2,2-Tetrachloroethane	-- U (12)	-- U (10)	-- U (11)	-- U (24)	600
Toluene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	1,500
Chlorobenzene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	1,700
Ethylbenzene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	5,500
Styrene	-- U (12)	-- U (10)	-- U (11)	-- U (24)	NS
Xylenes(Total)	-- U (12)	-- U (10)	-- U (11)	-- U (24)	1,200
Total VOC	7.9	72	37	168	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-15
EXTERIOR PARKING AREA: FIELD/TRIP BLANKS
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS (ug/L)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	FB020101	FB020201	FB020501	TB020201	TB020101	TB020501
Laboratory Sample ID #	255081	255374	255610	255381	255087	255611
Sample Date	02/01/01	02/02/01	02/05/01	01/26/01	02/02/01	02/05/01
Chloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromomethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
VinylChloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
MethyleneChloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Acetone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
CarbonDisulfide	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chloroform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
2-Butanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,1-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromodichloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Trichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Dibromochloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Benzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromoform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
2-Hexanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Tetrachloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Toluene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Ethylbenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Styrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Xylenes(Total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)

NOTES:
U - Indicates analyte was not detected at method reporting limit.

TABLE 3-16
INTERIOR LABEL PRINTING AREA: BORING P2-B13
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B13	P2-B13	P2-B13	P2-B13	P2-B13	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	5.0-5.5	10.0-10.5	15.0-15.5	19.5-20.0	23.0-23.5	
Laboratory Sample ID #	257765	257766	257767	257768	257769	
Sample Date	02/16/01	02/16/01	02/16/01	02/16/01	02/16/01	
Chloromethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
Bromomethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
VinylChloride	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	200
Chloroethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	1,900
MethyleneChloride	-- U (11)	-- U (10)	16 JB	3.0 JB	-- U (52)	100
Acetone	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	200
CarbonDisulfide	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	2,700
1,1-Dichloroethene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	7.0 J	400
1,1-Dichloroethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	12 J	200
1,2-Dichloroethene(total)	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	300 [2]
Chloroform	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	300
1,2-Dichloroethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	100
2-Butanone	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	300
1,1,1-Trichloroethane	0.7 J	4.0 J	32 J	5.0 J	33 J	800
CarbonTetrachloride	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	600
Bromodichloromethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
1,2-Dichloropropane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
cis-1,3-Dichloropropene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
Trichloroethene	17	86	390	65	340	700
Dibromochloromethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
1,1,2-Trichloroethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
Benzene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	60
trans-1,3-Dichloropropene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	300
Bromoform	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
4-Methyl-2-Pentanone	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	1,000
2-Hexanone	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
Tetrachloroethene	-- U (11)	1.0 J	-- U (56)	0.7 J	-- U (52)	1,400
1,1,2,2-Tetrachloroethane	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	600
Toluene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	1,500
Chlorobenzene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	1,700
Ethylbenzene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	5,500
Styrene	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	NS
Xylenes(Total)	-- U (11)	-- U (10)	-- U (56)	-- U (12)	-- U (52)	1,200
Total VOC	18	91	438	74	396	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-17
INTERIOR LABEL PRINTING AREA: BORING P2-B14
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B14	P2-B14	P2-B14	P2-B14	P2-B14	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	5.0-5.5	9.5-10.0	14.5-15.0	19.0-20.0	26.0-26.5	
Laboratory Sample ID #	257325	257327	257328	257329	257332	
Sample Date	02/14/01	02/14/01	02/14/01	02/14/01	02/14/01	
Chloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
Bromomethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
VinylChloride	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	200
Chloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	1,900
MethyleneChloride	-- U (10)	-- U (10)	-- U (11)	0.9 JB	0.9 JB	100
Acetone	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	200
CarbonDisulfide	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	2,700
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	400
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	300 [2]
Chloroform	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	300
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	100
2-Butanone	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	300
1,1,1-Trichloroethane	0.8 J	4.0 J	10 J	62	1.0 J	800
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	600
Bromodichloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
Trichloroethene	12	54	80	200	8.0 J	700
Dibromochloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
Benzene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	300
Bromoform	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	1,000
2-Hexanone	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
Tetrachloroethene	-- U (10)	1.0 J	2.0 J	6.0 J	1.0 J	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	600
Toluene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	1,500
Chlorobenzene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	1,700
Ethylbenzene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	5,500
Styrene	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	NS
Xylenes(Total)	-- U (10)	-- U (10)	-- U (11)	-- U (14)	-- U (12)	1,200
Total VOC	13	59	92	269	11	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-18
INTERIOR LABEL PRINTING AREA: BORING P2-B15
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B15	P2-B15	P2-B15	P2-B15	P2-B15	P2-B15	P2-B15	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	4.5-5.0	5.0-5.5	10.5-11.0	14.5-15.0	19.5-20.0	25.5-26.0	28.0-28.5	
Laboratory Sample ID #	257318	257319	257320	257321	257322	257323	257324	
Sample Date	02/14/01	02/14/01	02/14/01	02/14/01	02/14/01	02/14/01	02/14/01	
Chloromethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
Bromomethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
VinylChloride	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	200
Chloroethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	1,900
MethyleneChloride	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	100
Acetone	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	200
CarbonDisulfide	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	2,700
1,1-Dichloroethene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	6.0 J	16	400
1,1-Dichloroethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	36	200
1,2-Dichloroethene(total)	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	300 [2]
Chloroform	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	300
1,2-Dichloroethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	100
2-Butanone	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	300
1,1,1-Trichloroethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	430	41	800
CarbonTetrachloride	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	600
Bromodichloromethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
1,2-Dichloropropane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
Trichloroethene	13	12	20	12	3.0 J	160	5.0 J	700
Dibromochloromethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
Benzene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	300
Bromoform	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	1,000
2-Hexanone	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
Tetrachloroethene	0.6 J	-- U (11)	0.8 J	0.9 J	0.6 J	5.0 J	-- U (10)	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	600
Toluene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	1,500
Chlorobenzene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	1,700
Ethylbenzene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	5,500
Styrene	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	NS
Xylenes(Total)	-- U (10)	-- U (11)	-- U (10)	-- U (10)	-- U (10)	-- U (27)	-- U (10)	1,200
Total VOC	14	12	21	13	4	601	98	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-19
INTERIOR LABEL PRINTING AREA: BORING P2-B16
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B16	P2-B16	P2-B16	P2-B16	P2-B16	P2-B16	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	5.0-5.5	10.0-10.5	14.0-15.0	19.5-20.0	24.0-24.5	29.5-30.5	
Laboratory Sample ID #	257751	257752	257753	257755	257756	257757	
Sample Date	02/15/01	02/15/01	02/15/01	02/15/01	02/15/01	02/15/01	
Chloromethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
Bromomethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
VinylChloride	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	200
Chloroethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	1,900
MethyleneChloride	-- U (11)	-- U (11)	-- U (11)	-- U (12)	3.0 JB	-- U (12)	100
Acetone	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	200
CarbonDisulfide	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	2,700
1,1-Dichloroethene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	0.8 J	5.0 J	400
1,1-Dichloroethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	9.0 J	200
1,2-Dichloroethene(total)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	300 [2]
Chloroform	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	300
1,2-Dichloroethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	100
2-Butanone	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	300
1,1,1-Trichloroethane	-- U (11)	-- U (11)	1.0 J	19	110	43	800
CarbonTetrachloride	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	600
Bromodichloromethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
1,2-Dichloropropane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
cis-1,3-Dichloropropene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
Trichloroethene	19	19	38	78	110	46	700
Dibromochloromethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
1,1,2-Trichloroethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
Benzene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	60
trans-1,3-Dichloropropene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	300
Bromoform	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
4-Methyl-2-Pentanone	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	1,000
2-Hexanone	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
Tetrachloroethene	0.6 J	-- U (11)	0.8 J	2.0 J	2.0 J	3.0 J	1,400
1,1,2,2-Tetrachloroethane	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	600
Toluene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	1,500
Chlorobenzene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	1,700
Ethylbenzene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	5,500
Styrene	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	NS
Xylenes(Total)	-- U (11)	-- U (11)	-- U (11)	-- U (12)	-- U (11)	-- U (12)	1,200
Total VOC	19.6	19	39.8	99	225.8	106	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-20
INTERIOR LABEL PRINTING AREA: BORING P2-B17
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	P2-B17	P2-B17	P2-B17	P2-B17	P2-B17	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	5.0-5.5	10.0-10.5	13.0-13.5	19.5-20.0	25.0-25.5	
Laboratory Sample ID #	257745	257746	257747	257748	257749	
Sample Date	02/15/01	02/15/01	02/15/01	02/15/01	02/15/01	
Chloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
Bromomethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
VinylChloride	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	200
Chloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	1,900
MethyleneChloride	-- U (10)	0.6 JB	1.0 JB	-- U (25)	-- U (12)	100
Acetone	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	200
CarbonDisulfide	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	2,700
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	400
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	200
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	300 [2]
Chloroform	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	300
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	100
2-Butanone	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	300
1,1,1-Trichloroethane	2.0 J	4.0 J	7.0 J	89	4.0 J	800
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	600
Bromodichloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
Trichloroethene	40	70	100	280	10 J	700
Dibromochloromethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
Benzene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	60
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	300
Bromoform	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	1,000
2-Hexanone	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
Tetrachloroethene	-- U (10)	0.8 J	1.0 J	4.0 J	-- U (12)	1,400
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	600
Toluene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	1,500
Chlorobenzene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	1,700
Ethylbenzene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	5,500
Styrene	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	NS
Xylenes(Total)	-- U (10)	-- U (10)	-- U (11)	-- U (25)	-- U (12)	1,200
Total VOC	42	75	109	373	14	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer

TABLE 3-21
INTERIOR LABEL PRINTING AREA: BORING P2-B18
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS OF SOIL SAMPLES (ug/kg)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

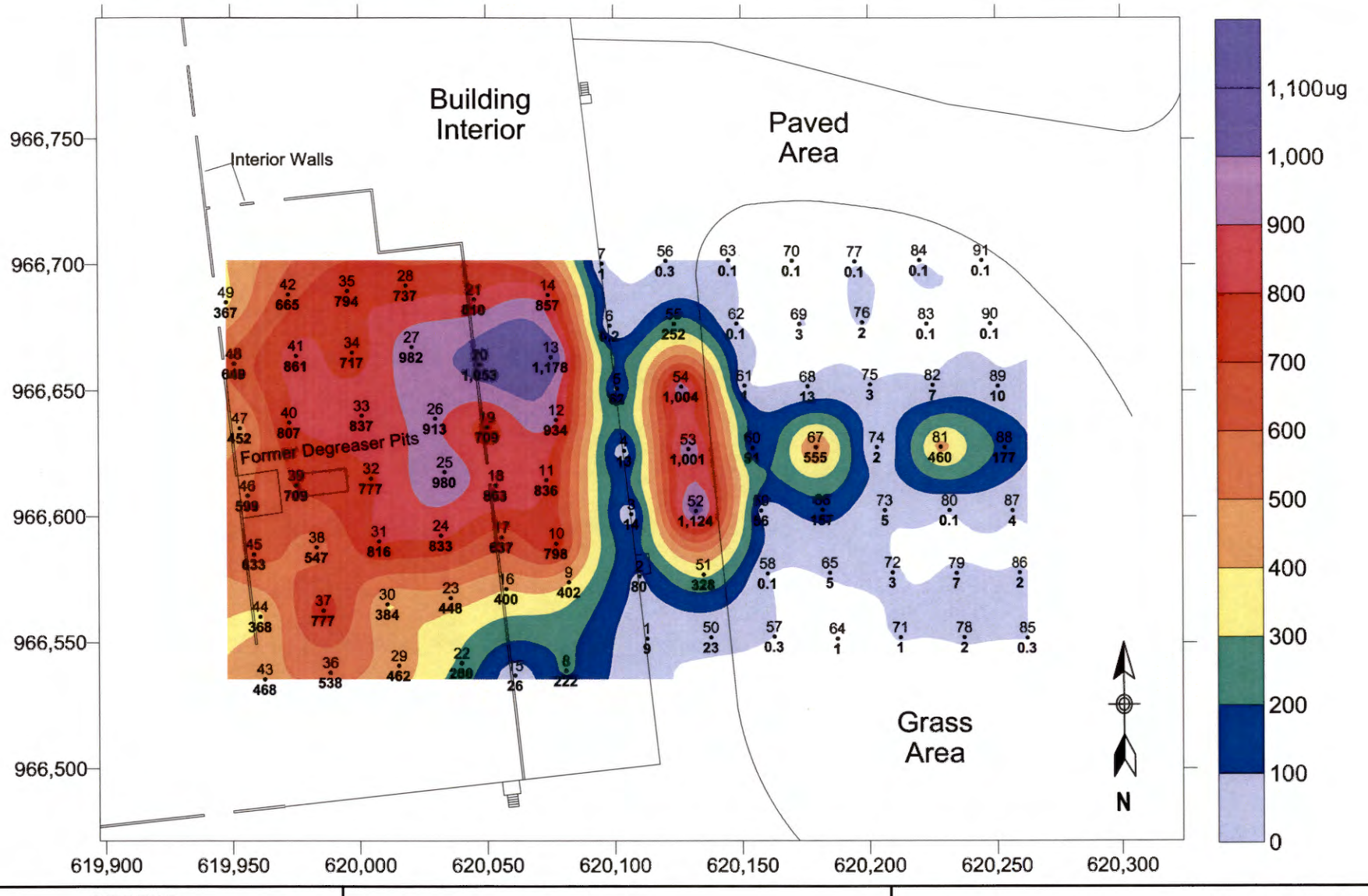
Sample No.	P2-B18	P2-B18	P2-B18	P2-B18	P2-B18	Recommended Soil Cleanup Objectives (ug/kg) [1]
Sample Depth (feet)	5.0-5.5	10.0-10.5	15.5-16.0	19.5-20.0	22.5-23.0	
Laboratory Sample ID #	257758	257759	257763	257762	257764	
Sample Date	02/15/01	02/15/01	02/15/01	02/15/01	02/15/01	
Chloromethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
Bromomethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
VinylChloride	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	200
Chloroethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	1,900
MethyleneChloride	-- U (11)	-- U (10)	0.9 JB	1.0 JB	38 JB	100
Acetone	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	200
CarbonDisulfide	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	2,700
1,1-Dichloroethene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	400
1,1-Dichloroethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	200
1,2-Dichloroethene(total)	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	300 [2]
Chloroform	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	300
1,2-Dichloroethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	100
2-Butanone	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	300
1,1,1-Trichloroethane	1.0 J	1.0 J	3.0 J	-- U (10)	260	800
CarbonTetrachloride	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	600
Bromodichloromethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
1,2-Dichloropropane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
cis-1,3-Dichloropropene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
Trichloroethene	51	33	110	3.0 J	***1,300***	700
Dibromochloromethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
1,1,2-Trichloroethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
Benzene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	60
trans-1,3-Dichloropropene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	300
Bromoform	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
4-Methyl-2-Pentanone	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	1,000
2-Hexanone	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
Tetrachloroethene	0.7 J	-- U (10)	0.6 J	-- U (10)	-- U (130)	1,400
1,1,2,2-Tetrachloroethane	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	600
Toluene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	1,500
Chlorobenzene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	1,700
Ethylbenzene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	5,500
Styrene	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	NS
Xylenes(Total)	-- U (11)	-- U (10)	-- U (12)	-- U (10)	-- U (130)	1,200
Total VOC	52	34	116	4	1,598	10,000

NOTES:
U - Indicates analyte was not detected at method reporting limit.
J - Estimated value less than minimum detection limit.
B - Analyte is found in the laboratory blanks as well as the sample.
NS - No Standard.
[1] - Division Technical Administrative Guidance Memorandum (TAGM) on Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-94-4046), NYSDEC, January 24, 1994.
[2] - trans-1,2-Dichloroethene isomer
BOLD - Value exceeds soil cleanup objective.

TABLE 3-22
INTERIOR LABEL PRINTING AREA: FIELD/TRIP BLANKS
VOLATILE ORGANIC COMPOUND (VOC) LABORATORY ANALYSIS (ug/L)
AVERY DENNISON/FORMER MONARCH SYSTEMS, INC. FACILITY, NEW WINDSOR, NEW YORK

Sample No.	FB021401	FB021501	FB021501-2	TB021401	TB021601
Laboratory Sample ID #	257326	257750	257761	257333	257770
Sample Date	02/14/01	02/15/01	02/15/01	02/14/01	02/15/01
Chloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromomethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
VinylChloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
MethyleneChloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Acetone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
CarbonDisulfide	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1-Dichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloroethene(total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chloroform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
2-Butanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,1-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
CarbonTetrachloride	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromodichloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,2-Dichloropropane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
cis-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Trichloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Dibromochloromethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,2-Trichloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Benzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
trans-1,3-Dichloropropene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Bromoform	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
4-Methyl-2-Pentanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
2-Hexanone	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Tetrachloroethene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
1,1,2,2-Tetrachloroethane	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Toluene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Chlorobenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Ethylbenzene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Styrene	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)
Xylenes(Total)	-- U (10)	-- U (10)	-- U (10)	-- U (10)	-- U (10)

NOTES:
U - Indicates analyte was not detected at method reporting limit.



LEGEND

Sample Location → 25 ← Sample Location Number
980 ← Mass Absorbed (ug)

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 75 ft

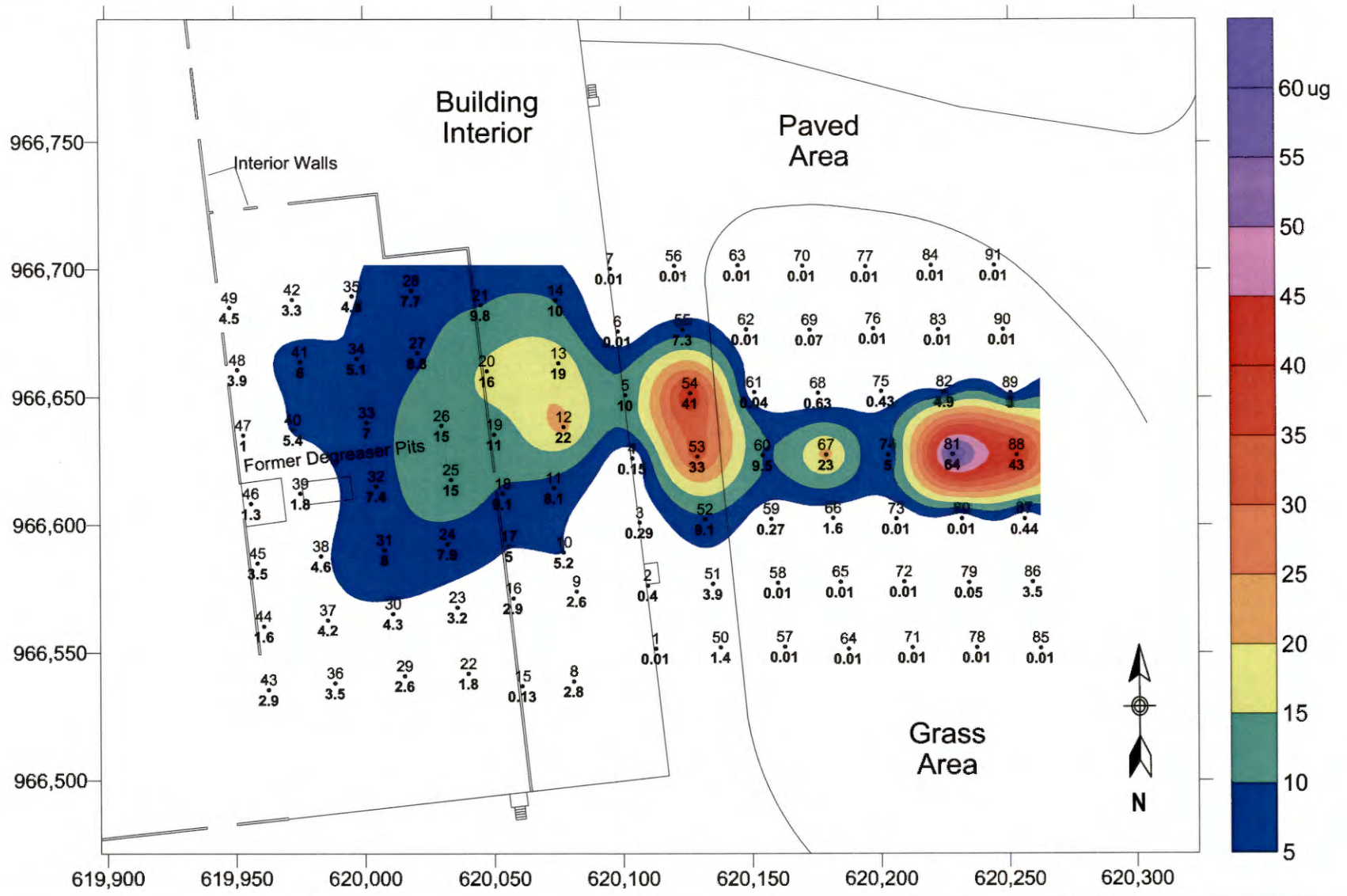
Figure 3-1

Trichloroethene (TCE)
Passive Soil Vapor Survey Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec Earth & Environmental

285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Sample Location → 25 ← Sample Location Number
15 ← Mass Absorbed (ug)

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 75 ft

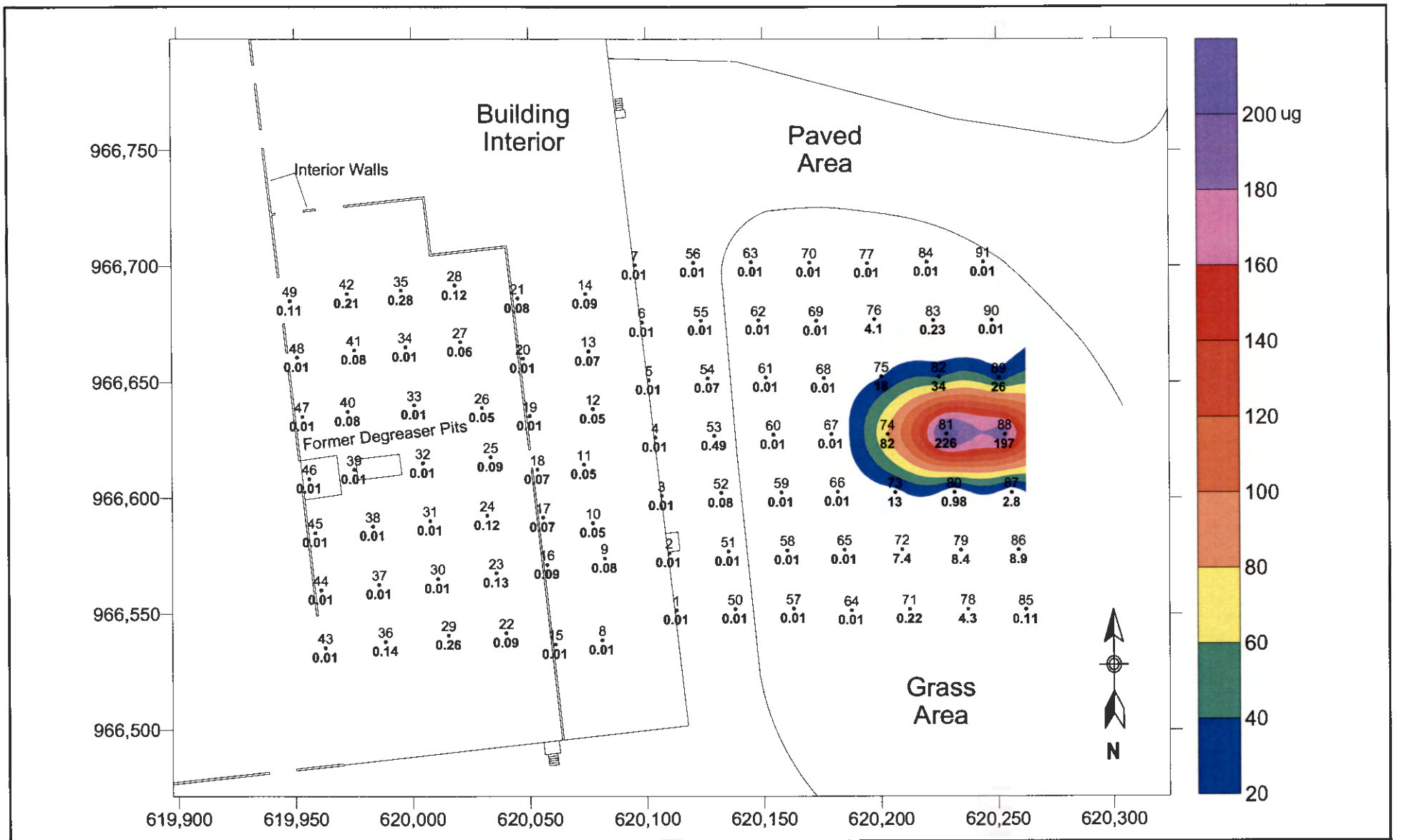
Figure 3-2

1,1-Dichloroethene (11DCE)
Passive Soil Vapor Survey Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec Earth & Environmental

285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Sample Location → 25 ← Sample Location Number
0.09 ← Mass Absorbed (ug)

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 75 ft

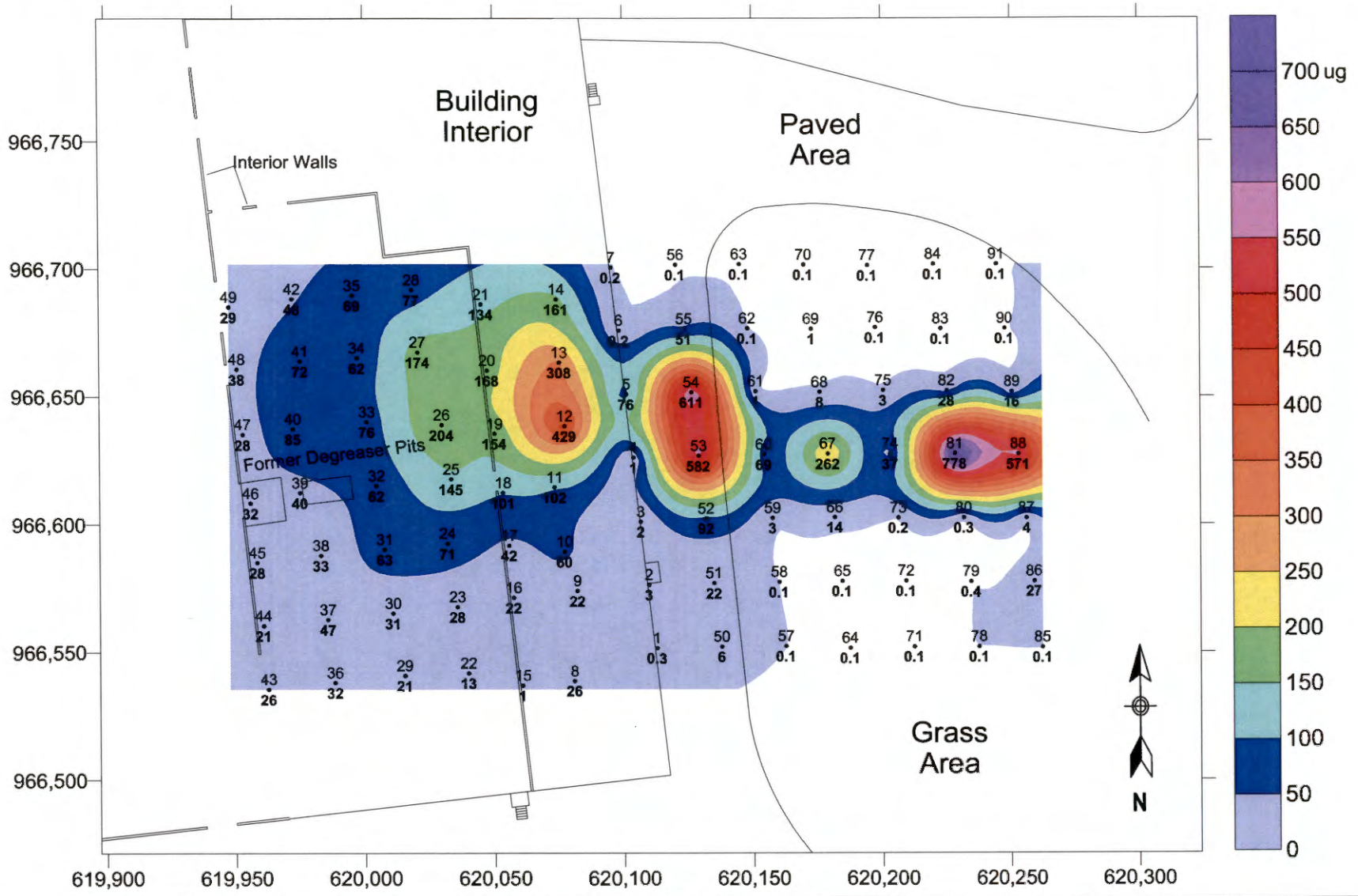
Figure 3-3

1,2-Dichloroethene (12DCE)
Passive Soil Vapor Survey Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec Earth & Environmental

285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Sample Location → 25 ← Sample Location Number
145 ← Mass Absorbed (ug)

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 75 ft

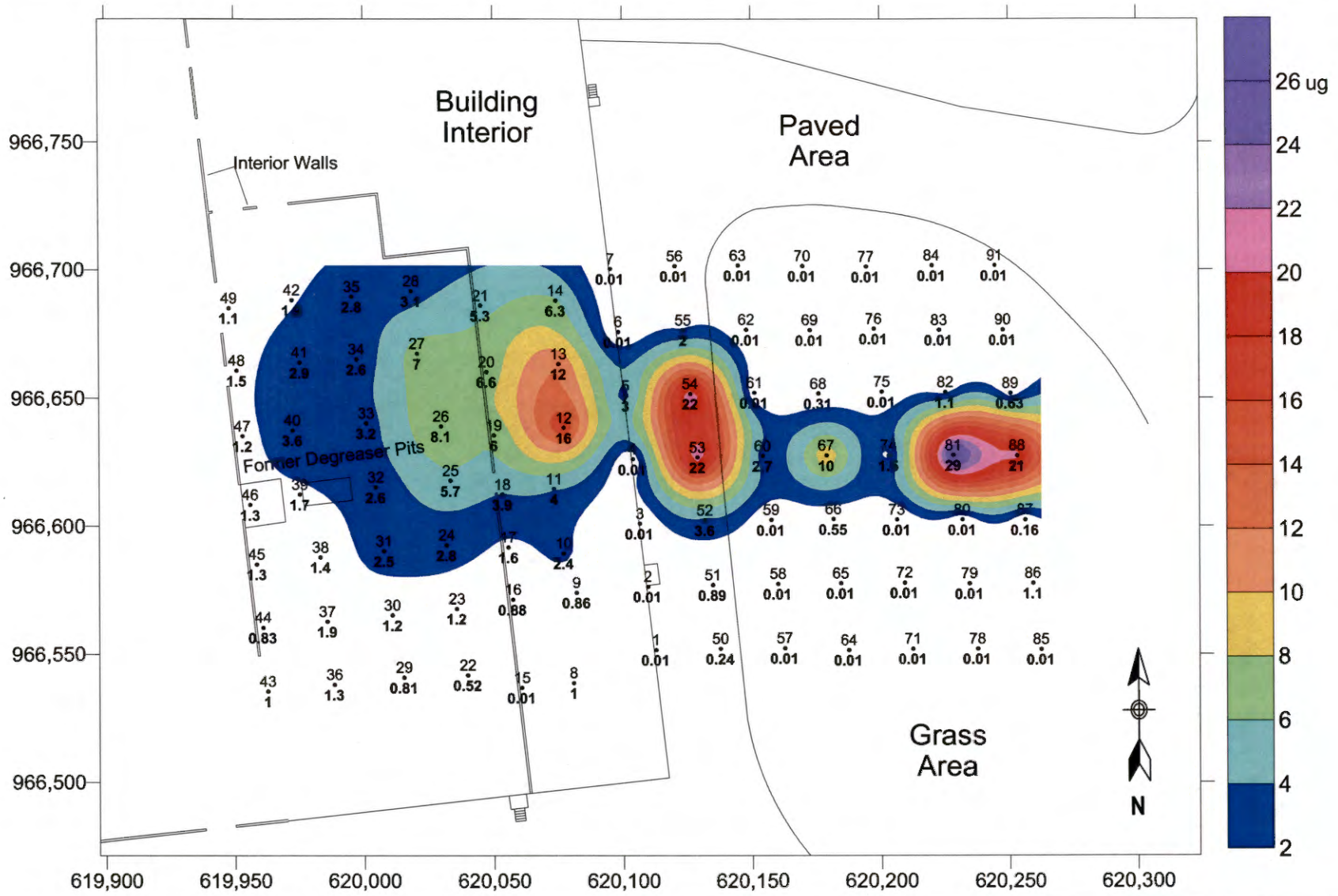
Figure 3-4

1,1,1-Trichloroethane (111TCA)
Passive Soil Vapor Survey Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec Earth & Environmental

285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Sample Location → 25 ← Sample Location Number
5.7 ← Mass Absorbed (ug)

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 75 ft

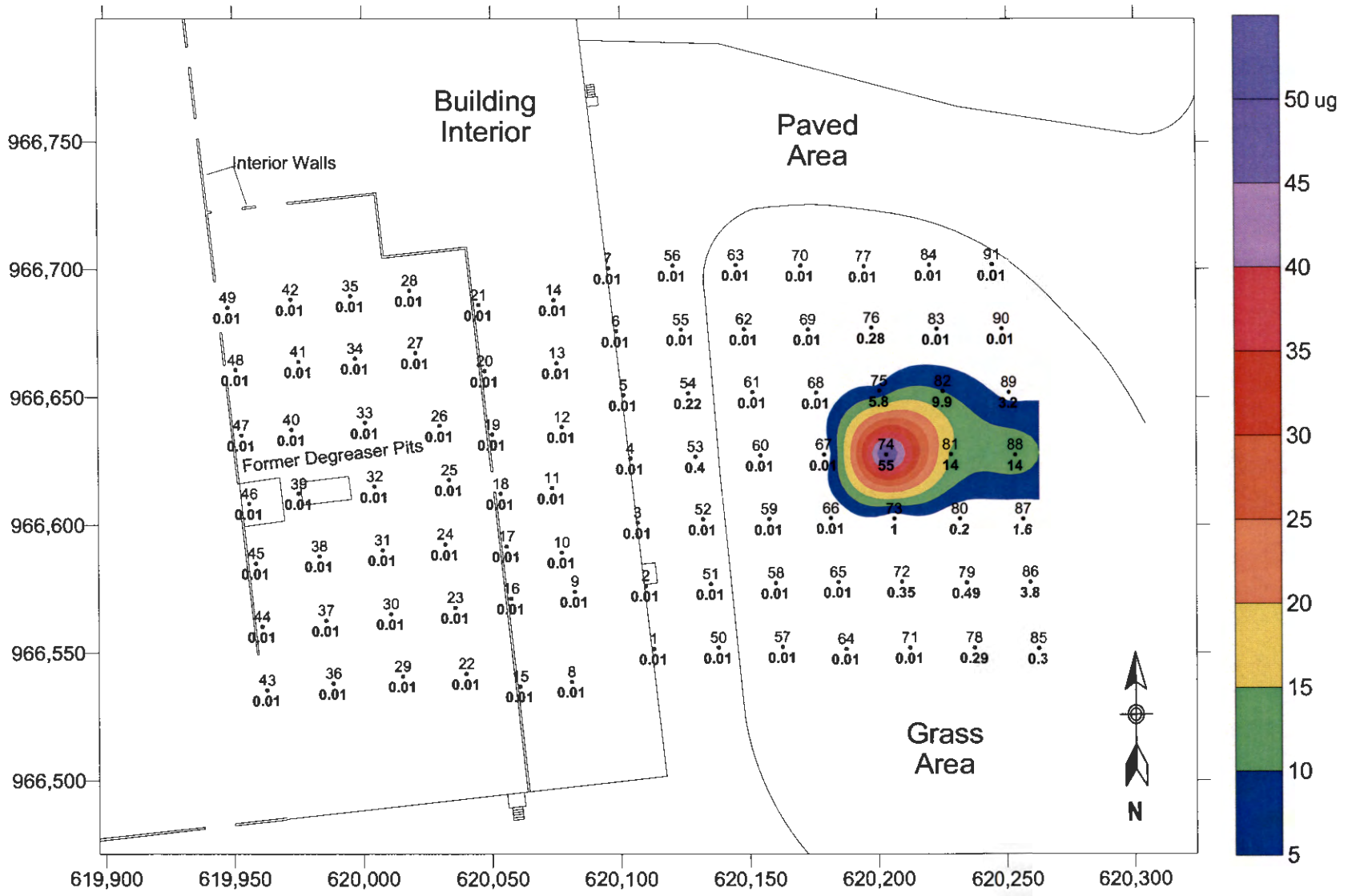
Figure 3-5

1,2-Dichloroethane (12DCA)
Passive Soil Vapor Survey Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec Earth & Environmental

285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Sample Location → 25 ← Sample Location Number
0.01 ← Mass Absorbed (ug)

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 75 ft

Figure 3-6

1,1-Dichloroethane (11DCA)
Passive Soil Vapor Survey Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

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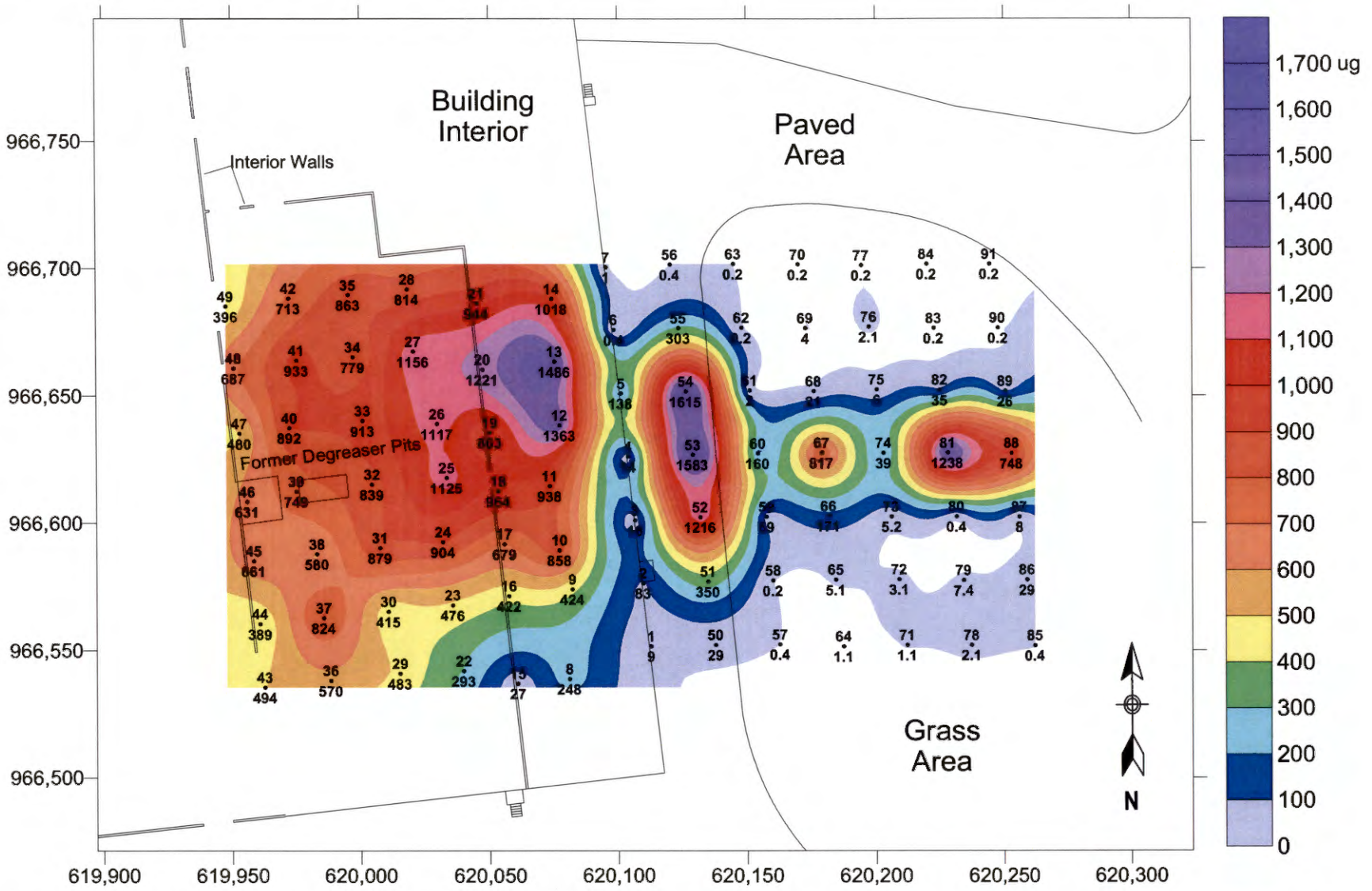
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Sample Location → 25 ← Sample Location Number
1125 ← Mass Absorbed (ug)

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 25 50 75 ft

Figure 3-7

Total Volatile Organic Compounds (TVOC)
Passive Soil Vapor Survey Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

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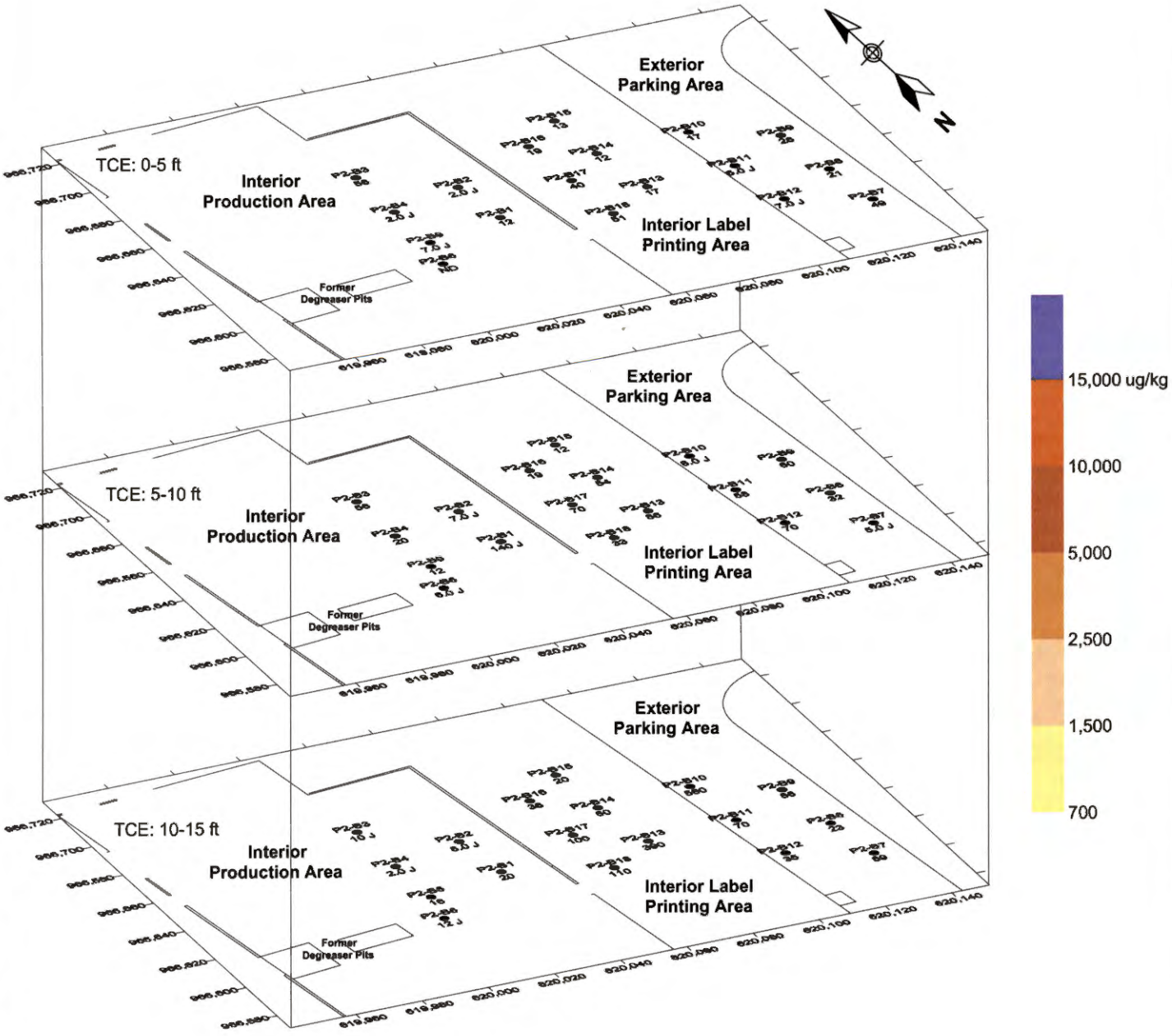

LEGEND

Boring Location → P2-B2 ← Boring Location Number

7.0 J ← Sample Concentration (ug/kg)

J = Estimated concentration below method detection limit

ND = Compound not detected

Note:
NYSDEC Recommended Soil Cleanup Objective for TCE = 700 ug/kg
Technical and Administrative Guidance Memorandum (TAGM) # 4046

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 20 40 60 ft

Figure 3-8

Trichlorethene (TCE): 0-15 ft Sample Increments
Subsurface Investigation Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec
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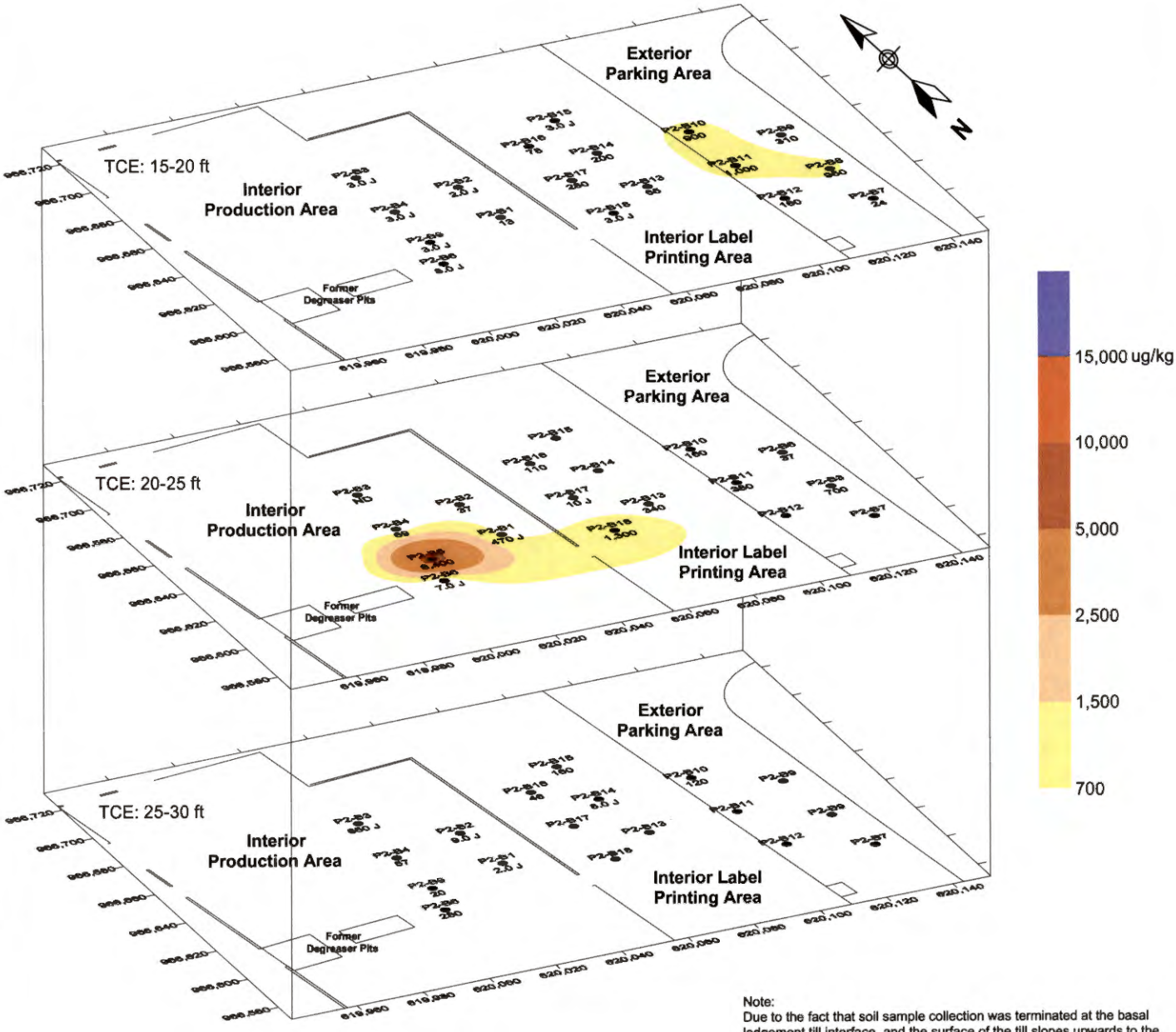
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



Note:
Due to the fact that soil sample collection was terminated at the basal lodgement till interface, and the surface of the till slopes upwards to the southeast (becomes shallower), samples were not collected within the 20-25 ft and/or 25-30 ft sample increments for borings P2-B7, B8, B9, B11, B12, B13, B17, and B18. Based on field analysis of soil lithology, no samples were collected within the 20-25 ft increment at borings P2-B14 and B15.

LEGEND

Boring Location → P2-B2 ← Boring Location Number
37 ← Sample Concentration (ug/kg)
J = Estimated concentration below method detection limit
ND = Compound not detected

Note:
NYSDEC Recommended Soil Cleanup Objective for TCE = 700 ug/kg
Technical and Administrative Guidance Memorandum (TAGM) # 4046

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 20 40 60 ft

Figure 3-9

Trichlorethene (TCE): 15-30 ft Sample Increments
Subsurface Investigation Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec
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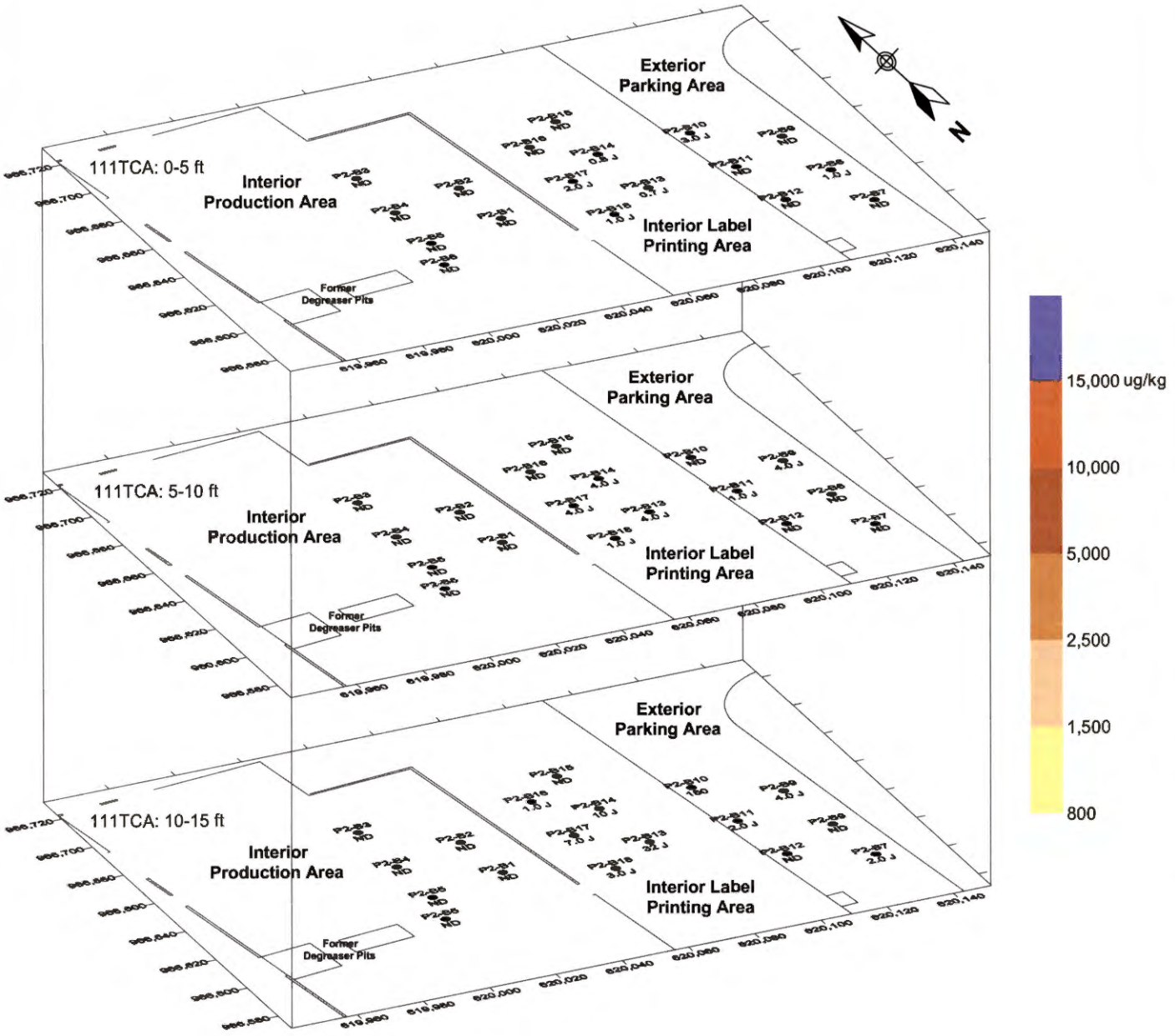
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Boring Location → P2-B2 ← Boring Location Number

ND ← Sample Concentration (ug/kg)

J = Estimated concentration below method detection limit

ND = Compound not detected

Note:
NYSDEC Recommended Soil Cleanup Objective for 111TCA = 800 ug/kg
Technical and Administrative Guidance Memorandum (TAGM) # 4046

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

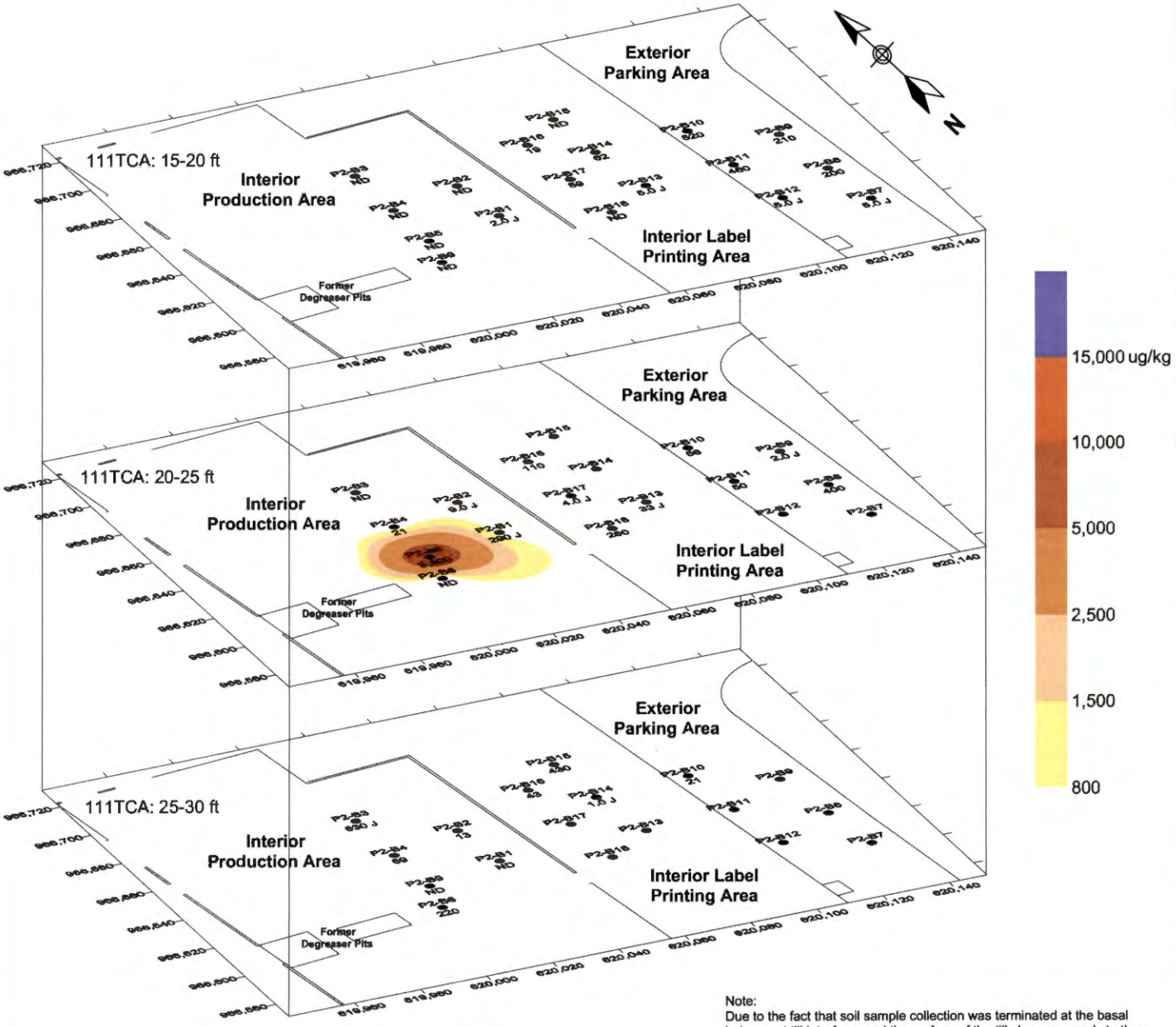
0 20 40 60 ft

Figure 3-10

1,1,1-Trichloroethane (111TCA): 0-15 ft Sample Increments
Subsurface Investigation Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec
Earth & Environmental
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



Note:
Due to the fact that soil sample collection was terminated at the basal lodgement till interface, and the surface of the till slopes upwards to the southeast (becomes shallower), samples were not collected within the 20-25 ft and/or 25-30 ft sample increments for borings P2-B7, B8, B9, B11, B12, B13, B17, and B18. Based on field analysis of soil lithology, no samples were collected within the 20-25 ft increment at borings P2-B14 and B15.

LEGEND

Boring Location → P2-B2 ← Boring Location Number

9.0 J ← Sample Concentration (ug/kg)
J = Estimated concentration below method detection limit
ND = Compound not detected

Note:
NYSDEC Recommended Soil Cleanup Objective for 111TCA = 800 ug/kg
Technical and Administrative Guidance Memorandum (TAGM) # 4046

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

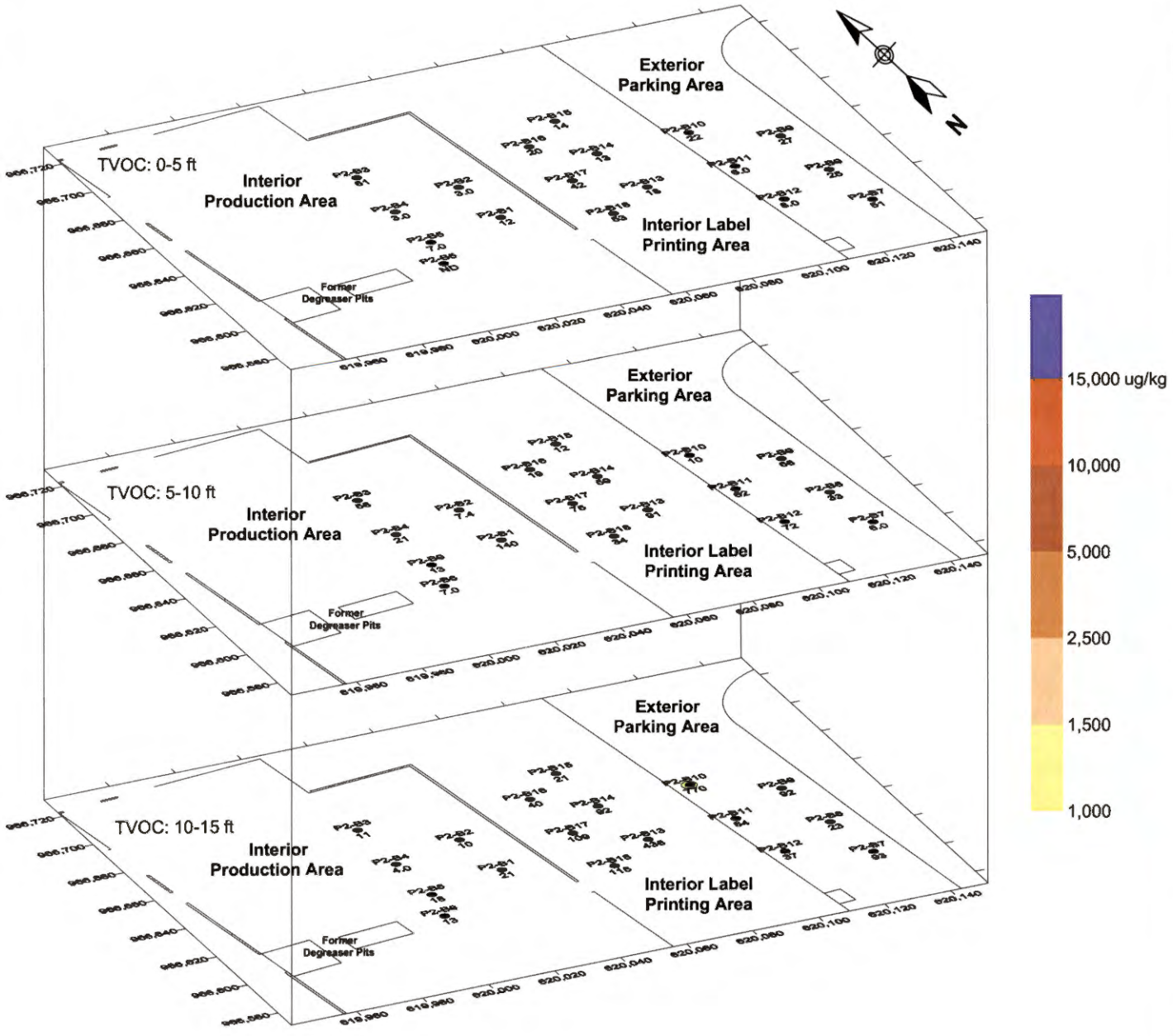
0 20 40 60 ft

Figure 3-11

1,1,1-Trichloroethane (111TCA): 15-30 ft Sample Increments
Subsurface Investigation Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec
Earth & Environmental
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



LEGEND

Boring Location → P2-B2 ← Boring Location Number

7.4 ← Sample Concentration (ug/kg)

J = Estimated concentration below method detection limit

ND = Compound not detected

Note:
NYSDEC Soil Cleanup Objective (Maximum) for TVOC = 10,000 ug/kg
Technical and Administrative Guidance Memorandum (TAGM) # 4046

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

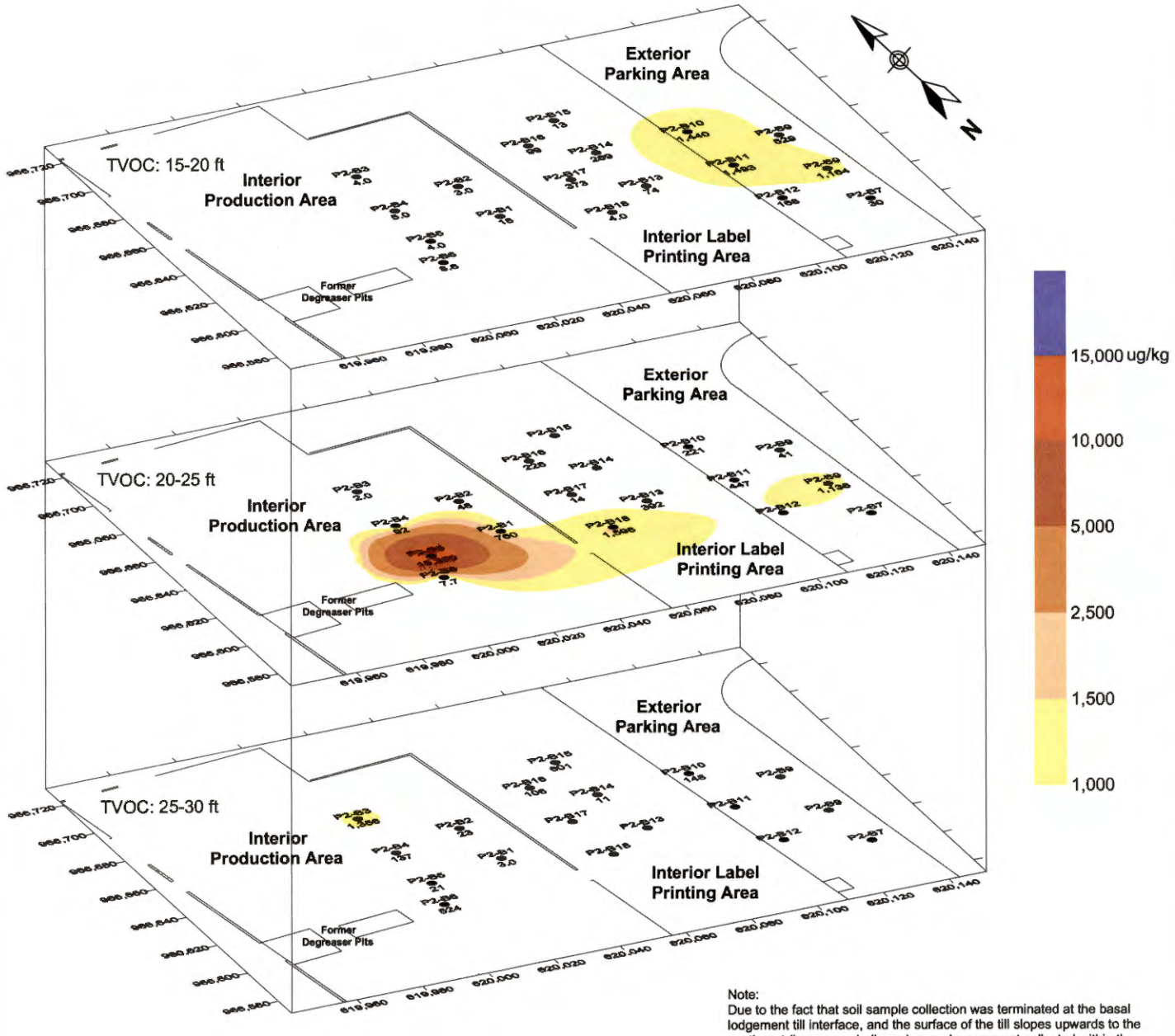
0 20 40 60 ft

Figure 3-12

Total Volatile Organic Compounds (TVOC): 0-15 ft Samples
Subsurface Investigation Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec
Earth & Environmental
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873



Note:
Due to the fact that soil sample collection was terminated at the basal lodgement till interface, and the surface of the till slopes upwards to the southeast (becomes shallower), samples were not collected within the 20-25 ft and/or 25-30 ft sample increments for borings P2-B7, B8, B9, B11, B12, B13, B17, and B18. Based on field analysis of soil lithology, no samples were collected within the 20-25 ft increment at borings P2-B14 and B15.

LEGEND

Boring Location → P2-B2 ← Boring Location Number

48 ← Sample Concentration (ug/kg)
J = Estimated concentration below method detection limit
ND = Compound not detected

Note:
NYSDEC Soil Cleanup Objective (Maximum) for TVOC = 10,000 ug/kg
Technical and Administrative Guidance Memorandum (TAGM) # 4046

Site Survey:
Grevas & Hildreth, P.C. Land Surveyors
Newburgh, NY 12550; October 2000

0 20 40 60 ft

Figure 3-13

Total Volatile Organic Compounds (TVOC): 15-30 ft Samples
Subsurface Investigation Results
Phase II Remedial Investigation

Avery Dennison/Former Monarch Systems, Inc.
New Windsor, New York

amec
Earth & Environmental
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873

4.0 CONCLUSIONS AND RECOMMENDATIONS

Several phases of remedial investigation have been performed previously at the former Monarch Systems, Inc. site and adjacent properties. These included the drilling of 32 borings, associated soil sample analysis, and the installation and periodic sampling and analysis of ground water from 21 monitoring wells on-site, as well as sampling and analysis of ground water from over 40 locations within and adjacent to the Town of New Windsor wetland area located hydraulically down gradient of the facility. The most significant results of these prior investigations were:

- Residual solvent contamination in soil is limited primarily to a small area within the saturated zone overlying impermeable basal lodgement till sediments, located adjacent to the former sub-grade vapor degreasers within the production facility,

- The adjacent wetland area acts as a local and regional hydraulic discharge area, controlling contaminant fate and transport in the shallow ground water flow system, and limiting the deep migration of contaminants (due to upward vertical hydraulic gradients),

- The concentration of dissolved solvent contaminants in ground water has decreased over time, and the center of mass of the contaminant plume has moved to the east along the hydraulic gradient to discharge into the adjacent wetland, and

- Natural, in-situ biodegradation processes associated with the organic carbon-rich, anaerobic sediments comprising the wetlands act to effectively dechlorinate dissolved solvents in ground water, limiting the extent of the off-site contaminant plume to the margins of the wetland area.

These findings supported Avery Dennison's proposal to implement a Monitored Natural Attenuation (MNA) remedy as an appropriate strategy to effectively address remaining dissolved solvent contamination in ground water. However, since the implementation of MNA is directly linked to understanding if there is contaminant desorption from source area soils, NYSDEC and Avery Dennison concurred that a more comprehensive investigation of residual source area contamination was warranted. The Phase II Remedial Investigation was performed to provide the additional site characterization data necessary to address these issues.

The results of the Phase II Remedial Investigation confirmed the findings of prior subsurface investigation, further delineating a small area of residual solvent contamination in saturated subsurface soils adjacent to the former location of sub-grade vapor degreasers within the facility production building. The residual contamination is limited to a depth of 20-25 ft below grade and a 25 ft radius around a single boring. There also appears to be some residual contamination within a narrow band of soils located hydraulically down gradient of the former source area at 20-25 ft below grade and 15-20 ft below grade (in the exterior parking area).

While the presence of some residual contamination has been confirmed, these data are not entirely consistent with the results of historical monitoring of the ground water contaminant plume. As such, the results do not currently lead to a conclusion that the identified residual contamination is having a significant affect on groundwater quality, nor does it lead to a conclusion that an MNA remedy for the project site is not appropriate. Additional work is warranted to further understand the significance of these findings in the context of an appropriate remedy for the project site. The objective of such work will be the identification of a

practical means to document a cause and effect relationship between residual source area soil contamination and ground water quality, allowing for an effective performance monitoring strategy if active remediation in the source area is deemed appropriate.

5.0 SUPPLEMENTAL INVESTIGATION ACTIVITIES

In response to NYSDEC review of prior documentation and technical meetings held between Avery Dennison and the Department, two additional remedial investigation activities are currently in progress: (1) sediment and surface water sampling within the Town of New Windsor wetlands area located across MacArthur Avenue and hydraulically down gradient of the project site, and (2) initiation of long-term ground water monitoring, in support of the proposed Monitored Natural Attenuation (MNA) remedy, outlined in the ***Supplemental Site Investigation Report/Remedial Action Workplan*** (AMEC, 2000). Details regarding the performance of these activities are summarized below. Review of laboratory analytical data obtained from these investigations is currently ongoing; the results of this review will be documented in a supplemental report submitted to NYSDEC on or before July 1, 2001.

5.1 SEDIMENT/SURFACE WATER SAMPLING

Sediment sampling within the presumed area of ground water contamination plume discharge in the wetland area was performed during the week of April 2, 2001. A total of 14 sediment samples (S-1 through S-14) were collected, as well as one duplicate and one matrix spike/matrix spike duplicate sample. The samples were obtained from a depth of 0-6 inches with decontaminated stainless steel trowels. Sample locations are located approximately on Figure 1, appended to correspondence to NYSDEC dated March 5, 2001, contained in Appendix A. Three surface water samples were also obtained as part of this investigation (SW-1 through SW-3), as well as one aqueous sample duplicate and one aqueous matrix spike/matrix spike duplicate sample. SW-1 was obtained in the vicinity of sediment sample S-14; SW-2 was obtained in the vicinity of sediment sample S-6; and SW-3 was obtained in the vicinity of sediment sample S-4. All samples were maintained on-site at a temperature of 4° C in dedicated sample coolers, and submitted to STL Envirotech, Edison, NJ, a NYSDOH ELAP-CLP certified laboratory. All samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) +10, with specification for data reporting in the NYSDEC Analytical Services Protocol (ASP) category B deliverables format.

5.2 MONITORED NATURAL ATTENUATION SAMPLING PROGRAM

During the week of April 2, 2001, 23 monitoring wells (including one piezometer) were sampled at and down gradient of the project site, as follows:

- On-Site Wells[8]: RIZ-2, RIZ-3, RIZ-4, RIZ-5, RIZ-6, RIZ-7, RIZ-8, RIZ-9, RIZ-10, RIZ-15, RIZ-16, RIZ-17, RIZ-18, RIZ-19, MW-1S, MW-1D, MW-2, MW-3, MW-4I, MW-4D.

- Off-Site Wells: MW-4S, MW-5, P-1 (piezometer).

Wells were purged a minimum of three well volumes using either a peristaltic pump or submersible pump, and indicator parameters (temperature, specific conductance, pH, turbidity, dissolved oxygen, REDOX, and ferrous iron) were monitored periodically during and at the completion of the purging process. Dedicated pre-cleaned tubing was used at each location, and samples were obtained either directly from the purge tubing (in-line), or with disposable,

[8] Monitoring well RIZ-1 could not be located; it is believed to be covered by storage materials associated with a leaseholder to the current property owner. The inability to access the well and obtain a sample is not considered critical to the ongoing ground water monitoring program.

pre-cleaned bailers. All samples were maintained on-site at a temperature of 4° C in dedicated sample coolers, and submitted to STL Envirotech, Edison, NJ, a NYSDOH ELAP-CLP certified laboratory. Samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) +10, methane, ethane, ethene, alkalinity, chloride, nitrate, sulfate, sulfide, and total organic carbon (TOC). Data reporting was specified as NYSDEC Analytical Services Protocol (ASP) category B deliverables format.

6.0 LIST OF REFERENCES

AMEC Earth & Environmental (formerly Ogden Environmental & Energy Services). April 1998. ***Site Investigation Report-Former Avery Dennison/Monarch Systems, Inc. Facility-New Windsor, New York***. Somerset, NJ.

AMEC Earth & Environmental (formerly Ogden Environmental & Energy Services). January 2000. ***Supplemental Site Investigation Report/Remedial Action Workplan-Former Avery Dennison/Monarch Systems, Inc. Facility-New Windsor, New York***. Somerset, NJ.

U.S. Environmental Protection Agency. August 1998. ***Environmental Technology Verification Report, Soil Gas Sampling Technology, W.L. Gore & Associates, Inc., GORE-SORBER Screening Survey***. Office of Research and Development, Washington, DC 20460. EPA/600/R-98/095.

U.S. Environmental Protection Agency. September 1988. ***Field Application of In Situ Remediation Technologies: Chemical Oxidation***. Office of Solid Waste and Emergency Response-Technology Innovation Office. Washington, DC 20460. EPA 542-R-98-008.

U.S. Environmental Protection Agency. August 2000. ***Proceedings-Abiotic In Situ Technologies for Groundwater Remediation Conference***. Dallas, TX, August 31-September 2, 1999. Office of Research and Development, Washington, DC 20460. EPA/625/R-99/012.

APPENDIX A

CORRESPONDENCE

New York State Department of Environmental Conservation
Region 3
Division of Environmental Remediation
21 South Putt Corners Rd., New Paltz, NY 12561-1696
Telephone: (914) 256-3146 FAX: (914) 255-3414

John P. Cahill
Commissioner

April 26, 2000

STEPHEN POSTEN
GENERAL MANAGER
OGDEN ENVIRONMENTAL AND ENERGY SERVICES
285 DAVIDSON AVENUE
SOMERSET, NEW JERSEY 08873

Re: Dennison Monarch Systems Facility -VCA No. V00135-3

Dear Mr. Posten:

The New York State Dept. of Environmental Conservation (NYSDEC) and the New York State Dept. of Health (NYSDOH) have reviewed Ogden's January 21, 2000 "Supplemental Site Investigation Report and Remedial Action Work Plan" and have the following comments:

1) The equation in Section 3.2.1, $C_t = C_0 e^{-Kt}$ does not produce a best fit first order decay curve when the trend has an underlying non-zero asymptotic level. This situation occurs when the source of contamination is not removed. The concentration trend in monitoring well MW-2 exhibits such a property. When equation $C_t = C_a + C_0 e^{-Kt}$ (which produces a better fit first order decay curve and includes the previous equation in its family of curves) is used for monitoring well MW-2, the asymptotic level is found to be around 6100 ppb for concentration of total VOCs.

2) A study of the trend for monitoring well RIZ-4 suggests a correlation between groundwater elevation and concentration of contaminants. One conclusion that may be drawn from this is that the vadose zone in the vicinity of the well has adsorbed contaminants that are released into the groundwater at high groundwater elevations.

3) The field screening of soil samples, conducted by Rizzo in August 1991, suggests that most of the contaminants in the vadose zone are within the footprint of the building at depths ranging from 2 to 4.5 feet. Under these conditions, a study focused solely on the concentrations in the groundwater would provide an incomplete picture. But this localized and shallow source of contamination should be amenable to an accelerated cleanup using a proven technology such as soil-vapor extraction (SVE) within the building footprint. Outside the building, a combination of air-sparging and SVE

may be used to good effect in light of the granular nature of the soil overlying the till layer that has formed a barrier to further downward migration of contaminants.

5) It is unclear whether any of the samples that were analyzed by the field GC were split for fixed laboratory confirmation.

6) Page 2-1, Section 2.1: The quality of VOC samples from open holes and standing water is questionable as they may be biased low for VOC concentrations due to volatilization to the atmosphere.

While the NYSDEC and NYSDOH are receptive to the use of monitored natural attenuation (MNA), the conditions at this site suggest that source removal is feasible, and should be explored before MNA is adopted as the sole remedy.

If you have any questions, please call me at (914) 256-3146.

Sincerely,

Ramanand R. Pergadia, P.E.
Regional Hazardous Waste Remediation Engineer
Region 3

cc:

K. Carpenter
G. Laccetti
D. Desnoyers
A. Thorne

OGDEN ENVIRONMENTAL AND ENERGY SERVICES

July 17, 2000

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Mr. Ramamand R. Pergadia, P.E.
Regional Hazardous Waste Remediation Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, NY 12561-1696

via facsimile (845) 255-3414 and U.S. Mail

Re: Dennison Monarch Systems Facility, New Windsor, NY
VCA No. V00135-3

Dear Mr. Pergadia:

Avery Dennison has carefully reviewed your correspondence dated April 26, 2000 (Attachment 1), which comments on the Supplemental Site Investigation Report/Remedial Action Workplan (SSIR/RAW), submitted to NYSDEC in January 2000. As a follow-up to our prior discussions regarding this correspondence, we have prepared a series of detailed responses to these comments, and have additionally outlined a Scope of Work that we believe will resolve outstanding issues that concern NYSDEC.

Comment Response

1) As discussed previously, a range of inferences can be drawn from the time series of existing ground water monitoring data available from the site. This is a function both of the variability evidenced in the data set, as well as the time frame and scheduling of the sample events. However, based on the results of more rigorous analysis (correspondence from Quantitative Decisions; Attachment 2), we see no technical basis to presume an asymptotic model at this time. Rather, a model that incorporates seasonal adjustment to the data set currently appears to provide the most logical assessment, with a resultant half-life on the order of 954 days.

Notwithstanding the above, we understand that a tenable basis for acceptance of such projections must include physical data describing the presence or absence of a continuing source of soil and/or vapor contribution to the ground water contaminant plume. As such, Avery Dennison proposes to perform additional subsurface investigation within and down gradient of the location of the former vapor degreasers to address this issue. The plan for this supplemental investigation is provided subsequent to our comment responses.

2) Ground water analytical data from several of the monitoring wells on-site (RIZ-2, RIZ-4, RIZ-17, RIZ-19, MW-2, MW-3) exhibit a seasonal effect; i.e., increasing ground water concentrations with increasing water table elevations in the winter and spring, and decreasing ground water concentrations with decreasing water table elevations in the summer and fall. Desorption of contaminants from the vadose zone (derived from a vapor source underlying the building slab) has been suggested by NYSDEC as a plausible explanation for this seasonal

pattern at well RIZ-4. However, the majority of analytical data from the site do not strongly support a conceptual model of contaminant hydrogeology that relies on desorption from the vadose zone as the primary source of observed contaminant concentrations in ground water, as follows:

- PID head space monitoring of wells performed prior to ground water sampling has not historically indicated a significant continuing vapor source in the vadose zone; in fact, none of the head space vapor concentrations measured during the last sample event (performed two weeks ago) exceeded the calibrated instrument background level;

- With one exception (boring B18/B24, discussed subsequently under the response to comment 3), PID screening of vadose zone soil samples recovered from the site investigation did not exhibit elevated vapor concentrations (Appendix A and Figure 4-1 of the April 1998 Site Investigation Report);

- Elevated contaminant concentrations in soils from sampling performed during the Site Investigation were not detected at the water table interface either beneath the building slab or outside the building (Table 4-1 and Figures 4-2 through 4-5 of the April 1998 Site Investigation Report); such data are inconsistent with the presumption of a significant vapor source within the vadose zone;

- Well RIZ-16, located adjacent to the former vapor degreaser source area (and presumably situated in an area that would reflect the most highly elevated vadose zone contaminant concentrations), does not exhibit the seasonal effect (Appendix E of the January 2000 SSIR/RAW report);

- Ground water contaminant concentrations in wells located within or adjacent to the building slab that exhibit the seasonal effect (wells RIZ-2, RZ-4, RIZ-17, and RIZ-19) are one or more orders of magnitude below those exhibited in the down gradient contaminant plume; and

- Wells MW-2 and MW-3, which exhibit the seasonal effect, are well removed from the building, and are clearly not influenced by vapor migration from below the slab.

These data suggest that, while a vapor source may initially have been partly responsible for the historic contaminant distribution in ground water, such is not likely the case today. Where currently observed, the seasonal effect may simply be the result of continued sorption and desorption between saturated zone soils, vadose zone soils, and ground water as the water level oscillates over the course of the year.

3) As discussed above, the continuing presence of a significant vapor concentration underlying the building slab is not supported by the available data. Further, elevated soil contamination (> 1 mg/kg) was detected in samples obtained from only 2 of the 24 borings advanced during the Site Investigation, and these samples were located near the base of the saturated soil column (at the lodgement till interface). Consequently, without further information

to the contrary, neither of the remedial methods suggested in this comment would appear to represent an effective means of addressing observed ground water contamination.

As noted previously, PID screening of vadose zone soils performed during the Site Investigation did indicate elevated vapor concentrations at one boring location (B18/B24), located adjacent to the building in the vicinity of well RIZ-4. These data (total organic vapor concentrations ranging from 260-1,080 ppm between ground surface and a depth of 12 ft) suggest that preferential pathways for vapor migration may exist in the subsurface, and that these pathways may contribute to the elevated ground water contaminant concentrations observed in the down gradient plume. To investigate the presence of such pathways and/or continuing sources, Avery Dennison proposes to perform additional subsurface investigation within and down gradient of the former vapor degreaser source area. The plan for this supplemental investigation is provided subsequent to our comment responses.

4) No comment 4.

5) Section 3.1 and Table 3-1 identify the confirmatory samples obtained during the hydropunch investigation that were submitted to an off-site fixed base laboratory for analysis. These samples were CS-1S, CS-2S (and duplicate), and CS-3S, corresponding to hydropunch samples HP-1, HP-10, and HP-13, respectively.

6) Subsurface samples were obtained from the auger boreholes immediately upon encountering ground water (i.e., immediately following sidewall drainage of ground water into the borehole). Consequently, the samples were not obtained from "standing water". For three of the four samples noted in Table 2-1 that indicate "water at surface" (1-2, 1-3, 4-4), samples were not obtained of standing water. Rather, boreholes were advanced 6 in. into the subsurface, and samples were collected as described above; the ground water elevation following sidewall drainage was at or slightly below ground surface. At location 4-4, sample was obtained from a ponded (eddy) area of the stream. While volatilization loss can be assumed from this area, it is presumed that the stream is continually recharged by ground water; i.e., the sample does not represent stagnant, standing water.

Remedial Investigation Scope of Work

The proposed remedial investigation will consist of two phases: (1) a soil gas component, to characterize the contaminant distribution within the vadose zone, and (2) a subsurface sampling component, targeted to the zones of elevated vapor concentrations (as determined from the initial phase), and/or other areas of interest based on the results of prior subsurface investigations.

Phase 1will entail the installation of passive soil gas detection membranes (e.g., Gore-Sorber®) in shallow surface penetrations along a grid oriented normal to the building foundation. Grid spacing will be 25 ft, and will extend both within and outside the building. As indicated on Figure 1, the east-west centerline of the grid will be oriented approximately through the former vapor degreasers, wells 4I/4D, RIZ-4, and MW-2, and will extend for a total length of about 300

ft. The grid will extend 75 ft north and south of this centerline, to encompass the center of mass of the mapped groundwater contaminant plume.

Based on the results of the Phase 1 investigation, conventional hollow-stem auger equipment will be used to obtain subsurface soil samples at five ft intervals from ground surface to the basal lodgement till interface. Recovered samples will be analyzed for Target Compound List (TCL) volatile organic compounds by a NYSDOH ELAP-CLP certified laboratory in accordance with the protocols previously specified in the May 1999 Revised Supplemental Site Investigation Work Plan. If the results of the Phase 1 investigation are not conclusive, targeted sample collection will be performed radially around borings B18/24 (elevated PID screening concentrations observed during Site Investigation) and B-27 (elevated soil VOC concentration detected at till interface during Site Investigation). A determination as to whether additional subsurface investigation will be necessary within the building footprint will be made following review of the Phase 1 soil vapor data, and consultation with NYSDEC.

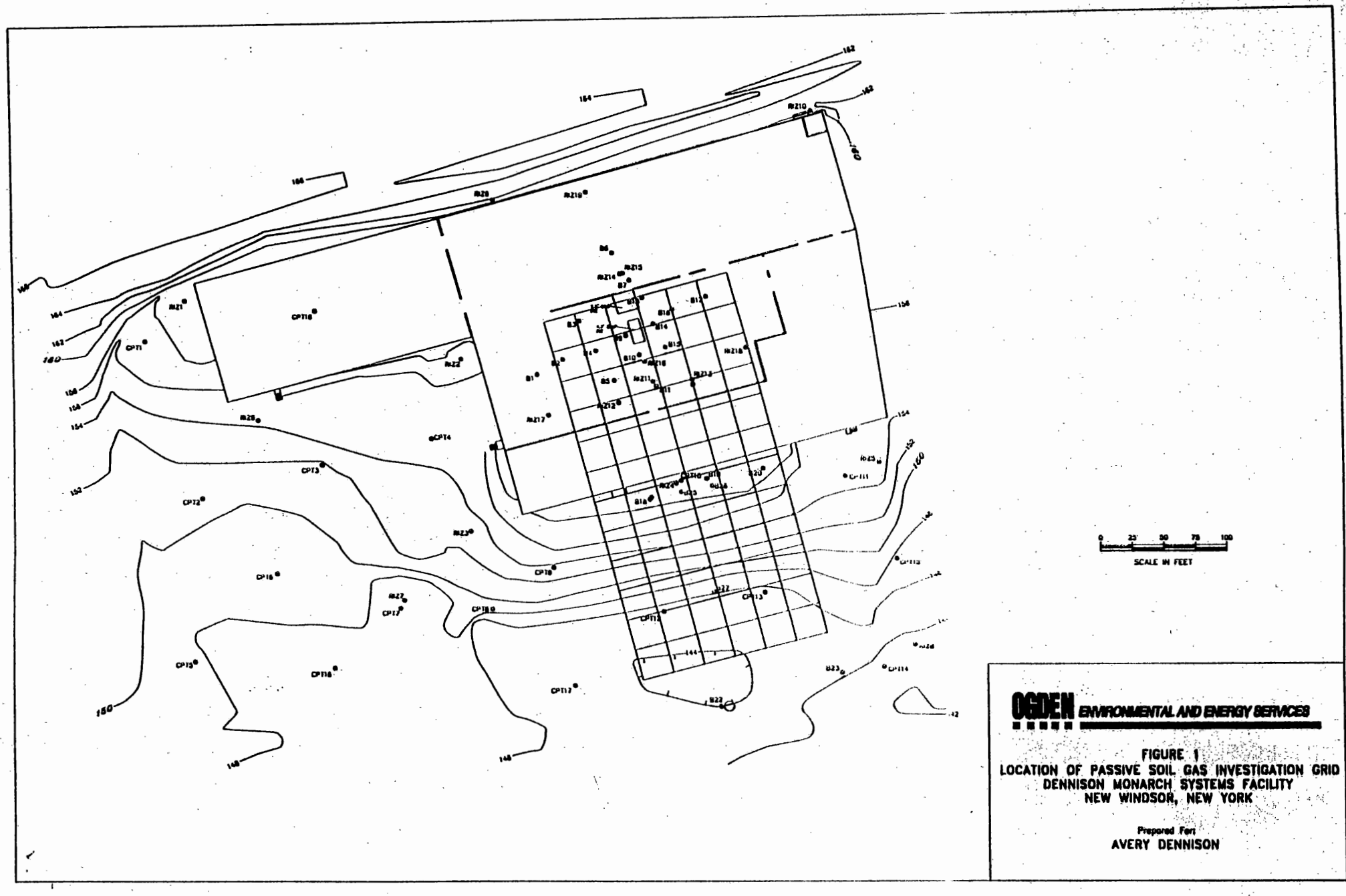
We trust that the preceding information addresses the issues raised in your correspondence of April 26, 2000, and provides a suitable framework to support remedy selection and implementation. On a related matter, we would like to obtain NYSDEC feedback regarding the off-site well installation and monitoring program specified in our January 2000 SSIR/RAW. This topic, and the range of issues outlined in this letter, can be addressed at our project team meeting, currently scheduled for Friday, July 28 at 10:30 AM in your office.

Sincerely,
OGDEN ENVIRONMENTAL & ENERGY SERVICES CO., INC.

Stephen E. Posten
General Manager

c: J. Rudisill (Avery Dennison)
G. Seibel (de maximis)
J. Lyons (Grant & Lyons)
W. Huber (Quantitative Decisions)

5-4061-4000-0008



OGDEN ENVIRONMENTAL AND ENERGY SERVICES

FIGURE 1
LOCATION OF PASSIVE SOIL GAS INVESTIGATION GRID
DENNISON MONARCH SYSTEMS FACILITY
NEW WINDSOR, NEW YORK

Prepared For:
AVERY DENNISON

ATTACHMENT 1

NYSDEC Correspondence Dated April 26, 2000

New York State Department of Environmental Conservation
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Division of Environmental Remediation
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John P. Cahill
Commissioner

April 26. 2000

STEPHEN POSTEN
GENERAL MANAGER
OGDEN ENVIRONMENTAL AND ENERGY SERVICES
285 DAVIDSON AVENUE
SOMERSET, NEW JERSEY 08873

Re: Dennison Monarch Systems Facility -VCA No. V00135-3

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3) The field screening of soil samples, conducted by Rizzo in August 1991, suggests that most of the contaminants in the vadose zone are within the footprint of the building at depths ranging from 2 to 4.5 feet. Under these conditions, a study focused solely on the concentrations in the groundwater would provide an incomplete picture. But this localized and shallow source of contamination should be amenable to an accelerated cleanup using a proven technology such as soil-vapor extraction (SVE) within the building footprint. Outside the building, a combination of air-sparging and SVE

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If you have any questions, please call me at (914) 256-3146.

Sincerely,

Ramanand R. Pergadia, P.E.
Regional Hazardous Waste Remediation Engineer
Region 3

cc:

K. Carpenter
G. Laccetti
D. Desnoyers
A. Thorne

ATTACHMENT 2

Quantitative Decisions Correspondence Dated May 24, 2000
In Response to Comment 1 of NYSDEC Correspondence Dated April 26, 2000

Quantitative Decisions

539 Valley View Road
Merion, Pennsylvania 19066
(610) 771-0606
Fax: (610) 771-0607
www.QuantDec.com

May 24, 2000

Stephen E. Posten
Ogden Environmental and Energy Services
285 Davidson Avenue, Suite 103
Somerset, NJ 08873

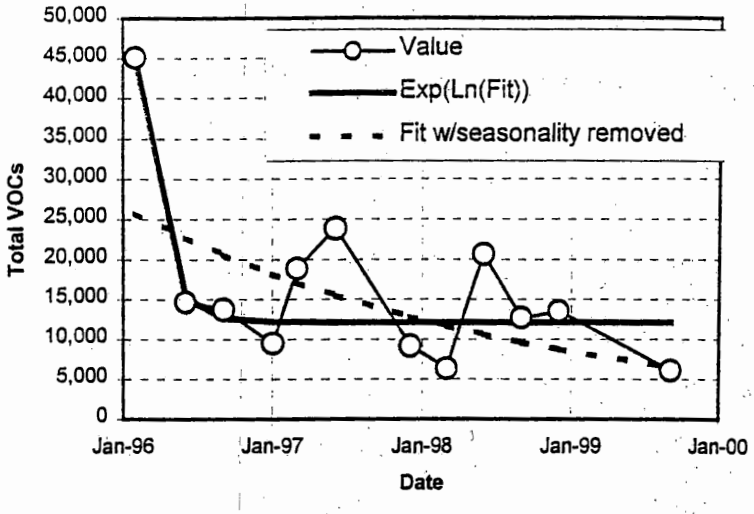
Via e-mail to seposten@oees.com

RE: Dennison Monarch Systems Facility: Comment 1 of the NYSDEC letter of 26 April 2000

Dear Steve,

Pursuant to your telephone request last week, Quantitative Decisions has evaluated the subject comment.

The last part of the comment states, "...[in] MW2, the asymptotic level is found to be around 6100 ppb for concentration of total VOCs." We therefore evaluated the total VOC data for well MW-2 found in Table 18, Appendix E, Supplemental Site Investigation Report Remedial Action Workplan Volume I, 21 January 2000 ("RAW").



The hollow blue circles in the figure portray the total VOC values in ppb.

The figure also shows two other curves, both "fits" to the data. The solid pink line is the best fit of the form $y = C_a + C_0e^{-Kt}$ as proposed by the NYSDEC. The dashed green line is the best fit of the form $y' = C_0e^{-Kt}$ where y' has been seasonally adjusted as described below.

Our measure of fit is based on the logarithms of the data. It is the sum of squares of the residuals. A "residual" is simply a difference between the fitted and observed value. Using a different measure of fit, for example by using untransformed values, does not appreciably change the fits. Somewhat surprisingly, the fit of the asymptotic model (pink line) is not at

all sensitive to the initial high outlying value. This is because the remaining data vary apparently at random about a middle value near 12,200 without showing a significant decrease relative to that variation.

We conclude that the NYSDEC asymptote of 6100 ppb is based on an "eyeball" fit or possibly on a fit of the lower envelope of the graph (blue circles), but not on the results of any recognizable curve-fitting procedure involving all the data. Supporting this conclusion is that the cited value of "around 6100" is essentially identical to the most recent measurement of 6,098 ppb. It is also noteworthy that the statistical fits using asymptotes produce unrealistically short half lives of about 50 days.

Regardless of the fit, the claim put forward by the NYSDEC is that a three-parameter family (the parameters are C_a, C_0, and K) models the data better than a two-parameter family (parameters C_0 and K) of which it is a generalization. This will always be the case, regardless of the data, simply because the additional parameter can be varied to improve the two-parameter fit and will never be set at a level yielding a poorer fit. Therefore the NYSDEC's implicit assertion is that introducing the third parameter (C_a, the purported asymptotic level) is a <u>much</u> better fit; in other words, that it is statistically significant.

Other models are, however, possible. For example, we have performed a seasonal adjustment of the data. This is grounded in your observation that some of the data for this facility appear to exhibit seasonal behavior. The seasonal adjustment proceeds simply by subtracting the preceding year's value from each value observed from 1997 onward (provided the preceding year contained an observation within the same or nearby month). Again we have used logarithms of the data in making this adjustment. Thus, each of these differences provides a season-independent estimate of annual decrease. The mean of these differences, -0.383, is a simple (albeit imperfect) estimator of the rate of decrease. This is equivalent to a half-life of 954 days, squarely in the range of the literature values and nicely between the TCA half life (819 days) and TCE half life (987 days) presented in section 3.2.1 of the RAW. TCA and TCE are the major components of the total VOC values.

Using this estimated half life we have plotted the best fitting exponential curve (<u>no</u> asymptote) in dashed green on the figure. As in the NYSDEC's comment, this curve may be considered a member of a three-parameter family of models subsuming the exponential decay model. In this case the third parameter represents seasonality rather than asymptote. (Technically, it is a seasonal first difference.) It provides an intuitively appealing explanation for the observed variation of results: namely, that they arise from (expected) seasonal fluctuations rather than from unknown "random" causes.

One possible objective for future groundwater monitoring would be to establish whether the apparent seasonality is statistically significant. Typically one needs at least three full years of quarterly monitoring to accomplish this. This data set, although it spans three years, has some gaps. Therefore it is presently difficult to establish the significance of the seasonality. The figure suggests, though, that the seasonal model may fit the data remarkably better than the NYSDEC's asymptotic model. After several more years of semiannual monitoring it

would be feasible to fit a combined four-parameter model incorporating an asymptote and seasonality, but presently there are not enough data to do that reliably.

In summary, the NYSDEC raises but does not settle two important issues: the question of what an appropriate model is for the data and whether the model fits the data sufficiently well. In this brief analysis we have demonstrated that better alternative models are possible and that one—exponential decay with seasonal adjustment—provides more realistic estimates of physically meaningful parameters, such as decay rates, than does the asymptotic model proposed by the NYSDEC. (This of course does not settle the model selection issue. A model must be grounded in a realistic scientific understanding of the phenomena being monitored.) We have also noted that the NYSDEC's estimated asymptotic level of 6100 ppb for total VOCs appears to be little more than an intuitive estimate; we can identify no standard procedure that reproduces this result.

Very truly yours,

William A. Huber

New York State Department of Environmental Conservation
Region 3
Division of Environmental Remediation
21 South Putt Corners Rd., New Paltz, NY 12561-1696
Telephone: (914) 256-3146 FAX: (914) 255-3414

John P. Cahill
Commissioner

September 8, 2000

STEPHEN POSTEN
GENERAL MANAGER
OGDEN ENVIRONMENTAL AND ENERGY SERVICES
285 DAVIDSON AVENUE
SOMERSET, NEW JERSEY 08873

Re: Dennison Monarch Systems Facility -VCA No. V00135-3

Dear Mr. Posten:

At our meeting here in New Paltz, you had sought the New York State Dept of Environment Conservation's (NYSDEC's) response to the following issues:

1) Response to Mr. William Huber's assessment of the contaminant concentration trend in MW-2.
2) NYSDEC's position regarding use of wetland as a principal attenuating agent of a remedial system.
3) Approval of the Scope of Work outlined in your July 17, 2000 letter.
4) Approval of proposed installation of additional monitoring wells for collecting data as detailed in the January 21, 2000 Supplemental Investigation Report/Remedial Action Workplan (SSIR/RAW).

Response to each of the above issues follow:

1) Attached is a graph of the trend in MW-2 using the approach described in my letter of April 26, 2000. This curve is not an "eyeball" fit as suggested by Mr. Huber in his May 24, 2000 letter to you. You should be aware that a natural attenuation proposal, if and when approved, will have to meet year-by-year goals established by the NYSDEC based on a first order decay curve. These goals will not be projections of existing data, but will be used as yardsticks to track the effectiveness of the remedial system that will be instituted for the site.

2) Ms. Christina Dowd of the NYSDEC's Division of Fish, Wildlife & Marine Resources (DFWMR) has provided the following comments to the use of wetland as the principal

attenuating agent:

a) The use of wetlands or surface waters as treatment systems is contrary to regulation and the Department's obligation to protect the environment.

b) The fact that the contaminants are volatile compounds and not generally bioaccumulable does not render them harmless to biota. Small mammals, birds, amphibians and invertebrates can be exposed to VOCs through dermal contact, inhalation and ingestion causing toxicity to these creatures. The attached surface water quality guidelines have been developed by the DFWMR Standards and Criteria Unit following the promulgated methodology in 6NYCRR Part 706.1.

c) At a minimum, source control is needed to preclude further discharge of contaminants to the wetland and the environment. This is consistent with the DER's policy that identifiable sources should be eliminated to the extent feasible. The fact that there may be other sources outside the control of the volunteer does not preclude the need for site specific source control.

d) The need for active remediation of the contamination that has already migrated off site would depend upon the concentrations of contaminants in sediment and/or surface water, the existence of any NAPL or grossly contaminated soils/sediments, and the expected time for natural attenuation of the currently existing contamination. VOCs are not expected to accumulate in sediments to any great extent, and it does not appear that the shallow groundwater concentrations would result in the guidance values being exceeded. Given this, capturing the off site plume may not be necessary, however, any grossly contaminated soils should be removed.

e) While the volunteer may be able to negotiate an agreement with the town to restrict human use of the wetland, this does not preclude animals from coming in contact with contaminated wetland sediments or surface water. In addition, the DFWMR does not support restricting the use of the state's wetland resources as a remedial strategy.

f) The volunteer may propose the use of a constructed wetland as a treatment system. Such a system would have to be constructed following both federal and state regulations.

3) The scope of work outlined in your July 17, 2000 letter is acceptable. The following comments are offered for your consideration in the development of the detailed work plan:

a) Details of the workings of the proposed passive soil-gas detection system must be provided.
b) Rationale for depths at which the adsorbent material will be placed, the duration of the placement and the nature of the media in which they are placed must be explained.
c) Where buried service structures are in the vicinity of any soil-gas detection points, the affect of the structure on the results of the soil-gas survey must be described.
d) Since the potential for exposure to the contaminant vapor by the occupants of the building exists, collection of soil-gas samples and their analysis must be included in the work plan.
e) The containment effect of the building slab may mask the actual location of any hot-spots/sources of contamination. The Gore Sorber pamphlet and CD video that you have sent to me recently does not adequately address this issue.
f) Should an appreciable level of concentration be detected in the soil-gas survey, a small scale test

of vapor extraction may usefully be performed to note the time required for regeneration of the vapor to its original concentration.

g) It is not clear whether the soil-gas points will be located at the center of each cell or at the nodes of the grids shown in Figure 1 of your proposal. The revised grid layout that you have faxed me recently to address this issue must be used in your work plan.

h) In your April 1998 Site Investigation Report, Section AA' (Fig. 3-1) does not reflect the pits through which the section crosses, and Section BB' (Fig. 3-2) follows a convoluted path, making comparative reading of the cross-sections a bit difficult. The lay of the till layer is important in determining the flow of DNAPL, if one exists. A more readable set of cross-sections will ease this task, and must be provided in the cross-sections.

i) Contrary to Item 2 of your letter, nothing in my April 26, 2000 letter suggests that absorption by groundwater of the contaminants in soil-gas is a significant means of contaminating the groundwater. This process is a weak process except under near no-flow conditions, and is of less consequence in comparison with the desorption of contaminants from saturated soil into the groundwater.

4) With regards to your proposal for installing additional wells, a representative cross-section through the wetland and the site depicting the vertical extent of the contaminant plume based on available data, would provide a good tool for designing the proposed off-site wells. In particular, the screen lengths and depth is more dependent on the configuration of the plume than on the groundwater elevation. Please note that if the wetland is registered, a permit to install well within its bound will be required.

The list of wells you have selected for dropping from the long term monitoring plan seems reasonable.

If you have any questions, please call me at (914) 256-3146.

Sincerely,

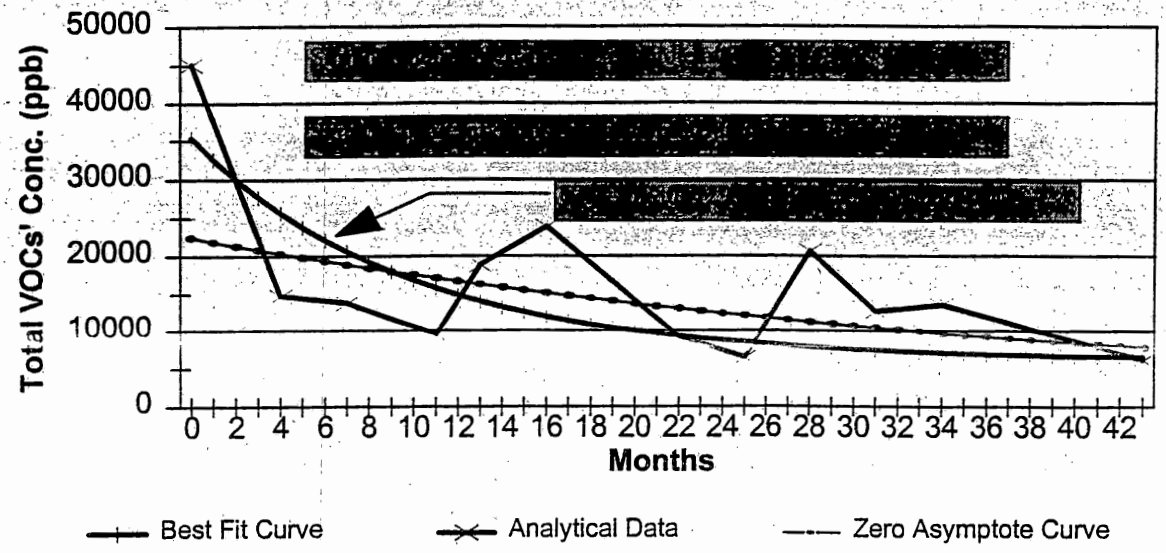
Ramanand R. Pergadia, P.E.
Regional Hazardous Waste Remediation Engineer
Region 3

cc:

K. Carpenter
G. Laccetti
D. Desnoyers
C. Dowd

Dennison Monarch

Trend Analysis for MW-2



Division of Fish, Wildlife & Marine Resources
Bureau of Habitat Technical Memorandum
August 15, 2000
Prepared by T. Sinnott

SUBJECT: Aquatic Toxicity of Volatile Organic Compounds

Aquatic life protection ambient water quality guidance values for six Volatile Organic Compounds (VOCs) were prepared using data from the EPA AQUIRE database and the Tier II methodologies as described in 6NYCRR Part 706.1 Section XII.

COMPOUND	MOST SENSITIVE SPECIES IN DATASET	CAS NO.	ACUTE TOXICITY GUIDANCE VALUE A(A) IN μg/L	CHRONIC TOXICITY GUIDANCE VALUE A(C) IN μg/L
carbon tetrachloride	Daphnia magna	56235	2200	240
1,1,1-trichloroethane	Bluegill sunfish	71556	2500	280
1,1,2-trichloroethane	Daphnia magna	79005	5000	560
1,1,2,2-tetrachloroethane	Fathead minnow	79345	1300	150
Trichloroethene	Daphnia magna	79016	1100	130
Tetrachloroethene	Rainbow trout	127184	390	43

ORIGINAL SIGNED
Timothy J. Sinnott
Biologist 2 (Ecology)

December 15, 2000

Mr. Ramanand Pergadia, PE
New York State Department of Environmental Conservation
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, New York 12561-1696

Re: Avery Dennison – Former Monarch Systems
New Windsor, New York
Phase 2 Remedial Investigation

Dear Mr. Pergadia:

As a follow-up to our meeting of November 30, and consistent with the approach outlined in correspondence dated July 16, 2000 (in response to NYSDEC comments on the ***Supplemental Site Investigation Report/Remedial Action Workplan (SSIR/RAW),*** dated January 21, 2000), enclosed is a plan of the subject property that indicates proposed soil boring locations in areas where the results of Gore® soil vapor analysis indicated elevated relative concentrations under the building slab and adjacent parking lot areas. A draft sketch of these boring locations was transmitted to you by fax on December 1. For reference, the enclosed figure also indicates pertinent building/property features; sample locations and Total VOC concentrations obtained from the vapor survey; prior Site Investigation soil boring locations and Total VOC data associated with soil samples obtained from these borings at the basal lodgement till interface; and the alignment of geologic cross-sections contained in the April 1998 Site Investigation Report. Per your request, Attachment 1 to this letter also includes detailed plots of the Gore® vapor survey (Total VOC, TCE, TCA, and breakdown products) indicating interior building walls and the former locations of the vapor degreasers.

A total of 18 borings are proposed, as follows: (1) six within the label printing area in the northeast portion of the building; (2) six within the main production area of the building, on a diagonal between the label printing area and the former location of the vapor degreasers; and (3) six within the exterior parking area located to the east of the label printing area. Due to the presence of interior walls and machinery/equipment, the exact number and location of borings advanced within the facility will require adjustment in the field. At each location, the borings will be advanced to the basal lodgement till, located at a depth ranging from 25 ft – 35 ft in the area of interest. At a subset of the boring locations, split spoon samples will be obtained continuously for geologic logging purposes; elsewhere, split spoon samples will be obtained at five foot intervals. In all borings, soil samples will be collected for laboratory analysis at five foot intervals, including the water table interface, the lodgement till interface, and/or at significant changes in lithology. These samples will be submitted to a NYSDOH ELAP-CLP certified laboratory for TCL-VOC analysis; analytical data will be reported in the NYSDEC Analytical Services Protocol (ASP) Category B deliverables format. Duplicate samples and matrix spike/matrix spike duplicate samples will be obtained at a frequency of 1:20; field (rinsate) blanks will be obtained at a frequency of 1:10, and one trip blank will be accompany each sample shipment.

We are planning for the performance of the soil boring program to proceed in several stages; *i.e.*, interior drilling, exterior drilling, and off-site well installation. It is anticipated that the interior drilling component will be initiated in mid-December, with the remaining stages completed in January and/or early February 2001.

On a separate matter, in the January 2000 ***SSIR/RAW***, Avery Dennison provided a proposal for off-site well installation and the initiation of a long-term monitoring program. As we discussed in our November 30 meeting, NYSDEC Division of Fish, Wildlife & Marine Resources (DFWMR) review is necessary prior to well installation in the wetlands (municipal Green Acres property) located down gradient of the subject property. Attachment 2 contains several pages excerpted from the ***SSIR/RAW*** that details the off-site monitoring strategy and well location. As indicated, the wetlands well (MW-5) will consist of a driven well point that will be installed using a hand-assembled tripod apparatus with drop hammer (i.e., heavy equipment will not be used for well installation). Please respond at your earliest convenience relative to this matter so that we may proceed expeditiously with well installation.

Relative to the second off-site monitoring well, located adjacent to the wetlands on the A&R Concrete property, it was agreed that a deep piezometer would be installed adjacent to the shallow monitoring well, to document the upward vertical hydraulic gradient expected in this area and previously exhibited on-site at wells MW-1S/MW-1D.

We will be in further contact with Ms. Christina Dowd of DFWMR to discuss the assessment of potential soil/sediment contamination in the down gradient wetlands area, in accordance with Department correspondence (Item 2) dated September 8, 2000.

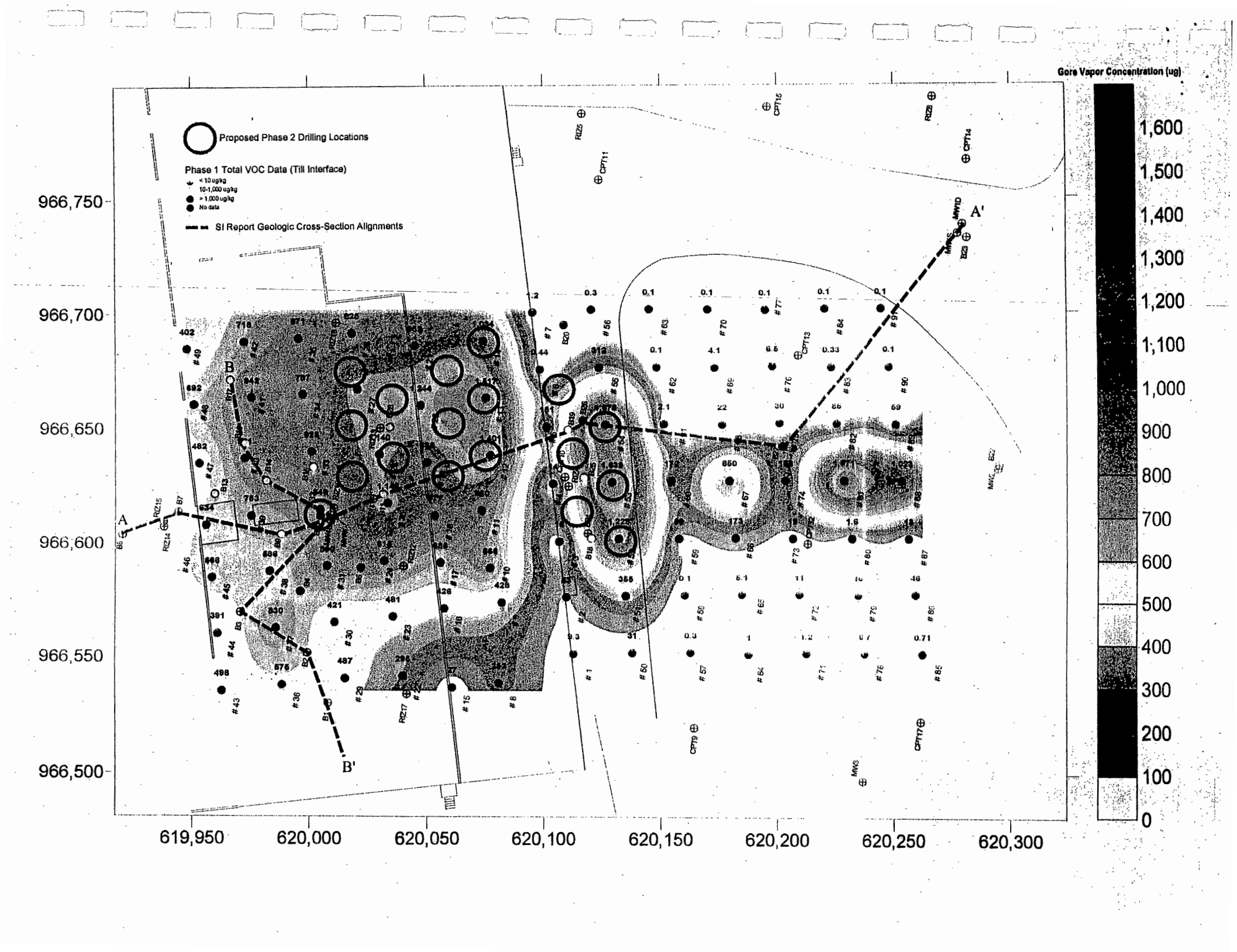
If you have any questions or comments regarding the enclosed, please feel free to contact me.

Sincerely,
AMEC
Earth & Environmental

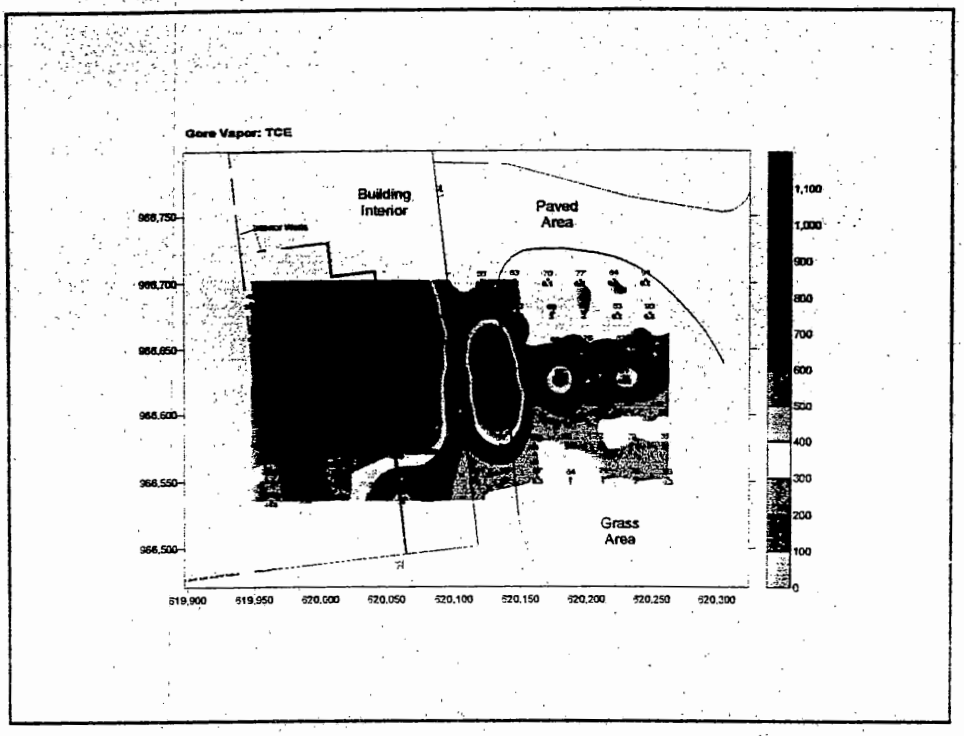
Stephen E. Posten
General Manager

c: J. Rudisill (Avery Dennison)
G. Seibel (demaximis)
J. Lyons (Grant & Lyons LLP)
V. Gallo/M. Patel (AMEC)

5-4061-4000


Proposed Phase 2 Drilling Locations
Phase 1 Total VOC Data (Till Interface)
< 10 ug/kg
10-1,000 ug/kg
> 1,000 ug/kg
No data
SI Report Geologic Cross-Section Alignments
Gore Vapor Concentration (ug)
1,600
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
966,750
966,700
966,650
966,600
966,550
966,500
619,950
620,000
620,050
620,100
620,150
620,200
620,250
620,300
A
A'
B
B'

ATTACHMENT 1


Gore Vapor: TCE
Building Interior
Paved Area
Grass Area
968,750
968,700
968,650
968,600
968,550
968,500
619,900
619,950
620,000
620,050
620,100
620,150
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620,300
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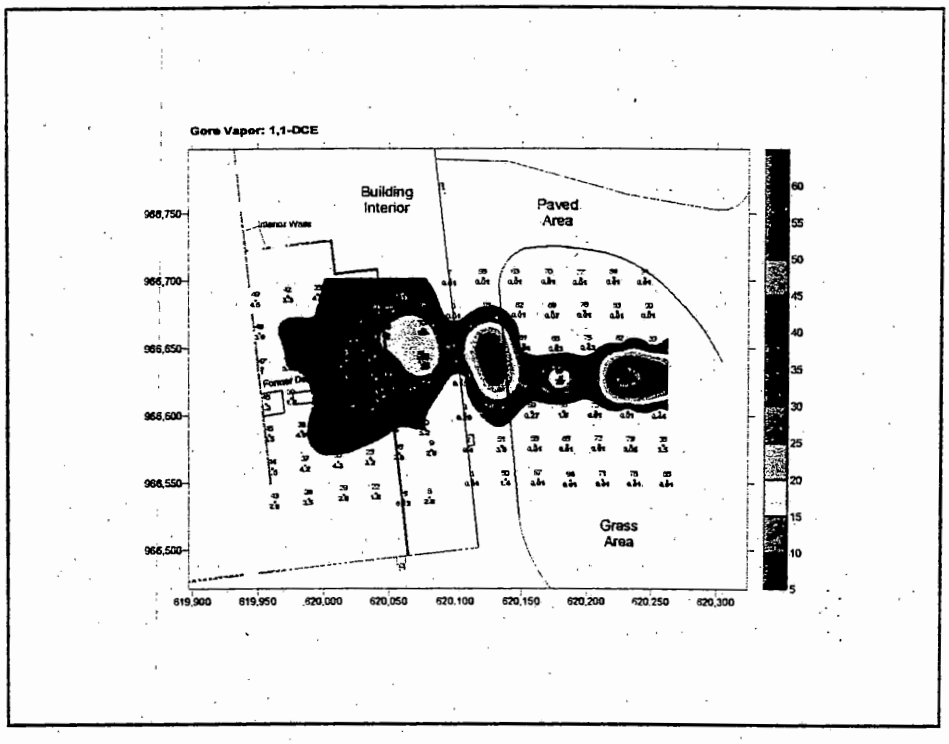
900
800
700
600
500
400
300
200
100
0


Gore Vapor: 1,1-DCE
Building Interior
Paved Area
Grass Area
968,750
968,700
968,650
968,600
968,550
968,500
619,900
619,950
620,000
620,050
620,100
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45
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35
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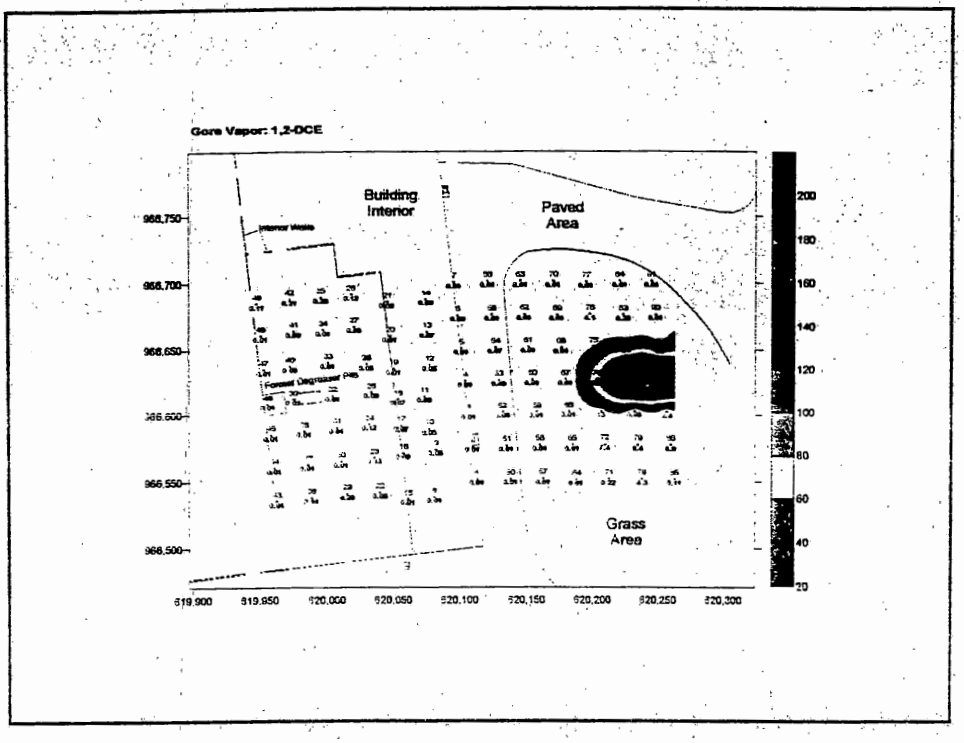
25
20
15
10
5


Gore Vapor: 1,2-DCE
Building Interior
Paved Area
Grass Area
Interior Walls
Forecourt Degreaser Pits
966,750
966,700
966,650
966,600
966,550
966,500
619,900
619,950
620,000
620,050
620,100
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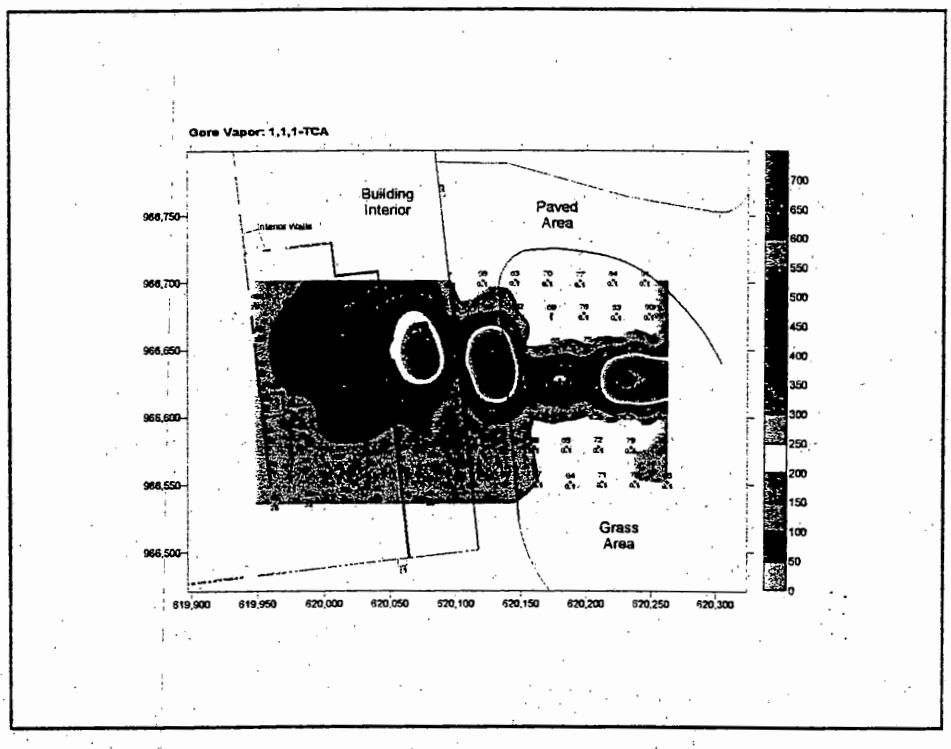
200
180
160
140
120
100
80
60
40
20


Gore Vapor: 1,1,1-TCA
Building Interior
Paved Area
Grass Area
Interior Walls
966,750
966,700
966,650
966,600
966,550
966,500
619,900
619,950
620,000
620,050
620,100
620,150
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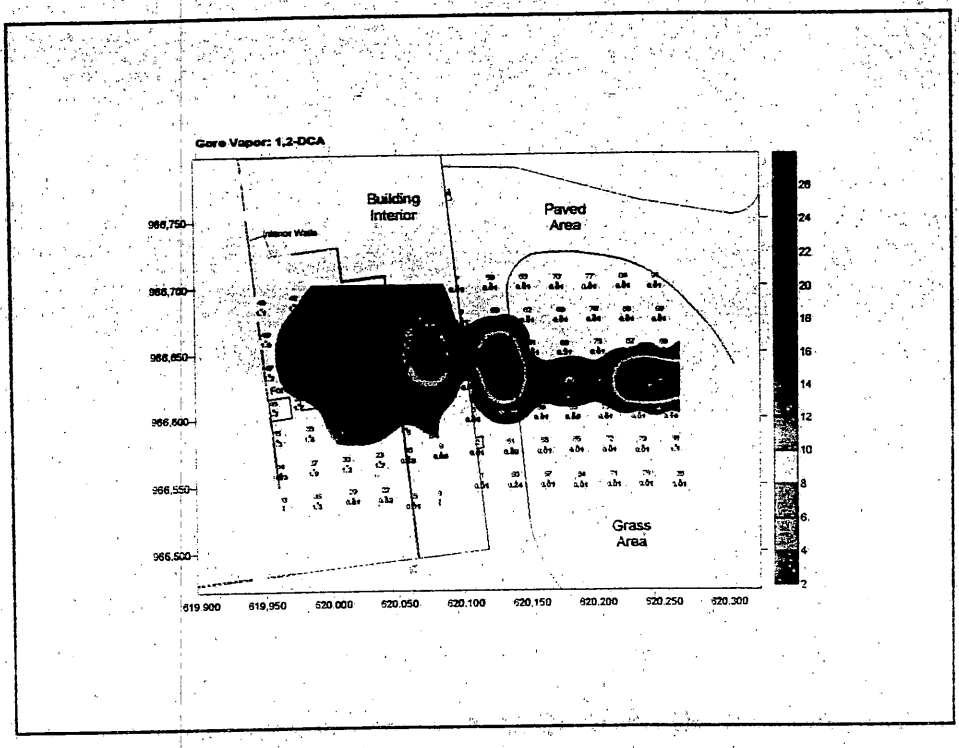
150
100
50
0


Gore Vapor: 1,2-DCA
Building Interior
Paved Area
Interior Walls
Grass Area
966,750
966,700
966,650
966,600
966,550
966,500
619,900
619,950
620,000
620,050
620,100
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18
16
14
12
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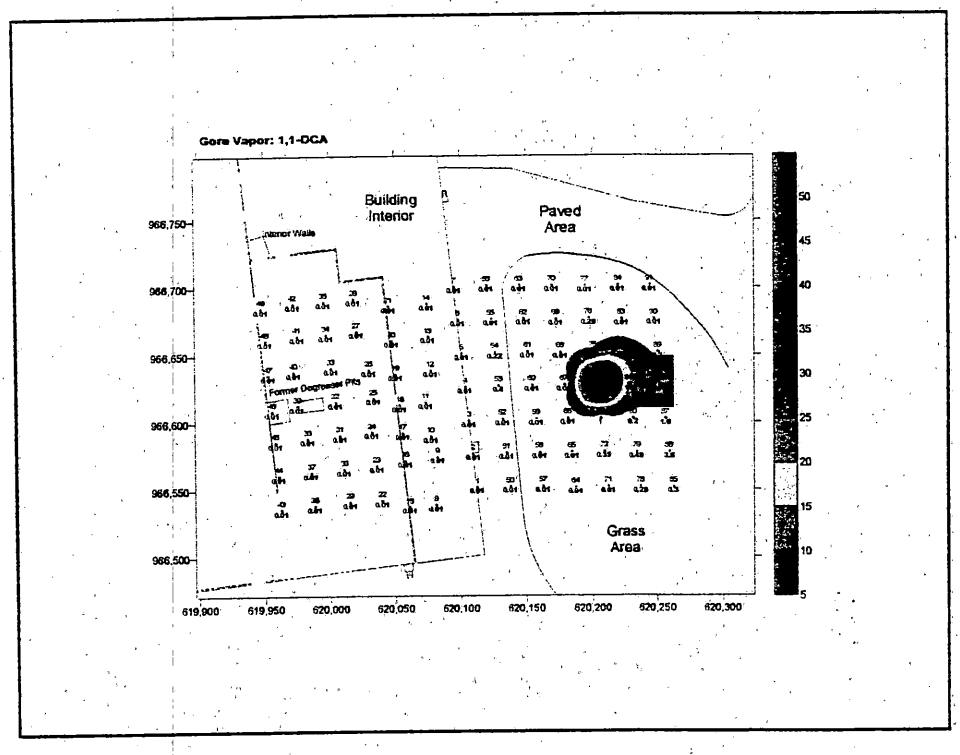
8
6
4
2


Gore Vapor: 1,1-DCA
Building Interior
Paved Area
Interior Walls
Former Degreaser PRS
Grass Area
966,750
966,700
966,650
966,600
966,550
966,500
619,900
619,950
620,000
620,050
620,100
620,150
620,200
620,250
620,300
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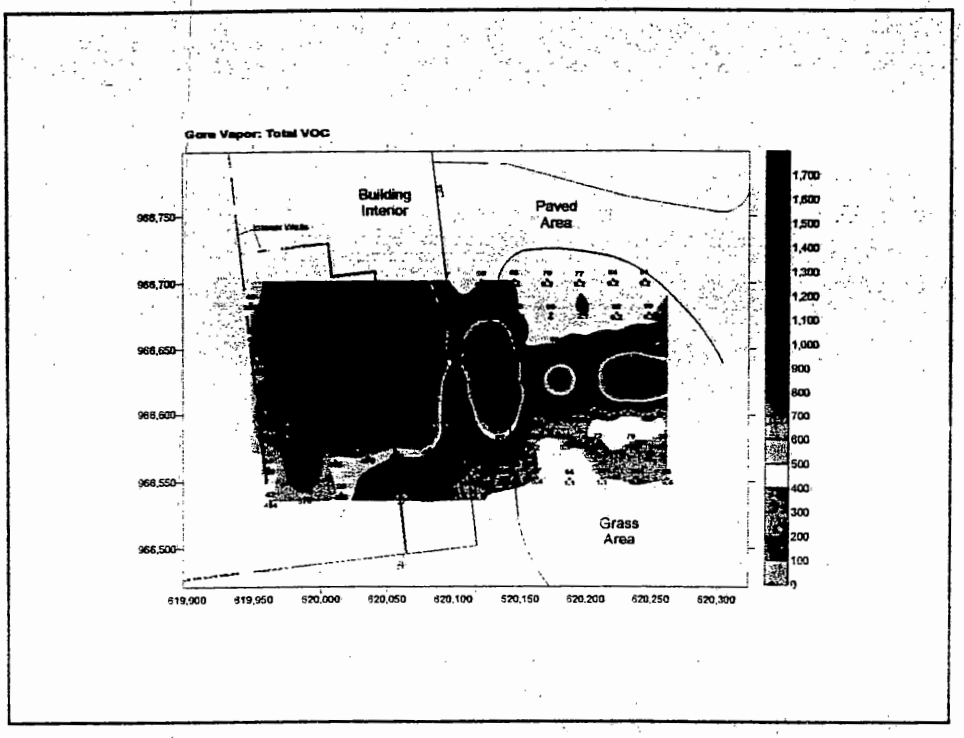
15
10
5


Gore Vapor: Total VOC
Building Interior
Paved Area
Grass Area
968,750
968,700
968,650
968,600
968,550
968,500
619,900
619,950
620,000
620,050
620,100
620,150
620,200
620,250
620,300
1,700
1,600
1,500
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0

ATTACHMENT 2

4.0 REMEDIAL ACTION WORKPLAN

The results of the supplemental site investigation performed in off-site areas adjacent to the project site, as well as monitoring data from on-site wells, provide evidence to support natural attenuation of chlorinated solvents both at the source and laterally along the leading edge of the contaminant plume. On-site decay of contaminants would be expected due to the prior removal of the primary sources (vapor-phase degreasers), and the limited extent of highly contaminated soils identified during the site investigation. Geochemical data suggest some degree of biodegradation, which when coupled with advection, dispersion, and dilution afforded by precipitation and upward discharging ground water, would suggest a long-term decreasing trend in source area concentration. These presumptions are reflected in the evaluation of first-order decay kinetics for the source area, which indicates TCE/TCA half-lives on the order of 575 days.

Laterally, attenuation of the contaminant plume is observed to the east-northeast, with concentrations decreasing to non-detect levels within the Town of New Windsor wetland property. Rapid dechlorination would be expected to occur in this area due to the enhanced biodegradation of the chlorinated solvents afforded by the organic rich and anaerobic sediments associated with the swamp.

The Supplemental Site Investigation Work Plan (Ogden, 1999) identified a progressive sampling strategy for sediment and surface water in the pond located east of the wetland area, pending review of data derived from the initial phase of the investigation. The results of the wetland sampling (*i.e.*, Figures 3-1 through 3-7) do not support migration of contaminants from the project site to the pond. In addition, multiple off-site sources, all with the potential to discharge into regional hydraulic sink represented by the wetland/pond area, were identified through review of environmental regulatory agency databases (*i.e.*, Appendix D). Consequently, it is believed that the appropriate course of action at this time is to implement a long-term monitoring strategy to document source decay over time, and document biodegradation down gradient of the project site.

4.1 MONITORED NATURAL ATTENUATION

Definition of a monitored natural attenuation (MNA) program requires specification of five primary components: (1) monitoring network, (2) analytical protocol, (3) monitoring frequency, (4) reporting schedule, and (5) MNA duration. Each of these components is detailed below.

4.1.1 Monitoring Network

There are currently 18 monitoring wells on-site (RIZ-1 through RIZ-10, RIZ 16 through RIZ-19, MW-1S, MW-1D, MW-2, and MW-3 (Figure 2-1). Based on the historical record (Appendix E), and review of Figure 3-1, on-site wells can be segregated into two groups; *i.e.*, (1) those clearly

useful for the definition of the lateral extent of the contaminant plume, and (2) those representing upgradient or cross gradient conditions, useful for characterizing background or documenting the lack of lateral plume migration from the former vapor-phase degreaser source area. The latter are represented by wells RIZ-1, RIZ-2, RIZ-6, RIZ-9[5], RIZ-10[5], and RIZ-19. In consideration of the above, and the needs of geochemical characterization (Section 4.1.2), it is proposed that the monitoring network initially be comprised of all on-site wells, and subsequently be modified to exclude the group (2) wells, in accordance with the schedule outlined in Section 4.1.3.

No off-site wells have been installed to date. In order to monitor the down gradient concentration distribution and document natural attenuation processes, two off-site wells are proposed for installation as part of the MNA program (Figure 4-1). Following negotiation of an installation schedule with the respective property owners (A&R Concrete and the Town of New Windsor), MW-4 will be constructed as a 4 in. diameter PVC well, screened across the water table, and completed with a locking cap and flush mount road box, and well MW-5 will be constructed as a driven, 2 in. diameter stainless steel well point, with locking cap. Due to severe access constraints, the location of MW-5 may need to be modified in the field from that depicted on Figure 4-1.

4.1.2 Analytical Protocol

The MNA analytical protocol consists of three components: (1) Target Compound List (TCL) Volatile Organic Compound (VOC) analysis (including library search for tentatively identified compounds [+10], and differentiation between *cis*- and *trans*- isomers of 1,2-dichloroethene), (2) a suite of geochemical parameters for assessment of biodegradation; *i.e.*, methane, ethane, ethene, chloride, TOC, nitrate, sulfate, sulfide, alkalinity, ORP (redox), and ferrous iron [iron (II)], and (3) field indicator parameter measurements: *i.e.*, DO, temperature, and pH. The TCL VOC analysis will be consistently performed across all monitoring periods for the duration of the MNA program, as will the field indicator parameter measurements. As noted in Section 4.1.3, analysis of the geochemical parameter suite will be performed during the initial phase of the MNA (to confirm geochemical relationships on-site, and document those off-site), and then only periodically thereafter. Table 4-1 details the analytical protocol for the selected monitoring parameters. With the exception of analytes requiring specialized analytical protocols (*e.g.*, methane, ethane, ethene), all analysis will be performed by an NYSDOH ELAP-CLP certified laboratory. Analytical data will be reported in the NYSDEC Analytical Services Protocol (ASP) Category B deliverables format.

[5]Note that upgradient wells RIZ-9 and RIZ-10 (small diameter well points located adjacent to the western exterior of the Former Monarch Systems, Inc. facility) are not indicated on Figure 2-1, as the wells were dry during the September 2, 1999 sampling event.

0 100 200 300 ft

Approximate Scale

N

⊕ Proposed Monitoring Well (MW-4) and Well Point (MW-5) Location

Figure 4-1

Proposed Location of Off-Site Monitoring Points
Monitored Natural Attenuation (MNA) Program

Former Avery Dennison-Monarch Systems, Inc.
New Windsor, New York

Sample Point Survey: Grevas & Hildreth, P.C., Newburgh, NY, May 1996; March 1999
Aerial Photo Base: Robinson Aerial Surveys, Inc., Newton, NJ
Exp. No. ORG-1-67; April 23, 1990

OGDEN ENVIRONMENTAL AND ENERGY SERVICES CO., INC.
285 DAVIDSON AVENUE, SOMERSET, NEW JERSEY 08873

March 5, 2001

Mr. Ramanand Pergadia, PE
New York State Department of Environmental Conservation
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, New York 12561-1696

Re: Former Avery Dennison/Monarch Systems, Inc. Facility; New Windsor, New York
VCA # V00135-3
Response to September 8, 2000 NYSDEC-DFWMR Comments

Dear Mr. Pergadia:

As a follow-up to a January 16, 2001 phone conversation between Mr. Charles Harman of this office and Ms. Christina Dowd of the NYSDEC Division of Fish, Wildlife & Marine Resources (DFWMR), we have prepared responses to a series of comments articulated by DFWMR in Department correspondence dated September 8, 2000. These comments (Items 2a – 2f of the referenced correspondence) pertain to issues associated with the biodegradation of organic solvents in ground water within a wetlands area located hydraulically down gradient of the subject facility. The comments in question and the associated AMEC responses are as follows:

Comment 2a): The use of wetlands or surface waters as treatment systems is contrary to regulation and the Department's obligation to protect the environment.

Response: *The Department's views on wetlands protection from VOCs, as per these comments and subsequent telephone conversation with AMEC staff, are noted. We would add, however, that one of the functions specific to wetlands is the removal of dissolved or suspended contaminants. It should be noted that Avery Dennison has previously taken action to eliminate the source of contamination at the site (vapor degreasing equipment), and is currently performing a second phase of subsurface investigation to determine whether residual source contamination remains in the saturated soil matrix. Should additional testing support our current findings that constituents of concern do not adversely affect the biological integrity or functional capability of the wetlands, and that the contaminant plume discharge is of finite duration, we would like to pursue discussion of this issue.*

Comment 2b): The fact that the contaminants are volatile compounds and not generally bioaccumulative does not render them harmless to biota. Small mammals, birds, amphibians and invertebrates can be exposed to VOCs through dermal contact, inhalation and ingestion causing toxicity to these creatures. The attached surface water quality guidelines have been developed by the DFWMR Standards and Criteria Unit following the promulgated methodology in 6NYCRR Part 706.1.

Response: *We understand that VOCs are not generally bioaccumulative, and at certain concentrations can be toxic to biological receptors of concern. However, in*

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Fax (732) 302-9504
www.amec.com

general, ecotoxicological impacts from the exposure of VOCs to biota requires concentrations in the parts per million range, versus the low parts per billion range detected sporadically within the wetlands. As noted in a later comment, measured concentrations of VOCs in shallow ground water/surface water do not exceed the surface water criteria provided in your correspondence.

Comment 2c): At a minimum, source control is needed to preclude further discharge of contaminants to the wetland and the environment. This is consistent with the DER's policy that identifiable sources should be eliminated to the extent feasible. The fact that there may be other sources outside the control of the volunteer does not preclude the need for site specific source control.

Response: *As noted earlier, Avery Dennison previously removed the contaminant sources (vapor degreasers) from the Monarch Systems facility. In response to ongoing NYSDEC technical review, Avery Dennison has proposed (and is currently implementing) additional testing activities to investigate the presence of residual contaminant sources in subsurface soils underlying the facility. The results of these investigations will provide the technical basis for decision-making regarding the need for implementation of active source controls.*

The results of prior investigation in the wetlands strongly suggest the presence of independent contaminant sources unrelated to the former Monarch Systems, Inc. facility. While Avery Dennison is committed to addressing constituents associated with that facility, they cannot accept responsibility for other sources.

Comment 2d): The need for active remediation of the contamination that has already migrated off site would depend upon the concentrations of contaminants in sediment and/or surface water, the existence of any NAPL or grossly contaminated soils/sediments, and the expected time for natural attenuation of the currently existing contamination. VOCs are not expected to accumulate in sediment to any great extent, and it does not appear that the shallow groundwater concentrations would result in the guidance values being exceeded. Given this, capturing the off site plume may not be necessary, however any grossly contaminated soils should be removed.

Response: *As noted, the results of shallow ground water/surface water sampling performed within the wetlands area (documented in the January 2000* ***Supplemental Site Investigation Report****) do not indicate exceedance of guidance values.*

The results of soil sampling on-site (contained in the April 1998 ***Site Investigation Report****) do not indicate the presence of extensive "gross" soil contamination. Soil contamination in the ppm range was detected only in very limited areas, and only at a depth of 25-35 ft (at the interface between shallow terrace sands/gravels and a basal lodgement till layer). NAPL was not detected in any of the 350+ soil samples recovered during the Site Investigation, or any of the 100+ samples recovered to date as part of the ongoing supplemental source area investigation.*

In our technical meeting of November 30, 2000, we provided the Department with a graphical summary of the trend in ground water contaminant concentrations at the site over the past seven years (these data were subsequently submitted to NYSDOH and DFWMR under cover memoranda dated January 25, 2001). Over this period, these data indicate a shift in the center of mass of the groundwater contaminant plume from west to east (along the hydraulic gradient), and a significant reduction in contaminant concentrations on-site. These data suggest that the maximum discharge of contaminant mass to the wetlands has already occurred, or is currently occurring, and that the results of the wetlands shallow ground water/surface water sampling program documented in the ***Supplemental Site Investigation Report*** *represent worst-case conditions. As noted above, these results do not indicate exceedance of surface water guidance values.*

Given the above, and the apparent destruction of the constituents of concern through microbially mediated anaerobic dehalogenation, it is not expected that significant concentrations of VOCs would be present within wetlands soils/sediments. To provide confirmation of this condition, Avery Dennison proposes to obtain sediment samples within the "footprint" of the presumed ground water contaminant plume discharge area. This area (based on the results of off-site ground water hydropunch and shallow ground water/surface water sampling within the wetlands) is indicated in Figure 1. As indicated, a total of 14 soil/sediment samples are proposed for collection. Field and laboratory QA/QC sample collection will include a sample duplicate, field (rinsate) blank, trip blank, and matrix spike/matrix spike duplicate. These samples will be obtained from a depth of 0 – 6 in., and will be analyzed for Target Compound List (TCL) volatile organic compounds by an NYSDOH ELAP-CLP certified laboratory. Analytical data will be reported in the NYSDEC Anlaytical Services Protocol (ASP) Category B deliverables format.

Comment 2e): While the volunteer may be able to negotiate an agreement with the town to restrict human use of the wetland, this does not preclude animals from coming in contact with contaminated wetland sediments or surface water. In addition, the DFWMR does not support restricting the use of the state's wetland resources as a remedial strategy.

Response: *The Department's concern for potential impacts to ecological receptors is noted. Avery Dennison is proposing a targeted sediment/surface soil sampling program to evaluate the potential distribution of constituents of concern within the presumed discharge area of the contaminant plume. As part of this program, we further propose to perform biological screening of the wetlands to characterize the basic wetland plant communities that are present and to ascertain whether observable ecotoxicological indications may be evident. It is believed that the results of these investigations will provide the necessary data to evaluate the potential for ecological risk.*

Comment 2f): The volunteer may propose the use of a constructed wetland as a treatment system. Such a system would have to be constructed following both federal and state regulations.

Response: *Based on the results of the ongoing source area investigation, as well as the proposed wetlands sediment sampling program, the need for implementation of an active remedial strategy will be evaluated. If warranted, such a strategy could incorporate hydraulic control and phytodegradation/rhizodegradation through the planting of* Salix/Populus *species (i.e., willows, poplars) adjacent to and along the subject property boundary. While the use of a constructed wetland would represent a viable treatment option, there is insufficient area within or adjacent to the subject property to create one.*

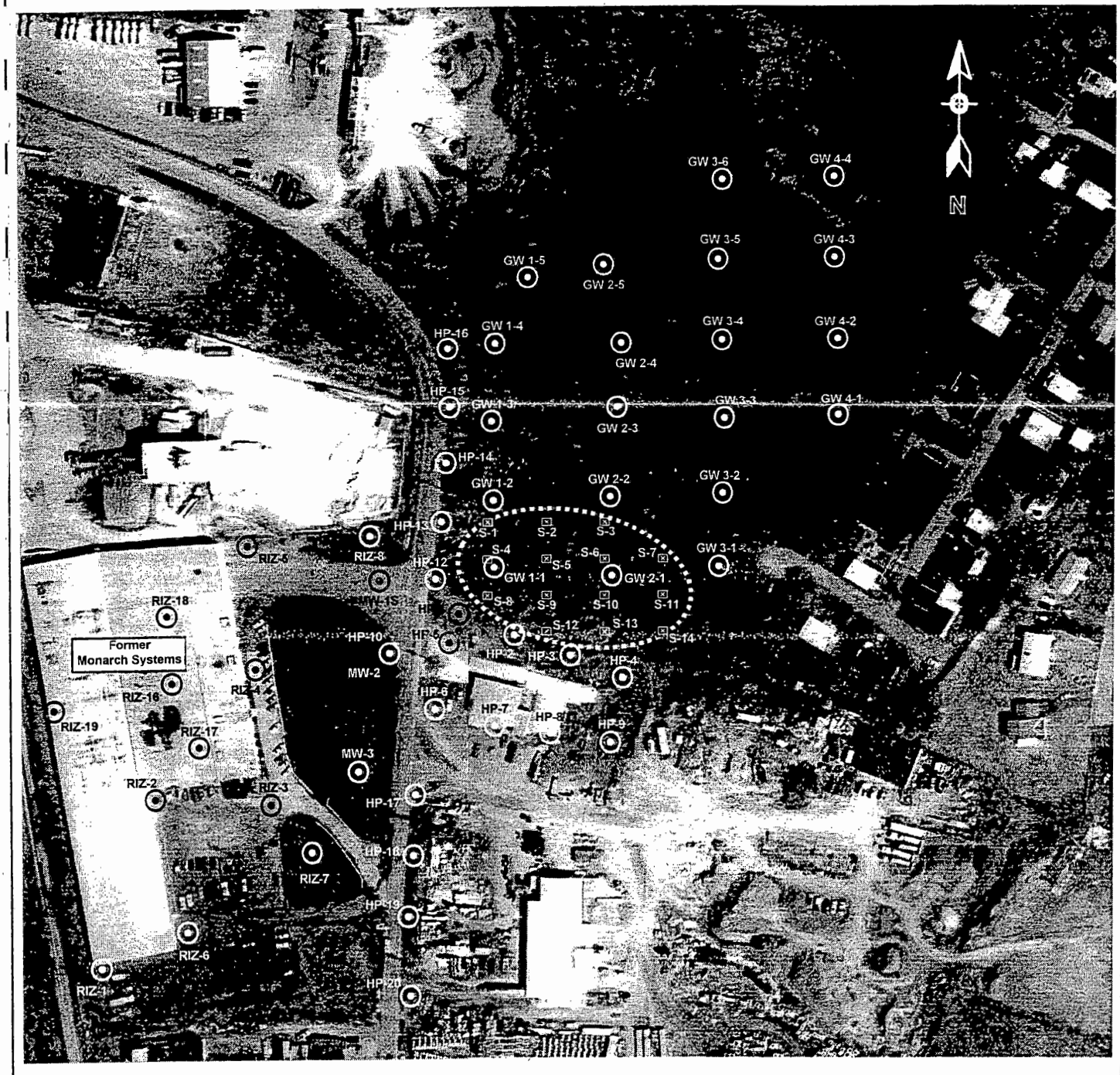
If you have any questions or comments regarding the enclosed, please feel free to contact me.

Sincerely,
AMEC
Earth & Environmental

Stephen E. Posten
General Manager

c: G. Aiezza (NYSDEC, New Paltz)
C. Dowd (NYSDEC-DFWMR, Albany)
J. Rudisill (Avery Dennison)
G. Seibel (de maximis)
J. Lyons (Grant & Lyons LLP)
C. Harman/V. Gallo (AMEC)

5-4061-4000



LEGEND

- Prior Ground Water Sample Location (MW/RIZ: Monitoring Wells; HP: Hydropunch; GW: Hand Auger)
- S-6 Proposed Sediment Sample Location
- Estimated Maximum Area of Ground Water Contaminant Plume Discharge (Figure 3-1: Supplemental Site Investigation Report; January 2000)

Sample Point Survey: Grevas & Hildreth, P.C., Newburgh, NY, March, August, 1999
Aerial Photo Base: Robinson Aerial Surveys, Inc., Newton, NJ
Exp. No. ORG-1-67; April 23, 1990

Figure 1
Proposed Wetlands Area Sediment Sample Locations
Phase 2 Remedial Investigation

Avery Dennison / Former Monarch Systems, Inc.
New Windsor, New York

amec Earth & Environmental
285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 3
21 South Putt Corners Road, New Paltz, New York 12561-1696
Phone: (845) 256-3153 • **FAX:** (845) 255-3414
Website: www.dec.state.ny.us

John P. Cahill
Commissioner

March 14, 2001

STEPHEN POSTEN
GENERAL MANAGER
AMEC EARTH & ENVIRONMENTAL, INC.
285 DAVIDSON AVENUE
SOMERSET, NEW JERSEY 08873

Re: Wetland Area Soil/Sediment Sampling Plan
Dennison Monarch Systems Facility
Voluntary Cleanup Agreement No. V00135-3

Dear Mr. Posten,

In response to your letter of March 5, 2001 in regards to the above referenced site, the NYSDEC approves the plan for 14 soil/sediment samples in the wetland area. Please notify the Department at least one week in advance of the field work. If you have any questions, please feel free to contact me at (845) 256-3153.

Sincerely,

Gianna Aiezza
Project Manager

cc: R. Pergadia
D. Desnoyers, Esq
C. Dowd
J. Rudisill (Avery Dennison)

APPENDIX B

BORING/WELL CONSTRUCTION LOGS

SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2-B1		COORDINATES: 966636.75, 620034.42	DAT E: 12/19/00
ELEVATION: 159.2		GWL: Depth 15.0 Date/Time 12/19/00	DATE STARTED: 12/19/00
GEOLOGIST/ENGINEER: Madhu Patel		GWL: Depth Date/Time	DATE COMPLETED: 12/19/00
DRILLING METHODS: Hollow Stem Auger			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm
0	0-2	S-1	20	23	20	27	16	Concrete	F	580
								Dark Brown cmf SAND, little cmf Gravel, trace		
	2 -4	S-2	17	20	21	22	10	SAME	SP	10,000
	4 -6	S-3	9	8	8	8	14	Dark Brown cmf SAND, some cmf Gravel, trace silt		10,000
5	6 -8	S-4	9	11	13	12	14	SAME		2,300
	8 -10	S-5	8	8	8	9	14	Dark Brown cmf SAND, little mf Gravel, trace silt		550
10	10 -12	S-6	8	9	5	10	12	Dark Brown mf SAND, trace silt, trace f gravel	SW	2000
	12-14	S-7	7	8	8	8	22	Brown mf SAND, some Silt, trace f gravel		1134
	14-16	S-8	6	7	7	8	22	Dark Brown cmf SAND, little Silt, trace f gravel	SM-SP	118
15	16-18	S-9	4	4	4	3	23	Dark Gray cmf SAND, little silt, trace f gravel		GWL. 15 ft 51
	18-20	S-10	4	4	4	4	22	SAME		75
20	20-22	S-11	1	1	1	1	10	Dark Gray and Black cmf SAND, tracs silt, trace f gravel	SP	30
	22-24	S-12	2	3	5	8	20	Dark Gray and Black cmf SAND, tracs silt, trace f gravel		17.5
	24-26	S-13	4	5	6	7	22	Dark Gray cmf SAND, little silt, trace clay	SM	41
25	26-28	S-14	3	4	4	5	22	SAME		21
								Dark Blue SILT and CLAY, some mf gravel and sand	CL	Till
	28-30	S-15	12	16	18	40	20	SAME		10
30								End of boring at 30 ft		

Notes:

Drilling Co: Advanced Drilling, Inc.
Pittstown, New Jersey 08867
Driller: Roger Logel

Size of Auger: 4.25 inch Diameter
Splitt Spoon: 2.0 feet, 2 inch OD

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873 732-302-9500/9504 (fax)

SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2-B2		COORDINATES: 966659.21, 620032.13	DATE: 12/19/2000
ELEVATION: 159.2		GWL: Depth 15.0 Date/Time 12/19/00	DATE STARTED:12/19/00
GEOLOGIST/ENGINEER: Madhu Patel		GWL: Depth Date/Time	DATE COMPLETED:12/19/00
DRILLING METHODS: Hollow Stem Auger			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm
0	0-2	S-1	21	22	23	25	12	Concrate	F	
								Brown cmf SAND, little silt, trace cmf gravel		1.9
	2 -4	S-2	12	17	20	12	15	SAME	SP	1.3
	4 -6	S-3	15	16	20	12	6	Dark Brown cmf SAND, some mf gravel, trace silt		1.8
5										
	6 -8	S-4	10	10	11	9	6	Dark Brown cmf SAND, little cmf gravel, trace silt		2.0
	8 -10	S-5	7	8	8	10	12	SAME		5.0
10	10 -12	S-6	5	6	6	6	17	Dark Brown mf SAND, some silt, trace f gravel		9.3
	12-14	S-7	5	5	6	6	18	Dark Brown cmf SAND, little silt, trace f gravel		6.9 GWL. 15 ft
	14-16	S-8	2	1	2	3	18	Dark Gray cmf SAND, little silt, trace clay	SM	1.9
15										
	16-18	S-9	3	4	4	3	16	Brown mf SAND, little silt, trace clay		1.8
	18-20	S-10	4	5	5	4	22	Dark Brown cmf SAND, trace silt, trace f gravel	SP	1.8
20	20-22	S-11	3	4	3	4	20	Dark Gray cmf SAND, trace f gravel, trace silt		40
	22-24	S-12	4	4	7	10	20	Dark Gray cmf SAND, little silt, trace f gravel		76
	24-26	S-13	5	6	8	9	18	Dark Gray cmf SAND, trace f gravel, trace silt & clay	SM-SP	5.6
25										
	26-28	S-14	7	8	9	9	20	SAME		0.9
	28-30	S-15	12	18	28	44	10	Dark Gray cmf SAND, little silt, trace clay	SM	
								Dark Blue Clay and SILT, trace cmf Gravel and sand	CL	Till
30	30 -32	S-16	12	10	11	13	12	SAME		
								End of boring at 32 feet		

Notes:

Drilling Co: Advanced Drilling, Inc.
Pittstown, New Jersey 08867
Driller: Roger Logel

Size of Auger: 4.25 inch Diameter
Splitt Spoon: 2.0 feet, 2 inch OD.

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873 732-302-9500/9504 (fax)

SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2-B3		COORDINATES: 966676.85, 620009.52	DATE: 12/20/2000
ELEVATION: 159.2		GWL: Depth 14.5 Date/Time 12/20/00	DATE STARTED:12/20/00
GEOLOGIST/ENGINEER: Madhu Patel		GWL: Depth Date/Time	DATE COMPLETED:12/20/00
DRILLING METHODS: Hollow Stem Auger			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm
0	0-2	S-1	27	29	18	25	12	Concrete	F	
								Brown cmf SAND, little silt, little cmf gravel		2.5
	2 -4	S-2	20	20	18	15	12	SAME	SP	2.4
	4 -6	S-3	9	9	8	8	12	Brown cmf SAND, some mf gravel, trace silt		4.6
5										
	6 -8	S-4	8	8	8	8	10	Brown cmf SAND, little cmf gravel, trace silt		3.8
	8 -10	S-5	8	9	8	9	15	Brown cmf GRAVEL, and mf sand, trace silt	GP-SP	4.5
10	10 -12	S-6	7	6	6	7	12	Dark Gray cmf SAND, trace silt, trace f gravel	SW	4.7
	12-14	S-7	6	7	7	6	16	Dark Gray cmf SAND, some cmf gravel, trace silt		3.3
										GWL. 14.5 ft
	14-16	S-8	6	6	6	6	15	Dark Gray cmf SAND, some f gravel little silt, trace		2.8
15										
	16-18	S-9	3	4	3	3	14	Dark Gray cmf SAND, little mf gravel trace silt,		2.4
	18-20	S-10	2	3	3	2	16	Dark Gray cmf SAND, and mf gravel, trace silt	SP-GP	2.5
20	20-22	S-11	2	2	3	2	22	Dark Gray and Brown cmf SAND, little silt, trace clay	SM	2.4
	22-24	S-12	2	2	2	2	20	Dark Gray cmf SAND, little silt, trace f gravel		4.2
	24-26	S-13	3	4	7	10	22	Dark Brown mf SAND, little silt, trace clay		2.3
25										
	26-28	S-14	5	7	10	12	20	Dark Brown cmf sand, little silt, trace f gravel	SP	5.0
	28-30	S-15	15	20	25	29	20	Dark Gray cmf SAND, little silt, trace clay		161
								Dark Blue Clay and SILT, trace cmf Gravel and sand	CL	Till
30								End of boring at 30 feet.		

Notes:

Drilling Co: Advanced Drilling, Inc.
Pittstown, New Jersey 08867
Driller: Roger Logel

Size of Auger: 4.25 inch Diameter
Splitt Spoon: 2.0 feet, 2 inch OD.

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AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873 732-302-9500/9504 (fax)

SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2-B4		COORDINATES: 966652.42, 620009.75	DATE: 12/19/2000
ELEVATION: 159.2		GWL: Depth 15.0 Date/Time 12/19/00	DATE STARTED:12/19/00
GEOLOGIST/ENGINEER: Madhu Patel		GWL: Depth Date/Time	DATE COMPLETED:12/20/00
DRILLING METHODS: Hollow Stem Auger			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm
0	0-2	S-1	21	22	23	29		Concrate	F	
							10	Dark Brown cmf SAND, little silt, little cmf gravel		3.8
	2 -4	S-2	16	17	18	19	3	SAME	SP	2.7
	4 -6	S-3	6	7	6	9	8	Dark Brown cmf SAND, some mf gravel, trace silt		2.8
5	6 -8	S-4	7	7	8	8	20	Dark Brown cmf SAND, little cmf gravel, trace silt		2.5
	8 -10	S-5	9	10	10	14	18	SAME		2.2
10	10 -12	S-6	7	7	7	8	12	Dark Brown cmf SAND, trace silt, trace f gravel	SM-SP	2.8
	12-14	S-7	7	8	6	5	18	Dark Brown cmf SAND, some cmf gravel, trace silt		4.2 GWL. 15 ft
	14-16	S-8	3	3	5	7	12	Dark Gray and Brown cmf SAND, trace silt and clay	SM	1.9
15	16-18	S-9	5	6	8	9	14	Dark Brown & Gray cmf SAND, little silt, trace clay		1.2
	18-20	S-10	5	5	6	8	8	Dark Gray cmf SAND, and mf gravel, trace silt	SP-GP	1.4
20	20-22	S-11	1	1	2	2	20	Dark Gray and Brown cmf SAND, little silt, trace clay	SM	1.5
	22-24	S-12	8	9	11	15	22	Dark Gray cmf SAND, little silt, trace f gravel	SP	1.5
	24-26	S-13	7	8	8	8	20	Dark Gray & Brown mf SAND, some f gravet & silt		260
25	26-28	S-14	8	8	9	8	21	Brown mf sand, little silt, trace f gravel		123
	28-30	S-15	W	O	H	1	18	Brown mf SAND, little silt, trace clay	SM	44
30	30-32	S-16	W	O	H	1	10	Brown mf SAND, little silt,		2.8
	23-34	S-17	2	3	5	7	22	Dark Gray cmf SAND, little f gravel, trace silt	SP	2.6
	34-36	S-18	18	20	25	29	20	Dark Blue CLAY and SILT, little f garvel and silt	CL	3.2 Till
35										

Notes:

End of boring at 36 feet.

Drilling Co: Advanced Drilling, Inc.
Pittstown, New Jersey 08867
Driller: Roger Logel

Size of Auger: 4.25 inch Diameter
Splitt Spoon: 2.0 feet, 2 inch OD

amec

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873 732-302-9500/9504 (fax)

SOIL BORING LOG

PROJECT NUMBER: 540614000	PROJECT NAME: Avery Dennison, New Windsor, New York		
BORING NUMBER: P2-B5	COORDINATES: 966630.47, 620010.32		DATE: 12/18/2000
ELEVATION: 159.2	GWL: Depth 15.0 Date/Time 12/18/00		DATE STARTED:12/18/00
GEOLOGIST/ENGINEER: Madhu Patel	GWL: Depth Date/Time		DATE COMPLETED:12/18/00
DRILLING METHODS: Hollow Stem Auger			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm
0	0-2	S-1	12	20	29	19	18	Concrate	F	
								Dark Brown cmf SAND, little silt & cmf gravel		3.2
	2 -4	S-2	10	11	12	9	15	SAME	SP	51
	4 -6	S-3	6	6	6	8	16	Dark Gray& Brown mf SAND, little cmf gravel, trace silt		56
5										
	6 -8	S-4	3	3	3	3	18	Dark Brown cmf SAND, some silt, trace clay	SM	17
	8 -10	S-5	3	3	3	3	10	SAME f gravel	SP	19
10	10 -12	S-6	3	2	2	2	20	Dark Gray cmf SAND, trace silt, trace f gravel		151
	12-14	S-7	3	4	4	4	10	Dark Gray cmf SAND, little cmf gravel, trace silt		8.7
										GWL. 15 ft
	14-16	S-8	3	3	4	4	15	Dark Brown cmf SAND, little cmf gravel trace silt		10
15										
	16-18	S-9	4	4	4	4	20	Dark Brown cmf SAND, little silt, trace mf gravel		4
	18-20	S-10	3	3	3	4	16	Dark Gray cmf SAND, little silt, trace f gravel		10.5
20	20-22	S-11	1	2	2	3	14	Dark Gray and Brown cmf SAND, little silt, trace clay	SM	2.7
	22-24	S-12	2	2	3	4	18	Dark Gray cmf SAND, little silt, trace f gravel	SP	95
	24-26	S-13	5	5	5	5	18	Dark Gray & Brown mf SAND, some silt, trace gravel	SM-SP	150
25										
	26-28	S-14	5	6	7	7	22	Dark Brown mf sand, trace silt, trace mf gravel		140
	28-30	S-15	5	7	12	16	16	Brown mf SAND, little silt, trace clay	SM	28
								Dark Blue CLAY and SILT trace mf sand & f gravel	CL	Till
30	30-32	S-16	18	19	29	28	22	Dark Blue CLAY little mf gravel wth pieces of rock		11
								End of the Boring at 32 feet		

Notes:

Drilling Co: Advanced Drilling, Inc.
Pittstown, New Jersey 08867
Driller: Roger Logel

Size of Auger: 4.25 inch Diameter
Split Spoon: 2.0 feet, 2 inch OD

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873 732-302-9500/9504 (fax)

SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2-B6		COORDINATES: 966616.53, 620007.68	DATE: 12/18/2000
ELEVATION: 159.2		GWL: Depth 15.0 Date/Time 12/18/00	DATE STARTED:12/18/00
GEOLOGIST/ENGINEER: Madhu Patel		GWL: Depth Date/Time	DATE COMPLETED:12/18/00
DRILLING METHODS: Hollow Stem Auger			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm
0	0-2	S-1	9	7	21	29	18	Concrate	F	
								Dark Brown SILT, some f sand, trace f gravel		5.6
	2 -4	S-2	16	20	18	15	6	SAME	SP	850
	4 -6	S-3	12	16	16	17	12	Dark Brown mf SAND, some silt, trace f gravel		8.8
5								trace clay		
	6 -8	S-4	10	12	12	11	2	SAME		2
										67
	8 -10	S-5	6	7	7	8	12	Dark Brown cmf SAND, little f gravel, trace silt		36
10	10 -12	S-6	3	3	3	4	10	Dark Brown & Gray cmf SAND, little mf gravel		21
								trace silt and clay		
	12-14	S-7	4	5	6	6	15	SAME		24
										GWL. 15 ft
	14-16	S-8	3	3	4	3	12	Dark Brown mf SAND, little silt	SM	56
15										
	16-18	S-9	3	2	3	2	14	Dark Brown mf SAND, little silt		12
	18-20	S-10	2	2	2	2	18	Dark Brown f SAND, little silt, trace clay		11.7
20	20-22	S-11	1	1	1	1	15	Dark Brown cmf SAND, little silt, trace clay		144
	22-24	S-12	1	1	1	1	16	SAME		14
	24-26	S-13	1	1	1	2	12	Dark Gray cmf SAND, little silt, trace f gravel	SP	1.4
25										
	26-28	S-14	2	3	1	2	14	Dark Gray cmf GRAVEL and SAND, little silt	GP-SM	40
								Dark Brown SILT, trace f sand and clay	SM	
	28-30	S-15	2	4	5	7	12	Dark Gray & Brown cmf SAND, little silt, trace clay,	SP	70
								trace f gravel		
30	30-32	S-16	10	12	12	13	12	SAME		24
								Dark Blue CLAY little mf gravel wth pieces of rock	CL	Till
	32-34	S-17	8	21	29	55	15	SAME		22
								End of boring at 34 feet		

Notes:

Drilling Co: Advanced Drilling, Inc.
Pittstown, New Jersey 08867
Driller: Roger Logel

Size of Auger: 4.25 inch Diameter
Splitt Spoon: 2.0 feet, 2 inch OD

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873 732-302-9500/9504 (fax)

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B7	COORDINATES:	966603.50, 620131.54	DATE:	02/12/01
ELEVATION:	158.8	GWL: Depth 15.0	Date/Time 02/05 @ 0935	DATE STARTED:	02/05/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/05/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 1	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	1	18	20	Asphalt				Pavement
1		12		Brown fine SAND, and medium Gravel, little Silt	SP			PID = 1.8 ppm
		9						
2		7						
	2	6	18	Brown fine SAND, and medium Gravel, little Silt	SP			PID = 1.2 ppm
3		6						
		2		Light Brown SILT, little Clay, trace fine Gravel	ML			
4		2						
	3	3	12	Brown SILT, little fine Sand, trace Clay, trace fine Gravel	ML			PID = 1.8 ppm
5		7						
		6						
6		5						
	4	6	18	Brown fine SAND, little medium-coarse Gravel, trace Silt	SP			PID = 1.3 ppm
7		7						
		9						
8		12						
	5	10	18	Brown fine-medium SAND, little fine-medium Gravel	SW			PID = 1.7 ppm
9		6						
		5						
10		4						
	6	6	14	Brown fine-medium SAND, little fine-medium Gravel	SW			PID = 0.9 ppm
11		5						
		5						
12		3						
	7	5	12	Brown fine-medium SAND, little fine-medium Gravel	SW			PID = 1.0 ppm
13		4						
		3		Brown fine-medium SAND, trace (-) fine Gravel	SW			
14		3						
	8	4	12	Brown fine SAND	SP			PID = 1.5 ppm
15		3						Wet @ 15.0 ft.

NOTES:

* 300-lb. hammer

End of boring at 20.0 ft.

Soil samples B7-(3.5-4.0), B7-(9.5-10.0), B7-(14.0-16.0), B7-(17.5-18.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B7	COORDINATES:	966603.50, 620131.54	DATE:	02/12/01
ELEVATION:	158.8	GWL: Depth 15.0	Date/Time 02/05 @ 0935	DATE STARTED:	02/05/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/05/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 2	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
		2						
		3						
16	9	3	24	Brown fine-medium SAND	SW			PID = 3.3 ppm
17		6						
		6		Light Brown fine SAND	SP			
18	10	5	18	Gray Clayey SILT, little fine Gravel	ML			PID = 1.0 ppm
		10						Lodgement till
19		7						
		7						
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

NOTES:

* 300-lb. hammer

End of boring at 20.0 ft.

Soil samples B7-(3.5-4.0), B7-(9.5-10.0), B7-(14.0-16.0), B7-(17.5-18.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B8	COORDINATES:	966625.92, 620128.92	DATE:	02/12/01
ELEVATION:	158.8	GWL: Depth 15.0	Date/Time 02/02 @ 1335	DATE STARTED:	02/02/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/02/01
DRILLING METHODS:	Mobile B-61; mud-rotary (Kendrick Drilling)			PAGE 1	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	1	9	18	Asphalt				Pavement
1		6		Brown fine SAND, and fine-medium Gravel	SP			PID = 1.8 ppm
		13		trace Silt, trace (-) Clay				
2		9						
	2	6	24	Brown fine SAND, and fine Gravel, little Silt	SP			PID = 1.8 ppm
3		5						
		4		Light Brown fine SAND, and Silt	SM			
4		2		Brown fine SAND, and Silt, trace fine Gravel	SM			
	3	3	18	Brown fine SAND, and fine Gravel	SP			PID = 1.4 ppm
5		7						
		5						
6		6						
	4	7	18	Brown fine SAND, and fine Gravel	SP			PID = 1.4 ppm
7		6						
		5						
8		4		Brown fine-medium SAND, and medium Gravel	SW			
	5	8	18	Brown fine-medium SAND, and medium Gravel	SW			PID = 1.4 ppm
9		6						
		6						
10		3						
	6	4	18	Brown fine-medium SAND, and medium Gravel	SW			PID = 1.5 ppm
11		3						
		2						
12		3						
	7	6	18	Brown fine-medium SAND, and medium Gravel	SW			PID = 3.4 ppm
13		5						
		4						
14		3						
	8	3	**NR					** No recovery
15		4						Wet @ 15.0 ft.

NOTES:

* 300-lb. hammer

End of boring at 22.0 ft.

Soil samples B8-(4.5-5.0), B8-(9.0-10.0), B8-(12.0-14.0), B8-(16.0-18.0), and B8-(19.5-20.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B8	COORDINATES:	966625.92, 620128.92	DATE:	02/12/01
ELEVATION:	158.8	GWL: Depth 15.0	Date/Time 02/02 @ 1335	DATE STARTED:	02/02/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/02/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 2	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
		3	**NR					** No recovery
		3						
16	9	4	18	Brown fine SAND, some Silt	SM			PID = 11.9 ppm
		5						Silt lenses
17		2						
		1						
18	10	1	18	Brown fine SAND, and Silt	SM			PID = 1.5 ppm
		2						
19		24						
		23		Light Brown SILT, some Clay	ML			
20	11	10	18	Light Brown SILT, some Clay	ML			PID = 1.5 ppm
		12						
21		11		Gray Clayey SILT, little fine Gravel	ML			Lodgement till
		12						
22								
23								
24								
25								
26								
27								
28								
29								
30								

NOTES:

* 300-lb. hammer

End of boring at 22.0 ft.

Soil samples B8-(4.5-5.0), B8-(9.0-10.0), B8-(12.0-14.0), B8-(16.0-18.0), and B8-(19.5-20.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B9	COORDINATES:	966651.17, 620126.02	DATE:	02/12/01
ELEVATION:	158.7	GWL: Depth	16.0 Date/Time 02/02 @ 1035	DATE STARTED:	02/02/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/02/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 1	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	1	7	18	Asphalt				Pavement
1		17		Brown fine SAND, some medium Gravel	SP			PID = 1.4 ppm
		11						
2		9						
	2	11	12	Brown fine SAND, some medium Gravel	SP			PID = 1.3 ppm
3		8						
		7						
4		5						
	3	3	6	Brown fine SAND, some medium Gravel	SP			PID = 1.4 ppm
5		2						
		1						
6		2						
	4	4	12	Brown fine SAND, some medium Gravel	SP			PID = 1.3 ppm
7		6		Light Brown SILT, little fine Sand	SM			
		6						
8		7						
	5	3	18	Black fine SAND, some fine-medium Gravel	SP			PID = 1.3 ppm
9		6						
		7		Brown medium SAND, little medium Gravel	SP			
10		8						
	6	8	12	Brown medium SAND, little medium Gravel	SP			PID = 1.7 ppm
11		8						
		8						
12		7						
	7	7	18	Brown coarse SAND, and medium-coarse	SP			PID = 1.7 ppm
13		3		Gravel, trace Silt				
		4						
14		5						
	8	7	18					
15		7		Brown medium-coarse GRAVEL, some Silt	GM			PID = 1.8 ppm

NOTES:

* 300-lb. hammer

End of boring at 26.0 ft.

Soil samples B9-(4.5-5.0), B9-(9.5-10.0), B9-(15.0-15.5), B9-(19.5-20.0), and B9-(24.5-25.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B9	COORDINATES:	966651.17, 620126.02	DATE:	02/12/01
ELEVATION:	158.7	GWL: Depth 16.0	Date/Time 02/02 @ 1035	DATE STARTED:	02/02/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/02/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 2	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
		7		Brown coarse GRAVEL, and Silt, trace fine Sand	GM			
		8						Wet @ 16.0 ft.
16	9	10	18	Brown coarse GRAVEL, and Silt, trace fine Sand	GM			PID = 1.7 ppm
		9						
17		8						
		7						
18	10	8	18	Brown coarse GRAVEL, and Silt, trace fine Sand	GM			PID = 4.7 ppm
		8		Light Brown SILT, trace (-) Clay	ML			
19		8		Brown fine SAND, little Silt	SM			
		8						
20	11	8	** NR					** No Recovery
		9						
21		7						
		9						
22	12	5	24	Light Brown fine SAND, little Silt	SM			PID = 1.2 ppm
		7		Light Brown SILT	ML			
23		7						
		9						
24	13	8	18					PID = 2.0 ppm
		10		Gray SILT, some Clay, little fine Sand, trace medium Gravel	ML			Lodgement till
25		9						
		12						
26								
27								
28								
29								
30								

NOTES:

* 300-lb. hammer

End of boring at 26.0 ft.

Soil samples B9-(4.5-5.0), B9-(9.5-10.0), B9-(15.0-15.5), B9-(19.5-20.0), and B9-(24.5-25.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	**PROJECT NAME:**	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B10	**COORDINATES:**	966663.90, 620104.09	**DATE:**	02/12/01
ELEVATION:	158.7	**GWL: Depth**	15.5 **Date/Time** 02/01 @ 1055	**DATE STARTED:**	02/01/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	**Depth**	**Date/Time**	**DATE COMPLETED:**	02/01/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			**PAGE** 1	**OF** 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	1	3	14	Asphalt				Pavement
1		2		Brown fine SAND, little fine Gravel, trace (-) Clay	SW			PID = 1.9 ppm
		1						
2								
	2	1	16					PID = 1.9 ppm
3		2						
		1		Light Brown fine SAND, trace fine Gravel	SP			
4		3						
	3	1	24					PID = 2.9 ppm
5		2						
		2		Brown fine-medium SAND, little fine Gravel	SW			
6		3						
	4	4	14	Brown medium-coarse SAND, and medium	SW			PID = 3.1 ppm
7		5		Gravel, trace (-) Silt				
		6						
8		8		Brown coarse SAND, little fine-medium Gravel	SP			
	5	5	14					PID = 2.0 ppm
9		1						
		2						
10		3						
	6	8	14	Brown coarse SAND, little fine-medium Gravel	SP			PID = 2.1 ppm
11		6						
		5						
12		6						
	7	6	14	Brown coarse SAND, little fine-medium Gravel	SP			PID = 2.1 ppm
13		5						
		5						
14		5						
	8	6	14	Brown coarse SAND, little fine-medium Gravel	SP			PID = 9.7 ppm
15		5						

NOTES:

* 300-lb. hammer

End of boring at 30.0 ft.

Soil samples B10-(4.5-5.0), B10-(9.5-10.0), B10-(14.5-15.0), B10-(23.5-24.0), and B10-(28.0-28.5) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B10	COORDINATES:	966663.90, 620104.09	DATE:	02/12/01
ELEVATION:	158.7	GWL: Depth 15.5	Date/Time 02/01 @ 1055	DATE STARTED:	02/01/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/01/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 2	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
		4		Brown coarse SAND, little medium Gravel	SP			Wet @ 15.5 ft.
		4						
16	9	5	13	Brown coarse SAND, little medium Gravel	SP			PID = 2.0 ppm
		5						
17		5						
		4						
18	10	5	2	Brown coarse SAND, little medium Gravel	SP			PID = 7.0 ppm
		5						
19		4						
		5						
20	11	6	14	Brown coarse SAND, little medium Gravel	SP			PID = 7.5 ppm
		4						
21		4						
		4						
22	12	4	12	Brown coarse SAND, little medium Gravel,	SP			PID = 7.7 ppm
		5		trace Silt				
23		6		Brown medium GRAVEL, little coarse Sand	GW			
		5						
24	13	8	14	Light-brown fine SAND, trace fine Gravel,	SP			PID = 12.5 ppm
		8		trace (-) Silt				
25		8		Brown fine SAND	SP			
		8						
26	14	8	14	Brown fine SAND	SP			PID = 6.1 ppm
		8						
27		8						
		7						
28	15	9	14	Brown fine SAND	SP			PID = 2.7 ppm
		8						
29		16		Gray Clayey SILT, some fine Gravel, trace	CL			
30		15		fine-medium Sand				Lodgement till

NOTES:

* 300-lb. hammer

End of boring at 30.0 ft.

Soil samples B10-(4.5-5.0), B10-(9.5-10.0), B10-(14.5-15.0), B10-(23.5-24.0), and B10-(28.0-28.5) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B11	COORDINATES:	966638.90, 620106.44	DATE:	02/12/01
ELEVATION:	158.7	GWL: Depth 15.7	Date/Time 02/01 @ 1230	DATE STARTED:	02/01/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/01/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 1	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	1	4	18	Asphalt				Pavement
1		3		Brown fine SAND, and Silt, little fine Gravel	SP			PID = 2.8 ppm
		4						
2		5						
	2	8	18	Light Brown SILT, little Clay, trace fine Gravel	ML			PID = 2.4 ppm
3		5						
		2						
4		2						
	3	2	18	Light Brown fine SAND, little medium Gravel	SP			PID = 3.8 ppm
		2		Light Brown SILT, trace fine SAND, trace	SM			
5		2		medium Gravel				
		2		Light Brown fine SAND, and Silt	SM			
6	4	2	18	Brown medium-coarse SAND,	SW			PID = 2.1 ppm
		3		some medium Gravel				
7		4						
		8						
8	5	4	6					PID = 6.3 ppm
		5						
9		5						
		5						
10	6	6	6					PID = 2.5 ppm
		7						
11		7		Light Brown fine SAND, and Silt, trace fine	SM			
		14		Gravel				
12	7	27	6	Brown medium-coarse SAND,	SW			PID = 2.5 ppm
		11		and coarse Gravel, trace Silt				
13		9						
		7						
14	8	9	18					PID = 10.7 ppm
15		7						

NOTES:

* 300-lb. hammer

End of boring at 24.0 ft.

Soil samples B11-(4.5-5.0), B11-(9.5-10.0), B11-(14.5-15.0), B11-(19.0-19.5), and B11-(21.5-22.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B11	COORDINATES:	966638.90, 620106.44	DATE:	02/12/01
ELEVATION:	158.7	GWL: Depth 15.7	Date/Time 02/01 @ 1230	DATE STARTED:	02/01/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/01/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 2	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
		5		Brown medium-coarse SAND,	SW			Wet @ 15.7 ft.
		4		and coarse Gravel, trace Silt				
16	9	14	12					PID = 1.9 ppm
		7						
17		9						
		7						
18	10	6	12	Tan SILT, some fine SAND, trace (-)	SM			PID = 25.7 ppm
		5		medium Gravel				
19		6		Light Brown fine SAND	SP			
		8		Dark Brown fine-medium SAND	SW			
20	11	4	18	Brown coarse SAND, little medium Gravel	SP			PID = 13.6 ppm
		6		Tan SILT, some fine Sand				
21		8						
		9		Gray Clayey SILT, trace fine Gravel, trace	CL			Lodgement till
22	12	4	12	fine Sand				PID = 2.5 ppm
		6						
23		8						
		8						
24								
25								
26								
27								
28								
29								
30								

NOTES:

* 300-lb. hammer

End of boring at 24.0 ft.

Soil samples B11-(4.5-5.0), B11-(9.5-10.0), B11-(14.5-15.0), B11-(19.0-19.5), and B11-(21.5-22.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	**PROJECT NAME:**	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B12	**COORDINATES:**	966613.98, 620109.70	**DATE:**	02/12/01
ELEVATION:	158.8	**GWL: Depth** 15.0	**Date/Time** 02/01 @ 1510	**DATE STARTED:**	02/01/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	**Depth**	**Date/Time**	**DATE COMPLETED:**	02/02/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			**PAGE** 1	**OF** 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	1	5	6	Asphalt				Pavement
		4		Brown fine SAND, and medium Gravel	SP			PID = 1.3 ppm
1		5						
		4						
2	2	5	6	Brown fine SAND, and medium-coarse Gravel	SP			PID = 1.6 ppm
		5						
3		5						
		3						
4	3	5	18	Brown fine SAND, and medium-coarse Gravel	SP			PID = 2.3 ppm
		5						
5		5		Brown fine-medium SAND	SW			
		5		Light Brown fine-medium SAND	SW			
6	4	5	18					PID = 1.6 ppm
		9						
7		11		Brown fine SAND, and medium-coarse Gravel	SP			
		12						
8	5	14	18	Brown fine SAND, and medium-coarse Gravel	SP			PID = 1.4 ppm
		14						
9		7						
		7						
10	6	11	12	Brown fine-medium SAND, little fine Gravel	SW			PID = 2.2 ppm
		11						
11		4						
		4						
12	7	8	6	Brown fine SAND, and Silt, trace (-) Clay	SM			PID = 1.4 ppm
		6		Dark Brown fine SAND, and fine-medium Gravel	SP			
13		8						
		8						
14	8	6	3	Brown coarse SAND, and medium-coarse Gravel	SP			PID = 1.2 ppm
15		6						Wet @ 15.0 ft.

NOTES:

* 300-lb. hammer

End of boring at 22.0 ft.

Soil samples B12-(4.5-5.0), B12-(9.5-10.0), B12-(19.5-20.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER:	5-4061-4000-0009	PROJECT NAME:	Avery Dennison - New Windsor, NY		
BORING NUMBER:	P2-B12	COORDINATES:	966613.98, 620109.70	DATE:	02/12/01
ELEVATION:	158.8	GWL: Depth	15.0 Date/Time 02/01 @ 1510	DATE STARTED:	02/01/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	Depth	Date/Time	DATE COMPLETED:	02/02/01
DRILLING METHODS:	Mobile B-61; mud rotary (Kendrick Drilling)			PAGE 2	OF 2

DEPTH (ft.)	SAMPLE TYPE & NO.	*BLOWS ON SAMPLER PER (6-in.)	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
		5		Brown coarse SAND, and medium-coarse Gravel	SP			
		5						
16	9	3	3	Brown fine SAND, some Silt, trace (-) Clay	SM			PID = 1.3 ppm
		3						
17		2						
		2						
18	10	5	24	Brown fine SAND, little Silt	SM			PID = 6.0 ppm
		9						
19		10						
		7		Gray Clayey SILT, little fine Sand, trace	ML			Lodgement till
20	11	7	24	medium Gravel				PID = 1.5 ppm
		9						
21		9		Gray Clayey SILT, little fine Sand, trace	ML			
		12		medium Gravel				
22								
23								
24								
25								
26								
27								
28								
29								
30								

NOTES:

* 300-lb. hammer

End of boring at 22.0 ft.

Soil samples B12-(4.5-5.0), B12-(9.5-10.0), B12-(19.5-20.0) submitted for laboratory analyses. Sample depths correspond to interval in parentheses.

Boring sealed with cement/bentonite via grout pump and tremie pipe.

SOIL BORING LOG

PROJECT NUMBER: 540614000	PROJECT NAME: Avery Dennison, New Windsor, New York		
BORING NUMBER: P2-B13	COORDINATES: 966637.13, 620078.98		DAT E: 02/27/01
ELEVATION: 159.2	GWL: Depth 15.0 Date/Time 2/16/01		DATE STARTED: 02/16/01
GEOLOGIST/ENGINEER: Madhu Patel	GWL: Depth Date/Time		DATE COMPLETED: 02/16/01
DRILLING METHODS: Geoprobe - Advance 66 DT			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm	REMARKS Lab Sample
0	0 - 4	MC-1					44	Concrete Brown cmf SAND, little cmf Gravel, trace Silt with Pieces of concrete		2.6	
								with f Gravel			
	4 - 8	MC-2						Brown cmf SAND, little mf Gravel, trace Silt	SW		
5							46			4.4	P2B13(5.0-5.5)
								Damp- Brown cmf SAND, little mf Gravel, trace Silt and Clay			
	8 - 12	MC-3					42	Same mf Gravel		8.7	
10								Same cmf Gravel			P2B13(10-10.5)
	12-16	MC-4					40	Moist- Dark Brown cmf SAND, little cmf Gravel, trace Silt and Clay	SW	66	
								Moist- Dark Brown cmf SAND, little cmf Gravel, trace Silt and Clay			GWL- 15.0 ft.
15											P2B13(15-15.5)
	16-20	MC-5					42	Dark Brown cmf SAND, trace F Gravel, trace Silt and Clay		115	
								Dark Brown cmf SAND, little Silt			P2B13(19.5-20.0)
20	20-24	MC-6					44	Brown f SAND, some Silt		75	
								Brown f SAND, some Silt and Clay			P2B13(23.0-23.5)
								Blue Silt and Clay w/ pieces of rock and Gravel etc.	ML-CL		Till
								End of boring at 24 ft			

Notes:

Drilling Co: Subsurface Investi Sub Surface Investigation Inc.
Point Pleasant, Ne Point Pleasant, New Jersey 08742
Driller: Art and George

MC: Micro Core - 4 ft Lexan liner

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SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2-B14		COORDINATES: 966662.46, 620075.57	DAT E: 02/27/01
ELEVATION: 159.2		GWL: Depth 15.0 Date/Time 2/16/01 10:00	DATE STARTED: 02/16/01
GEOLOGIST/ENGINEER: S. Posten		GWL: Depth Date/Time	DATE COMPLETED: 02/16/01
DRILLING METHODS: Geoprobe - Advance 66 DT			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm	REMARKS Lab Sample
0	0 - 4	MC-1					42	Concrete Brown cm SAND, somef Gravel		5.9	
	4 - 8	MC-2					44	Brown cm SAND, some f Gravel			
5								Brown cm SAND, trace f Gravel	SW	7.9	P2B14(5.0-5.5)
	8 - 12	MC-3					44	SAME			
								Brown cm SAND, trace cf Gravel		5.9	
10											P2B14(9.5-10.0)
	12-16	MC-4					24	Brown cmf SAND, trace c Gravel	SW	43	GWL- 15.0 ft.
								Brown mf SAND, trace c Gravel			P2B14(14.5-15.0)
15											
	16-20	MC-5					36	Brown cm SAND, trace cf Gravel		37	P2B14(19.5-20.0)
20	20-24	MC-6					40	Brown mf SAND, trace cf Gravel			(Duplicate)
								Tan silty SAND		1.3	
								Brown mf SAND, trace cf Gravel with alternate bands of Silty SAND(6 inches)	SW		
	24-28	MC-7						Brown mf SAND, well sorted			
25								Tan silty SAND (6 inchs)		1.3	ms/msd-(25.5-26)
								C Gravel (2 inches)			P2B14(26.0-26.5)
								Gray SILT and CLAY with Gravel & pieces of Rock	CL		Till
								End of boring at 28 ft			

Notes:

Drilling Co: Subsurface Investi Sub Surface Investigation Inc.
Point Pleasant, Ne Point Pleasant, New Jersey 08742
Driller: Art and George

MC: Micro Core - 4 ft Lexan liner

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SOIL BORING LOG

PROJECT NUMBER: 540614000	PROJECT NAME: Avery Dennison, New Windsor, New York		
BORING NUMBER: P2-B15	COORDINATES: 966686.34, 620073.97		DAT E: 02/28/01
ELEVATION: 159.2	GWL: Depth 14.0 Date/Time 2/14/01 12:00		DATE STARTED: 02/14/01
GEOLOGIST/ENGINEER: S. Posten	GWL: Depth Date/Time		DATE COMPLETED: 02/14/01
DRILLING METHODS: Geoprobe - Advance 66 DT			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm	REMARKS Lab Sample
0	0 - 4	MC-1					30	Concrete			
								Tan mf SAND, trace Gravel	SW	3.2	
								Brown cf SAND, trace Gravel			Poorly sorted
								Brown cf SAND, some Gravel, trace Silt			
	4 - 8	MC-2					30	Tan cf SAND, trace fc Gravel			
5								Brown cm SAND, trace fc Gravel	SW	11.9	P2B15(5.0-5.5)
								SAME			
								SAME			
	8 - 12	MC-3					46	Brown mf SAND, some Gravel	SP		
								SAME		3.2	
10								Brown cm SAND (well sorted)	SW		P2B15(10.5-11.0)
	12-16	MC-4					36	Brown cmf SAND (well sorted)			
										3.2	GWL- 14.0 ft.
								Brown f Gravel with cm Sand			P2B15(14.5-15.0)
15	16-20	MC-5					30	Brown f GRAVEL with cm Sand	GW		
										3.2	
											P2B15(19.5-20.0)
20	20-24	MC-6					34	Brown f GRAVEL with cm Sand			
									GW		
								Brown c GRAVEL, trace mf Sand w/ rock fragment		10.6	
	24-28	MC-7					30	Tan cf Gravel, trace Silt			
25								Brown and Tan mf SAND, little Silt, trace f Gravel	SP	25.7	P2B15(25.5-26)
								alternate lenses of Silt and Sand (4 to 6 inches)			
								Tan Silt and f SAND	SM		P2B15(28.-28.5)
	28-32	MC-8						Gray SILT/CLAY with cf Gravel (interbedded)l		3.2	
								Till (very stiff/dense)	CL		
30											
								End of boring at 32 ft			

Notes:

Drilling Co: Subsurface Investi Sub Surface Investigation Inc.
Point Pleasant, Ne Point Pleasant, New Jersey 08742
Driller: Art and George

MC: Micro Core - 4 ft Lexan liner

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SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2-B16		COORDINATES: 966674.51, 620060.64	DAT E: 02/28/01
ELEVATION: 159.2		GWL: Depth 14.5 Date/Time 2/15/01 12:00	DATE STARTED: 02/15/01
GEOLOGIST/ENGINEER: Madhu Patel		GWL: Depth Date/Time	DATE COMPLETED: 02/15/01
DRILLING METHODS: Geoprobe - Advance 66 DT			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm	REMARKS Lab Sample
0	0 - 4	MC-1						Concrete			
						42		Brown cmf SAND, trace f Gravel	SW	3	
								Brown cmf SAND, trace Silt	SM		
	4 - 8	MC-2				44		Brown and Dark Brown cmf SAND, trace mf Gravel			
5								trace Silt		2.5	P2B16(5.0-5.5)
	8 - 12	MC-3				40		Brown cmf SAND, trace Silt, trace f Gravel	SW	6.2	
10								Dark Brown cmf SAND, little Silt, trace cmf Gravel			P2B16(10.5-11.0)
	12-16	MC-4				42		Brown mf SAND, trace Silt			
								Brown cmf SANDand cmf Gravel, trace Silt and		4.4	GWL- 14.50 ft.
								Clay	SW		P2B16(14.0-15.0)
15											
	16-20	MC-5				44		SAME		5.3	
								Brown cmf SAND, trace F Gravel, trace Silt and Clay			P2B16(19.5-20.0)
20	20-24	MC-6				38		Dark Brown cmf SAND, trace F Gravel, trace Silt	SW	20	
								Dark Brown cmf SAND, trace Silt			
								Brown mf SAND, some Silt			
	24-28	MC-7				42		Brown Silt and F SAND			P2B16(24.0-24.5)
25										4.6	
								Brown mf SAND, some Silt (loomy Sand)	SM		
	28-32	MC-8				48		Brown mf SAND, some Silt, trace Clay		1.9	P2B16(29.5-30.5)
30								Dark Blue SILT and CLAY with cmf Gravel and Pieces of Rock	CL		Till
								End of boring at 32 ft			

Notes:

Drilling Co: Subsurface Investigations, Inc.
Point Pleasant, New Jersey 08742
Driller: Art and George

MC: Micro Core - 4 ft Lexan liner

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SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P2 -B17		COORDINATES: 966649.67, 620062.02	DAT E: 02/28/01
ELEVATION: 159.2		GWL: Depth 14.0 Date/Time 2/15/01 9:00	DATE STARTED: 02/15/01
GEOLOGIST/ENGINEER: S. Posten		GWL: Depth Date/Time	DATE COMPLETED: 02/15/01
DRILLING METHODS: Geoprobe - Advance 66 DT			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm	REMARKS Lab Sample
0	0 - 4	MC-1						Concrete			
							46	Brown cm SAND, trace Gravel	SW	8.5	
								Brown f SAND, some Silt (Silty SAND)	SM		
								Brown cmf SAND, some cf Gravel, trace Silt			
	4 - 8	MC-2					44				
5									SW	4.2	P2B17(5.0-5.5)
								SAME			
	8 - 12	MC-3					30			7.2	
								Brown c SAND, trace FC Gravel	SP		
10											P2B17(10.5-11.0)
								Brown cm SAND with cf Gravel			
	12-16	MC-4					36	Brown cf GRAVEL, little cm Sand	SW	7.1	
											GWL- 14.0 ft.
								Brown cm SAND, trace Silt (well sorted)			P2B17(13.5-13.0)
15								Brown Silty SAND (6 inch)	SM		
	16-20	MC-5					40				
								SAME (6 inch mf Sand)		188	
								Brown cm SAND, trace F Gravel	SW	201	P2B17(19.5-20.0)
20	20-24	MC-6					40	Brown f Gravel with cm Sand, trace C Gravel	GW		
								Brown Silty SAND (6 inch)	SM		
								Brown cm SAND, trace F Gravel	SW	13.9	
	24-28	MC-7					38	Brown mf SAND			
25								Tan Sity SAND(4 Inch) w/ cf Gravel(4 inch),		2.0	P2B15(25 -25.5)
								Gray SILT/CLAY with cf Gravel	CL		
	28-32	MC-8						SAME			
								End of boring at 28 ft			

Notes:

Drilling Co: Subsurface Investi Sub Surface Investigation Inc.
Point Pleasant, Ne Point Pleasant, New Jersey 08742
Driller: Art and George

MC: Micro Core - 4 ft Lexan liner

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SOIL BORING LOG

PROJECT NUMBER: 540614000	PROJECT NAME: Avery Dennison, New Windsor, New York		
BORING NUMBER: P2-B18	COORDINATES: 966625.72, 620063.41		DAT E: 02/27/01
ELEVATION: 159.2	GWL: Depth 15.0 Date/Time 2/16/01 10:00		DATE STARTED: 02/15/01
GEOLOGIST/ENGINEER: Madhu Patel	GWL: Depth Date/Time		DATE COMPLETED: 02/15/01
DRILLING METHODS: Geoprobe - Advance 66 DT			PAGE 1 OF 1

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	REMARKS PID ppm	REMARKS Lab Sample
	0 - 4	MC-1						Concrete			
							42	Brown cmf SAND and cmf Gravel, trace Silt with	SW	3	
								Pieces of Concrete etc			
								Brown cmf SAND, little cmf Gravel			
	4 - 8	MC-2					40	Dark Brown cmf SAND, some cmf Gravel, trace		9.0	
5								Silt			P2B18(5.0-5.5)
								SAME			
	8 - 12	MC-3					44	Brown cmf SAND, little cmf Gravel, little Silt	SW	7.6	
								Damp-Moist, Dark Brown cmf SAND, little cmf			
10								Gravel, trace Silt			P2B18(10-10.5)
	12-16	MC-4					42	SAME	SW	95	
								Wet, Dark Brown cmf SAND, little mf Gravel, trace			GWL- 15.0 ft
15								Silt (silt layer 15.5)			P2B18(15-16)
	16-20	MC-5					43	Dark Gray cmf SAND, some Silt, trace Clay	SW	5.2	
								Brown cmf SAND, some Silt, trace Clay			P2B18(19.5-20.0)
20	20-24	MC-6					45	SAME		75	
								Brown cmf SAND, some Silt, trace Clay			P2B13(22.0-23.0)
								Blue Silt and Clay w/ pieces of rock and Gravel etc.	CL		Till
								End of the Boring at 24.00 feet			

Notes:

Drilling Co: Subsurface Investi Sub Surface Investigation Inc.
Point Pleasant, Ne Point Pleasant, New Jersey 08742
Driller: Art and George

MC: Micro Core - 4 ft Lexan liner

amec

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SOIL BORING LOG

PROJECT NUMBER: 540614000	PROJECT NAME: Avery Dennison, New Windsor, New York		
BORING NUMBER: MW-4S	COORDINATES: 966667.6, 620475.5	DATE: 02/08/01	
ELEVATION: TOC = 148.33	GWL: Depth 7.0 feet Date/Time: 02/06/01/11.00	DATE STARTED: 02/07/01	
GEOLOGIST/ENGINEER: Madhu Patel	GWL: Depth Date/Time:	DATE COMPLETED: 02/07/01	
DRILLING METHODS: Water/mud rotary		PAGE 1 OF 1	

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	Well Const.	REMARKS
0								Fill Material- Brown cmf SAND, trace silt, trace f gravel with pieces of wood, brick, concrete etc.	F		Grout 0-2' bgs
								Fill Material- Brown cmf SAND, little silt, trace f gravel with pieces of wood, brick, concrete etc.			Riser 0-5' bgs
								SAME			Bentonite 2-3' bgs
											Sand 3-15' bgs
5								Fill Material- Brown cmf SAND, little silt, trace f gravel with pieces of, rock, concrete etc.	F		GWL: 7.0 ft
								Gray Clayey SILT, trace cmf sand	ML-CL		Screen 5-15' bgs
								Brown Silt with pieces of decomposed wood (peat)	Peat		
10								Gray SILT, little cmf sand, trace clay with pieces of wood.	ML-CL		
								Gray Clayey SILT, trace f sand			
15								End of boring at 15.00 feet.			

Notes:

Drilling Co: Kendrick, Chester, New York.

Driller : Tom Kendrick

Well develped for 1 hour - 0.25 GPM (very low recharge).

Soil classification was described by soil cuttings

Size of Hole: 10 inch Diameter

Screen - From 5 - 15 feet, 4 inch dia., sch 40 PVC, 0.010 inch. Slott

Riser- from 0.0 to 5.0 feet, 4 inch. OD, sch 40 PVC

Sand - 3.0 to 15.0 feet

Bentonite- 2.0 to 3.0 feet

Grout - 0.0 to 2.0 feet

Stick up - 2.5 feet

Protective Casing (steel).

amec

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PROJECT NUMBER:	5-4061-4000-0009	**PROJECT NAME:**	Avery Dennison - New Windsor, NY		
BORING NUMBER:	MW-5	**COORDINATES:**	966722.0, 620580.4	**DATE:**	02/12/01
ELEVATION:	TOC = 140.67	**GWL: Depth** 0.8	**Date/Time** 02/05 @ 1125	**DATE STARTED:**	02/05/01
ENGINEER/GEOLOGIST:	E. Kohlsaat	**Depth**	**Date/Time**	**DATE COMPLETED:**	02/05/01
DRILLING METHODS:	Driven well-point (Kendrick Drilling)			**PAGE** 1 **OF** 1	

DEPTH (ft.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (')	RECOVERY (in)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	1		6	Black-Gray SILT, and Clay (roots)	PT		CASING	Meadow mat
								Wet @ 0.8 ft.
	2		6	Black-Brown SILT, trace Clay	OL			
1								
	3		4	Black-Brown SILT, trace Clay	OL			
		H						
	4	A	6	Black-Brown SILT, trace Clay	OL			
		N						
2	5	D	3	Black-Brown SILT, trace Clay	OL			
	6		6	Black-Brown SILT, trace Clay	OL			
3	7		5	Black-Brown SILT, trace fine Sand, trace (-) Clay	OL		SCREEN	
	8	A	6	Dark Gray SILT, little fine Sand, trace (-) Clay	SM			
		U						
4	9	G	6					
		E		Gray SILT, and fine Sand	SM			Alternating Black and Gray SILT lenses
	10	R	4					
				Gray fine SAND, and Silt	SM			
5	11		6	Gray Clayey SILT, trace fine Sand	ML			
	12		6	Gray Clayey SILT, trace fine Sand, trace (-) fine Gravel	ML			
6								

NOTES:

End of boring at 6.0 ft.

Well Construction:

Screen (2.0 in. diameter stainless steel wire mesh screen)	-	(6.0 - 1.0 ft.)
Casing (2.0 in. diameter black galvanized pipe)	-	(1.0 - + 1.0 ft.)
Grout (gravel mix)	-	(1.0 - + 0.5 ft.)

Samples obtained for stratigraphy (no samples submitted for laboratory analysis)

SOIL BORING LOG

PROJECT NUMBER: 540614000	PROJECT NAME: Avery Dennison, New Windsor, New York		
BORING NUMBER: P-1	COORDINATES: 966673.9, 620478.2	DATE: 02/08/01	
ELEVATION: TOC = 147.95	GWL: Depth 7.0 feet Date/Time: 02/06/01/11.00	DATE STARTED: 02/06/01	
GEOLOGIST/ENGINEER: Madhu Patel	GWL: Depth Date/Time:	DATE COMPLETED: 02/07/01	
DRILLING METHODS: Water/mud rotary		PAGE 1 OF 2	

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	Well Const.	REMARKS
0	0-2	S-1	1	2	3	4	18	Fill Material- Brown cmf SAND, trace silt, trace f gravel with pieces of wood, brick, concrete etc.	F		
	2-4	S-2	2	2	3	3	12	Fill Material- Brown cmf SAND, little silt, trace f gravel with pieces of wood, brick, concrete etc.			
	4-6	S-3	2	1	2	3	12	SAME			
5	6-8	S-4	1	3	12	14	18	Fill Material- Brown cmf SAND, little silt, trace f gravel with pieces of, rock, concrete etc.	F		GWL: 7.0 ft
	8-10	S-5	8	3	1	1	18	Gray Clayey SILT, trace cmf sand	ML-CL		
								Brown Silt with pieces of decomposed wood (peat)	Peat		
10	10-12	S-6	1	2	2	2	18	Gray SILT, little cmf sand, trace clay with pieces of wood.			Grout 0-34' bgs
	14-16	S-7	2	3	2	3	18	Gray Clayey SILT, trace f sand			
15									ML-CL		Riser 0-38' bgs
	19-21	S-8	3	8	9	12	15	Brownish Yellow CLAY and SILT, trace f gravel	CL-ML		
20	24-26	S-9	7	9	8	7	18	Brown cmf SAND, little mf gravel, trace silt	SP		
25	29-31	S-10	8	9	20	22	16	Brown cmf SAND, little cmf gravel, trace silt with pieces of rock			
30	34-36	S-11	8	9	11	11	15	Brown cmf SAND, trace silt, trace clay	SW		Bentonite 34-36' bgs

Notes:

Drilling Co: Kendrick, Chester, New York.

Driller : Tom Kendrick

Well develped for 1 hour - 2 GPM

Size of Hole: 6 inch Diameter

Screen - From 38 - 40 feet, 2 inch dia., sch 40 PVC, 0.010 inch slot

Riser- from 0.0 to 38.0 feet, 2 inch. OD, sch 40 PVC

Sand - 36.0 to 40.0 feet

Bentonote - 34.0 to 36.0 feet

Grout - 00 to 34.00 feet

Stick up - 2.5 feet

Protective Casing (steel).

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SOIL BORING LOG

PROJECT NUMBER: 540614000		PROJECT NAME: Avery Dennison, New Windsor, New York	
BORING NUMBER: P-1		COORDINATES: 966673.9, 620478.2	DATE: 02/08/01
ELEVATION: TOC = 147.95		GWL: Depth 7.0 feet	DATE STARTED: 02/06/01
GEOLOGIST/ENGINEER: Madhu Patel		GWL: Depth	DATE COMPLETED: 02/07/01
DRILLING METHODS: Water/mud rotary			PAGE 2 OF 2

DEPTH (ft.)	SAMPLE Depth (ft.)	SAMPLE No.	BLOWS ON SPOON (inches) 6	12	18	24	Recovery (inches)	DESCRIPTION	USCS	Well Const.	REMARKS
35											Bentonite 34-36' bgs
											Sand 34-40' bgs
	39-41	S-12	31	23	19	34	16	Gray and Brown cmf SAND and GRAVEL, trace	SP-GP		Screen 38-40' bgs
40								clayand silt with pieces of rock.			
	44-46	S-13	100 for 0 inch				0	Boulder or cobbles			
45								Refusal at 49 feet due to cobbles caved in the hole			
								End of boring at 49.0 feet			

Notes: Hole caved at depth of 40 to 49 ft bgs due to presence of cobbles and gravels.

AMEC Earth & Environmental, 285 Davidson Avenue, Suite 100, Somerset, New Jersey 08873 732-302-9500/9504 (fax)

APPENDIX C

PASSIVE SOIL VAPOR SURVEY ANALYTICAL LABORATORY REPORT (W.L. GORE & ASSOCIATES)

W. L. GORE & ASSOCIATES, INC.
100 CHESAPEAKE BLVD., P.O. BOX 10 • ELKTON, MARYLAND 21922-0010 • PHONE: 410/392-7600
FAX: 410/506-4780

GORE-SORBER® Screening Survey
Final Report

Monarch Systems
New Windsor, NY

October 13, 2000

Prepared For:
Ogden Environmental
285 Davidson Avenue, Suite100
Somerset, NJ 08873

W.L. Gore & Associates, Inc.

Written/Submitted by:
Ray Fenstermacher, P.G., Project Manager

Reviewed/Approved by:
Jay W. Hodny, Ph.D., Project Manager

Analytical Data Reviewed by:
Jim E. Whetzel, Chemist

I:\MAPPING\PROJECTS\10482569\001013R.DOC

GORE-SORBER® Screening Survey
Final Report

REPORT DATE: October 13, 2000 **AUTHOR:** RFF

SITE INFORMATION

Site Reference: Monarch Systems, New Windsor, NY
Customer Purchase Order Number: 540614000
Gore Production Order Number: 10482569 **Gore Site Code:** BNG

FIELD PROCEDURES

 # Modules shipped: 125
Installation Date(s): 9/5 – 9/8/00 **# Modules Installed:** 105
Field work performed by: Ogden Environmental

Retrieval date(s): 9/21/00 **Exposure Time:** ~15 **[days]**
 # Modules Retrieved: 105 **# Trip Blanks Returned:** 6
 # Modules Lost in Field: 0 * **# Unused Modules:** 14 *

Date/Time Received by Gore: 9/25/00 @ 11:15 AM **By:** CW
Chain of Custody Form attached: √
Chain of Custody discrepancies: None
Comments: Modules 336929, '6932, '6934, '8722, '8723 and '8724 were identified as trip blanks. Although none of the modules that were installed were lost, 14 modules (336894 – 6907) were mis-placed prior to the field installation.

GORE-SORBER® Screening Survey
Final Report

ANALYTICAL PROCEDURES

W.L. Gore & Associates' Screening Module Laboratory operates under the guidelines of its Quality Assurance Manual, Operating Procedures and Methods. The quality assurance program is consistent with Good Laboratory Practices (GLP) and ISO Guide 25, "General Requirements for the Competence of Calibration and Testing Laboratories", third edition, 1990.

Instrumentation consists of state of the art gas chromatographs equipped with mass selective detectors, coupled with automated thermal desorption units. Sample preparation simply involves cutting the tip off the bottom of the sample module and transferring one or more exposed sorbent containers (sorbers, each containing 40mg of a suitable granular adsorbent) to a thermal desorption tube for analysis. Sorbers remain clean and protected from dirt, soil, and ground water by the insertion/retrieval cord, and require no further sample preparation.

Analytical Method Quality Assurance:
The analytical method employed is a modified EPA method 8260/8270. Before each run sequence, two instrument blanks, a sorber containing 5µg BFB (Bromofluorobenzene), and a method blank are analyzed. The BFB mass spectra must meet the criteria set forth in the method before samples can be analyzed. A method blank and a sorber containing BFB is also analyzed after every 30 samples and/or trip blanks. Standards containing the selected target compounds at three calibration levels of 5, 20, and 50µg are analyzed at the beginning of each run. The criterion for each target compound is less than 35% RSD (relative standard deviation). If this criterion is not met for any target compound, the analyst has the option of generating second- or third-order standard curves, as appropriate. A second-source reference standard, at a level of 10µg per target compound, is analyzed after every ten samples and/or trip blanks, and at the end of the run sequence. Positive identification of target compounds is determined by 1) the presence of the target ion and at least two secondary ions; 2) retention time versus reference standard; and, 3) the analyst's judgment.

NOTE: All data have been archived. Any replicate sorbers not used in the initial analysis will be discarded fifteen (15) days from the date of analysis.

Laboratory analysis: thermal desorption, gas chromatography, mass selective detection
Instrument ID: # 2 **Chemist:** JW
Compounds/mixtures requested: Gore Chlorinated VOC Target Compounds (A10)
Deviations from Standard Method: None
Comments: Soil vapor analytes and abbreviations are tabulated in the Data Table Key (page 6).

GORE-SORBER® Screening Survey
Final Report

DATA TABULATION

 # CONTOUR MAPS ENCLOSED: Three (3) B-sized color contour maps
LIST OF MAPS ENCLOSED:

- Trichloroethene (TCE)
- 1,1,1-Trichloroethane (111TCA)
- Select Chlorinated Compounds – This is a summation of all of the compounds reported (see page 6 of 6 for complete list).

NOTE: All data values presented in Appendix A represent masses of compound(s) desorbed from the GORE-SORBER Screening Modules received and analyzed by W.L. Gore & Associates, Inc., as identified in the Chain of Custody (Appendix A). The measurement traceability and instrument performance are reproducible and accurate for the measurement process documented. Semi-quantitation of the compound mass is based on either a single-level (QA Level 1) or three-level (QA Level 2) standard calibration.

General Comments:

- This survey reports soil gas mass levels present in the vapor phase. Vapors are subject to a variety of attenuation factors during migration away from the source concentration to the module. Thus, mass levels reported from the module will often be less than concentrations reported in soil and groundwater matrix data. In most instances, the soil gas masses reported on the modules compare favorably with concentrations reported in the soil or groundwater (e.g., where soil gas levels are reported at greater levels relative to other sampled locations on the site, matrix data should reveal the same pattern, and vice versa). However, due to a variety of factors, a perfect comparison between matrix data and soil gas levels can rarely be achieved.
- Soil gas signals reported by this method cannot be identified to soil adsorbed, groundwater, and/or free-product contamination. The soil gas signal reported from each module can evolve from all of these sources. Differentiation between soil and groundwater contamination can only be achieved with prior knowledge of the site history (i.e., the site is known to have groundwater contamination only).
- QA/QC trip blank modules were provided to document potential exposures that were not part of the soil gas signal of interest (i.e., impact during module shipment, installation and retrieval, and storage). The trip blanks are identically manufactured and packaged soil gas modules to those modules placed in the subsurface. However, the trip blanks remain unopened during all phases of the soil gas survey. Levels reported on the trip blanks may indicate potential impact to modules other than the contaminant source of interest.

GORE-SORBER® Screening Survey
Final Report

- Unresolved peak envelopes (UPEs) are represented as a series of compound peaks clustered together around a central GC elution time in the total ion chromatogram. Typically, UPEs are indicative of complex fluid mixtures that are present in the subsurface. UPEs observed early in the chromatogram are considered to indicate the presence of more volatile fluids, while UPEs observed later in the chromatogram may indicate the presence of less volatile fluids. Multiple UPEs may indicate the presence of multiple complex fluids.

Project Specific Comments:

- The minimum (gray) contour level, for each mapped analyte or group of analytes, was set at the maximum blank level observed or the method detection limit, whichever was greater. The maximum contour level was set at the maximum value observed.
- During the analysis of modules #336875, '6939, '6940, '6943, '6949, '6950, '8711, '8713, '8714, and '8720, the mass of TCE eluting from the instrumentation caused an instrument detector overload (under maximum dilution conditions). Therefore, the TCE values reported in the data table are indicated with a ">" sign. This indicates that the microgram levels were at least this high. Quantification of this compound is integrated up to a point of confidence in the chromatograms. For mapping purposes, those values reported with a ">" sign were set equal to that value.
- Stacked total ion chromatograms (TIC's) are included in Appendix A. The six-digit serial number of each module is incorporated into the TIC identification (e.g.: 123456S.D represents module #123456).
- TCE was detected on three of the six trip blanks at relatively low levels. No other target compounds were detected on the trip blanks or the method blanks. Thus, target analyte levels reported for the field-installed modules that exceed trip and method blank levels, and the method detection limit, have a high probability of originating from on-site sources.
- The mapped spatial patterns indicate an area of high mass values for chlorinated compounds in the western half of the survey area. TCE contributed the bulk of the signal of the chlorinated compounds reported.
- If the objective of the soil gas survey was to delineate the nature and extent of the contamination, then additional soil gas sampling is recommended in those areas where the color contours appear to extend into unsampled areas. Subsequent sampling events can be combined with the data from this event and mapped together to provide greater coverage.

GORE-SORBER® Screening Survey
Final Report

KEY TO DATA TABLE
Monarch Systems, New Windsor, NY

UNITS

µg	micrograms (per sorber), reported for compounds
MDL	method detection limit
bdl	below detection limit
nd	non-detect

ANALYTES

ClBENZ	chlorobenzene
ct12DCE	cis- & trans-1,2-dichloroethene
t12DCE	trans-1,2-dichloroethene
c12DCE	cis-1,2-dichloroethene
11DCA	1,1-dichloroethane
111TCA	1,1,1-trichloroethane
12DCA	1,2-dichloroethane
TCE	trichloroethene
PCE	tetrachloroethene
14DCB	1,4-dichlorobenzene
11DCE	1,1-dichloroethene
$CHCl_3$	chloroform
CCl_4	carbon tetrachloride
112TCA	1,1,2-trichloroethane
1112TetCA	1,1,1,2-tetrachloroethane
1122TetCA	1,1,2,2-tetrachloroethane
13DCB	1,3-dichlorobenzene
12DCB	1,2-dichlorobenzene

BLANKS

TBn	unexposed trip blanks, travels with the exposed modules
method blank	QA/QC module, documents analytical conditions during analysis

APPENDIX A:

1. CHAIN OF CUSTODY
2. DATA TABLE
3. STACKED TOTAL ION CHROMATOGRAMS
4. COLOR CONTOUR MAPS

GORE-SORBER® Screening Survey Chain of Custody

For W.L. Gore & Associates use only
Production Order # 10482569

W. L. Gore & Associates, Inc., Environmental Products Group
100 Chesapeake Boulevard • Elkton, Maryland 21921 • Tel: (410) 392-7600 • Fax (410) 506-4780

Instructions: Customer must complete ALL shaded cells

Customer Name: OGDEN ENVIRONMENTAL	Site Name: MONARCH SYSTEMS
Address: 285 DAVIDSON AVENUE	Site Address: NEW WINDSOR NY
SOMERSET NJ 08873	
	Project Manager: Steve Posten
Phone: 732-302-9500	Customer Project No.: 540614000
FAX: 732-302-9504	Customer P.O. #: _____ Quote #: _____

Serial # of Modules Shipped						# of Modules for Installation 10~~5~~ # of Trip Blanks 6		
# 336860	# 336893	#	#			Total Modules Shipped: ~~110~~ 125 Pieces		
# 336968	# 336975	#	#			Total Modules Received: 125 Pieces		
# 338710	# 338724	#	#			Total Modules Installed: 105 Pieces		
# 336908	# 336961	#	#			Serial # of Trip Blanks (*Client Decides*)	#	#
#	#	#	#			# 336929	#	#
#	#	#	#			# 336932	#	#
#	#	#	#			# 336934	#	#
#	#	#	#			# 338722	#	#
#	#	#	#			# 338723	#	#
#	#	#	#			# 338724	#	#
Prepared By: T. Wallace						#	#	#
Verified By: Marilynn Davis						#	#	#

Installation Performed By:
Name (*please print*): Vanessa A. Gallo
Company/Affiliation: Ogden Environmental

Installation Method(s) (*circle those that apply*):
(Slide Hammer) (Hammer Drill) Auger
Other: _____

Installation Start Date and Time:	9/5/00	10:15	(AM) PM
Installation Complete Date and Time:	9/8/00	9:45	(AM) ~~PM~~

Retrieval Performed By:
Name (*please print*): Vanessa Gallo
Company/Affiliation: OGDEN

Total Modules Retrieved: 105 Pieces
Total Modules Lost in Field: 0 Pieces
Total Unused Modules Returned: 0 Pieces

Retrieval Start Date and Time:	9/21/00	10:35	(AM) PM
Retrieval Complete Date and Time:	9/21/00	16:15	AM (PM)

Relinquished By T. Wallace Affiliation: W.L. Gore & Associates, Inc.	Date 8/18/00	Time 10am	Received By: _____ Affiliation: _____	Date	Time
Relinquished By Vanessa A. Gallo Affiliation: OGDEN ENV.	Date 9/22/00	Time NOON	Received By: _____ Affiliation: _____	Date	Time
Relinquished By _____ Affiliation _____	Date	Time	Received By: _____ Affiliation: W.L. Gore & Associates, Inc.	Date 9-25-00	Time 11:15

GORE-SORBER® Screening Survey Installation and Retrieval Log

Page 1 of 3

SITE NAME & LOCATION
Monarch Systems
New Windsor, NY

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate)			MODULE IN WATER (check one)		COMMENTS
				LPH	ODOR	NONE	YES	NO	
1.	336860	9/5 10:15	9/21/00 10:35						43
2.	336861	9/5 10:45	9/21/00 10:41						44 surface
3.	336862	9/5 10:45	" 10:41						44
4.	336863	9/5 10:53	" 10:45						45
5.	336864	9/5 11:20	" 10:46						46
6.	336865	9/5 11:20	" 10:46						46 surface
7.	336866	9/5 11:30	" 10:49						39
8.	336867	9/5 11:42	" 10:49						39 surface
9.	336868	9/5 12:07	" 10:52						47
10.	336869	9/5 12:19	" 10:54						48
11.	336870	9/5 12:20	" 10:54						48 surface
12.	336871	9/5 12:56	" 10:57						49
13.	336872	9/5 13:07	" 10:59						42
14.	336873	9/5 13:21	" 11:05						35
15.	336874	9/5 14:27	" 11:46						28 next to machine
16.	336875	9/5 14:40	" 12:00						26 (next to mach
17.	336876	9/5 14:41	" 11:59						26 surface
18.	336877	9/5 14:48	" 11:39						33
19.	336878	9/5 15:05	" 11:34						32
20.	336879	9/5 15:15	" 11:32						32 surface
21.	336880	9/5 15:23	" 11:29						31
22.	336881	9/5 15:35	" 12:05						24
23.	336882	9/5 15:46	" 12:05						24 surface
24.	336883	9/5 15:57	" 11:28						30
25.	336884	9/5 15:58	" 11:25						30 surface
26.	336885	9/5 16:09	" 12:10						23
27	336886	9/5 16:20	" 16:10						22
28.	336887	9/5 16:33	" 11:23						29
29.	336888	9/5 16:45	" 11:12						36
30.	336889	9/5 16:55	" 11:14						37
31	336890	9/5 17:10	" 16:07						38
32	336891	9/5 17:11	" 16:07						38 surface
33.	336892	9/5 17:30	" 11:41						34
34.	336893	9/5 17:31	" 11:40						34 surface
35.	336894								
36.	336895								
37.	336896								
38.	336897								
39.	336898								
40.	336899								
41.	336900								
42.	336901								

22, 35, 41

GORE-SORBER® Screening Survey Installation and Retrieval Log

SITE NAME & LOCATION
Monarch Systems
New Windsor, NY

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate)			MODULE IN WATER (check one)		COMMENTS
				LPH	ODOR	NONE	YES	NO	
43.	336902								
44.	336903								
45.	336904								
46.	336905								
47.	336906								
48.	336907								
49.	336908	9/6/00 940	9/21 1505				✓		71
50.	336909	9/6/00 942	" 1506				✓		72
51.	336910	9/6/00 944	" 1507				✓		73
52.	336911	9/6/00 946	" 1508				✓		74
53.	336912	9/6 948	" 1509				✓		75
54.	336913	9/6 1003	" 1510				✓		76
55.	336914	9/6 1006	" 1510				✓		77
56.	336915	9/6 1018	" 1517				✓		78
57.	336916	9/6 1020	" 1516				✓		79
58.	336917	9/6 1023	" 1515				✓		80
59.	336918	9/6 1025	" 1515				✓		81
60.	336919	9/6 1028	" 1514				✓		82 wet
61.	336920	9/6 1035	" 1512				✓		83 wet
62.	336921	9/6 1040	" 1511				✓		84 wet
63.	336922	9/6 1045	" 1513				✓		85
64.	336923	9/6 1048	" 1514				✓		86
65.	336924	9/6 1051	" 1520				✓		87
66.	336925	9/6 1053	" 1530				✓		88
67.	336926	9/6 1056	" 1521				✓		89
68.	336927	9/6 1059	" 1523				✓		90
69.	336928	9/6 1105	" 1524				✓		91
70.	336929	TRIP BLANK							
71.	336930	1231	9/21/00 1223						8
72.	336931	1240	" 1229						15
73.	336932	TRIP BLANK							
74.	336933	1256	9/21/00 1236						10
75.	336934	TRIP BLANK							
76.	336935	9/7/00 908	9/21/00 1238						11
77.	336936	9/7 915	9/21 1240						18
78.	336937	9/7 919	9/21/00 1240						18 surface
79.	336938	9/7 921	9/21/00 1241						17
80.	336939	9/7 927	9/21/00 1245						12
81.	336940	9/7 935	9/21/00 1249						13
82.	336941	9/7 943	9/21 1252						14
83.	336942	9/7 950	9/21 1300						21
84.	336943	9/7 959	9/21 1256						20 mid-02

GORE-SORBER® Screening Survey
Installation and Retrieval Log

SITE NAME & LOCATION
Monarch Systems
New Windsor, NY

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate)			MODULE IN WATER (check one)		COMMENTS
				LPH	ODOR	NONE	YES	NO	
85.	336944	9/7/00 1022	9/21 1255						20 surface
86.	336945	9/7 1011	9/21 1253						19
87.	336946	9/7 1032	9/21 1214						9
88.	336947	9/7 1040	9/21 1215						16
89.	336948	9/7 1041	9/21 1215						16 surface
90.	336949	9/7 1052	9/21 1200						25
91.	336950	9/7 1106	9/21 1100						40
92.	336951	9/7 1108	9/21 1100						40 surface
93.	336952	9/7 1118	9/21 1600						41
94.	336953	9/7 1410	" 1420						2
95.	336954	9/7 1413	9/21 1421						1
96.	336955	9/7 1420	" 1421						3
97.	336956	9/6/00 825	" 1450						57
98.	336957	9/6 834	" 1450						58
99.	336958	9/6 849	" 1451						59
100.	336959	9/6 847	" 1452						60
101.	336960	9/6 849	" 1453						61
102.	336961	9/6 850	" 1454						62
103.	336968	9/6 853	" 1454						63
104.	336969	9/6 900	" 1504						64
105.	336970	9/6 903	" 1503						65
106.	336971	9/6 906	" 1503						66
107.	336972	9/6 909	" 1501						67
108.	336973	9/6 916	" 1500						68
109.	336974	9/6 920	" 1457						69
110.	336975	9/6 924	" 1456						70
111.									
112.									
113.									
114.									
115.									
116.									
117.									
118.									
119.									
120.									
121.									
122.									
123.									
124.									
125.									
126.									

GORE-SORBER® Screening Survey Installation and Retrieval Log

Page 1 of 1

SITE NAME & LOCATION
Avery Dennison - Monarch Systems
New Windsor, NY

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate)			MODULE IN WATER (check one)		COMMENTS
				LPH	ODOR	NONE	YES	NO	
1.	338710	9/8/00 735	" 1430						55
2.	338711	9/8/00 745	" 1435						52 (DUP)
3.	338712	9/8 750	" 1441						51
4.	338713	9/8 800	9/21 1437						53
5.	338714	9/8 809	9/21 1435						54
6.	338715	9/8 825	9/21 1429						4
7.	338716	9/8 832	" 1426						5
8.	338717	9/8 838	" 1428						6
9.	338718	9/8 848	" 1422						7
10.	338719	9/8 930	" (LPH) 1615						50
11.	338720	9/8 945	9/21/00 1156						27
12.	338721	9/8 1026	9/21/00 1429						56 - (1" H2O)
13.	338722	TRIP BLANK							TRIP
14.	338723	TRIP BLANK							"
15.	338724	TRIP BLANK							"
16.									
17.									
18.									
19.									
20.									
21.									
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40.									
41.									
42.									

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
OGDEN ENVIRONMENTAL SERVICES, SOMERSET, NJ
GORE CHLORINATED VOC (A10)
MONARCH SYSTEMS, NEW WINDSOR, NY
SITE BNG - PRODUCTION ORDER #10482569

DATE ANALYZED	FIELD ID	SAMPLE NAME	Select Chlorinateds, ug	CIBENZ, ug	ct12DCE, ug	t12DCE, ug	c12DCE, ug	11DCA, ug	111TCA, ug	12DCA, ug
		MDL=		0.02		0.03	0.02	0.06	0.04	0.03
10/4/00	1	336954	8.97	nd	0.00	nd	nd	nd	0.32	nd
10/4/00	2	336953	82.95	nd	0.00	nd	nd	nd	2.75	nd
10/4/00	3	336955	15.92	nd	0.00	nd	nd	nd	1.64	nd
10/5/00	4	338715	14.92	nd	0.00	nd	nd	nd	1.49	nd
10/5/00	5	338716	152.12	nd	0.00	nd	nd	nd	75.98	2.98
10/5/00	6	338717	0.48	nd	0.00	nd	nd	nd	0.17	nd
10/5/00	7	338718	0.73	nd	0.00	nd	nd	nd	0.21	nd
10/4/00	8	336930	254.18	nd	0.00	nd	nd	nd	26.27	1.02
10/4/00	9	336946	428.94	nd	0.08	nd	0.08	nd	22.25	0.86
10/4/00	10	336933	871.44	nd	0.05	nd	0.05	nd	60.29	2.35
10/4/00	11	336935	959.73	nd	0.05	nd	0.05	nd	101.71	3.96
10/4/00	12	336939	1437.92	nd	0.05	nd	0.05	nd	429.43	16.06
10/4/00	13	336940	1554.83	nd	0.07	nd	0.07	nd	308.41	11.81
10/4/00	14	336941	1056.15	nd	0.09	nd	0.09	nd	160.97	6.31
10/4/00	15	336931	27.31	nd	0.00	nd	nd	nd	0.78	nd
10/4/00	16	336947	427.51	nd	0.09	nd	0.09	nd	22.34	0.88
10/4/00	16 Surface	336948	146.81	nd	0.00	nd	nd	nd	7.36	0.30
10/4/00	17	336938	690.40	nd	0.07	nd	0.07	nd	42.10	1.64
10/4/00	18	336936	993.91	nd	0.07	nd	0.07	nd	100.74	3.93
10/4/00	18 Surface	336937	106.66	nd	0.00	nd	nd	nd	7.79	0.31
10/4/00	19	336945	896.23	nd	0.00	nd	nd	nd	153.91	6.01
10/4/00	20	336943	1258.64	nd	0.00	nd	nd	nd	168.07	6.62
10/4/00	20 Surface	336944	217.19	nd	0.00	nd	nd	nd	28.79	1.15
10/4/00	21	336942	980.45	nd	0.08	nd	0.08	nd	133.97	5.29
10/3/00	22	336886	298.95	nd	0.09	nd	0.09	nd	13.36	0.52
10/3/00	23	336885	484.63	nd	0.13	nd	0.13	nd	28.25	1.16
10/3/00	24	336881	925.67	nd	0.12	nd	0.12	nd	70.59	2.77
10/3/00	24 Surface	336882	682.48	nd	0.08	nd	0.08	nd	51.23	1.98
10/4/00	25	336949	1171.02	nd	0.09	nd	0.09	nd	145.12	5.70
10/3/00	26	336875	1187.11	nd	0.05	nd	0.05	nd	203.73	8.07
10/3/00	26 Surface	336876	1027.47	nd	0.00	nd	nd	nd	150.27	6.00
10/5/00	27	338720	1205.03	nd	0.06	nd	0.06	nd	173.55	7.03
10/3/00	28	336874	846.83	nd	0.12	nd	0.12	nd	76.66	3.10
10/3/00	29	336887	499.52	nd	0.26	nd	0.26	nd	20.69	0.81
10/3/00	30	336883	424.91	nd	0.00	nd	nd	nd	31.02	1.23
10/3/00	30 Surface	336884	132.47	nd	0.00	nd	nd	nd	14.33	0.56
10/3/00	31	336880	912.50	nd	0.00	nd	nd	nd	63.43	2.53
10/3/00	32	336878	862.05	nd	0.00	nd	nd	nd	61.72	2.55
10/3/00	32 Surface	336879	641.78	nd	0.00	nd	nd	nd	29.36	1.21
10/3/00	33	336877	948.23	nd	0.00	nd	nd	nd	76.28	3.22
10/4/00	34	336892	807.87	nd	0.00	nd	nd	nd	62.02	2.60
10/4/00	34 Surface	336893	758.93	nd	0.00	nd	nd	nd	53.92	2.25
10/3/00	35	336873	894.82	nd	0.28	nd	0.28	nd	69.38	2.80
10/4/00	36	336888	601.08	nd	0.14	nd	0.14	nd	32.47	1.27
10/4/00	37	336889	858.26	nd	0.00	nd	nd	nd	47.16	1.88
10/4/00	38	336890	592.47	nd	0.00	nd	nd	nd	33.27	1.37
10/4/00	38 Surface	336891	165.19	nd	0.00	nd	nd	nd	4.90	0.20
10/3/00	39	336866	772.48	nd	0.00	nd	bdl	nd	39.81	1.72
10/3/00	39 Surface	336867	688.51	nd	0.00	nd	nd	nd	39.70	1.68
10/4/00	40	336950	969.31	0.06	0.08	nd	0.08	nd	84.92	3.56
10/4/00	40 Surface	336951	896.10	nd	0.08	nd	0.08	nd	57.20	2.49
10/4/00	41	336952	989.69	nd	0.08	0.04	0.04	nd	72.47	2.92
10/3/00	42	336872	739.52	nd	0.21	nd	0.21	nd	47.55	1.94
10/3/00	43	336860	524.47	nd	0.00	nd	nd	nd	25.59	0.99
10/3/00	44	336862	400.64	nd	0.00	nd	nd	nd	21.12	0.83
10/3/00	44 - Surface	336861	669.71	nd	0.00	nd	nd	nd	32.70	1.31
10/3/00	45	336863	676.63	nd	0.00	nd	nd	nd	27.78	1.26
10/3/00	46	336864	658.46	nd	0.00	nd	nd	nd	31.85	1.33
10/3/00	46 Surface	336865	402.19	nd	0.00	nd	nd	nd	18.09	0.76
10/3/00	47	336868	527.20	0.14	0.00	nd	nd	nd	28.39	1.22
10/3/00	48	336869	719.45	nd	0.00	nd	nd	nd	37.97	1.51

No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
OGDEN ENVIRONMENTAL SERVICES, SOMERSET, NJ
GORE CHLORINATED VOC (A10)
MONARCH SYSTEMS, NEW WINDSOR, NY
SITE BNG - PRODUCTION ORDER #10482569

DATE ANALYZED	FIELD ID	SAMPLE NAME	Select Chlorinateds, ug	ClBENZ, ug	ct12DCE, ug	t12DCE, ug	c12DCE, ug	11DCA, ug	111TCA, ug	12DCA, ug
		MDL=		0.02		0.03	0.02	0.06	0.04	0.03
)/3/00	48 Surface	336870	646.79	nd	0.00	nd	nd	nd	38.62	1.54
10/3/00	49	336871	414.55	nd	0.11	nd	0.11	nd	29.32	1.14
0/5/00	50	338719	31.04	nd	0.00	nd	nd	nd	6.26	0.24
/5/00	51	338712	355.66	nd	0.00	nd	nd	nd	22.39	0.89
/5/00	52	338711	1236.85	nd	0.08	nd	0.08	nd	91.60	3.62
10/5/00	53	338713	1667.82	nd	0.49	nd	0.49	0.40	581.80	21.64
0/5/00	54	338714	1694.95	nd	0.07	nd	0.07	0.22	610.99	22.45
0/5/00	55	338710	313.36	nd	0.00	nd	nd	nd	50.55	1.97
0/5/00	56	338721	0.64	nd	0.00	nd	nd	nd	nd	nd
10/4/00	57	336956	0.33	nd	0.00	nd	nd	nd	nd	nd
0/4/00	58	336957	0.00	nd	0.00	nd	nd	nd	nd	nd
0/4/00	59	336958	59.93	nd	0.00	nd	nd	nd	2.83	nd
0/4/00	60	336959	173.59	nd	0.00	nd	nd	nd	69.35	2.74
10/4/00	61	336960	2.50	nd	0.00	nd	nd	nd	1.20	nd
0/4/00	62	336961	0.12	nd	0.00	nd	nd	nd	nd	nd
0/5/00	63	336968	0.00	nd	0.00	nd	nd	nd	nd	nd
0/5/00	64	336969	0.78	nd	0.00	nd	nd	nd	nd	nd
10/5/00	65	336970	5.51	nd	0.00	nd	nd	nd	0.12	nd
0/5/00	66	336971	176.15	nd	0.00	nd	nd	nd	13.92	0.55
0/5/00	67	336972	857.37	nd	0.00	nd	nd	nd	262.12	10.11
0/5/00	68	336973	22.42	nd	0.00	nd	nd	nd	8.06	0.31
10/5/00	69	336974	4.77	nd	0.00	nd	nd	nd	1.30	nd
0/5/00	70	336975	0.10	nd	0.00	nd	nd	nd	nd	nd
0/4/00	71	336908	1.44	nd	0.22	nd	0.22	nd	nd	nd
0/4/00	72	336909	18.06	nd	7.42	0.49	6.93	0.35	0.10	nd
10/4/00	73	336910	32.66	nd	13.35	0.79	12.57	0.99	0.20	nd
0/4/00	74	336911	263.17	nd	81.60	1.80	79.80	54.64	37.28	1.51
0/4/00	75	336912	47.16	nd	17.56	0.39	17.16	5.81	3.25	nd
10/4/00	76	336913	10.52	nd	4.12	0.42	3.70	0.28	nd	nd
10/4/00	77	336914	0.00	nd	0.00	nd	nd	nd	nd	nd
10/4/00	78	336915	10.53	nd	4.29	0.05	4.23	0.29	nd	nd
10/4/00	79	336916	24.66	nd	8.36	0.15	8.21	0.49	0.37	nd
10/4/00	80	336917	2.61	nd	0.98	nd	0.98	0.20	0.30	nd
10/4/00	81	336918	1800.06	nd	226.04	4.48	221.55	14.25	778.11	28.74
10/4/00	82	336919	118.90	nd	33.95	1.05	32.90	9.89	28.04	1.10
10/4/00	83	336920	0.59	nd	0.23	nd	0.23	nd	nd	nd
10/4/00	84	336921	0.00	nd	0.00	nd	nd	nd	nd	nd
10/4/00	85	336922	0.87	nd	0.11	nd	0.11	0.30	nd	nd
10/4/00	86	336923	55.48	nd	8.92	0.19	8.73	3.78	27.22	1.07
10/4/00	87	336924	16.18	nd	2.76	0.13	2.64	1.60	4.43	0.16
10/4/00	88	336925	1219.88	nd	196.64	4.30	192.34	13.53	571.12	20.95
10/3/00	89	336926	84.30	nd	26.15	0.51	25.64	3.23	15.51	0.63
10/4/00	90	336927	0.00	nd	0.00	nd	nd	nd	nd	nd
10/4/00	91	336928	0.00	nd	0.00	nd	nd	nd	nd	nd
10/4/00		TB1 - 336929	0.00	nd	0.00	nd	nd	nd	nd	nd
10/3/00		TB2 - 336932	0.24	nd	0.00	nd	nd	nd	nd	nd
10/4/00		TB3 - 336934	0.00	nd	0.00	nd	nd	nd	nd	nd
10/4/00		TB4 - 338722	0.22	nd	0.00	nd	nd	nd	nd	nd
10/4/00		TB5 - 338723	0.25	nd	0.00	nd	nd	nd	nd	nd
10/5/00		TB6 - 338724	0.00	nd	0.00	nd	nd	nd	nd	nd
10/3/00		method blank	0.00	nd	0.00	nd	nd	nd	nd	nd
10/3/00		method blank	0.00	nd	0.00	nd	nd	nd	nd	nd
10/4/00		method blank	0.00	nd	0.00	nd	nd	nd	nd	nd
10/4/00		method blank	0.00	nd	0.00	nd	nd	nd	nd	nd
		Maximum	1800.06	0.14	226.04	4.48	221.55	54.64	778.11	28.74
		Standard Dev.	475.57	0.01	30.25	0.64	29.61	5.73	133.04	4.95
		Mean	481.15	0.00	6.06	0.14	5.92	1.05	68.49	2.64

No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
OGDEN ENVIRONMENTAL SERVICES, SOMERSET, NJ
GORE CHLORINATED VOC (A10)
MONARCH SYSTEMS, NEW WINDSOR, NY
SITE BNG - PRODUCTION ORDER #10482569

SAMPLE NAME	TCE, ug	PCE, ug	14DCB, ug	11DCE, ug	CHCl3, ug	CCl4, ug	112TCA, ug	1112TetCA, ug	1122TetCA, ug	13DCB, ug	12DCB, ug
MDL=	0.03	0.04	0.01	0.02	0.02	0.03	0.05	0.04	0.03	0.03	0.02
336954	8.65	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336953	79.58	0.22	nd	0.40	nd	nd	nd	nd	nd	nd	nd
336955	13.94	0.06	nd	0.29	nd	nd	nd	nd	nd	nd	nd
338715	13.21	0.07	nd	0.15	nd	nd	nd	nd	nd	nd	nd
338716	62.29	0.59	nd	10.28	nd	nd	nd	nd	nd	nd	nd
338717	0.20	nd	nd	nd	0.11	nd	nd	nd	nd	nd	nd
338718	0.52	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336930	222.43	0.22	nd	2.78	1.46	nd	nd	nd	nd	nd	nd
336946	401.65	1.16	nd	2.64	0.23	nd	nd	nd	nd	nd	nd
336933	798.12	5.10	nd	5.18	0.32	nd	nd	nd	nd	nd	nd
336935	836.40	9.27	nd	8.10	0.20	nd	nd	nd	nd	nd	nd
336939	>934.19	36.21	nd	21.82	nd	nd	0.10	nd	nd	nd	nd
336940	>1178.31	36.75	nd	19.00	0.09	nd	0.31	nd	nd	nd	nd
336941	856.51	21.52	nd	10.42	0.12	nd	0.11	nd	nd	nd	nd
336931	26.14	0.21	0.04	0.13	nd	nd	nd	nd	nd	nd	0.03
336947	399.67	1.33	nd	2.87	0.24	nd	nd	nd	nd	nd	nd
336948	137.78	0.34	0.06	0.83	0.13	nd	nd	nd	nd	nd	bdl
336938	636.84	4.50	nd	4.98	0.19	nd	nd	nd	nd	nd	nd
336936	863.10	16.74	nd	9.11	0.14	nd	nd	nd	nd	nd	nd
336937	96.95	0.65	0.16	0.76	nd	nd	nd	nd	nd	nd	0.05
336945	709.38	15.75	nd	10.64	0.22	nd	0.33	nd	nd	nd	nd
336943	>1053.47	13.73	nd	16.35	0.16	nd	0.25	nd	nd	nd	nd
336944	183.58	2.14	0.05	1.44	nd	nd	nd	nd	nd	nd	0.04
336942	809.58	21.37	nd	9.75	0.22	nd	0.11	nd	nd	nd	nd
336886	280.12	2.76	nd	1.76	0.24	nd	nd	nd	nd	nd	nd
336885	448.42	3.10	nd	3.22	0.24	nd	nd	nd	nd	nd	nd
336881	832.62	11.34	nd	7.90	0.21	nd	nd	nd	nd	nd	nd
336882	621.36	5.68	0.02	1.86	0.20	nd	nd	nd	nd	nd	nd
336949	>980.42	24.77	nd	14.54	0.14	nd	0.15	nd	nd	nd	nd
336875	>912.64	46.80	nd	15.33	0.20	nd	0.25	nd	nd	nd	nd
336876	836.40	26.02	nd	8.39	0.16	nd	0.23	nd	nd	nd	nd
338720	>982.35	32.63	nd	8.75	0.32	nd	0.28	nd	nd	nd	nd
336874	737.45	21.14	nd	7.74	0.26	nd	0.25	nd	nd	nd	nd
336887	461.64	13.10	nd	2.61	0.16	nd	nd	nd	nd	nd	nd
336883	383.67	4.47	nd	4.25	0.28	nd	nd	nd	nd	nd	nd
336884	115.51	1.14	nd	0.77	0.17	nd	nd	nd	nd	nd	nd
336880	815.98	22.03	nd	7.95	0.37	nd	0.20	nd	nd	nd	nd
336878	776.89	13.03	nd	7.42	0.21	nd	0.22	nd	nd	nd	nd
336879	599.06	9.37	0.01	2.30	0.14	nd	0.33	nd	nd	nd	nd
336877	836.85	24.28	nd	6.98	0.18	nd	0.44	nd	nd	nd	nd
336892	716.70	20.84	0.08	5.09	0.31	nd	0.24	nd	nd	nd	nd
336893	676.16	22.17	0.15	3.27	0.27	nd	0.75	nd	nd	nd	nd
336873	793.97	22.91	nd	4.83	0.31	nd	0.06	nd	nd	nd	nd
336888	538.08	25.15	nd	3.50	0.33	nd	nd	nd	nd	nd	nd
336889	777.31	27.42	nd	4.20	0.30	nd	nd	nd	nd	nd	nd
336890	547.11	5.55	nd	4.63	0.37	nd	0.17	nd	nd	nd	nd
336891	157.00	2.45	nd	0.65	nd	nd	nd	nd	nd	nd	nd
336866	709.32	19.20	0.02	1.75	0.31	nd	0.21	nd	nd	nd	0.12
336867	622.50	22.80	nd	1.36	0.23	nd	0.21	nd	nd	nd	0.03
336950	>806.72	67.54	nd	5.43	0.38	nd	0.55	nd	nd	nd	nd
336951	806.40	25.32	nd	3.80	0.40	nd	0.33	nd	nd	nd	nd
336952	860.99	46.20	0.04	6.02	0.75	nd	0.15	nd	nd	nd	nd
336872	664.70	21.17	0.05	3.32	0.37	nd	nd	nd	nd	nd	nd
336860	468.19	26.68	nd	2.86	0.17	nd	nd	nd	nd	nd	nd
336862	368.02	8.83	0.17	1.56	0.11	nd	nd	nd	nd	nd	nd
336861	609.19	22.75	nd	3.60	0.16	nd	nd	nd	nd	nd	nd
336863	633.38	10.17	nd	3.48	0.25	nd	0.31	nd	nd	nd	nd
336864	599.17	23.00	0.06	1.28	0.54	nd	0.15	nd	nd	nd	1.09
336865	367.27	13.95	0.08	0.49	0.37	nd	0.08	nd	nd	nd	1.10
336868	452.17	37.70	1.16	1.00	0.65	nd	0.20	nd	nd	0.74	3.84
336869	648.84	26.85	nd	3.89	0.28	nd	0.12	nd	nd	nd	nd

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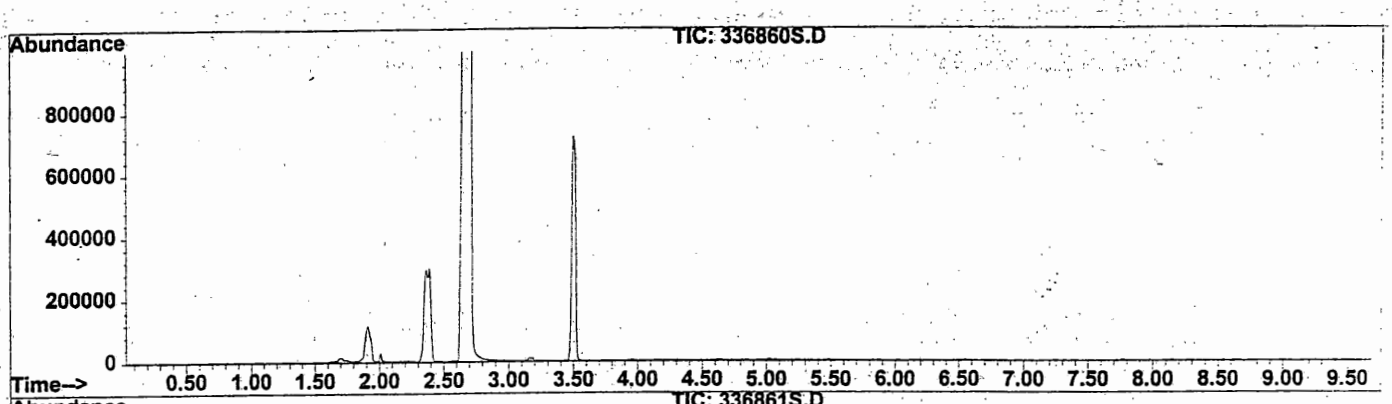
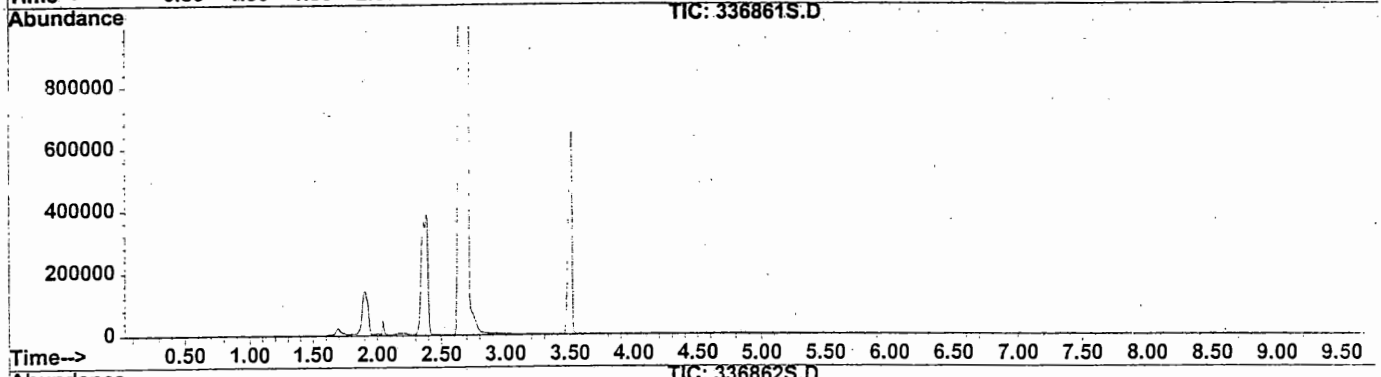
GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
OGDEN ENVIRONMENTAL SERVICES, SOMERSET, NJ
GORE CHLORINATED VOC (A10)
MONARCH SYSTEMS, NEW WINDSOR, NY
SITE BNG - PRODUCTION ORDER #10482569

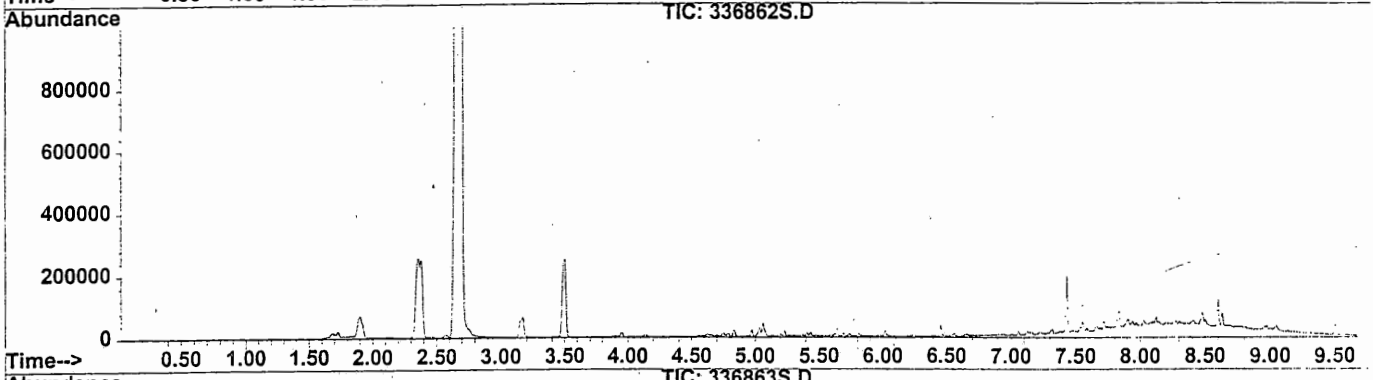
SAMPLE NAME	TCE, ug	PCE, ug	14DCB, ug	11DCE, ug	CHCl3, ug	CCl4, ug	112TCA, ug	1112TetCA, ug	1122TetCA, ug	13DCB, ug	12DCB, ug
MDL=	0.03	0.04	0.01	0.02	0.02	0.03	0.05	0.04	0.03	0.03	0.02
336870	577.89	26.48	nd	1.82	0.22	nd	0.22	nd	nd	nd	nd
336871	367.03	12.00	nd	4.48	0.37	nd	nd	nd	nd	nd	nd
338719	23.16	nd	nd	1.37	nd	nd	nd	nd	nd	nd	nd
338712	327.62	0.89	nd	3.87	nd	nd	nd	nd	nd	nd	nd
338711	>1123.79	8.40	nd	9.10	0.17	nd	nd	nd	nd	nd	nd
338713	>1001.00	28.47	nd	33.24	0.22	nd	0.06	nd	nd	nd	nd
338714	>1003.72	15.82	nd	41.41	0.21	nd	nd	nd	nd	nd	nd
338710	252.23	1.29	nd	7.31	nd	nd	nd	nd	nd	nd	nd
338721	0.32	nd	nd	nd	0.33	nd	nd	nd	nd	nd	nd
336956	0.33	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336957	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336958	55.52	0.38	nd	0.27	0.94	nd	nd	nd	nd	nd	nd
336959	90.91	0.85	nd	9.48	0.25	nd	nd	nd	nd	nd	nd
336960	0.92	nd	nd	0.04	0.33	nd	nd	nd	nd	nd	nd
336961	nd	nd	nd	nd	0.12	nd	nd	nd	nd	nd	nd
336968	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336969	0.60	nd	nd	nd	0.19	nd	nd	nd	nd	nd	nd
336970	5.25	nd	nd	nd	0.14	nd	nd	nd	nd	nd	nd
336971	157.42	1.74	nd	1.55	0.98	nd	nd	nd	nd	nd	nd
336972	555.35	6.42	nd	22.63	0.75	nd	nd	nd	nd	nd	nd
336973	13.24	0.09	nd	0.63	0.09	nd	nd	nd	nd	nd	nd
336974	3.27	nd	nd	0.07	0.13	nd	nd	nd	nd	nd	nd
336975	nd	nd	nd	nd	0.10	nd	nd	nd	nd	nd	nd
336908	1.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336909	2.78	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336910	4.76	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336911	1.52	nd	nd	5.03	nd	nd	nd	nd	nd	nd	nd
336912	2.57	nd	nd	0.43	nd	nd	nd	nd	nd	nd	nd
336913	2.00	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336914	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336915	1.67	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336916	6.92	nd	nd	0.05	0.11	nd	nd	nd	nd	nd	nd
336917	0.14	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336918	460.15	2.32	nd	64.30	0.12	nd	nd	nd	nd	nd	nd
336919	7.10	nd	nd	4.89	nd	nd	nd	nd	nd	nd	nd
336920	0.13	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336921	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336922	0.34	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336923	2.07	nd	nd	3.49	nd	nd	nd	nd	nd	nd	nd
336924	3.88	nd	nd	0.44	0.15	nd	nd	nd	nd	nd	nd
336925	176.63	0.97	nd	43.31	0.09	nd	nd	nd	nd	nd	nd
336926	9.54	nd	nd	3.01	0.08	nd	nd	nd	nd	nd	nd
336927	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
336928	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TB1 - 336929	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TB2 - 336932	0.24	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TB3 - 336934	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TB4 - 338722	0.22	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TB5 - 338723	0.25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TB6 - 338724	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Maximum	1178.31	67.54	1.16	64.30	1.46	0.00	0.75	0.00	0.00	0.74	3.84
Standard Dev.	366.28	13.30	0.12	9.59	0.23	0.00	0.13	0.00	0.00	0.07	0.40
Mean	381.05	10.04	0.02	5.41	0.19	0.00	0.07	0.00	0.00	0.01	0.06

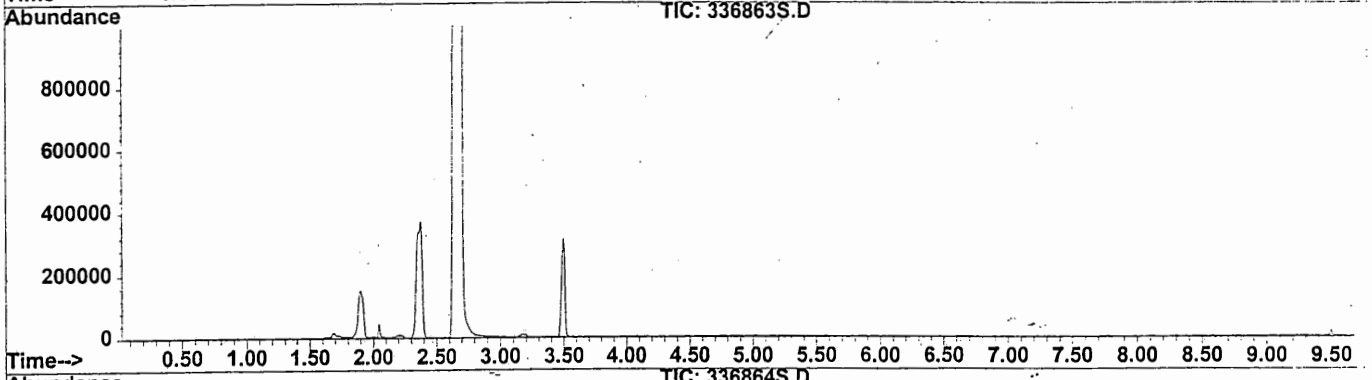
No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

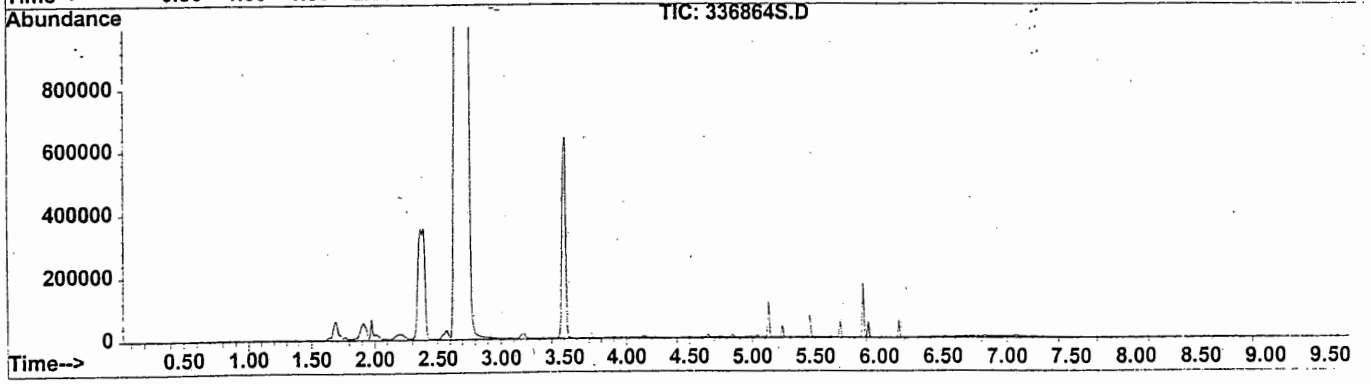
TIC - SITE BNG - PRODUCTION ORDER #10482569
In Numerical Order



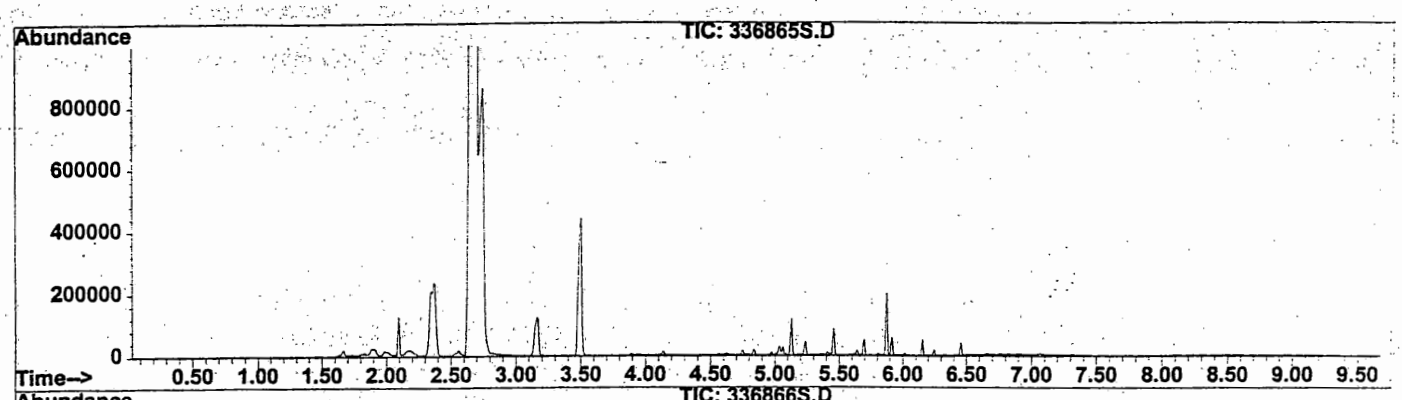


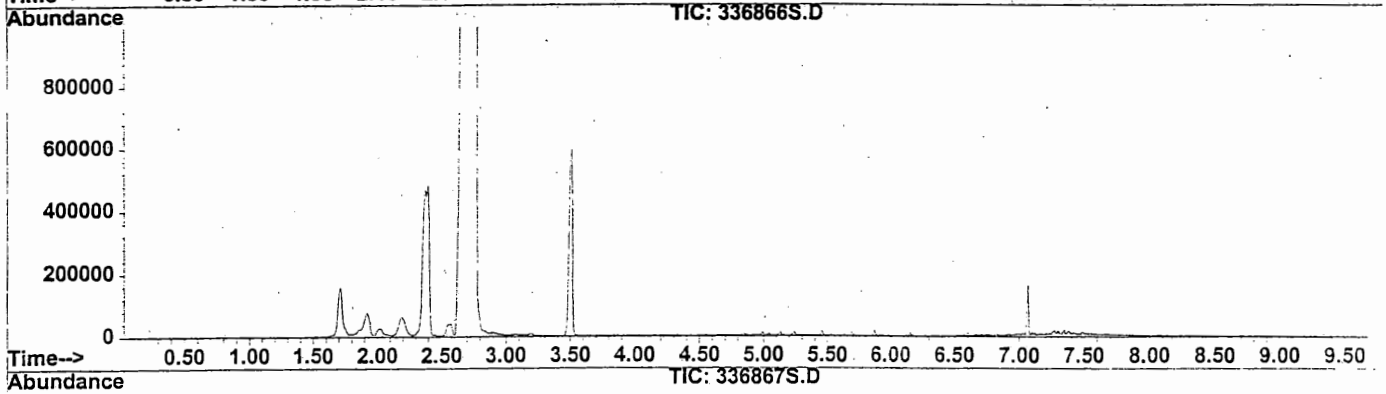


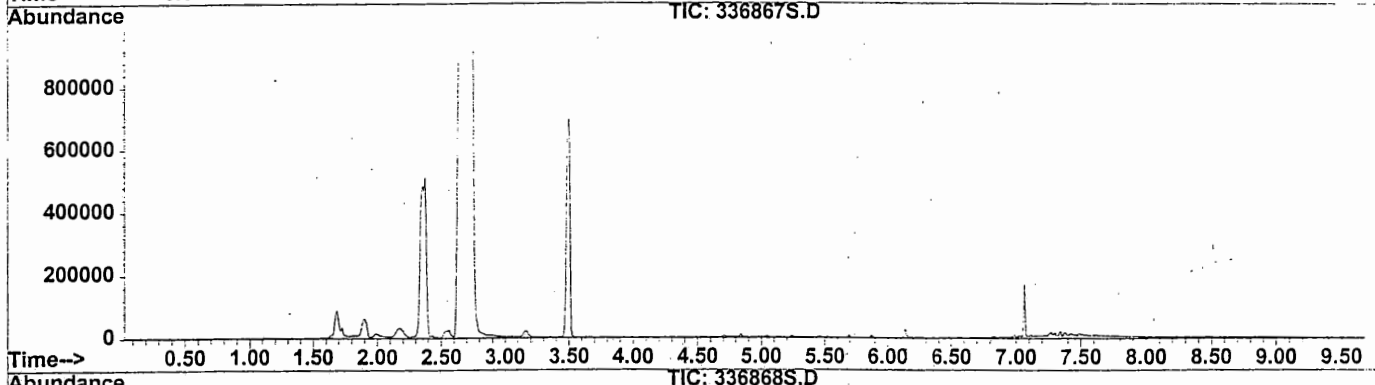


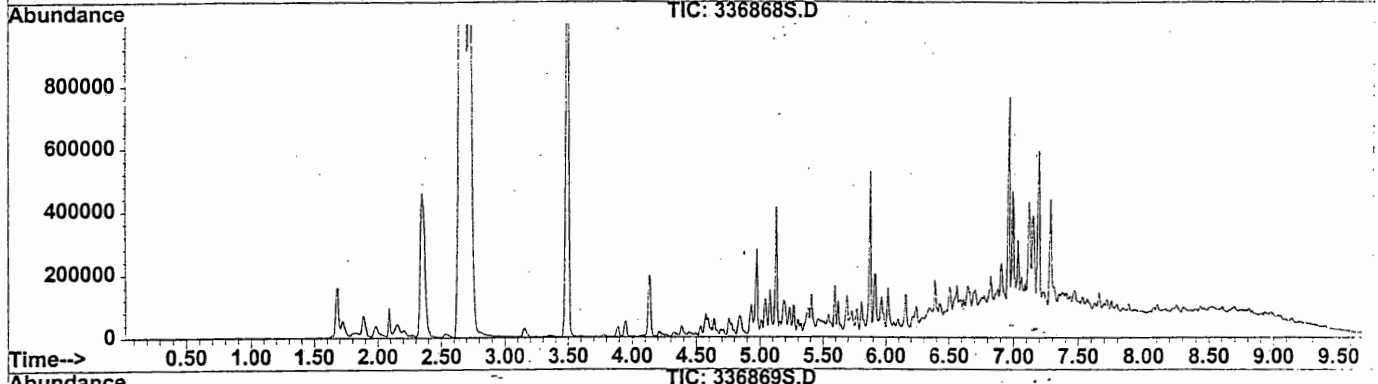


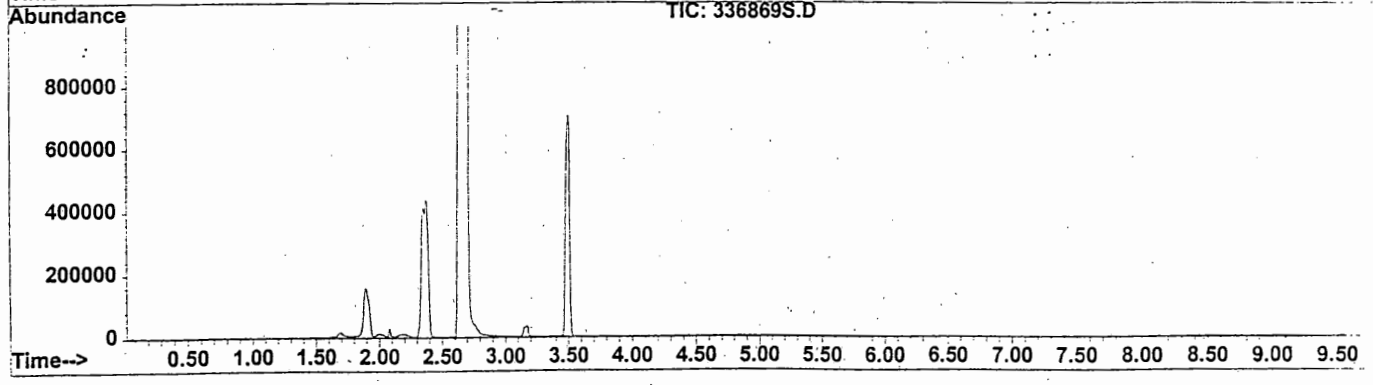
TIC - SITE BNG - PRODUCTION ORDER #10482569
In Numerical Order











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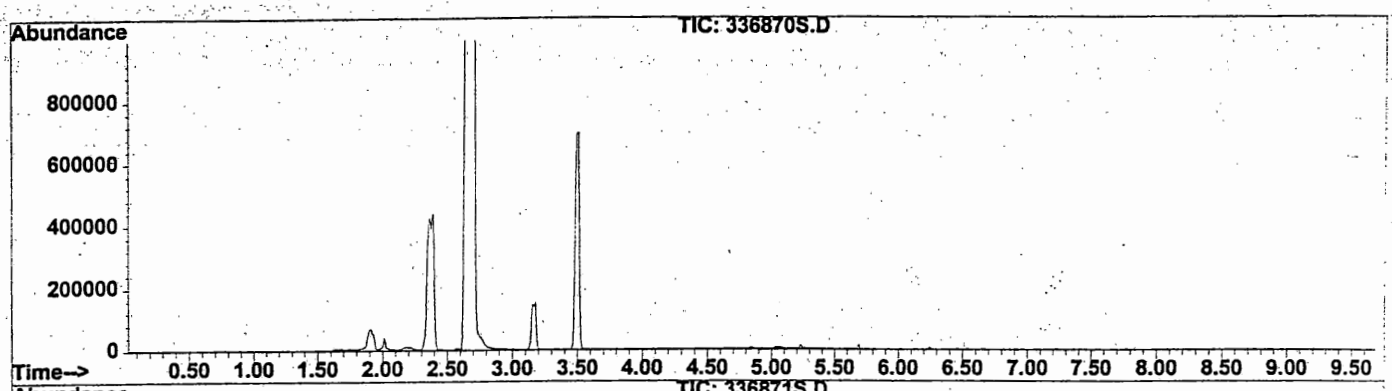

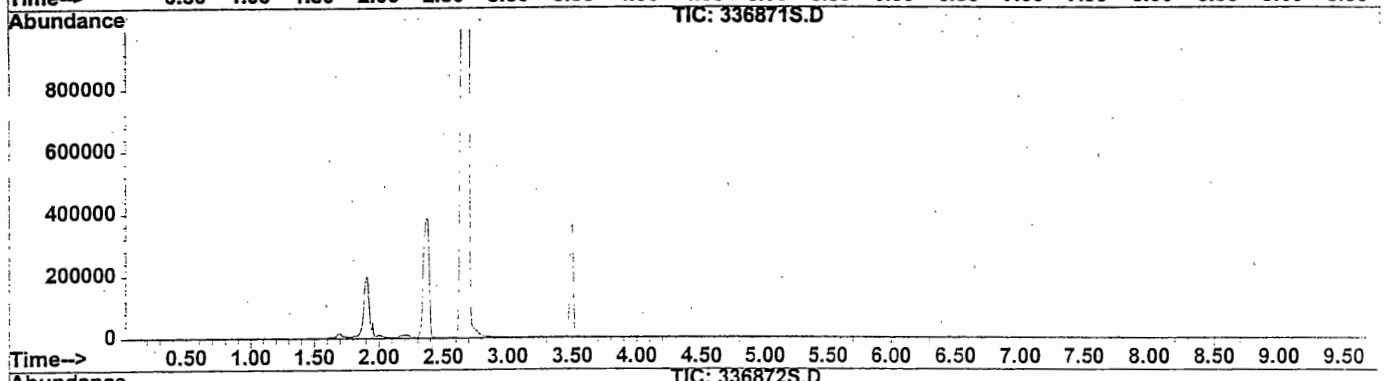

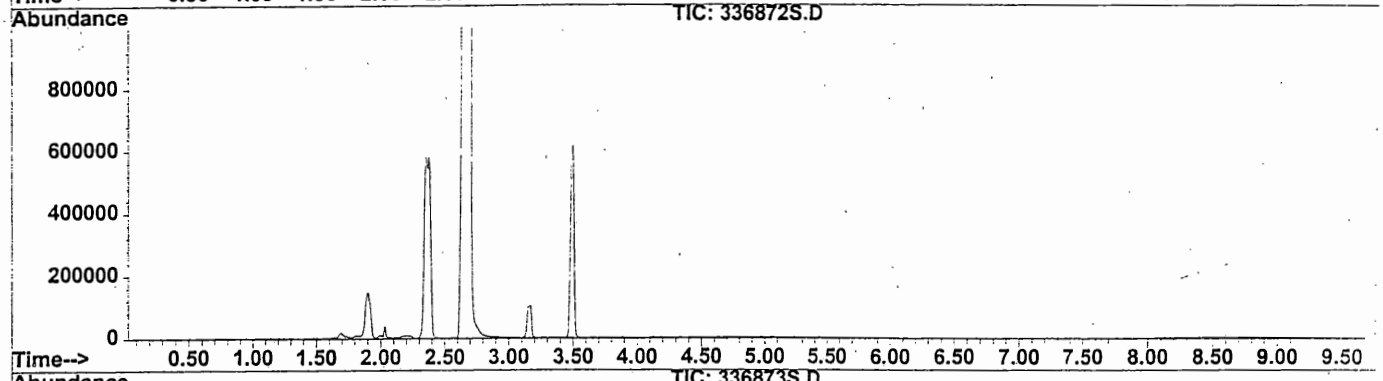

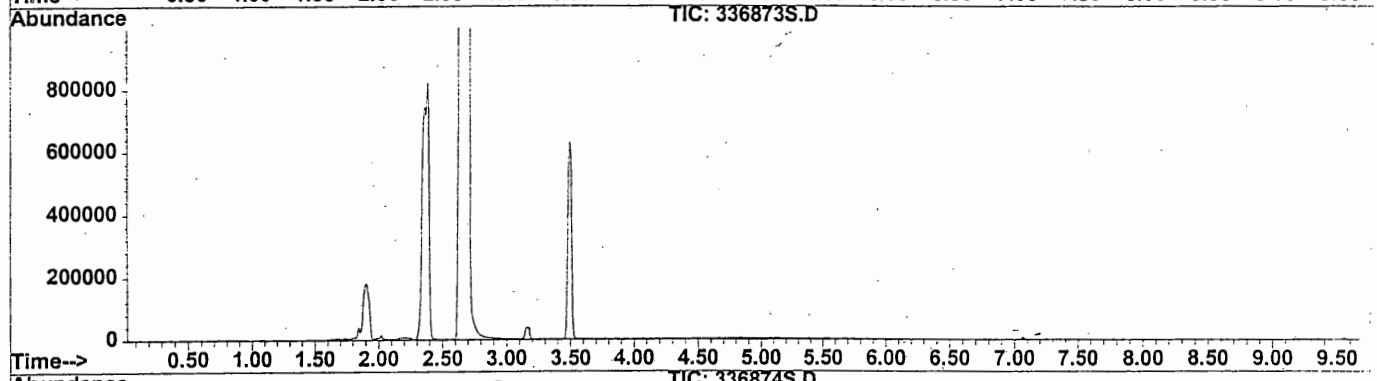

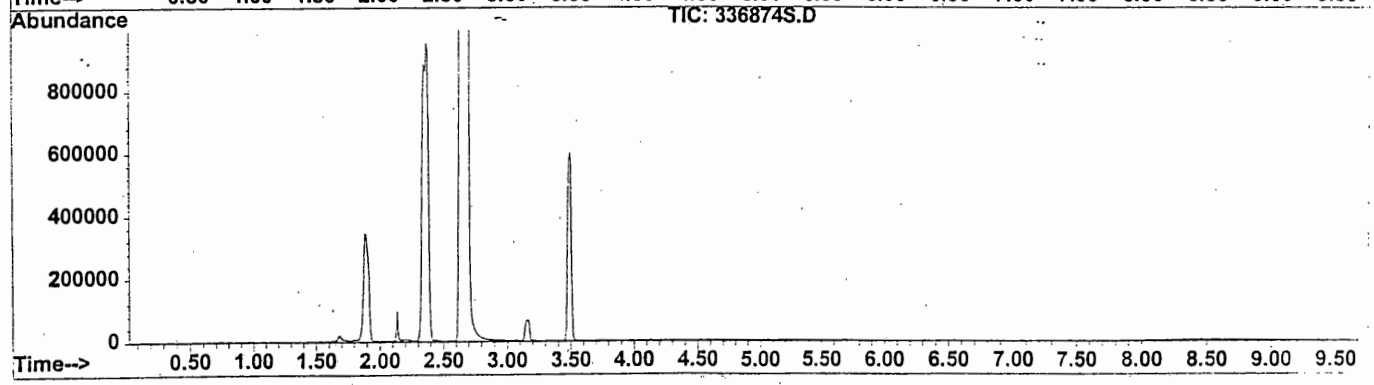

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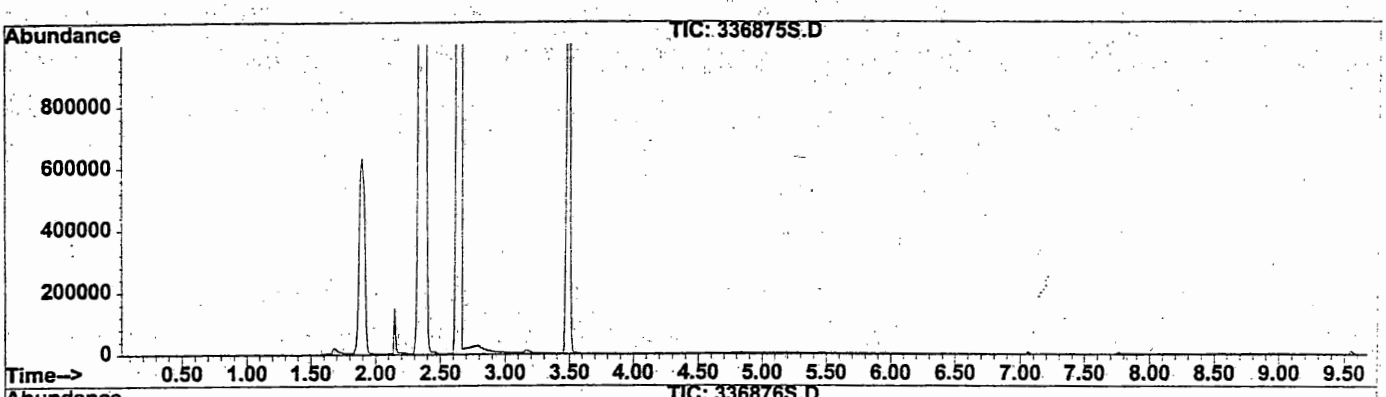

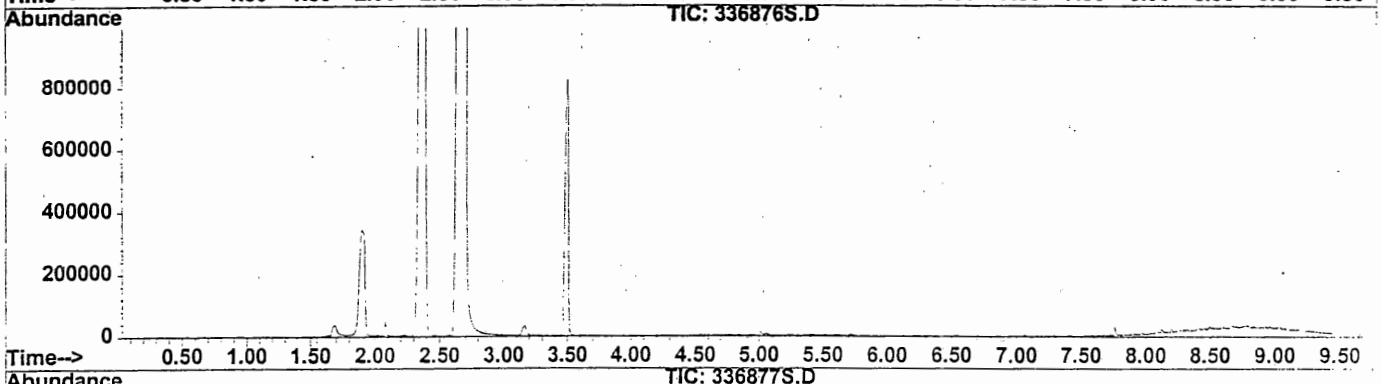

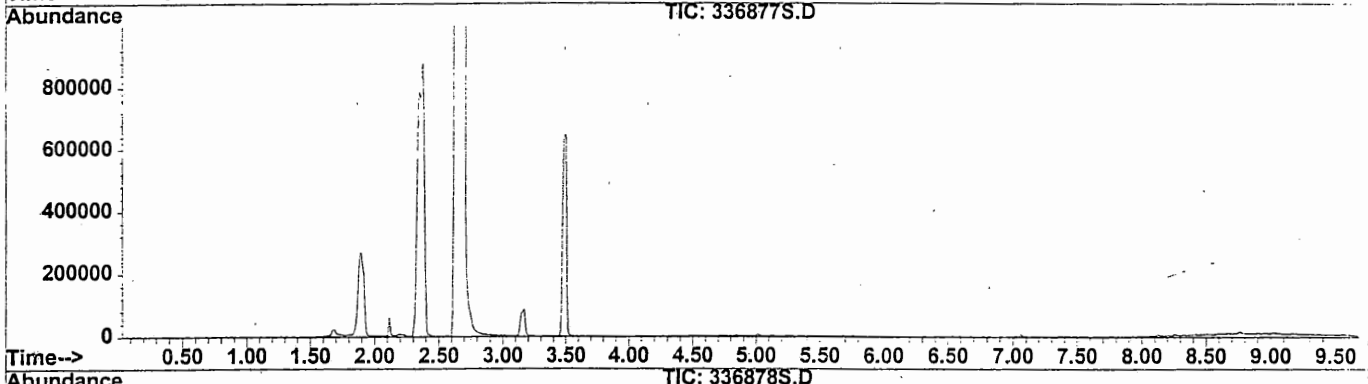

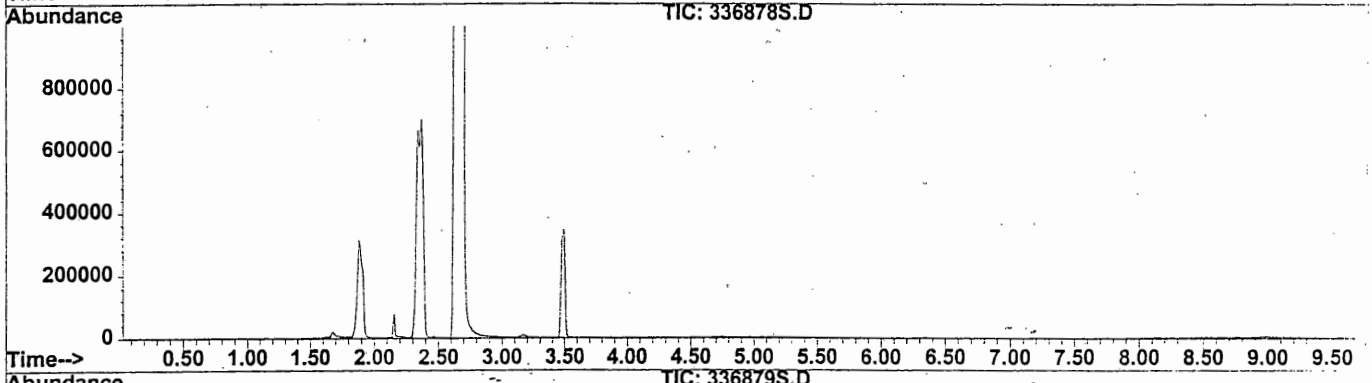

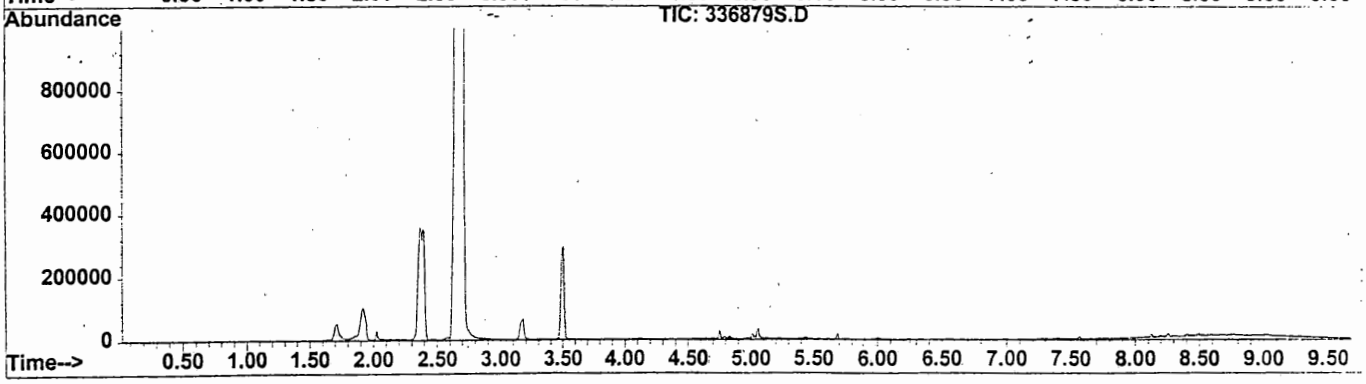

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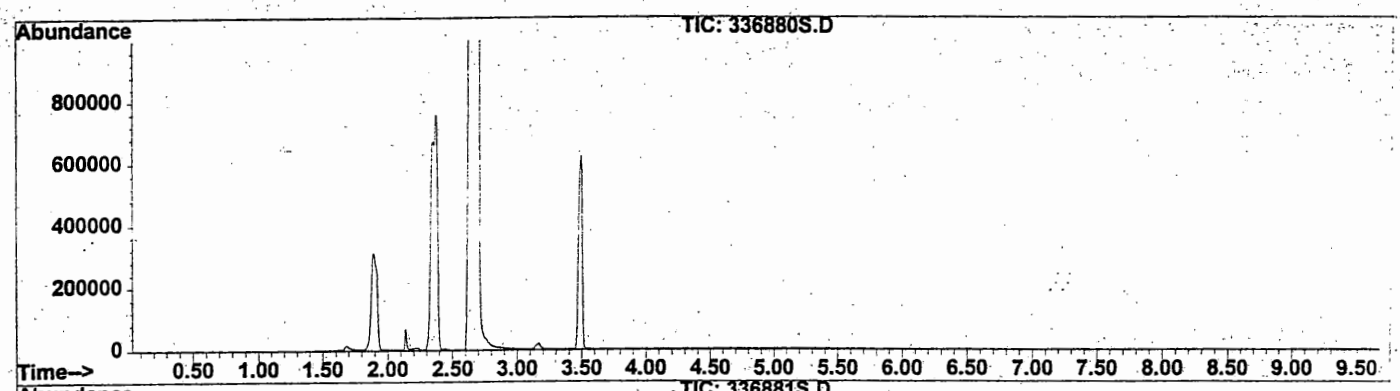

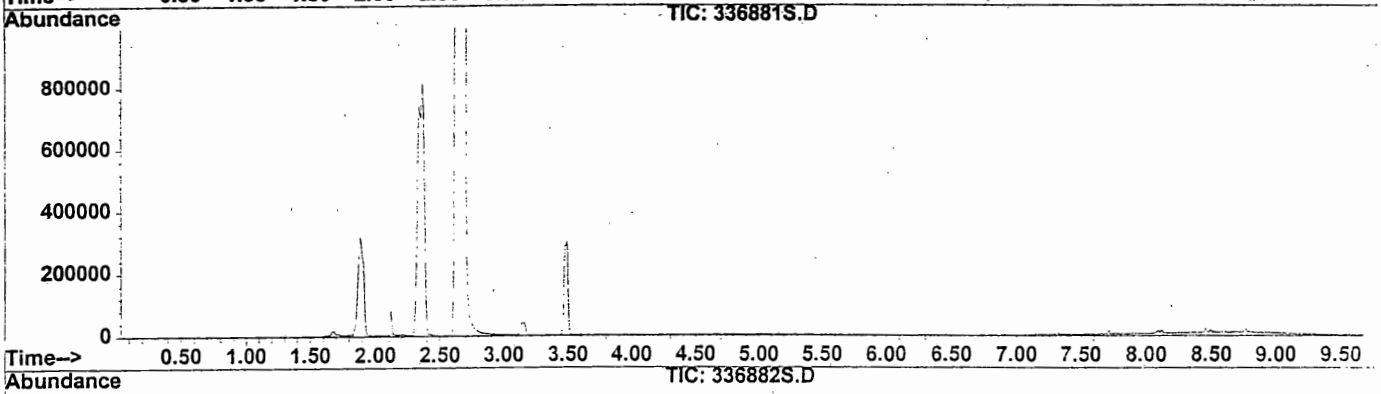

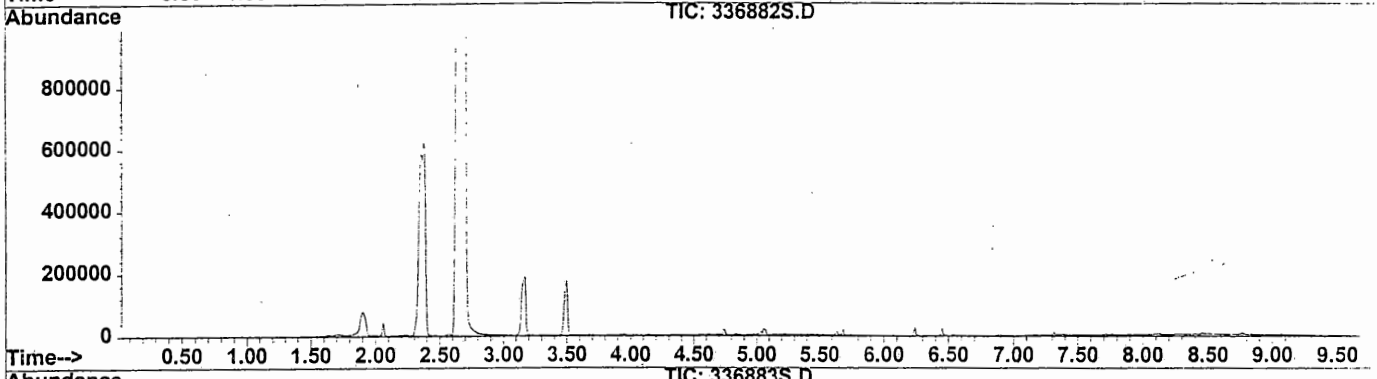

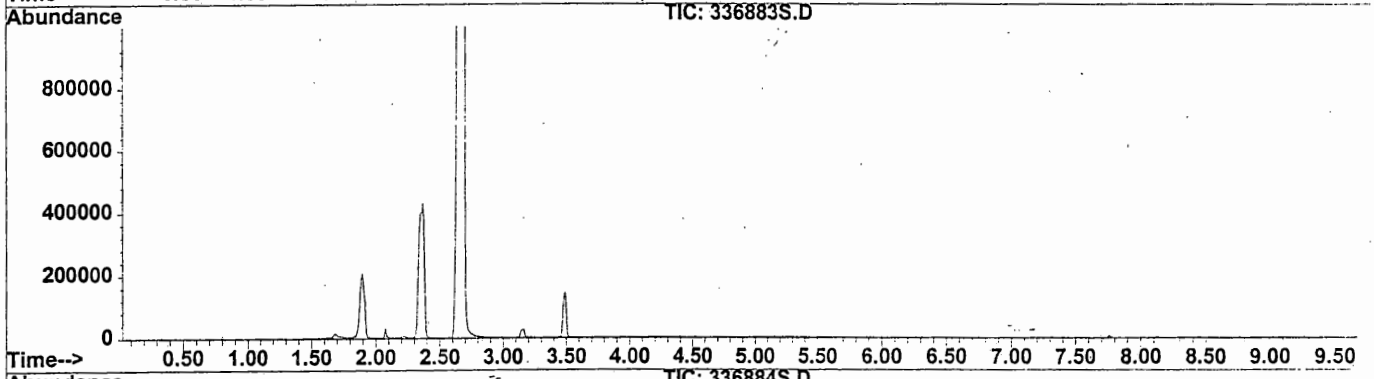

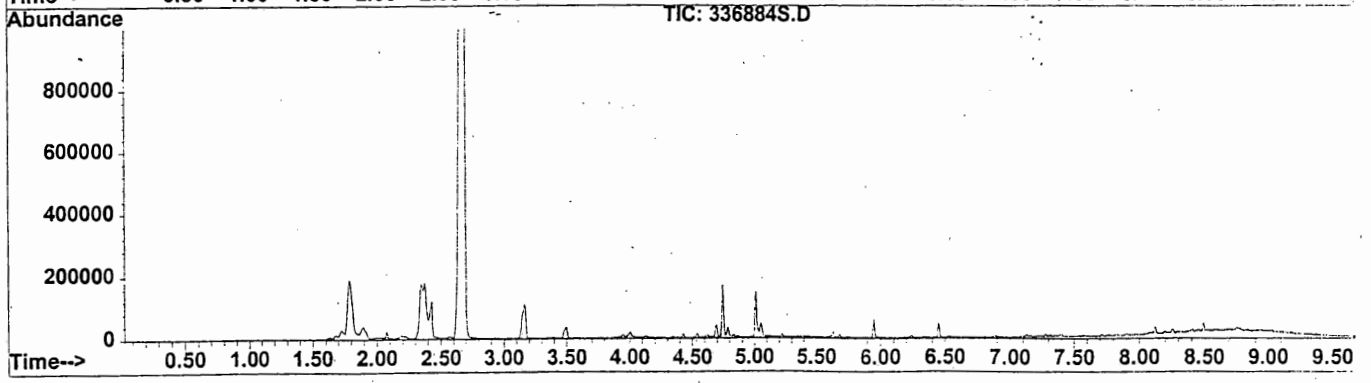

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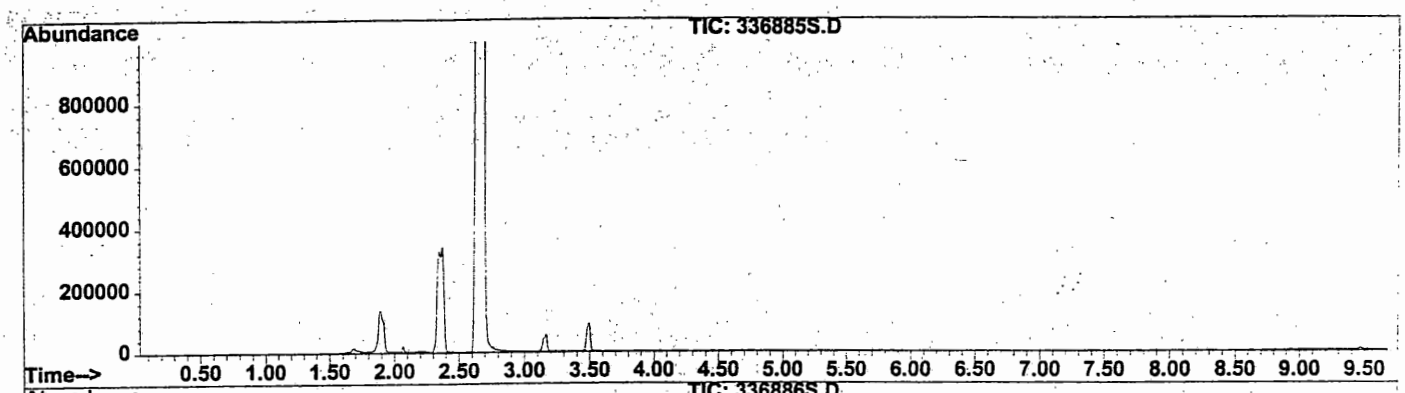

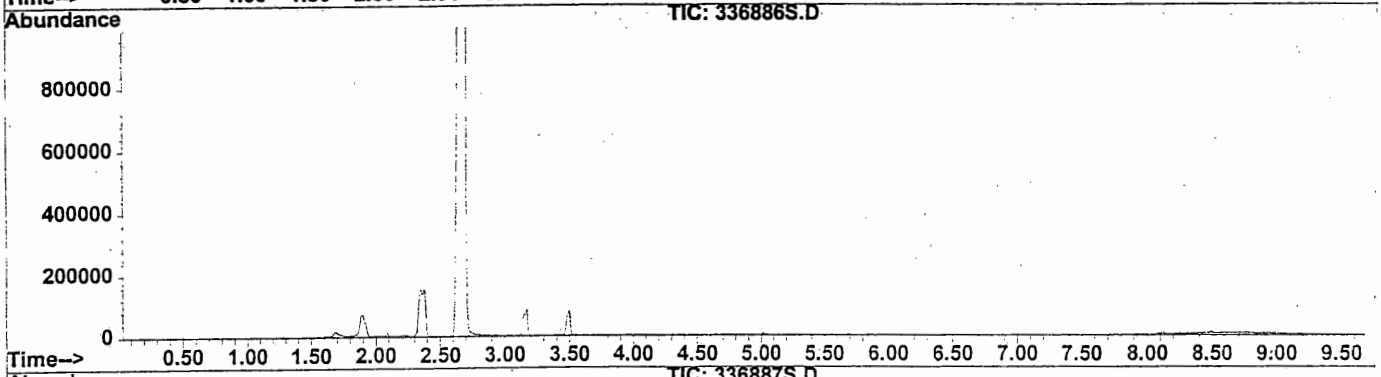

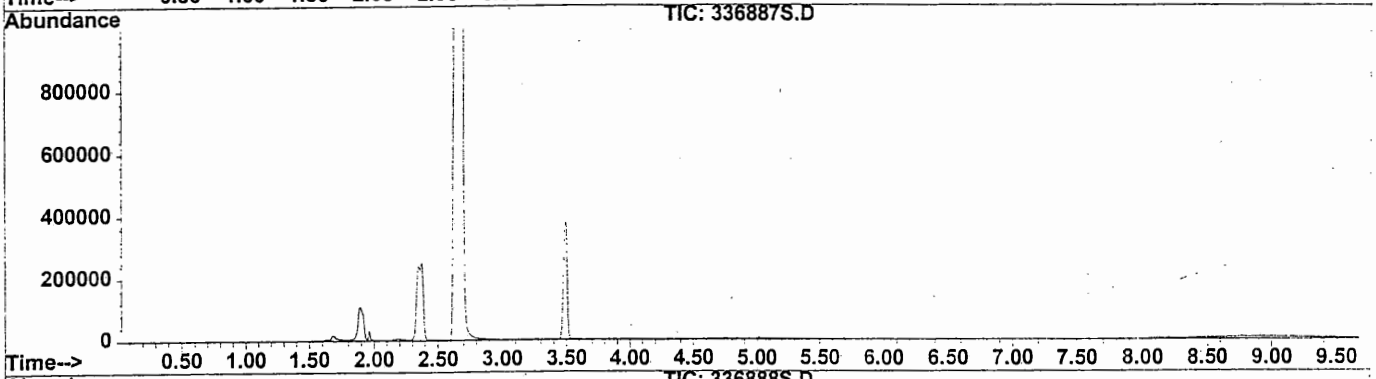

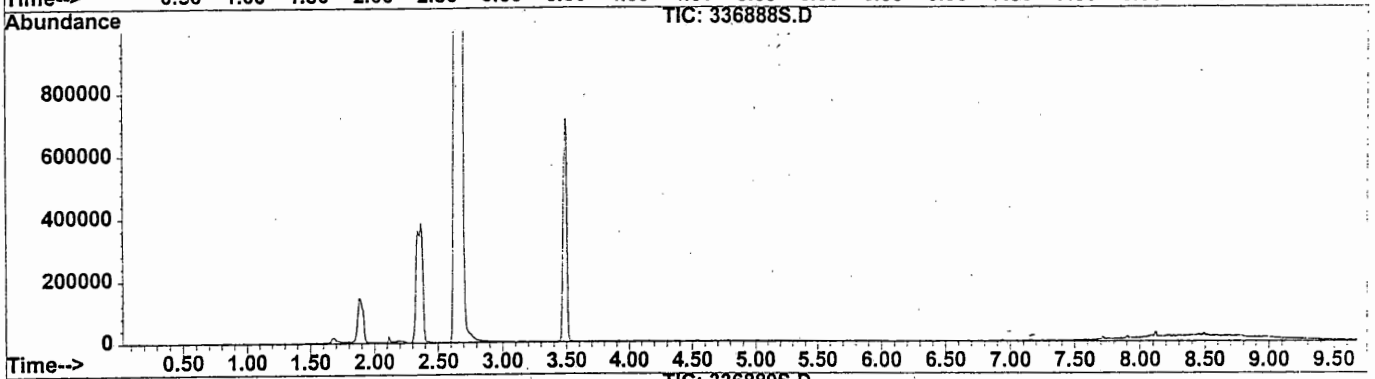

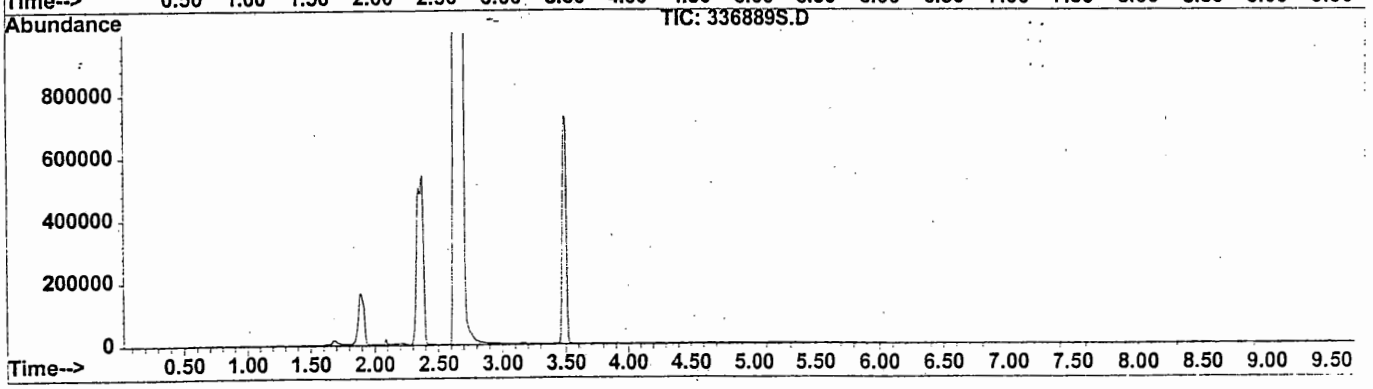

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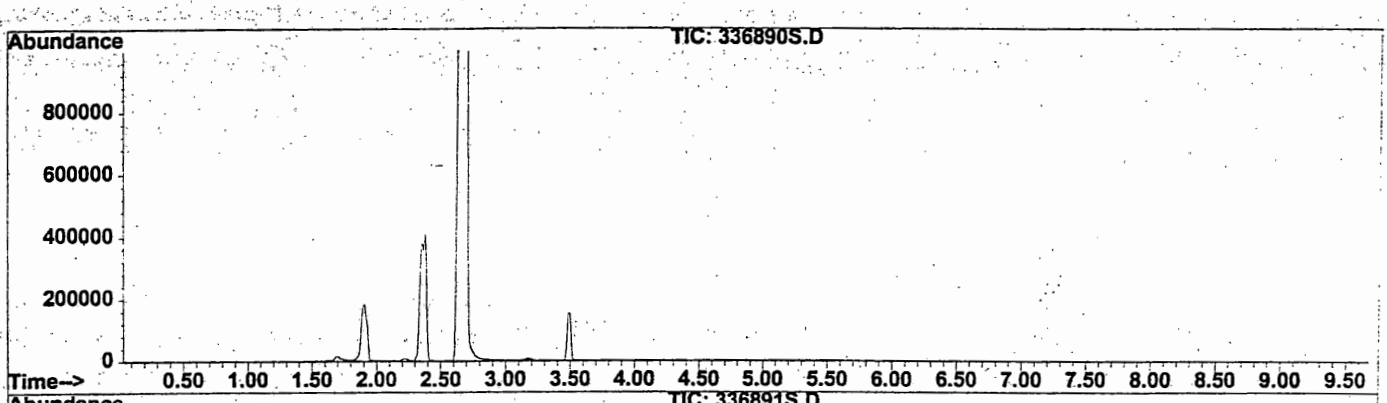

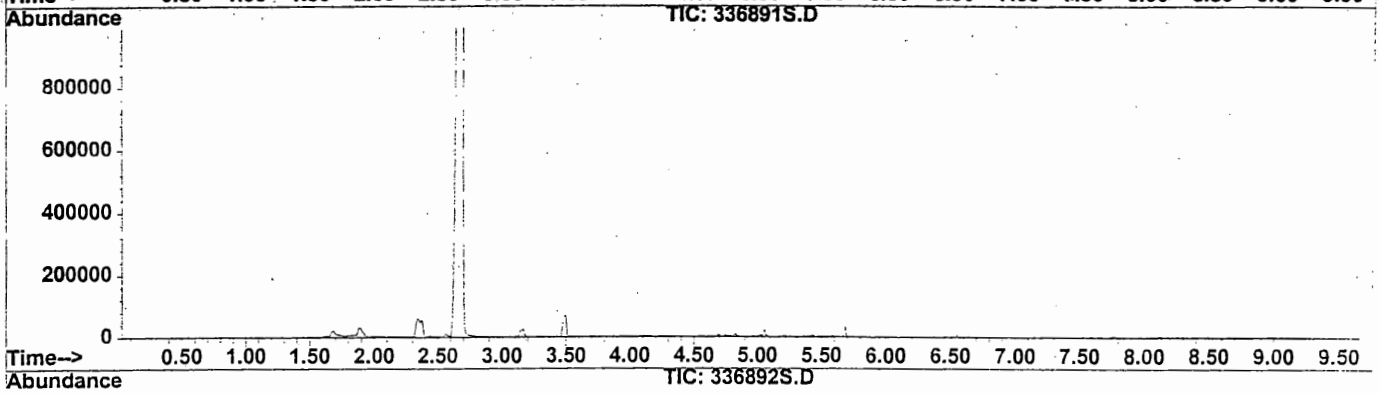

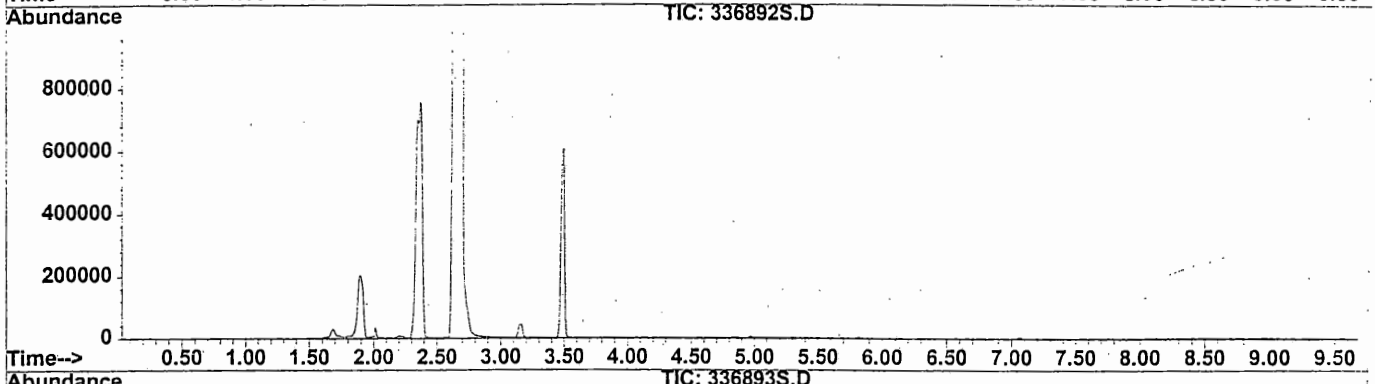

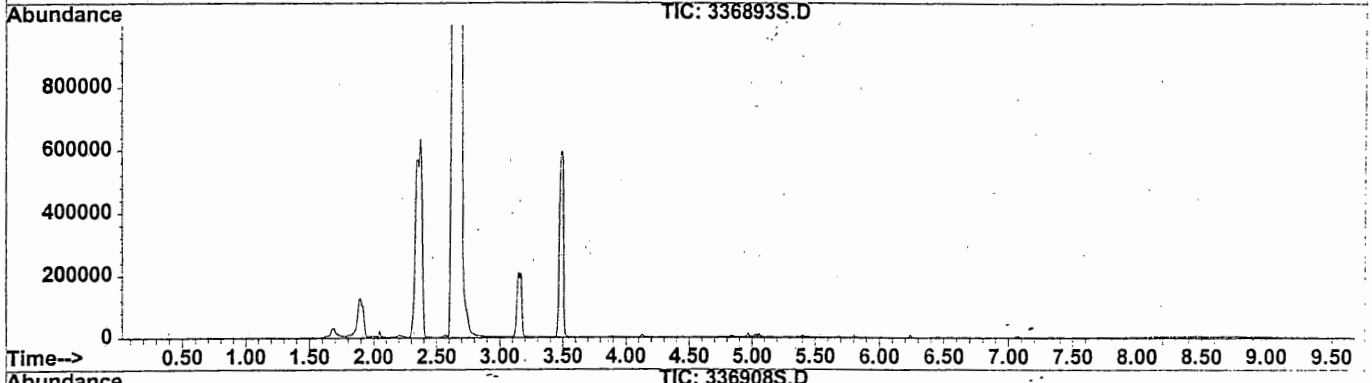

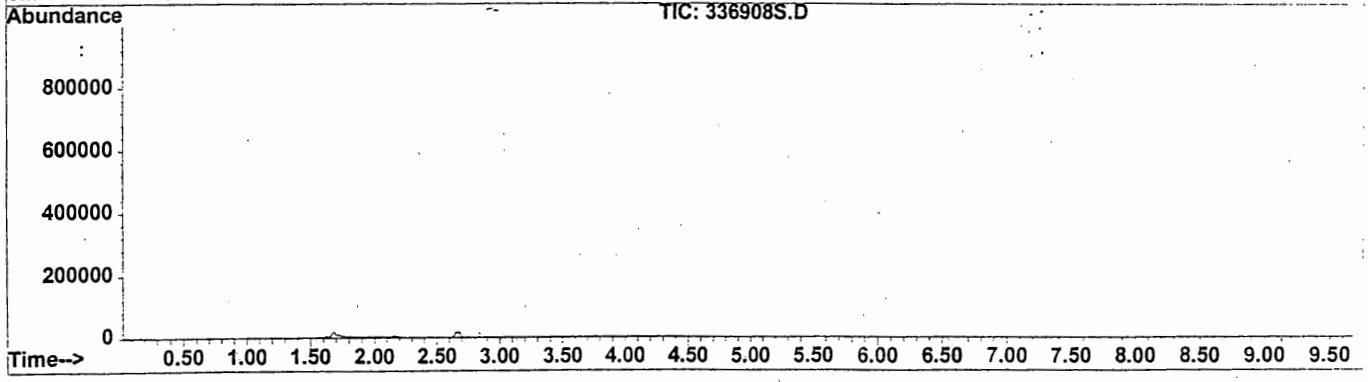

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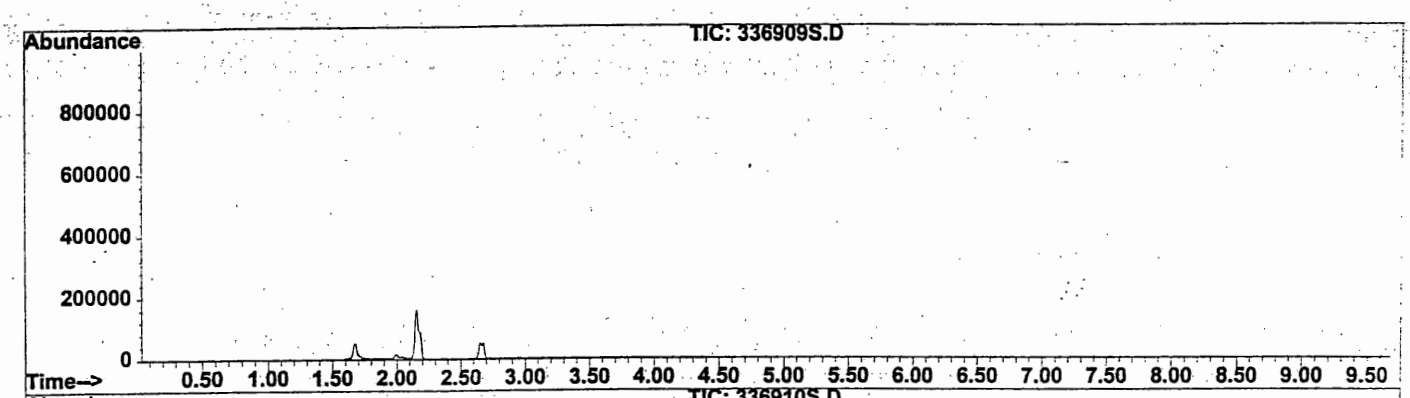

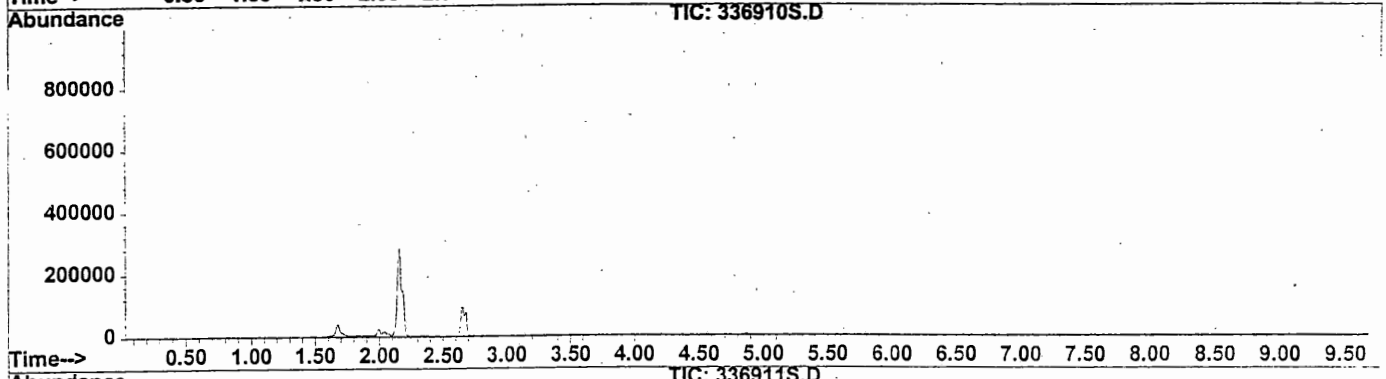

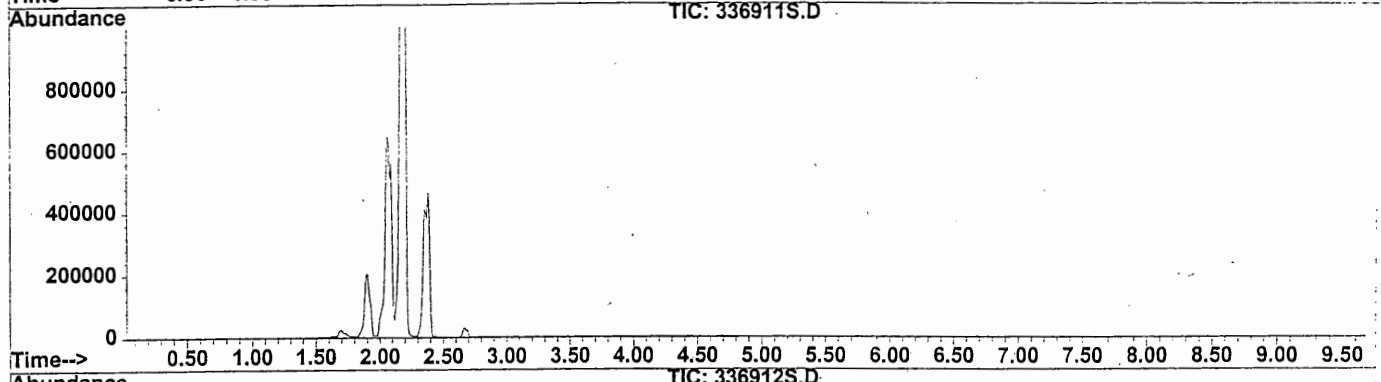

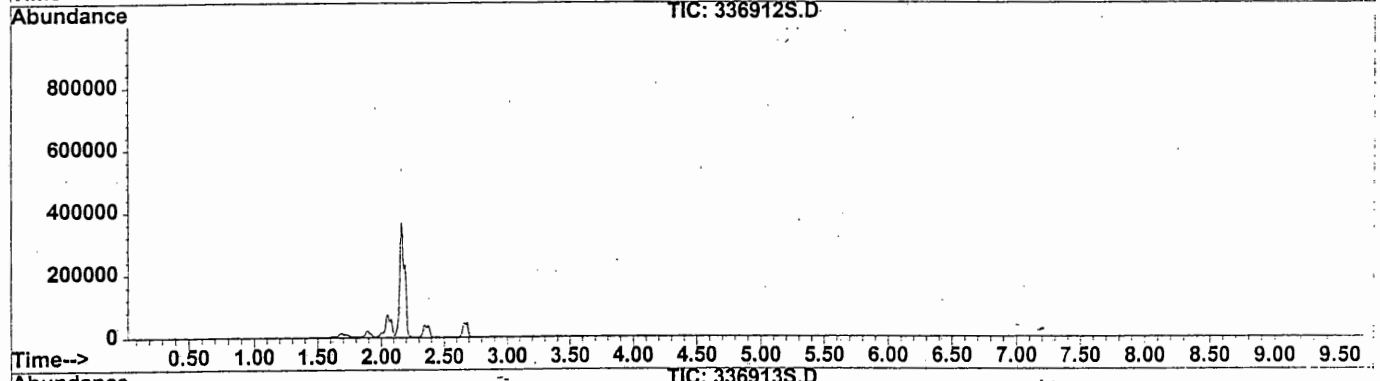

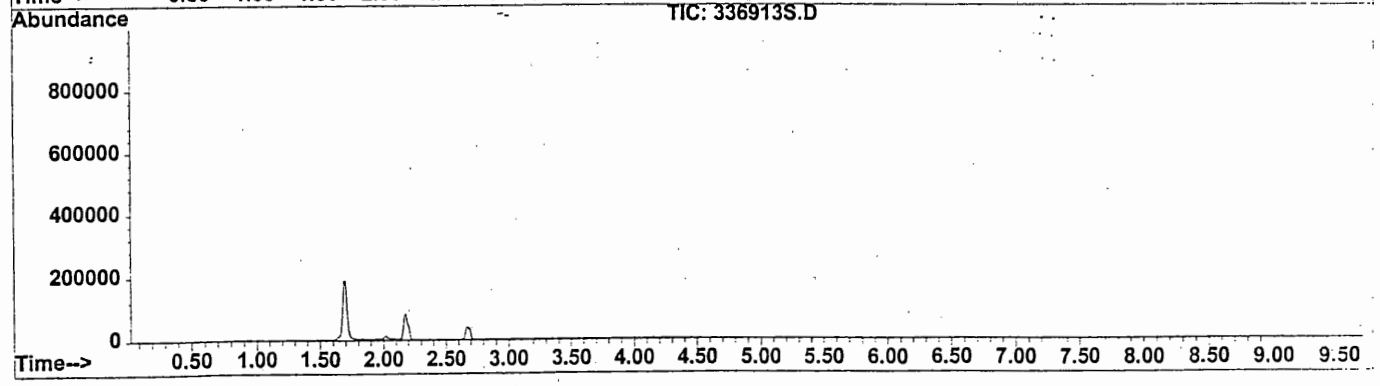

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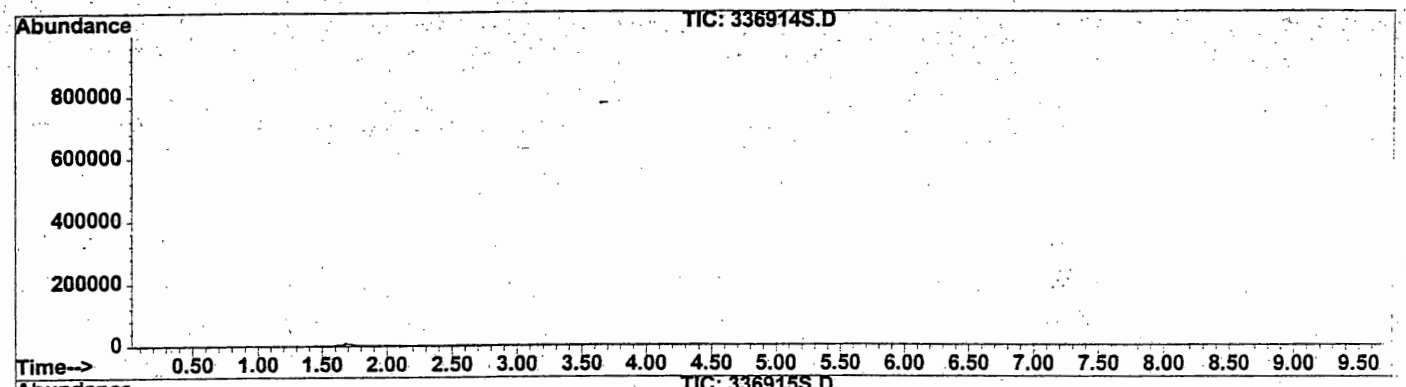

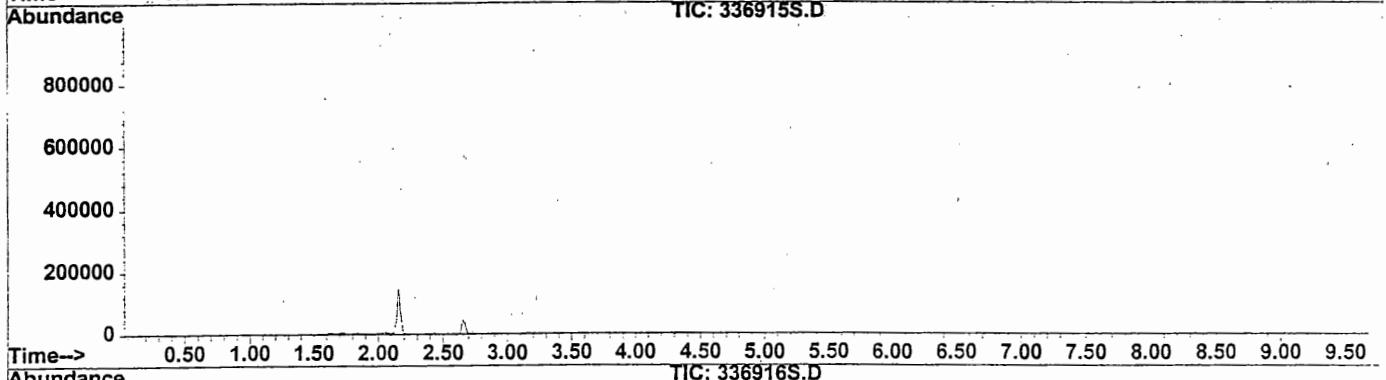

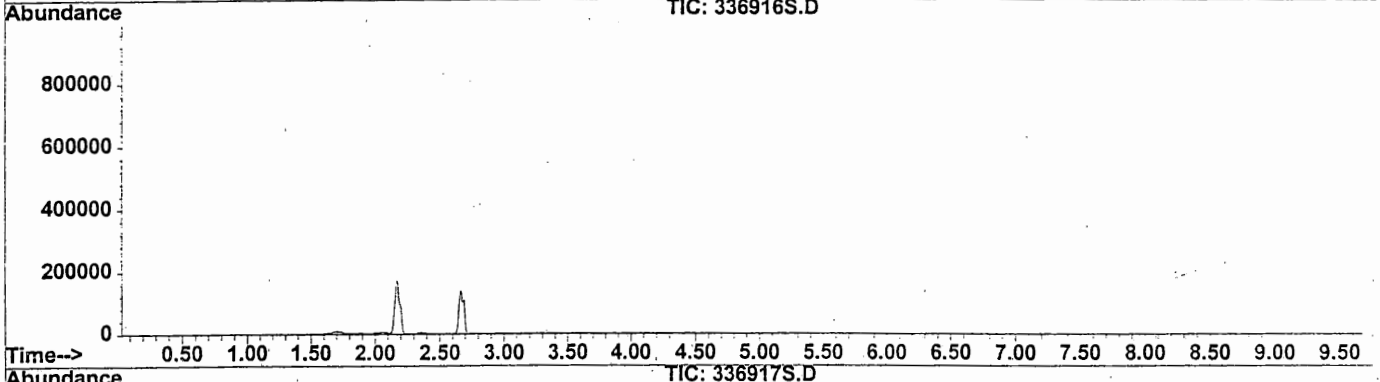

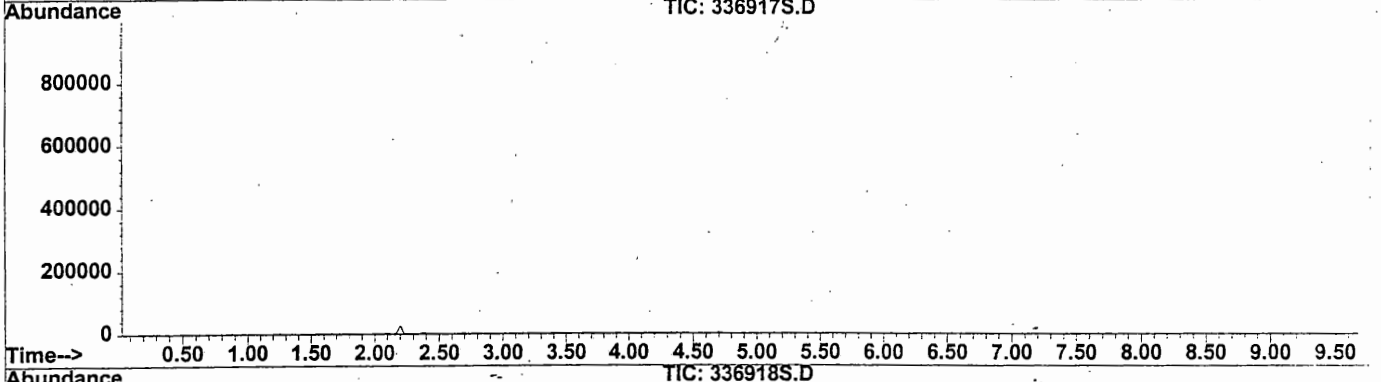

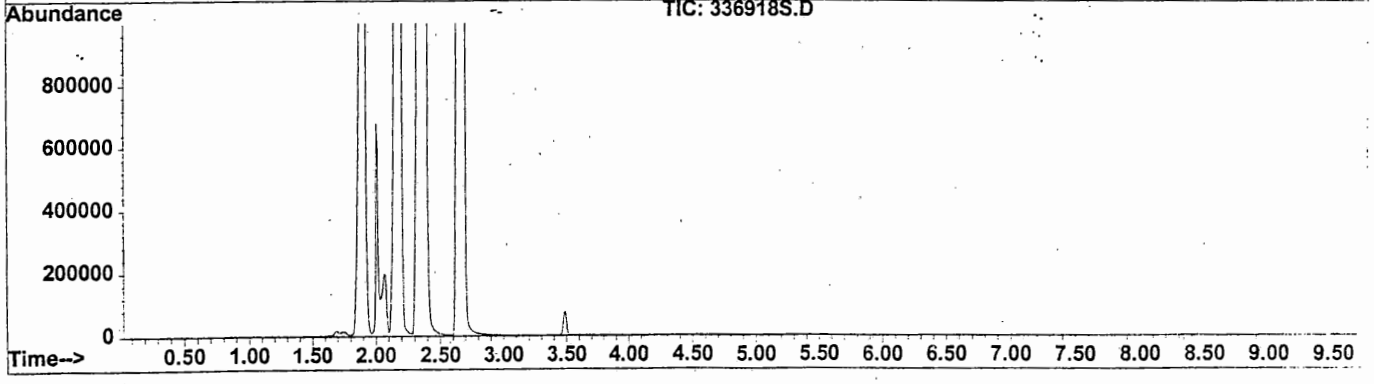

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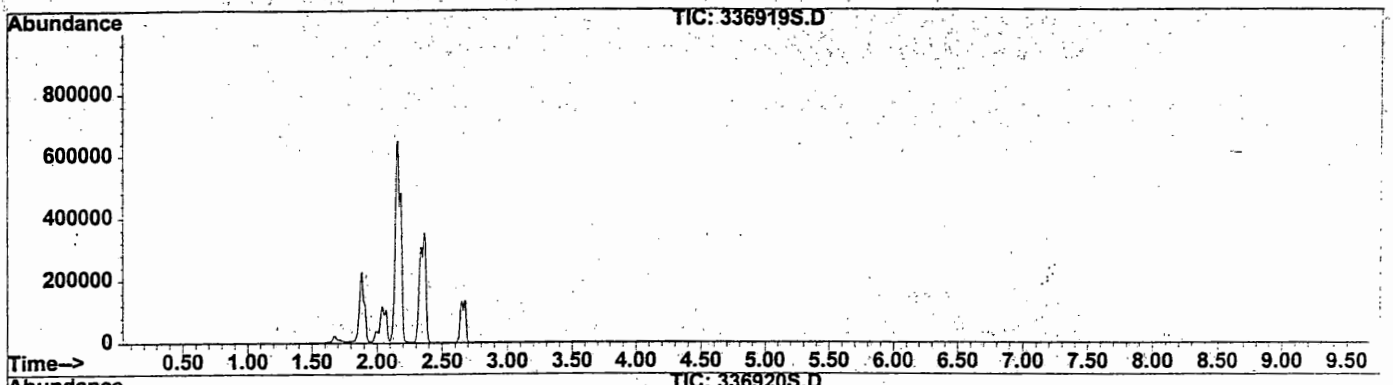

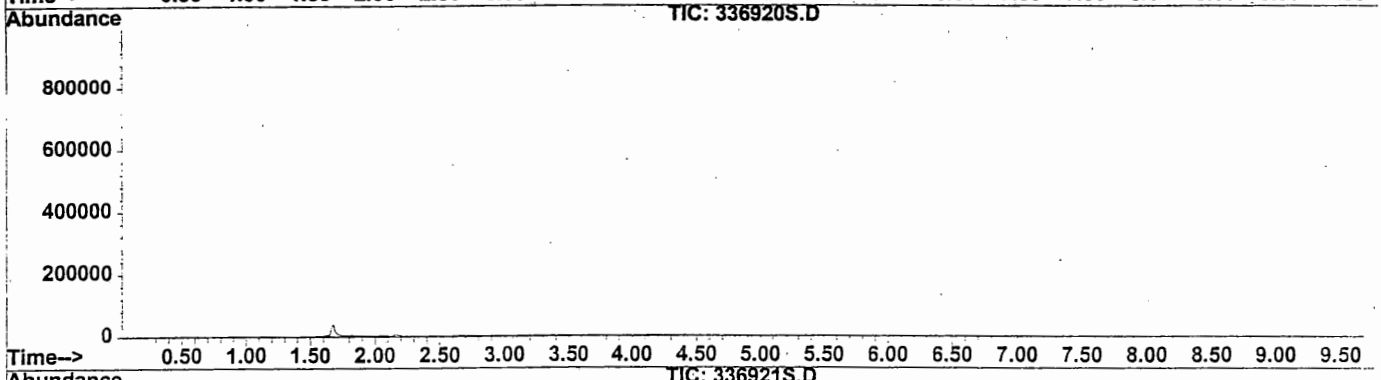

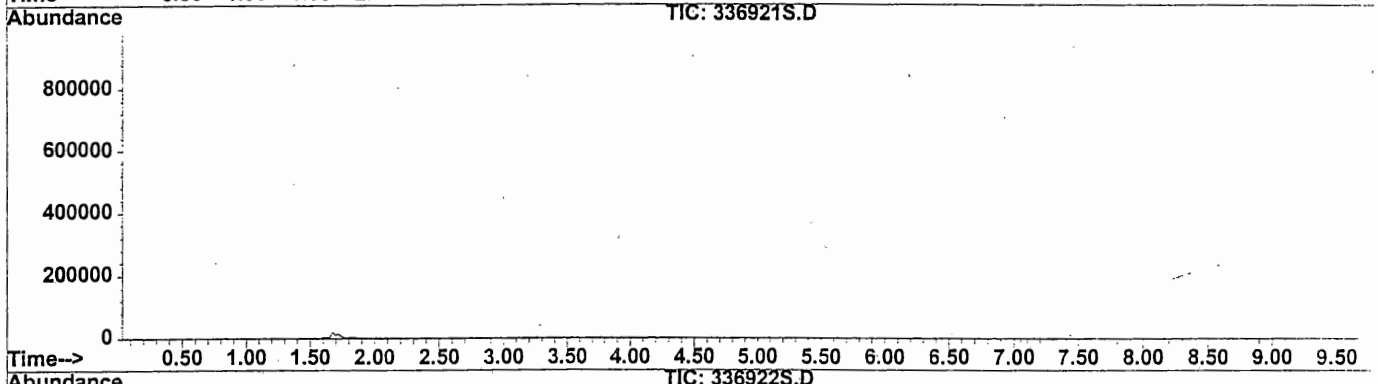

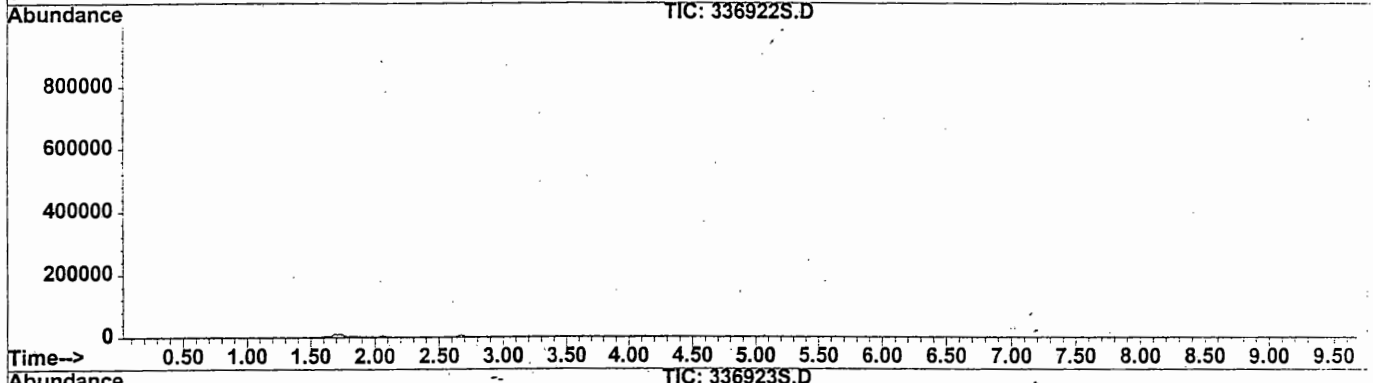

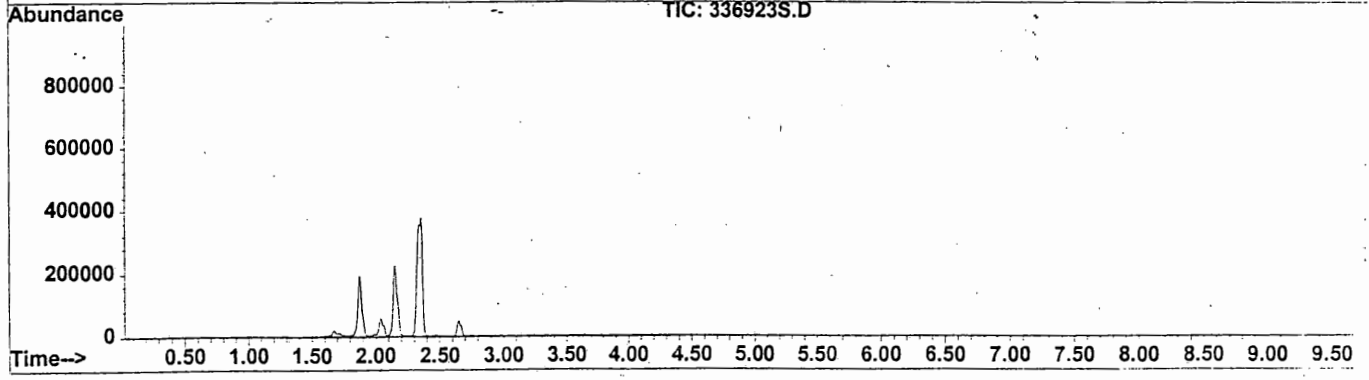

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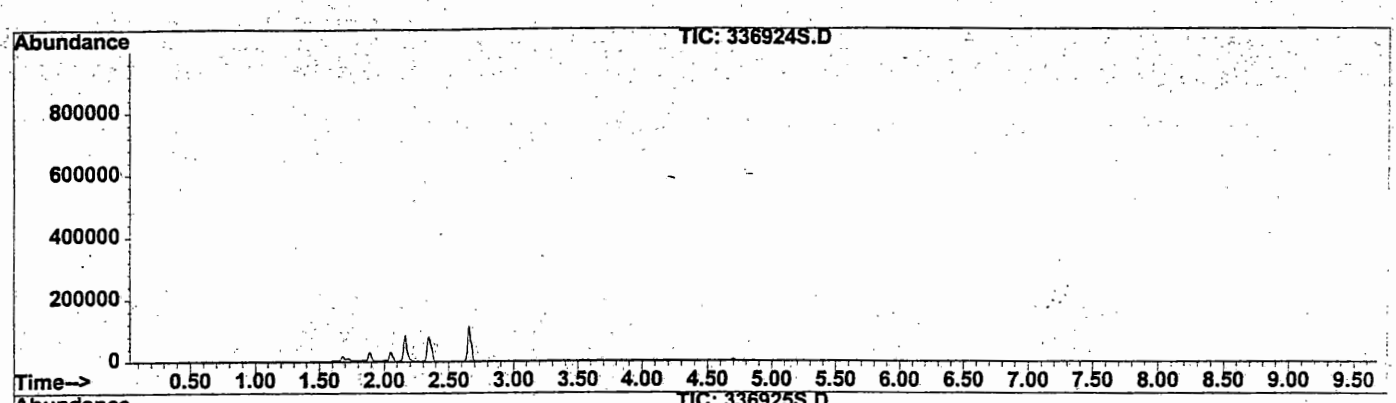

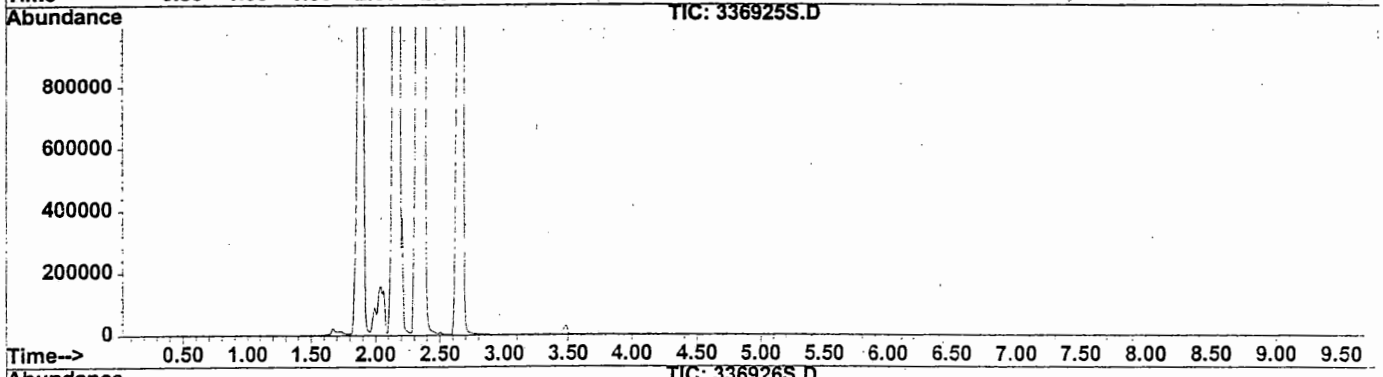

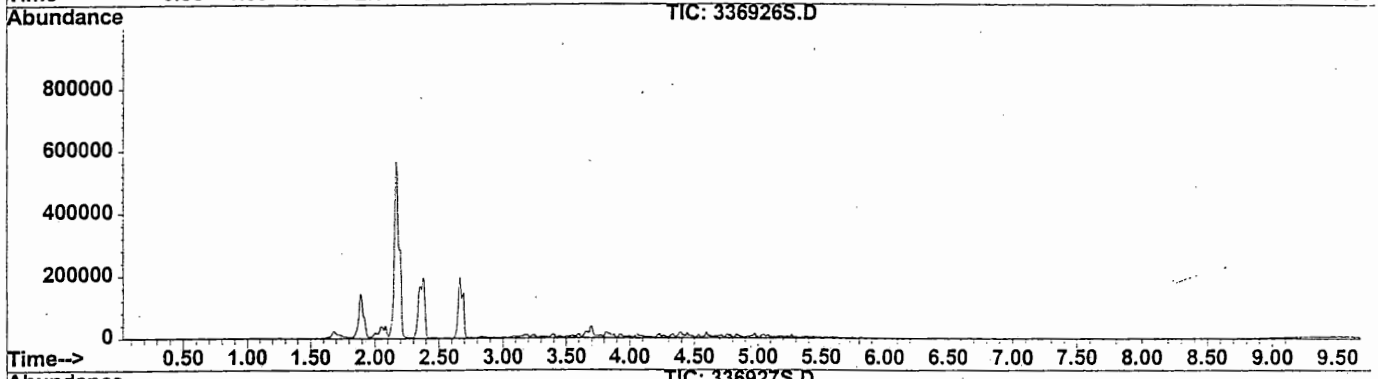

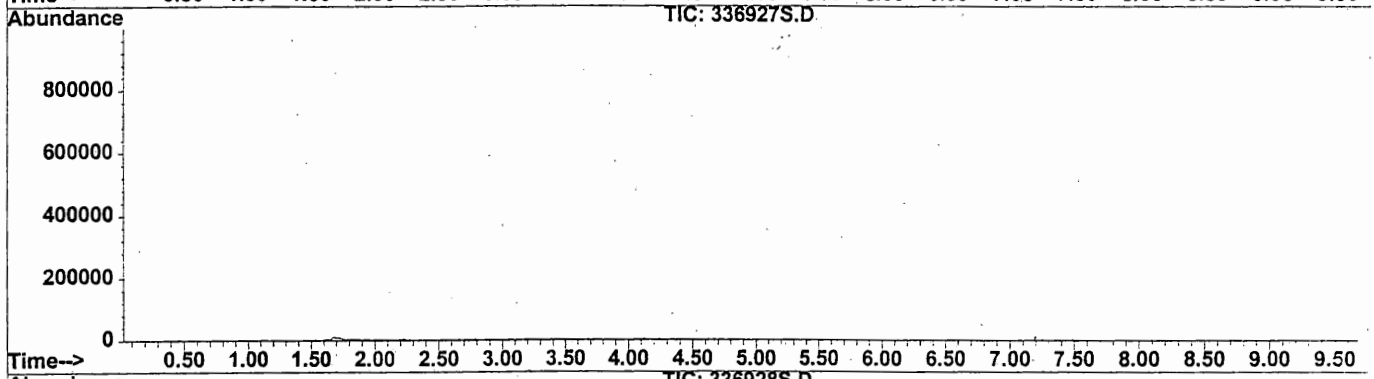

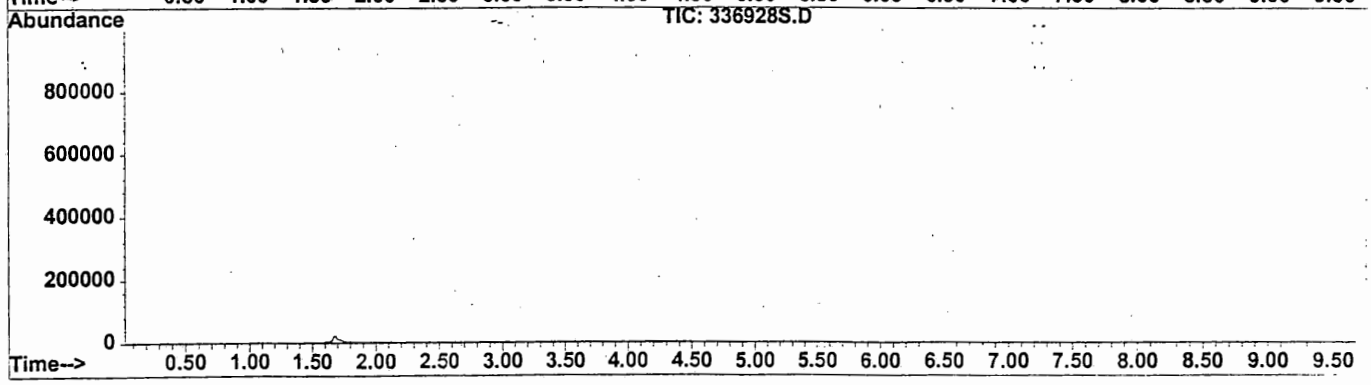

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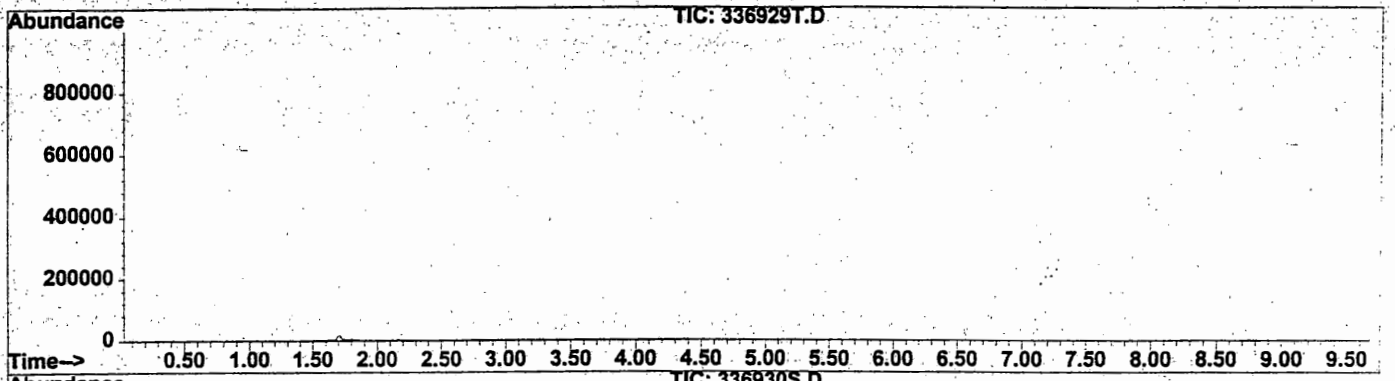
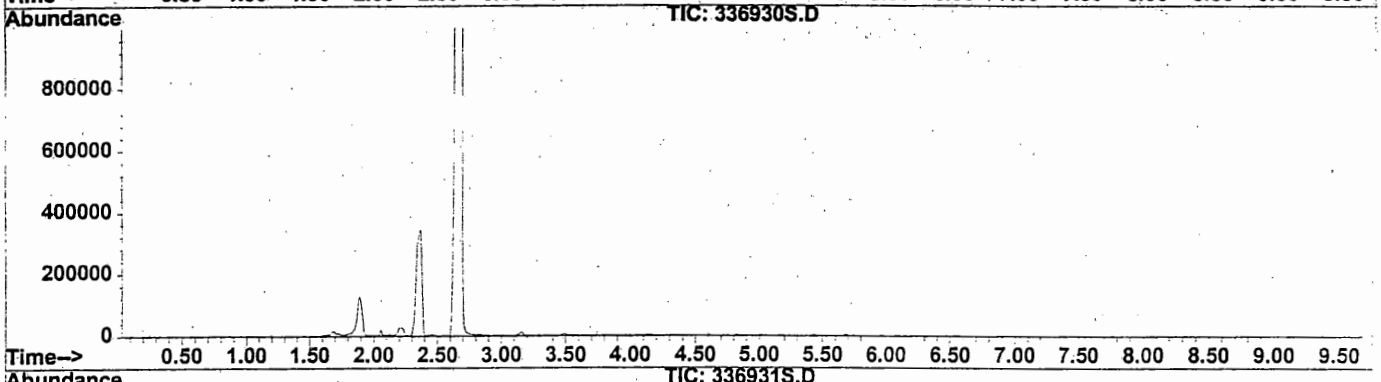
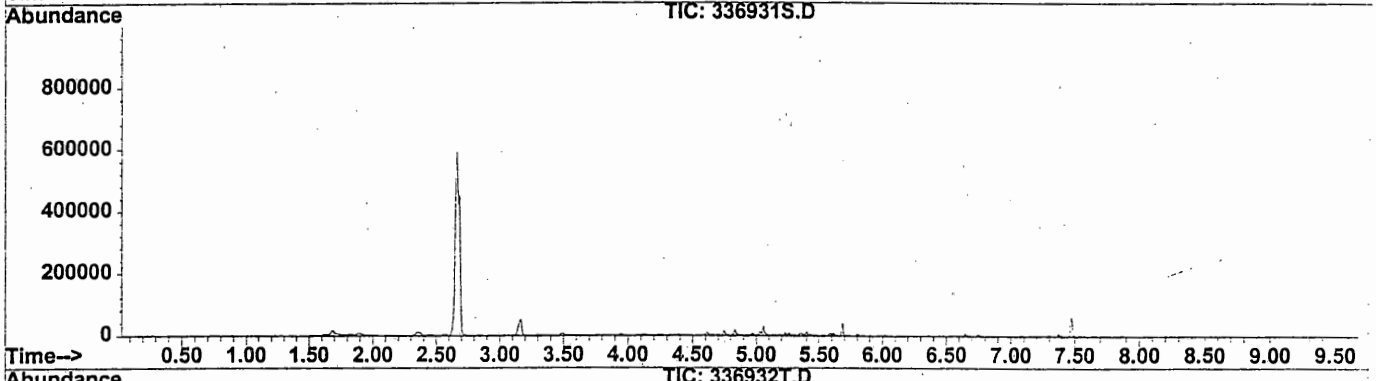
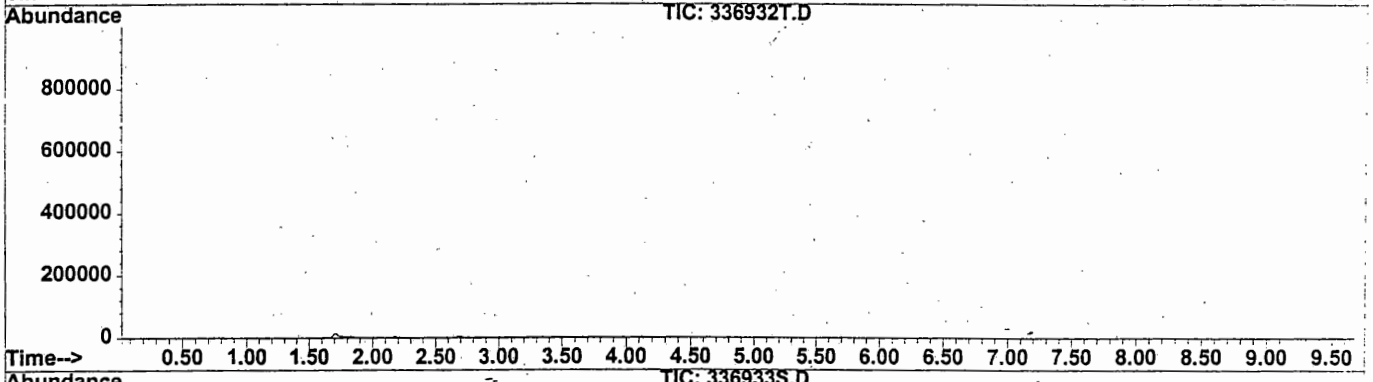
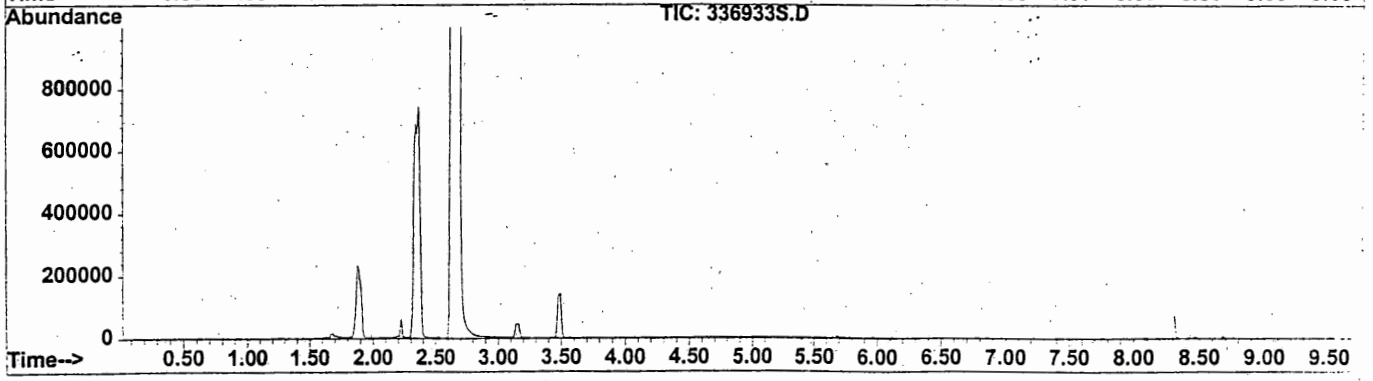


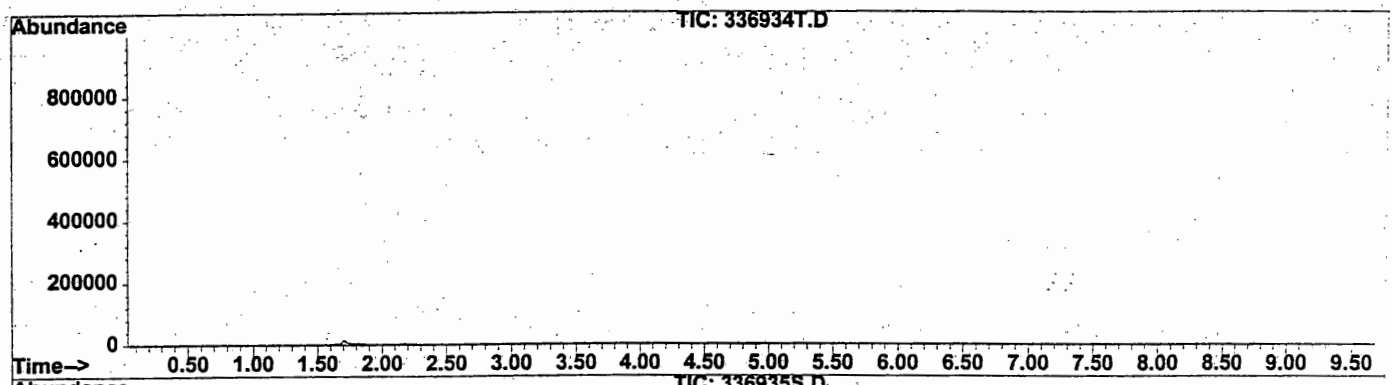


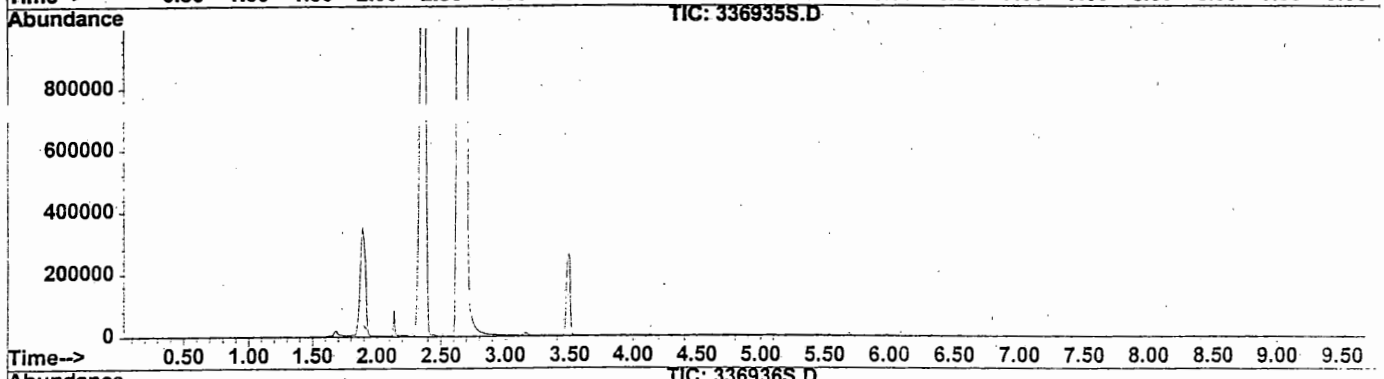


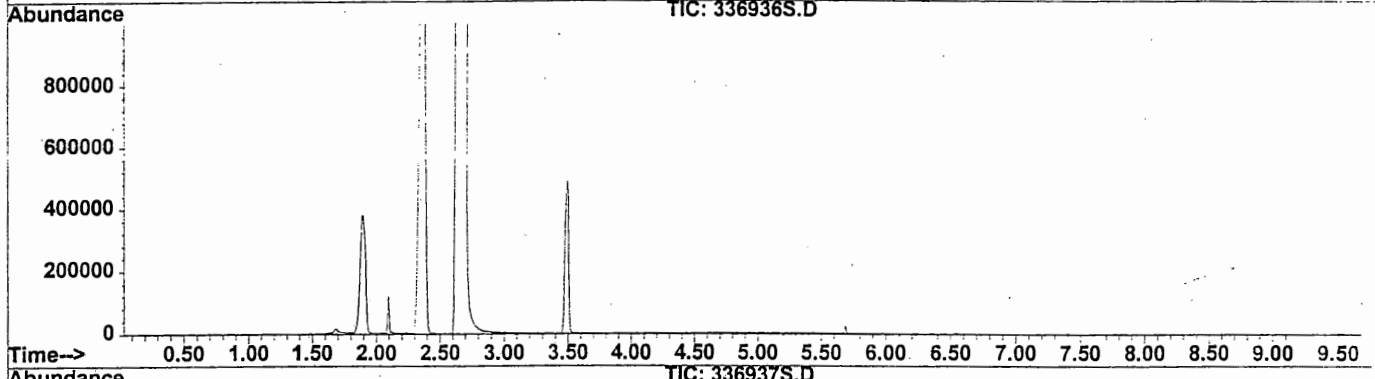


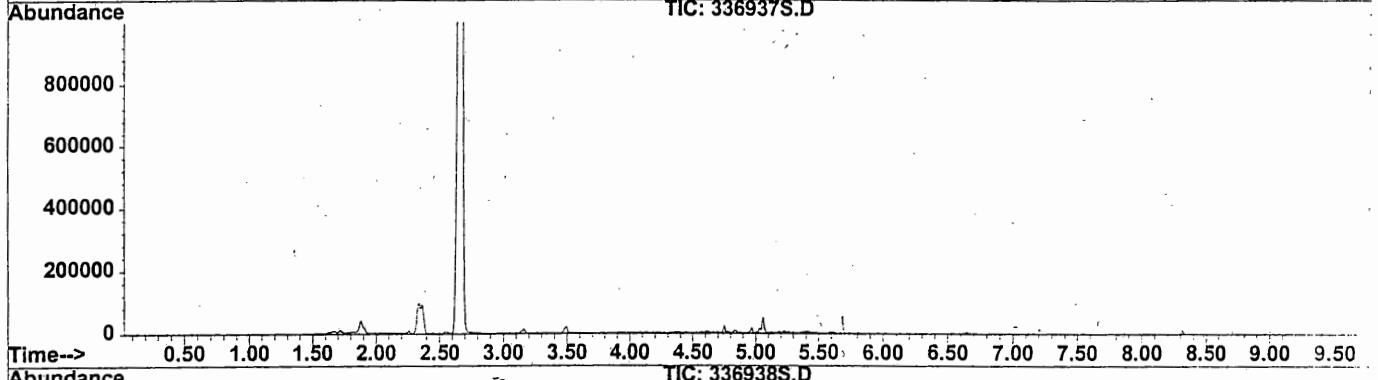


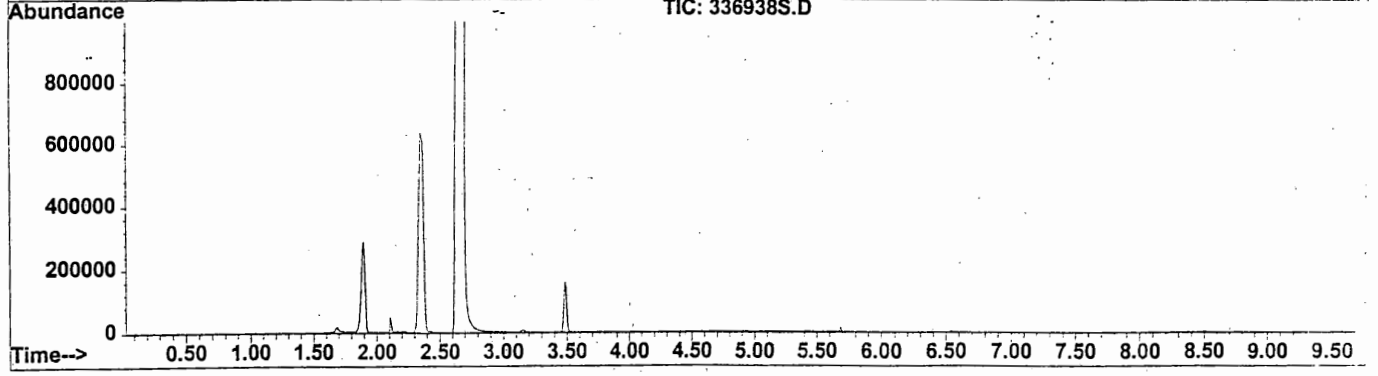
TIC - SITE BNG - PRODUCTION ORDER #10482569
In Numerical Order











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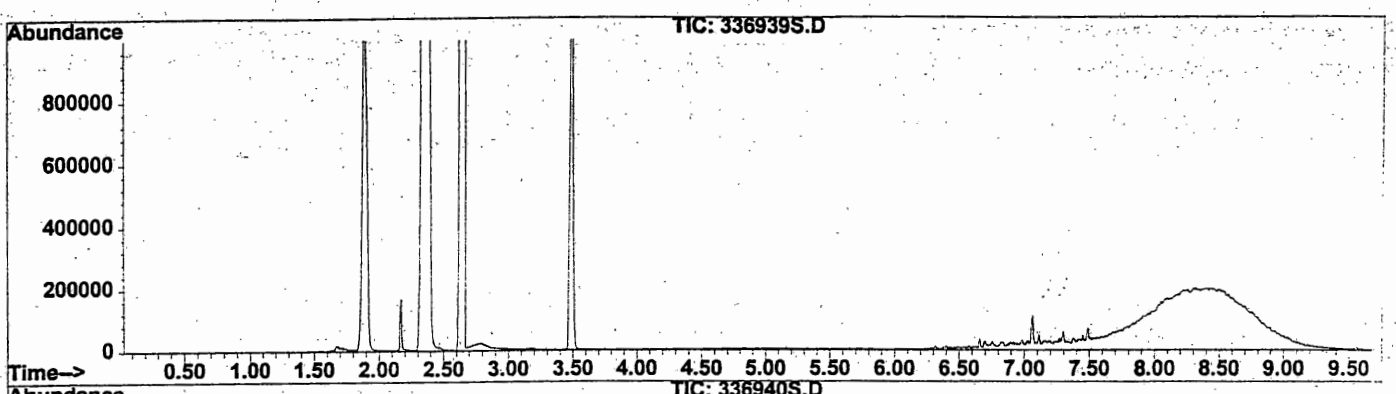

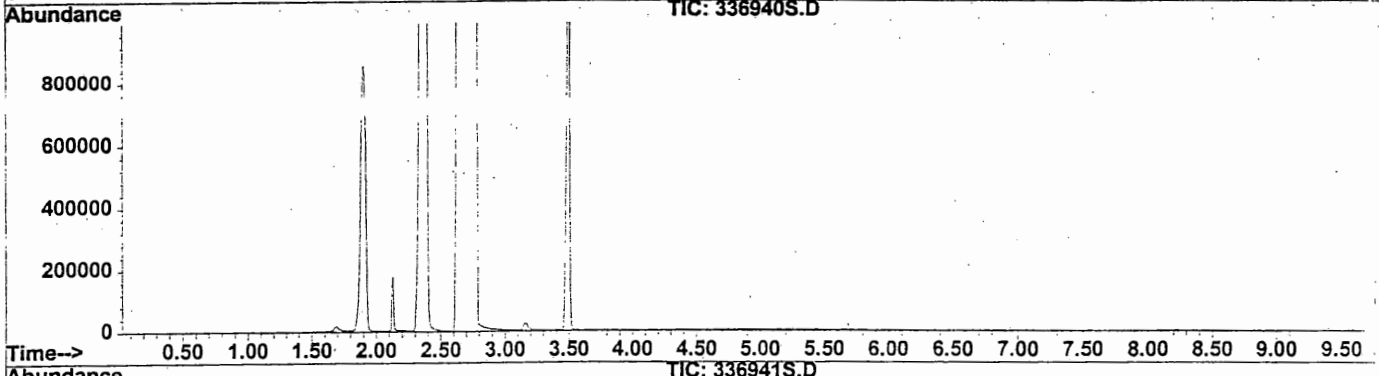

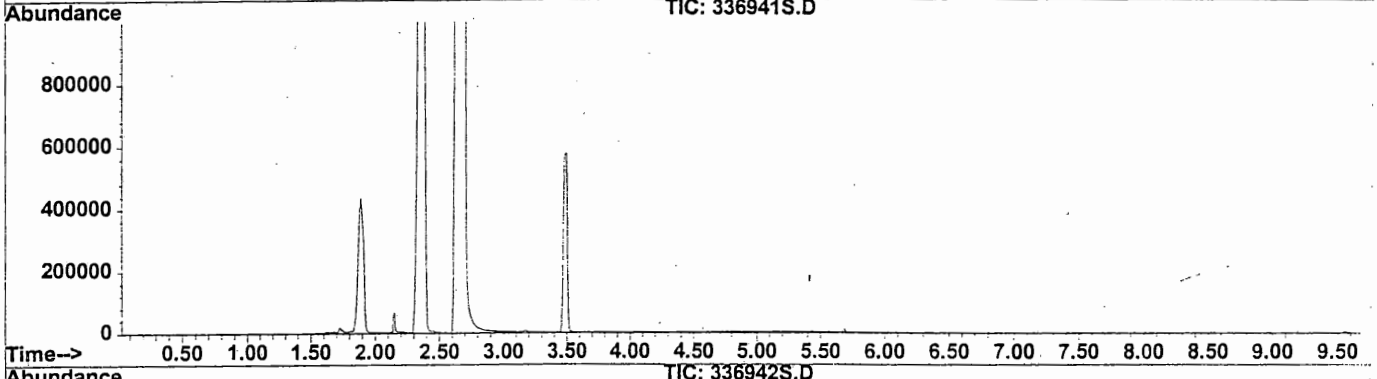

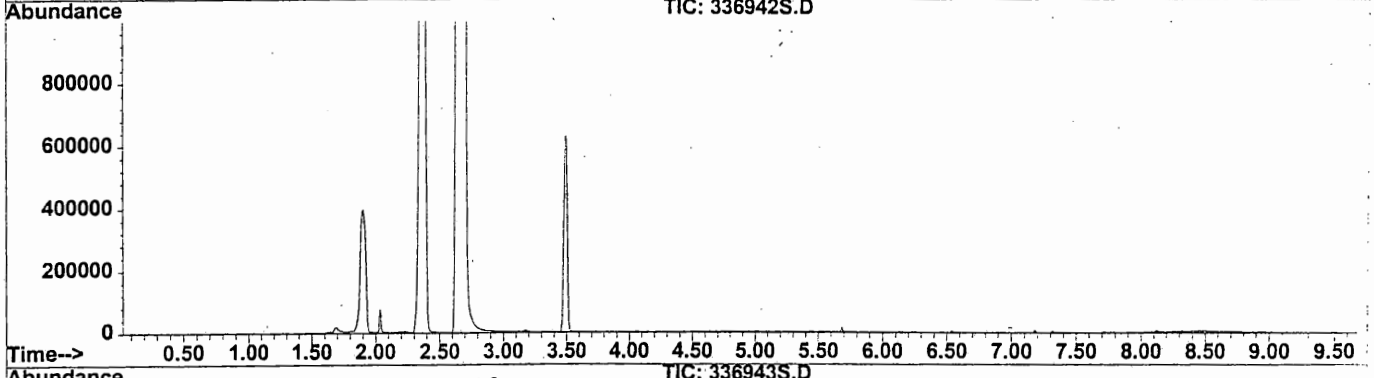

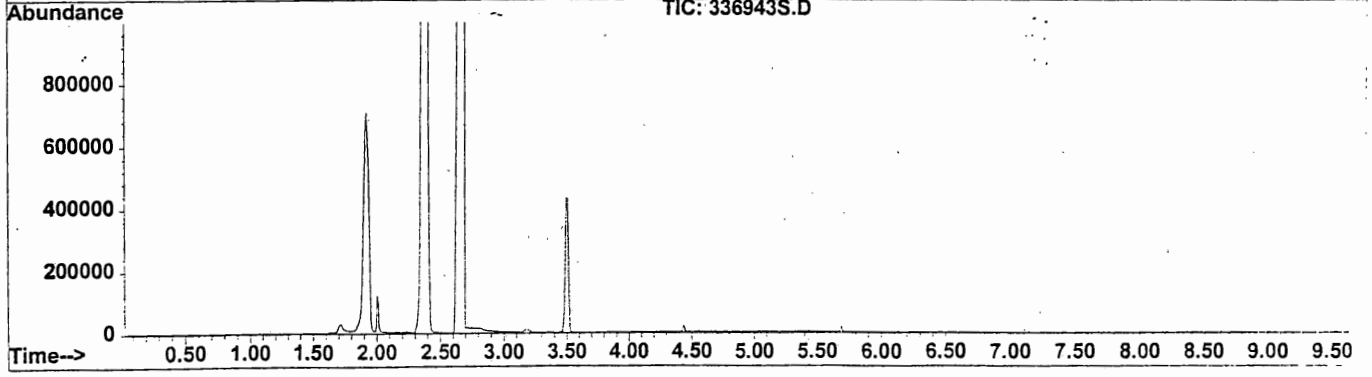

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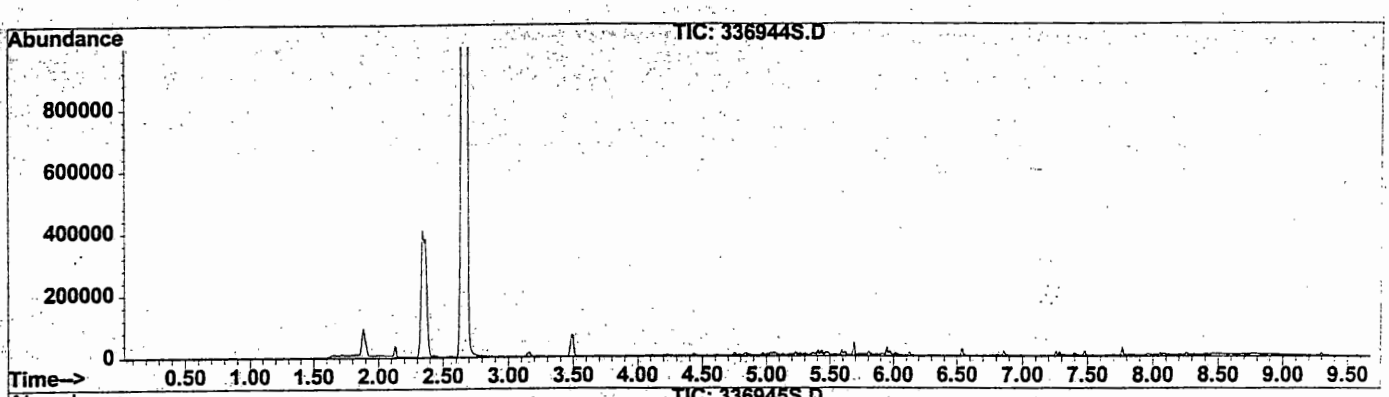

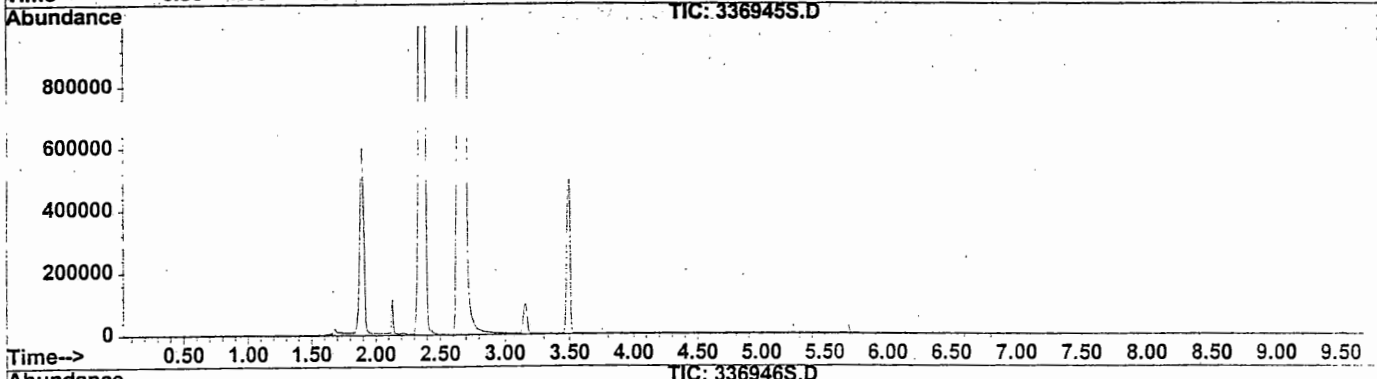

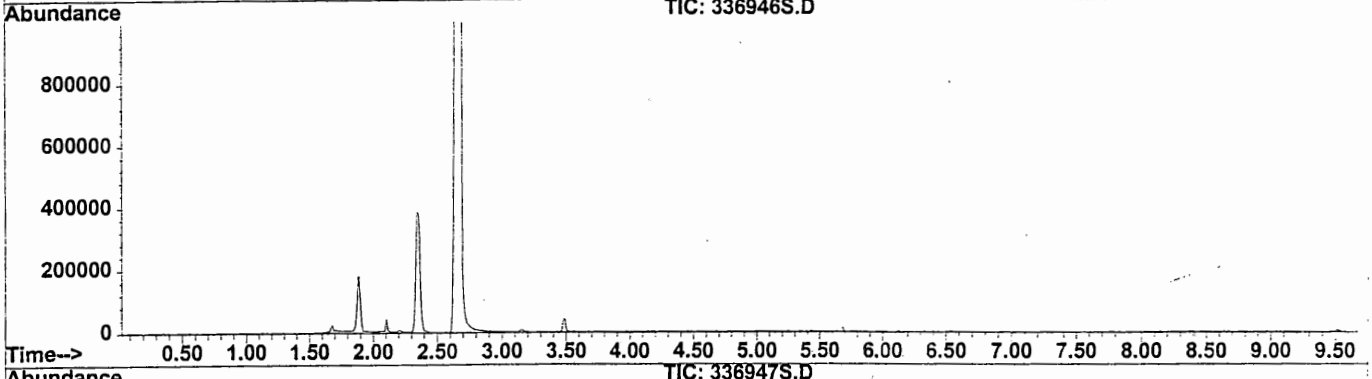

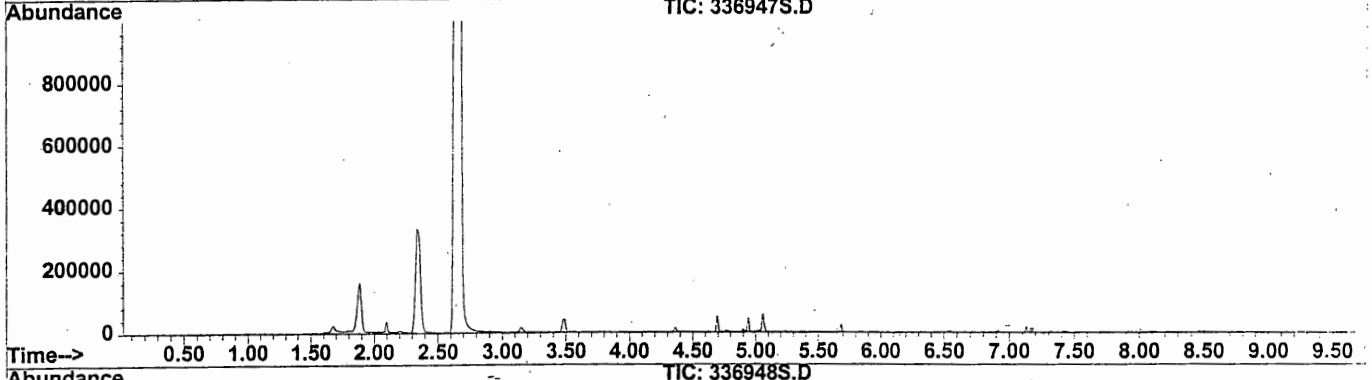

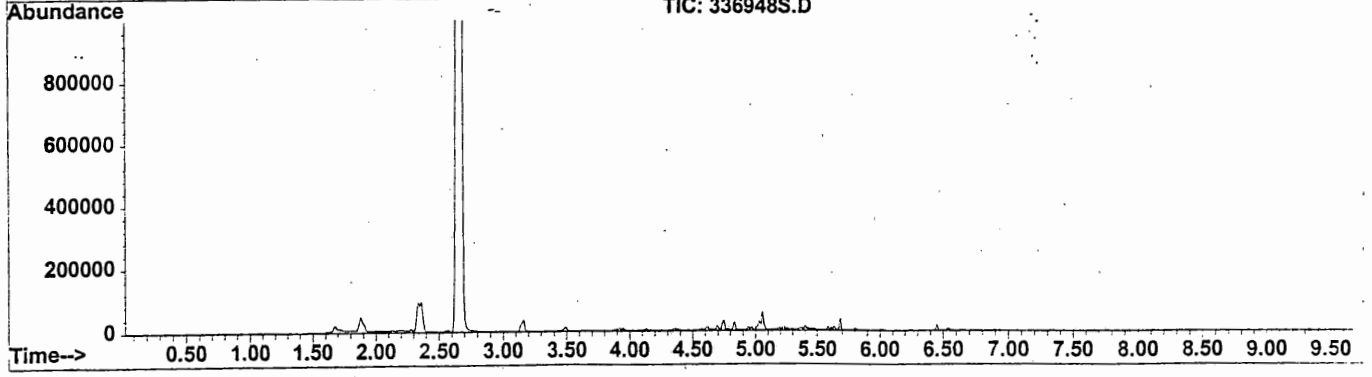

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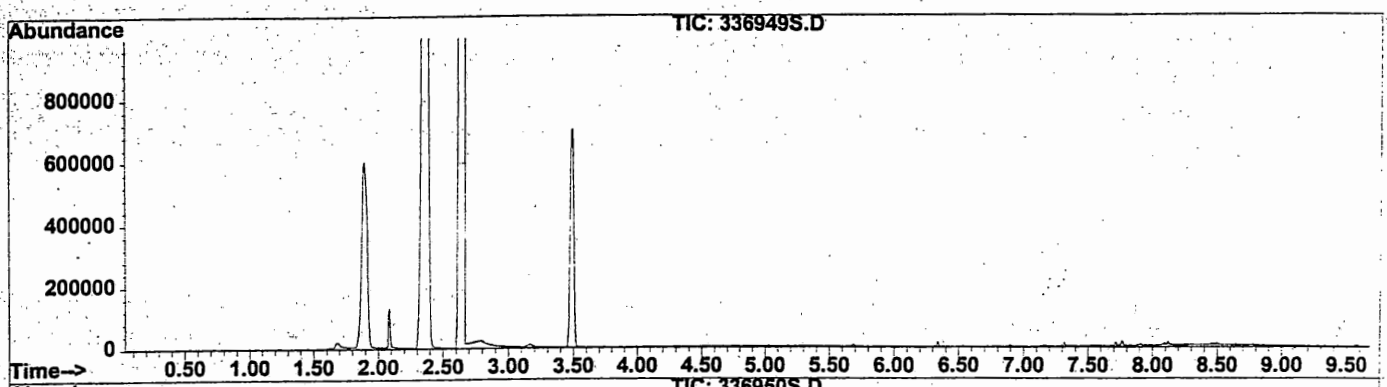

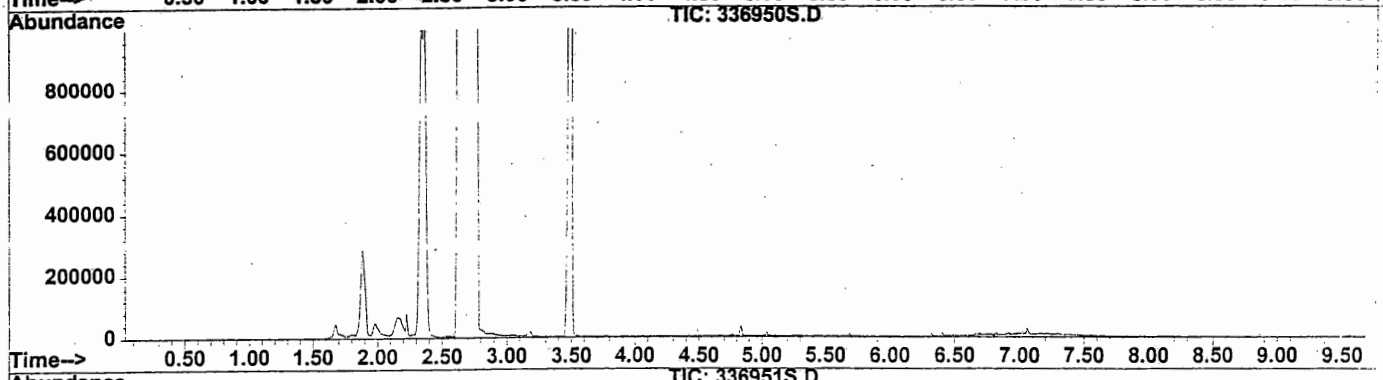

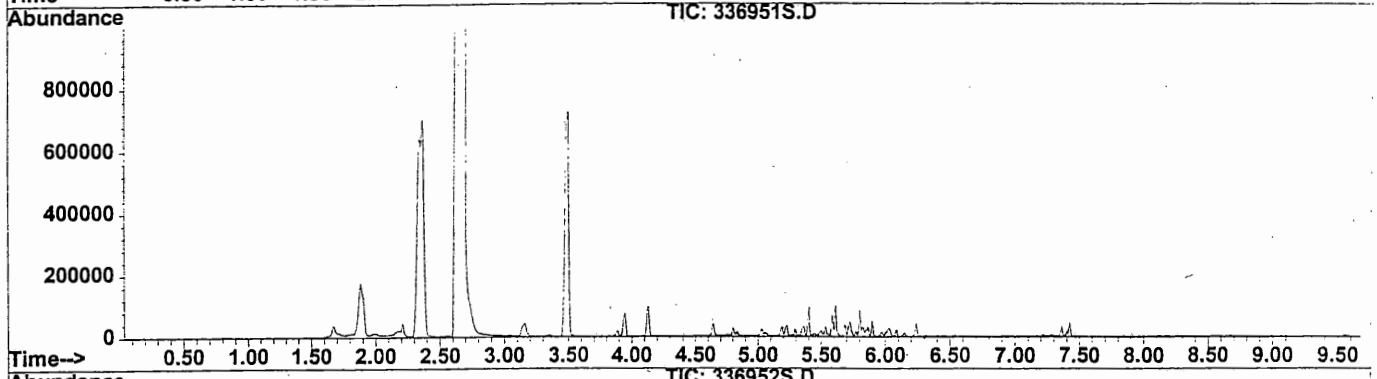

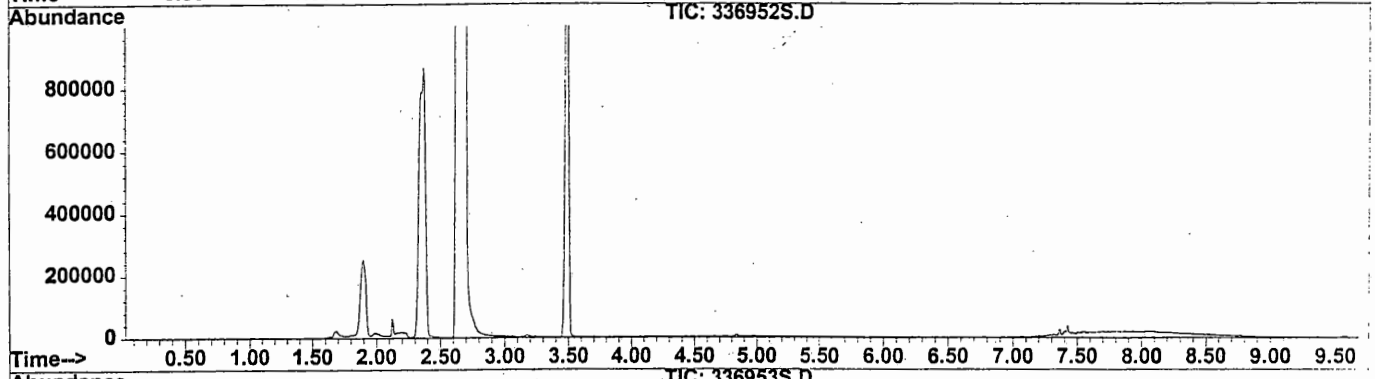

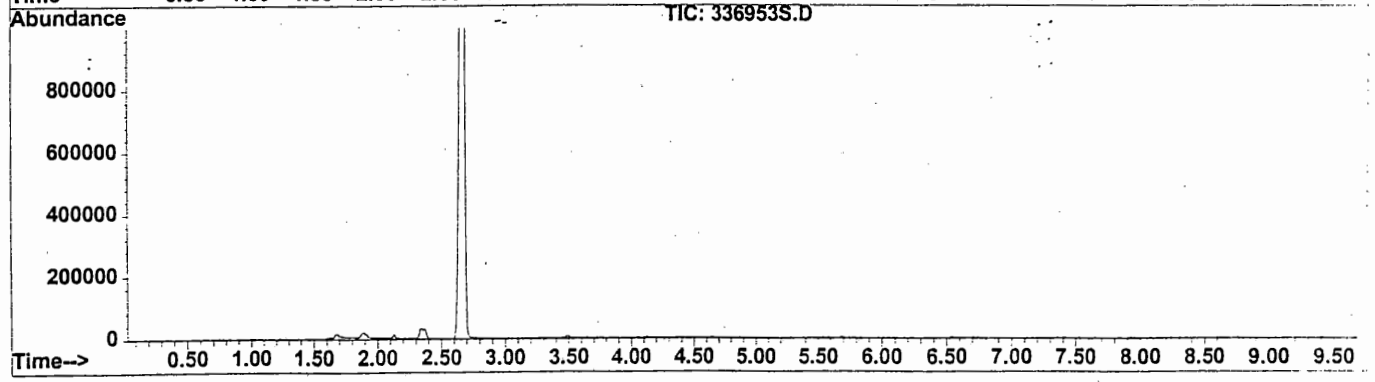

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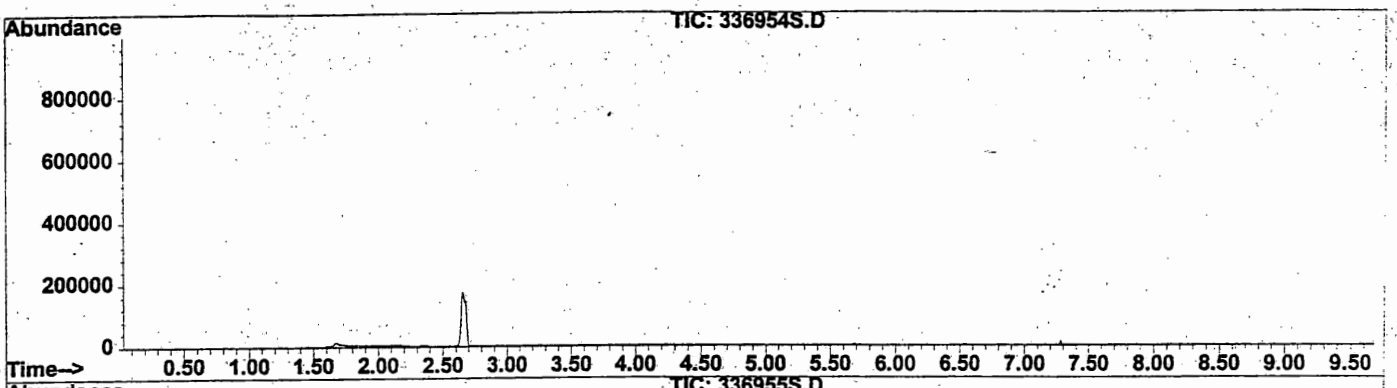

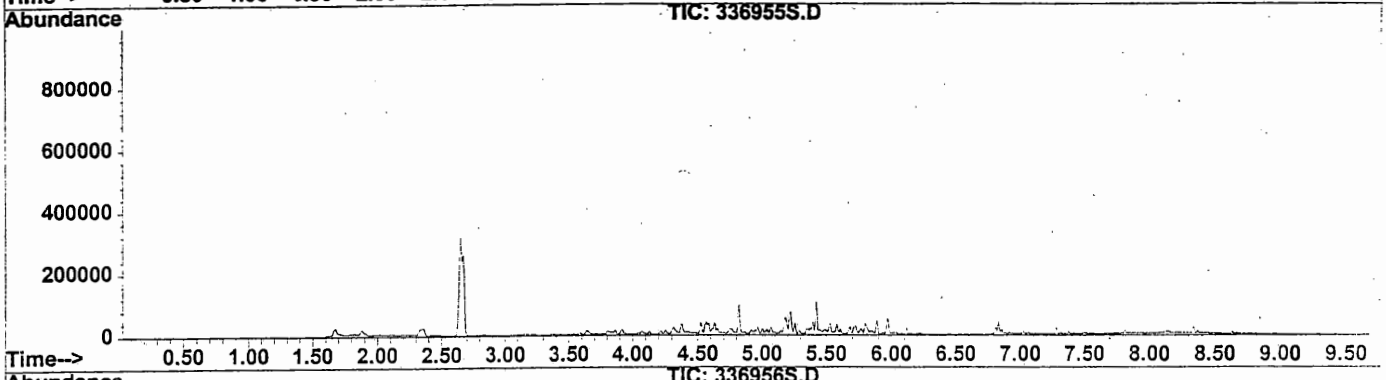

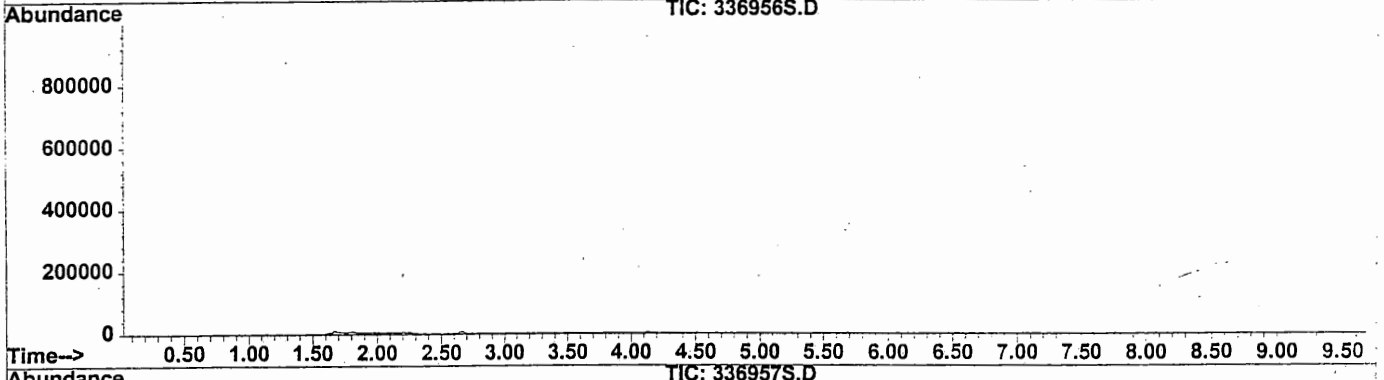

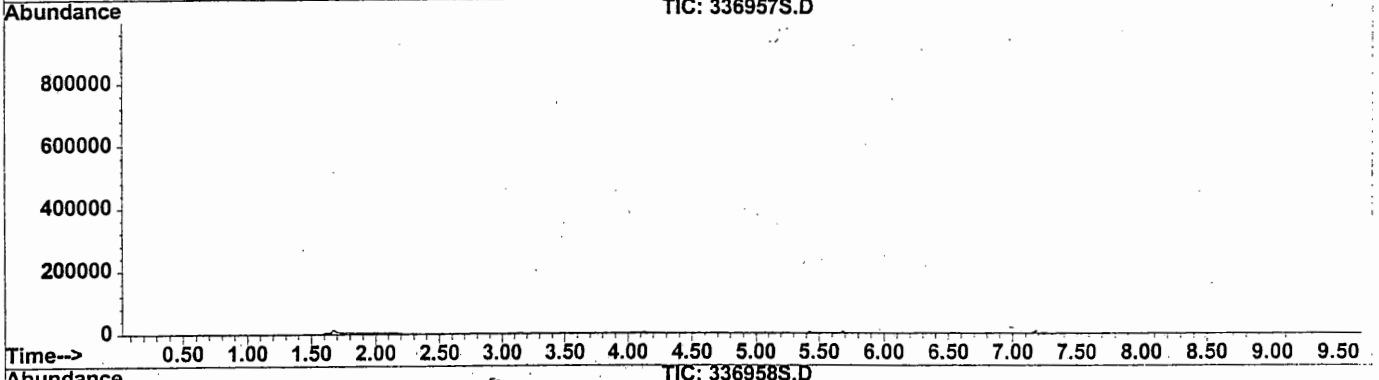

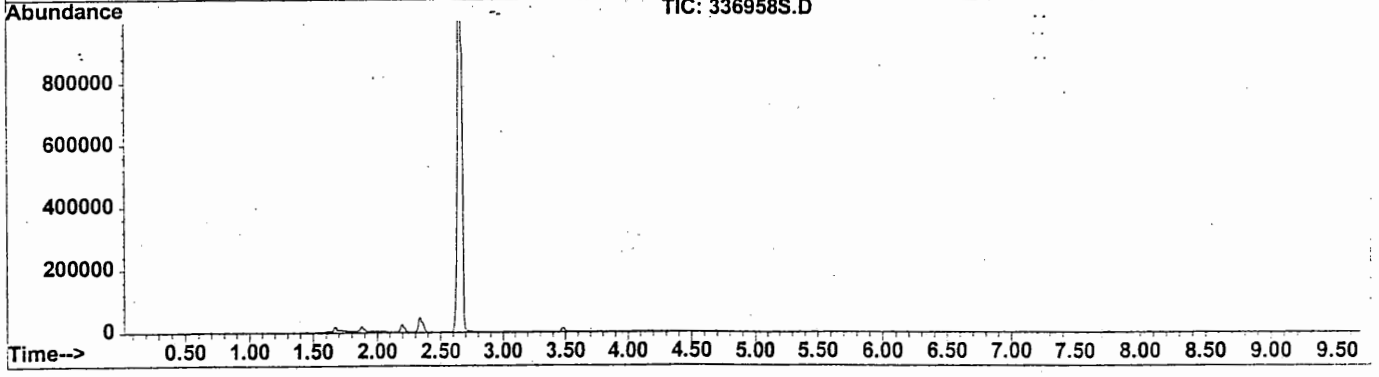

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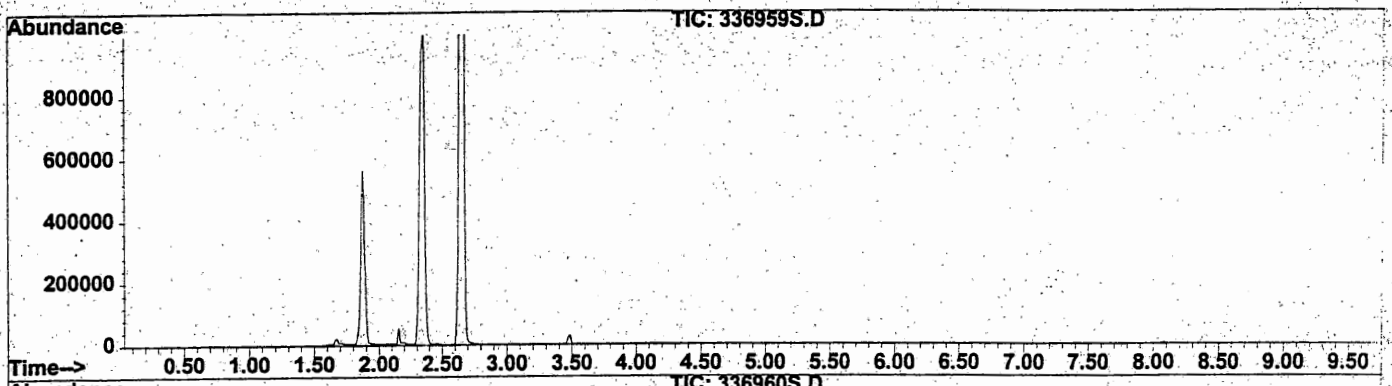

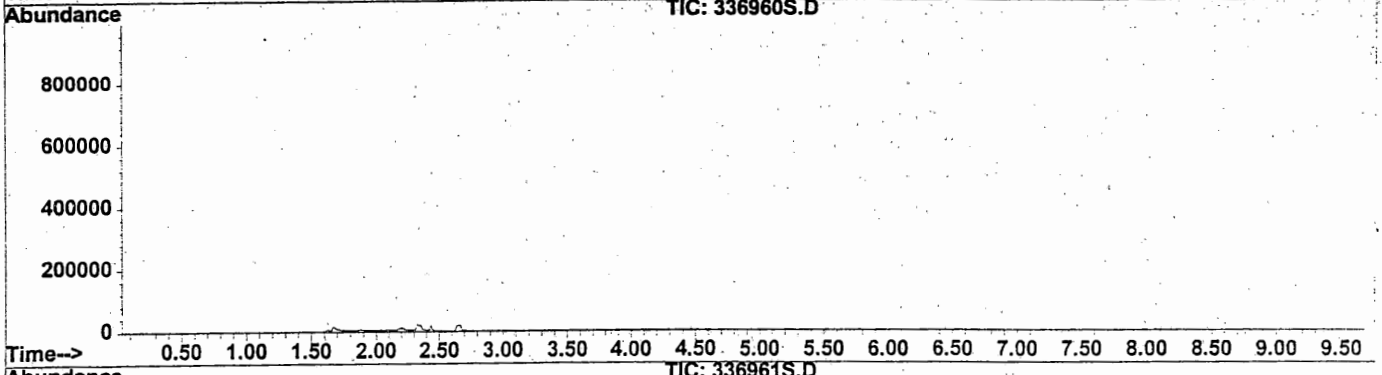

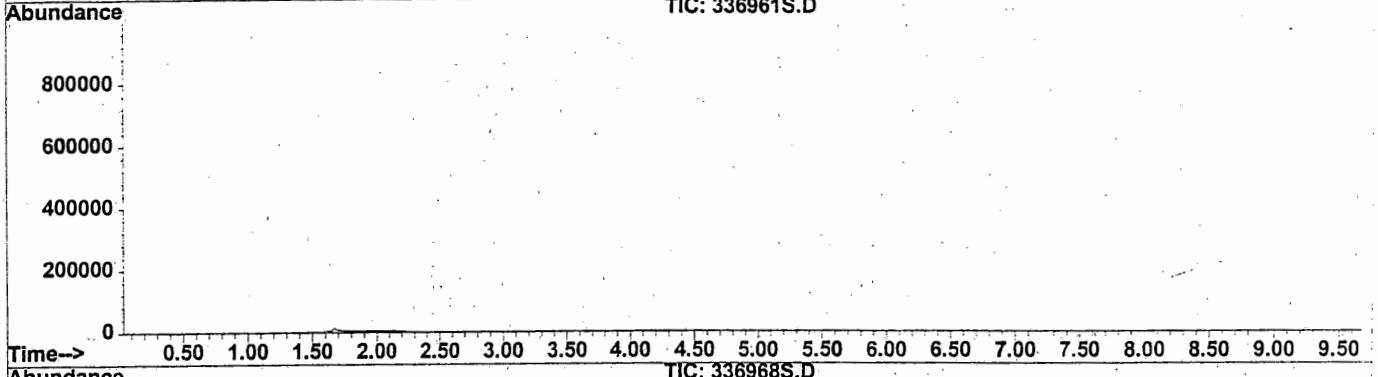

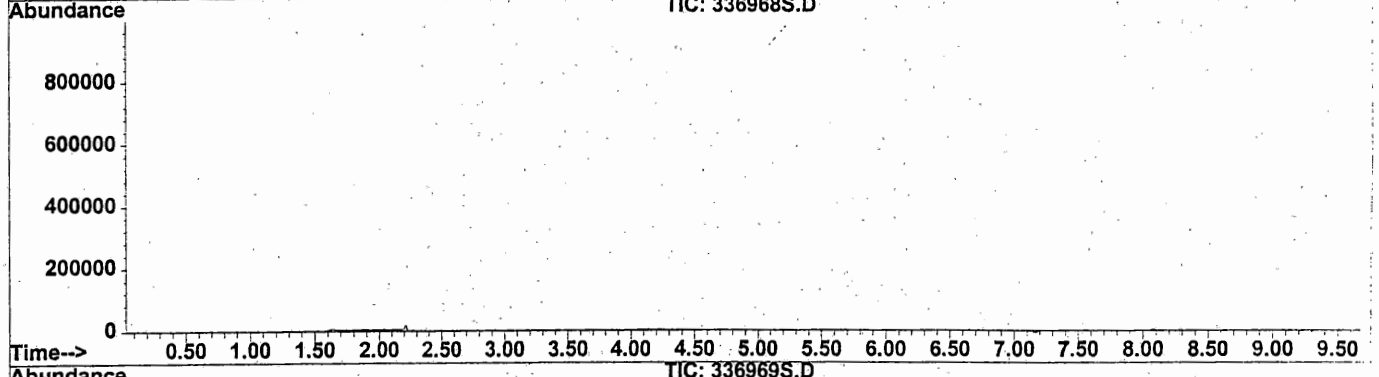

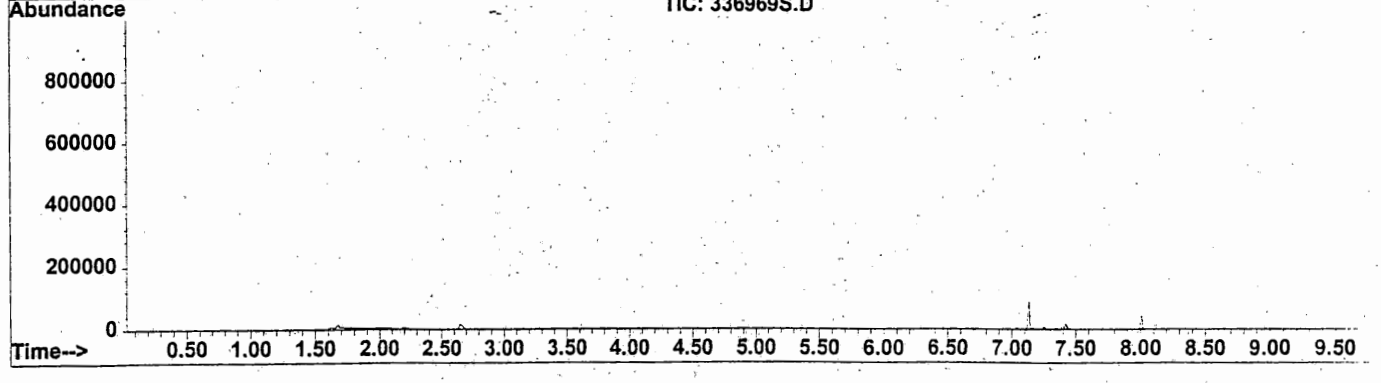

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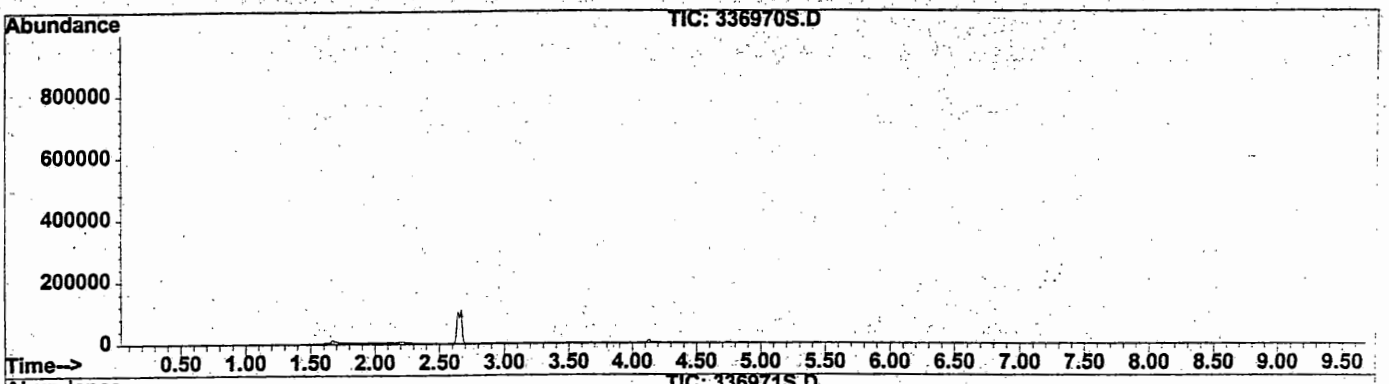

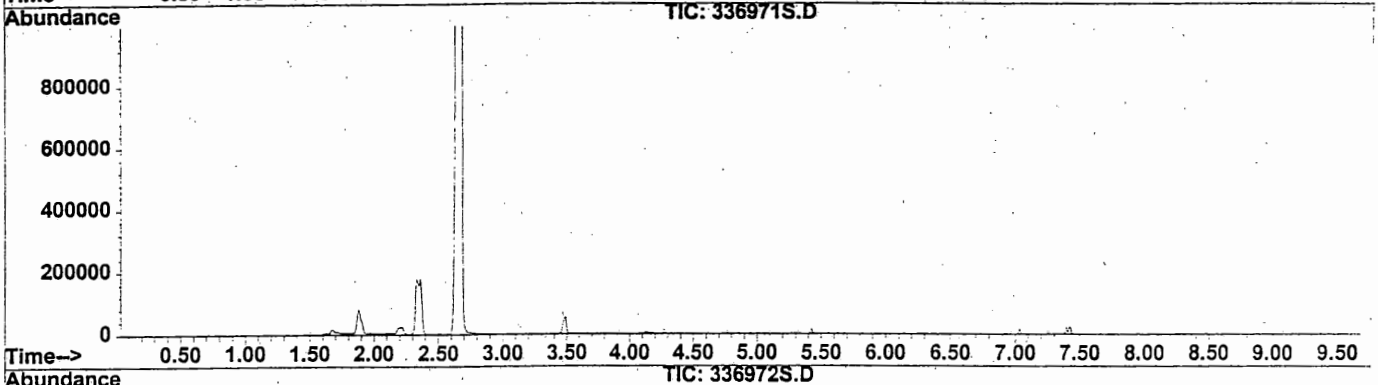

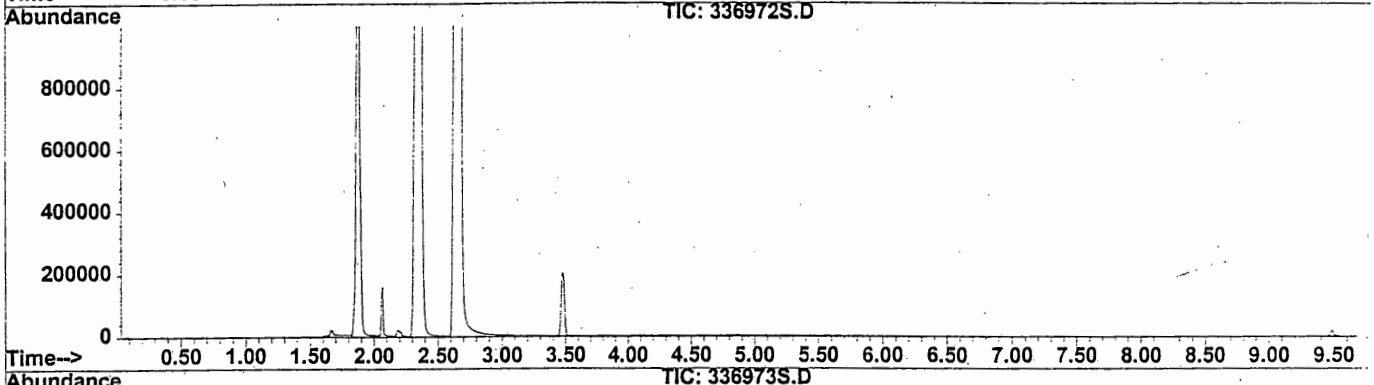

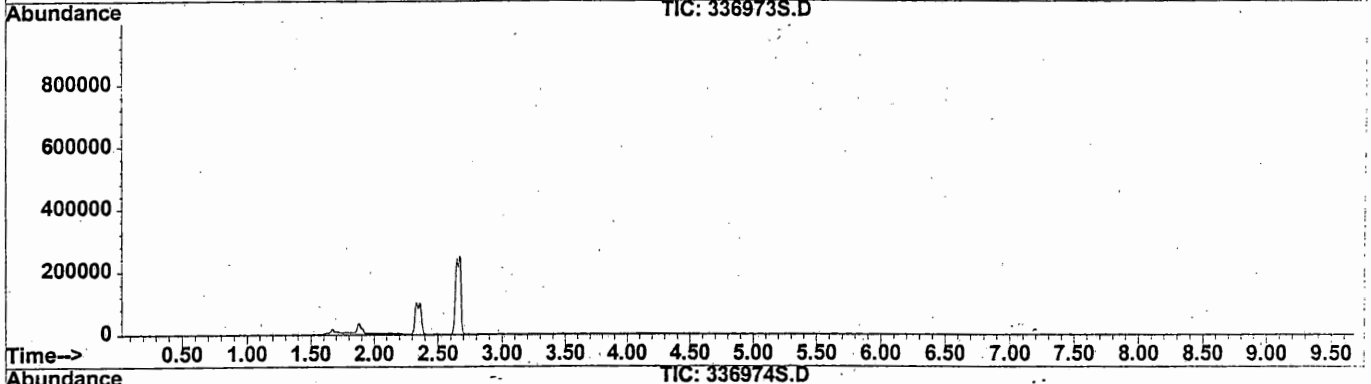

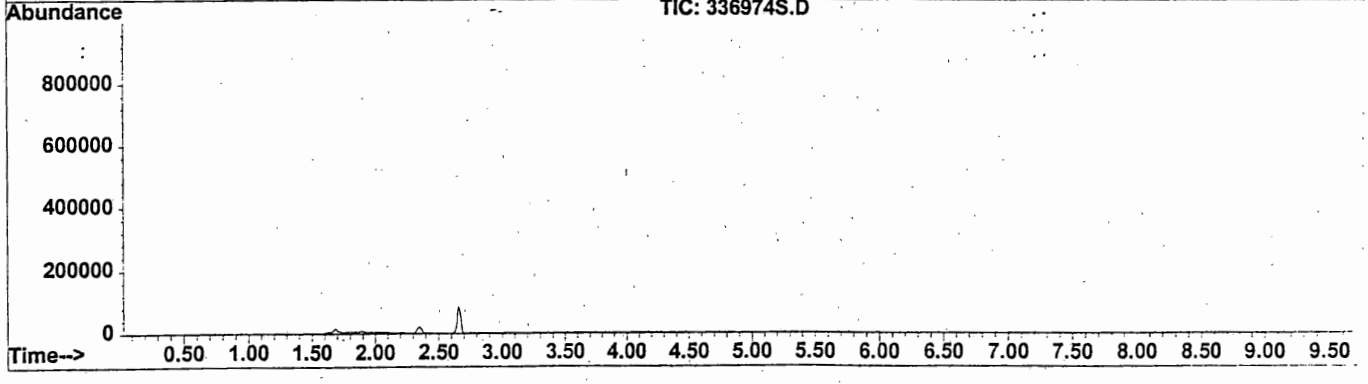

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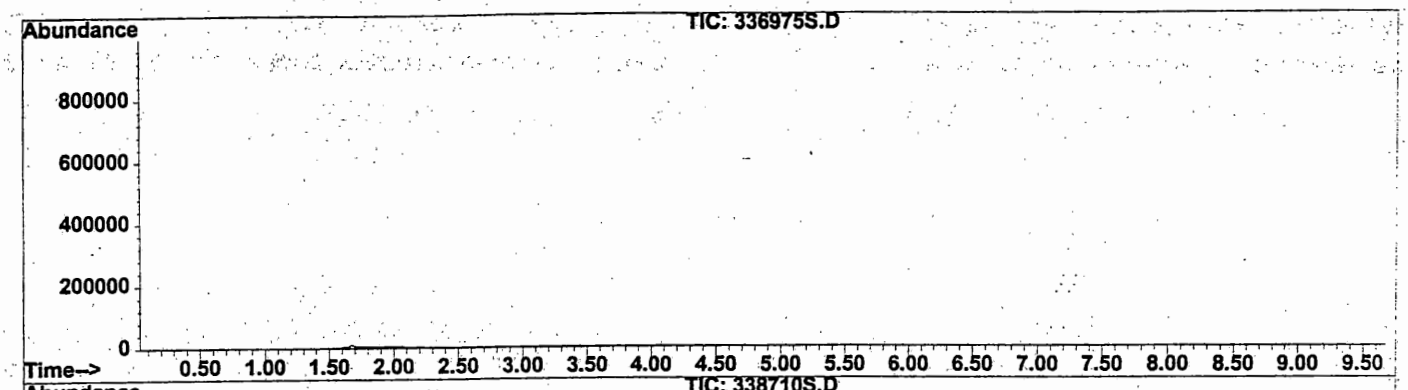

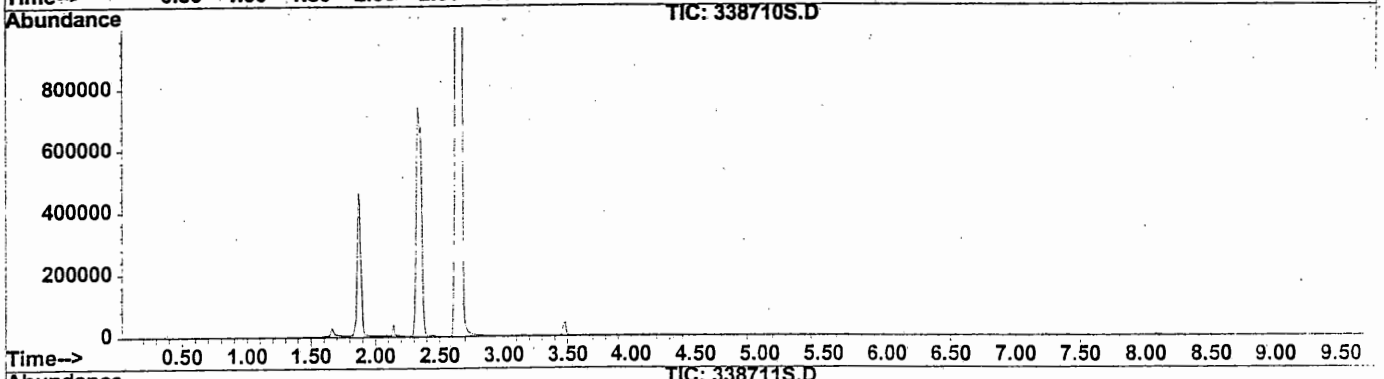

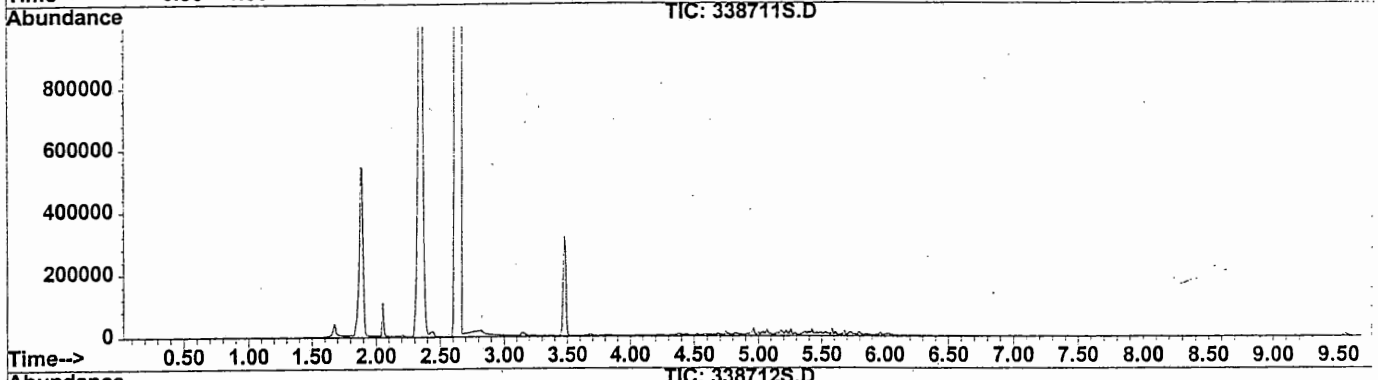

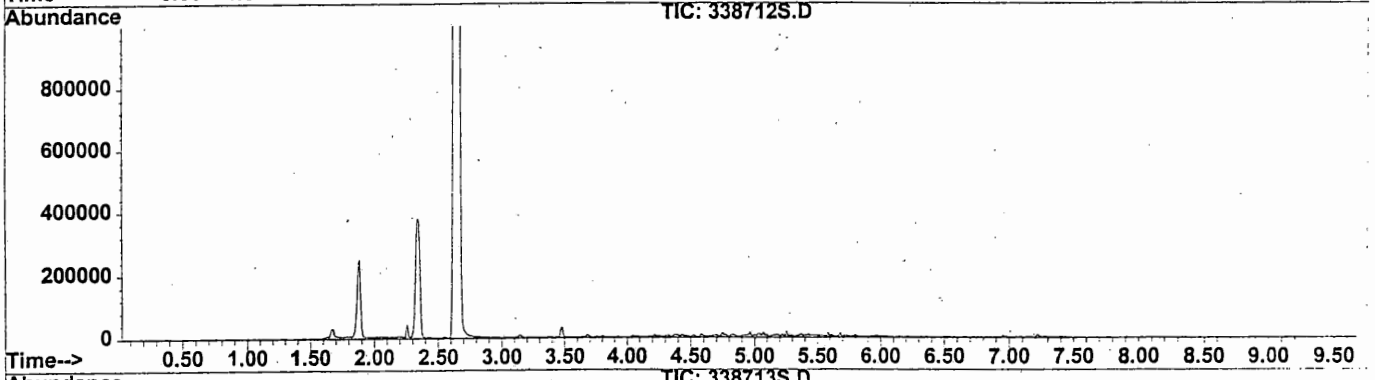

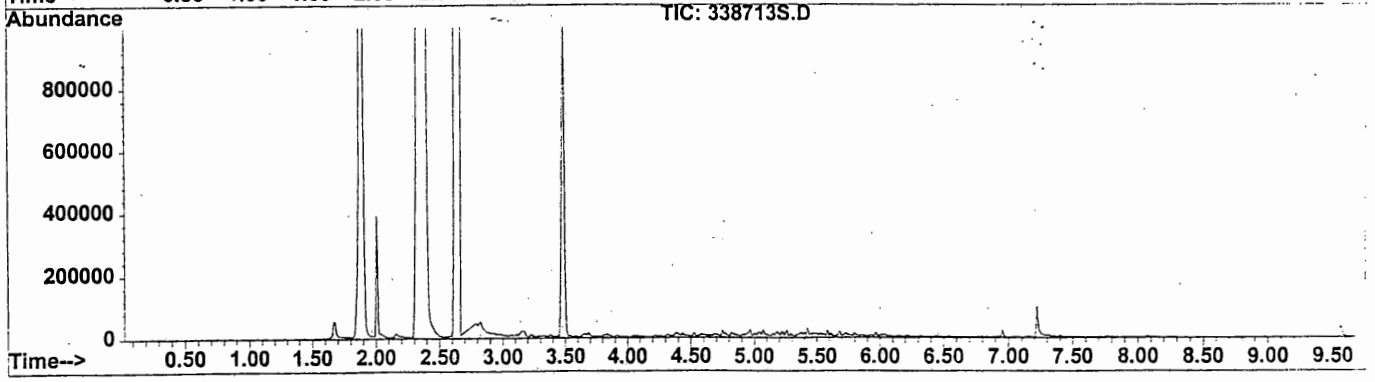

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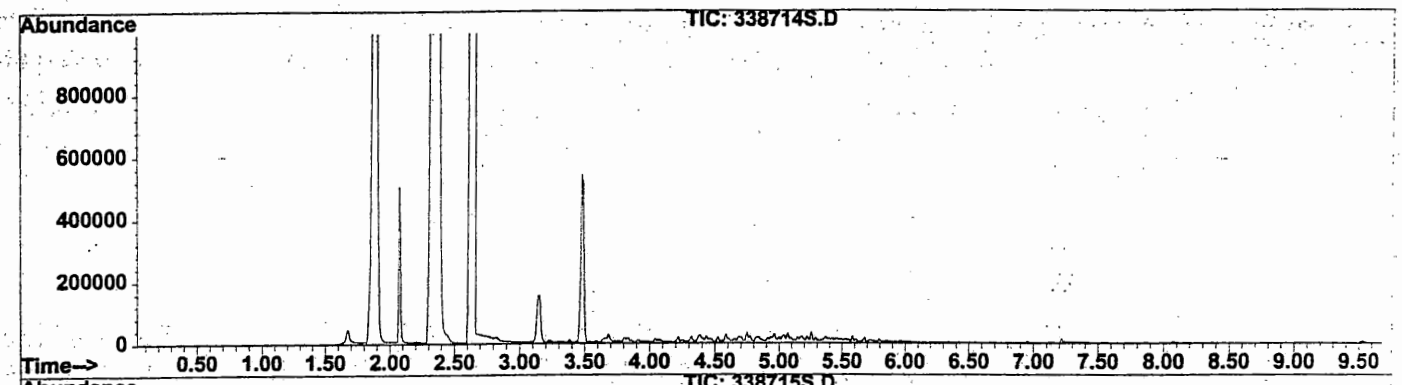

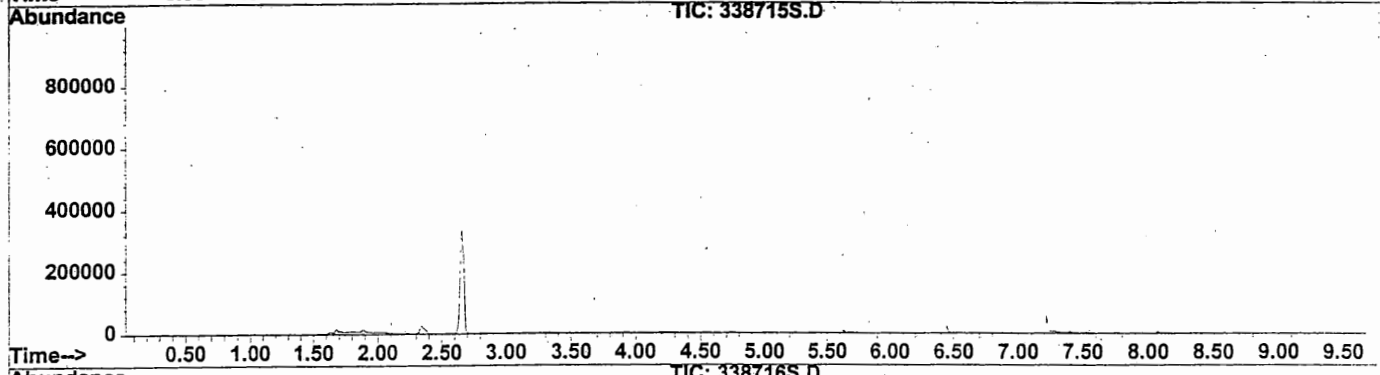

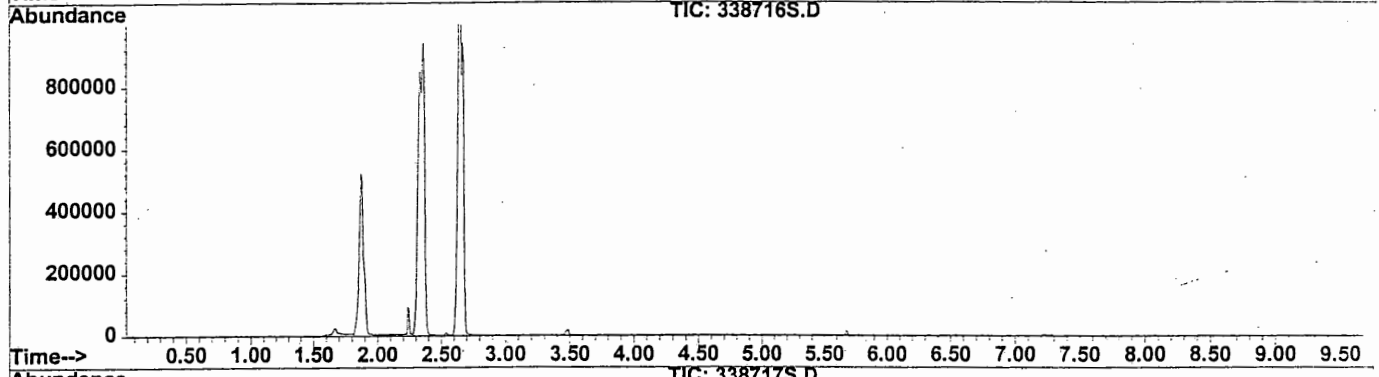

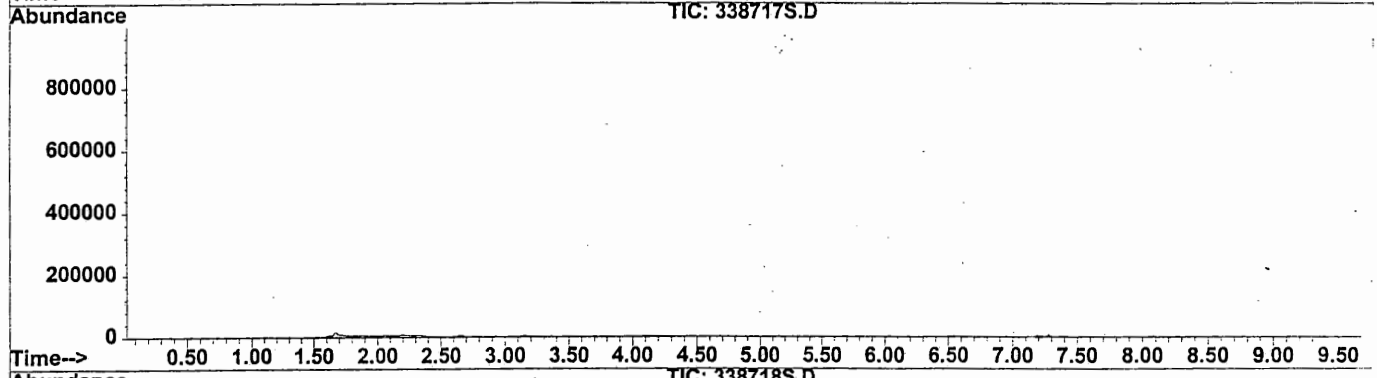

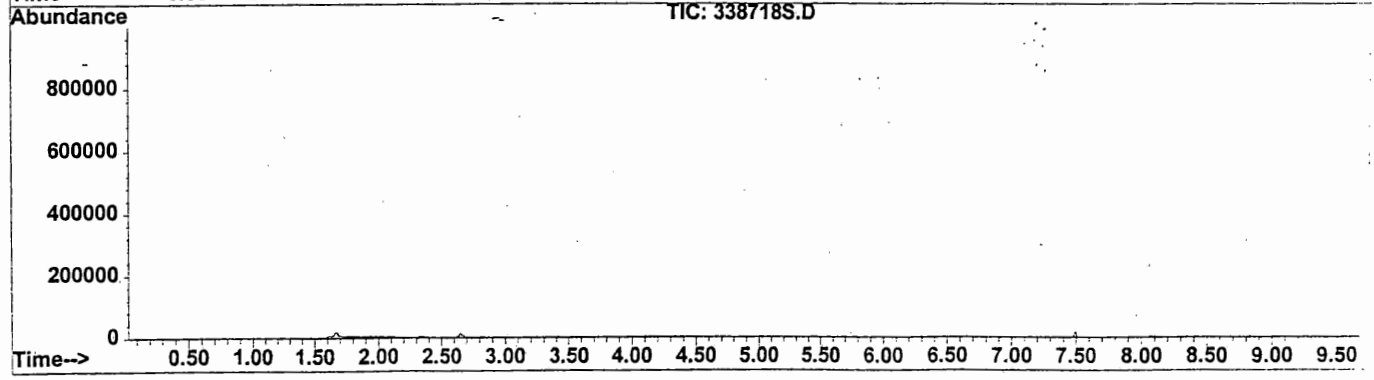

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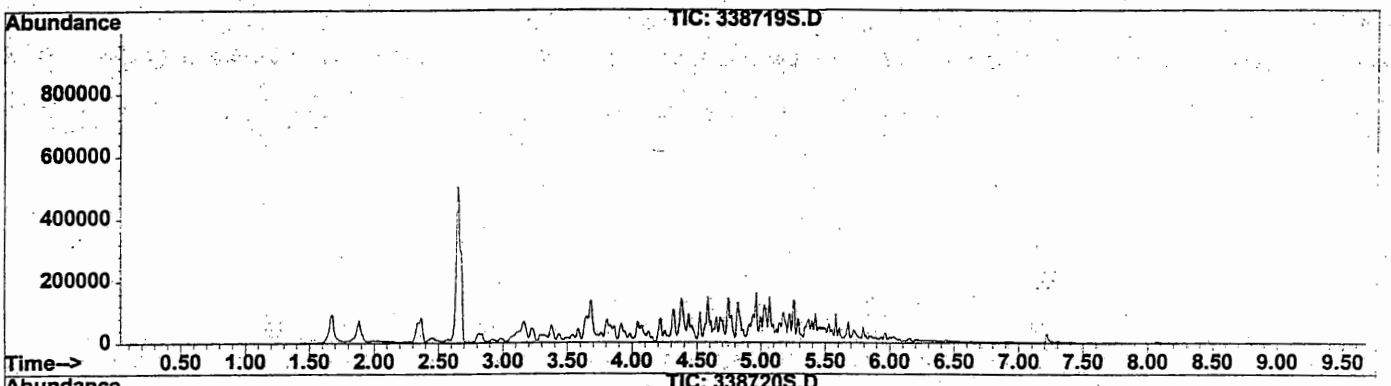

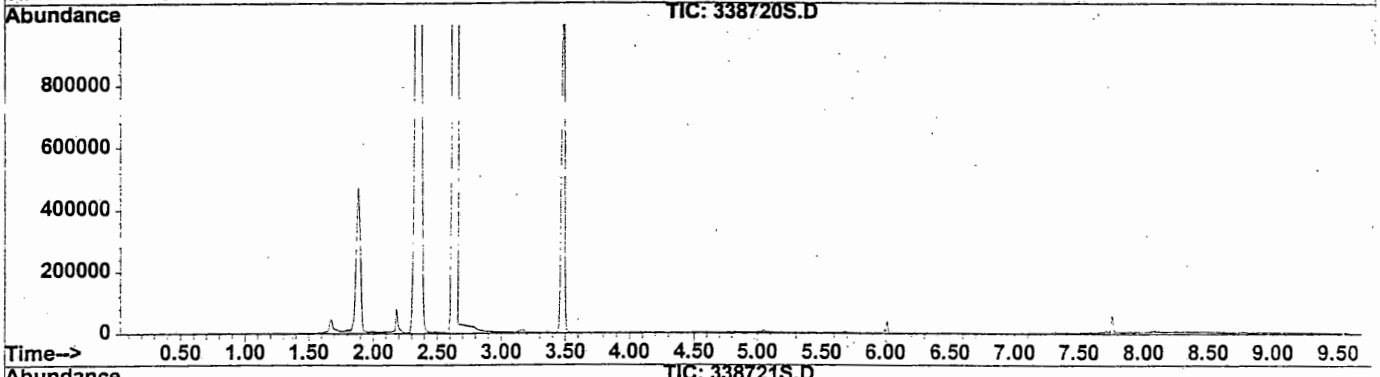

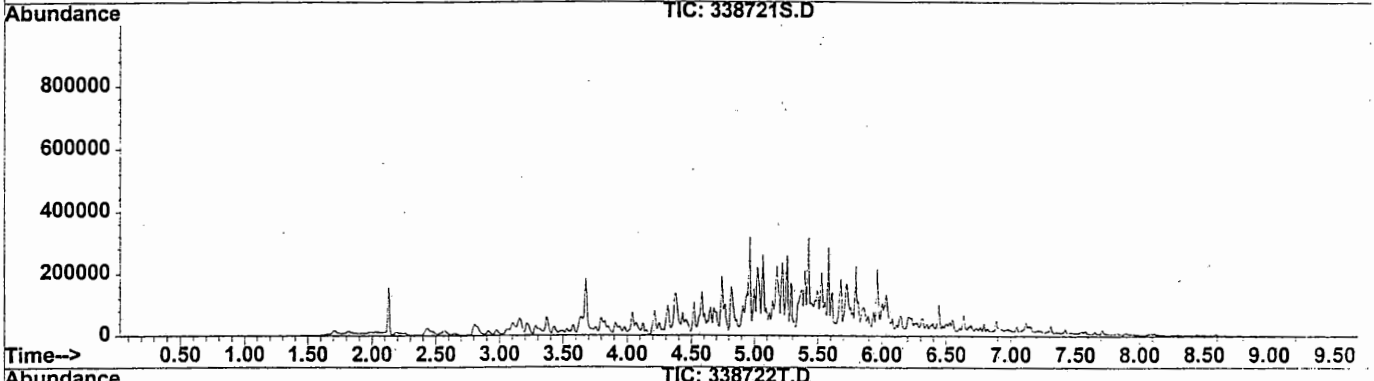

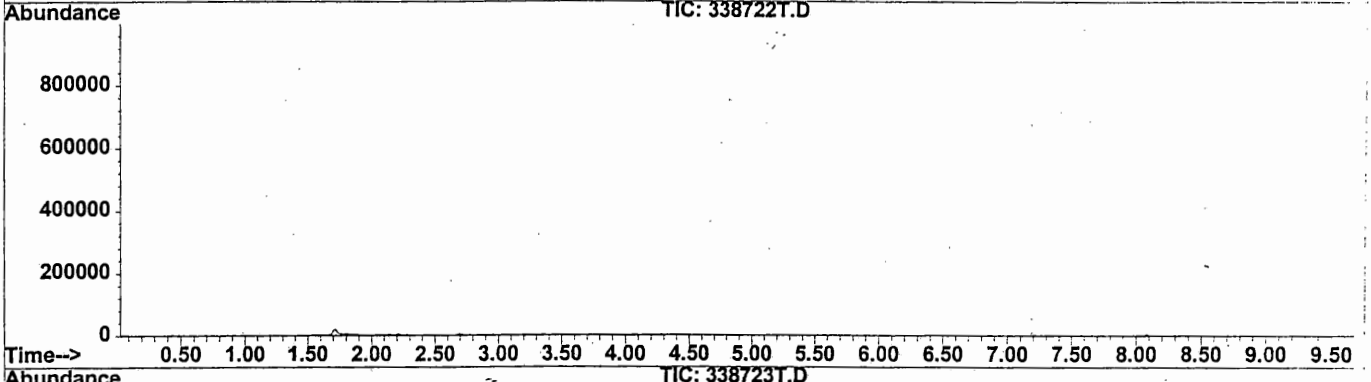

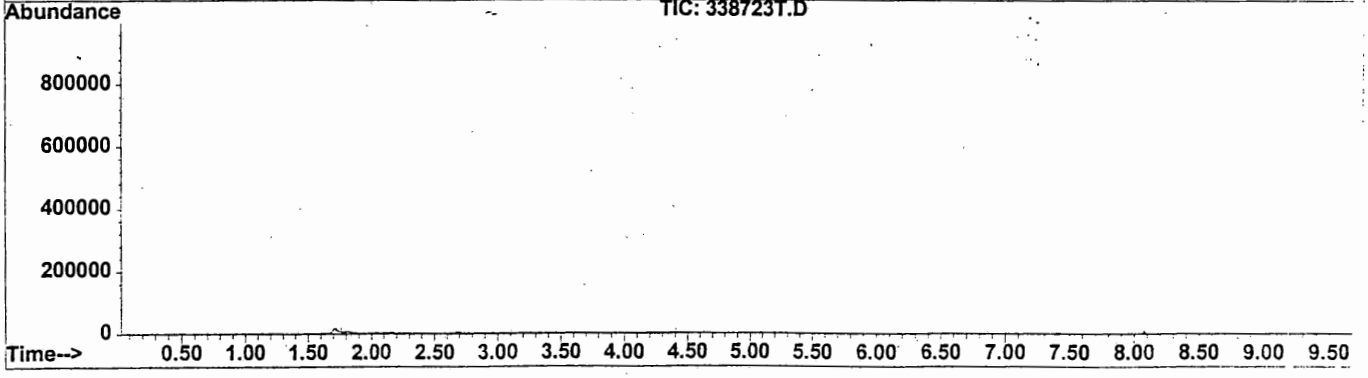

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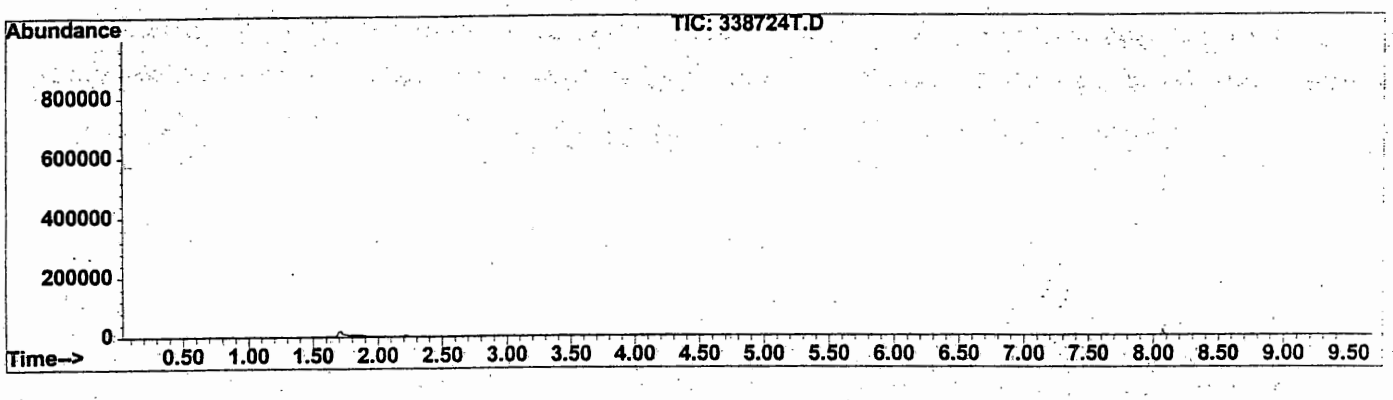

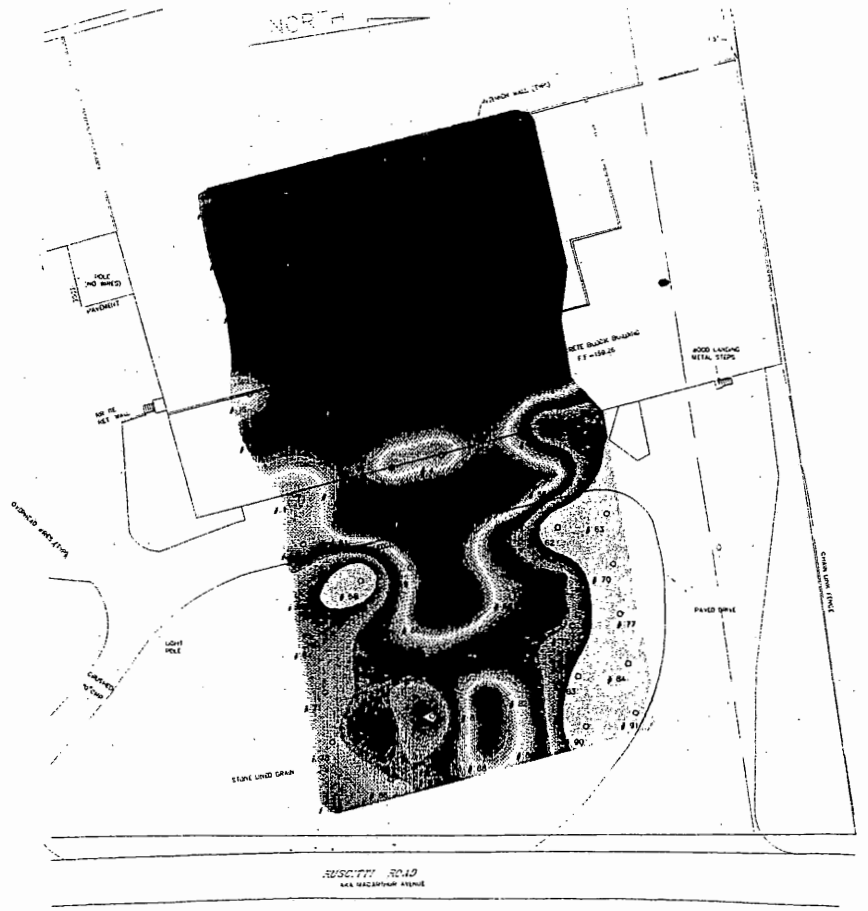

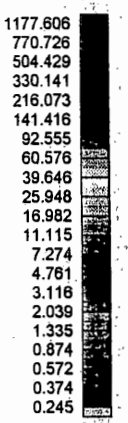

GORE-SORBER® Screening Survey

W.L. GORE & ASSOCIATES, INC.
100 CHESAPEAKE BOULEVARD
ELKTON, MD, USA 21921
USA
(410) 392-7600

Ogden Environmental Services, Somerset, NJ
Monarch Systems, New Windsor, NY
Trichloroethene

DATE DRAWN: Oct. 13, 2000	DRAWN BY: RF	ORIG. CAD:	SITE CODE: BNG
REV. DATE:	REV. #:	PROJECT NUMBER: 10482569	

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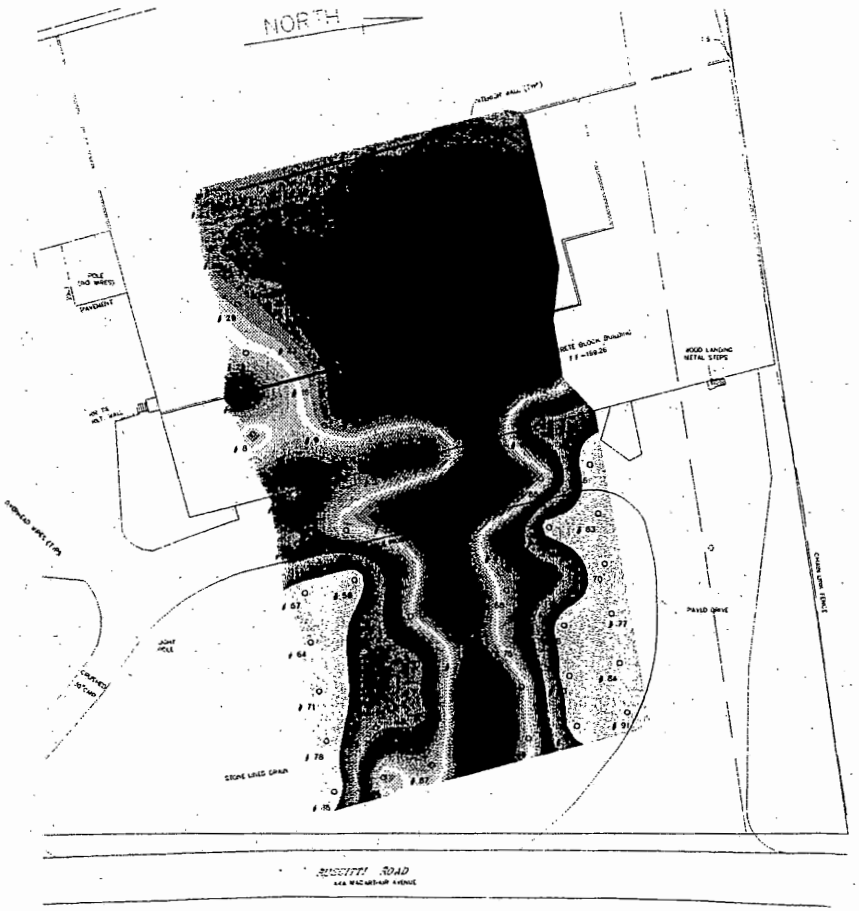

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[µg]

Scale 1:720

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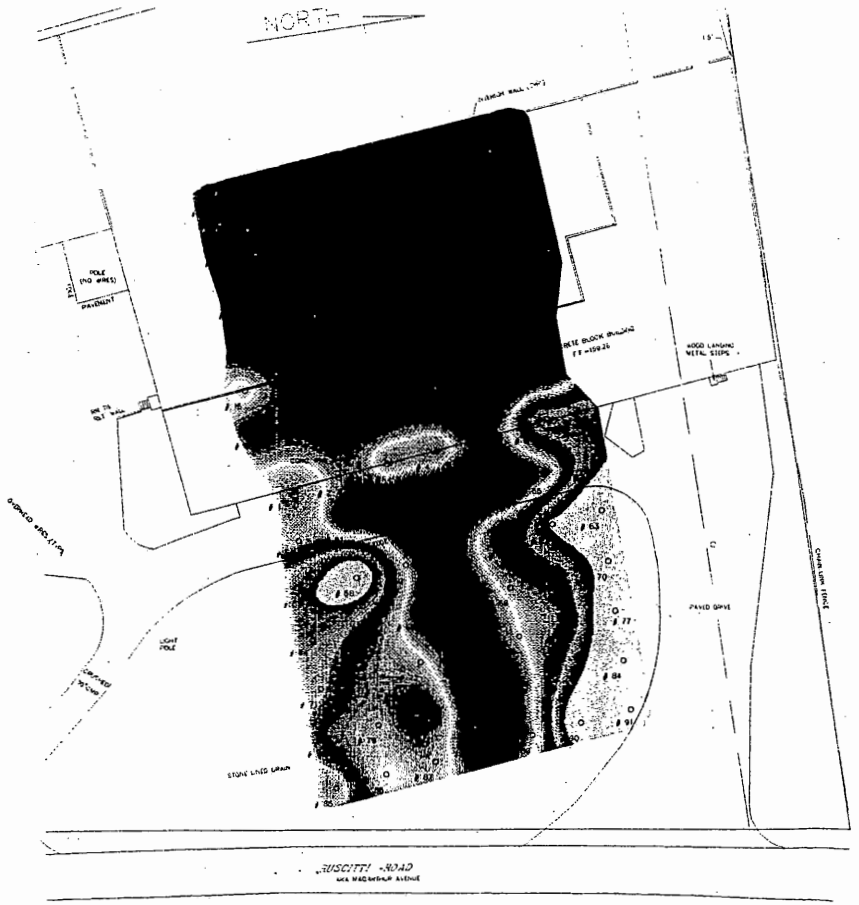
foot

GORE-SORBER® Screening Survey

W.L. GORE & ASSOCIATES, INC.
100 CHESAPEAKE BOULEVARD
ELKTON, MD, USA 21921
USA
(410) 392-7600

Ogden Environmental Services, Somerset, NJ
Monarch Systems, New Windsor, NY
1,1,1-Trichloroethane

DATE DRAWN: Oct. 13, 2000	DRAWN BY: RF	ORIG. CAD:	SITE CODE: BNG
REV. DATE:	REV. #:	PROJECT NUMBER: 10482569	



Select Chlorinateds [µg]
1798.871
1152.657
738.584
473.260
303.249
194.312
124.509
79.781
51.121
32.757
20.989
13.449
8.618
5.522
3.538
2.267
1.453
0.931
0.596
0.382
0.245

Scale 1:720

25 0 25 50 75 100 125 150

foot

GORE-SORBER® Screening Survey

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W.L. GORE & ASSOCIATES, INC.
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ELKTON, MD, USA 21921
USA
(410) 392-7600

Ogden Environmental Services, Somerset, NJ
Monarch Systems, New Windsor, NY
Select Chlorinated Compounds

DATE DRAWN: Oct. 13, 2000	DRAWN BY: RF	ORIG. CAD:	SITE CODE: BNG
REV. DATE:	REV #:	PROJECT NUMBER: 10482569	

APPENDIX D

AMBIENT AIR MONITORING ANALYTICAL LABORATORY REPORT (STL, PENSACOLA, FL)

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-02426
Received: 19 FEB 01
Reported: 28 FEB 01

Mr. STEPHEN POSTEN
AMEC
285 Davidson Avenue
Somerset, NJ 08873

Project: 540614000-AVERY DENNISON, NEW WINDSOR, NY
Sampled By: Client
Code: 083310228

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , AIR SAMPLES	DATE/ TIME SAMPLED
02426-1	CPA	02-14-01

PARAMETER	02426-1
Volatile Organic Compounds in Air (TO14)	
Chloroethane, mg/m3	<0.060
1,1-Dichloroethane, mg/m3	<0.060
1,2-Dichloroethane, mg/m3	<0.060
1,1-Dichloroethene, mg/m3	<0.060
cis-1,2-Dichloroethene, mg/m3	<0.060
trans-1,2-Dichloroethene, mg/m3	<0.060
1,1,1,2-Tetrachloroethane, mg/m3	<0.060
1,1,2,2-Tetrachloroethane, mg/m3	<0.060
Tetrachloroethene, mg/m3	0.08
1,1,1-Trichloroethane, mg/m3	<0.060
Trichloroethene, mg/m3	0.14
Vinyl chloride, mg/m3	<0.060
Surrogate - 1,2-Dichloroethane-d4	89 %
Surrogate - Toluene-d8	100 %
Surrogate - 4-Bromofluorobenzene	102 %
Dilution Factor	1
Analysis Date	02.23.01
Batch ID	MAB038
Analyst	BDH

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-02426
Received: 19 FEB 01
Reported: 28 FEB 01

Mr. STEPHEN POSTEN
AMEC
285 Davidson Avenue
Somerset, NJ 08873

Project: 540614000-AVERY DENNISON, NEW WINDSOR, NY
Sampled By: Client
Code: 083310228

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR AIR SAMPLES	DATE/ TIME SAMPLED
02426-2	Method Blank	
02426-3	Lab Control Standard Duplicate Result	

PARAMETER	02426-2	02426-3
Volatile Organic Compounds in Air (TO14)		
Chloroethane, mg/m3	<0.030	---
1,1-Dichloroethane, mg/m3	<0.030	---
1,2-Dichloroethane, mg/m3	<0.030	---
1,1-Dichloroethene, mg/m3	<0.030	82 %
cis-1,2-Dichloroethene, mg/m3	<0.030	---
trans-1,2-Dichloroethene, mg/m3	<0.030	---
1,1,1,2-Tetrachloroethane, mg/m3	<0.030	---
1,1,2,2-Tetrachloroethane, mg/m3	<0.030	---
Tetrachloroethene, mg/m3	<0.030	---
1,1,1-Trichloroethane, mg/m3	<0.030	---
Trichloroethene, mg/m3	<0.030	95 %
Vinyl chloride, mg/m3	<0.030	---
Surrogate - 1,2-Dichloroethane-d4	95 %	95 %
Surrogate - Toluene-d8	100 %	100 %
Surrogate - 4-Bromofluorobenzene	95 %	93 %
Dilution Factor	1	1
Analysis Date	02.23.01	02.23.01
Batch ID	MAB038	MAB038
Analyst	BDH	BDH

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT SERVICES

STL Pensacola

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results)Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside –50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is ≤ Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

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Committed To *Your* Success Tel: (850) 474-1001 • Fax: (850) 474-4789

LAB ACCESSION # C102426

PART 1 - Bottle Shipment Information

CLIENT: Avery Dennison

CLIENT PROJECT NUMBER: 54061 4000

QUANTITY OF SAMPLE CONTAINERS SHIPPED	PRESERVATIVE							PLASTIC CONTAINERS							GLASS CONTAINERS									NOTES
	H_2SO_4	HNO_3	HCL	Zn Acetate	$Na_2S_2O_3$	Unpreserved	NaOH	8 oz.	16 oz.	32 oz.	½ gallon	1 gallon	Whirl-pak	100-ML Cup	120 ml (A)	1 liter (A)	1 liter (C)	40 ml Vial	4 oz. wm	8 oz. wm	16 oz. wm	32 oz. wm	D.I. Trip Blank	

Relinquished By:	Time	Date	Received By:	Time	Date

PART 2 - Sample/Project Information

SAMPLE MATRIX CODES

DW DRINKING WATER
WW WASTEWATER
GW GROUNDWATER
AI AIR
SO SOIL
OI OIL
SW SURFACE WATER
SL SLUDGE
ST STORMWATER

SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME	MATRIX	PARAMETERS AND PRESERVATIVES REQUESTED: VOC													TOTAL # OF BOTTLES
LPA	02/14/01		AI	X											2	9	0	1

Total Number of Bottles/Containers:

Relinquished By	Date	Time	Received By	Date	Time
Vanessa M. Gallo AMEC	02/16/01		Mark Swafford	2/19/01	0900

Client	AMEC Earth & Environmental			Purchase Order Number	
Address	285 Davidson Avenue			Project Number	54061 4000
City	Somerset	State NJ	Zip 08831	Project Name	Avery Dennison
Phone Number	(732) 302 9500	Fax Number	(732) 302 9504	Project Location	New Windsor, NY
Project Manager	Stephen Posten			Sampled By	VG

TURNAROUND TIMES	check below	SPECIAL INSTRUCTIONS
Standard - 14-21 days	X	Sample collected @ 12.5 ml./min for 8 hours
RUSH (must be approved in advance)		
<- 48 hours - 2x standard price		
3-7 days - 1.5x standard price		Chlorinated hydrocarbon analysis
TCLP - 1 week rush 1.5x standard price		
QC Level none I II III IV (circle one)		Copies of report needed _____

FORM # 12694

WHITE — LAB CANARY — REPORT PINK — CLIENT

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-03372
Received: 15 MAR 01
Reported: 22 MAR 01

Mr. JOHN RUDISILL
Avery Dennison
P.O. Box 199
Worton, MD 21678

Requisition: PRODUCTION AREA-AMBIENT AIR SAMPLE 8-HR

CC: STEVE POSTEN(AMEC) Project: 540614000-AVERY DENNISON, NEW WINDSOR, NY

Sampled By: Client
Code: 162810329

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , AIR SAMPLES	DATE/ TIME SAMPLED
03372-1	MPA	03-13-01

PARAMETER	03372-1
Volatile Organic Compounds in Air (MOD-TO14)	
Chloroethane, mg/m3	<0.060
1,1-Dichloroethane, mg/m3	<0.060
1,2-Dichloroethane, mg/m3	<0.060
1,1-Dichloroethene, mg/m3	<0.060
cis-1,2-Dichloroethene, mg/m3	<0.060
trans-1,2-Dichloroethene, mg/m3	<0.060
1,1,1,2-Tetrachloroethane, mg/m3	<0.060
1,1,2,2-Tetrachloroethane, mg/m3	<0.060
Tetrachloroethene, mg/m3	<0.060
1,1,1-Trichloroethane, mg/m3	<0.060
Trichloroethene, mg/m3	0.09
Vinyl chloride, mg/m3	<0.060
Surrogate - 1,2-Dichloroethane-d4	90 %
Surrogate - Toluene-d8	103 %
Surrogate - 4-Bromofluorobenzene	99 %
Dilution Factor	1
Analysis Date	03.19.01
Batch ID	MAB058

SEVERN TRENT SERVICES

STL Pensacola

LOG NO: C1-03372
Received: 15 MAR 01
Reported: 22 MAR 01

Mr. JOHN RUDISILL
Avery Dennison
P.O. Box 199
Worton, MD 21678

Requisition: PRODUCTION AREA-AMBIENT AIR SAMPLE 8-HR

CC: STEVE POSTEN(AMEC) Project: 540614000-AVERY DENNISON, NEW WINDSOR, NY

Sampled By: Client
Code: 162810329

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR AIR SAMPLES	DATE/ TIME SAMPLED
03372-2	Method Blank	
03372-3	Lab Control Standard Duplicate Result	

PARAMETER	03372-2	03372-3
Volatile Organic Compounds in Air (MOD-TO14)		
Chloroethane, mg/m3	<0.030	---
1,1-Dichloroethane, mg/m3	<0.030	---
1,2-Dichloroethane, mg/m3	<0.030	---
1,1-Dichloroethene, mg/m3	<0.030	87 %
cis-1,2-Dichloroethene, mg/m3	<0.030	---
trans-1,2-Dichloroethene, mg/m3	<0.030	---
1,1,1,2-Tetrachloroethane, mg/m3	<0.030	---
1,1,2,2-Tetrachloroethane, mg/m3	<0.030	---
Tetrachloroethene, mg/m3	<0.030	---
1,1,1-Trichloroethane, mg/m3	<0.030	---
Trichloroethene, mg/m3	<0.030	99 %
Vinyl chloride, mg/m3	<0.030	---
Surrogate - 1,2-Dichloroethane-d4	96 %	93 %
Surrogate - Toluene-d8	102 %	102 %
Surrogate - 4-Bromofluorobenzene	95 %	93 %
Dilution Factor	1	1
Analysis Date	03.19.01	03.19.01
Batch ID	MAB058	MBA058

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

Lance W Larson

Lance Larson, Project Manager

Final Page Of Report

SEVERN TRENT SERVICES

STL Pensacola

Data Qualifiers for Final Report

STL-Pensacola Inorganic/Organic

B1	The analyte was detected in the associated method blank (sample itself is flagged even though sample is ND).
B2	The analyte was detected in the sample(s) and in the associated method blank analyzed on the day samples were extruded; however, this analyte was not detected in the blank analyzed with the samples.
B3	The analyte was found in the associated blank as well as in the associated sample(s) (qualifier is applied to the sample, not to the blank).
B4	Sample results were corrected due to contaminants in Fractionation Blank
D	Diluted out (surrogate or spike due to sample dilution)
E	Compound concentration exceeds the upper calibration range of the instrument.
F	The reported value is < STL-Pensacola RL and > the STL-Pensacola MDL; therefore, the quantitation is estimation (The STL-PN RL is at or above lowest calibration standard in the initial calibration curve).
G	Sample and/or duplicate result is at or below 5 X (times) the STL Reporting Limit and the absolute difference between the sample and duplicate result is at or below the STL reporting limit; therefore, the results are "in control".
H1	Sample and/or duplicate is below 5 X (times) the STL Reporting Limit and the absolute difference between the results exceeds the STL Reporting Limit; therefore, the results are "out of control"
H2	Sample and duplicate (or MS and MSD) RPD is above control limit.
J (description)	The analyte was positively identified, the quantitation may be an estimation
J4	(For positive results)Temperature limits exceeded (≤2°C or ≥ 6°C), non-reportable for NDPES compliance monitoring.
J6	(For positive results) LCS or Surrogate %R is > upper control limit (UCL), results may be biased high
J7	The reported value is > the laboratory MDL and < lowest calibration standard; therefore, the quantitation is an estimation (this qualifier should only be used when the STL-PN RL is below the lowest calibration standard in the initial calibration).
J8	Matrix spike and post spike recoveries are outside control limits. See out of Control Events/Corrective Action Form.
J9	(For positive results) LCS or Surrogate %R is < lower control limit (LCL), results may be biased low
M1	A matrix effect was present ([1]sample, MS or MSD was analyzed twice to confirm surrogate/spike failure, [2]sample and/or MS/MSD chromatogram(s) had interfering peaks, [3]sample result was > 4 X spike added, [4]metals serial dilution was performed, or [5]metals post spike is < 40% R)
M2	The MS and/or MSD %R or RPD was outside upper or lower control limits; not necessarily due to matrix effect.
N/C	Not Calculable; Sample spiked is > 4X spike concentration (may also use this flag in place of negative numbers)
NH	Sample and duplicate results are "out of control". The sample is nonhomogeneous.
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
Q	The analytical (post digestion) spike is reported due to the percent recovery being outside limits on the matrix (pre-digestion) spike.
R (description)	The data may be unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
R1	(For nondetects) Temperature limits exceeded (≤2°C or ≥ 6°C); non-reportable for NDPES compliance monitoring
R2	Improper preservation, no preservative present or insufficient amounts of preservative in sample upon receipt, non-reportable for NDPES compliance monitoring
R3	Improper preservation, incorrect preservative present in sample upon receipt, non-reportable for NPDES compliance
R4	Holding time exceeded, non-reportable for NDPES compliance monitoring.
R5	Sample collection requirements not met, see case narrative.
R6	LCS or surrogate %R is < LCL and analyte is not detected or surrogate %R is < 10% for detects/nondetects.
R7	Internal standard area outside –50% to +100% of calibration verification standard.
R8	Initial calibration or any calibration verification exceeds acceptance criteria.
R9	Not filtered and preserved at time of collection.
R10	Headspace >1/4" in diameter in volatile vials, non-reportable for NPDES compliance monitoring
R11	Samples were filtered and preserved within 4 hours of collection.
R12	Analysis performed outside the 12-hour tune or not within tune criteria.
S1	The Method of Standard Additions (MSA) has been performed on this sample.
S2	Incorrect sample amount was submitted to the laboratory for analysis
S3 (Flashpoint)	This method is not designed for solids and the results may not be accepted by any regulator for such purposes.
T	Second-column or detector confirmation exceeded the SW-846 criteria of 40% RPD for this compound.
TIC	The compound is not within the initial calibration curve. It is searched for qualitatively or as a Tentatively Identified Compound.
U	The reported value is ≤ Laboratory MDL (value for result will be the MDL, never below the MDL)
W	Post-digestion spike for Furnace AA is out of control limits (85-115%), while sample absorbance is less than 50% spike absorbance.
@	Adjusted reporting limit due to sample composition, not due to overcal (dilution prior to digestion and/or analysis).
#	Elevated reporting limit due to insufficient sample size
1 pt	The compound has been quantitated against a one point calibration.
* (Metals & Wet Chem)	Elevated reporting limit due to matrix interference (dilution prior to digestion and/or analysis)

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LAB ACCESSION # C103372

PART 1 - Bottle Shipment Information

CLIENT: AVERY DENNISON **CLIENT PROJECT NUMBER:** 5406614000

QUANTITY OF SAMPLE CONTAINERS SHIPPED	PRESERVATIVE							PLASTIC CONTAINERS							GLASS CONTAINERS									NOTES
	H_2SO_4	HNO3	HCL	Zn Acetate	$Na_2S_2O_3$	Unpreserved	NaOH	8 oz.	16 oz.	32 oz.	½ gallon	1 gallon	Whirl-pak	100-ML Cup	120 ml (A)	1 liter (A)	1 liter (C)	40 ml Vial	4 oz. wm	8 oz. wm	16 oz. wm	32 oz. wm	D.I. Trip Blank	

Relinquished By: | **Time** | **Date** | **Received By:** | **Time** | **Date**

PART 2 - Sample/Project Information

SAMPLE MATRIX CODES

DW DRINKING WATER
WW WASTEWATER
GW GROUNDWATER
AI AIR
SO SOIL
OI OIL
SW SURFACE WATER
SL SLUDGE
ST STORMWATER

PARAMETERS AND PRESERVATIVES REQUESTED

SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME	MATRIX	VOC	TOTAL # OF BOTTLES
MPA	03 13 01		AI	X	1
					185

Total Number of Bottles/Containers:

Relinquished By	Date	Time	Received By	Date	Time
Vanessa A. Gallo	03 14 01		Danielle Harned	3-15-01	0910

Client	AMEC Earth + Environmental		Purchase Order Number
Address	285 Davidson Avenue		Project Number 5406614000
City	Somerset	State NJ Zip 08873	Project Name Avery Dennison
Phone Number	(732) 302 9500	Fax Number (732) 302 9504	Project Location New Windsor, NY
Project Manager	Steve Pasten		Sampled By VB

TURNAROUND TIMES	check below
Standard - 14-21 days	X
RUSH (must be approved in advance)	
<- 48 hours - 2x standard price	
3-7 days - 1.5x standard price	
TCLP - 1 week rush 1.5x standard price	
QC Level none I II III IV (c one)	

SPECIAL INSTRUCTIONS

Chlorinated hydrocarbon analysis (same analysis as previous suma canister sampled 02/14/01)

Copies of report needed _____

FORM # 12694

WHITE — LAB CANARY — REPORT PINK — CLIENT