SUPPLEMENTAL GEOHYDROLOGY WORK PLAN
UNIONDALE SHOPPING CENTER SITE

Objective: To determine if contaminates are leaving the Uniondale Shopping Center site with a resulting impact on human population or the environment.(1)

Methodology:

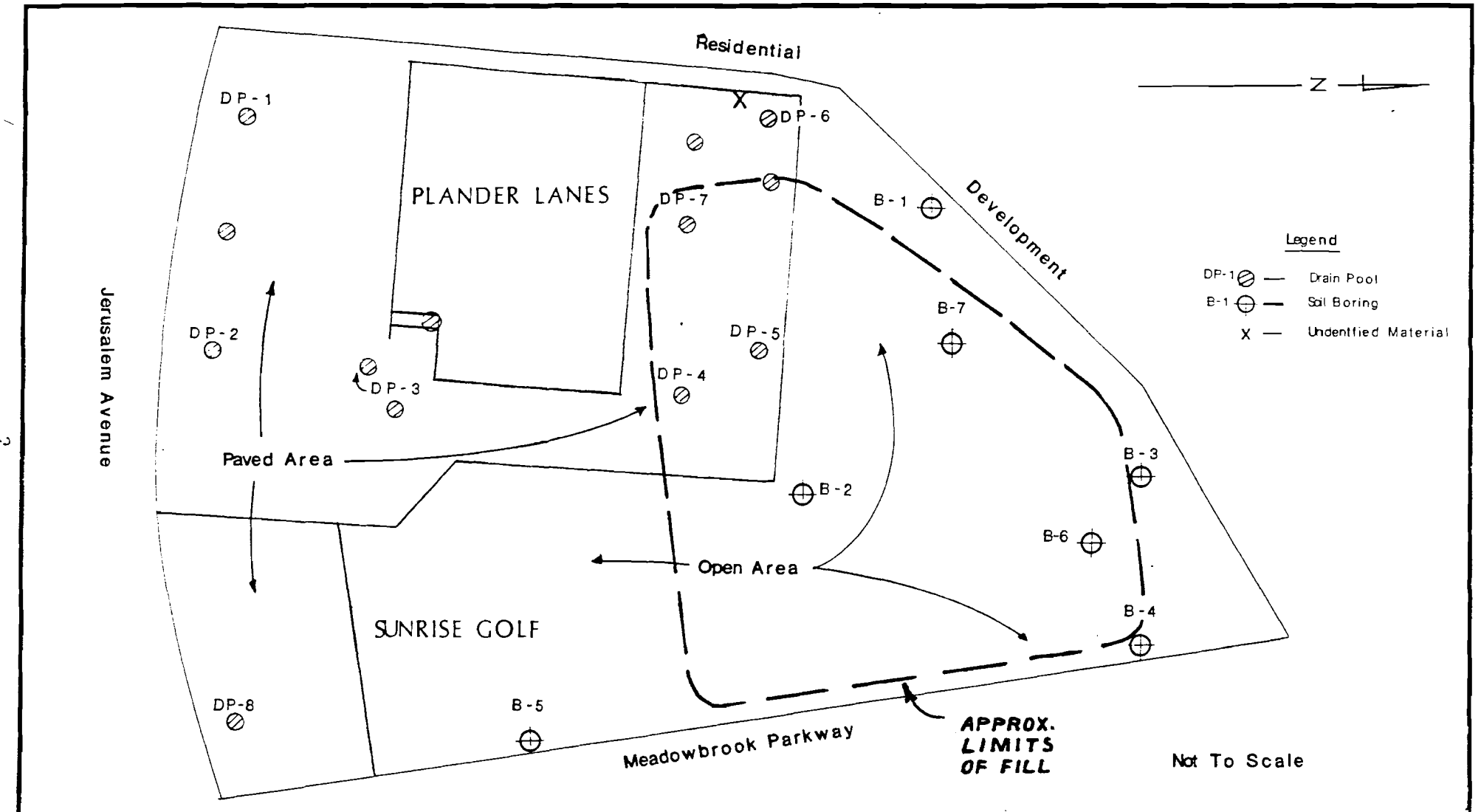
* Previous two studies that have characterized the site.
* Identify any other information that may be pertinent.
* Identify specific Data Gaps.
* Install 2 on site downgradient shallow groundwater wells.
* Sample groundwater from new wells (downgradient).
* Sample groundwater from existing wells.
* Survey new wells and measure water levels for all wells.
* Prepare final report.

BACKGROUND

A site contamination study was conducted for the site in 1986 (see Appendix A). A thorough review of Nassau County Health Department, New York State Department of Environmental Conservation, and Nassau County Fire Marshal files showed no evidence of hazardous waste activity. Tests on site showed little, if any, contamination and **laboratory tests directly in the fill showed undetected levels of VOC priority pollutants** (see Figure 1 and Appendix A).

On April 25, 1989 a public hearing was held at Hempstead Town Hall as part of the State Environmental Quality Review Act and preparation of Final Environmental Impact Statement for the proposed

1. NYSDEC May 9, 1988 memorandum. Phase II Investigation Generic Work Plan.



F,P&M

FIGURE 1 - DRAINAGE POOL AND BORING LOCATIONS ANALYZED

development of a 10.7 acre shopping center located on Jerusalem Avenue, in Uniondale, Town of Hempstead, Nassau County, New York. During the public hearing, people submitted affidavits that questionable materials had been landfilled approximately 17 years ago, including paint cans and medical wastes.

In May, 1989, a further study was undertaken to investigate this new information supplied to the developer and to further study the soils of the fill and to ascertain whether contaminants are leaving the site and impacting any human population or the environment. A total of five (5) wells were installed to investigate the groundwater quality upgradient, within, and downgradient of the fill. Each well was surveyed to determine the upper glacial aquifer gradient and to determine groundwater movement. To further characterize the hydrodynamics of the fill area, a paired piezometer was installed in the fill (2 wells were installed, one shallow and one deep, in the fill).

In addition, 5 soil samples were obtained within the fill, 2 in the unsaturated and 3 in the saturated zones. All groundwater and soil samples were tested by a USEPA and NYSDEC contract laboratory for full target compound parameters (149 parameters).

The results of the groundwater sampling indicate that there are substances present in the groundwater within the fill at both shallow and deeper zones.

Groundwater quality within the fill was characterized to be slightly tainted and exceeded the NYSDEC class "GA" groundwater standards. However, groundwater quality directly downgradient of the fill was acceptable. Thus, based upon the results of this investigation, it can be concluded that this site does not pose a

threat to drinking water supplies of Nassau County. We will further confirm this with two additional downgradient wells.

Soil samples were obtained in the middle of the fill at 4 different depths. Low levels of PCBs, lead, pesticides and VOCs were detected at different depths within the soil boring. The concentration of the compounds in the fill were not high enough to cause a threat to human health and are below action levels of N.J. or EPA records of decision.

PROPOSED TECHNICAL SCOPE OF WORK
SOILS

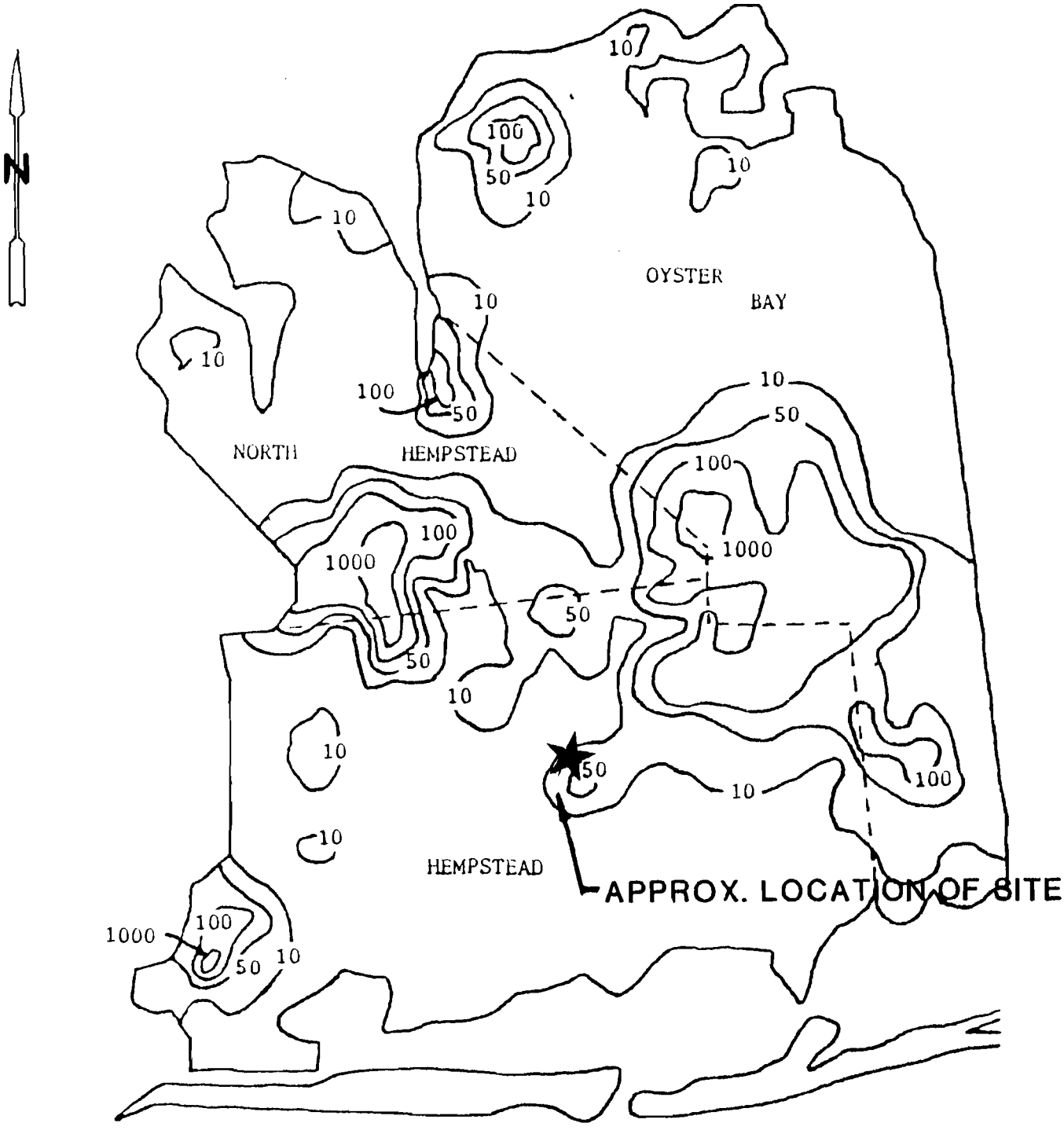
The testing of soils to date simply does not warrant additional borings on site. The first tests performed in 1986 showed non-detectable levels while the second study showed low levels of a few select compounds.

Since the tests do not warrant additional sampling, the next question posed is whether the coverage is representative? Because of the heterogeneous nature of the fill it is almost impossible to characterize it. One bore hole 5 feet from another will show significant differences. Therefore, a fill can never be said to be characterized. This is one reason why the NYSDEC almost never requires samples in a fill. Indeed, Fanning, Phillips and Molnar has recently reviewed the Holtsville Landfill, Phase II study. No soil samples were required to be taken in the fill. The stated purpose of this Phase II study was "... to determine if the landfill is a source of contamination in the area." In the Holtsville study (a much larger municipal landfill), this was accomplished by ground and surface water sampling only. Why are samples of groundwater in a downgradient direction more technically sound? First, groundwater is an integration of what is leaching out of the fill and therefore characterizes the leachate for a large area. Second, it provides a direct measure of the impact of the fill on the human population, which is NYSDEC's stated objective in Phase II plans. Therefore, we believe that it is not necessary to take any more soil borings in the fill but would rather concentrate our effort in installing downgradient groundwater wells, which would provide better indication of the contaminants leaving the Uniondale site with a resulting impact on the human population and the environment.

GROUNDWATER OBSERVATION WELLS

The results of the groundwater testing indicate minor contamination of petroleum based compounds that are present in the fill. Note that these levels of organics are below levels measured in the 30% of the Glacial Aquifer in Nassau County (see Figure 2). The concentrations of benzene detected in fill groundwater are above the NYSDEC standards for Class "GA" groundwaters. The direction of groundwater flow beneath the site is south-southeast, towards Meadow Brook. There are no public water supply wells down gradient of the site, thus eliminating the pathway of this contamination to a receptor (public supply well). The concentration of benzene detected in the groundwater, down gradient of the fill, shows a significant decrease to below GA standards. This may be due to biodegradation or dispersion. Finally, the vertical gradient observed in the paired piezometers in the fill shows an upward movement indicating a discharge area. This is consistent with its proximity to Meadow Brook. This shows that hydrodynamically, the water within the fill is not moving downward, but rather laterally into Meadow Brook, away from any public water supply wells.

Therefore, Fanning, Phillips and Molnar recommended that two additional wells be installed on site in the downgradient direction as shown in Figure 3. As the only groundwater quality violation that occurred was for VOCs. We propose to test these wells only for VOCs. In addition, all existing wells on site will be resampled and tested for VOCs. Each well will be installed to NYSDEC specifications following all QA/QC protocol. All wells will be developed then sampled one week after development. Sampling will take place after



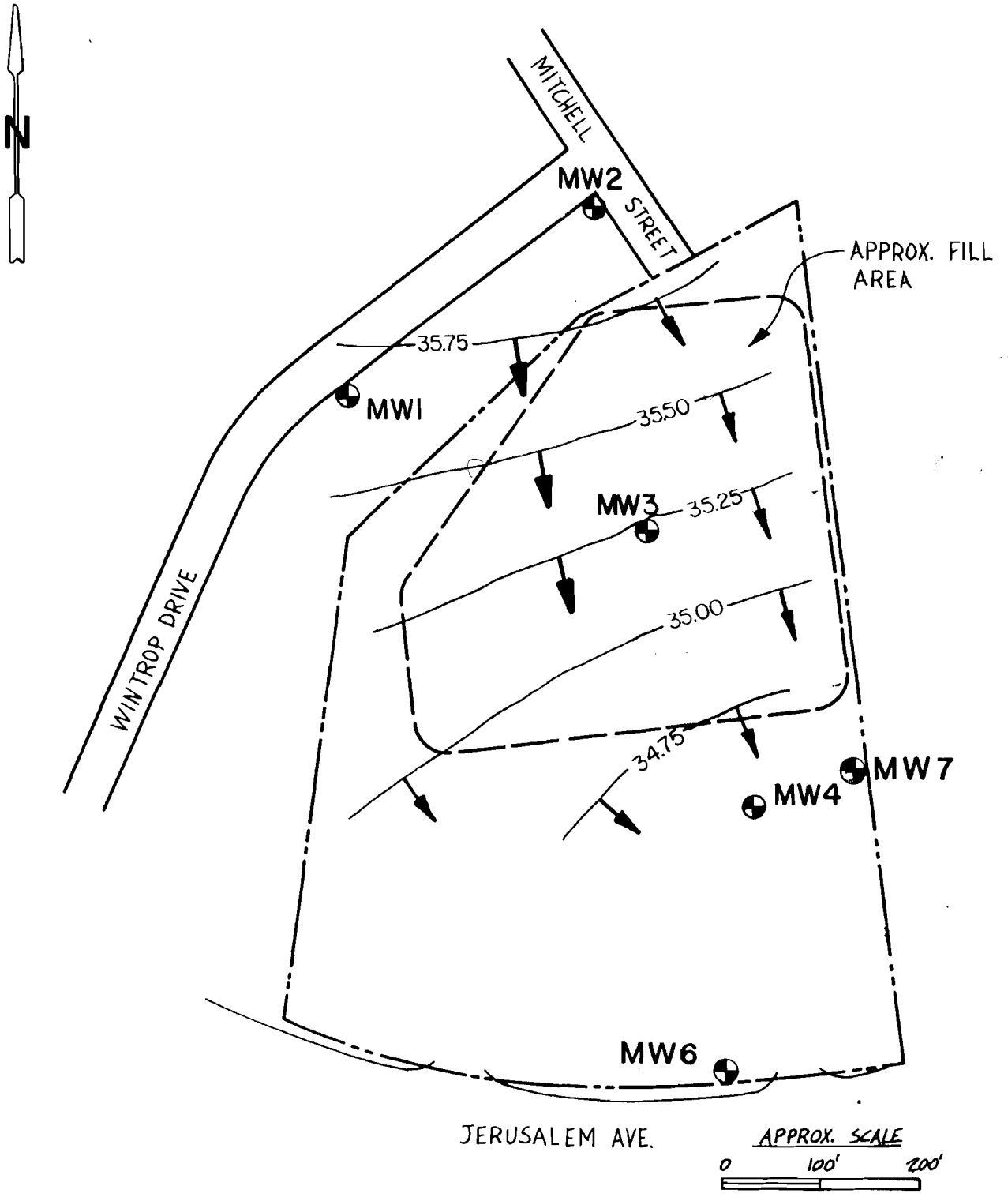
N.T.S.

LEGEND:

— 10 — LEVELS ARE IN UG/L

SOURCE: NASSAU COUNTY DEPT. OF HEALTH (WATER SUPPLY BRIEFING REPORT, NOV. 1981)

FIGURE 2 -TOTAL VOLATILE ORGANIC CHEMICALS IN THE UPPER GLACIAL AQUIFER IN NASSAU COUNTY-1979



F,P&M **FIGURE 3 – PROPOSED NEW MONITORING WELLS**

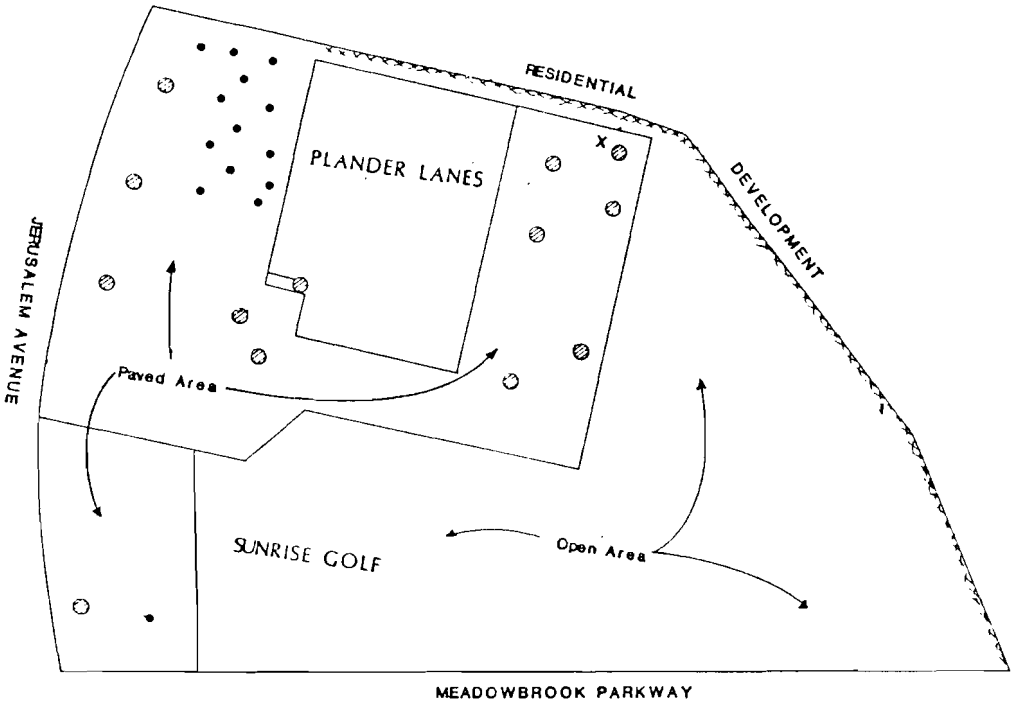
several well volumes are exhausted out of the observation well and specific conductance, temperature and pH do not change (within 10%). The specific conductance will be used to insure that we are in the plume of the fill.

APPENDIX A
SUPPLEMENT SAMPLING PROGRAM
UNIONDALE, NEW YORK

APPENDIX A

SUPPLEMENT

SAMPLING PROGRAM
UNIONDALE, NEW YORK



NOVEMBER 1986

fanning, phillips & molnar
ENGINEERS
PLAINVIEW NEW YORK

DISCLAIMER

These findings are based upon a detailed sampling procedure that has been formulated in accordance with U.S. E.P.A. Procedures both for sampling and for laboratory analysis. Conclusions from this data represent our best judgment using analytical techniques and our past experience. Due to the complexity of this project, the site and past discharge practices, it is likely that there are some aspects which are as yet unidentified and may warrant further study.

FIELD REPORT FOR REALCO/UNIONDALE PHASE II SAMPLING

Objective: Sample sediment and soils from locations that were recorded having elevated concentrations of petroleum hydrocarbons and multiple OVA/GC peaks. Have samples analyzed by laboratory for volatile organics listed under EPA's "129 Priority Pollutants."

Dates: 10/9 and 10/10/86

Present: Fanning, Phillips and Molnar - Errol Kitt

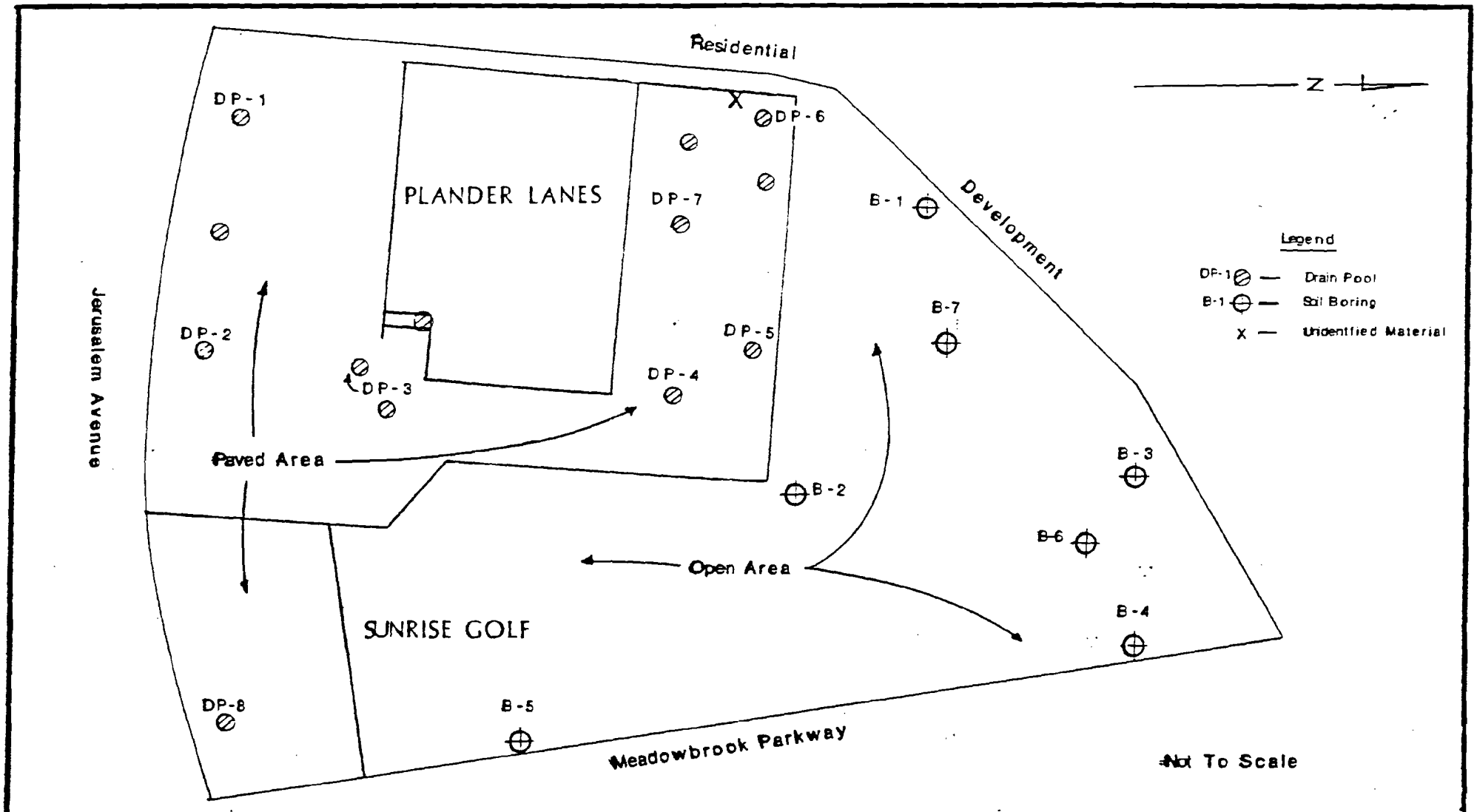
Fanning, Phillips and Molnar - Martin Klein

Weather Conditions: 10/9 - Sunny, 80 °F

10/10- Sunny, 65-70 °F

Summary:

- Preparation:
  - o Located sampling locations DP#1, DP#3, DP#4, DP#5, DP#6, B-2 and B-6 on base map (Figure 1).
  - o Rinsed all sampling equipment with distilled water and torched all metal parts with propane burner to assure quality of samples.
- Sampling of Drain Pools:
  - o Identified all drain pools to be sampled (#1, #3, #4, #5 and #6) in field.
  - o Hand augered a surface sediment sample from each pool.
  - o Each sediment sample was contained in a 40 ml. vial and packed in ice.
  - o Drove a 1" O pipe, 3' into the bottom sediment of the pool in order to obtain a 3' soil sample.
  - o Each sample was contained in a 40 ml vial and packed in ice.



F,P&M

FIGURE 1 - DRAINAGE POOL AND BORING LOCATIONS ANALYZED

- Sampling of soil borings:
  - o Identified soil boring locations to be sampled (#2 and #6) in field.
  - o Hand augered 2' into soil at boring location #2. Deeper penetration was not possible with the equipment used. Obtained a soil sample at 2' depth.
  - o Hand augered 1' into soil at boring location #6. Deeper penetration was not possible with the equipment used. Obtained a soil sample at 1' depth.
  - o Each soil sample was contained in a 40 ml vial and packed in ice.
- All sampling areas were cleaned after sampling.
- All 12 sediment samples were immediately delivered to the laboratory to be analyzed for the volatile organics portion of EPA's "129 Priority Pollutants."

Sampling Results-

Initial sampling and OVA/GC analysis determined high levels of organic vapors emanating from soils collected at several locations on site. Laboratory analysis identified extremely high concentrations of petroleum hydrocarbons within these samples as well (see Table 1).

Phase II sampling and laboratory results (see Appendix A) confirm undetectable concentrations of the EPA list of volatile organics (1) in all samples obtained on the Uniondale site. Figure 1 shows each sampling location on site.

Interpretation of these results suggests that:

1) It is probable the multiple peaks recorded from the OVA/GC represent several different volatile compounds occurring within each sample.

2) These peaks do not correspond to E.P.A. volatile organic compounds listed in the "129 Priority Pollutants".

3) The high petroleum hydrocarbon results are an indication of potential contamination problems and should be removed from the leaching pools to:

   - Improve drainage.
   - Avoid leaking any pollutants into the groundwater.

(1) Part of the "129 Priority Pollutants"

TABLE 1

SUMMARY OF OVA/GC AND LABORATORY ANALYSIS OF SAMPLES ON SITE

(1) Sample Location	OVA/GC	Laboratory Analysis for Petroleum Hydrocarbon (Parts Per Million)	(2) Laboratory Analysis of Volatile Organic Compounds Listed Under EPA's "129 Priority Pollutants" Exceeding Maximum Levels (Parts Per Billion)	
			Surface	3' Depth
DP-1	High	5,900	X (3)	X
DP-2	High	Not Analyzed	Not Analyzed	Not Analyzed
DP-3	High	Not Analyzed	X	X
DP-4	High	2,300	X	X
DP-5	High	2,200	X	X
DP-6	High	7,200	X	X
DP-7	Low	Not Analyzed	Not Analyzed	Not Analyzed
DP-8	No Peak	Not Analyzed	Not Analyzed	Not Analyzed
B-1	No Peak	Not Analyzed	Not Analyzed	Not Analyzed
B-2	High	350	X	Not Analyzed
B-3	Low	Not Analyzed	Not Analyzed	Not Analyzed
B-4	No Peak	Not Analyzed	Not Analyzed	Not Analyzed
B-5	No Peak	Not Analyzed	Not Analyzed	Not Analyzed
B-6	High	Not Analyzed	X	Not Analyzed
B-7	No Peak	Not Analyzed	Not Analyzed	Not Analyzed

(1) See Figure 1 for sampling locations
(2) Laboratory analysis performed on 5 samples according to proposal and highest recorded OVA/GC readings
(3) "X" indicates undetected levels

APPENDIX A
LAB RESULTS

TOTAL ANALYTICAL SERVICES FOR A SAFE ENVIRONMENT
nytest environmental inc

Lab No 86-12711(B)
P.O. No.: Pending
October 31, 1986

REPORT OF TESTS

FOR

FANNING PHILLIPS & MOLNAR
80 SKYLINE DRIVE
PLAINVIEW, NEW YORK 11803

Report prepared by:

Parag K. Shah, Ph.D.
Organic Lab. Manager

Report prepared by:

Peggy Sacks PS
Q.C. Manager

CERTIFICATION

We certify that this report is a true report of results obtained from our tests of this material.

Respectfully submitted,

Nytest Environmental Inc.

Remo Gigante
Laboratory Director

Att: Mr. M. Klien

RG/jw

call box 1021 ▫ 75 urban avenue, westbury, n.y. 11590 ▫ (516) 334/7770, (718) 297/1449

TOTAL ANALYTICAL SERVICES FOR A SAFE ENVIRONMENT

nytest environmental inc.

REPORT OF TESTS

Date: October 31, 1986 Lab. No. 86-12711(B)

Client	Fanning Phillips & Molnar
Material	Twelve (12) Soil Samples
Identification	As Below (Samples Received 10/10/86)
Client's Order No.	Pending
Submitted for	Chemcial Analysis

The submitted soil samples received on 10/10/86 were identified as the following:

B-2
B-6 Mid-North
DP #1 Surface
DP #1 3'
DP #3 Surface
DP #3 3'
DP #4 Surface
DP #4 3'
DP #5 Surface
DP #5 3'
DP #6 Surface
DP #6 3'

RESULTS

See the following pages.

call box 1021 ▫ 75 urban avenue, westbury, n.y. 11590 ▫ (516) 334/7770, (718) 297/1449

Sample Number
B-2

Organics Analysis Data Sheet
(Page 1)

Lab. No. 86-12711(B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH:
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichlorooropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used Additional flags or footnotes explaining results are encouraged However the definition of each flag must be explicit

Value If the result is a value greater than or equal to the detection limit report the value

U Indicates compound was analyzed for but not detected Report the minimum detection limit for the sample with the U (e g 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit) The footnote should read U Compound was analyzed for but not detected The number is the minimum attainable detection limit for the sample

J Indicates an estimated value This flag is used either when estimating a concentration for tentatively identified compounds where a 1 1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e g 10J) If limit of detection is 10 µg l and a concentration of 3 µg l is calculated report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC MS Single component pesticides ≥10 ng µl in the final extract should be confirmed by GC MS

B This flag is used when the analyte is found in the blank as well as a sample It indicates possible probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results If used they must be fully described and such description attached to the data summary report

Page: 2A

Lab. No.: 86-12711(B)

Sample Identification: B-2

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
B-6

Organics Analysis Data Sheet
(Page 1)

Lab. No. 86-12711(B)

Laboratory Name Nytest Environmental Inc. Case No _____

Lab Sample ID No _____ QC Report No _____

Sample Matrix Soil Contract No _____

Data Release Authorized By _____ Date Sample Received 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: _____

Date Analyzed: 10/13/86

Conc/Dil Factor: 1 pH _____

Percent Moisture: (Not Decanted) _____

CAS Number		ug/kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such descriptions attached to the data summary report.

Page: 3A

Lab. No.: 86-12711(B)

Sample Identification: B-6

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP #1 Surface

Organics Analysis Data Sheet
(Page 1)

Lab. No. 86-12711(B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/L and a concentration of 3 µg/L is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µl in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such descriptions attached to the data summary report.

Page: 4A

Lab. No.: 86-12711(B)

Sample Identification: DP #1 Surface

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP#1 3'

Organics Analysis Data Sheet
(Page 1)

Lab No. 86-12711 (B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received:

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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Lab. No.: 86-12711(B)

Sample Identification: DP#1 3'

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP #3 Surface

Organics Analysis Data Sheet
(Page 1)

Lab. No. 86-12711(B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used Additional flags or footnotes explaining results are encouraged However the definition of each flag must be explicit

Value If the result is a value greater than or equal to the detection limit report the value

U Indicates compound was analyzed for but not detected Report the minimum detection limit for the sample with the U (e g 10U) based on necessary concentration dilution action (This is not necessarily the instrument detection limit) The footnote should read U Compound was analyzed for but not detected The number is the minimum attainable detection limit for the sample

J Indicates an estimated value This flag is used either when estimating a concentration for tentatively identified compounds where a 1 1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e g 10J) If limit of detection is 10 µg l and a concentration of 3 µg l is calculated report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC MS Single component pesticides ≥ 10 ng µl in the final extract should be confirmed by GC MS

B This flag is used when the analyte is found in the blank as well as a sample It indicates possible probable blank contamination and warns the data user to take appropriate action

Other Other specific flags and footnotes may be required to properly define the results If used they must be fully described and such description attached to the data summary report

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Lab. No.: 86-12711(B)

Sample Identification: DE #3 Surface

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP #3 3'

Organics Analysis Data Sheet
(Page 1)

Lab. No. 86-12711(B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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Lab. No.: 86-12711(B)

Sample Identification: DP #3 3'

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP #4 Surface

Organics Analysis Data Sheet

(Page 1) Lab. No. 86-12711(B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such descriptions attached to the data summary report.

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Lab. No.: 86-12711(B)

Sample Identification: DP #4 Surface

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP#4 3'

Organics Analysis Data Sheet
(Page 1)

Lab No. 86-12711 (B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH:
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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Lab. No.: 86-12711(B)

Sample Identification: DP#4 3'

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP#5 Surface

Lab No. 86-12711(B)

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ml in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

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Lab. No.: 86-12711(B)

Sample Identification: DP#5 Surface

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP#5 3'

Organics Analysis Data Sheet
(Page 1)

Lab No. 86-12711(B)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH
Percent Moisture: (Not Decanted)

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration, dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such descriptions attached to the data summary report.

Page: 11A.

Lab. No.: 86-12711(B)

Sample Identification: DP#6 Surface

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP#6 Surface

Lab No. 86-12711(B)

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Nytest Environmental Inc.
Case No:
Lab Sample ID No:
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 10/13/86
Conc/Dil Factor: 1 pH:
Percent Moisture (Not Decanted):

CAS Number		ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
75-25-2	Bromoform	5 u
591-78-6	4-Methyl-2-Pentanone	10 u
108-10-1	2-Hexanone	10 u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Page: 12A.

Lab. No.: 86-12711(B)

Sample Identification: DP#6 Surface

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

Sample Number
DP#6 3'

Organics Analysis Data Sheet
(Page 1)

Lab No. 86-12711(B)

Laboratory Name Nytest Environmental Inc. Case No

Lab Sample ID No QC Report No

Sample Matrix Soil Contract No

Data Release Authorized By Date Sample Received 10/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared

Date Analyzed 10/13/86

Conc/Dil Factor: 1 pH

Percent Moisture: (Not Decanted)

CAS Number		ug/Kg or ug/Kg
74-87-3	Chloromethane	10 u
74-83-9	Bromomethane	10 u
75-01-4	Vinyl Chloride	10 u
75-00-3	Chloroethane	10 u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10 u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
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107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10 u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10 u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/Kg or ug/Kg
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10 u
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591-78-6	4-Methyl-2-Pentanone	10 u
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127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If limit of detection is 10 µg/L and a concentration of 3 µg/L is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ml in the final extract should be confirmed by GC/MS.

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Page: 13A.

Lab. No.: 86-12711(B)

Sample Identification: DP#6 3'

CAS Number		Results in ug/kg
095-50-1	1,2-Dichlorobenzene	10 u
541-73-1	1,3-Dichlorobenzene	10 u
106-46-7	1,4-Dichlorobenzene	10 u

nytest environmental

CHAIN OF CUSTODY RECORD

PROJECT NO

PROJECT NAME: REALCO UNIONDALE / FANNING, PHILLIPS AND MOLNAR

CLIENT NAME: FPM (FANNING, PHILLIPS + MOLNAR

LAB #

SAMPLE NO	DATE	TIME	COMP	GRAB	SAMPLE LOCATION	NO OF CONTAINERS	ANALYSIS: NITROGEN	OIL & GREASE	CYANIDE	PHENOL	VOLATILE	METALS	ORGANICS	BACTERIAL	TOC COD	OTHER	UNPRESERVED	REMARKS / ADDITIONAL REQUIREMENTS
#1	10/10	2:15		/	Dp #1 (Surface) (Front)	1 (4oz)												TEST 601 + 602
#1	10/10	"		/	Dp #1 (3' Depth) (Front)	1 4oz												"
#3				/	Dp #3 (Surface) (Front)	1 4oz												"
#3				/	Dp #3 (3') (Back)	1 4oz												"
#4				/	Dp #4 Surface (Back)	1												"
#4				/	Dp #4 (3') (Back)	1												"
#5				/	Dp #5 (Surface) (Back)	1												"
#5				/	Dp #5 (3') (Back)	1												"
#6				/	Dp #6 (Surface) Back	1												"
#6				/	Dp #6 (3') Back	1												"
-2				/	B-2 (Middle) (2')	1												"
-6				/	B-6 (Mid-North) (1')	1												"
NOWN				/	UNKNOWN SUBSTANCE (Back)	1 4oz												E.P. TOXICITY (Metals only)
				X														
					Total	13												

Shipped Via:

	Date/Time	Agent of	Rec'd by (Signature)	Date/Time	Agent of
Relinquished by (Signature)					
Printed Name: MARTIN O. KLEIN	10/10/86 2:25	FPM	Printed Name: K. TAOKO	10-10-86 2:25	NYT
Relinquished by (Signature)	Date/Time	Agent of	Rec'd by (Signature)	Date/Time	Agent of
Printed Name			Printed Name		
Relinquished by (Signature)	Date/Time	Received for Laboratory by (Signature)	Date/Time	Remarks: CONTACT: FANNING, PHILLIPS AND MOLNAR	
Printed Name: K. AGAKI	10/10 2:30	Printed Name	10-10 2:30	80 SKYLINE DRIVE PLAINVIEW, N.Y. 11803	
Sampler (Signature)		Samplers Name (Print)		PHONE # 516 938-2200	
Martin O. Klein		MARTIN O. KLEIN		ATTN: MARTIN O. KLEIN	ONE WK. 10/17/86