SITE EVALUATION ADDENDUM

80 & 120 LISTER AVENUE

SUBMITTED TO

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PREPARED BY

DIAMOND SHAMROCK CHEMICALS COMPANY

IT CORPORATION

WOODWARD-CLYDE CONSULTANTS

ENVIRO-MEASURE, INC.

FEBRUARY, 1986

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
HAZARDOUS SITE MITIGATION ADMINISTRATION
CN 028, Trenton, N J 08625

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M E M O R A N D U M

TO: Distribution List

THROUGH: Robert Predale - Chief, BSM

FROM: David Kindig, P.E. - Site Manager, BSM

SUBJECT: 80 and 120 Lister Avenue Addendum
Diamond Shamrock - Newark

Enclosed for your review and comment is an addendum to the Site Evaluation Reports for the 80 and 120 Lister Avenue sites. This addendum has been submitted by Diamond Shamrock and their Contractor, IT Corporation, in response to comments made by NJDEP relative to their initial submittal.

As you are probably aware, a hearing held February 20, 1986 to receive public comments on the Feasibility Study completed for the site. In summary, NJDEP has received the following documents submitted in response to the requirements of the Administrative Consent Orders:

80 Lister Avenue Site Evaluation Report, 3 vol. (RI)
120 Lister Avenue Site Evaluation Report, 2 vol. (RI)
80 Lister Avenue Site Feasibility Study, 1 vol. (FS)
80 and 120 Lister Avenue Site Evaluation Addendum, 1 vol

With the exception of the 120 Lister Avenue Site Evaluation Report, which has not had a Quality Assurance data review, copies of each of these documents have been distributed internally to DEP and EPA, with additional copies placed in public repositories for review. This office will also be receiving two additional documents by the end of March which address the Passaic River Study completed during the summer of 1985, and a summary of Diamond Shamrock off-site remediation efforts. These will be distributed when received.

If there are any further comments/recommendations pertaining to any of the above documents, I would appreciate receiving them no later than March 20, 1986. If you have any further questions, please do not hesitate to contact me at 984-3074.

HS107:kk
Distribution List
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PREFACE

This addendum to the 80 and 120 Lister Avenue Site Evaluation Reports presents the results of additional data collection efforts that have become available since initial report submittal. The work has been performed for Diamond Shamrock Chemicals Company (Diamond Shamrock) by International Technology Corporation (IT) and its subcontractors--Woodward-Clyde Consultants (WCC) and Enviromeasure, Inc. (EMI). This addendum is being submitted to the New Jersey Department of Environmental Protection (NJDEP) in response to Administrative Consent Orders I and II (ACO I and ACO II) related to the 80 and 120 Lister Avenue sites, respectively.

The addendum is divided into two chapters containing additions and revisions to the 80 Lister Avenue report (Chapter I) and the 120 Lister Avenue report (Chapter II). Each chapter is preceded by a summary of responses to NJDEP requests for additional information or clarification of statements presented in the Site Evaluation Reports.

Each chapter is further divided into sections consistent with the format of the original reports. Tables and figures are presented following all text additions and revisions. The appendices are contained at the end of each chapter. Only one new appendix was added to the report, Appendix K, found in Chapter I which contains meteorologic data requested by NJDEP. A Table of Contents is provided at the beginning of each chapter.

It should be noted that ground water and land elevations presented in new or revised tables, cross sections, boring logs, and monitoring well logs have been converted to the New Jersey Geodetic Vertical Control datum. The site elevation benchmark which had been arbitrarily set at Elevation 100.00 is now 9.06 feet. This was done for purposes of clarity and consistency with the Feasibility Study. In addition, all site plan views contained in this report show the present locations of fences and gates on the sites.

SUMMARY OF RESPONSES
TO NJDEP'S APRIL 3, 1985
COMMENTS ON SITE EVALUATION REPORT
80 LISTER AVENUE

MONITORING WELLS/SOILS

Item 1

The results of dioxin, organic, and inorganic analysis of background soils were presented in Tables 5.9.2-1 and 5.9.2-5 of the Site Evaluation Report. Dioxin was not found in any of the three soils analyzed. Volatile organic compounds were absent from background samples, with the exception of methylene chloride which may result from laboratory contamination. Four compounds were detected in the base/neutral/acid fraction. Of these, hexachlorobenzene was detected at higher concentrations than were detected in the same sample interval on site. Two pesticides, DDT and DDE, were detected at low concentrations (<200 ppb) in the background soils. PCB-1260 was present in two of the samples. This compound was not detected in any sample on site. Inorganic compounds were generally in the same concentration ranges as present at 80 Lister Avenue. The only exception is lead, which is present in concentrations at least two times greater in the background samples.

Item 2

A contour map has been provided in the addendum (Figure 6.5.2-1) showing the effects of high and low tides on water levels in the fill. These measurements were taken on October 15, 1984 and the data are presented in revised Figures 5.6.1-1 through 5.6.1-8. Similar measurements are not available for the 120 Lister Avenue site.

Item 3

The locations of all known wells in the vicinity of 80 Lister Avenue are shown in Figure A-1, Appendix A of the Feasibility Study.

Item 4

Conventional field-measured ground water quality parameters for the 80 Lister Avenue site may be found in Table 5.6.4-13 of this addendum.

PASSAIC RIVER SEDIMENTS

All items will be addressed and presented under separate cover in the Passaic River Study Report.

AMBIENT AIR SAMPLING

Item 1

PAH/VOC analyses and coeluting isomers have been discussed in the response letter dated April 17, 1985 from J. T. Onstott to E. E. Noble that was submitted to the agency on April 18, 1985 (attached).

Meteorological data used to generate Figures 5.1-1 and 5.1-2 of the Site Evaluation Report are presented in Appendix K of the addendum.

Item 2

Two ambient air samples that had detectable dioxin concentrations are discussed in Section 3.3.4.1 of the Feasibility Study. Location of the samplers and site activities are discussed in relation to the positive readings.

ANALYTICAL QA/QC

Analytical data presented in the Site Evaluation Report have undergone QA/QC review. Results of this review will be presented at a later date under separate cover.

GENERAL

Item 1

All information known about the subsurface piping on 80 Lister Avenue has been supplied to the NJDEP in the Site Evaluation Report and the Feasibility Study. It should be noted that implementation of any of the remedial alternatives presented in the Feasibility Study except the "no-action" alternative will result in the location and removal or plugging of all underground conduits leading from the site.

Item 2

The Feasibility Study addresses both short- and long-term concerns pertaining to risk assessment. The risks associated with remediation activities are also addressed for the various alternatives.

Diamond Shamrock

ATTACHMENT

April 18, 1985

Mr. Jorge Berkowitz, Ph.D.
New Jersey Department of Environmental Protection
65 Prospect Street
Trenton, New Jersey 08625

Dear Mr. Berkowitz:

Please find enclosed the response to your letter dated April 3, 1985, transmitting the DEP's comments on the 80 Lister Avenue "Site Evaluation Report".

If there are any questions please contact me at (216) 694-5351.

Very truly yours,

E E Noble/pke

E. E. Noble

EEN/pke

cc: D. Kindig

DEP\DA0100114

IT CORPORATION

April 17, 1985

Project No. 850032

Mr. Edward E. Noble
Diamond Shamrock Corporation
1100 Superior Avenue
Cleveland, OH 44114

80 Lister Avenue
Response to Review
of Site Evaluation Report
by NJDEP

Dear Mr. Noble:

We have reviewed the comments and recommendations provided to you in the transmittal of April 3, 1985 by the New Jersey Department of Environmental Protection (NJDEP) following their review of the Site Evaluation Report for the 80 Lister Avenue site.

Our response to these comments and recommendations is provided in the following paragraphs and is presented in the same sequence as the items addressed in the April 3, 1985 letter.

MONITORING WELLS/SOILS

1. An "interpretation of the background soil sample" has been requested by the NJDEP. The meaning of this is unclear. The borehole was logged and the results of analytical testing were provided. If what is desired is a characterization of the extent of contamination relative to that found on site, this can be provided.

2. The ground water contour map was limited to the site. Contours extending to the surrounding properties can be provided, particularly when the additional monitoring wells currently being installed are completed. A map providing high and low ground water elevations can also be provided. It is noted that the monitoring wells near the river exhibit a tidal fluctuation while those further from the river exhibit little short-term variation.

3. The locations of wells in the vicinity of the site will be located on an area map and will be presented either in the Feasibility Study or an addendum to the Site Evaluation Report.

4. The conventional ground water sample data referred to is available and can be provided in an addendum.

5. Slug test data for Monitoring Wells 10A and 11B were not completed in time for inclusion in the Site Evaluation Report. These data will be provided in an addendum. Strip chart data are available in the project files, but were not provided in the report.

PASSAIC RIVER SEDIMENTS

It is anticipated that the issues discussed in this section of the NJDEP letter will be addressed by the bathymetric study which has been completed and by an ongoing investigation comprising additional river sampling and data gathering and analysis of river transport mechanisms. The work plan for the ongoing river activities has been presented to the NJDEP and approval is expected shortly.

AMBIENT AIR SAMPLING

1. Clarifications

   a. PAH/VOC Analyses - All targeted compounds were separated by the HPLC procedure used for the analysis as demonstrated by the standard chromatograms provided in the analytical batch reports. Identifications are based on the individual compound's retention time and absorption of the selected wavelength of the UV detector. Utilizing this preferred method for the analysis of the PAHs, the probability of properly identifying the selected compounds is higher than misidentification. This method is preferred for the analysis of PAHs; however, as with any analytical technique utilizing retention time, coelution can be identified typically as shoulders or split peaks being produced.

   The VOC analysis was performed using gas chromatography/mass spectrometry which is able, through the interpretation of the mass spectra, to differentiate between the coeluting compounds. In the case of coeluting isomers, unless major differences occur in the mass spectra, they are not typically differentiated. For this analysis, using retention times and mass spectra, all compounds, coeluting or not, are distinguishable except for the ortho and para xylenes and the ortho and para dichlorobenzenes. The column recommended in the VOST method does not separate these isomeric pairs in standards or samples. The quantitation is based on a mixed standard of both isomers, and the sample results are compared to these standards. The results were reported as the same for both ortho and para isomers as it is not distinguishable which isomer is present based on this analysis. The meta isomers are distinguishable based on the retention time differences although their mass spectra are the same as the other isomers. This is a commonly accepted practice by the U.S. Environmental Protection Agency (EPA) for these isomers in VOAs, priority pollutants, and the VOST method analysis, recognizing the shortcoming of the method.

b. VOC Analysis - Compounds that coelute but are identified by spectral differences are tetrachloroethylene and 1,1,2,2-tetrachloroethane. Isomers coeluting that are not distinguishable are the O-, P-xylene and the O-, P-dichlorobenzenes. Other compounds partially coelute in standards but produce significant valleys for easy identification with retention times and mass spectra.

c. Meteorological Data - The data used to produce Figures 5.1-1 and 5.1-2 can be put in tables in an addendum to the Site Evaluation Report.

d. The concentrations calculated for the coeluting isomers are based on a mixed standard of equal volume of both isomers. The quantitation is therefore a sum of both isomers possibly present, and with no way to differentiate which isomer is present, both are reported at equal concentrations. This is intended as an indication of being possibly some combination of either or both isomers present.

2. Recommendations

Information for the assessment of the ambient air dioxin is being investigated and will be presented in an addendum. If this method of selection is utilized again, the TSP filters will be considered for the selection criteria.

ANALYTICAL QUALITY ASSURANCE/QUALITY CONTROL

The analytical data have been reviewed in a tiered method at the laboratory and project levels. The laboratory review is included as part of the data batch reports. Included as part of the Site Evaluation Report in the data section under Quality Control (QC) is a summary of the laboratory and program QC data.

In addition to the summaries, the NJDEP has split data with outside laboratories and proficiency samples were performed during the project. This information is included in the report and is intended to facilitate the data and QC review.

GENERAL

1. More detailed information regarding the sewers, sumps, catch basins, manholes, etc., is available and these data can be provided in an addendum to the Site Evaluation Report.

2. The comments regarding the Feasibility Study have been noted and all items mentioned will be addressed in the Feasibility Study.

If there are any questions regarding the responses provided above, please contact me.

Very truly yours,

Jim Onstott

J. Timothy Onstott

JTO:rsg

cc: R. Lidstrom
S. Wojinski
D. Erikson

CHAPTER I

CHAPTER I
80 LISTER AVENUE

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1.0 INTRODUCTION

The 80 Lister Avenue Site Evaluation Report was submitted to the New Jersey Department of Environmental Protection (NJDEP) in February 1985 in response to ACO I, dated March 13, 1984. The following text presents the results of the site evaluation activities related to the 80 Lister Avenue site since the first report was issued.

2.4 PRESENT CONDITION OF THE PLANT

2.4.1 Buildings and Facilities (Page 2-10)

Demolition of the stack commenced on March 22, 1985. The upper 30 feet were dismantled by hand using an air chipper while the structure was continuously sprayed with water to minimize particulate emissions. Approximately 140 feet were demolished using a clamshell with a waterline attached to the crane boom for continuous dust abatement spraying. The clamshell was used to loosen the bricks, which were allowed to fall into and around the base of the structure. Demolition was completed on April 6, 1985. Approximately 20 feet of the stack remains intact.

3.0 REGIONAL SETTING

3.1 CLIMATE AND METEOROLOGY

3.1.2 Wind (Page 3-2)

Replace last paragraph with the following.

A summary of wind direction and frequency of occurrence is shown in Figure 3.1.2-1. Average wind speeds for each wind direction are shown in Figure 3.1.2-2.

4.0 SITE INVESTIGATION

4.2 SAMPLING, MONITORING, AND PHYSICAL TESTING

4.2.5 Soils (Page 4-28)

Soil samples were obtained from an additional seven drilled borings located on or near the site on the Sherwin Williams property. The locations of all drilled borings and near-surface samples are shown in plan view in revised Figure 4.2.5-1. Revised Table 4.2.5-1 denotes the locations of all sampling points relative to the site coordinate system and ground surface elevations relative to the New Jersey Geodetic Vertical Control Datum.

4.2.5.1 Drilled Borings (page 4-28)

4.2.5.1.1 Drilling Procedures (Page 4-28)

Seven additional borings were drilled in the spring and early summer of 1985 and are included in revised Figure 4.2.5-1. The boring logs are presented in Appendix B. Three of the borings (B-2B, B-4B, and B-7B) were drilled to a depth of 36.5 feet. Two of the borings (B-2C and B-4C) were drilled to depths of 61.5 and 46.5 feet, respectively. The two deep borings (B-7D and B-10D) were drilled to depths of 96.2 and 89.0 feet, respectively. Each of the additional borings was advanced through the surficial fill and up to six inches into the silt interval with a 12-inch steel casing driven with a 1,000-pound hammer. The boring was continued to the silt-sand interface with a 12-inch-O.D., 6-inch-I.D. hollow-stem auger. The drilling was halted at this point and hollow-stem augers were filled with cement grout with 5 percent bentonite added. A minimum of a two-foot head of grout was maintained within the augers as they were withdrawn until the grout was one to two feet above the bottom of the 12-inch steel casing. After the augers were completely removed, an eight-inch PVC casing with a bottom plug was installed from the ground surface to the silt-sand interface. The annular space between the steel and PVC casing was also filled with grout. The grout was then left overnight, at a minimum, to obtain partial strength.

At the beginning of the next shift, the bottom cap was removed by drilling with a six-inch tricone roller bit and/or driving nominal six-inch-I.D. steel casing through the cap. The boring was continued to the bottom depth by driving nominal six-inch-I.D. steel casing with an 800-pound hammer. The casing was driven for a maximum of five feet and then the material inside the casing was flushed out with a 3-7/8-inch tricone roller bit and water to the bottom of the casing. The soil was then sampled with a two- or three-inch-O.D. split-barrel soil sampler driven at 18-inch intervals with a 140-pound hammer falling 30 inches.

Each additional boring was located within 15 feet of a previously sampled boring, so the sampling of the additional boring was not repeated for the depths sampled in the previous boring. The boring was sampled every five feet in the sand interval or when stratigraphic changes were observed. The field geologist had the option of decreasing the sampling interval at his discretion.

At the completion of each additional boring to its specified depth, a monitoring well was installed (Section 4.2.6). All auger cuttings, drilling fluids, and other wastes generated during drilling and well installation were collected, placed in drums, and stored on site.

4.2.5.1.2 Sample Collection Procedures (Page 4-29)

For each of the additional borings, 250 milliliter (ml) of sample were obtained and placed in a 250-ml amber glass jar. The samples were retained in an on-site archive until the boring was completed. At this time, the project geologist selected the samples to be analyzed for dioxin using a staggered test method.

4.2.6 Ground Water (Page 4-34)

Additional intermediate and deep wells monitoring the sand unit were installed on site. Three upper intermediate monitoring wells (MW-2B, MW-4B, and MW-7B) were installed and screened below the silt stratum at a depth of approximately 35 feet. Two lower intermediate monitoring wells (MW-2C and MW-4C) were installed at depths of 60 and 45 feet, respectively. The deep on-site monitoring well (MW-7D) was installed and screened in the lower sand unit near the sand/bedrock interface at a depth of 85 feet below ground surface. An additional off-site deep monitoring well (MW-10D) was installed on the adjacent Sherwin Williams property at a depth of approximately 84 feet. The locations of all on-site and off-site wells are shown in revised Figure 4.2.6-1.

4.2.6.1 Well Installation (Page 4-35)

The ground water monitoring wells installed at the site were designated as:

- "A" - Shallow Monitoring Wells in the Fill Unit
- "B" - Upper Intermediate Monitoring Wells in the Sand Unit
- "C" - Lower Intermediate Monitoring Wells in the Sand Unit
- "D" - Deep Monitoring Wells in the Sand Unit near the Sand/Bedrock Interface.

Documentation of well dimensions was accomplished by the on-site WCC geologist. The monitoring well installation reports, as prepared by the geologist, are presented in Appendix B.

For purposes of clarity, this subsection has been further subdivided into smaller subsections based upon the alphabetical well designation described above. Subsection 4.2.6.1.1, Shallow Monitoring Wells, contains no additional information.

4.2.6.1.2 Upper Intermediate Monitoring Wells ("B" Wells) (Page 4-35)

Three additional upper intermediate monitoring wells installed in the spring of 1985 (MW-2B, MW-4B, and MW-7B) are located on the 80 Lister Avenue site, as shown in revised Figure 4.2.6-1. The following installation procedures were used to reduce the potential for the introduction of surface compounds into the sand.

A 12-inch-diameter steel casing was driven through the surficial fill and six inches into the top of the silt interval. The boring was continued with 12-inch-O.D., 6-inch-I.D. hollow-stem augers until the silt-sand interface was contacted. Drilling was halted and the augers were filled with cement grout with 5 percent bentonite added. The augers were withdrawn, keeping a minimum of a two-foot head of grout within the augers to maintain a 12±-inch borehole, until the grout was one to two feet above the bottom of the 12-inch steel casing. After the augers were removed, an eight-inch PVC casing with an unglued bottom cap was pushed from the ground surface to the silt-sand interface. The annular space between the steel and PVC casing was filled with grout and the boring was left overnight to allow the grout to obtain partial strength.

At the beginning of the next shift, the bottom cap was removed by drilling with a six-inch tricone roller bit using a wet rotary technique and potable water as a drilling fluid and/or driving nominal six-inch-I.D. steel casing through the cap. The boring was advanced to the desired depth by driving the nominal six-inch-I.D. steel casing with an 800-pound hammer. The casing was advanced a maximum of five feet; then material inside the casing was flushed out with a 3-7/8-inch tricone roller bit and water. The casing was advanced to a depth of approximately 35 feet with soil samples taken every five feet with either a two- or three-inch-O.D. split-barrel soil sampler.

A Schedule 40, flush-threaded, two-inch inside diameter PVC casing with well screen was installed to a depth of approximately 35 feet. The well was screened between a depth of approximately 25 to 35 feet with two-inch-diameter, No. 10 slot PVC screen with an unglued slip cap sealing the bottom of the screen. A filter pack of clean, bagged sand approved by NJDEP for use on site was introduced between the depths of approximately 20 feet (approximately five feet above the top of the well screen) and 35 feet. A bentonite seal of approximately one-foot thickness was installed above the filter pack to discourage infiltration of grout into the filter pack. A tremie pipe was then set on top of the bentonite seal and grout was introduced as the six-inch steel casing was withdrawn. Each boring was grouted from the bentonite seal to the ground surface. A protective steel outer casing with a keyed lock was installed and locked after completion of each well. A protective cement collar, 1.5 feet square and a minimum of one-foot thick, was poured around the protective steel casing. Vent holes were provided in both the PVC well riser pipe and protective steel casing. A schematic diagram of these upper intermediate monitoring wells is shown in Figure 4.2.6.1-3.

It should be noted that Monitoring Well MW-10B was constructed and installed in a slightly different manner. Construction details are presented in the Site Evaluation Report. The schematic diagram for this well only has been retitled and is presented as revised Figure 4.2.6.1-2.

4.2.6.1.3 Lower Intermediate Monitoring Wells ("C" Wells) (Page 4-37)

Two lower intermediate monitoring wells (MW-2C and MW-4C) were installed on the 80 Lister Avenue site, as shown in Figure 4.2.6-1. Well installation procedures were the same as the upper intermediate monitoring wells previously described, with the following exceptions. The borehole was advanced until a cohesive zone was encountered. This was at a depth of about 60+ feet below the ground surface at Monitoring Well MW-2C and 46+ feet at Monitoring Well MW-4C. At this point, drilling was halted and a monitoring well was installed. Each well screen was 10 feet in length and was installed at the sand/cohesive zone interface. The remaining procedures for installing the sand pack, bentonite seal, etc., for each well installation were the same as previously described for the "B" wells. A schematic diagram of a typical lower intermediate monitoring well is shown in Figure 4.2.6.1-4.

4.2.6.1.4 Deep Monitoring Wells ("D" Wells) (Page 4-37)

Two deep monitoring wells (MW-10D and MW-7D) were installed on the Sherwin Williams property and 80 Lister Avenue site, respectively, and are located in revised Figure 4.2.6-1. These wells extended to the sand/bedrock interface and were installed using the same procedures as previously described, with the following exceptions. A nominal six-inch steel casing was advanced to refusal at sand/bedrock interface. The borehole was continued for an additional 5± feet using a 3-7/8-inch tricone roller bit and water as a drilling fluid to confirm the presence of bedrock. After bedrock was confirmed, the portion of the borehole in rock was backfilled with cement grout with 5 percent bentonite added. Approximately six inches to one foot of bagged sand was placed on top of the grout and then the well was installed.

The deep monitoring wells used a 10-foot length of two-inch-diameter, No. 10 slot PVC screen that was placed at 83.8 and 85.0 feet of Monitoring Wells MW-10D and MW-7D, respectively. The well installation techniques were the same as previously described for "B" wells. A schematic drawing of a typical deep monitoring well is shown in Figure 4.2.6.1-5.

4.2.6.2 Well Development (Page 4-37)

Well development of the seven additional monitoring wells installed in the spring and early summer of 1985 was performed at least three days after completion of each well. Monitoring Wells MW-2B, MW-2C, MW-4B, and MW-7B were developed using a dedicated, 30-inch stainless steel and teflon bailer.

Monitoring Wells MW-4C, MW-7D, and MW-10D were developed using an Isco well sampling pump that was decontaminated after each use. All additional wells were developed for at least one hour or until five to ten casing volumes of water were removed. Fluids resulting from well development were collected in drums and stored on site.

4.2.6.3 Water Level Monitoring (Page 4-37)

Ground water level measurements were taken in all existing monitoring wells on the following dates during and following installation of the additional monitoring wells: May 11, 1985; May 18, 1985; May 25, 1985; June 1, 1985; July 3, 1985; and July 8, 1985. These measurements were used to determine potentiometric contours within the aquifers.

4.2.6.4 Ground Water Sampling (Page 4-37)

Following installation and development of the additional monitoring wells, ground water samples were collected from various wells on the following dates: June 5, 1985; June 17, 1985; June 25, 1985; June 27, 1985; July 15, 1985; and August 5, 1985.

Ground water sampling procedures were the same as described in the Site Evaluation Report, with the following exceptions. A sample set on these sampling rounds consisted of two 40-ml glass septum vials that were filled first with no head space allowed; six amber glass one-liter bottles; one nalgene one-liter bottle; one amber glass one-gallon jug; and one amber glass 500-ml bottle that was used for field analysis. Specific conductance, salinity, temperature, dissolved oxygen content, and pH for each ground water sample were measured and recorded in the field.

4.2.6.5 Slug Tests (Page 4-39)

Slug tests in Monitoring Wells MW-2B, MW-2C, MW-4B, MW-7B, and MW-10D were conducted during July 1985 in the same manner as described in the Site Evaluation Report, except the instrument used to record water level changes was the In Situ Model SE-1000 Hydrologic Monitor. Slug testing in Monitoring Wells MW-4C and MW-7D was conducted on August 10, 1985.

5.0 DATA PRESENTATION

5.1 AMBIENT AIR (Page 5-1)

Raw data from site measurements of hourly wind speed and direction and data recorded at the Newark Airport are included in Appendix K. These data were used to generate Figures 5.1-1 and 5.1-2 contained in the Site Evaluation Report.

5.2 INDUSTRIAL HYGIENE

5.2.1 Atmospheric Samples for Dioxin (Page 5-3)

Table 5.2.1-2 presents results of all additional dioxin-related industrial hygiene monitoring; of these, seven were atmospheric samples. All atmospheric samples, including blanks, had nondetectable levels of dioxin.

5.2.2 Wipe and Water Samples for Dioxin (Page 5-4)

Sixteen additional wipe samples (including five blanks) for dioxin analysis were collected. Eleven of these samples were from equipment used on site after being cleaned for release. Results are presented in Table 5.2.1-2. Four samples indicated positive results ranging from 8.8 to 82 nanograms per square meter (ng/m^2). All equipment was released to the owners since results were less than the allowable limit of 100 ng/m^2.

5.5 SOILS

5.5.1 Subsurface Lithology (Page 5-10)

Seven additional geotechnical borings were drilled on or near the site (revised Figure 4.2.5-1). All borings penetrated the upper organic silt layer and extended to varying depths within the glaciofluvial sand unit. Monitoring wells were completed in each of these borings. The boring logs and well installation reports are contained in Appendix B.

Revised cross sections have been completed (revised Figures 5.5.1-1 through 5.5.1-4) and represent an interpretation of the subsurface stratigraphy. A description of the glaciofluvial deposits is contained in Subsection 6.4.4 of this chapter.

5.5.2.1 Near-Surface Soil Samples (Page 5-12)

Figures 5.5.2.1-4 through 5.5.2.1-7 contained in the Site Evaluation Report depict actual concentrations of selected semivolatile priority pollutants, herbicides, and pesticides. The report incorrectly identified these figures as depicting relative concentrations.

5.6 GROUND WATER

5.6.1 Ground Water Levels (Page 5-19)

Figures 5.6.1-1 through 5.6.1-9 have been revised to show elevations with respect to the New Jersey Geodetic Vertical Control Datum.

Ground water levels were also measured across the 80/120 Lister Avenue site on the following dates: May 11, 1985; May 18, 1985; May 25, 1985; June 1, 1985; July 3, 1985; and July 8, 1985. A summary of the observed water levels is provided in Table 5.6.1-3. Potentiometric contours based on these data for selected dates are presented in Figures 5.6.1-10 and 5.6.1-11. Ground water levels in the glaciofluvial sand unit are shown in Figures 5.6.1-12 through 5.6.1-14.

5.6.2 Hydraulic Conductivities (Page 5-19)

Revised Table 5.6.2-1 shows the ground surface elevations of the shallow monitoring wells relative to the New Jersey Geodetic Vertical Control Datum.

Slug tests were performed on the deeper wells installed on the 80 Lister Avenue site in July and August of 1985. A summary of results is contained in Table 5.6.2-2. The computed hydraulic conductivities of the glaciofluvial sands range from less than 0.0003 to 43 feet per day.

5.6.4 Analytical Laboratory Testing (Page 5-21)

Concentration units in Table 5.6.4-6 of the Site Evaluation Report were incorrectly listed as µg/ℓ or ppb. They should be changed to mg/ℓ or ppm.

Additional ground water samples were collected from the six newly installed on-site wells monitoring the sand unit. Monitoring Wells MW-2B, MW-4C, and MW-7B were sampled three times and Monitoring Wells MW-2C, MW-4B, and

MW-7D were sampled twice. All samples were analyzed for full priority pollutants plus 40 and dioxin. Appendix F contains summaries of the quantitative analytical results.

Of the 15 on-site ground water samples analyzed for dioxin, six had identifiable dioxin concentrations. Table 5.6.4-7 is a summary of ground water sample dioxin results by well number.

A summary of all on-site detected organic priority pollutants is presented in Table 5.6.4-8. Of the 38 volatile organic compounds, 7 (18 percent) were identified one or more times. Seventeen (25 percent) of the 69 base/neutral and acid organic compounds were detected one or more times in the samples. Of the 35 possible pesticides, herbicides, and PCBs, 13 compounds (37 percent) were detected one or more times. No PCBs were detected.

Inorganic compounds detected in on-site ground waters are summarized in Table 5.6.4-9. Of the 13 metals, 11 (85 percent) were detected one or more times. Seven of the 15 ground water samples had positive cyanide results. Total phenols analysis showed positive results for 14 of the 15 samples analyzed.

Ground water samples from off-site monitoring wells located on the Sherwin Williams property were collected on December 14, 1984 and January 8, 1985 for Monitoring Wells MW-10A and MW-10B. The deep monitoring well (MW-10D) was sampled on June 5, 1985 and again on July 15, 1985.

Dioxin was not detected in the six samples analyzed from the three wells. Table 5.6.4-10 is a summary of analytical results by well number.

A summary of all detected organic priority pollutants is presented in Table 5.6.4-11. Of the 38 volatile organic compounds, 5 (13 percent) were detected one or more times. Seven (10 percent) of the 69 semivolatile acid and base/neutral compounds were detected up to three times in the samples. Of the 35 possible pesticides, herbicides, and PCBs, 9 (26 percent) were detected once.

Inorganic compounds detected in off-site monitoring wells are presented in Table 5.6.4-12. Of the 13 metals, only thallium was not detected in any of the samples. Two of the six samples had positive cyanide results. All six samples showed positive results for total phenols.

Water quality parameters (pH, salinity, conductivity, temperature, and dissolved oxygen) were measured in the field at the time of sample collection. The results of these measurements are presented in Table 5.6.4-13.

5.7 PASSAIC RIVER WATER

5.7.2 Analytical Laboratory Testing (Page 5-23)

Concentration units in Table 5.7.2-1 of the Site Evaluation Report for inorganic parameters only should be mg/ℓ or ppm. All organic parameters are expressed as μg/ℓ or ppb.

5.8 PASSAIC RIVER SEDIMENTS

Concentration units in Table 5.8-8 of the Site Evaluation Report should be expressed as mg/kg or ppm.

5.9 BACKGROUND SAMPLES

5.9.1 Sherwin Williams (Page 5-26)

Three samples of glaciofluvial sand from Boring B-10D were analyzed for the presence of dioxin. Samples were collected during the period of April 18 through May 4, 1985 at depths ranging from 39 to 66 feet below land surface. All samples had no detectable dioxin.

Dioxin results from all Sherwin Williams samples are presented in revised Table 5.9.1-1.

5.10 DRUM WASTE CATEGORIZATION DATA AND DIOXIN ANALYSIS

Dioxin Analysis (Page 5-30)

Based upon further review of field notebooks and laboratory data, Appendix I and Table 5.10-1 have been revised to clarify lot designations and the number of drum samples analyzed.

5.12 ANALYTICAL RESULTS FOR QUALITY ASSURANCE/QUALITY CONTROL CHECKS

5.12.1 Sampling Quality Control Checks: Field and Trip Blanks (Page 5-32)

A total of 21 additional well water samples were collected from wells installed on the 80 Lister Avenue and Sherwin Williams (background) sites on seven different days between December 14, 1984 and August 5, 1985. In association with these samples, a trip and field blank pair was prepared on each sample collection date and submitted for full priority pollutant analysis. Summary tabulations of the complete priority pollutant results for each of these quality control samples have been added to Appendix J.

Significant contamination was not detected in the extractable priority pollutants, dioxin, metals, cyanide, or phenols fractions of any of these blanks. A few low-level hits in the herbicide fraction of five of the blank samples are below the detection limits and not confirmed; they are, most likely, laboratory artifacts and do not affect the quality of sample results. Volatile analysis indicated methylene chloride contamination in every blank sample, at levels ranging from 22 to 510 ppb; this may have occurred as part of the sample handling process, but none of the results are high enough to significantly affect the quality of sample results. In most cases, samples showed higher concentrations of methylene chloride than the blanks.

6.0 SITE CHARACTERIZATION

6.4 SOILS AND GEOLOGY

6.4.4 Glaciofluvial Deposits (Page 6-10)

Replace this subsection with the following:

The total thickness of the glaciofluvial sediments ranges from 62± to 75± feet across the site. Based on the limited soil boring information and published data, these deposits are expected to thicken toward the northwest following the bedrock contour (Lovegreen, 1974). From boring data on the adjacent 120 Lister Avenue site, a thickness of up to 95 feet may be present along the northern border of the subject site. The glaciofluvial sediments are divided into three subunits: an upper silty sand, a cohesive zone, and a lower sand zone. A discussion of each subunit follows.

The upper glaciofluvial deposits range in thickness from 25 to 30 feet in the southern portion of the site to a maximum of 41± feet along the northern portion of the site. These materials are typically silty sands of varying density, color, and admixtures. There do not appear to be identifiable different characteristics related to the significant change in thickness. The density of these sands typically is loose to medium dense in the upper area. In several borings, a dense to very dense zone occurs in the middle to lower middle portion of this stratum. The color of this subunit varies but is generally dark brown, gray, and black in the upper portion, grading to brown in the middle portion, and red-brown in the lower middle and lower areas. Occasionally, the color returns to brown near the bottom. Grain size is typically fine to medium (with the fine grain size predominating). Gravels are randomly mixed throughout the unit but appear to increase with depth.

Various anomalies are present at isolated locations within the stratigraphic unit. A thin (less than one foot) lens of silty clay was recorded in Boring B-1-60 (drilled in 1960) at a depth of 31 feet. Occasional thin gravel zones were observed in several borings.

A cohesive zone was encountered in all borings on the 80 Lister Avenue site drilled deeper than approximately 60 feet below ground surface. The thickness of this zone varied from 5 feet (B-1) to greater than 30 feet (B-7D). The cohesive zone is significantly thinner along the northern border of the site which borders the Passaic River. The cohesive layer was encountered at a deeper position along the northern site boundary. The top of this zone is typically at approximately Elevation -50 feet along the Passaic River and rises to approximately Elevation -35 feet in the central portion of the site. The change in elevation, as well as thickness, appears to be elongated in an east-west direction.

The material in this zone has been described as a silt with low plasticity, containing varying amounts of clay, sand, and occasional gravels. This zone appears to be significantly less permeable than the materials above and below. Soils in the central and southern portions of the site appear to have a higher clay content than in the northern portion. The silts are typically red-brown in color, except in Boring B-1 where they were described as brown in color. The soils are generally classified as medium dense to very dense with one major exception. Boring B-3 exhibited silt in a loose condition (blow counts of 2, 2, and 4 for each six-inch interval).

The lower glaciofluvial zone is typically 20 feet thick but may thicken to the north. Only one boring on site (B-7D) was drilled to bedrock, encountering the total thickness of this unit. Boring B-10D, located in the Sherwin Williams parking lot, also penetrated the total thickness. This zone typically consists of medium dense to very dense, red-brown to brown, fine- to coarse-grained sand with varying amounts of silt and clay. Gravel zones up to 4 feet thick were detected.

A glaciolacustrine clay layer overlying the bedrock, which has been noted in other borings in the area (Nichols, 1968), was not found in any of the borings on the subject site. However, in Boring B-1, a low plastic silt was observed at deep elevations which may be close to the top of bedrock. In borings east of the subject site, cohesive materials were encountered overlying bedrock.

Three samples from Boring B-10D were analyzed for the presence of dioxin in the sand zones. Dioxin was not detected in the samples.

6.4.5 Bedrock Units (Page 6-10)

Replace this subsection with the following:

The bedrock unit encountered beneath the subject site is a sandstone member of the Passaic Formation (Olsen, 1980). This unit is more commonly known as the prebasalt portion of the Brunswick Formation (Olsen, 1980). It is typically described as soft, red shales and sandstones which are commonly fractured.

The depth to bedrock varies from 84 to 93 feet below the ground surface at the two borings drilled to rock (B-10D and B-7D). The sandstone has been described as red-brown and fine- to coarse-grained. A hard, red-brown shale was encountered in Boring B-10D below approximately 3 feet of sandstone. Borings drilled east of the subject site encountered shale with no overlying sandstone.

The bedrock surface is an erosional plane which slopes generally to the north-northeast, but local irregularities are expected.

6.5 GROUND WATER HYDROLOGY

6.5.1 Site Hydrogeologic Model (Page 6-10)

Replace this subsection with the following:

The fill, the underlying upper and lower glaciofluvial sand deposits, and the bedrock of the Brunswick Formation are the significant aquifers beneath the site. A silt layer separates the fill and glaciofluvial sands and ranges in thickness from 2 to 12.5 feet. Data from site borings indicate that this silt layer is probably continuous across the site.

The fill material on the site constitutes a "surficial aquifer" and the silt layer underlying the fill has a lower permeability, restricting the downward movement of ground water contained in the fill. Table 5.6.1-1 presents a summary of monitoring well data for the fill material. The last column of the table shows the saturated thickness of the permeable zones in the fill ranges from about 2 to 8 feet. The saturated thickness for Monitoring Wells MW-1A, MW-2A, and MW-3A is likely to range both higher and lower than the values shown in Table 5.6.1-1 because of the effect of tidal fluctuations on surficial ground water levels near the river. Although the fill layer is denoted as the surface aquifer, it is very limited in extent and does not serve as a source of potable or industrial water usage.

The glaciofluvial sand deposit underlying the silt layer is a significant water-bearing unit. Some possible industrial usage of water from this unit is indicated in Table 3.3.2-1 of the Site Evaluation Report. The deep borings (B-7D and B-10D) indicated that this unit ranges in thickness from 75 to 62 feet, respectively. This sand unit may be separated into two aquifers by a relatively impermeable, cohesive, clayey silt unit that seems to be continuous across the site at depths ranging from approximately 45 to 75 feet, with the thickness of this ranging from 5 to 30 feet. The upper glaciofluvial sand has a thickness ranging from 25.0 to 28.5 feet, while the lower sand deposit ranges from 19.0 to 22.0 feet thick with both units apparently completely saturated. There appears to be a head differential of up to approximately 7 feet between the two glaciofluvial sand units as observed in the ground water level monitoring program (Table 5.6.1-3). (The July 3, 1985 measurements for MW-10D are not thought to be representative of normal aquifer conditions and may result from increased pumping at an off-site well.) This information, as well as field observations, lead to the possibility of two aquifers within the sand interval. No glaciolacustrine clay layer separating the glaciofluvial sand deposit and the shale or sandstone bedrock was encountered in the two deep borings (B-10D and B-7D) on the 80 Lister Avenue site as it does in many parts of the area (Nichols, 1968). Absence of this glaciolacustrine clay unit may increase the possibility of downward ground water flow from the sands into the bedrock unit.

Bedrock is composed of Triassic sandstones and shales of the Brunswick Formation. Based on data from nearby areas, it appears that the Brunswick Formation beneath the site is highly fractured. The Brunswick aquifer is the source of potable water in the surrounding area.

6.5.2 <u>Piezometric Levels</u> (Page 6-12)

Ground water levels in the fill are generally a few feet below the ground surface (Table 5.6.1-1). Tidal fluctuations are observable in Monitoring Wells MW-1A, MW-2A, and MW-3A, indicating that the ground water in the fill near the river is in close communication with the river. Figure 6.5.2-1 depicts the measured ground water levels in the fill zone on October 15, 1984 at high and low tides. Monitoring Wells MW-4A through MW-8A show essentially no variation with tidal fluctuations, thus indicating that silt from the old river bank could restrict any ground water flow toward the river from the southern two-thirds of the site.

Potentiometric levels observed in the six on-site monitoring wells screened in the glaciofluvial sands on the 80 Lister Avenue site show minimal variation due to tidal influence (Table 5.6.1-3). Ground water levels range from 1.8 to 6.7 feet lower than ground water levels observed in the fill at the same location with an average value difference of approximately 5.0 feet. This head differential across the silt interval indicates a hydraulic potential for downward flow from the fill through the silt into the glaciofluvial sands. Ground water levels observed in the lower sand unit ranged from 0.1 to 1.7 feet below water levels observed in the upper sand unit at the same time and location. The resulting vertical gradient yields a hydraulic potential for ground water flow downward from the upper sand unit.

6.5.3 Hydraulic Conductivities (Page 6-12)

Estimates of horizontal hydraulic conductivity of the fill were obtained from field permeability tests on Monitoring Wells MW-1A through MW-8A. No permeability tests were made on the organic silt layer underlying the fill. However, field permeability tests were performed on Monitoring Wells MW-2B, MW-2C, MW-4B, MW-4C, MW-7B, MW-7D, and MW-10D, all of which are completed in the glaciofluvial sands below the organic silt layer.

6.5.3.2 Hydraulic Conductivity of Lower Organic Silt (Page 6-12)

Based on comparison with values reported for similar materials in the literature, it is estimated that 0.003 foot per day (1.0×10^{-6} centimeter per second) is a reasonable value for the average vertical hydraulic conductivity of the silt. This is a low value and indicates a significant potential for retarding the downward flow of ground water from the fill.

6.5.3.3 Hydraulic Conductivity of Glaciofluvial Deposits (Page 6-13)

Hydraulic conductivities in the glaciofluvial sands range from 0.0003 to 43 feet per day (Table 5.6.2-2). These values tend to be more uniform in the upper glaciofluvial unit and average 0.48 foot per day in the "B" and "C" monitoring wells.

6.5.4 Ground Water Flow (Page 6-13)
Based upon the ground water level measurements and slug tests performed in the eight shallow monitoring wells, estimates of ground water flow directions and rates in the fill were made. Estimates of the vertical flow of ground water from the fill through the silt to the sand are also made.

6.5.4.1 Ground Water Flow in the Fill (Page 6-13)
Ground water flow velocities in the surficial fill at the site were computed from gradients (piezometric head divided by distance) developed from Figures 5.6.1-10 and 5.6.1-11 and hydraulic conductivities presented in Table 5.6.2-1. Computed ground water velocities, assuming an average gradient of 0.03, range from 0.3 to 6.0 feet per day from the center of the site, north toward the river. Using an average gradient of 0.01, computed velocities from the center of the site toward the south range from 0.03 to 0.30 foot per day.

Figures 5.6.1-10 and 5.6.1-11 are based on on-site as well as off-site shallow wells and include ground water contours beyond the site boundaries. Data used to construct these contour maps verify the existence of a ground water mound trending east-west across the center of the site which was inferred from data collected earlier from on-site wells alone (Figure 5.6.1-9). Observations during the site investigation indicated that surface drainage was very poor in the central part of the site, particularly along the east side in the vicinity of Monitoring Wells MW-4A and MW-8A. Over a foot of standing water was observed at times in that area. Ground water levels in the two monitoring wells indicate a close connection between the standing water and surficial ground water levels (approximately 0.8 and 0.4 foot below ground surface in Monitoring Wells MW-4A and MW-8A, respectively) (Table 5.6.1-1). This ground water mound accounts for the apparent flow gradients to the north and south on the site.

6.5.4.2 Ground Water Flow in the Silt
The vertical hydraulic gradient between the fill and underlying glaciofluvial sand was determined at the locations of nested Monitoring Wells MW-2A, MW-2B,

MW-4A, MW-4B, MW-7A, MW-7B, MW-10A, and MW-10B. The vertical hydraulic gradient was calculated at each well nest for July 3 and 8, 1985 by dividing the difference in potentiometric water levels (Table 5.6.1-3) by the silt thickness at each location. The vertical velocity is the product of gradient and assumed hydraulic conductivity of the silt layer (0.003 feet per day). The computed velocities range from 7.2×10^{-4} to 2.7×10^{-3} feet per day. The average vertical velocity for the silt layer is 1.7×10^{-3} feet per day.

Lateral flow in the silt is expected to be very small when compared to the overlying fill and underlying sand since both units have much higher hydraulic conductivities.

6.5.4.3 <u>Ground Water Flow in the Glaciofluvial Unit</u> (Page 6-15)
Six monitoring wells were installed in the glaciofluvial sands on 80 Lister Avenue, with five of the wells screened in the upper sand unit and one well screened in the lower sand. Two off-site monitoring wells (MW-10B and MW-10D) were installed on the adjacent Sherwin Williams property and screened in the upper and lower sand unit, respectively.

Hydraulic conductivity testing was performed on Monitoring Wells MW-2B, MW-2C, MW-4B, and MW-7B on July 17 and 18, 1985. Hydraulic conductivities from Table 5.6.2-2 ranged from >0.3 foot per day at Monitoring Well MW-7B to 0.6 foot per day at MW-2C, with a mean value of 0.48 feet per day. Monitoring Well MW-4C was tested on August 10, 1985 and yielded a hydraulic conductivity of 43.0 feet per day. From the piezometric level data available in the B and C monitoring wells (Table 5.6.1-3) and Figures 5.6.1-12 and 5.6.1-13, the piezometric surface in the upper sand unit appears to be relatively flat. Ground water velocities will thus be very low in the vicinity of the site and the direction of flow may be to the southwest in response to the regional gradient (Figure 3.3.2-2 of the Site Evaluation Report).

The two deep monitoring wells (MW-7D and MW-10D) have hydraulic conductivities of 5.1 and <0.0003 feet per day, respectively. Piezometric levels shown in Figure 5.6.1-14 show a relatively flat potentiometric surface on the 80 and 120 Lister Avenue sites. The water level measured in the off-site monitoring well (MW-10D) is significantly lower than the other monitoring wells and may be affected by bedrock pumping wells.

Piezometric levels also indicate a vertical hydraulic gradient downward across the lower silt-clay layer separating the upper and lower glaciofluvial sands, implying a potential for downward flow. No index property information is currently available for this unit to evaluate its effectiveness as an aquiclude.

6.5.4.4 Ground Water Flow in the Bedrock (Page 6-15)

No monitoring wells were installed in the bedrock. Therefore, no information is available to make estimates of flow rates and direction in the bedrock.

7.0 CONCLUSIONS AND RECOMMENDATIONS

(No additional information)

TABLES

TABLES

TABLE 4.2.5-1

COORDINATES AND ELEVATIONS OF NEAR SURFACE SOIL SAMPLES, BORINGS, AND MONITORING WELLS

IDENTIFICATION	COORDINATES (1) NORTH	EAST	GROUND SURFACE ELEVATION (2)
NEAR SURFACE SOIL SAMPLES			
A-2-G	21.0	71.0	8.4
A-4-F	28.0	239.0	9.6
A-5-G	28.1	233.9	8.2
B-2-M	96.7	57.4	7.6
C-6-B	138.9	283.3	7.9
D-4-N	188.7	140.1	12.1
E-1-G	259.4	24.1	7.4
E-5-D	195.4	226.6	7.4
G-3-I	346.0	92.5	8.8
G-3-L	309.6	133.1	8.7
G-4-A	356.3	187.8	9.1
G-5-F	323.3	205.4	8.6
H-1-H	381.7	30.0	7.7
H-2-B	395.2	85.5	9.5
H-2-H	365.3	63.7	8.6
H-5-F	395.2	204.8	8.6
H-7-F	415.0	344.0	7.5
H-7-H	357.3	343.3	8.0
J-6-K	394.0	260.0	11.4
MONITORING WELLS			
MW-1A	418.2	50.0	7.8
MW-2A	440.3	214.2	8.0
MW-2B	435.0	223.4	8.1
MW-2C	437.5	230.2	7.9
MW-3A	450.4	336.9	6.4
MW-4A	147.0	339.3	5.8
MW-4B	140.3	341.3	7.6
MW-4C	131.9	342.7	7.8
MW-5A	37.7	44.6	8.0
MW-6A	14.2	137.9	8.0
MW-7A	178.0	30.3	7.5
MW-7B	164.8	24.9	7.7
MW-7D	164.1	36.3	8.4
MW-8A	280.8	335.7	6.8
MP-9A (3)	337.6	224.5	8.6
MW-10A	-116.8	145.4	8.8
MW-10B	-115.1	140.6	8.7
MW-10D	-122.4	147.3	8.5

See footnotes at end of table.

TABLE 4.2.5-1
(Continued)

IDENTIFICATION	COORDINATES[1] NORTH	EAST	GROUND SURFACE ELEVATION[2]
BORINGS			
B-1	416.7	50.6	7.8
B-2	439.3	217.3	8.0
B-2B	435.0	223.4	8.1
B-2C	437.5	230.2	7.9
B-3	450.0	332.3	6.4
B-4	142.8	340.2	6.7
B-4B	140.3	341.3	7.6
B-4C	131.9	342.7	7.8
B-5	38.3	49.7	8.0
B-6	14.1	141.6	8.0
B-7	177.4	24.9	7.5
B-7B	164.8	24.9	7.7
B-7D	164.1	36.3	8.4
B-8	274.3	336.1	6.8
B-9	270.2	212.2	8.4
B-10[4]	360.4	225.4	8.8
B-10D	-122.4	147.3	8.5
B-11[4]	313.0	228.2	8.3
B-12	348.9	224.2	8.8
B-13	346.0	224.0	7.1
B-14	-260.0	136.0	8.8
EXISTING BORINGS			
B-1-60	217.0	170.0	12.1
B-2-60	396.0	174.0	9.5
B-3-60	419.0	116.0	7.9
B-4-60	104.0	166.0	7.9
B-5-60	47.0	192.0	9.6

[1] Coordinates are with respect to site grid (Figure 4.2.5-1).

[2] Ground surface elevations are with respect to New Jersey Geodetic Vertical Datum.

[3] MP-9A is a piezometer installed in the glaciofluvial sands.

[4] Borings B-10 and B-11 were also designated as Near-Surface Soil Sample Locations G-5-E and F-5-E, respectively.

TABLE 5.2.1-2

ADDITIONAL INDUSTRIAL HYGIENE MONITORING RESULTS

SAMPLE NO.	DESCRIPTION	DIOXIN RESULT
A006-2926-A-L	IH Spiked Glass Fiber Filter	Lost in preparation
A006-2927-A-L	IH XAD-2 Backup	ND (0.18 ng/m^3)
F066-2928-A-L	IH Field Blank Glass Fiber Filter	ND (0.60 ng/sample)
F067-2929-A-L	IH Field Blank XAD-2	ND (0.65 ng/sample)
A006-3032-A-L	IH Glass Fiber Filter	ND (1.46 ng/m^3)
A006-3033-A-L	IH XAD-2 Tube	ND (0.52 ng/m^3)
H006-3280-T-L	IH Personnel Cartridge	ND (0.05 ng/m^3)
9200-2527-W-L	IH Wipe: 16' Aluma Craft Boat	ND (7.2 ng/m^2)
9200-2528-W-L	IH Wipe: Comp. from B&D Percussion Hammer and Diesel Trash Pump	82 ng/m^2
F029-2536-W-L	IH Wipe: Field Blank	ND (4.0 ng/wipe)
9200-2680-W-L	IH Wipe: Carteret Air Compressor No. NR5976400	ND (4.8 ng/m^2)
9100-2819-W-L	IH Wipe: "Clamshell" used in Stack Demolition	8.8 ng/m^2
9100-2881-W-L	IH Wipe: Grave Crane	ND (2.08 ng/m^2)
F062-2882-W-L	IH Wipe: Field Blank	ND (1.7 ng/wipe)
9100-2931-W-L	IH Wipe: Manitoc Crane Used in Stack Demolition	38.4 ng/m^2
F069-2932-W-L	IH Wipe: Field Blank	ND (0.70 ng/wipe)
F156-4452-W-L	IH Wipe: Field Blank	ND (5.7 ng/wipe)
9200-4453-W-L	IH Wipe: Mud Pump	ND (20.8 ng/m^2)
9200-4454-W-L	IH Wipe: Drill Rig	ND (7.2 ng/m^2)
F170-4580-W-L	IH Wipe: Field Blank	ND (7.3 ng/wipe)
9100-4581-W-L	IH Wipe: Hertz Case 1845 Bobcat No. 259-054-528	80.3 ng/m^2
9101-5145-001-W-L	IH Wipe: Compressed Gas Cylinders	ND (2.96 ng/m^2)
9102-5146-002-W-L	IH Wipe: Compressed Air Cylinders	ND (1.2 ng/m^2)

TABLE 5.6.1-3

GROUND WATER ELEVATIONS - 80 LISTER AVENUE

	ELEVATION OF TOP OF WELL RISER PIPE	MAY 11, 1985	MAY 18, 1985	MAY 25, 1985	JUNE 1, 1985	JULY 3, 1985	JULY 8, 1985
MW-1A	9.01(a)	-0.89	3.08	-0.09	1.22	2.71	2.11
MW-2A	9.29	-2.81	3.39	-0.06	1.53	2.34	1.09
MW-2B	11.42					-0.63	-0.68
MW-2C	10.77					-1.03	-0.63
MW-3A	8.04	1.64	3.54	1.69	2.80	2.84	1.64
MW-4A	8.74		6.14	6.24	6.25	5.99	5.64
MW-4B	11.02					-0.28	-0.68
MW-4C	11.02					-0.88	-0.63
MW-5A	10.22	4.22	4.62	4.97	4.85	5.12	4.52
MW-6A	10.66	4.36	4.56	5.06	4.78	5.46	4.76
MW-7A	9.41	5.41	6.39	6.41	6.65	6.51	5.46
MW-7B	11.40					-0.20	-0.50
MW-7D	11.91					-1.89	-0.79
MW-8A	8.55		6.35	6.40	6.47	6.35	5.95
MW-9A	10.49	4.19	4.19	4.94	4.81	5.49	4.69
MW-10A	10.94	4.60	4.50	4.90	4.71	4.74	5.14
MW-10B	10.53	-1.06	-0.21	-0.56	-0.37	-0.52	-0.87
MW-10D	10.11	-2.38	-1.86	-4.08	2.52	-15.89	-8.39

(a)Elevation in feet, New Jersey Geodetic Vertical Control.

TABLE 5.6.2-1

REPRESENTATIVE HYDRAULIC CONDUCTIVITY VALUES(a) IN FILL ZONE

WELL NUMBER	MEAN HYDRAULIC CONDUCTIVITY (ft/day)	RANGE IN HYDRAULIC CONDUCTIVITY (ft/day)	GROUND SURFACE ELEVATION(b) (ft)	BELOW SURFACE DEPTH RANGE OF MOST PERMEABLE ZONE (ft)
MW-1A	10	5-15	7.8	6.6 to 14.5
MW-2A	200	100-300	8.0	6.5 to 11.5
MW-3A	40	20-60	6.4	4.7 to 8.5
MW-4A	3	2-4	5.8	0.7 to 6.7
MW-5A	20	10-30	8.0	4.2 to 8.0
MW-6A	30	20-40	8.0	4.1 to 7.8
MW-7A	10	5-15	7.5	1.6 to 3.5
MW-8A	10	5-15	6.8	0.4 to 5.0

(a)Hydraulic conductivities are estimated values assigned to the zone in which the monitoring wells are screened. Results were determined from field slug tests.

(b)New Jersey Geodetic Vertical Control Datum.

TABLE 5.6.2-2

RESULTS OF FALLING HEAD SLUG TEST ANALYSIS IN GLACIOFLUVIAL SAND

WELL NUMBER	HYDRAULIC CONDUCTIVITY OF PERMEABLE ZONE (ft/day)		
	METHOD OF COOPER BREDEHOEFT AND PAPADOPULOS	METHOD OF BOUWER AND RICE	
		USING DIAMETER OF CASING AND SCREEN	USING DIAMETER OF DRILLED HOLE
MW-2B	0.4	0.5	0.4
MW-2C	0.1	0.6	0.5
MW-4B	0.1	0.5	0.4
MW-4C	29	43	33
MW-7B	-	>0.3	-
MW-7D	2.53	5.06	4.01
MW-10D(a)	-	<0.0003	-

(a)Slug test data outside range of test procedure.

TABLE 5.6.4-7

SUMMARY OF 2,3,7,8-TCDD
ON-SITE WELLS
80 LISTER AVENUE

WELL NUMBER	SAMPLING DATE	RESULTS (ppb)
2B	6-17-85	0.0042
	6-25-85	ND (0.00061)
	7-15-85	ND (0.0012)
2C	6-25-85	0.0061
	7-15-85	0.12
4B	6-25-85	0.0047
	7-15-85	0.038
4C	6-25-85	ND (0.0029)
	7-15-85	ND (0.00049)
	8-05-85	ND (0.0019)
7B	6-17-85	0.0034
	6-25-85	ND (0.0072)
	7-15-85	ND (0.0027)
7D	7-15-85	ND (0.0084)
	8-05-85	ND (0.00041)

ND - Not detected at the indicated ( ) detection limit.

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TABLE 5.6.4.-8

SUMMARY OF DETECTED ORGANIC COMPOUNDS
ON-SITE WELLS - 80 LISTER

COMPOUND	CONCENTRATION RANGE (ppb or μg/ℓ)	NO. POSITIVE RESULTS	NO. SAMPLES ANALYZED
Benzene	14-1300	12	15
Chlorobenzene	96-9800	15	15
1,2-Dichloroethane	10	1	15
trans-1,2-Dichloroethene	5-120	5	15
Methylene Chloride	20-950	15	15
Toluene	2-850	9	15
Acetone	10-1000	8	15
2,4,6-Trichlorophenol	13-1500	7	15
2-Chlorophenol	10-160	3	15
2,4-Dichlorophenol	9-11,000	8	15
Phenol	130-290	3	15
Benzoic Acid	9-16	2	15
2,4,5-Trichlorophenol	22-1500	7	15
1,2,4-Trichlorobenzene	2-34	6	15
1,2-Dichlorobenzene	3-46	8	15
1,3-Dichlorobenzene	2-38	7	15
1,4-Dichlorobenzene	5-220	10	15
Naphthalene	3	1	15
Bis(2-ethylhexyl)phthalate	2-8	5	15
Di-N-octyl phthalate	25	1	15
Anthracene	2	1	15
Benzo(GHI)perylene	4	1	15
Indeno(1,2,3-CD)pyrene	4	1	15
2-Methylnaphthalene	2	1	15
4,4'-DDT	0.41-1.5	2	15
4,4'-DDE	0.15-12	3	15
4,4'-DDD	0.19-12	10	15
alpha-BHC	0.46-44	5	15
beta-BHC	0.34-2.6	3	15
gamma-BHC	7.5-28	2	15
delta-BHC	0.56-7.4	10	15
Dalapon	2.0-2.7	3	15
Dicamba	1.6	1	15
Dichloroprop (2,4-DP)	2.0	1	15
2,4-D	2.0-21,000	13	15
2,4,5-TP (Silvex)	10	1	15
2,4,5-T	1.00-880	9	15

TABLE 5.6.4-9

SUMMARY OF DETECTED INORGANIC COMPOUNDS ON SITE WELLS - 80 LISTER

COMPOUND	CONCENTRATION RANGE (ppm or mg/ℓ)	NO. POSITIVE RESULTS	NO. SAMPLES ANALYZED
Antimony	0.001-0.003	3	15
Arsenic	0.003-0.079	15	15
Beryllium	0.002-0.005	10	15
Cadmium	0.004	1	15
Chromium	0.03-0.19	15	15
Copper	0.013-0.294	15	15
Lead	0.03-0.10	6	15
Nickel	0.01-0.15	13	15
Selenium	0.004-0.006	3	15
Silver	0.021-0.059	3	15
Zinc	0.042-0.632	15	15
Total Cyanide	0.01-0.02	7	15
Total Phenols	0.01-11.4	14	15

TABLE 5.6.4-10

SUMMARY OF 2,3,7,8-TCDD
OFF-SITE WELLS - SHERWIN WILLIAMS

WELL NUMBER	SAMPLING DATA	RESULTS (ppb)
10A	12-14-84	ND (0.005)
	1-8-85	ND (0.005)
10B	12-14-84	ND (0.002)
	1-8-85	ND (0.005)
10D	6-5-85	ND (0.001)
	6-27-85	ND (0.0050)

ND - Not detected at the indicated ( ) detection limit.

TABLE 5.6.4-11

SUMMARY OF DETECTED ORGANIC COMPOUNDS
OFF SITE WELLS - SHERWIN WILLIAMS

COMPOUND	CONCENTRATION RANGE (ppb or μg/ℓ)	NO. POSITIVE RESULTS	NO. SAMPLES ANALYZED
Benzene	160.-610.	4	6
Chlorobenzene	4.-8500.	5	6
Methylene Chloride	40.-4100.	6	6
Toluene	1.	1	6
Acetone	12-500.	2	6
2-Chlorophenol	12.	1	6
1,2,4-Trichlorobenzene	12.	1	6
1,2-Dichlorobenzene	240.-1300.	3	6
1,3-Dichlorobenzene	64.-180.	2	6
1,4-Dichlorobenzene	810.-4700.	3	6
Bis(2-ethylhexyl)phthalate	3.	1	6
Aniline	70.-18000.	3	6
4,4'-DDT	17.	1	6
4,4'-DDD	1.5	1	6
alpha-BHC	7.5	1	6
beta-BHC	1.9	1	6
delta-BHC	4.8	1	6
Dalapon	8.0	1	6
Dicamba	1.0	1	6
2,4-D	2.0-5.2	2	6
2,4,5-T	2.0	1	6

TABLE 5.6.4-12

SUMMARY OF DETECTED INORGANIC COMPOUNDS
OFF SITE WELLS - SHERWIN WILLIAMS

COMPOUND	CONCENTRATION RANGE (ppm or mg/ℓ)	NO. POSITIVE RESULTS	NO. SAMPLES ANALYZED
Antimony	0.001-.077	5	6
Arsenic	0.004-.044	5	6
Beryllium	0.003-0.006	2	6
Cadmium	0.003-.014	2	6
Chromium	0.03-0.23	6	6
Copper	0.052-0.251	6	6
Lead	0.02-1.2	6	6
Mercury	0.004	2	6
Nickel	0.02-0.16	6	6
Selenium	0.002-0.007	2	6
Silver	0.003-0.021	3	6
Zinc	0.054-2.7	6	6
Total Cyanide	0.01-0.02	2	6
Total Phenols	0.01-0.17	6	6

TABLE 5.6.4-13

FIELD MEASURED WATER QUALITY PARAMETERS

WELL NUMBER	SAMPLING DATE	pH	SALINITY ‰	CONDUCTIVITY µmhos/cm	TEMP. °C	DISSOLVED O_2 mg/ℓ
1A	10-9-84	6.2	9.5	14,000	18.0	1.9
	10-30-84	6.4	6.0	9,000	17.6	0.8
2A	10-9-84	6.5	10.5	16,000	20.2	1.2
	10-30-84	6.5	4.5	6,200	16.7	6.2
2B	6-17-85	10.62	1.9	2,900	22.5	2.19
	6-25-85	9.49	1.6	2,320	20.7	1.7
	7-15-85	9.11	1.5	2,200	20.5	6.0
2C	6-25-85	8.86	1.7	2,390	19.8	2.6
	7-15-85	8.31	1.0	2,050	20.0	4.6
3A	10-9-84	6.4	4.0	6,000	17.5	4.4
	10-30-84	6.2	3.1	4,400	16.8	6.2
4A	10-9-84	6.5	<1.0	620	17.0	0.8
	10-30-84	6.2	0.0	415	15.5	0.8
4B	7-15-85	8.81	0.5	800	20.0	5.7
4C	7-15-85	6.71	0.5	950	20.0	4.8
	8-5-85	N/A(a)	<1.0	700	22.8	N/A
5A	10-9-84	6.4	<0.5	700	18.1	1.4
	10-30-84	6.7	0.0	590	19.3	1.6
6A	10-9-84	6.6	1.0	1,450	18.8	1.1
	10-30-84	6.7	0.0	700	18.6	2.9
7A	10-9-84	7.5	0.5	700	18.1	0.5
	10-30-84	7.0	0.0	650	18.3	4.1
7B	6-17-85	8.43	0.5	860	23.0	2.05
	6-25-85	8.52	0.7	890	20.3	4.4
	7-15-85	6.41	0.5	950	20.0	2.5
7D	7-15-85	7.11	1.0	1,500	24.0	5.7
	8-05-85	N/A	1.5	1,480	19.5	5.4
8A	10-9-84	11.5	7.0	10,500	20.1	0.5
	10-30-84	10.5	2.0	3,120	19.6	0.1
10A	12-14-85	6.4	<1.0	850	12.5	3.0
	1-8-85	6.52	1.0	1,250	7.5	2.4
10B	12-14-84	6.5	<1.0	1,100	13.0	1.8
	1-8-85	6.95	0.7	890	8.0	2.4
10D	6-5-85	11.53	0.2	510	16	5.3
	7-15-85	8.42	2.2	3,520	26.4	4.1

(a)Indicated parameter not measured due to equipment malfunction.

TABLE 5.9.1-1

RESULTS OF 2,3,7,8-TCDD ANALYSIS OF BORING SAMPLES SHERWIN-WILLIAMS

ELEVATION CODE	DEPTH (inches)	RESULTS (ppb)
100	0-6	1.2
101	6-12	5.1
102	12-24	3.4
109	above silt (11-12.5')	ND(0.57)
201	silt (15-17')	ND(0.76)
300	sand (39-40.5')	ND (0.020)
301	sand (44-45.5')	ND (0.032)
405	sand (65-66')	ND (0.043)

ND - not detected at the indicated ( ) detection limit.

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TABLE 5.10-1

2,3,7,8-TCDD ANALYSIS RESULTS
DRUM SAMPLING PROGRAM

DIOXIN CONCENTRATION (ppb)	SAMPLE ID	SAMPLE DESCRIPTION	NUMBER OF DRUMS REPRESENTED BY THIS SAMPLE
12.1	0018-0045-D-L	Drum No. 18, CY white and yellow crystals	15
12,220	0021-0064-D-L	Drum No. 21, CQ yellow crystal powders	11
8.0	0040-0091-D-L	Drum No. 40, 23AA milky liquid	5
54.0	0065-0136-D-L	Drum No. 65, 400, clear gold liquid	37
2.6	0075-0152-D-L	Drum No. 75, 15T pink thick liquid	10
13.9	0119-0255-D-L	Drum No. 119, CZ dark brown liquid	12
1.5	0162-0346-D-L	Drum No. 162, CX golden liquid	9
35.9	0176-0364-D-L	Drum No. 176, 21Y thick white paste	90
7.5	0174-0403-D-L	Drum No. 174, 21Y thick white paste	[90]
16.0	0183-0371-D-L	Drum No. 183, QQ pink and red liquid	15
3.4	0230-0502-D-L	Drum No. 230, BB clear liquid and white solids	32
476	0251-0523-D-L	Drum No. 251, ZB brown sludge and water	33
ND (1.7)	0305-0670-D-L	Drum No. 305, Pit clear liquid	12
ND (6.7)	0314-0679-D-L	Drum No. 314, 9K dark brown crystals	7
ND (3.8)	0388-0816-D-L	Drum No. 388, 18W clear liquid (rusty)	44
ND (2.0)	0392-0820-D-L	Drum No. 392, JJ golden liquid	39
12	0438-0925-D-L	Drum No. 438, NN white solids	14
ND (16.2)	0450-0937-D-L	Drum No. 450, DD white powder	12
174	0458-0948-D-L	Drum No. 458, S brown liquid	5
ND (8.4)	0492-1015-D-L	Drum No. 492, PP dark liquids w/solids	18
ND (2.0)	0554-1136-D-L	Drum No. 554, Pit 3 clear liquid	91
8,750	0558-1140-D-L	Drum No. 558, Pit 3 dark sludge w/water	[91]

ND = none detected; number in ( ) indicates the lower detection limit of the linear range due to background noise; [ ] indicates analysis performed on two drums within same lot.

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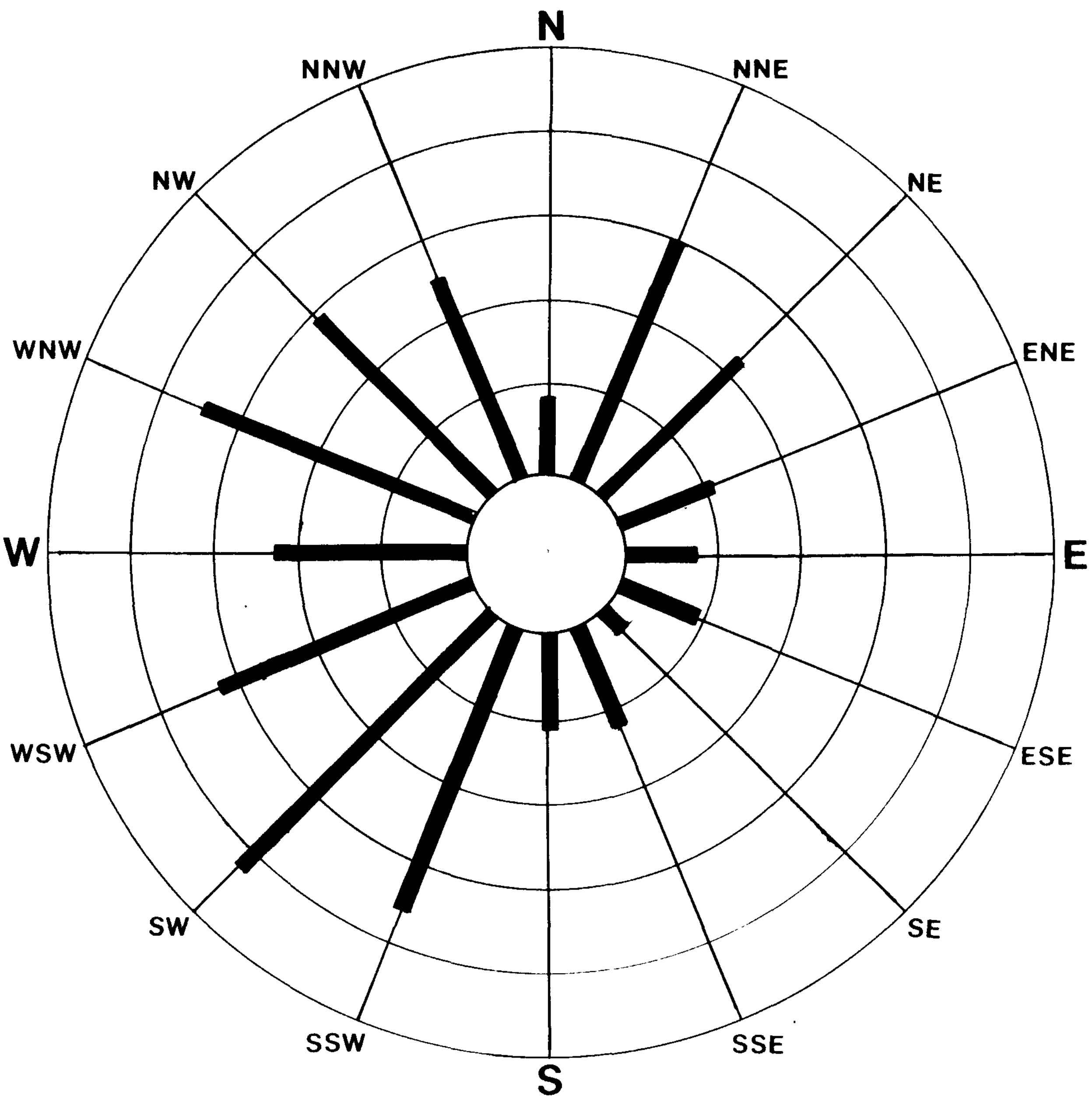
FIGURES

FIGURES

DRAWN BY J. LOGRECO 12-12-85
CHECKED BY JAD 1-27-86
APPROVED BY JAD 2-17-86
DRAWING NUMBER [illegible]46733-A8



FREQUENCY %
0 2 4

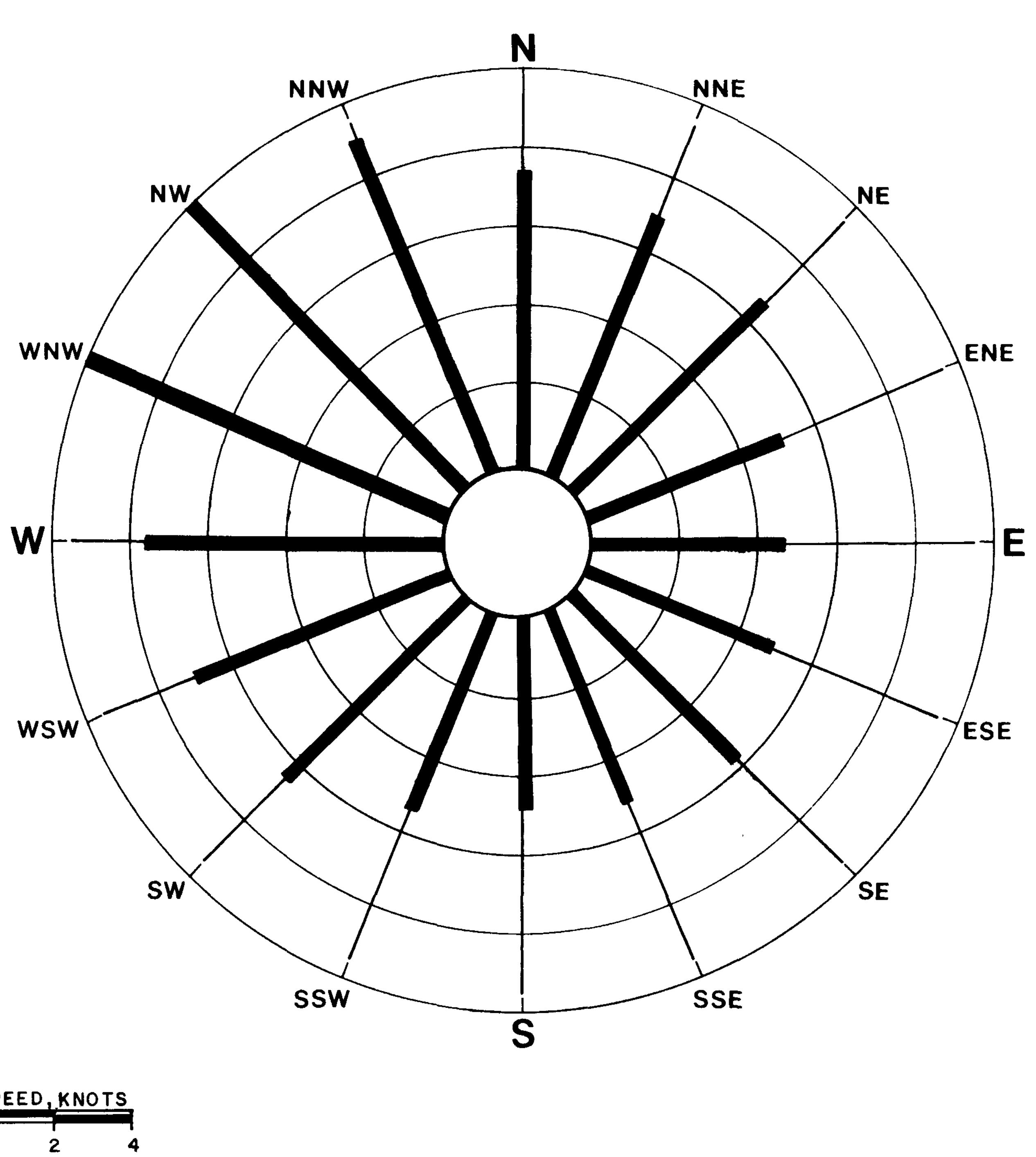
REFERENCE:
WOODWARD & CLYDE CONSULTANTS 1982.

FIGURE 3.1.2-1
WIND DIRECTION AND FREQUENCY (%)
1965-1974

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

IT . . Creating a Safer Tomorrow



REFERENCE:
NOAA, 1978

FIGURE 3.1.2-2
AVERAGE WIND SPEED
FOR WIND DIRECTION
1965-1974 NEWARK, N.J.
80 LISTER AVENUE
PREPARED FOR

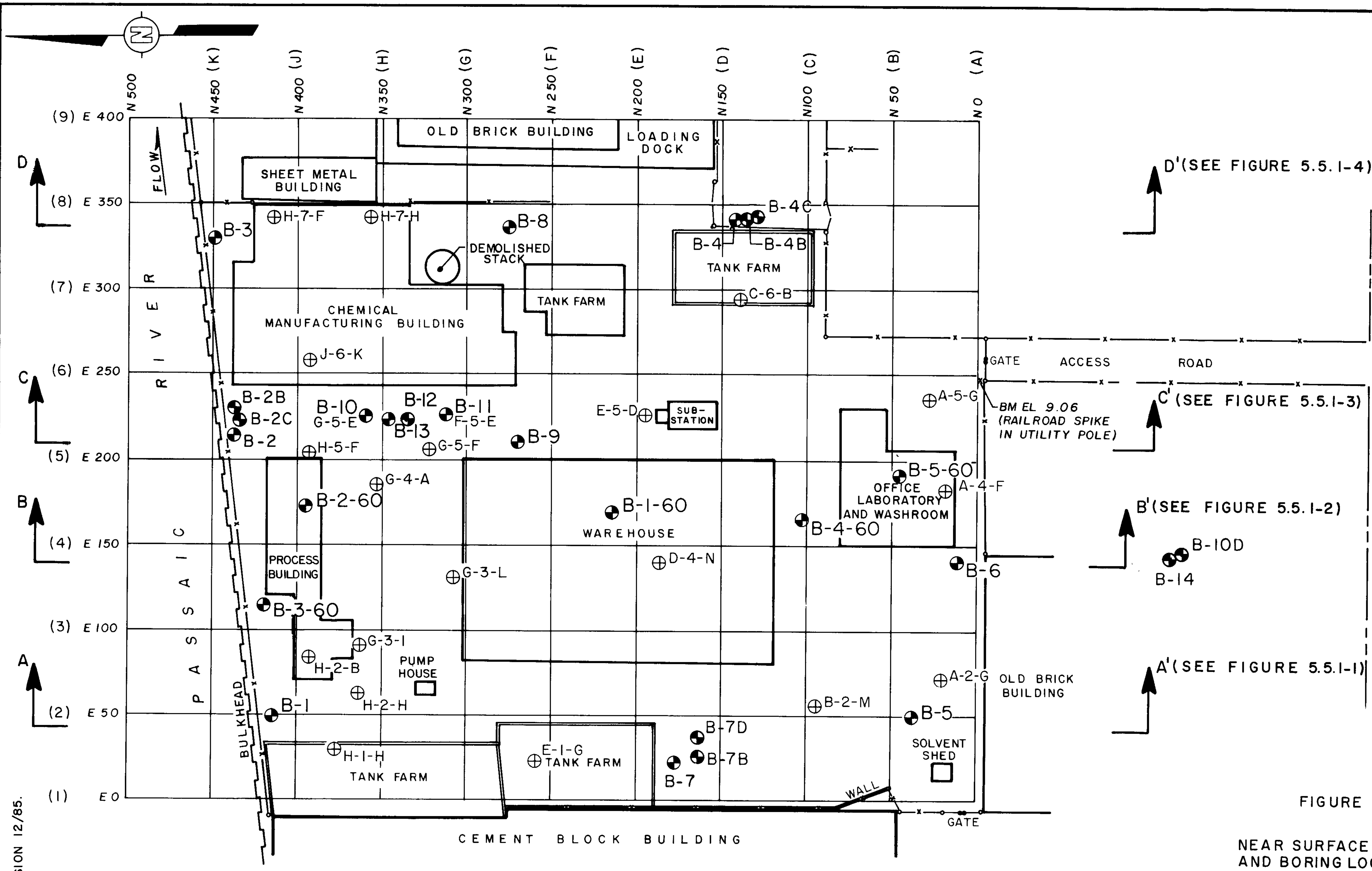
DIAMOND SHAMROCK
DALLAS, TEXAS

IT ... Creating a Safer Tomorrow

DRAWN BY J. LOGRECO 12-12-85
CHECKED BY JAD 1-26-86
APPROVED BY JAD 2-17-86
DRAWING NUMBER 46733-A7

65360

DEP\DA0100169



LEGEND

B-7 ◐ BORING LOCATION AND NUMBER

E-5-D ⊕ NEAR SURFACE SOIL SAMPLE AND NUMBER

SCALE

0 60 120 FEET

FIGURE 4.2.5-1

NEAR SURFACE SOIL SAMPLE AND BORING LOCATION PLAN

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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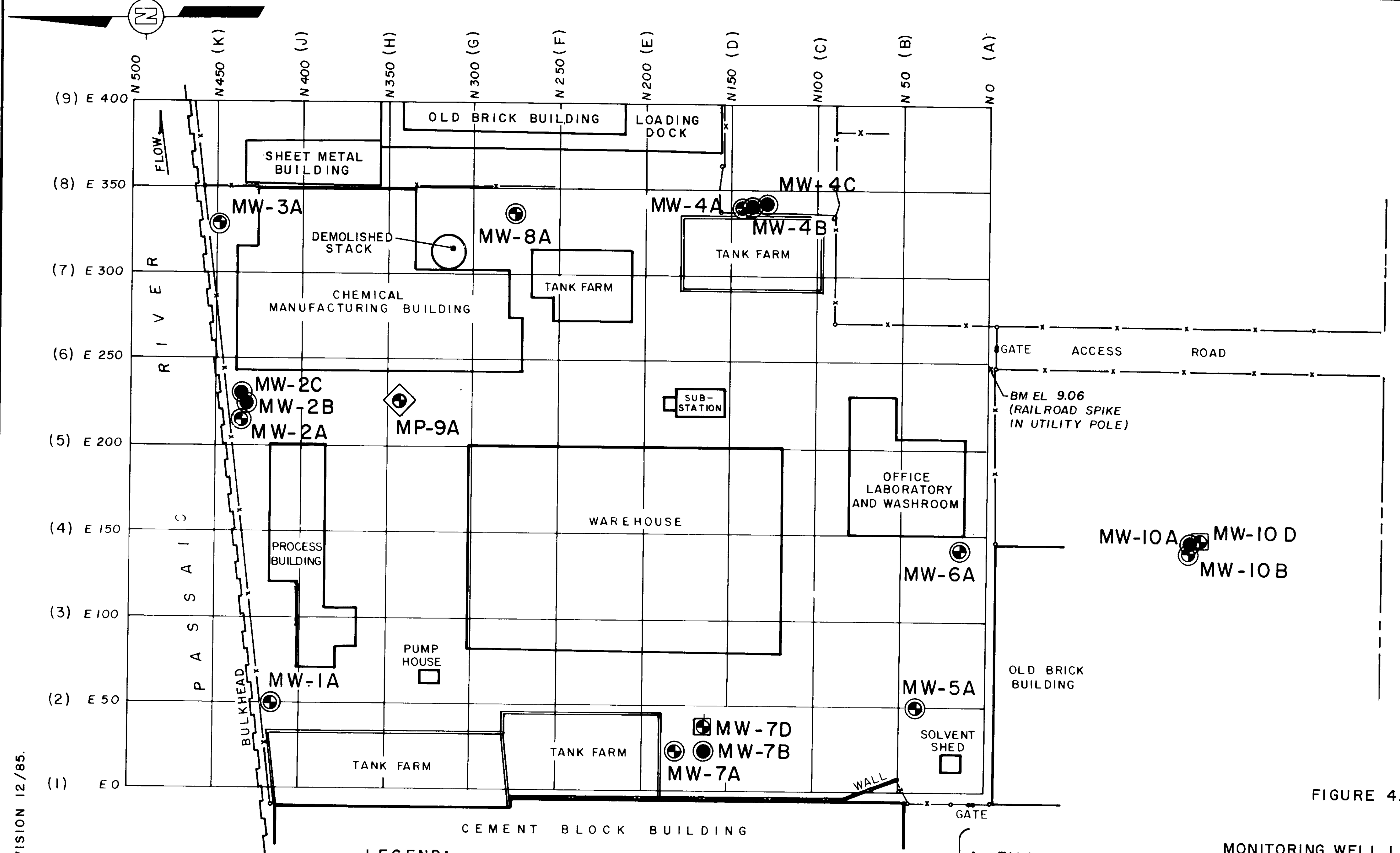
REVISIONS:
△ GENERAL REVISION 12/85.

65360

DRG. 2B	DRAWN BY RW	1-29-85	CHECKED BY TTO	APPROVED BY DGE	2-15-85 2-15-85	DRAWING NUMBER 846248-B18



LEGEND:

MP-9A	PIEZOMETER LOCATION AND NUMBER
MW-1A	SHALLOW DEPTH MONITORING WELL
MW-2C	INTERMEDIATE MONITORING WELL
MW-7D	DEEP MONITORING WELL

VERTICAL SAMPLING INTERVAL DESIGNATIONS

A. FILL
B. GLACIOFLUVIAL SAND BELOW SILT
C. MIDDLE GLACIOFLUVIAL SAND
D. GLACIOFLUVIAL SAND JUST ABOVE BEDROCK

SCALE

0 60 120 FEET

FIGURE 4.2.6-1

MONITORING WELL LOCATION PLAN

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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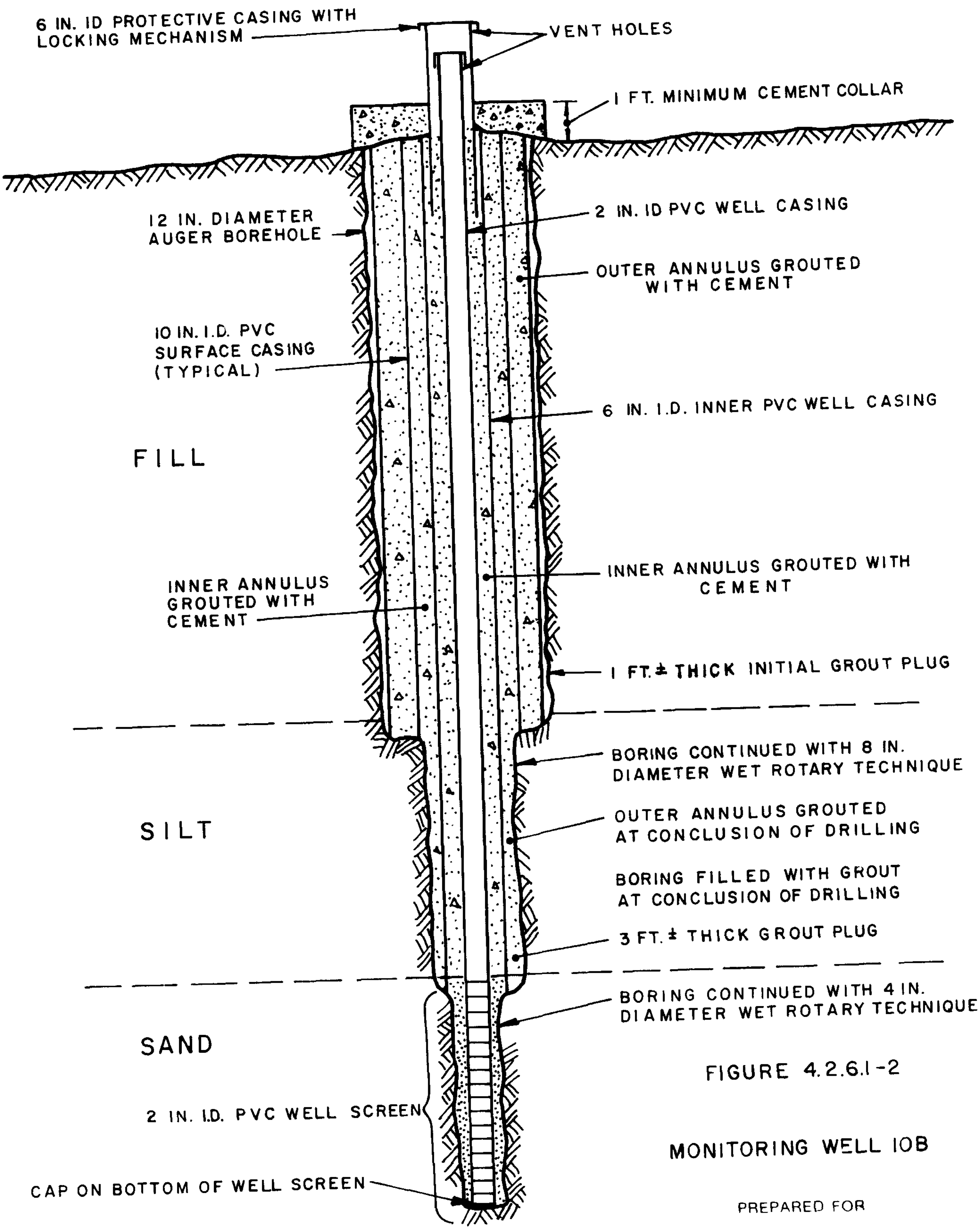

FIGURE 4.2.6.1-2

MONITORING WELL 10B

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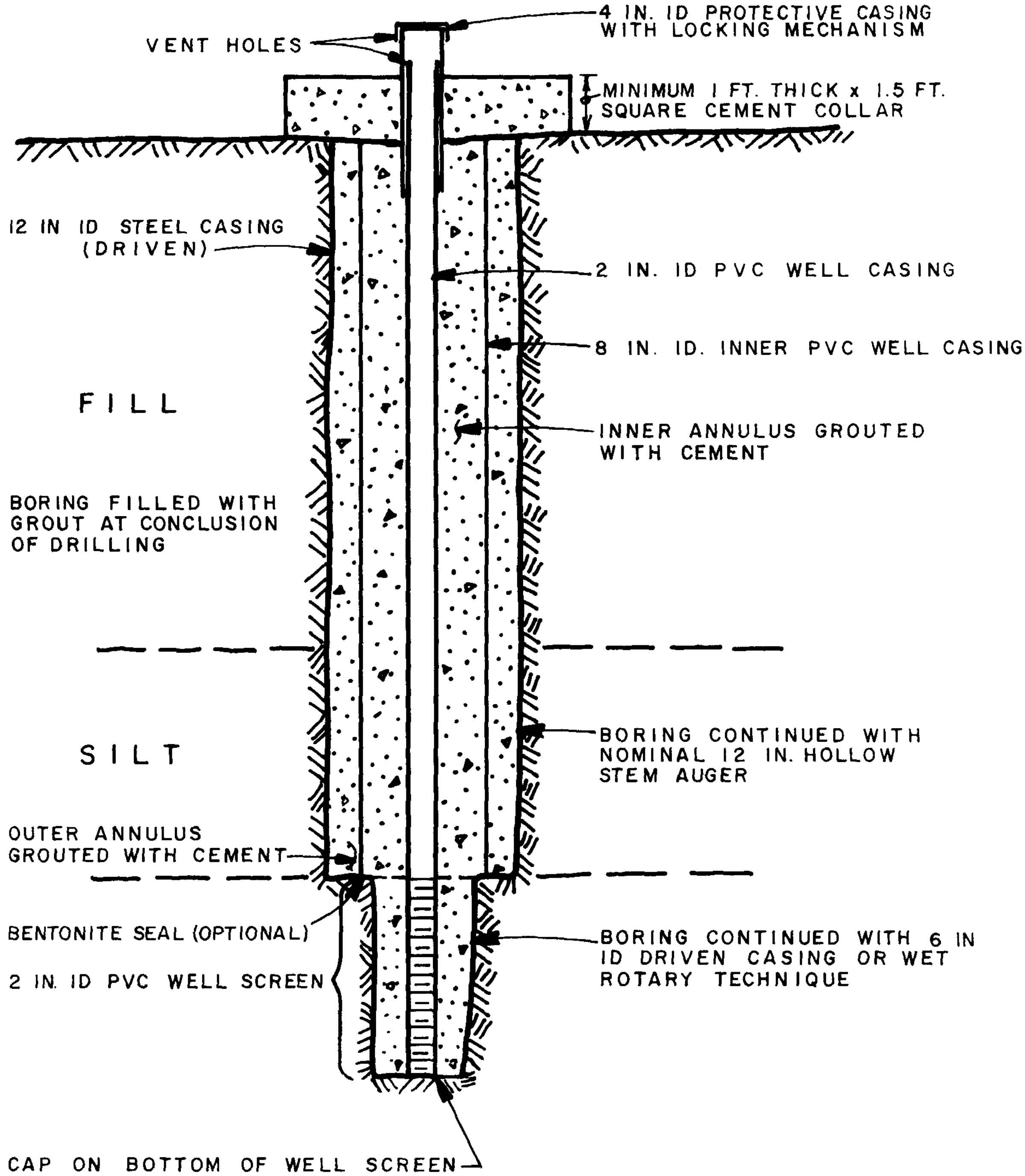

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FIGURE 4.2.6.1-3

TYPICAL UPPER INTERMEDIATE (B) MONITORING WELL

PREPARED FOR

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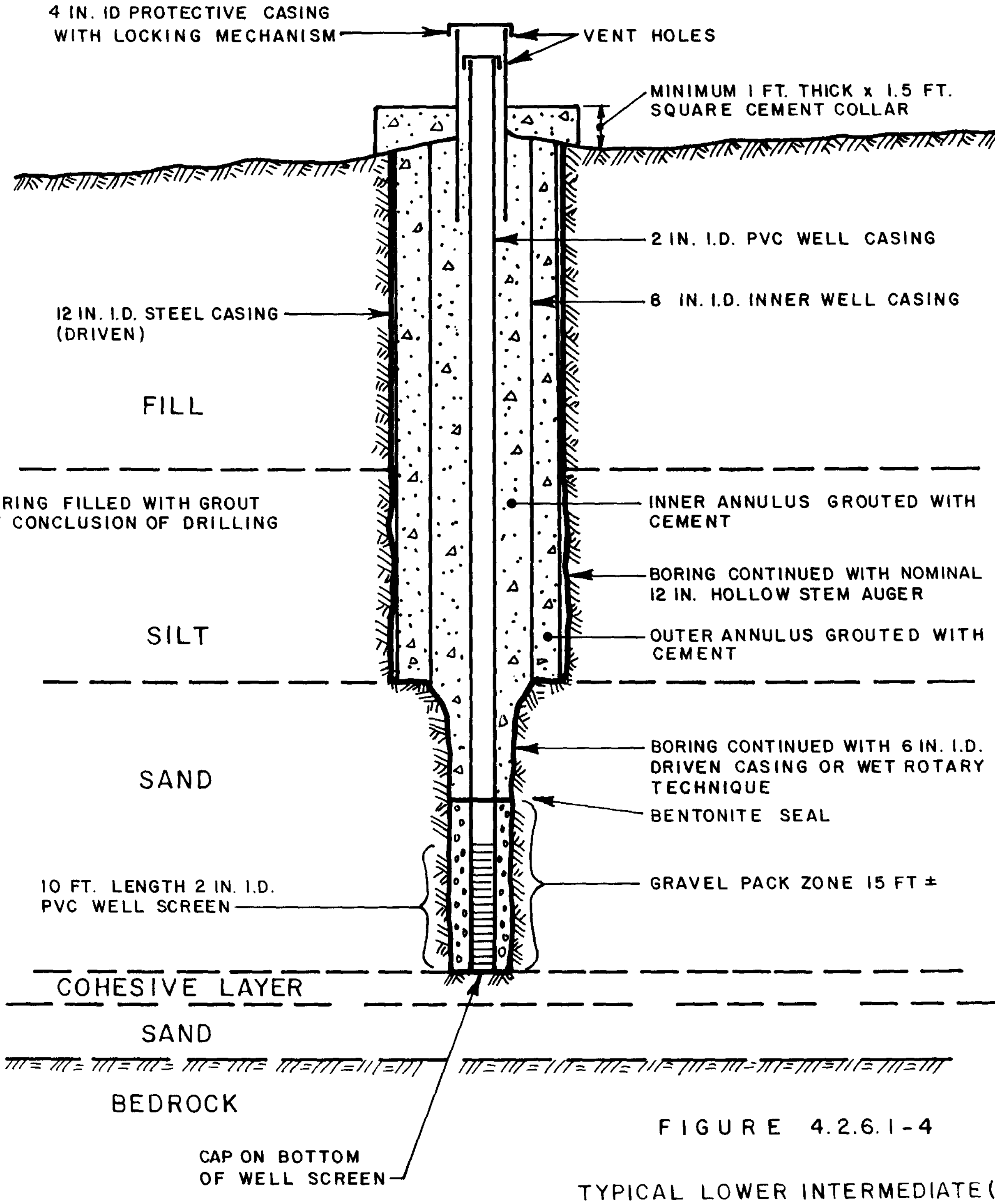

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FIGURE 4.2.6.1-4

TYPICAL LOWER INTERMEDIATE (C) MONITORING WELL

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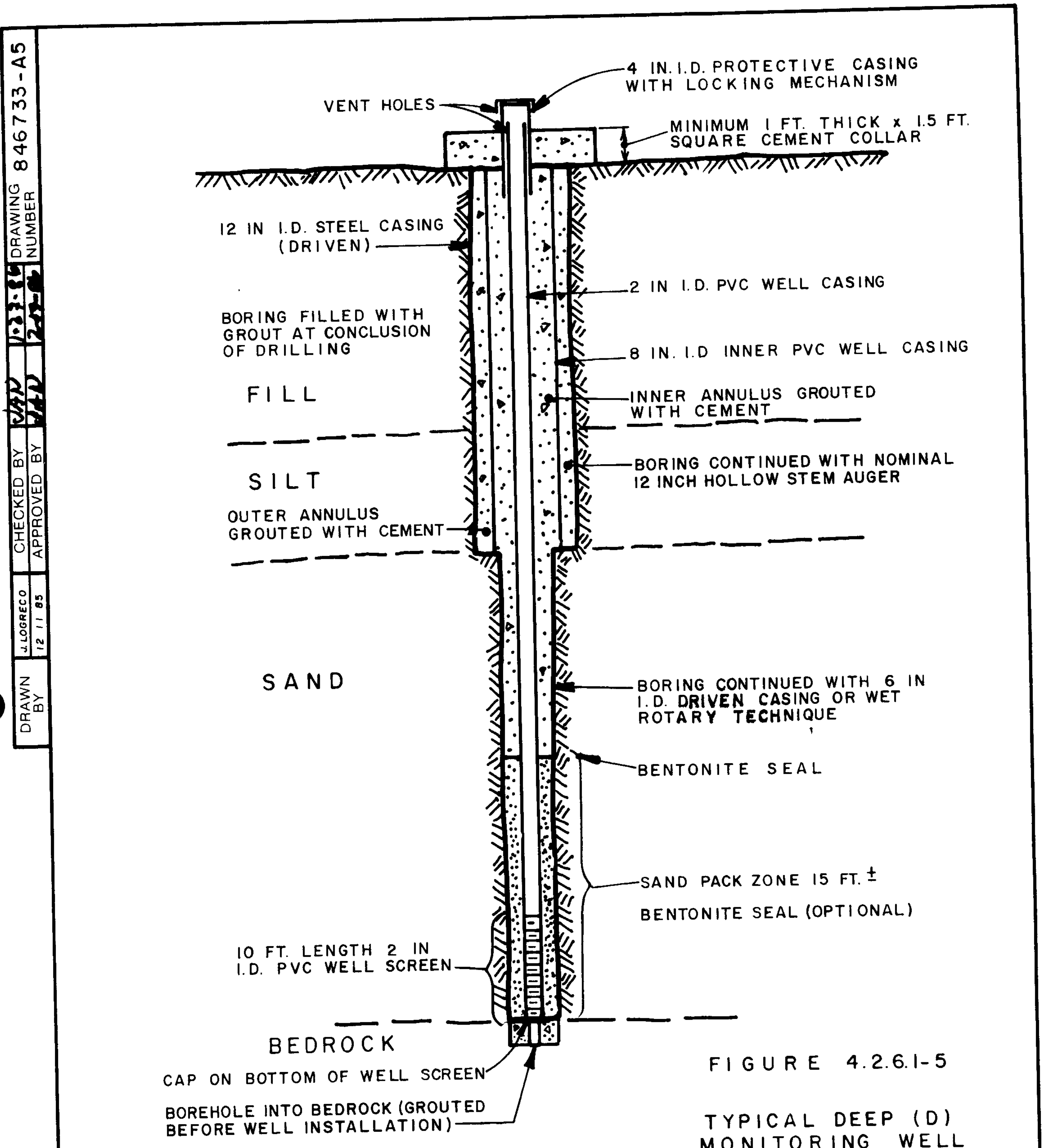

FIGURE 4.2.6.1-5

TYPICAL DEEP (D) MONITORING WELL

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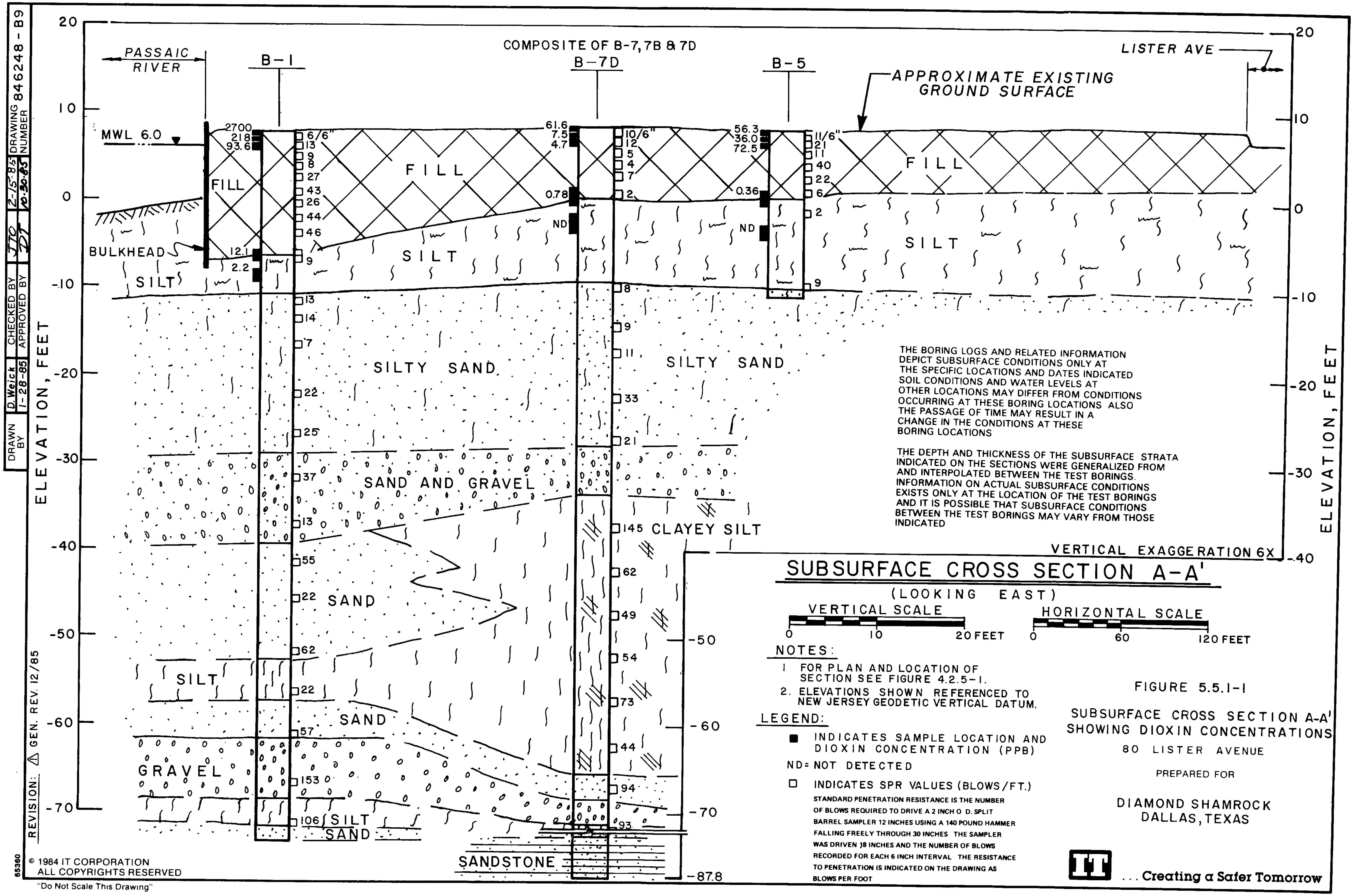
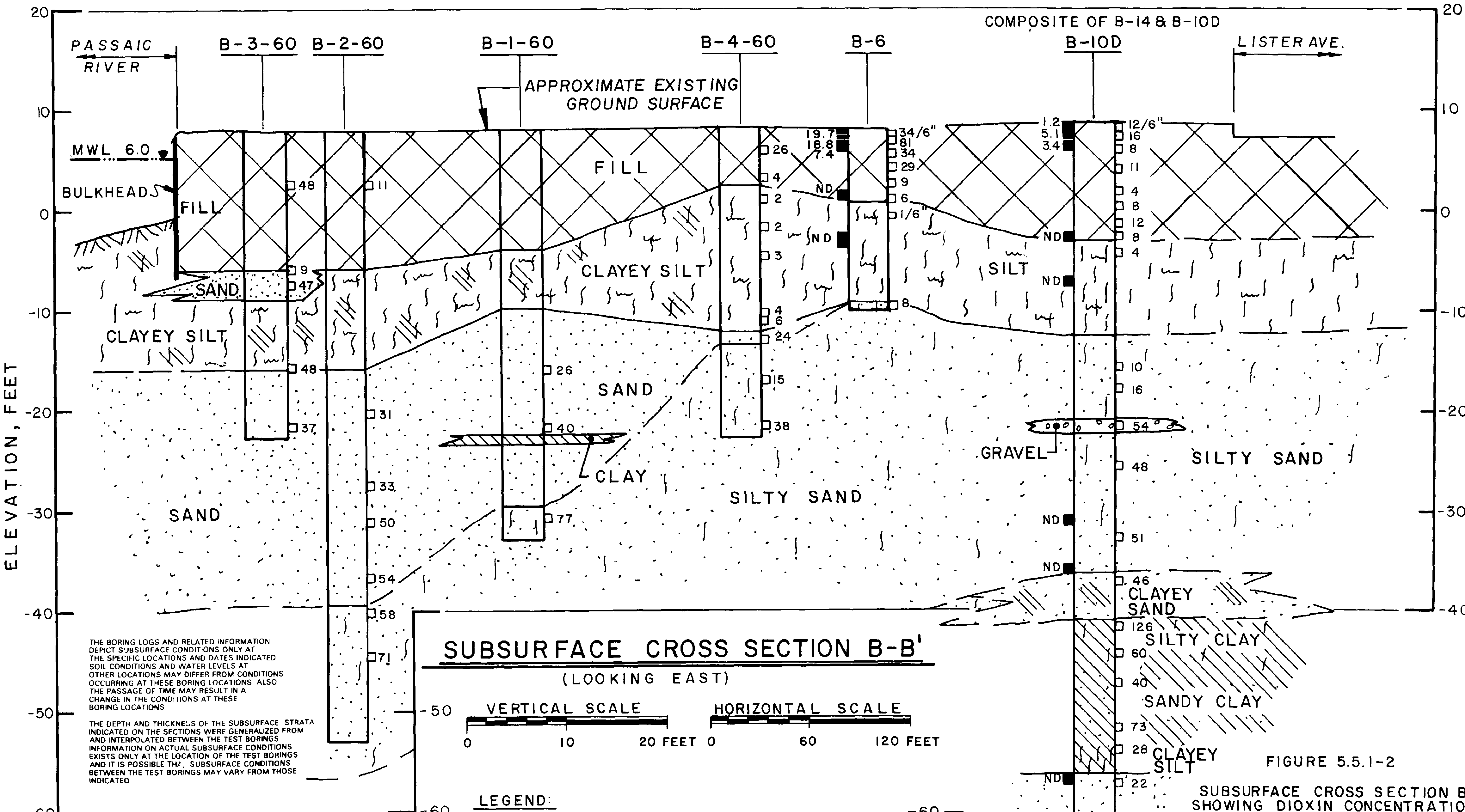


DEP\DA0100176



THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED

SUBSURFACE CROSS SECTION B-B'

(LOOKING EAST)

VERTICAL SCALE 0 10 20 FEET

HORIZONTAL SCALE 0 60 120 FEET

NOTES:

1. FOR PLAN AND LOCATION OF SECTION SEE FIGURE 4.2.5-1.
2. ELEVATIONS SHOWN REFERENCED TO NEW JERSEY GEODETIC VERTICAL DATUM.

LEGEND:

■ INDICATES SAMPLE LOCATION AND DIOXIN CONCENTRATION (PPB)

ND= NOT DETECTED

□ INDICATES SPR VALUES (BLOWS/FT.)

STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2 INCH O D. SPLIT BARREL SAMPLER 12 INCHES USING A 140 POUND HAMMER FALLING FREELY THROUGH 30 INCHES THE SAMPLER WAS DRIVEN 18 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6 INCH INTERVAL THE RESISTANCE TO PENETRATION IS INDICATED ON THE DRAWING AS BLOWS PER FOOT

FIGURE 5.5.1-2

SUBSURFACE CROSS SECTION B-B' SHOWING DIOXIN CONCENTRATIONS

80 LISTER AVENUE

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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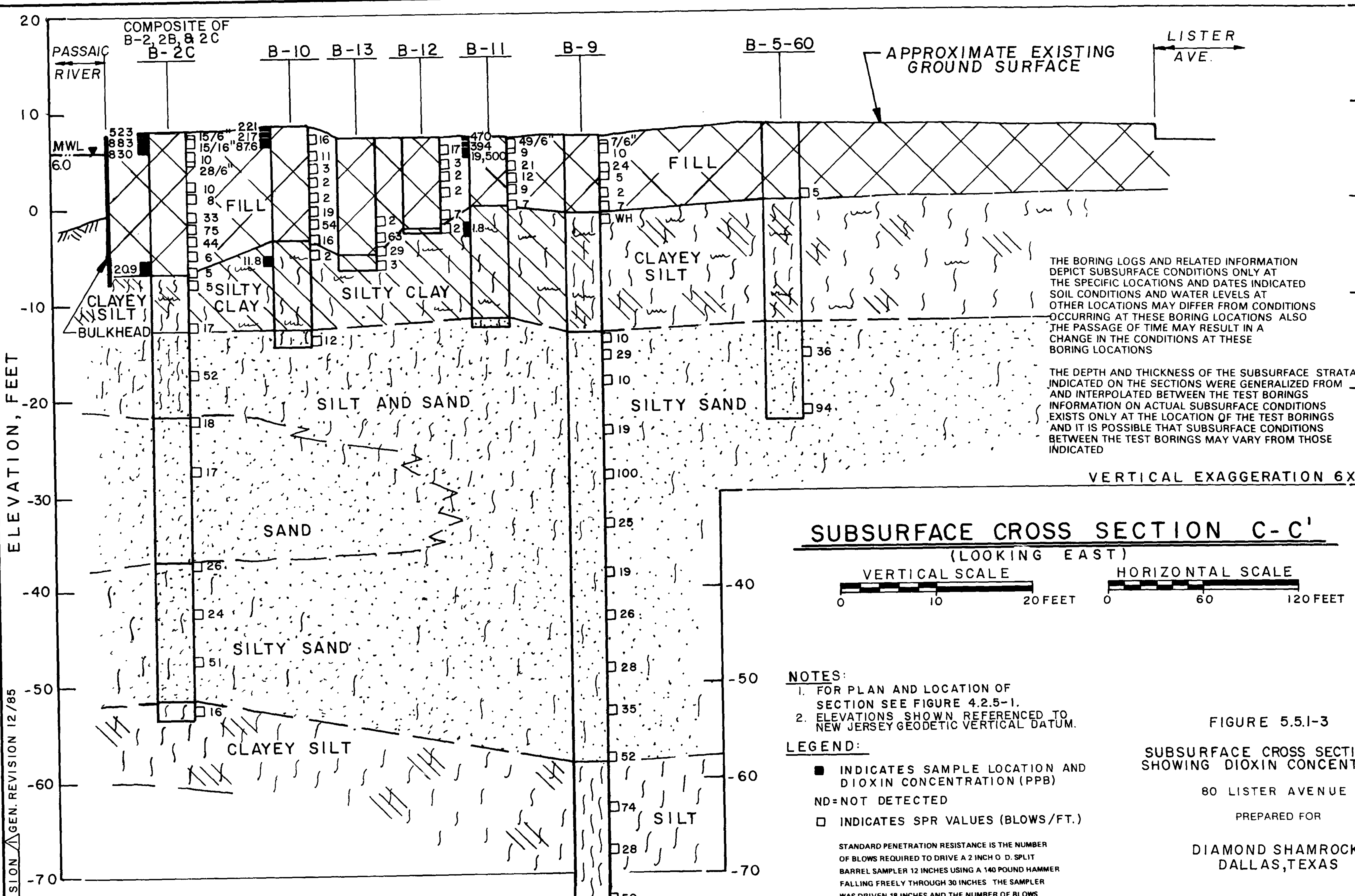

SUBSURFACE CROSS SECTION C-C'

(LOOKING EAST)

VERTICAL SCALE 0 10 20 FEET

HORIZONTAL SCALE 0 60 120 FEET

NOTES:
1. FOR PLAN AND LOCATION OF SECTION SEE FIGURE 4.2.5-1.
2. ELEVATIONS SHOWN REFERENCED TO NEW JERSEY GEODETIC VERTICAL DATUM.

LEGEND:

■ INDICATES SAMPLE LOCATION AND DIOXIN CONCENTRATION (PPB)

ND=NOT DETECTED

□ INDICATES SPR VALUES (BLOWS/FT.)

STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2 INCH O. D. SPLIT BARREL SAMPLER 12 INCHES USING A 140 POUND HAMMER FALLING FREELY THROUGH 30 INCHES THE SAMPLER WAS DRIVEN 18 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6 INCH INTERVAL THE RESISTANCE TO PENETRATION IS INDICATED ON THE DRAWING AS BLOWS PER FOOT

FIGURE 5.5.1-3

SUBSURFACE CROSS SECTION C-C' SHOWING DIOXIN CONCENTRATIONS

80 LISTER AVENUE

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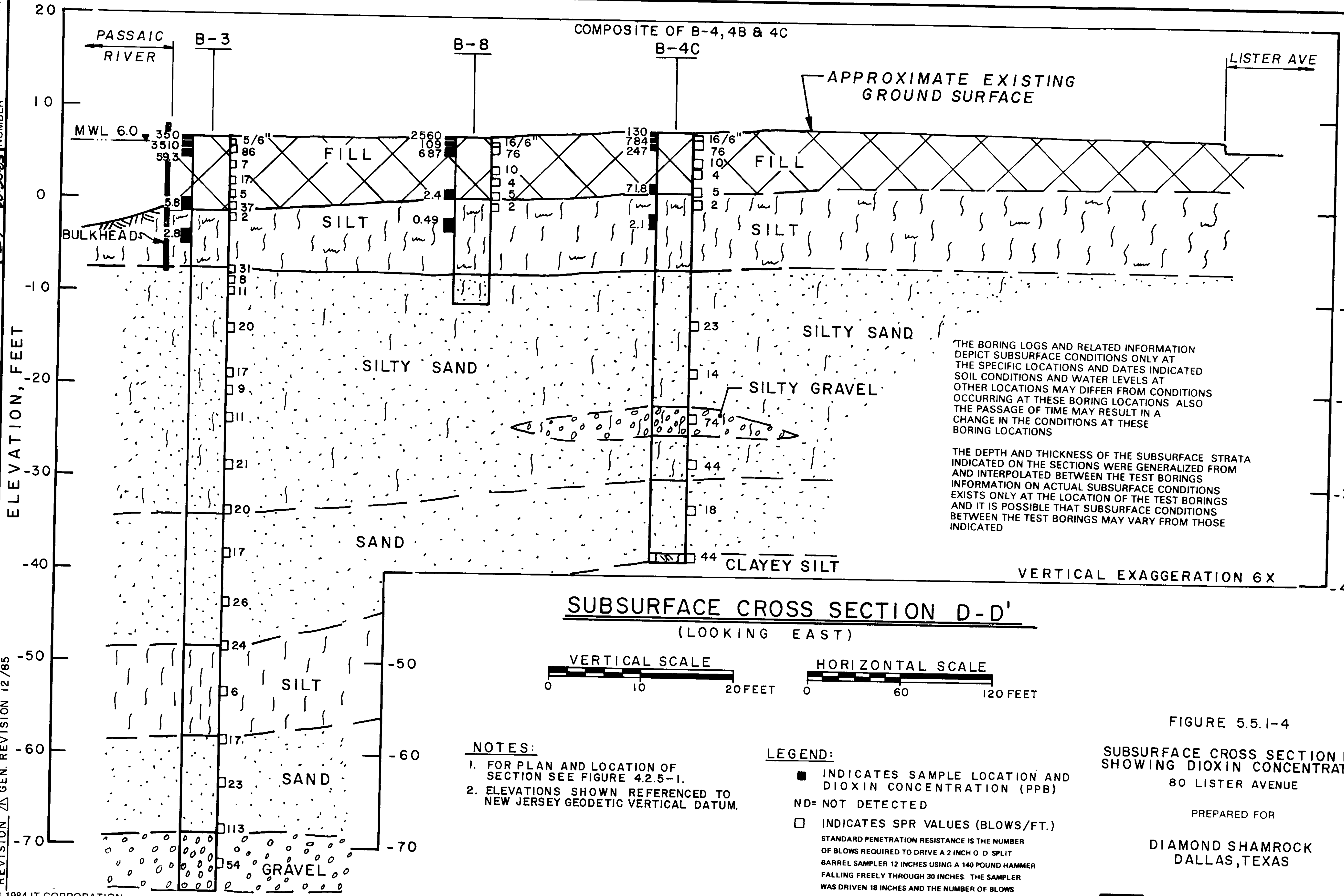

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED

SUBSURFACE CROSS SECTION D-D'

(LOOKING EAST)

NOTES:

1. FOR PLAN AND LOCATION OF SECTION SEE FIGURE 4.2.5-1.
2. ELEVATIONS SHOWN REFERENCED TO NEW JERSEY GEODETIC VERTICAL DATUM.

LEGEND:

■ INDICATES SAMPLE LOCATION AND DIOXIN CONCENTRATION (PPB)

ND= NOT DETECTED

□ INDICATES SPR VALUES (BLOWS/FT.)
STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2 INCH O D SPLIT BARREL SAMPLER 12 INCHES USING A 140 POUND HAMMER FALLING FREELY THROUGH 30 INCHES. THE SAMPLER WAS DRIVEN 18 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6 INCH INTERVAL. THE RESISTANCE TO PENETRATION IS INDICATED ON THE DRAWING AS BLOWS PER FOOT

FIGURE 5.5.1-4

SUBSURFACE CROSS SECTION D-D' SHOWING DIOXIN CONCENTRATIONS
80 LISTER AVENUE

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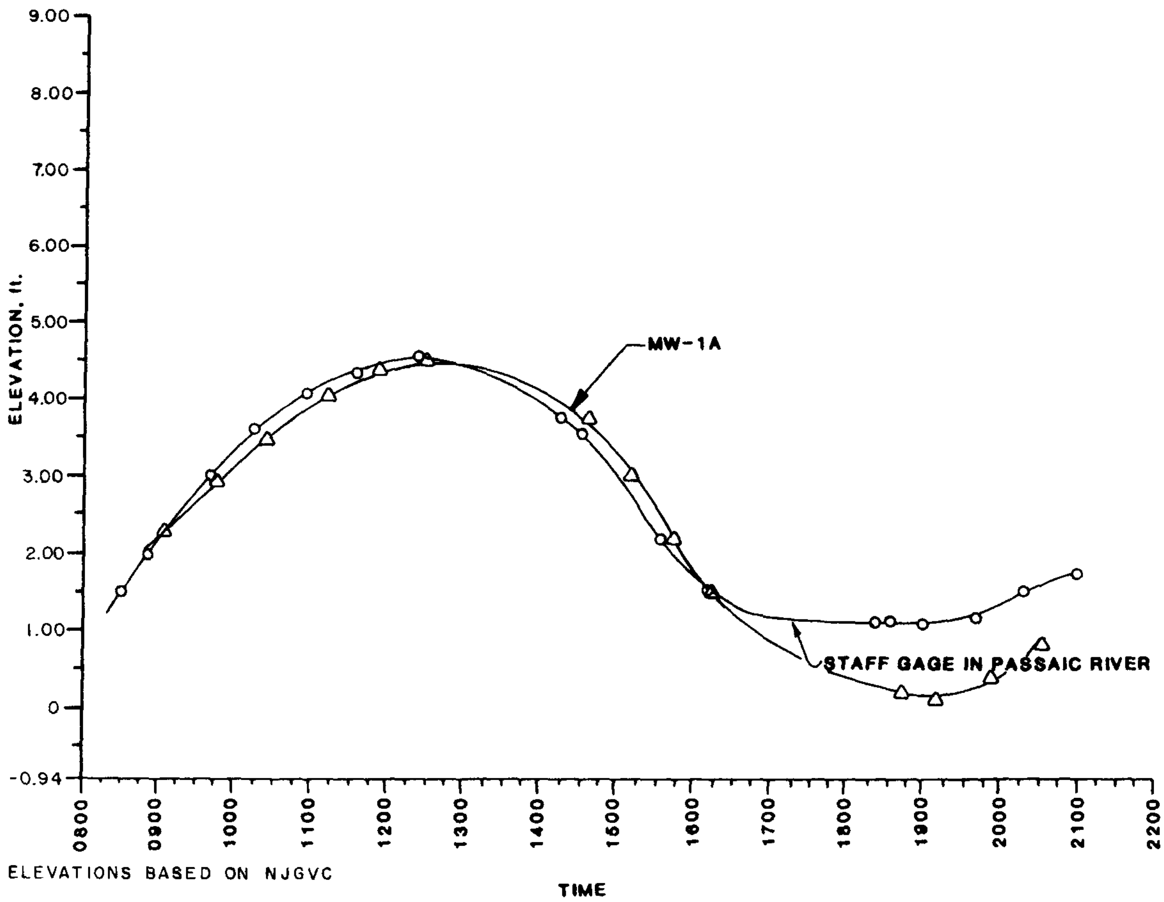

ELEVATIONS BASED ON NJGVC

OCTOBER 15, 1984

STAFF GAGE

TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-1A

TIME	WATER ELEV.
9:06	2.28
9:45	2.90
10:25	3.48
11:08	4.03
11:50	4.37
12:30	4.50
14:35	3.74
15:09	3.00
15:41	2.19
16:14	1.53
18:36	0.24
19:09	0.12
19:49	0.39
20:31	0.85

FIGURE 5.6.1-1

GROUND WATER ELEVATION
VERSUS TIDAL FLUCTUATION:
MW-1A

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DALLAS, TEXAS

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1 GENERAL REVISION 12-26-85

DRAWING NUMBER 846248-A27

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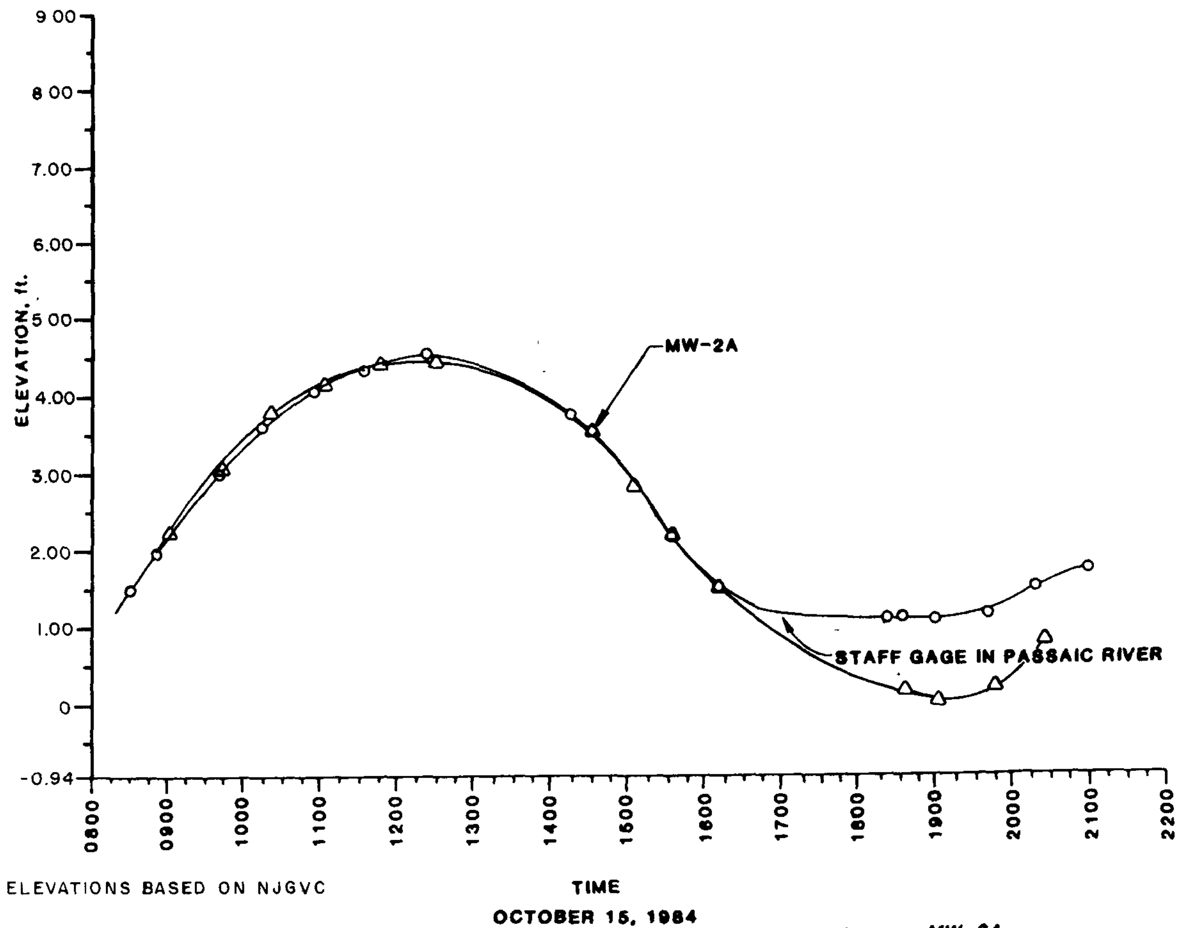

ELEVATIONS BASED ON NJGVC

STAFF GAGE

TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-2A

TIME	WATER ELEV.
9:00	2.17
9:42	3.07
10:21	3.80
11:04	4.18
11:45	4.45
12:28	4.48
14:31	3.55
15:06	2.82
15:38	2.22
16:12	1.53
18:34	0.19
19:03	0.09
19:44	0.25
20:26	0.81

FIGURE 5.6.1-2

GROUND WATER ELEVATION
VERSUS TIDAL FLUCTUATION:
MW-2A

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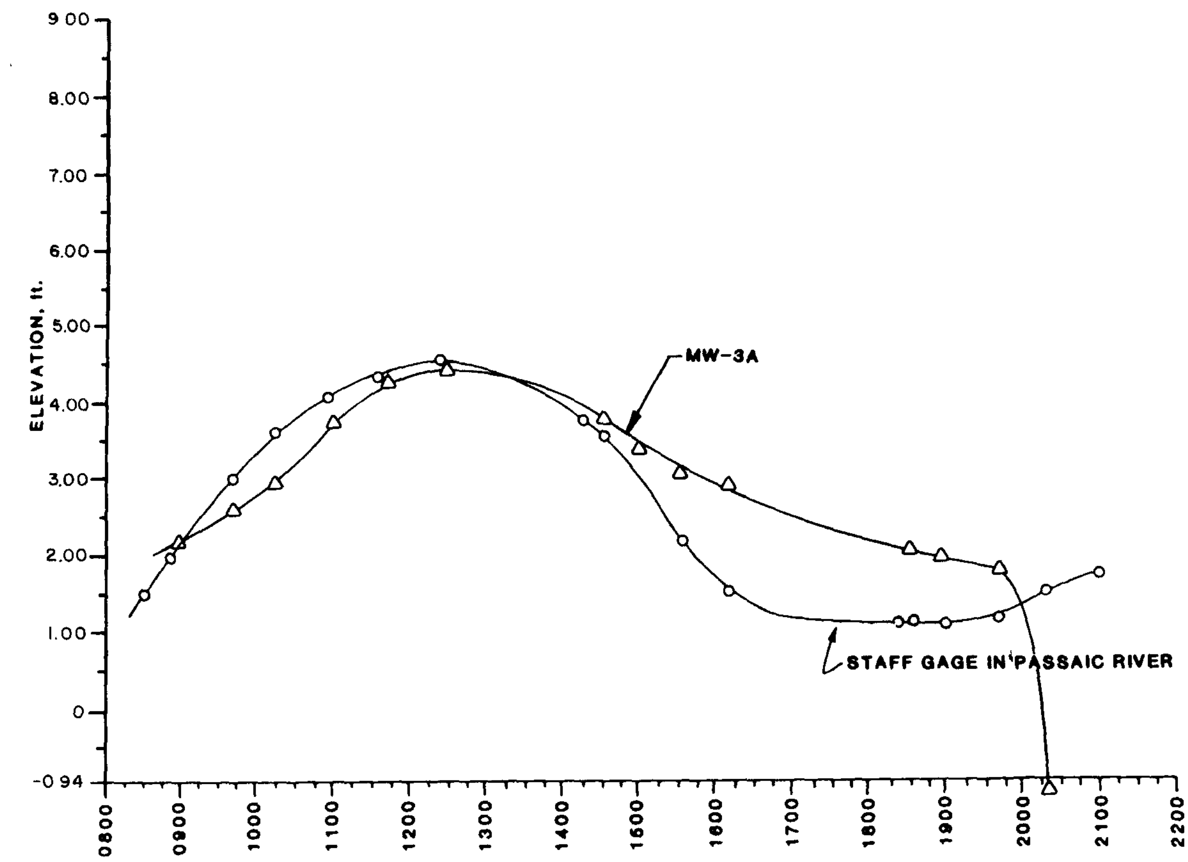

STAFF GAGE

TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-3A

TIME	WATER ELEV.
8:55	2.19
9:37	2.59
10:15	2.92
11:00	3.72
11:40	4.28
12:25	4.44
14:28	3.80
15:01	3.41
15:34	3.06
16:08	2.90
18:30	2.07
18:59	1.96
19:39	1.83
20:17	-1.06

FIGURE 5.6.1-3

GROUND WATER ELEVATION VERSUS TIDAL FLUCTUATION: MW-3A

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APPROVED BY: DGE 2-15-85
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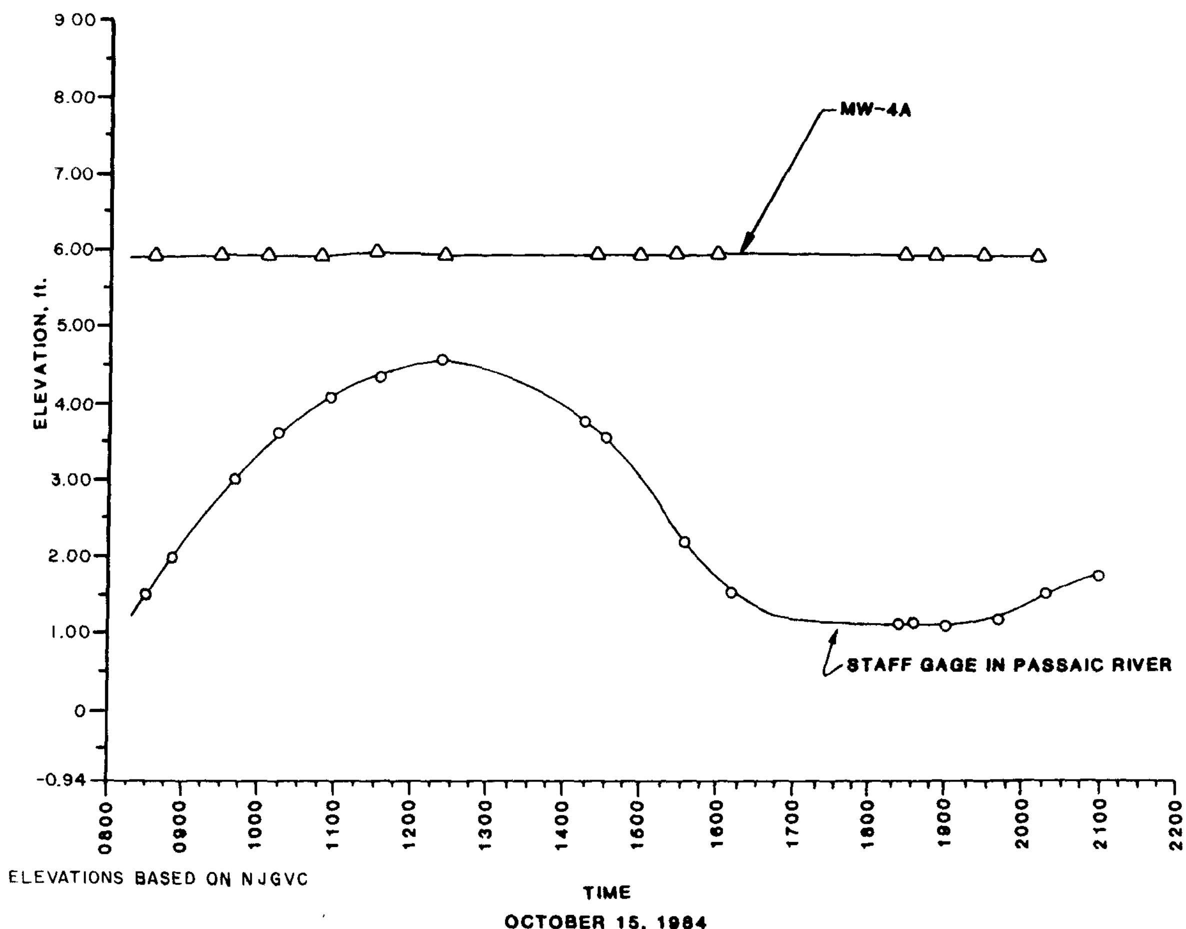

STAFF GAGE

TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-4A

TIME	WATER ELEV.
8:35	5.90
9:30	5.93
10:07	5.91
10:45	5.91
11:26	5.97
12:20	5.93
14:21	5.93
15:56	5.92
15:27	5.91
16:01	5.92
18:25	5.89
18:50	5.89
19:25	5.88
20:10	5.88

FIGURE 5.6.1-4

GROUND WATER ELEVATION
VERSUS TIDAL FLUCTUATION:
MW-4A

PREPARED FOR

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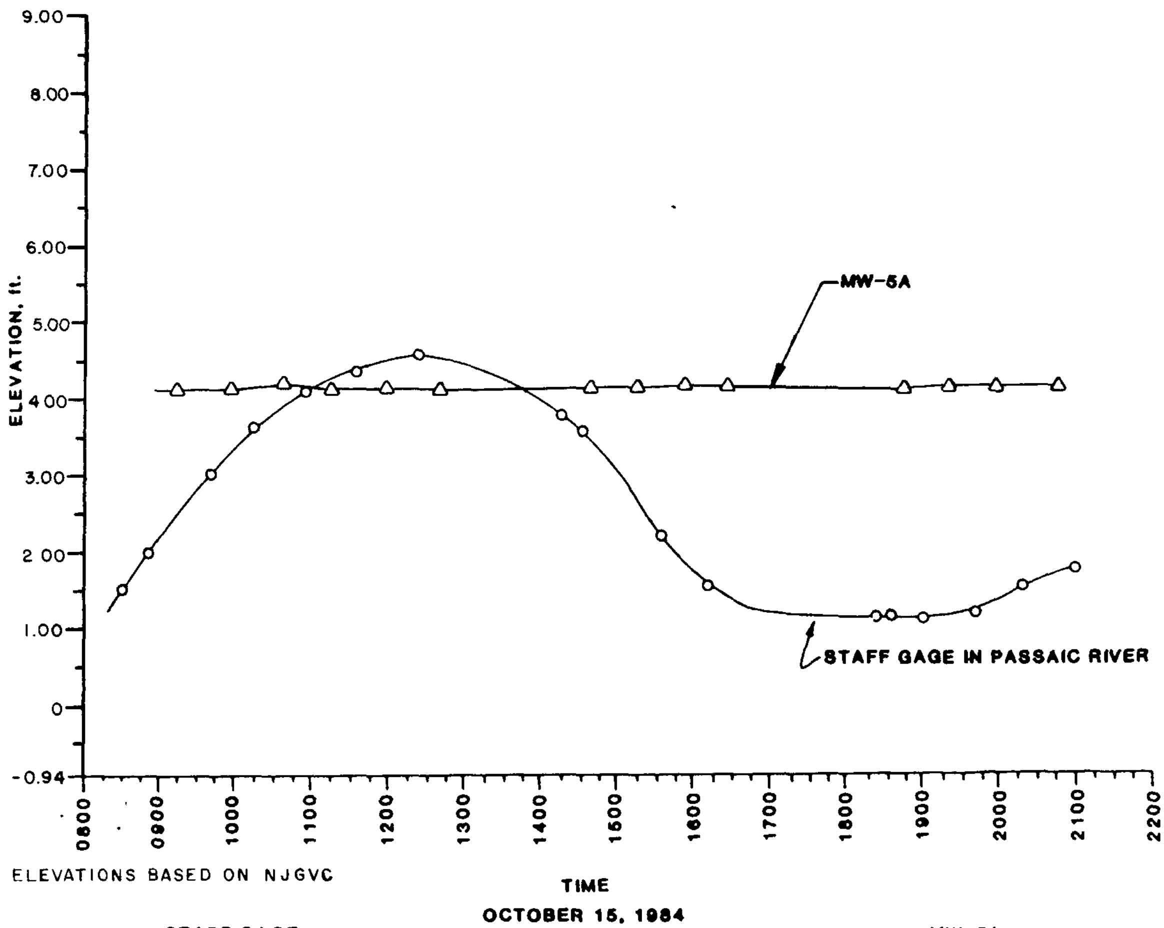
DRAWN BY D. Weick 1-29-85



STAFF GAGE

TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-5A

TIME	WATER ELEV.
9:16	4.11
9:55	4.12
10:35	4.16
11:15	4.12
12.01	4.12
12:37	4.11
14:42	4.13
15:15	4.14
15:50	4.15
16:25	4.13
18:42	4.11
19:14	4.12
19:58	4.12
20:44	4.12

FIGURE 5.6.1-5

GROUND WATER ELEVATION
VERSUS TIDAL FLUCTUATION:
MW-5A

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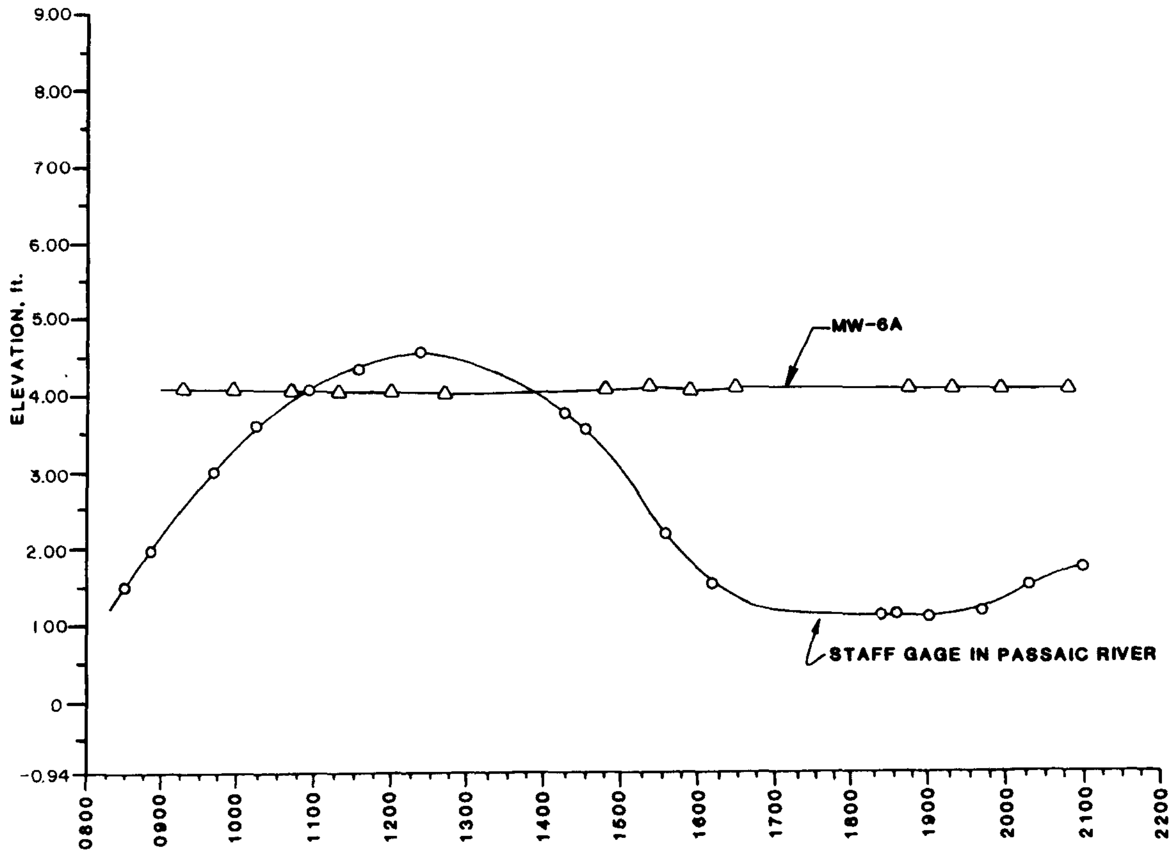

ELEVATIONS BASED ON NJGVC

TIME
OCTOBER 15, 1984

STAFF GAGE

TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-6A

TIME	WATER ELEV.
9:20	4.09
9:58	4.08
10:38	4.06
11:19	4.05
12:05	4.05
12:40	4.04
14:46	4.09
15:18	4.11
15:53	4.09
16:28	4.11
18:45	4.09
19:17	4.09
20:01	4.09
20:48	4.08

FIGURE 5.6.1-6

GROUND WATER ELEVATION
VERSUS TIDAL FLUCTUATION:
MW-6A

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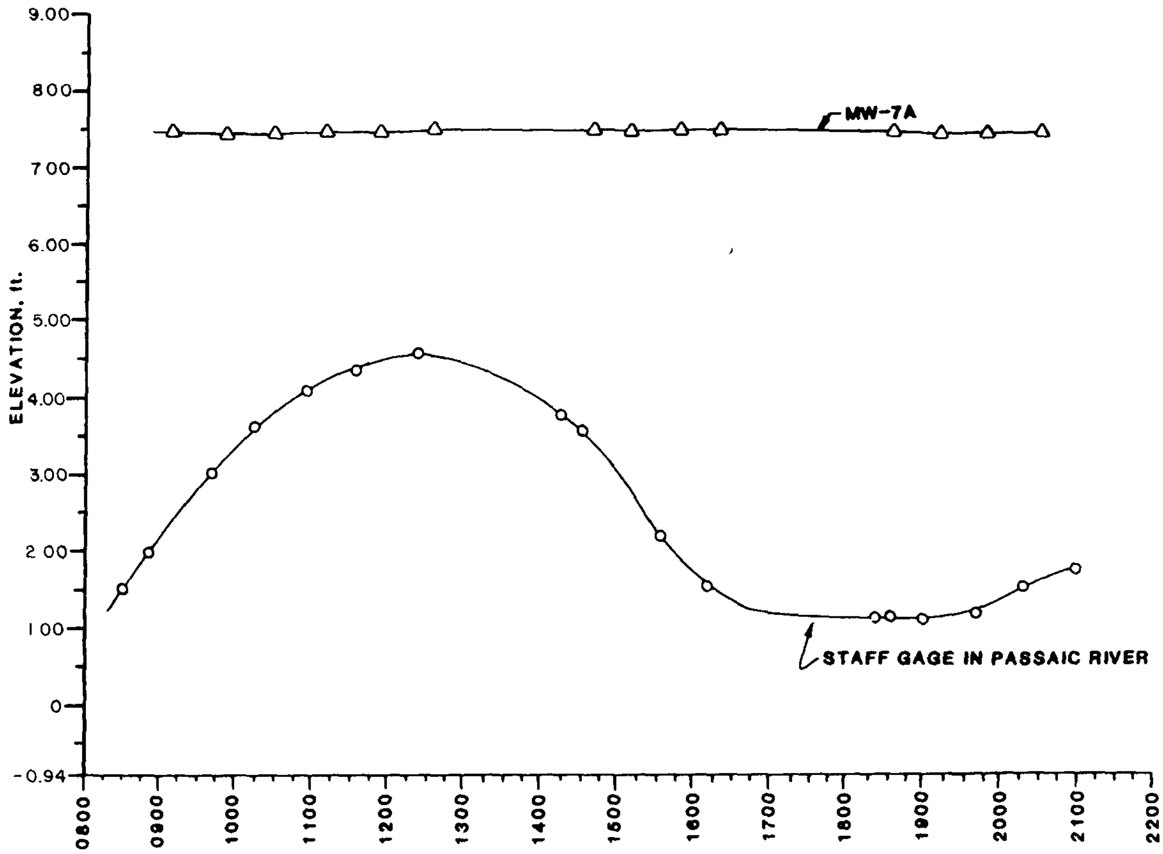

ELEVATIONS BASED ON NJGVC

TIME

OCTOBER 15, 1984

STAFF GAGE	
TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-7A	
TIME	WATER ELEV.
9:11	7.48
9:51	7.46
10:30	7.45
11:12	7.47
11:55	7.48
12:35	7.50
14:39	7.50
15:12	7.48
15:47	7.50
16:21	7.50
18:40	7.48
19:14	7.45
19:54	7.45
20:37	7.46

FIGURE 5.6.1-7

GROUND WATER ELEVATION
VERSUS TIDAL FLUCTUATION:
MW—7A

PREPARED FOR

DIAMOND SHAMROCK
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DRAWING NUMBER 846248-A33

DRAWN BY D. Weick 1-29-85

CHECKED BY JTC 2-15-85

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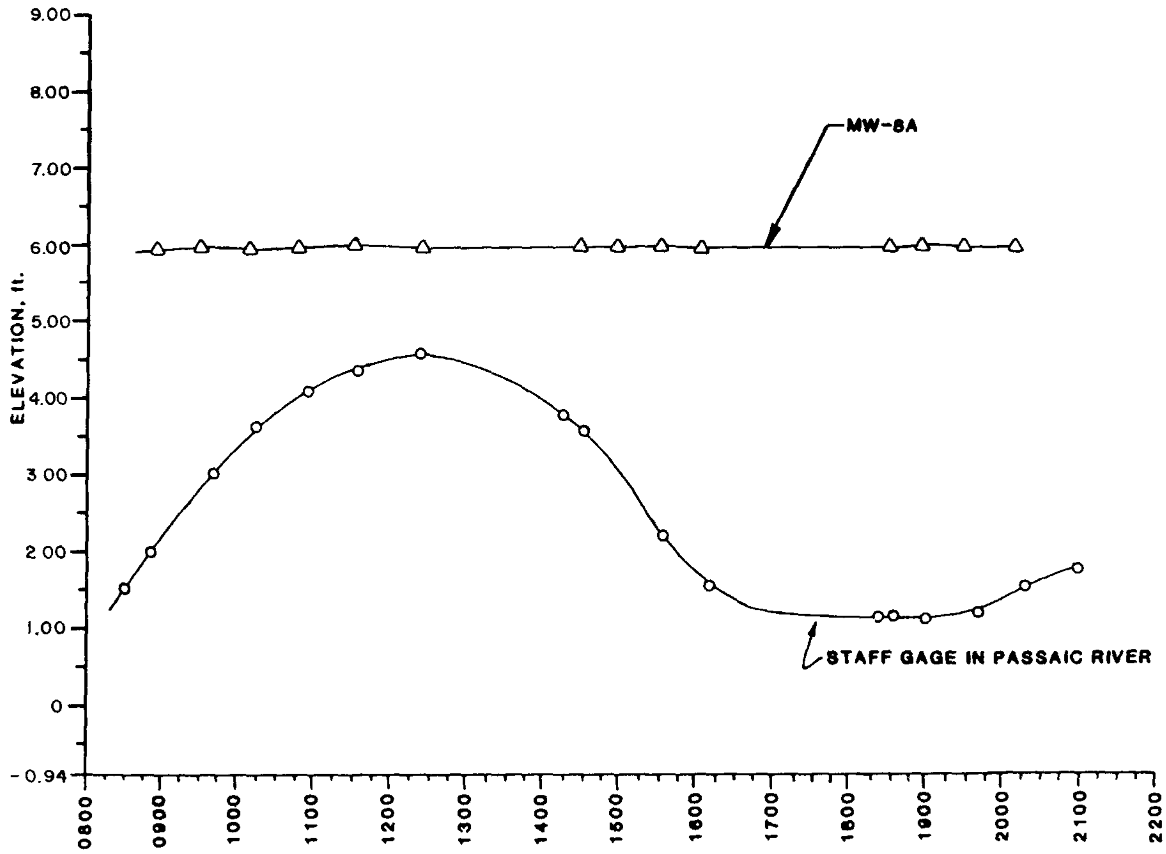

ELEVATIONS BASED ON NJGVC

TIME
OCTOBER 15, 1984

STAFF GAGE

TIME	RIVER ELEV.
8:30	1.52
8:50	1.97
9:40	3.02
10:14	3.64
10:55	4.11
11:35	4.37
12:24	4.57
14:15	3.72
14:29	3.50
15:36	2.20
16:10	1.50
18:18	1.12
18:31	1.12
19:01	1.07
19:43	1.22
20:23	1.62
21:00	1.72

MW-8A

TIME	WATER ELEV.
8:48	5.95
9:33	5.97
10:10	5.95
10:50	5.97
11:31	6.00
12:22	5.98
14:25	5.98
14:58	5.98
15:30	5.99
16:04	5.97
18:27	5.97
18:53	5.98
19:33	5.96
20:13	5.97

FIGURE 5.6.1-8

GROUND WATER ELEVATION
VERSUS TIDAL FLUCTUATION:
MW-8A

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DIAMOND SHAMROCK
DALLAS, TEXAS

REVISION:

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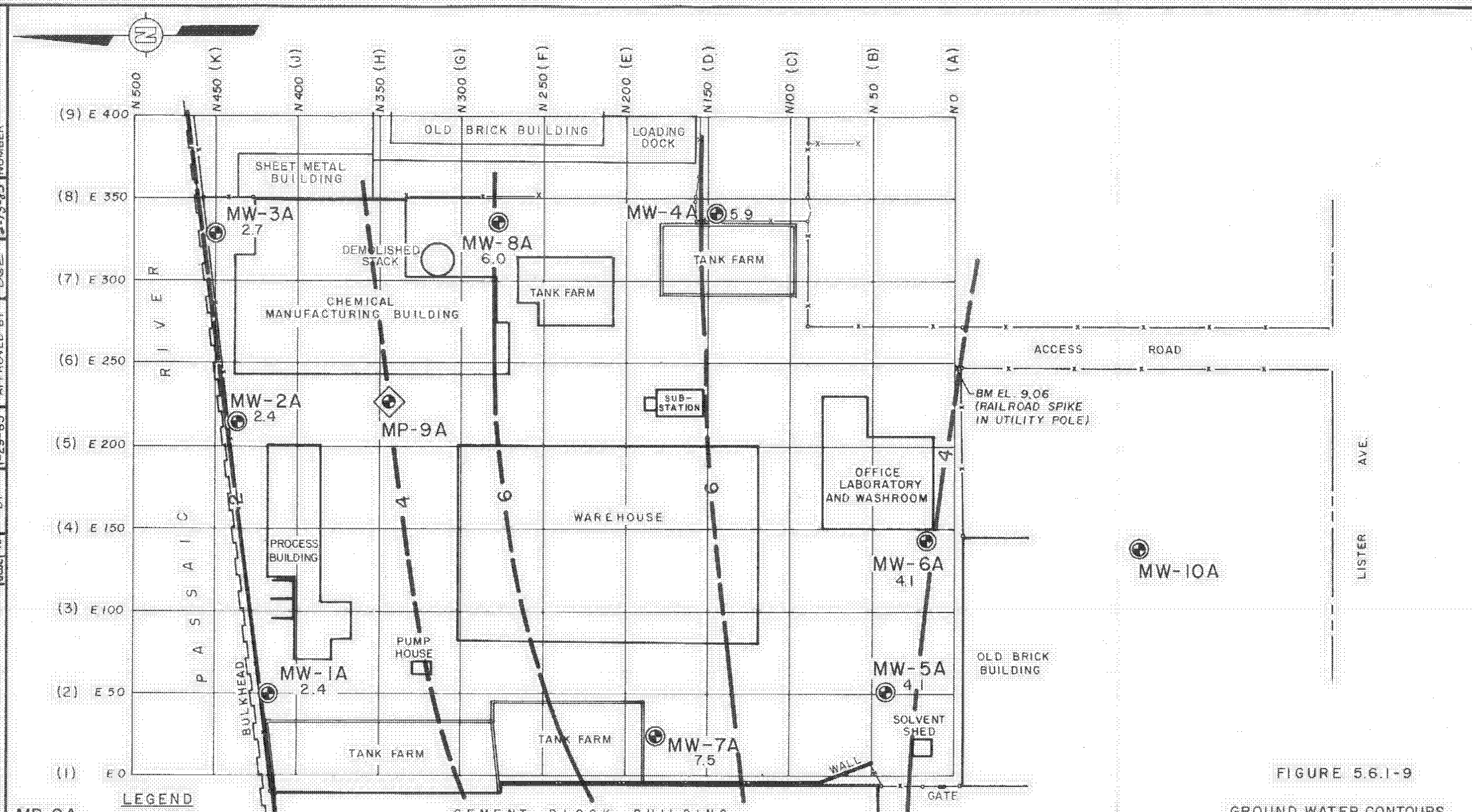

LEGEND

MP-9A — PIEZOMETER LOCATION AND NUMBER

MW-1A — SHALLOW DEPTH MONITORING WELL

9 4.0 — AVERAGE GROUND WATER LEVEL (10-15-84)

—4— GROUND WATER CONTOUR (10-15-84)

NOTE:
ELEVATIONS SHOWN ARE BASED ON NEW JERSEY GEODETIC VERTICAL DATUM.

REVISION
△ GENERAL REVISION 12-20-85

SCALE
0 60 120 FEET

FIGURE 5.6.1-9

GROUND WATER CONTOURS IN THE FILL
10-15-84

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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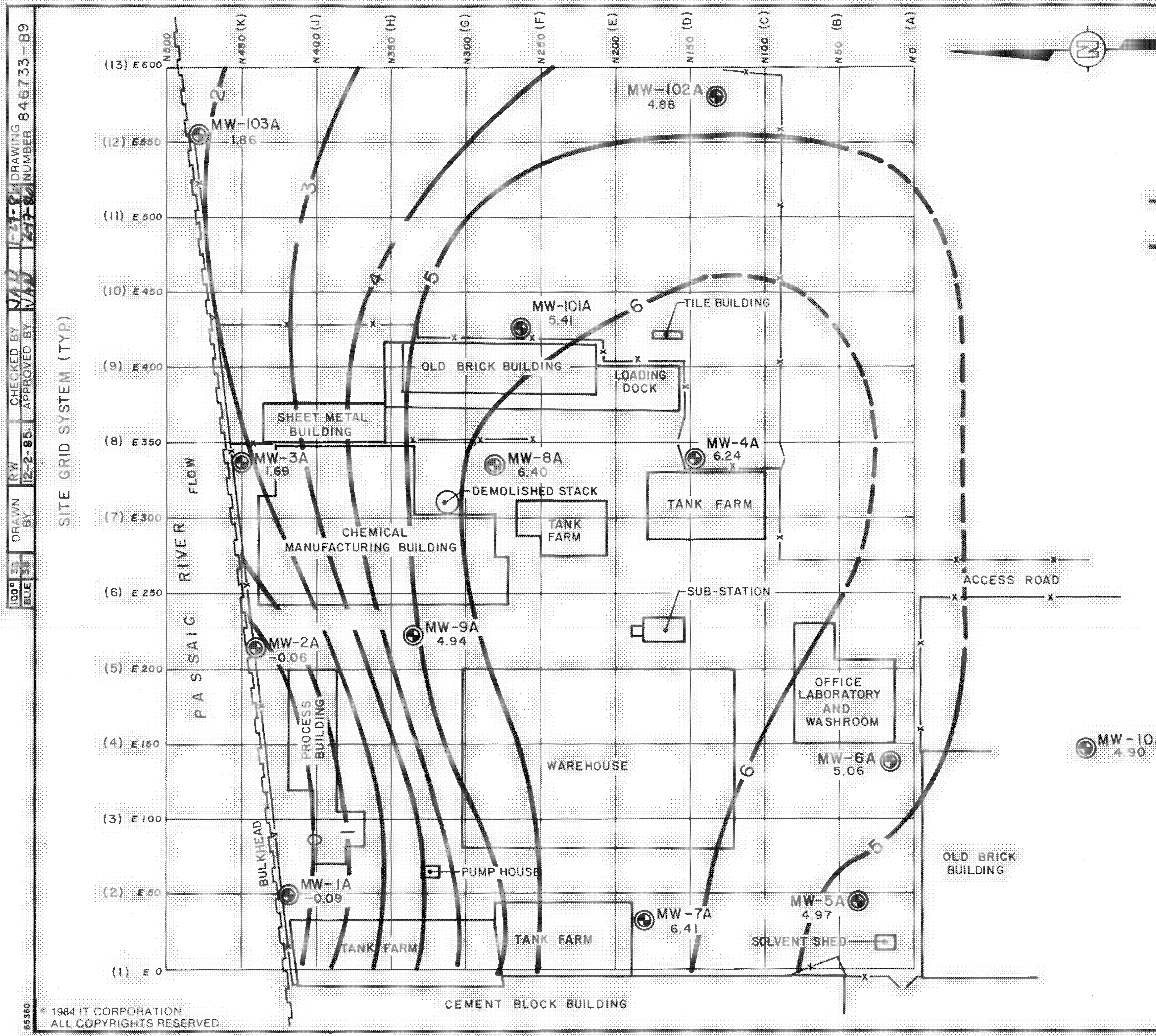
CHECKED BY	JTO	2-15-85
APPROVED BY	DGE	2-15-85
DRAWING NUMBER	846248-B21	

100% 48 BLUE 48

65360



LEGEND

MW-10A 4.90 SHALLOW DEPTH MONITORING WELL AND WATER LEVEL EL. ON MAY 25, 1985.

— 4 — POTENTIOMETRIC CONTOUR INTERPOLATED FROM SITE DATA

— — — INFERRED POTENTIOMETRIC CONTOUR

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.6.1-10

SHALLOW MONITORING WELLS AND POTENTIOMETRIC CONTOURS OF GROUND WATER ON MAY 25, 1985
80 AND 120 LISTER AVENUE

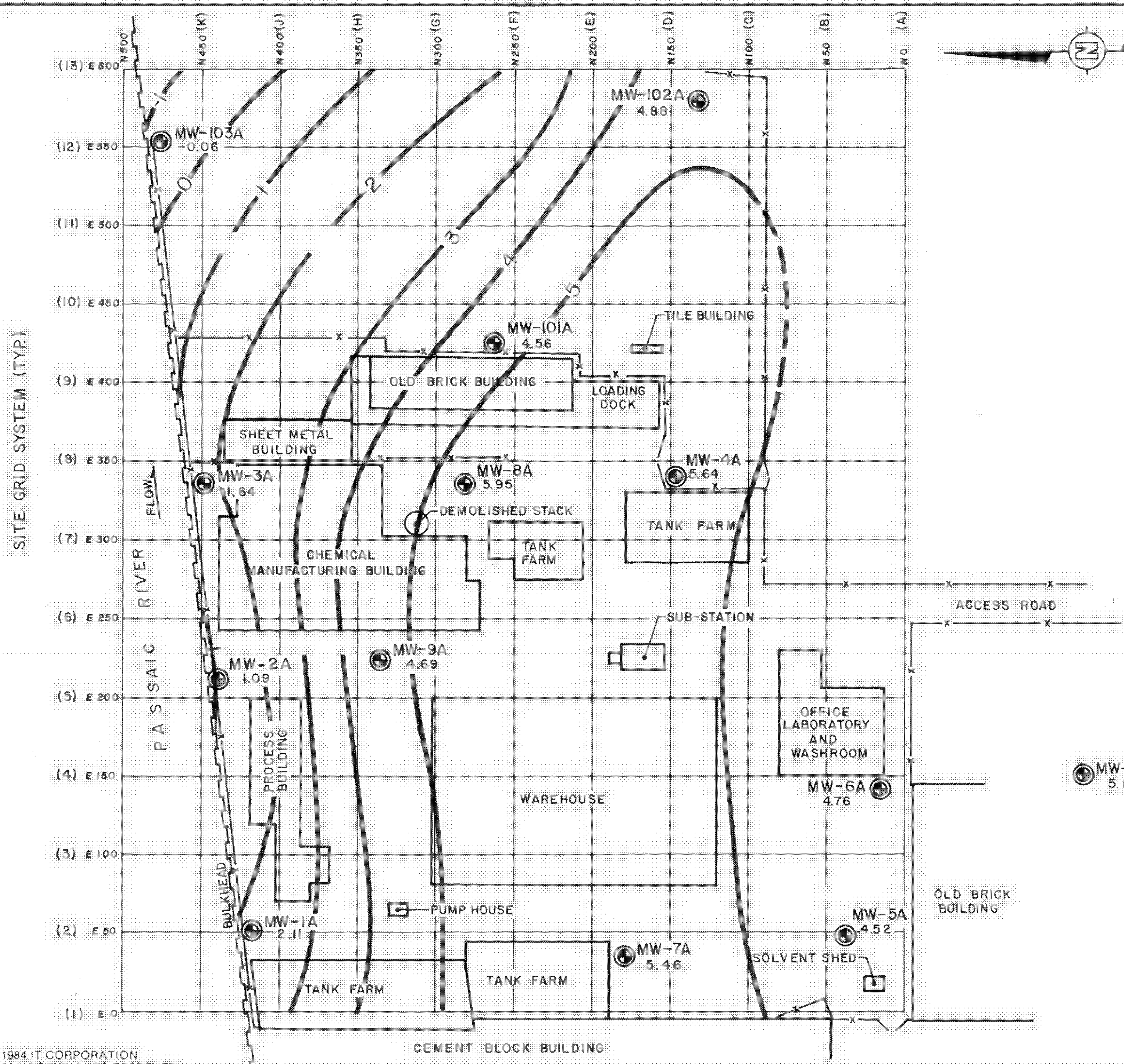
PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

IT ...Creating a Safer Tomorrow

"Do Not Scale This Drawing"

65360



LEGEND

MW-10A 5.14 SHALLOW DEPTH MONITORING WELL AND WATER LEVEL EL ON JULY 8, 1985

—5— POTENTIOMETRIC CONTOUR INTERPOLATED FROM SITE DATA

— — INFERRED POTENTIOMETRIC CONTOUR

NOTE

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.6.1-11

SHALLOW MONITORING WELLS AND POTENTIOMETRIC CONTOURS OF GROUND WATER ON JULY 8, 1985
80 AND 120 LISTER AVENUE

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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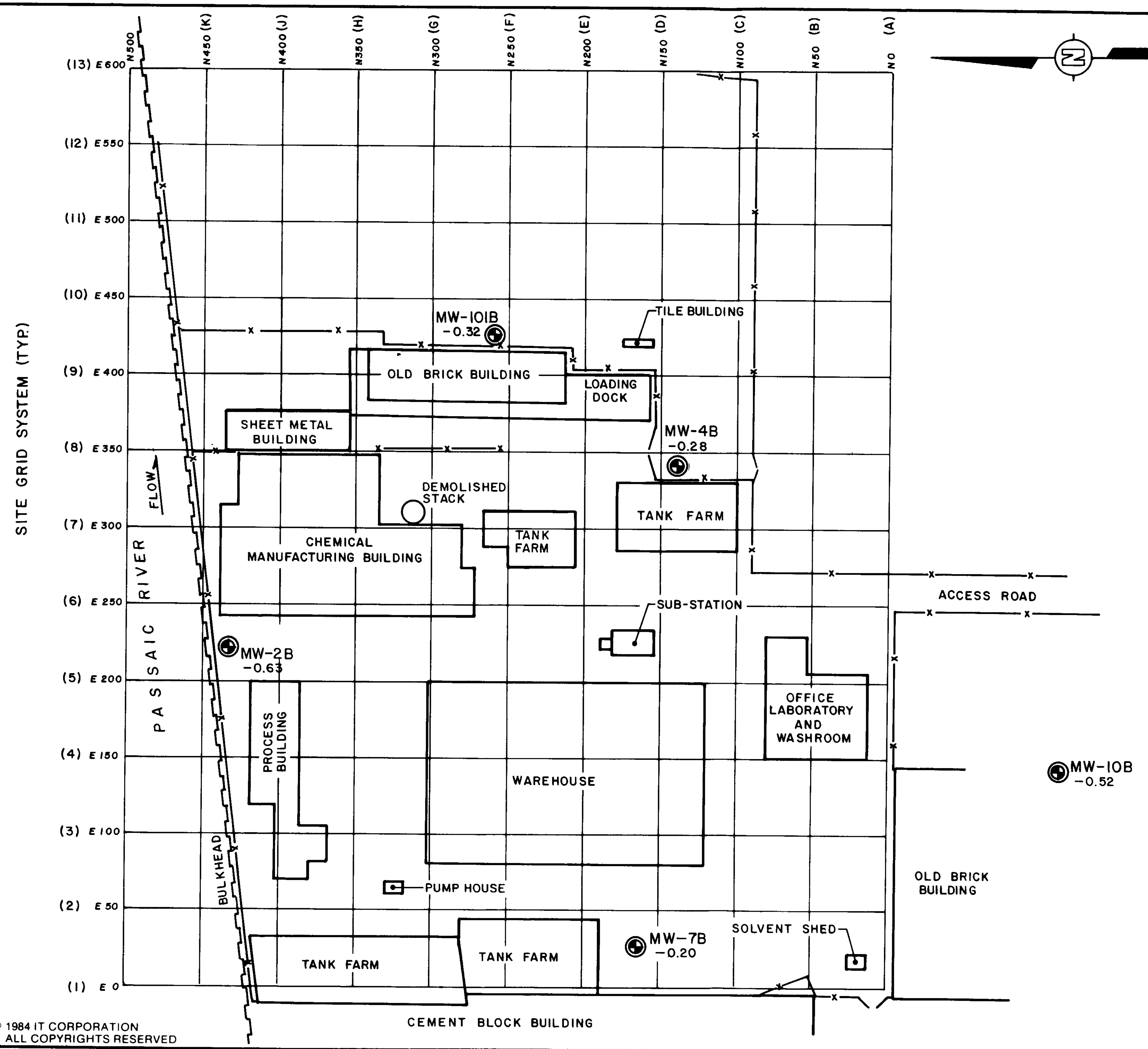
100% 48 / BLUE 48	DRAWN BY	RW / 12-26-85	CHECKED BY / APPROVED BY	1-27-86 / 2-17-86	DRAWING NUMBER 846733-B10

65360

DEP\DA0100190



LEGEND

MW-4B -0.28 UPPER INTERMEDIATE DEPTH MONITORING WELL AND WATER LEVEL EL.

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.6.1-12

WATER LEVELS MEASURED IN UPPER INTERMEDIATE "B" WELLS ON JULY 3, 1985

80 AND 120 LISTER AVENUE

PREPARED FOR

DIAMOND SHAMROCK

DALLAS, TEXAS

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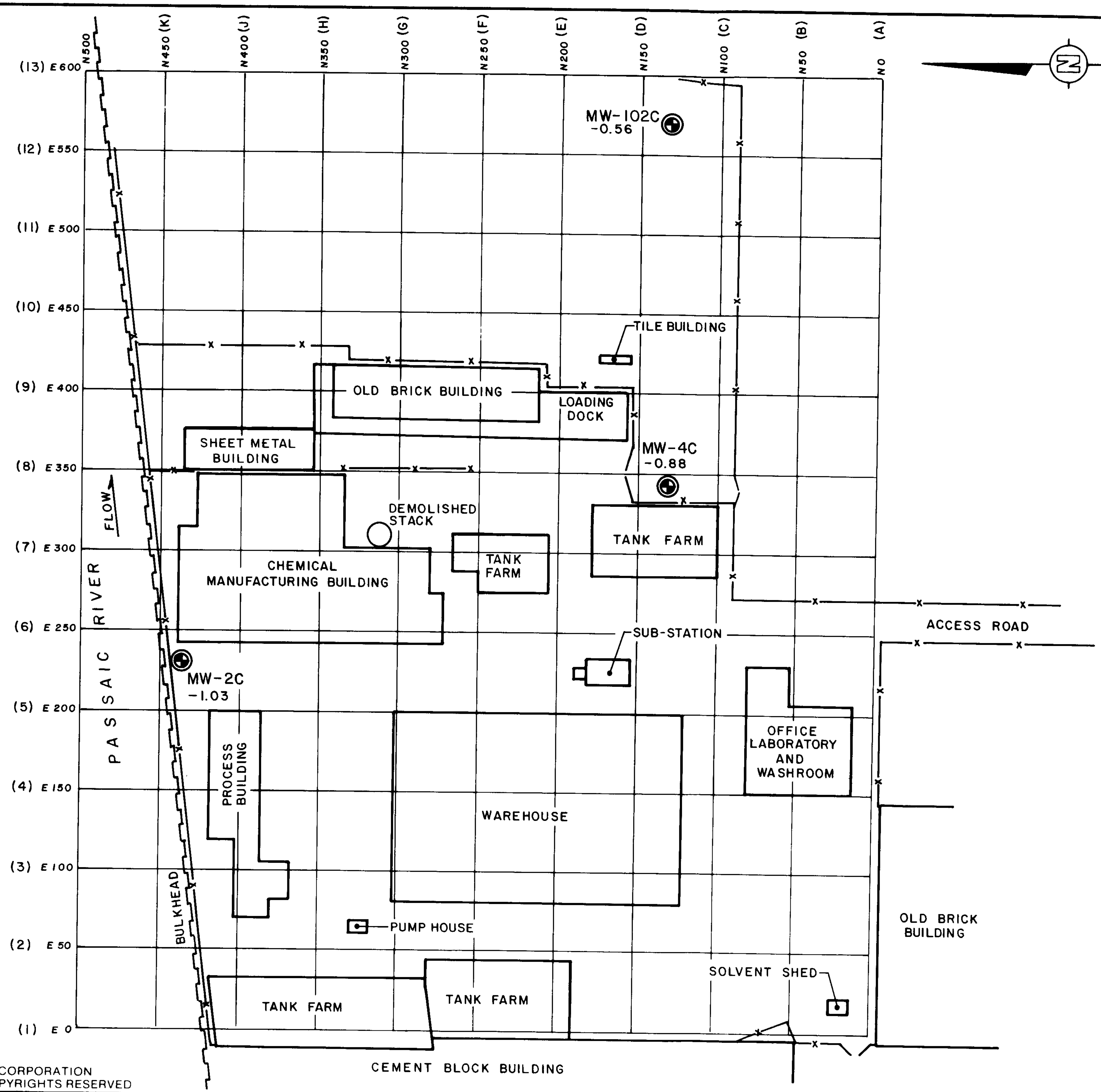
DRAWN BY	RW	CHECKED BY	[illegible]	[illegible]	DRAWING NUMBER	846733-B11
	12-27-85	APPROVED BY	[illegible]	[illegible]		

65360

DEP\DA0100191



LEGEND

MW-4C -0.88 LOWER INTERMEDIATE DEPTH MONITORING WELL AND WATER LEVEL EL.

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.6.1-13

WATER LEVELS MEASURED IN LOWER INTERMEDIATE "C" WELLS ON JULY 3, 1985

80 AND 120 LISTER AVENUE

PREPARED FOR

DIAMOND SHAMROCK

DALLAS, TEXAS

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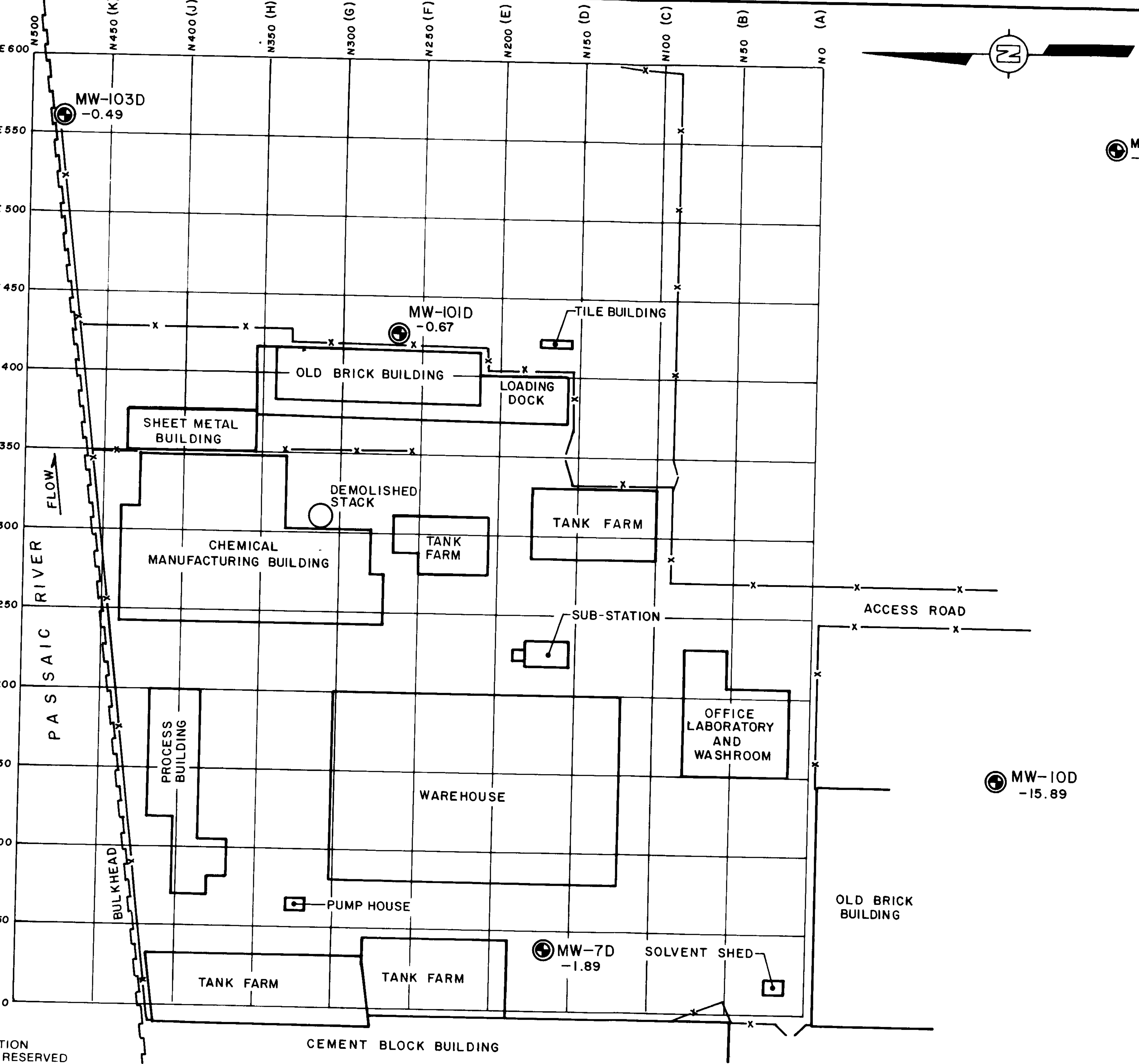
DRAWN BY	RW	12-27-85	CHECKED BY	JAD	[illegible]	DRAWING NUMBER	846733-B12
			APPROVED BY	JAD	2-13-[illegible]		

65360

Do Not Scale This Drawing



SITE GRID SYSTEM (TYP.)

LEGEND

MW-7D -1.89 DEEP DEPTH MONITORING WELL AND WATER LEVEL EL.

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.6.1-14

WATER LEVELS MEASURED IN DEEP "D" WELLS ON JULY 3, 1985

80 AND 120 LISTER AVENUE

PREPARED FOR

DIAMOND SHAMROCK

DALLAS, TEXAS

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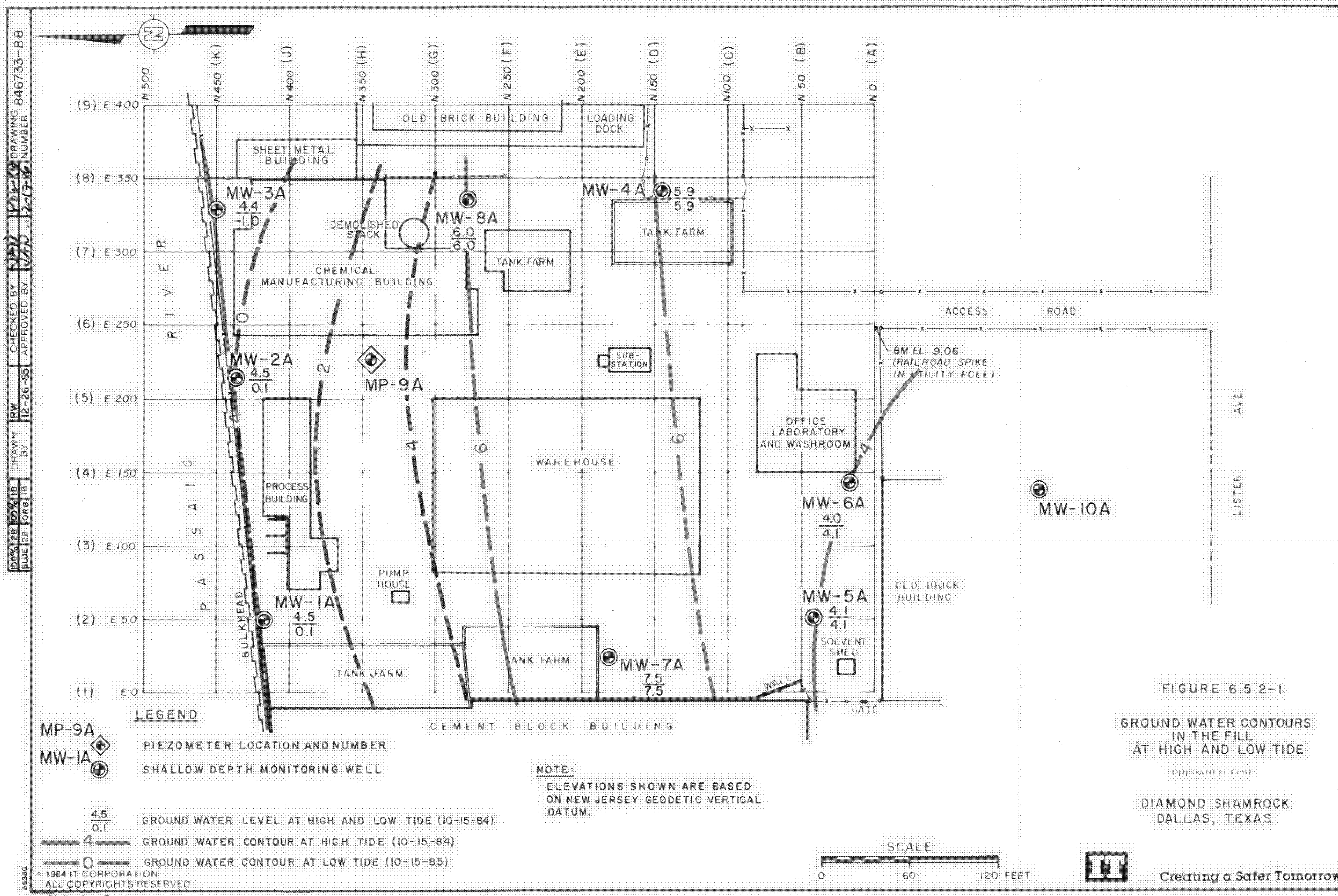
DRAWN BY	RW	CHECKED BY	[signature] 1-27-86	DRAWING NUMBER	846733-B13
	12-27-85	APPROVED BY	[signature] 2-13-86		

65360

DEP\DA0100193



DEP\DA0100194

APPENDIX
A

APPENDIX A

(NO ADDITIONAL INFORMATION)

APPENDIX
B

APPENDIX B

(BORING AND MONITORING WELL LOGS)

BORING LOG

B-1

SHEET 1 OF 2

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/14-17/85

B-2B

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.1' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION: USC	DESCRIPTION: BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose to medium dense, gray-brown, poorly graded, Sandy, Silty FILL with metal, wood, glass	Gray brown coarse to fine GRAVEL and, coarse to fine Sand, and trace(-) Silt. Fill: metal, wood, and pipe	Boring advanced with 12" steel casing driven with 1000 lb. hammer
				Becoming medium dense and brown with brick, glass and rubble	Dark brown coarse to fine SAND, trace Silt, some coarse to fine Gravel. Fill: brick.	
					Brown coarse to fine SAND, some(-) Silt, some medium to fine Gravel. Fill: brick fragments.	
5				Becoming loose to medium dense, silt content increasing, with ballast, wood and brick fragments	Brown coarse to fine SAND, some(+) Silt, medium to fine Gravel. Fill: brick fragments.	
				Becoming loose	Dark gray SILT trace, coarse to fine Sand, trace medium to fine Gravel. Fill.	
				Becoming dense	Brown coarse to fine SAND, trace(+) Silt, some coarse to fine Gravel. Fill: brick fragments.	
				Becoming very dense and gravelly	Dark gray coarse to fine SAND, trace(-) Silt, some Gravel. Fill: ballast.	
10				Becoming dark gray and sandy		
				Becoming dense	Dark gray coarse to fine SAND, and Silt. Fill: chunks of coal.	
				Becoming loose		
15				Very loose, dark gray, organic, low plastic Clayey SILT with lenses of medium grained sand	Dark gray SILT some (-), medium to fine Sand, lenses of Sand.	12" steel casing set at 15.5'. Boring continued with 12" OD HSA
					Gray soft SILT little (+), medium to fine Sand; decreasing Sand content with depth.	8" steel PVC casing set at 18.5'. Boring continued with 6" nominal steel casing driven with 800 lb. hammer.
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100199

BORING LOG

SHEET 2 OF 2

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-

DATE 6/14-17/85

B-2B

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.1' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20	S	11/18	9 8 9	Firm, black, medium to fine grained SILT and SAND	Black medium (+) to fine SAND and SILT.	
25	S	10/18	29 27 25	Dense, black, fine to medium grained Silty SAND	Black medium (+) to fine SAND, trace Silt	
30	S	6/18	8 7 5	Medium dense, black, medium to fine grained SAND with trace of fine gravel or coarse sand	Black medium (+) to fine SAND, trace Silt, trace fine Gravel, trace coarse Sand.	
35	S	4/18	3 7 10			Bottom of Boring 36.5' MW-2B installed at 34.2'
40						

Note:

Depth	IT Sample #
20.0'-21.5'	4282
25.0'-26.5'	4283
30.0'-31.5'	4284
35.0'-36.5'	4285

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

BORING LOG

B-3

SHEET 1 OF 4

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/14-17/85

B-2C

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods.

SURFACE ELEVATION 7.9' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION: USC	DESCRIPTION: BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose to medium dense, gray brown, poorly graded, Sandy, Silty FILL with metal, wood, glass	Gray brown coarse to fine GRAVEL and, coarse to fine Sand, and trace(-) Silt. Fill: metal, wood, and pipe.	Boring advanced with 12" steel casing driven with 1000 lb. hammer
				Becoming medium dense and brown with brick, glass and rubble	Dark brown coarse to fine SAND, trace Silt, some coarse to fine Gravel. Fill: brick.	
					Brown coarse to fine SAND, some(-) Silt, some medium to fine Gravel. Fill: brick fragments.	
5				Becoming loose to medium dense, silt content increasing, with ballast, wood and brick fragments	Brown coarse to fine SAND, some(+) Silt, medium to fine Gravel. Fill: brick fragments.	
				Becoming loose	Dark gray SILT trace, coarse to fine Sand, trace medium to fine Gravel. Fill.	
				Becoming dense	Brown coarse to fine SAND, trace(+) Silt, some coarse to fine Gravel. Fill: brick fragments.	
10				Becoming very dense and gravelly	Dark gray coarse to fine SAND, trace(-) Silt, some Gravel. Fill: ballast.	
				Becoming dark gray and sandy		
				Becoming dense	Dark gray coarse to fine SAND, and Silt. Fill: chunks of coal.	
				Becoming loose		
15				Very loose, dark gray, organic, low plastic Clayey SILT with thin lenses of medium grained sand	Dark gray SILT some (-), medium to fine Sand, lenses of Sand.	12" steel casing set at 15.5'. Boring continued with 12" OD HSA.
					Gray soft SILT little (+), medium to fine Sand; decreasing Sand content with depth.	8" steel PVC casing set at 18.5'. Boring continued with 6" nominal steel casing driven with 800 lb. hammer
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

BORING LOG

B-4

SHEET 2 OF 4

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-24/25

DATE 6/14-17/85

B-2C

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods.

SURFACE ELEVATION 7.9' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20				Medium dense, black, medium to fine grained SILT and SAND	Black medium (+) to fine SAND and SILT.	
25				Dense, black, fine to medium grained Silty SAND	Black medium (+) to fine SAND, trace Silt.	
30				Medium dense, black, medium to fine grained SAND with trace of fine gravel and coarse sand.	Black medium (+) to fine SAND, trace Silt, trace fine Gravel, trace coarse Sand.	
35						
40						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100202

BORING LOG

B-5

SHEET 3 OF 4

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/14-17/85

B-2C

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.9' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
40				SAME: Medium dense, black, medium to fine grained SAND with trace of fine gravel and coarse sand	SAME: Black medium (+) to fine SAND, trace Silt, trace coarse Sand.	Sand pushed up into 6" casing and prevented any sampling effort at this depth. 3 attempts made for sample.
45	S	4/18	10 12 14	Medium dense, red-brown, medium to fine grained, Silty SAND with a trace of clay	Red brown medium (+) to fine SAND, trace Silt, trace Clay.	
50	S	9/18	8 10 14	Medium dense, red-brown, coarse to fine grained Silty SAND with a little medium to fine gravel and a trace of clay.	Red brown coarse to medium (+) to fine SAND, little medium to fine (+) Gravel, trace Silt, trace (-) Clay.	
55	S	6/18	19 25 26	Very dense, red-brown, medium to fine grained Silty SAND with a trace of clay	Red brown medium to fine (+) SAND, trace Silt, trace (-) Clay.	
60						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100203

BORING LOG

SHEET 4 OF 4 B-6

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/14-17/85

B-2C

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.9' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
60	S	10/18	19 21 25	Dense, red-brown, Clayey SILT with a trace of fine grained sand	Red brown SILT trace (+), fine Sand, trace (-) Clay.	
						Bottom of Boring 61'.5
				Note:		MW-2C installed at 60.0'
65						
70						

Depth	IT Sample #
40.0'-41.5'	4286
45.0'-46.5'	4287
55.0'-56.5'	4288
60.0'-61.5'	4294

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100204

BORING LOG

B-7

SHEET 1 OF 2

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6-18-85

B-4B

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.6' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Medium dense, gray, poorly graded, Gravel FILL with some silt and oil film	Gray coarse GRAVEL some Silt. Fill: Gravel with oil film	Boring advanced with 12" steel casing driven with 1000 lb. hammer
				Becoming very dense, with trace of sand and rubble	Gray coarse GRAVEL some, coarse to fine Sand. Fill: Gravel with oil film	
				Becoming loose to medium dense	Black coarse to fine SAND, trace(+) Silt, trace(+) coarse to fine Gravel. Fill: Wood fragments	
				Becoming very loose to loose, with wood fragments		
5				Becoming loose, black to dark gray with ashes, porcelain and glass	Black to dark gray medium to coarse SAND, some (-) Silt. Fill: Ashes, porcelain, and glass.	
				Very loose, brown, low plastic Organic SILT with some peat	Brown organic SILT and PEAT	12" steel casing set at 7.0'. Boring continued with 12" HSA
10				Becoming brown to gray with roots and stems	Brown to gray organic SILT with roots and stems	
15				Loose to medium dense, gray, poorly graded, Silty SAND	Gray coarse to fine SAND, little(-) Gravel.	8" PVC casing set at 15.5'. Boring cont. with 6" nominal steel casing driven with 800 lb. hammer.
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

DEP\DA0100205

BORING LOG

SHEET 2 OF 2 B-8

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6-18-85

B-4B

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.6' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20	S	15/18	9 14 9	Medium dense, black, coarse to fine grained Silty SAND with trace of clay	Black coarse to medium(+) to fine SAND, little Silt, trace(-) Clay.	
25	S	2/18	13 8 6	Medium dense, blackish brown coarse to fine grained Silty SAND with a trace of fine gravel	Black brown coarse to medium(+) to fine SAND, trace Silt, trace(-) fine Gravel.	
30	S	16/18	30 41 33	Very dense, brown, medium to fine grained Silty GRAVEL with some coarse to fine-grained sand	Brown medium to fine(+) GRAVEL some, coarse to medium(+) to fine Sand, trace Silt.	
35	S	6/18	13 21 23	Dense, red brown, coarse to fine grained Clayey SAND with a little medium to fine gravel	Red brown coarse to medium (+) to fine SAND, little medium to fine(+) Gravel, trace Clay.	Bottom of boring 36.5' MW-4B installed at 35.0'
40						

Note:

Depth	IT Sample #
20.0'-21.5'	4334
25.0'-26.5'	4335
30.0'-31.5'	4336
35.0'-36.5'	4337

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100206

BORING LOG

SHEET 1 OF 3

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6-19-85

B-4C

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.8' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Medium dense, gray, poorly graded, Gravel FILL with some silt and oil film. Becoming very dense, with trace of sand and rubble. Becoming loose to medium dense. Becoming very loose to loose, with wood fragments	Gray coarse GRAVEL, some Silt. Fill: Gravel with oil film. Gray coarse GRAVEL some, coarse to fine Sand. Fill: Gravel with oil film. Black coarse to fine SAND, trace(+) Silt, trace(+) coarse to fine Gravel. Fill: Wood fragments.	Boring advanced with 12" steel casing driven with 1000 lb. hammer
5				Becoming loose, black to dark gray with ashes, porcelain and glass	Black to dark gray medium to coarse SAND, some (-) Silt. Fill: Ashes, porcelain, and glass.	
				Very loose, brown, low plastic Organic SILT with some peat	Brown organic SILT and PEAT.	12" steel casing set at 7.0'. Boring continued with 12" HSA
10				Becoming brown to gray with roots and stems	Brown to gray organic SILT with roots and stems.	
15				Loose to medium dense, gray, poorly graded, Silty SAND	Gray coarse to fine SAND, little(-) Gravel.	8" PVC casing set at 15.5'. Boring cont. with 6" nominal steel casing driven with 800 lb. hammer.
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

BORING LOG

SHEET 2 OF 3

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6-19-85

B-4C

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.8' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20				Medium dense, black, coarse to fine grained Silty SAND with trace of clay	Black coarse to medium(+) to fine SAND, little Silt, trace(-) Clay.	
25				Medium dense, blackish brown, coarse to fine grained Silty SAND with a trace of fine gravel	Black brown coarse to medium(+) to fine SAND, trace Silt, trace(-) fine Gravel.	
30				Very dense, brown, medium to fine grained Silty GRAVEL with some coarse to fine grained sand	Brown medium to fine(+) GRAVEL some, coarse to medium(+) to fine Sand, trace Silt.	
35				Dense, red brown, coarse to fine grained Clayey SAND with a little medium to fine gravel	Red brown coarse to medium (+) to fine SAND, little medium to fine(+) Gravel, trace Clay.	
40						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

BORING LOG

SHEET 3 OF 3 B-11

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6-19-85

RIG CME-55

B-4C

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.8' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
40	S	14/18	7 9 9	Medium dense, red brown to black, coarse to fine grained Silty SAND	Red brown to black coarse to medium(+) to fine SAND, trace Silt.	
45	S	18/18	7 13 31	Dense, red brown, Clayey SILT with a trace of fine grained sand	Red brown SILT trace(-), fine Sand, trace Clay.	Bottom of boring 46.5' MW-4C installed at 45.0'
50						
55						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

DEP\DA0100209

BORING LOG

B-12

SHEET 1 OF 2

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6-4-85

RIG CME-55

B-7B

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.7' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	REC	RESIST	DESCRIPTION: USC	DESCRIPTION: BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose to medium dense, brown, poorly graded Sand FILL with brick fragments	Brown SAND, some Organic material concentrated in upper 2". Fill: brick fragments.	Boring advanced with 12" steel casing driven with 1000 lb. hammer
				Becoming black, wet, with with wood and gravel	Black coarse to fine SAND, some Silt, little(-) medium to fine Gravel. Fill: organic material such as timber fragments.	
				Becoming loose, with silt and organic matter		
				Becoming very loose to loose with silt content increasing	Dark gray SILT, trace organic material. Fill.	
5				Becoming loose with glass, gravel content increasing	Dark gray SILT, some coarse to fine Gravel. Fill: glass.	
				Loose to very loose, brown, low plastic Organic SILT with trace of clay	Brown organic SILT and PEAT.	
					Brown to gray organic SILT little(+) organic material	12" steel casing set at 9.8'. Boring continued with 12" HSA
10				With roots; clay content increasing		
				Becoming dark gray	Dark gray organic SILT, trace(+) organic material	
15					Dark gray organic SILT little, medium to fine Sand.	
						8" PVC set at 17.5' Boring continued with 6" nominal steel casing driven with 800 lb. hammer
				Loose, dark gray, fine grained, poorly graded silty SAND	Light gray coarse to fine SAND, some(-) Silt.	
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

DEP\DA0100210

BORING LOG

B-13

SHEET 2 OF 2
PROJECT NO. 85C7782-30
DATE 6-4-85
RIG CME-55
WATER ENTERS Not determined due to drilling methods

PROJECT NAME 80 LISTER AVENUE

B-7B

PROJECT LOCATION Newark, New Jersey
LOGGED BY Moore/Fessler DRILLED BY Empire Soils
SURFACE ELEVATION 7.7' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	REC	RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20						
	S	5/18	5 6 3	Loose, variegated, very fine to medium grained Silty SAND with trace of clay	Variegated very fine to fine(+) to medium SAND, some Silt, trace(-) Clay	
25	S	10/18	3 4 7	Medium dense, brown, very fine to medium grained Silty SAND with some coarse to very coarse grained sand and trace of clay.	Brown very fine to medium SAND, some(-) coarse to very coarse Sand and Silt, trace Clay	
30	S	10.5/18	2 10 23	Very dense, medium gray, very fine to fine grained Silty SAND with trace of clay and fine gravel	Medium gray very fine to fine SAND, some Silt, trace Clay, trace(-) fine Gravel.	NOTE: Depth / IT Sample No.: 22.0'-23.5' 4128; 25.0'-26.5' 4129; 30.0'-31.5' 4130; 35.0'-36.5' 4131
35	S	11.5/18	7 10 11	Medium dense, red brown, fine to very coarse grained Silty SAND and fine to coarse GRAVEL with occasional cobbles	Red brown fine to very coarse SAND and fine to coarse GRAVEL, some(-) Silt, trace(+) Cobbles	Sample #303 IT Corp #4131
						Bottom of Boring 36.5'
40						MW-7B installed at 35.0'

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

DEP\DA0100211

BORING LOG

B-14

SHEET 1 OF 5

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/26/85 to 6/28/85

B-7D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.4' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose to medium dense, brown, poorly graded Sand FILL with brick fragments Becoming black, wet, with with wood and gravel Becoming loose, with silt and organic matter Becoming very loose to loose with silt content increasing Becoming loose with glass, gravel content increasing	Brown SAND, some Organic material concentrated in upper 2". Fill: brick fragments. Black coarse to fine SAND, some Silt, little(-) medium to fine Gravel. Fill: organic material such as timber fragments. Dark gray SILT, trace organic material. Fill. Dark gray SILT, some coarse to fine Gravel. Fill: glass.	Boring advanced with 12" steel casing driven with 1000 lb. hammer
5						
				Loose to very loose, brown, low plastic Organic SILT with trace of clay With roots; clay content increasing	Brown organic SILT and PEAT. Brown to gray organic SILT, little(+) organic material	
10						12" steel casing set at 9.8'. Boring continued with 12" OD HSA.
				Becoming dark gray	Dark gray organic SILT, trace(+) organic material	
15					Dark gray organic SILT little, medium to fine Sand.	
				Loose, dark gray, fine grained, poorly graded, Silty SAND	Light gray coarse to fine SAND, some(-) Silt.	8" PVC casing set at 17.5'. Boring continued with 6" nominal steel casing driven with 800 lb hammer.
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

BORING LOG

SHEET 2 OF 5

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/26/85 - 6/28/85

B-7D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.4' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20						
				Loose, variegated, very fine to medium grained Silty SAND with trace of clay	Variegated very fine to fine(+) to medium SAND, some Silt, trace(-) Clay.	
25				Medium dense, brown, very fine to medium grained Silty SAND with some coarse to very coarse grained sand and trace of clay	Brown very fine to medium SAND, some(-) coarse to very coarse Sand and Silt, trace Clay.	
30				Very dense, medium gray, very fine to fine grained Silty SAND with trace of clay and fine gravel	Medium gray very fine to fine SAND, some Silt, trace Clay, trace(-) fine Gravel.	
35				Medium dense, red brown, fine to very coarse grained Silty SAND and fine to coarse GRAVEL with occasional cobbles	Red brown fine to very coarse SAND and fine to coarse GRAVEL, some(-) Silt, trace(+) Cobbles	
40						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

BORING LOG

B-16

SHEET 3 OF 5

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/26/85 - 6/28/85

B-7D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.4' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
40	S	0/18	-	SAME: Medium dense, red brown, fine to very coarse grained Silty SAND and fine to coarse GRAVEL with occasional cobbles	SAME: Red brown fine to very coarse SAND and fine to coarse GRAVEL, some(-) Silt, trace (+) Cobbles.	No sample was retained due to sand blowing into the casing. 3 attempts were made to recover a sample.
45	S	6/18	11 78 67	Dense, red brown, Clayey SILT with a trace of well-rounded medium to fine gravel	Red brown SILT, trace Clay, trace (-) medium to fine Gravel.	
50	S	14/18	27 38 24		Red brown SILT, trace Clay.	
55	S	15/18	20 25 24		Red brown SILT, trace (+) Clay, trace medium to fine Gravel.	
60						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100214

BORING LOG

SHEET 4 OF 5

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/26/85 - 6/28/85

B-7D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.4' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
60	S	18/18	17 30 24	SAME: Dense, red brown, Clayey SILT with a trace of well rounded medium to fine gravel	SAME: Red Brown SILT, trace (+) Clay, trace medium to fine Gravel.	
65	S	18/18	44 28 45			
70	S	18/18	20 22 22	Becoming mixed with medium to fine grained SAND	Red brown SILT some, medium to fine (+) Sand.	
75	S	18/18	34 38 56	Very dense, red brown, coarse to fine-grained Silty SAND with a trace of clay and fine gravel	Red brown coarse to fine SAND, little (-) Silt, trace Clay, trace fine Gravel.	Note: Sample graded downward from fine Silt and Clay to a coarse to medium grained Sand with a trace of fine Gravel Sample displayed alternating layers of Clay, Silt, and Sand.
80						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

BORING LOG

B-18

SHEET 5 OF 5

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/26/85-6/28/85

B-7D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling method

SURFACE ELEVATION 8.4' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION: USC	DESCRIPTION: BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
80	S	18/18	48 48 45	Very dense, red-brown, medium to fine grained Sandy GRAVEL with a trace of silt and clay	Red brown medium to fine GRAVEL little (-), coarse to fine Sand, trace Silt, trace (-) Clay.	
85	S	15/15	37 101 121/3"	Very dense, red-brown, medium to mostly fine grained Silty SAND with a trace of clay	Red-brown medium to fine SAND, trace Silt, trace(-) Clay.	--
90	S	14/18	41 39 30	Very dense, red-brown, medium to fine grained Silty SAND	Red-brown medium to fine SAND, trace Silt.	
				SANDSTONE: Hard, red-brown	Red brown SANDSTONE	
95						Bottom of Boring 96.2'
						MW-7D installed at 93.1'.

Note:

Depth	IT Sample Number	Depth	IT Sample Number
45.0'-46.5'	4411	70.0'-71.5'	4422
50.0'-51.5'	4412	75.0'-76.5'	4423
55.0'-56.5'	4413	80.0'-81.5'	4424
60.0'-61.5'	4414	85.0'-86.5'	4425
65.0'-66.5'	4415	90.0'-91.5'	4426

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100216

BORING LOG

B-19

SHEET 1 OF 5

PROJECT NAME 80 LISTER AVENUE

PROJECT NO 85C7782-30

DATE 4/18 - 5/4/85

B-10D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.5' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose to medium dense, brown, Sand, Gravel FILL with clayey silt and debris	Brown fine GRAVEL and, coarse to fine(+) Sand, some Clayey Silt. Fill. Brown and gray fine GRAVEL and, coarse to fine Sand, and Clayey Silt. Fill.	Boring advanced with 12" steel casing to 12'6"
				Becoming brown to black, cinders with sand, gravel content decreasing	Dark brown and black CINDERS some, coarse to fine (+) Sand, and Silt, trace(-) fine Gravel. Fill.	
				Becoming very loose	Black to dark gray fine SAND, and Clayey Silt. Fill	
				Sand content increasing		
5				Soft, black to dark gray, organic Clayey Silt FILL with some fine sand, and trace wood fragments	Black to dark gray organic Clayey SILT and, fine Sand. Fill: wood fragments.	
				Very loose, black, Silty Sand FILL with some clayey silt and cinders	Black fine SAND, and Clayey SILT. Fill: cinders.	
				Becoming medium dense, black to brown with trace gravel		
10				Becoming dense, with some shale fragments	Brown medium to fine(+) SAND, and Silt, some medium to fine(+) Gravel. Fill.	
				Dense, dk.brown, Sandy Gravel FILL with some silt	Dark brown medium(+) to fine GRAVEL and, coarse(+) to fine Sand, some Silt. Fill.	
				Soft, gray, organic Silty CLAY with trace shell fragments in occasional thin partings	Gray organic Silty CLAY trace(-), fine Sand. Shell fragments.	Boring continued with 12" OD HSA
15					Gray organic Silty CLAY trace(+), medium to fine(+) Sand, trace(+) cement grout fragments, trace(-) shells.	
				With trace plant fibers (peat) and wood fragments	Gray organic Silty CLAY, trace(+) very fibrous peat. Wood fragments.	
					Gray organic Silty CLAY trace(+), fine Sand, trace (+) Peat. Shell fragments.	
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100217

BORING LOG

B-20

SHEET 2 OF 5

PROJECT NAME 80 LISTER AVENUE

PROJECT NO. 85C7782-30

B-10D

DATE 4/18 to 5/4/85

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 8.5' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20				SAME: Soft, gray, organic Silty CLAY with trace fine grained sand	Gray organic Silty CLAY trace(+), fine Sand.	8" PVC casing installed
				Loose, dark gray, fine grained Silty SAND, with trace of clay and plant fibers Becoming medium dense	Dark gray fine SAND, and Silt, trace Clay. Vegetation fibers. Dark gray to brown fine SAND, and Silt.	Boring cont. by driving 6" steel casing with 800 lb. hammer
25						
30						
35						
				Becoming dense and red brown	Red brown medium to fine SAND, trace Silt, trace(-) Clay.	140 lb. hammer used for blow counts.
40	S	10/18	13 24 27			

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100218

BORING LOG

SHEET 3 OF 5

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

RIG CME-55

WATER ENTERS Not determined due to drilling methods

PROJECT NAME 80 LISTER AVENUE

B-10D

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

SURFACE ELEVATION 8.5' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	REC	RESIST	DESCRIPTION: USC	DESCRIPTION: BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
40				SAME: Dense, red brown, medium to fine grained Silty SAND with a trace of clay	SAME: Red brown medium to fine SAND, trace Silt, trace (-) Clay.	
45	S	8/18	41 15 31	Dense, reddish-brown, Clayey SAND, with trace of rock fragments	Red brown medium to fine (+) SAND, little (-) Clay, trace rock fragments	
50	S	11/18	56 60 66	Hard, reddish-brown, low plastic Silty CLAY with trace of fine-grained sand	Red brown CLAY trace, fine Sand, little (-) Silt.	
	S	13/18	20 27 33	Hard, reddish-brown, low plastic Sandy CLAY	Red brown CLAY little, medium to fine (+) Sand, trace Silt.	Changed from 140 lb. hammer to 300 lb. hammer
55	S	8/18	7 11 29	Hard, red-brown, low plastic CLAY and fine grained SAND with trace of silt	Red brown CLAY and, fine SAND, trace (+) Silt.	
60						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO.

DEP\DA0100219

BORING LOG

SHEET 4 OF 5

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

RIG CME-55

WATER ENTERS Not determined due to drilling methods

PROJECT NAME 80 LISTER AVENUE

B-10D

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

SURFACE ELEVATION 8.5' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION USC	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
60	S	10/18	15 32 41	Dense, reddish-brown, low to medium plastic Clayey SILT with trace of fine grained sand	Red brown SILT trace (-), fine Sand, trace (+) Clay.	
	S	8/18	5 11 17	Medium-dense, reddish-brown fine-grained SAND with some silt and clay	Red brown SILT some, fine Sand, trace Clay.	
65	S	7/18	15 12 10	Medium dense, reddish-brown fine-grained SAND with some silt and clay	Red brown fine SAND, some Silt, some Clay.	Transitional zone between cohesive layer and sand layer Also change sampling intervals from 2'6" to 5' depths
				Clay content decreasing		
70	S	13/18	9 11 23		Red brown medium to fine (+) SAND, trace Silt.	
75	S	9/18	10 9 8			Loss of drilling fluid at a fast rate
80						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

BORING LOG

SHEET 5 OF 5

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

RIG CME-55

WATER ENTERS Not determined due to drilling methods

PROJECT NAME 80 LISTER AVENUE

B-10D

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

SURFACE ELEVATION 8.5' ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
80	S	6/18	26 16 52	Medium dense, reddish-brown coarse SAND, with some fine gravel and medium to fine grained sand and trace of silt	Red brown coarse SAND, some fine Gravel, some medium to fine Sand, trace Silt.	
85				SANDSTONE: Reddish-brown, coarse to fine grained	Red brown coarse to fine SANDSTONE.	Casing advanced to 83.8' when bedrock was encountered Rotary drill bit stopped at 89.0' Rock coring was attempted but was unsuccessful. Split spoon was obtained from 87.5 -88.3'.
	S	10/10	74 100/4"	SHALE: Reddish-brown, clayey	Red brown Clayey SHALE.	Bottom of Boring 88.3'
90						Grout was used to backfill the boring to a depth of 83.8'
						MW-10D installed at 83.8'
95						
100						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. ______

APPENDIX ___

MONITORING WELL REPORTS

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-2B

Project 80 Lister Avenue

Location Newark, N.J.

Project No 85C7782-30 Installed By Empire Soils Inv.

Date 6/13/85 Time 1:00 p.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan.

LOG OF BORING AND MONITORING WELL

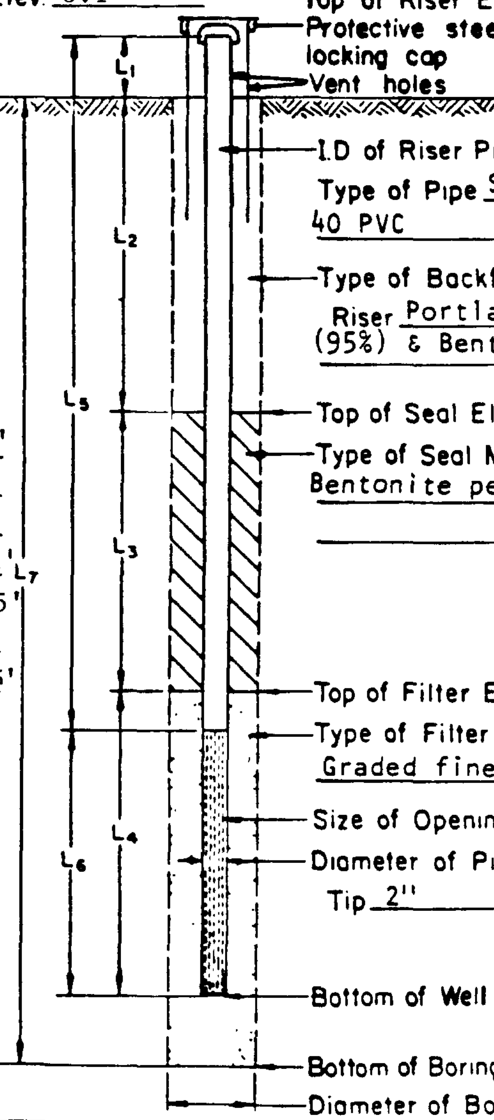
BORING

Depth in ft.	Description	Symbol
	See boring log B-2B for detailed soil description	

Type of Well Groundwater sampling

Ground Elev. 8.1'

Top of Riser Elev 11.4'



- Protective steel casing with locking cap
- Vent holes
- I.D of Riser Pipe 2"
- Type of Pipe Schedule 40 PVC
- Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)
- Top of Seal Elev -10.9'
- Type of Seal Material Bentonite pellets
- Top of Filter Elev -11.9'
- Type of Filter Material Graded fine sand
- Size of Openings 0.010"
- Diameter of Piezometer Tip 2"
- Bottom of Well Elev -26.1'
- Bottom of Boring Elev -28.4'
- Diameter of Boring 6"

L_1 = 3.3'
L_2 = 19'
L_3 = 1'
L_4 = 14.2'
L_5 = 27.5'
L_6 = 10'
L_7 = 36.5'

Remarks

Inspected By James Moore

WOODWARD - CLYDE CONSULTANTS

DEP\DA0100223

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-2C

Project 80 Lister Avenue

Location Newark, N.J.

Project No 85C7782-30 Installed By Empire Soils

Date 6/17/85 Time 3:00 p.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan.

LOG OF BORING AND MONITORING WELL

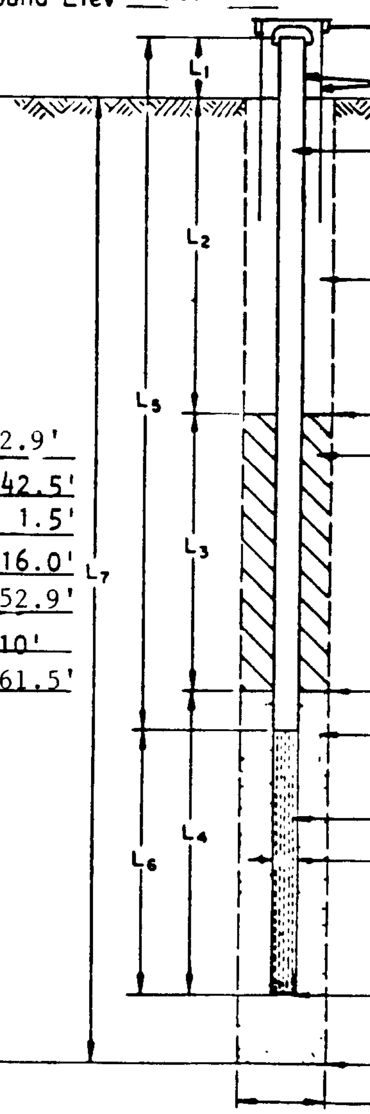
BORING

Depth in ft.	Description	Symbol
	See boring log B-2C for detailed soil description	

Type of Well Groundwater sampling

Ground Elev 7.9'

Top of Riser Elev 10.8'



Protective steel casing with locking cap

Vent holes

I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland Cement (95%) & Bentonite (5%)

Top of Seal Elev -34.6'

Type of Seal Material Bentonite pellets

L1 = 2.9'
L2 = 42.5'
L3 = 1.5'
L4 = 16.0'
L5 = 52.9'
L6 = 10'
L7 = 61.5'

Top of Filter Elev -36.1'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev -52.1'

Bottom of Boring Elev -53.6'

Diameter of Boring 6"

Remarks

Inspected By James Moore

WOODWARD – CLYDE CONSULTANTS

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-4B

Project 80 Lister Avenue | Location Newark, N.J.

Project No. 85C7782-30 | Installed By Empire Soils | Date 6/18/85 | Time 3:00 p.m.

Method of Installation Drilled with CME-55. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

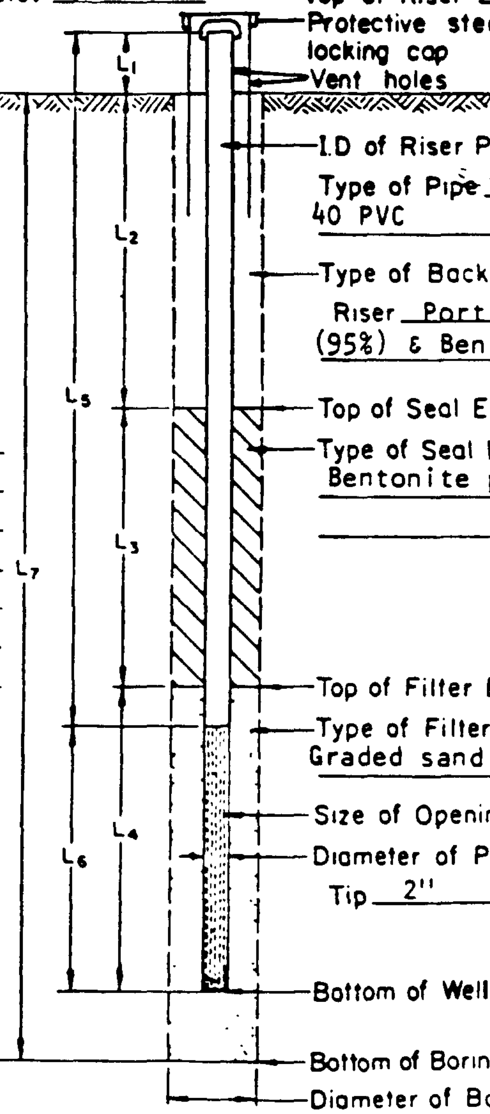
BORING

Depth in ft.	Description	Symbol
	See boring log B-4B for detailed soil description	

Type of Well Groundwater sampling

Ground Elev 7.6'

Top of Riser Elev 11.0'



Protective steel casing with locking cap

Vent holes

I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)

Top of Seal Elev -10.2'

Type of Seal Material Bentonite pellets

L1: 3.4'
L2: 17.8'
L3: 1.8'
L4: 15.3'
L5: 28.3'
L6: 10.0'
L7: 36.5'

Top of Filter Elev -12.0'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev -27.3'

Bottom of Boring Elev -28.9'

Diameter of Boring 6"

Remarks

Inspected By JT Moore

WOODWARD - CLYDE CONSULTANTS

DEP\DA0100225

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-4C

Project 80 Lister Avenue

Location Newark, N.J.

Project No 85C7782-30 Installed By Empire Soils

Date 6/20/85 Time 10:00 a.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

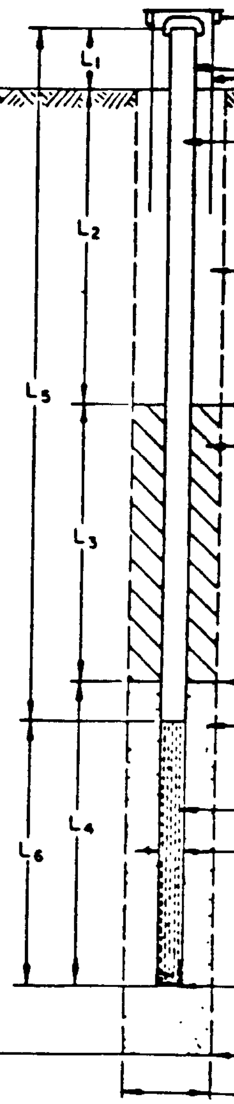
LOG OF BORING AND MONITORING WELL

BORING		
Depth in ft	Description	Symbol
	See boring lof B-4C for detailed soil description	

Type of Well Groundwater sampling

Ground Elev. 7.8'

Top of Riser Elev 11.0'



Protective steel casing with locking cap

Vent holes

I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)

Top of Seal Elev -21.0'

Type of Seal Material Bentonite pellets

L1: 3.2'
L2: 28'.8
L3: 1'
L4: 15'.2
L5: 38.2'
L6: 10'.0
L7: 46.5'

Top of Filter Elev -22.0'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev -37.2'

Bottom of Boring Elev -38.7'

Diameter of Boring

Remarks

Inspected By James Moore

WOODWARD-CLYDE CONSULTANTS

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-7B

Project 80 Lister Avenue

Location Newark, N.J.

Project No 85C7782-30 Installed By Empire Soils Date 6/1/85 Time 11:05 a.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

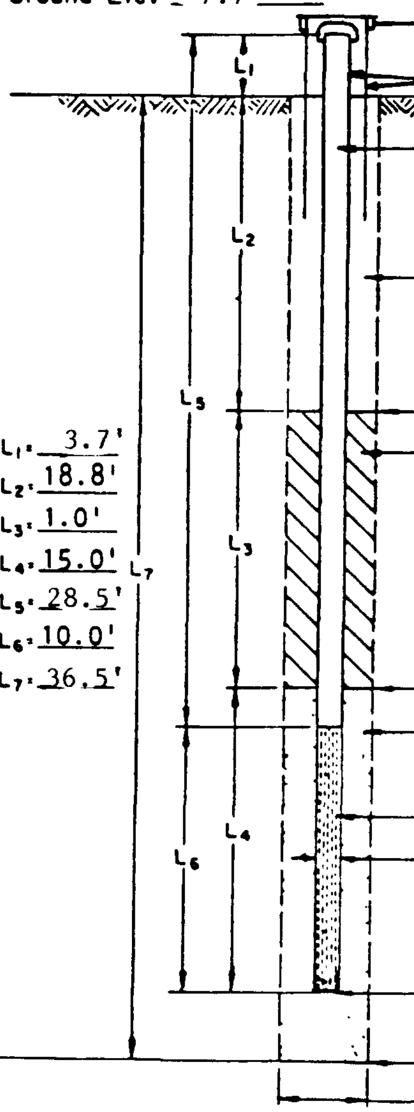
BORING

Depth in ft.	Description	Symbol
	See boring log B-7B for detailed soil description	

Type of Well Groundwater sampling

Ground Elev 7.7'

Top of Riser Elev 11.4'



Protective steel casing with locking cap

Vent holes

I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)

Top of Seal Elev -11.1'

Type of Seal Material Bentonite pellets

L_1: 3.7'
L_2: 18.8'
L_3: 1.0'
L_4: 15.0'
L_5: 28.5'
L_6: 10.0'
L_7: 36.5'

Top of Filter Elev -12.1'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev -27.1'

Bottom of Boring Elev -28.8'

Diameter of Boring 6"

Remarks

Inspected By JT Moore

WOODWARD-CLYDE CONSULTANTS

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-7D
Project 80 Lister Avenue
Location Newark, N.J.
Project No 85C7782-30 Installed By Empire Soils
Date 6/29/85 Time 4:30 p.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

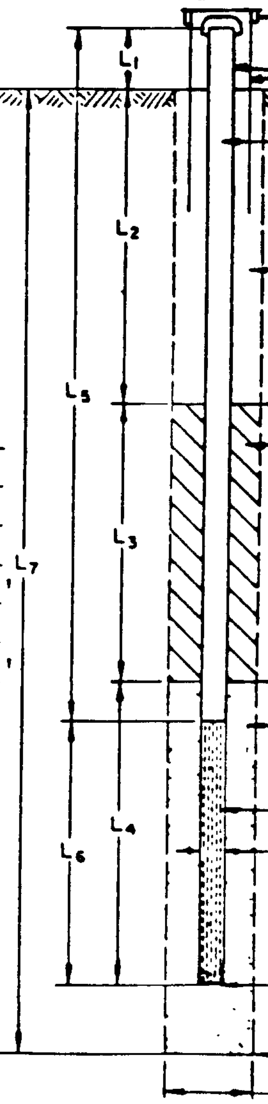
BORING

Depth in ft.	Description	Symbol
	See boring log B-7D for detailed soil description	

Type of Well Groundwater sampling

Ground Elev 8.4'

Top of Riser Elev 11.9'



Protective steel casing with locking cap

Vent holes

I.D. of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)

Top of Seal Elev -60.6'

Type of Seal Material Bentonite pellets

Top of Filter Elev -61.6'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev -76.6'

Bottom of Boring Elev -87.8'

Diameter of Boring 6"

L1 = 3.5'
L2 = 69'
L3 = 1'
L4 = 15'
L5 = 78.5'
L6 = 10'
L7 = 96.2'

Remarks

Inspected By J.T. Moore

WOODWARD-CLYDE CONSULTANTS

MONITORING WELL INSTALLATION REPORT

Project 80 Lister Avenue

Project No 85C7782-30 Installed By Empire Soils

Monitoring Well No. MW-10D

Location Newark, N.J.

Date 4/12/85 Time 3:00 p.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

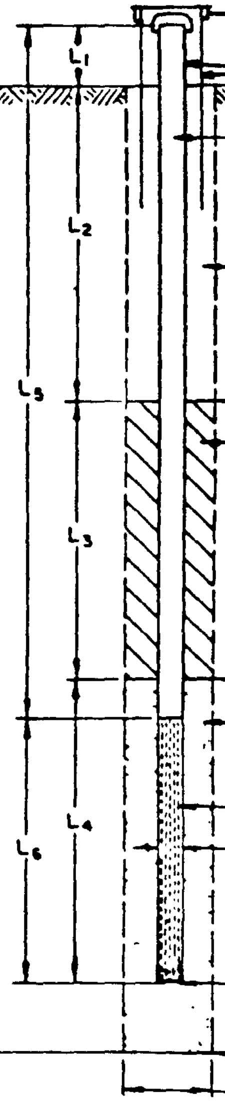
BORING

Depth in ft.	Description	Symbol
	See boring log B-10D for detailed soil description	

Type of Well Groundwater sampling

Ground Elev. 8.5'

Top of Riser Elev 10.1'



Protective steel casing with locking cap

Vent holes

I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland Cement (95%) & Bentonite (5%)

Top of Seal Elev -59.3'

Type of Seal Material Bentonite pellets

Top of Filter Elev -60.3'

Type of Filter Material Graded fine sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev -75.3'

Bottom of Boring Elev -79.8'

Diameter of Boring 6"

L_1 = 1.6'
L_2 = 67.8'
L_3 = 1.0'
L_4 = 15.0'
L_5 = 75.4'
L_6 = 10.0'
L_7 = 88.3'

Remarks

Inspected By R. Fessler/J. Moore

WOODWARD - CLYDE CONSULTANTS

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-10D

Project 80 Lister Avenue

Location Newark, N.J.

Project No 85C7782-30 Installed By Empire Soils

Date 4/12/85 Time 3:00 p.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

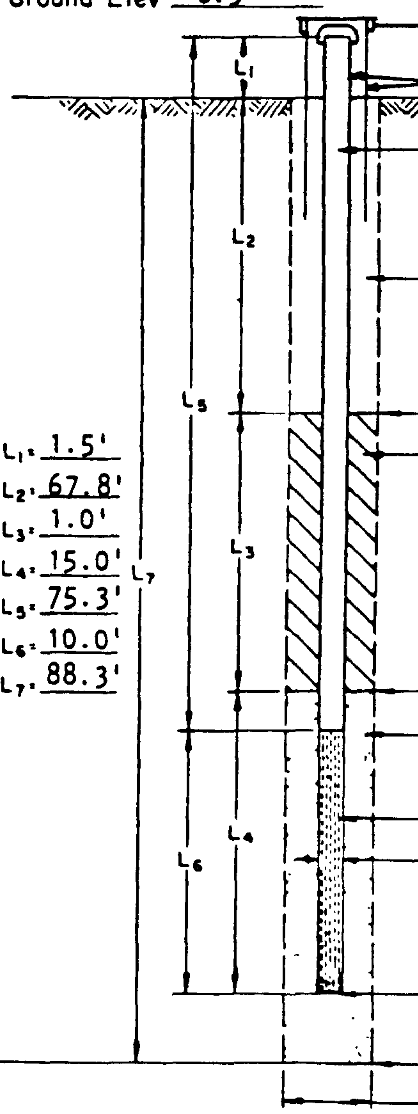
BORING

Depth in ft	Description	Symbol
	See boring log B-10D for detailed soil description	

Type of Well Groundwater sampling

Ground Elev 8.5'

Top of Riser Elev 10.0'



I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland Cement (95%) & Bentonite (5%)

Top of Seal Elev -59.3

Type of Seal Material Bentonite pellets

L_1= 1.5'
L_2= 67.8'
L_3= 1.0'
L_4= 15.0'
L_5= 75.3'
L_6= 10.0'
L_7= 88.3'

Top of Filter Elev -60.3

Type of Filter Material Graded fine sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev -75.3

Bottom of Boring Elev -79.8

Diameter of Boring 6"

Remarks

Inspected By R. Fessler/J. Moore

WOODWARD-CLYDE CONSULTANTS

DEP\DA0100230

APPENDIX
C

APPENDIX C

(FINAL DIOXIN RESULTS AND ARCHIVE LIST)

[illegible]	CLIENT #	SAM.DESC	SOFT 3
ND (0.54) ng/wipe	F002-0015-W-L	Wipe Field Blank	840905
75. ng/meter2	1100-0016-W-L	Wipe-Office/Lab-Room 1100, Main Entrance	840905
38. ng/meter2	1102-0017-W-L	Wipe-Office/Lab-Rm. 1102, Accounting	840905
100. ng/meter2	1105-0018-W-L	Wipe-Office/Lab, Rm. 1105, FLOOR, Plant Mgr.	840905
490. ng/meter2	1108-0019-W-L	Wipe-Office/Lab-Rm 1108, Wall	840905
100. ng/meter2	1107-0020-W-L	Wipe-Office/Lab-Rm 1107, Floor	840905
500. ng/meter2	1106-0021-W-L	Wipe-Office/Lab-Rm. 1106, Floor-Back foyer inside door	840905
ND (4.8 ng/wipe)	T002-0022-W-L	Wipe-Trip Blank	840905
150. ng/meter2	1204-0023-W-L	Wipe-Office/Lab-Rm 1204, Floor by back door-Lab	840905
14,000. ng/meter2	1204-0024-W-L	Wipe-Office/Lab-Rm 1204, Lab Hood, Lab	840905
10. ng/meter2	1204-0025-W-L	Wipe-Office/Lab-Rm 1204, N side of entrance, lab side	840905
1000. ng/meter2	1204-0026-W-L	Wipe-Office/Lab-Rm 1204, Lab bench near back door	840905
350. ng/meter2	1206-0027-W-L	Wipe-Office/Lab-Rm 1206, Floor-Small Lab	840905
ND (0.003 ppb)	9300-0029-H-L	DI H2O Check (Fisher)	840905
1200. ng/meter2	1205-0030-W-L	Wipe-Off/Lab-Rm1205.A/C Intake Duct-Utility	840906
98. ng/meter2	1205-0031-W-L	Wipe/Off/Lab-Rm1205,Furnace Intake-Utility Rm	840906
56. ng/meter2	1201-0032-W-L	Wipe-Off/Lab-Rm1202,Floor-Lunchroom	840906
18. ng/meter2	1202-0033-W-L	Wipe-Off/Lab. Rm1202, Radiator-Lunchroom	840906
500. ng/meter2	1116-0034-W-L	Wipe-Off/Lab-Rm 1116, Locker Room	840906
120. ng/meter2	1122-0035-W-L	Wipe-Off/Lab-Rm1122, Heater Duct-Basket Room	840906
ND (0.74 ng/wipe)	F003-0036-W-L	Wipe-Field Blank	840906
ND (0.40 ng/wipe)	T003-0037-W-L	Wipe-Trip Blank	840906
12.1 ppb	0018-0045-D-L	Drum #18, CY, white & yellow crystals	840906
ND (0.16 ppb)	F005-0048-H-L	Water: Field Blank, Chip Sampling	840906
2.0 ppb	1118-0049-C-L	Chip-Off/Lab-Rm1118,Flr under Sinkedge-Washroom	840906
3.7 ppb	1119-0050-C-L	Chip-Off/Lab Rm 1119, Floor, Slop Sink	840906
25.0 ppb	1122-0051-C-L	Chip-Off/LabRm1122,Flr undr Arch Btwn Rm1122 & 111-	840906
59.3 ppb	1122-0052-C-L	Chip-Off/Lab-Rm 1122,Flr near Drain, Basket Room	840906
61.3 ppb	1122-0053-C-L	Chip-Off/Lab-Rm1122.Flr near Backdoor-Basket Room	840906
12,200. ppb	0021-0064-D-L	Drum #21, CQ, yellow crystal powders	840906
520. ng/meter2	1122-0073-W-L	Wipe-Office/Lab-Rm 1122, windowsill, Basket Rm	840907
1100. ng/meter2	1122-0074-W-L	wipe-Office/Lab-Rm 1122, Flr near inside entrance	840907
5.0 ppb	0040-0091-D-L	Drum #40, 2344, milky liquid	840907
1400. ng/meter2	1205-0095-W-L	Wipe-Off/Lab Rm1205,Heater Interior Inlet-Utility	840906
ND (0.38 ppb)	F013-0096-H-L	Field Blank-Chip Sampling	840907
ND (0.08 ppb)	1505-0097-C-L	Chip-Off/Lab Extr-1505-S corner, E wall at roofsill	840907
ND (0.10 ppb)	1501-0098-C-L	Chip-Off/Lab Extr-1501-center, N wall at roofsil	840907
ND (0.24 ppb)	1506-0099-C-L	Chip-Off/Lab Extr-1506-center W wall,top 24",vertica	840907
24.8 ng/wipe	F014-0100-W-L	Wipe-Field Blank	840907
ND (3.2 ng/meter2)	1506-0101-W-L	Wipe-Off/Lab Extr-1506-Center of W wall at roof	840907
ND (0.41 ng/meter3)	H300-0103-T-L	IH-glass fiber filter: Personnel sample	840907
ND (0.20 ng/meter3)	H300-0104-T-L	IH glass fiber filter: Hi vol. clear area sample	840907
ND (0.27 ng/meter3)	H300-0105-T-L	IH XAD2: BACK-UP TO L0104	840907
ND (0.80 ng/sample)	F015-0106-T-L	IH glass fiber filter: Blank	840907
ND (0.18 ppb)	T006-0107-H-L	Trip Blank-Chip Sampling	840907
ND (0.63 ppb)	1505-0108-C-L	Chip-Off/Lab Extr-1505- S corner E wall, 3' to 5'	840907

RELT.INE	CLIEH #	SAM.DESC	SCRT Z
ND (0.25 ppb)	1505-0109-C-L	Chip-Off/Lab Extr-1505- S corner E wall, ground level	840907
3.3 ppb	1505-0110-C-L	Chip-Off/Lab Extr-1505-Walkway of Front Entrance	840907
0.7. ppb	1501-0111-C-L	Chip-Off/Lab Extr-1501-center of N wall, 3' to 5'	840907
1.95 ppb	1501-0112-C-L	ITAS Split of 1501-0111-C-L	840907
0.57 ppb	1501-0113-C-L	Chip-Off/Lab Extr-1501-center N wall, ground level	840907
51.0 ppb	0065-0136-D-L	Drum #65, 400 clear gold liquid	840910
25.6 ng/sample	A007-0144-A-K	Ambient Air: September 10,1984	840910
ND (0.75 ng/sample)	F016-0146-T-L	IH: XAD-2 tube Field Blank	840907
2.5 ppb	0075-0152-D-L	Drum #75, 15T, pink thick liquid	840910
ND (1.6 ng/meter3)	H300-0159-T-L	IH glass fiber filter-Personnel sample	840910
ND (1.2 ng/meter3)	H300-0160-T-L	IH-GFF/XAD: 37-Cl SAMPLE SPIKE	840910
ND (1.0 ng/meter3)	H300-0161-T-L	IH glass fiber filter-Hi vol.btwn tanks,Process bldg	840910
ND (0.09 ng/meter3)	H500-0162-T-L	IH-XAD: BACK-UP TO L0161	840910
ND (1.1 ng/sample)	F018-0163-T-L	IH glass fiber filter-Blank	840910
ND (0.5? ng/sample)	F019-0164-T-L	IH XAD-Blank	840910
ND (0.004 ppb)	T008-0165-H-L	Trip Blank-Chip Sampling	840910
ND (0.58 ppb)	1506-0166-C-L	Chip-Off/Lab Extr-1506-center W wall, 3' to 5	840910
2.4 ppb	1506-0167-C-L	Chip-Off/Lab Extr-1506-center W wall, ground level	840910
54.6 ppb	2100-0168-C-L	Chip-Warehse-Rm 2100,center of traffic area, floor	840910
48.? ppb	2109-0169-C-L	Chip-Warehse-Rm 2109-Flr, tool crib cage area	840910
121. ppb	2109-0170-C-L	Chip-Warehse-Rm 2109-Floor by traffic door	840910
192. ppb	2109-0171-C-L	Chip-Warehse-Rm 2109-Floor by warehouse door	840910
ND (0.003 ppb)	F020-0172-H-L	Field Blank-Chip Sampling	840910
ND (0.56 ng/wipe)	F021-0174-W-L	Wipe-Field Blank	840910
600. ng/meter2	2108-0176-W-L	Wipe-warehouse-Rm 2108, Floor-kitchen	840910
130. ng/meter2	2108-0177-W-L	Wipe-Warehouse-Rm 2108, Windowsill, Kitchen	840910
19,000. ng/meter2	2109-0178-W-L	Wipe-warehse-Rm 2109-Top of Light work Area, Shop	840910
3500. ng/meter2	2109-0179-W-L	Wipe-Warehse-Rm 2109-Top of bench in Shop	840910
8000. ng/meter2	2200-0180-W-L	Wipe-Warehse-Rm 2200-Top of beam in Storage area	840910
ND (2.4 ng/sample)	A007-0181-A-K	Ambient Air: September 11, 1984	840911
ND (1.9 ng/sample)	A007-0182-A-K	Ambient Air: September 12, 1984	840912
3.9 ppb	0-1-0-0186-300-M-Y	Passaic River Sediment-Station 0-1-0, 0-12"	840911
0.95 ppb	0-2-0-0187-300-M-L	Passaic River Sediment-Station 0-2-0, 0-12"	840911
ND (0.23 ppb)	0-2-0-0188-299-M-L	Passaic River Sediment-Station 0-2-0, 12-24"	840911
1.1 ppb	0-3-0-0189-300-M-Y	Passaic River Sediment-Station 0-3-0, 0-12"	840911
0.53 ppb	0-4-0-0190-300-M-L	Passaic River Sediment-Station 0-4-0, 0-12"	840911
1.8 ppb	0-4-0-0191-299-M-L	Passaic River Sediment-Station 0-4-0, 12-24"	840911
ND (0.54 ppb)	0-5-0-0192-300-M-Y	Passaic River Sediment-Station 0-5-0, 0-12"	840911
ND (0.20 ppb)	0-5-0-0193-299-M-Y	Passaic River Sediment-Station 0-5-0, 12-24"	840911
ND (0.69 ppb)	0-6-1-0196-300-M-L	Passaic River Sediment-Station 0-6-1, 0-12"	840912
0.63 ppb	0-6-1-0197-299-M-L	Passaic River Sediment-Station 0-6-1, 12-24"	840912
1.2 ppb	0-6-2-0198-300-M-L	Passaic River Sediment: Station 0-6-2, 0-12	840912
ND (0.16 ppb)	0-6-2-0199-299-M-L	Passaic River Sediment: Station 0-6-2, 12-24"	840912
ND (0.73 ppb)	0-8-2-0200-300-M-Y	Passaic River Sediment: Station 0-8-2, 0-12	840912
ND (0.43 ppb)	0-8-2-0201-299-M-Y	Passaic River Sediment: Station 0-8-2, 12-24	840912
ND (0.32 ppb)	0-8-1-0202-300-M-Y	Passaic River Sediment: Station 0-8-1, 0-12"	840912

R : I T . Z N E	: L I E N T #	: A M . D E S C	C L F T Z
1.2 ppb	0-8-1-0203-299-M-Y	Passaic River Sediment: Station 0-8-1, 12-24"	840913
0.5 ppb	0-8-0-0204-300-M-Y	Passaic River Sediment: Station 0-8-0, 0-12"	840912
10.4 ppb	0-8-0-0205-299-M-Y	Passaic River Sediment: Station 0-8-0, 12-24	840912
1.8 ppb	0-7-0-0206-300-M-L	Passaic River Sediment: Station 0-7-0, 0-12"	840912
1910. ng/meter2	2103-0217-W-L	Wipe-Warehouse-Rm 2103-Floor, Foremans Office	840910
8120. ng/meter2	2100-0218-W-L	Wipe-Warehouse-Rm 2100-Top of Flourescent	840910
ND (0.34 ng/meter3)	H300-0240-T-L	IH glass fiber filter-Personnel sample	840911
ND (1.1 ng/sample)	F024-0242-T-L	IH glass fiber filter-Field Blank	840911
12.9 ppb	0119-0255-D-L	Drum #119, CZ, dark brown liquid	840912
ND (0.10 ng/meter3)	H300-0273-T-L	IH glass fiber filter-Personnel sample	840912
ND (0.55 ng/meter3)	H300-0274-T-L	IH Personnel Sample: Drum Sampler Assistant	840912
ND (0.14 ng/meter3)	H300-0275-T-L	IH Personnel Sample: Driller (glass fiber filter)	840912
ND (0.16 ng/meter3)	H300-0276-T-L	IH glass fiber filter: Betwn tanks & Process Bldg	840912
10.5 ppb	5001-0277-C-L	Chip-Stack Flue, Soot at Furnace Entrance	840912
9.2 ppb	5002-0278-C-L	Chip-Stack, Soot from base of inside drop-out chamber	840912
1.2 ppb	5003-0279-C-L	Chip-Stack Extr- at base, 0-24" vertical	840912
0.17 ppb	6500-0280-P-L	Bulk-Solvent Shed Extr-insulating panel	540912
ND (0.37 ng/meter3)	H500-0283-T-L	IH-XAD: BACK-UP TO L0275	840912
ND (0.11 ng/sample)	F026-0284-T-L	IH Glass Fiber Filter-Field Blank	840912
ND (1.1 ng/sample)	F027-0285-T-L	IH XAD: Field Blank	840912
10.9 ppb	0-9-0-0299-300-M-Y	Passaic River Sediment: Station 0-9-0, 0-12"	840912
3.3 ppb	1-0-0-0300-300-M-Y	Passaic River Sediment: Station 1-0-0, 0-12"	840912
0.87 ppb	1-1-0-0301-300-M-Y	Passaic River Sediment: Station 1-1-0, 0-12"	840912
65.6 ppb	1-1-0-0302-299-M-L	Passaic River Sediment: Station 1-1-0, 12-24"	840912
ND (0.27 ppb)	1-1-1-0303-300-M-L	Passaic River Sediment-Station 1-1-1, 0-12"	840913
1.5 ppb	1-1-1-0304-299-M-L	Passaic River Sediment-Station 1-1-1, 12-24"	840913
3.5 ppb	1-1-2-0305-300-M-L	Passaic River Sediment-Station 1-1-2, 0-12"	840913
10.3 ppb	1-1-2-0306-299-M-L	Passaic River Sediment-Station 1-1-2, 12-24"	840913
1.7 ppb	1-2-0-0307-300-M-L	Passaic River Sediment-Station 1-2-0, 0-12"	840913
1.3 ppb	1-3-0-0308-300-M-Y	Passaic River Sediment: Station 1-3-0, 0-12"	840913
130. ppb	1-3-0-0309-299-M-Y	Passaic River Sediment: Station 1-3-0, 12-24"	840913
0.97 ppb	1-4-0-0310-300-M-L	Passaic River Sediment-Station 1-4-0, 0-12"	840913
0.94 ppb	1-5-0-0311-300-M-Y	Passaic River Sediment: Station 1-5-0, 0-12"	840913
2.0 ppb	1-6-0-0312-300-M-L	Passaic River Sediment-Station 1-6-0, 0-12"	840913
1.1 ppb	1-7-0-0313-300-M-L	Passaic River Sediment-Station 1-7-0, 0-12"	840913
1?. ng/meter2	2400-0315-W-L	Wipe-Warehouse, West Roof	840913
ND (0.57 ppb)	2506-0316-C-L	Chip West Wall at Ground Level	840913
4.4 ppb	2501-0317-C-L	Chip-Warehose N. wall at Ground Level	840913
?.1 ppb	2504-0318-C-L	Chip-Warehouse E. Wall at Ground Level	840913
10. ppb	2502-0319-C-L	Chip-Warehose S. wall at Ground Level	840913
ND (0.42 ng/wipe)	F029-0320-W-L	Field Blank Wipe	840913
?.5 ppb	0162-0346-D-L	Drum #162, CX, golden liquid	840913
ND (0.72 ppb)	0-6-0-0351-300-M-L	Passaic River Sediment-Station 0-6-0, 0-12"	840913
3.2 ppb	0-6-0-0352-299-M-L	Passaic River Sediment-Station 0-6-0, 12-24"	840913
19.7 ppb	A-3-C-0353-100-S-Y	Soil: Station A-3-C, Borehole #6, 0-6"	840913
18.8 ppb	A-3-C-0354-101-S-L	Soil: Station A-3-C, Borehole #6, 6-12"	840913

REST LNE	CLIENT #	SAM. DTSC	CCRI :
7.4 ppb	A-3-C-0355-102-S-Y	Soil: Station A-3-C, Borehole #6, 12-24'	840913
ND (0.02 ppb)	A-3-C-0362-109-S-Y	Soil: Station A-3-C, Borehole #6, 6.5-8.0	840913
25.9 ppb	0176-0364-D-L	Drum #176, 21Y, thick white paste	840914
16.0 ppb	0183-0371-D-L	Drum #183, 9Q, pink & red liquid	840914
150. ng/meter2	1206-0381-W-L	Office Lab Rm1206-wipe-Bench-Small Lab	840913
ND (0.12 ng/meter3)	H300-0382-T-L	Glass Fiber Filter: Personnel	840913
ND (0.91 ng/meter3)	H300-0383-T-L	Glass Fiber Filter Personnel	840913
ND (0.99 ng/meter3	H300-0384-T-L	Glass Fiber Filter Personnel	840913
9.0 ppb	5100-0388-C-L	Chip-Solvent Shed Interior Floor	840913
ND (0.77 ppb)	2506-0389-C-L	Chip-Warehouse West Wall @60" (3-5')	840913
ND (0.28 ppb)	2506-0390-C-L	Chip-warehouse West Wall @ Roof line	840913
1.4 ppb	2501-0391-C-L	Chip-Warehouse North Wall @ 60" (3-5')	840913
1.6 ppb	2501-0392-C-L	Chip-Warehouse Exter-North side at Roof	840914
13.3 ppb	2502-0393-C-L	Chip-Warehouse South Wall @ 60" (3-5')	840913
7.5 ppb	0174-0403-D-L	Drum #174, 21Y, thick white paste	840914
ND (0.45 ng/sample)	F033-0409-T-L	Glass Fiber Filter Field Blank	840913
ND (8.7 ng/sample)	A007-0414-A-K	Ambient Air: September 17, 1984	840917
ND (0.2 ppb)	A-3-C-0417-201-S-L	Soil: Station A-3-C, Borehole #6, 11-13', silt	840914
45. ppb	4501-0424-C-L	Chip-Process Bldg Exter-North Wall, 0-24'	840914
3.7 ppb	4506-0425-C-L	Chip-Process Bldg Exter-Bin Wall, W side, 0-24'	840914
2.9 ppb	4506-0426-C-L	Chip-Process Bldg Exter-Bin Wall,W side, 36-60"	840914
57.9 ppb	4503-0427-C-L	Chip-Proc Bldg, Extr S-at C filter,24" over tun:	840914
37.0 ppb	4501-0428-C-L	Chip-Process Bldg-IN PIN-North, 0-24'	840914
56.3 ppb	A-2-K-0434-100-S-Y	Soil-Station A-2-K, Borehole #5, 0-6"	840917
36.0 ppb	A-2-K-0435-101-S-Y	Soil: Station A-2-K, Borehole #5, 6-12"	840917
73.5 ppb	A-2-K-0436-102-S-Y	Soil-Station A-2-K, Borehole #5, 12-24"	840917
0.36 ppb	A-2-K-0443-109-S-Y	Soil-Station A-2-K, Borehole #5, 6.5-8.5'	840917
ND (0.16 ng/meter3)	H300-0444-T-L	IH glass fiber filter--Area Decon	840914
ND (0.55 ng/meter3)	H500-0445-T-L	IH-XAD: BACK-UP TO L0444	840914
0.74 ng/meter3	H300-0446-T-L	IH glass fiber filter--Personnel	840914
ND (0.05 ng/sample)	F036-0449-T-L	IH glass fiber filter-Field Blank	840914
ND (0.32 ng/sample)	F037-0450-T-L	IH XAD2--Field Blank	840914
76.8 ppb	4502-0451-C-L	Chip-Proc Bldg-S wall-near roof at vert stairs	840917
1580. ppb	4504-0452-C-L	Chip-Proc Bldg-E wall,over trench near vessels (0-24")	840917
95.4 ppb	4504-0453-B-L	Bulk-Proc Bldg-E wall, near vessels (24-60")	840917
78.3 ppb	4504-0454-B-L	Bulk-Proc Bldg-E wall, at roof near vessels	840917
126. ppb	4501-0455-B-L	Bulk-Proc Bldg-N wall, 36-60"	840917
9.1 ppb	4503-0456-B-L	Bulk-Proc Bldg-S wall, 36-60"	840917
ND (0.31 ng/meter3)	H300-0479-T-L	IH glass fiber filter--Personnel	840917
ND (1.0 ng/sample)	H300-0481-T-L	IH glass fiber filter--Field Blank	840917
3.0 ppb	4501-0493-B-L	Bulk-Proc Bldg-N wall, 24" fr top (off louvers)	840917
ND (0.69 ng/wipe)	F041-0494-W-L	Wipe-Field Blank	840917
6.4 ng/meter2	4400-0495-W-L	Wipe-Proc Bldg-Roof, Northeast quadrant	840917
12. ng/meter2	4400-0496-W-L	Wipe-Proc Bldg-Roof, Southwest corner	840917
3.4 ppb	0230-0502-D-L	Drum #230, BB, clear liquid & white solids	840919
476. ppb	0251-0523-D-L	Drum #251, ZB, brown sludge & water	840918

P:LT.LNE	CLIENT #	SAM.DESC	SO
1.4 ppb	2504-0527-C-L	Chip-Warehouse Exter-E wall, 3'-5'	840919
1.0 ppb	2504-0528-C-L	Chip-Warehouse Exter-E wall, at roof line	840918
16.5 ppb	2502-0529-C-L	Chip-Warehouse Exter-S wall, at roof line	840919
ND (0.07 ppb)	A-2-K-0531-201-S-L	Soil: Station A-2-K, Borehole #5, 13.7-14.7 , silt	840918
1.2 ng/meter3	H300-0540-T-L	IH glass fiber filter--Personnel, Chip Sampler	840919
ND (0.36 ng/meter3)	H300-0541-T-L	IH glass fiber filter-Personnel, Driller	840918
ND (0.61 ng/sample)	F043-0542-T-L	IH glass fiber filter-Field Blank	840919
61.6 ppb	D-1-F-0543-100-S-Y	Soil: Station D-1-F, Borehole #7, 0-6	840919
7.5 ppb	D-1-F-0544-101-S-L	Soil: Station D-1-F, Borehole #7, 6"-12"	840919
4.7 ppb	D-1-F-0545-102-S-Y	Soil: Station D-1-F, Borehole #7, 12"-24"	840919
0.78 ppb	D-1-F-0552-109-S-Y	Soil: Station D-1-F, Borehole #7, 6.5'-9.7'	840919
696. ppb	4100-0553-C-L	Chip-Process Bldg-Floor, W end of first floor	840918
445. ppb	4100-0554-C-L	Chip-Process Bldg-Floor at loading door, first floor	840919
43.2 ppb	4100-0555-C-L	Chip-Proc Bldg-Floor, E end under vessel, 1st floor	840918
1970. ng/meter2	4100-0556-W-L	Wipe-Proc Bldg-E end, near vessel-top of light-1st flr	840919
4040. ng/meter2	4100-0557-W-L	Wipe-Proc Bldg-E end, low on column, nr vessel, 1st flr	840918
1200. ng/meter2	4100-0558-W-L	Wipe-Proc Bldg-center 1st flr, top of light, nr vessel	840918
29,200. ng/meter2	4100-0559-W-L	Wipe-Proc Bldg-center 1st flr, low on column, nr vessel	840918
41,600. ng/meter2	4100-0560-W-L	Wipe-Proc Bldg-W end 1st flr, top of light, nr vessel	840918
9070. ng/meter2	4100-0561-W-L	Wipe-Proc Bldg-W end, 1st flr, low on column, nr vessel	840918
ND (0.47 ng/wipe)	F044-0562-W-L	Wipe-Field Blank	840918
ND (2.9 ng/sample)	4007-0597-A-K	Ambient Air: September 17, 1984	840919
ND (0.98 ng/sample)	H300-0599-T-L	IH-GFF/XAD: 37-Cl BLANK SPIKE	840919
ND (0.06 ppb)	D-1-F-0601-201-S-L	Soil: Station D-1-F, Borehole #7, 10.7'-12.7', silt	840920
1200. ng/meter2	4200-0608-W-L	Wipe-Proc Bldg-2nd Flr, W end interior wall	840919
380. ng/meter2	4200-0609-W-L	Wipe-Proc Bldg-2nd Flr, Acid Rm Wall (interior)	840919
270 ng/meter2	4200-0610-W-L	Wipe-Proc Bldg-2nd Flr, E end interior wall	840919
9100. ng/meter2	4300-0611-W-L	Wipe-Proc Bldg-3rd Flr, E end interior wall	840919
170. ng/meter2	4300-0612-W-L	Wipe-Proc Bldg-3rd Flr, Surface-Center	840919
60. ng/meter2	4300-0613-W-L	Wipe-Proc Bldg-3rd Flr, Surface-East End	840919
ND (1.2 ng/wipe)	F046-0614-W-L	Wipe--Field Blank	840919
5.3 ppb	6600-0617-C-L	Chip-Well House-Exterior, 0-24"	840919
50.0 ppb	6200-0618-C-L	Chip-Well House-Interior, floor	840919
1.1 ppb	3100-0619-C-L	Chip-Mftg Bldg-Old Area, roof slab, S of cntr vessel	840919
12.3 ppb	3100-0620-C-L	Chip-Mftg Bldg-Old Area, roof slab, W of north vessel	840919
1790. ppb	3100-0621-C-L	Chip-Mftg Bldg-BULK DEBRIS from Drain Area	840919
91.5 ppb	3100-0622-C-L	Chip-Mftg Bldg-Old Area, 1st flr-Flr in N end, N door	840919
447. ppb	3100-0633-C-L	Chip-Mftg Bldg-Old Area, Floor--Center	840920
502. ppb	3100-0634-C-L	Chip-Mftg Bldg-Old Area, Floor--South	840920
710. ppb	3100-0635-C-L	Chip-Mftg Bldg-Packing Area, Floor at man door	840920
191. ppb	3100-0636-C-L	Chip-Mftg Bldg-Packing Area, Floor at packing chute	840920
6.0 ppb	3100-0639-C-L	Chip-Mftg Bldg-Packing Area, Low on East wall	840920
18.1 ppb	3100-0640-C-L	Chip-Mftg Bldg-Packing Area, 36-60" on West wall	840920
62.1 ppb	3100-0641-C-L	Chip-Mftg Bldg-New Addition, SW wall, interior	840920
130. ppb	C-7-C-0642-100-S-Y	Soil: Station C-7-C, Borehole #4, 0-6"	840920
784. ppb	C-7-C-0643-101-S-L	Soil: Station C-7-C, Borehole #4, 6"-12"	840920

[illegible]	CLIENT #	SAM. DESC	DATE
247. ppb	C-7-C-0644-102-S-Y	Soil: Station C-7-C. Borehole #4. 12"-24"	840921
?.1 ppb	3100-0652-C-L	Chip-Mftg Bldg-1st Flr, SW flr under vessel	840920
5?.5 ppb	3100-0653-C-L	Chip-Mftg Bldg-1st Flr,New Add'n. center flr by pump	840920
?95. ppb	3200-0654-C-L	Chip-Mftg Bldg-2nd flr,New Add'n, N wall by door	840920
7000. ng/meter2	3200-0655-W-L	Wipe-Mftg Bldg-2nd Flr,New Add'n, Floor-South end	840920
1100 ng/meter2	3200-0656-W-L	Wipe-Mftg Bldg-2nd Flr,New Add'n, Panel-Center	840920
530. ng/meter2	3200-0657-W-L	Wipe-Mftg Bldg-2nd Flr,New Add'n. North end-Beam	840920
333. ng/meter2	3100-0658-W-L	Wipe-Mftg Bldg-1st Flr. Packing Area-Rafter	840920
3.7 ng/wipe	F048-0659-W-L	Wipe-Field Blank	840920
ND (1.7 ppb)	0305-0670-D-L	Drum #305. PIT. clear liquid	840921
ND (? 7 ppb)	0314-0679-D-L	Drum #314. 9F, dark brown crystals	840921
302. ppb	3501-0690-C-L	Chip-Mftg Bldg Exter-North wall. 0-24". by man door	840921
167. ppb	3501-0691-C-L	Chip-Mftg Bldg Exter-North wall,36-60".by man door	840921
59.9 ppb	3506-0692-C-L	Chip-Mftg Bldg Exter-West wall, 0-6",by ?g N doorway	840921
12.2 ppb	3506-0693-C-L	Chip-Mftg Bldg Exter-W wall 36-60",by ?g N doorway	840921
3.1 ppb	3506-0694-C-L	Chip-Mftg Bldg Exter-W wall, 0-6",by S stairway	840921
0.92 ppb	3506-0695-C-L	Chip-Mftg Bldg Exter-W wall,36-60",by S stairway	840921
200. ppb	3502-0696-C-L	Chip-Mftg Bldg Exter-South, under Load-out door	840921
6.9 ppb	3502-0697-C-L	Chip-Mftg Bldg Exter-S wall,0-6",package area door	840921
?6.? ppb	3502-0698-C-L	Chip-Mftg Bldg Exter-S wall,36-60",package area door	840921
?.1 ppb	C-7-C-0701-201-S-L	Soil: Station C-7-C. Borehole #4, 10"-12". silt	840921
?.2 ppb	C-7-C-0702-202-S-G	Soil fr Shelby Tube Archive: B#4. C-7-C, 12-14'	840921
71.8 ppb	C-7-C-0710-109-S-Y	Soil: Station C-7-C. Borehole #4, 6.5'-8'	840922
ND (1.? ng/sample)	A007-0711-A-K	Ambient Air: September 21, 1984	840921
75.8 ng/sample	A007-0714-A-K	Ambient Air: September 24, 1984	840924
ND (6.5 ng/wipe)	F051-0715-W-L	Wipe-Field Blank	840921
ND (77.5 ng/meter2	3502-0716-W-L	Wipe-Mftg Bldg-South Exterior Door	840921
2560. ppb	F-7-B-0751-100-S-Y	Soil: Station F-7-B. Borehole #8, 0-6"	840922
109. ppb	F-7-B-0752-101-S-Y	Soil: Station F-7-B. Borehole #8, 6"-12"	840922
587. ppb	F-7-B-0753-102-S-Y	Soil: Station F-7-B, Borehole #8, 12"-24"	840922
?.4 ppb	F-7-B-0760-109-S-Y	Soil: Station F-7-B, Borehole #8, 6.5'-8'	840922
0.49 ppb	F-7-B-0764-201-S-L	Soil: Station F-7-B, Borehole #8. 10'-12', silt	840924
41.? ng/wipe	9100-0801-W-L	Wipe-Decon Line, Split Spoon after Decon	840922
0.05 ppb	9100-0802-H-L	Water-Decon Line, Personnel Washwater Rinse	840922
ND (0.02 ppb)	9100-0803-H-L	Water-Decon Line, Drum Sampling Thief, final rinse	840922
ND (0.49 ng/meter3)	H300-0806-T-L	IH-glass fiber filter: Personnel. Driller	840924
ND (0.74 ng/meter3)	H300-0807-T-L	IH glass fiber filter: Personnel. Tank Sampling	840924
ND (0.55 ng/meter3)	H500-0808-T-L	IH XAD: BACK-UP TO L0807	840924
ND (0.51 ng/sample)	F054-0809-T-L	IH-glass fiber filter: Field Blank	840924
ND (0.68 ng/sample)	H500-0810-T-L	IH-XAD: Field Blank	840924
ND (3.8 ppb)	0388-0816-D-L	Drum #388. 18W, clear liquid crystal	840925
ND (2.? ppb)	0392-0820-D-L	Drum #392, ?? golden liquid	840925
ND (?.? ng sample)	A007-0843-A-K	Ambient Air: September 25, 1984	840925
2700. ppb	I-2-L-0848-100-S-Y	Soil: Station I-2-L. Borehole #1, 0-6"	840927
318. ppb	I-2-L-0849-101-S-Y	Soil: Station I-2-L, Borehole #1, 6-12"	840927
95.6 ppb	I-2-L-0850-102-S-Y	Soil: Station I-2-L, Borehole #1, 12-24"	840927

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12.0 ppb	I-2-L-0857-109-S-Y	Soil: Station I-2-L, Borehole #1, 13.5'-15.5'	840927
522. ppb	I-5-A-0860-100-S-Y	Soil: Station I-5-A, Borehole #2, 0-6"	840925
863. ppb	I-5-A-0861-101-S-L	Soil: Station I-5-A, Borehole #2, 6-12	840925
330. ppb	I-5-A-0862-102-S-Y	Soil: Station I-5-A, Borehole #2, 12-24"	840925
20.9 ppb	I-5-A-0869-109-S-Y	Soil: Station I-5-A, Borehole #2, 13.5-15.5	840925
12. ppb	0438-0925-D-L	Drum #438, NN, white solids	840926
ND (16.2 ppb)	0450-0937-D-L	Drum #450, DD, white powder	840927
174. ppb	0458-0948-D-L	Drum #458, S, brown liquid	840927
ND (1.01 ng/meter3)	H300-0966-T-L	IH: Glass Fiber Filter Area	840926
ND (0.27 ng/meter3)	H500-0967-T-L	IH: XAD2, Area Sample	840926
ND (0.5 ng/sample)	F058-0968-T-L	IH: Glass Fiber Filter Field Blank	840926
ND (0.55 ng/sample)	F059-0969-T-L	IH: XAD2 Field Blank	840926
ND (8.4 ppb)	0492-1015-D-L	Drum #492, PP, dark liquid w/solids	840928
350. ppb	I-7-K-1038-100-S-Y	Soil: Station I-7-K, Borehole #3, 0-6"	840928
2510. ppb	I-7-K-1039-101-S-L	Soil: Station I-7-K Borehole #3, 6-12"	840928
59.2 ppb	I-7-K-1040-102-S-Y	Soil: Station I-7-K, Borehole #3, 12-24"	840928
5.8 ppb	I-7-K-1047-109-S-Y	Soil: Station I-7-K, Borehole #3, 7-6.5	840928
1033. ppb	I-7-K-1048-100-S-Y	ITAS Split of I-7-K-1038-100-S-Y	840928
924. ppb	I-7-K-1049-101-S-L	ITAS Split of I-7-K-1039-101-S-L	840928
ND (1.9 ng/sample)	A007-1084-A-K	Ambient Air October 3, 1984	841003
ND (2.02 ng/meter3)	H300-1085-T-L	IH: Glass Fiber Filter,Personnel-Drum Crew	841001
ND (0.33 ng/meter3)	H300-1086-T-L	IH: Glass Fiber Filter, Personnel-Tank Crew	841001
ND (2.9 ng/meter3)	H300-1087-T-L	IH: Glass Fiber Filter, Personnel-Drillers	841003
ND (0.4 ng/sample)	F062-1088-T-L	IH: Glass Fiber Filter-Field Blank	841001
ND (0.28 ng/meter3)	H300-1089-T-L	IH: Glass Fiber Filter Area	841003
ND (0.97 ng/meter3)	H500-1090-T-L	IH: XAD2, Area Sample	841003
ND (3.7 ng/sample)	F062-1091-T-L	IH: XAD2, Field Blank	841003
2.1 ppb	I-7-K-1119-200-S-G	Soil fr Shelby Tube Archive: B#3, I-7-K, 8.5-10.5'	841001
2.8 ppb	I-7-K-1120-201-S-L	Soil: Station I-7-K, Borehole #3, 10.5-15.2 silt	841001
ND (2.0 ppb)	0554-1136-D-L	Drum #554, Pit 3, clear liquid	841002
9750. ppb	0558-1140-D-L	Drum #558, Pit 3, dark sludge w/water	841002
7.1 ppb	A-4-F-1518-102-S-Y	Soil: Station A-4-F, 12-24", Near Surface Soil	841011
5.5 ng/wipe	F066-1163-W-L	Wipe: Field Blank	841002
No Recovery	7041-1192-N-L	Tank #41	841002
No Recovery	7037-1206-N-L	Tank #37	841002
ND (0.39 ng/meter3)	H300-1209-T-L	IH: Glass Fiber Filter, Personnel-Drums	841003
ND (3.4 ng/meter3)	H300-1210-T-L	IH: Glass Fiber Filter, Personnel-Tanks	841003
ND (0.85 ng/sample)	F068-1211-T-L	IH: Glass Fiber Filter, Field Blank	841003
52.2 ng/wipe	H600-1213-W-L	IH Wipe: Mat bgne of decon were prsnl untape	841003
ND (16.4 ng/meter2)	H600-1214-W-L	IH Wipe:Stblz Cloth in Decon trwn brk area & D Trlr	841003
0.02 ppb	H600-1215-H-L	IH Water: Final Rinse Tub in Decon Line	841003
ND (26.8 ng/meter2)	H600-1216-W-L	IH Wipe: Stblz Cloth in frnt of Smc Trlr Steps	841003
88.7 ng/wipe	F069-1217-W-L	Wipe: Field Blank Wipe-Tank	841003
2590. ppb	8001-1231-Z-L	Sump: Mftg Bldg-1st flr-W Wall nxt to rollup door	841003
1011. ppb	8002-1232-Z-L	Sump: Mftg Bldg-1st flr-W side-N of rollup door	841003
105. ppb	8003-1233-Z-L	Sump: Mftg Bldg-1st Flr-SE Side-Flr Smp-N Bldg Drs	841003

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350. ppb	8004-1234-Z-L	Sump: Outside Process Bldg-E Wall-Floor Sump	841003
ND (0.0054 ppb)	F070-1235-H-L	Water: Field Blank-Sewer/Sump	841003
ND (4.3 ng/sample)	A007-1241-A-F	Ambient Air: October 4, 1984	841004
ND (0.27 ppb)	I-2-L-1244-200-S-G	Soil fr Shelby Tube Archive: B#1, I-2-L, 15-17'	841004
2.2 ppb	I-2-L-1245-201-S-L	Soil: Station I-2-L, Borehole #1, 17'-19', silt	841004
2680. ppb	8005-1254-Z-L	Sump: Otsd Wall of Process Bldg-30' W of Tank 2099	841004
9160. ppb	8006-1255-Z-L	Sump: Otsd NW Crnr Process Bldg-5' E of Rck Strwy	841004
19.5 ppb	8007-1256-Z-L	Sewer: 12' S of SW Crnr of Mftg Bldg	841004
3.0 ppb	7057-1258-N-L	Tank: Tank #57	841004
190. ppb	7063-1264-N-L	Tank #63	841004
ND (0.49 ng/meter3)	H300-1267-T-L	IH: Glass Fiber Filter, Personne -Tank	841004
ND (0.93 ng/sample)	F072-1269-T-L	IH: Glass Fiber Filer, Field Blank	841004
550. ppb	8008-1284-Z-L	Sump: 15' NW of SW crnr of Mftg Bldg	841005
836. ppb	8009-1285-Z-L	Sump: 60' N of outside SW crnr of Mftg Bldg	841005
4040. ppb	8010-1286-Z-L	Sewer: 25' N & 15' W of SW otsd wll at Mftg Bldg	841005
420. ppb	8011-1297-Z-L	Sewer: Directly 20'S of Tank #22 nr Warehouse	841005
529. ppb	8012-1332-Z-L	Sewer: 50' NE of Office Lab	841005
326. ppb	A-2-G-1333-100-S-Y	Soil: Station A-2-G, 0-6", Near Surface Soi	841008
330. ppb	A-2-G-1334-101-S-L	Soil: Station A-2-G, 6-12", Near Surface Soil	841008
214. ppb	A-2-G-1335-102-S-Y	Soil: Station A 2-G, 12-24",Near Surface Soil	841008
461. ppb	A-2-G-1339-100-S-Y	ITAS Split of A-2-G-1333-100-S-Y	841008
143. ppb	B-2-M-1344-100-S-Y	Soil: Station B-2-M, 0-6", Near Surface Soil	841009
11.1 ppb	B-2-M-1345-101-S-L	Soil: Station B-2-M, 6-12", Near Surface Soil	841009
2.9 ppb	B-2-M-1346-102-S-Y	Soil: Station B-2-M, 12-24", Near Surface Soil	841009
0.012 ppb	A-3-C-1354-290-H-Y	Water: Station A-3-C, Well #6	841009
ND (0.002 ppb)	A-2-K-1355-290-H-Y	Water: Station A-2-K, Well #5	841009
0.016 ppb	D-1-F-1356-290-H-Y	Water: Station D-1-F, Well #7	841009
0.20 ppb	C-7-C-1357-290-H-Y	Water: Station C-7-C, Well #4	841009
0.72 ppb	F-7-E-1358-290-H-Y	Water: Station F-7-B, Well #8	841009
0.19 ppb	I-2-L-1359-290-H-Y	Water: Station I-2-L, Well #1	841009
7.5 ppb	I-5-A-1361-290-H-Y	Water: Station I-5-A, Well #2	841009
ND (0.005 ppb)	T032-1363-H-Y	Water: Trip Blank, Wells	841009
0.18 ppb	I-2-L-1371-290-H-Y	ITAS Split of I-2-L-1359-290-H-Y	841009
ND (0.004 ppb)	0-7-1-1379-290-H-Y	Water: Station 0-7-1, Passaic River	841009
58.6 ppb	H-1-H-1388-100-S-Y	Soil: Station H-1-H, 0-6", Near Surface Soil	841009
30.9 ppb	H-1-H-1389-101-S-L	Soil: Station H-1-H, 6-12", Near Surface Soil	841009
22.2 ppb	H-1-H-1390-102-S-Y	Soil: Station H-1-H, 12-24", Near Surface Soil	841009
28.5 ppb	H-5-F-1394-100-S-Y	Soil: Station H-5-F, 0-6", Near Surface Soil	841010
69.3 ppb	H-5-F-1395-101-S-L	Soil: Station H-5-F, 6-12", Near Surface Soil	841010
385. ppb	H-5-F-1396-102-S-Y	Soil: Station H-5-F, 12-24", Near Surface Soil	841010
152. ppb	E-1-G-1401-100-S-Y	Soil: Station E-1-G, 0-6", Near Surface Soil	841009
4.2 ppb	E-1-G-1402-101-S-L	Soil: Station E-1-G, 6-12", Near Surface Soil	841009
5.6 ppb	E-1-G-1403-102-S-Y	Soil: Station E-1-G, 12-24", Near Surface Soil	841009
336. ppb	7094-1410-N-L	Tank: Tank #94	841009
5.5 ppb	D-4-N-1437-100-S-Y	Soil: Station D-4-N, 0-6", Inside Warehouse	841010
3.3 ppb	D-4-N-1438-101-S-L	Soil: Station D-4-N, Inside Warehouse, 6-12"	841010

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1.2 ppb	D-4-N-1439-102-S-Y	Soil: Station D-4-N, 12-24", Inside Warehouse	841010
361. ppb	G-5-F-1448-100-S-Y	Soil: Station G-5-F, Near Surface Soil	841012
494. ppb	G-5-F-1449-101-S-L	Soil: Station G-5-F, 6-12", Near Surface Soil	841012
339. ppb	G-5-F-1450-102-S-Y	Soil: Station G-5-F, 12-24", Near Surface Soil	841012
0.049 ppb	I-7-K-1451-290-W-L	Water: Station I-7-K, Well #2 Re-take for TCDD	841010
0.005 ppb	F083-1452-W-L	Water: Field Blank-Well	841010
ND (0.001 ppb)	T037-1453-H-L	Water: Trip Blank-Well	841010
ND (3.6 ng/wipe)	9900-1458-W-L	Wipe: Program QC-Blank Wipe	841015
ND (3.8 ng/wipe)	9900-1460-W-L	Wipe: Program QC-Blank Wipe	841015
34.9 ng/wipe	9900-1461-W-L	Wipe: Program QC-Spiked Wipe	841015
34.7 ng/wipe	9900-1462-W-L	Wipe: Program QC-Spiked Wipe	841015
38.5 ng/wipe	9900-1463-W-L	Wipe: Program QC-Spiked Wipe	841015
0.76 ppb	Q-1-C-1464-100-S-L	Soil: Program QC-Virgin Soil	841015
1.6 ppb	Q-1-C-1465-100-S-L	Soil: Program QC-Virgin Soil	841015
0.89 ppb	Q-1-C-1466-100-S-L	Soil: Program QC-Virgin Soil	841015
725. ppb	Q-1-C-1467-100-S-L	Soil: Program QC-Clarksburg Soil	841015
875. ppb	Q-1-C-1468-100-S-L	Soil: Program QC-Clarksburg Soil	841015
780. ppb	Q-1-C-1469-100-S-L	Soil: Program QC-Clarksburg Soil	841015
ND (0.002 ppb)	9900-1470-H-Y	Water: Program QC Blank	841019
3.6 ppb	C-6-B-1471-100-S-Y	Soil: Station C-6-B, 0-6", Near Surface Soil	841017
87.5 ppb	C-6-B-1472-101-S-L	Soil: Station C-6-B, 6-12", Near Surface Soil	841017
12.2 ppb	C-6-B-1473-102-S-Y	Soil: Station C-6-B, 12-24", Near Surface Soil	841017
1.8 ppb	C-6-B-1474-100-S-Y	ITAS Split of C-6-B-1471-100-S-Y	841017
1.7 ppb	9400-1475-S-L	NJDEP Proficiency Sample A020-Blank Spike	841016
4.4 ppb	9400-1476-S-L	NJDEP Proficiency Sample A021	841016
1.1 ppb	9400-1477-S-L	NJDEP Proficiency Sample A022	841016
511. ppb	9400-1478-S-L	NJDEP Proficiency Sample A023	841016
0.39 ppb	A-4-F-1516-100-S-Y	Soil: Station A-4-F, 0-6", Near Surface Soil	841011
1.2 ppb	A-4-F-1517-101-S-L	Soil: Station A-4-F, 6-12", Near Surface Soil	841011
0.7 ppb	A-4-F-1519-101-S-L	ITAS Split of A-4-F-1517-101-S-L	841011
29.5 ppb	H-7-H-1520-100-S-Y	Soil: Station H-7-H, 0-6", Near Surface Soil	841011
27.6 ppb	H-7-H-1521-101-S-L	Soil: Station H-7-H, 6-12", Near Surface Soil	841011
No Recovery	7112-1523-N-L	Tank #112	841011
8.2 ppb	7118-1526-N-L	Tank: Tank #118	841011
ND (3.2 ng/meter2)	H600-1529-W-L	IH Wipe: Frm Smplg Head of Instrmt #15084 Aftr Dcn	841011
ND (4.8 ng/meter2)	H600-1530-W-L	IH Wipe: Frm Otsd Body o Decon Instrmt #15084	841011
ND (3.8 ng/wipe)	F086-1531-W-L	IH Wipe: Field Blank	841011
26.3 ng/meter3	H300-1532-T-L	IH: Glass Fiber Filter, Personnel, Tank	841012
ND (4.5 ng/meter3)	H300-1533-T-L	IH: Glass Fiber Filter, Personnel, Tank	841012
ND (11.1 ng/sample)	F087-1534-T-L	IH: Glass Fiber Filter, Field Blank	841012
5530. ppb	7126-1539-N-L	Tank #12-	841012
4200. ppb	7127-1540-N-L	Tank #127	841012
40.4 ppb	E-5-D-1541-100-S-Y	Soil: Station E-5-D, 0-6", Near Surface Soil	841012
14.4 ppb	E-5-D-1542-101-S-L	Soil: Station E-5-D, 6-12", Near Surface Soil	841012
10.6 ppb	E-5-D-1543-102-S-Y	Soil: Station E-5-D, 12-24", Near Surface Soil	841012
7.2 ng/wipe	F089-1547-W-L	Wipe: Field Blank	841012

	CLIENT #	SAMP. DESC	
679. ppb	7129-1548-N-L	Tank #129	841011
1.7 ppb	9400-1549-S-L	NJDEP Proficiency Sample A010-Blank Spike	841012
1.7 ppb	9400-1550-S-L	NJDEP Proficiency Sample A011	841012
3.6 ppb	9400-1551-S-L	NJDEP Proficiency Sample A012	841012
492. ppb	9400-1552-S-L	NJDEP Proficiency Sample A013	841012
2290. ppb	H-2-H-1553-100-S-Y	Soil: Station H-2-H, 0-6", Near Surface Soil	841015
1230. ppb	H-2-H-1554-101-S-L	Soil: Station H-2-H, 6-12", Near Surface Soil	841015
510. ppb	H-2-H-1555-102-S-Y	Soil: Station H-2-H, 12-24", Near Surface Soil	841015
ND (0.0007 ppb)	F090-1556-H-L	Water: Field Blank for Dioxin	841015
221. ppb	G-5-E-1566-100-S-Y	Soil: Station G-5-E, 0-6", Near Surface Soil, B #10	841015
217. ppb	G-5-E-1567-101-S-L	Soil: Station G-5-E, 6-12", Near Surface Soil, B #10	841015
97.5 ppb	G-5-E-1568-102-S-Y	Soil: Station G-5-E, 12-24", Near Surface Soil, B #10	841015
1010. ppb	G-3-I-1576-100-S-Y	Soil: Station G-3-I, 0-6", Near Surface Soil	841015
94.2 ppb	G-3-I-1577-101-S-L	Soil: Station G-3-I, 6-12", Near Surface Soil	841015
26.0 ppb	G-3-I-1578-102-S-Y	Soil: Station G-3-I, 12-24", Near Surface Soil	841015
11.8 ppb	G-5-E-1580-201-S-L	Soil: Station G-5-E, Borehole #10, Silt	841016
166. ng/meter2	1506-1590-W-L	Wipe: Office Lab, West Wall, at Roof	841017
1. ng/wipe	F092-1591-W-L	Wipe: Field Blank	841017
502 ppb	9400-1592-S-L	NJDEP Proficiency Sample A016	841015
541. ppb	9400-1593-S-L	NJDEP Proficiency Sample A017	841015
1.1 ppb	9400-1594-S-L	NJDEP Proficiency Sample A018	841015
1.5 ppb	9400-1595-S-L	NJDEP Proficiency Sample A019-Blank Spike	841015
43.5 ppb	H-2-B-1598-100-S-Y	Soil: Station H-2-B, 0-6", Near Surface Soil	841016
47.0 ppb	H-2-B-1599-101-S-L	Soil: Station H-2-B, 6-12", Near Surface Soil	841016
177. ppb	H-2-B-1600-102-S-Y	Soil: Station H-2-B, 12-24", Near Surface Soil	841016
470. ppb	F-5-E-1604-100-S-Y	Soil: Station F-5-E, 0-6", Near Surface Soil, B #11	841017
394. ppb	F-5-E-1605-101-S-L	Soil: Station F-5-E, 6-12", Near Surface Soil, B #11	841017
19,500. ppb	F-5-E-1606-102-S-Y	Soil: Station F-5-E, 12-24", Near Surface Soil, B #11	841017
17,800. ppb	7125-1620-N-L	Tank #125	841017
ND (0.009 ppb)	F096-1622-H-L	Water: Field Blank for Dioxin	841017
276. ppb	G-4-A-1627-100-S-Y	Soil: Station G-4-A, 0-6", Near Surface Soil	841022
3690. ppb	G-4-A-1628-101-S-L	Soil: Station G-4-A, 6-12", Near Surface Soil	841022
1770. ppb	G-4-A-1629-102-S-Y	Soil: Station G-4-A, 12-24", Near Surface Soil	841022
11.1 ppb	7136-1635-N-L	Tank: Tank #136	841017
1.7 ppb	9400-1653-S-L	NJDEP Proficiency Sample A024-Blank Spike	841017
4.2 ppb	9400-1654-S-L	NJDEP Proficiency Sample A025	841017
1.2 ppb	9400-1655-S-L	NJDEP Proficiency Sample A026	841017
393. ppb	9400-1656-S-L	NJDEP Proficiency Sample A027	841017
695. ppb	A-5-G-1660-100-S-Y	Soil: Station A-5-G, 0-6", Near Surface Soil	841018
453. ppb	A-5-G-1661-101-S-L	Soil: Station A-5-G, 6-12", Near Surface Soil	841018
7.3 ppb	A-5-G-1662-102-S-Y	Soil: Station A-5-G, 12-24", Near Surface Soil	841018
576. ppb	A-5-G-1663-101-S-L	ITAS Split of A-5-G-1661-101-S-L	841018
1.8 ppb	F-5-E-1668-201-S-L	Soil: Station F-5-E, Borehole #11, Silt	841018
ND (0.24 ppb)	F-5-E-1668-201-S-L	Soil fr Shelby Tube Archive: B#11, F-5-E, 10.5-12.5'	841018
ND (0.18 ppb)	F-5-E-1670-203-S-G	Soil fr Shelby Tube Archive: B#11, F-5-E, 14.5-16.5'	841018
1.8 ppb	9400-1675-S-L	NJDEP Proficiency Sample A028-Blank Spike	841018

RSLT.LNE	CLIENT #	SAM.DESC	SORT 2
4.5 ppb	9400-1676-S-L	NJDEP Proficiency Sample A029	841018
1.4 ppb	9400-1677-S-L	NJDEP Proficiency Sample A030	841018
595 ppb	9400-1678-S-L	NJDEP Proficiency Sample A031	841018
ND (4.4 ng/meter2)	H600-1713-W-L	IH Wipe: Wheel of Drill Rig after Decon	841019
84. ng/meter2	H600-1714-W-L	IH Wipe: Back of Drill Rig on Steel Plates aftr Dcn	841019
ND (1.5 ng/wipe	F103-1715-W-L	Wipe: IH Wipe. Field Blank	841019
236. ppb	H-7-H-1729-102-S-Y	Soil: Station H-7-H, 12-24" . Near Surface Soil	841019
1.6 ppb	9400-1733-S-L	NJDEP Proficiency Sample A032-Blank Spike	841019
ND (0.76 ppb)	9400-1734-S-L	NJDEP Proficiency Sample A033	841019
554. ppb	9400-1735-S-L	NJDEP Proficiency Sample A034	841019
500. ppb	9400-1736-S-L	NJDEP Proficiency Sample A035	841019
310. ppb	G-3-L-1742-100-S-Y	Soil: Station G-3-L, 0-6", Near Surface Soil	841022
126. ppb	G-3-L-1743-101-S-L	Soil: Station G-3-L, 6-12", Near Surface Soil	841022
33.4 ppb	G-3-L-1744-102-S-Y	Soil: Station G-3-L, 12-24", Near Surface Soil	841022
98.9 ng/meter3	H300-1754-T-L	IH: Glass Fiber Filter-Frnt Personnel Drl Rig Dcn	841022
8.9 ng/meter3	H300-1755-T-L	IH: Glass Fiber Filter-Bck Personnel Drl Rig Dcn	841022
ND (3.3 ng/sample)	F106-1756-T-L	IH: Glass Fiber Filter-Field Blank	841022
ND (16.1 ng/meter3)	H300-1757-T-L	IH: Glass Fiber Filter-Area Otsd Dcn Tent-Drl Rig	841022
ND (9.6 ng/meter3)	H500-1758-T-L	IH: XAD2-Area Otsd Decon Tent for Drill Rig	841022
ND (52. ng/sample)	F107-1759-T-L	IH: XAD2-Field Blank	841022
1.8 ng/meter3	H300-1760-T-L	IH: Glass Fiber Filter, Personnel-Soil Crew	841022
1.[illegible] ng/meter3	H300-1761-T-L	IH: Glass Fiber Filter, Personnel-Soil Crew	841022
1.9 ppb	9400-1762-S-L	NJDEP Proficiency Sample A036-Blank Spike	841022
2.5 ppb	J-6-K-1764-100-S-Y	Soil: Station J-6-K, Near Surface Soil	841022
1.6 ppb	J-6-K-1765-101-S-L	Soil: Station J-6-K, 6-12", Near Surface Soil	841022
0.89 ppb	J-6-K-1766-102-S-Y	Soil: Station J-6-K, 12-24", Near Surface Soil	841023
9050. ppb	H-7-F-1775-100-S-Y	Soil: Station H-7-F, 0-6", Near Surface Soil	841024
2730. ppb	H-7-F-1776-101-S-L	Soil: Station H-7-F, 6-12", Near Surface Soil	841024
300. ppb	H-7-F-1777-102-S-Y	Soil: Station H-7-F, 12-24", Near Surface Soil	841024
1.6 ppb	9400-1781-S-L	NJDEP Proficiency Sample A038-Blank Spike	841023
367. ppb	9400-1782-S-L	NJDEP Proficiency Sample A039	841023
171. ppb	1-3-0-1785-300-M-L	Sediment: Station 1-3-0, Passaic River, 0-12"	841024
151. ppb	1-3-0-1786-299-M-L	Sediment: Station 1-3-0, Passaic River, 12-24"	841024
175. ppb	1-3-0-1787-298-M-L	Sediment: Station 1-3-0, Passaic River, 24-36"	841024
238. ppb	1-3-0-1788-297-M-L	Sediment: Station 1-3-0, Passaic River, 36-48"	841024
470. ppb	1-3-0-1789-296-M-L	Sediment: Station 1-3-0, Passaic River, 48-60"	841024
ND (0.0007 ppb)	F112-1795-H-L	Water: Field Blank	841024
72. ng/meter2	H600-1796-W-L	IH Wipe: Bck of Drl Rig-Dck Stl Plt-Right Side	841025
19. ng/meter2	H600-1797-W-L	IH Wipe: Steel High Pressure Air Bottle	841025
134. ng/meter2	H600-1798-W-L	IH Wipe: MSA Air Hose	841025
9.4 ng/meter2	H600-1799-W-L	IH Wipe: Steam Jenny Heater Tower	841025
ND (4.1 ng/wipe)	F113-1800-W-L	Wipe: Field Blank	841025
0.0086 ppb	A-3-C-1801-290-H-Y	Water: Station A-3-C, Well #[illegible]	841030
0.0059 ppb	A-2-K-1802-290-H-Y	Water: Station A-2-K, Well #5	841030
ND (0.024 ppb)	D-1-F-1803-290-H-Y	Water: Station D-1-F, Well #7	841030
0.74 ppb	C-7-C-1804-290-H-Y	Water: Station C-7-C, Well #4	841030

1.1 ppb	F-7-E-1805-290-H-Y	Water: Station F-7-E, Well #6	841030
) .5 ppb	I-2-L-1806-290-H-Y	Water: Station I-2-L, Well #1	841030
0.73 ppb	I-7-K-1807-290-H-Y	Water: Station I-7-K, Well #3	841030
4.2 ppb	I-5-A-1808-290-H-Y	Water: Station I-5-A, Well #2	841130
ND (0.007 ppb)	0-9-0-1809-290-H-Y	Water: Station 0-9-C, Passaic River	841030
ND (0.17 ppb)	9600-1812-100-S-Y	Background Surface Soil-Harrison Ave, ref: Spl #H0681	841025
ND (0.27 ppb)	9600-1813-100-S-Y	Background Surface Soil-Raymond Blvd, ref: spl #H0682	841025
ND (0.77 ppb)	9600-1814-100-S-Y	Background Surface Soil-Roanoke Ave, ref: spl #H0683	841025
ND (0.0031 ppb)	F114-1815-H-Y	Water: Field Blank-Well	841030
ND (0.005 ppb)	T050-1816-H-Y	Water: Trip Blank-Well	841030
1.2 ppb	9600-1832-100-S-Y	Background Soil Boring: Sherwin-Williams, 0-6"	841114
5.1 ppb	9600-1833-101-S-L	Background Soil Boring: Sherwin-Williams, 6-12"	841114
3.4 ppb	9600-1834-102-S-Y	Background Soil Boring: Sherwin-Williams, 12-24"	841116
ND (0.57 ppb)	9600-1841-109-S-Y	Background Soil Boring: Sherwin-Williams, 11-12.5	841116
ND (0.76 ppb)	9600-1845-201-S-L	Background Soil Boring: Sherwin Williams, 15-17',silt	841120
ND (0.007 ppb)	F116-1852-H-L	Water: Field Blank	841120
ND (0.0034 ppb)	F117-1867-H-Y	Water: Field Blank	841214
ND (0.002 ppb)	T052-1868-H-Y	Water: Trip Blank	841214
ND (0.0019 ppb)	9650-1869-265-H-Y	Background Well Water--Deep Well	841214
ND (0.005 ppb)	9650-1870-290-H-Y	Background Well Water--Shallow Well	841214
9.4 ppb	I-5-A-1872-290-H-Y	Water: Station I-5-A, well #2	841214
ND (0.0015 ppb)	F118-1873-H-L	Water: Field Blank	841214
ND (0.005 ppb)	9650-1874-265-H-Y	Background Well Water, Deep	850109
ND (0.005 ppb)	9650-1875-290-H-Y	Background Well Water, Shallow	850109
ND (0.009 ppb)	F119-1876-H-Y	Water: Field Blank for Off-Site Wells	850109
ND (0.005 ppb)	T053-1877-H-Y	Water: Trip Blank for Off Site Wells	850109
ND (1.9 ng/wipe)	9200-2527-W-L	Wipe-Sol Aluma Craft Boat, 80 Lister	850220
29.5 ng/wipe	9200-2529-W-L	Wipe-Comp.from B&D percussion hammer&Diesel TrashF.mo	850220
ND (4.0 ng/wipe)	F029-2530-W-L	Field Blank-Wipe	850220
ND (0.0034 ppb)	T021-2597-H-L	Travel Blank-Water	850301
ND (0.00058 ppb)	F024-2598-H-L	Field Blank-Water	850301
ND (1.7 ng/wipe)	9200-2680-W-L	Wipe-Canterm Air Compressor #NR5976400, Comp. of 3	850318
ND (0.020 ppb)	10-D-2766-300-S-Y	Deep Soil Boring-Station 10-D, 39-40.5	850405
ND (0.032 ppb)	10-D-2767-301-S-L	Deep Soil Boring-Station 10-D, 44-45.5	850405
ND (0.043 ppb)	10-D-2778-405-S-G	Deep Soil Boring-Station 10-D, 65-66	850410
0.60 ppb	9400-2818-S-L	Near Surface Soil-LubriPlate&Fisk Gros,Lockwood,0-2"	850411
1.2 ng/wipe	9100-2819-W-L	Wipe-Clam Shell used in stack demolition	850411
ND (0.0010 ppb)	T025-2823-H-L	Travel Blank-Near Surface Soil	850411
ND (0.0056 ppb)	F053-2824-H-L	Field Blank-Near Surface Soil	85041[illegible]
ND (0.57 ng/wipe)	9100-2881-W-L	Wipe-Grove crane	850419
ND (1.7 ng/wipe)	F062-2882-W-L	Field Blank-Wipe	850419
Sample Lost in Prep	A006-2926-A-L	Ambient Air-80 Lister (spiked filter GFF)	850425
ND (0.60 ng/sample)	A006-2927-A-L	Ambient Air-80 Lister (XAD 2 backup	850424
ND (0.60 ng/sample)	F066-2928-A-L	Field Blank-GFF Filter (80 Lister)	850424
ND (0.65 ng/sample)	F067-2929-A-L	Field Blank-XAD-2 Tube (80 Lister)	850424
4.4 ng/wipe	9100-2931-W-L	Wipe Manitowoc crane used in stack demolition,80 Liste	850424

E T L E	CLIENT #	Am DESC	S C T ?
ND (0.70 ng/wipe)	F069-2932-W-L	Field Blank-Wipe	850425
ND (0.40 ng/sample)	A006-3031-A-L	Ambient Air-80 Lister	850430
ND (1.1 ng/sample)	A006-3032-A-L	Ambient Air-80 Lister (GFF	850430
ND (0.75 ng/sample)	A006-3033-A-L	Ambient Air-80 Lister (XAD)	850430
ND (0.062 ppb/sample	H006-3281-T-L	Ambient Air-Cartridge (Personnel)	850510
ND ([illegible] ppb)	[illegible]-4143-P-?-L	NJ DEP Proficiency Sample 76L04	850604
ND (0.001 ppb)	10D-4173-298-H-Y	Well Water-Station 10D	850605
ND (0.0029 ppb)	T091-4299-H-Y	Travel Blank-Well Water	850617
ND (0.0034 ppb)	F145-4300-H-Y	Field Blank-Well water	850617
0.0034 ppb	7-B-4301-298-H-Y	Well Water-Station 7-B	850617
0.0042 ppb	2-B-4302-298-H-Y	Well Water-Station 2-B	850617
ND (0.00061 ppb)	3-B-4435-298-H-Y	Well Water-Station 3-B	850625
0.0061 ppb	2-C-4436-298-H-Y	Well Water-Station 2-C	850625
0.0047 ppb	4-B-4437-298-H-Y	Well Water-Station 4-B	850625
ND (0.0029 ppb)	4-C-4438-298-H-Y	Well Water-Station 4-C	850625
ND (0.0072 ppb	7-B-4439-298-H-Y	Well Water-Station 7-B	850625
ND (0.0050 ppb)	10-D-4440-298-H-Y	Well Water-Station 10-D	850627
ND (5.? ng/wipe)	F156-4452-W-L	Field Blank--Wipe	850712
ND (5.2 ng/wipe)	9200-4453-W-L	Wipe-Mud Pump	850712
ND (1.8 ng/wipe)	9200-4454-W-L	Wipe-Drill Rig	850712
ND (0.002? ppb)	7-B-4458-298-H-Y	Well Water-Station 7B	850715
ND (0.0012 ppb)	2-B-4459-298-H-Y	Well Water-Station 2B	850715
0.0? ppb	2-C-4460-298-H-Y	Well Water-Station 2C	850715
0.038 ppb	4-B-4461-298-H-Y	Well Water-Station 4B	850715
ND (0.0004? ppb)	4-C-4462-298-H-Y	Well Water-Station 4C	850715
ND (0.0084 ppb)	7-D-4464-298-H-Y	Well Water-Station 7D	850715
ND (0.0026 ppb)	T100-4465-H-Y	Travel Blank-Well water	850715
ND (0.0023 ppb)	F157-4466-H-Y	Field Blank-Well Water	850715
ND (0.00041 ppb)	7-D-4542-H-Y	Well Water-Station 7D	850805
ND (0.0019 ppb)	4-C-4543-H-Y	Well Water-Station 4C	850805
ND (0.00072 ppb)	T102-4544-H-L	Travel Blank-Well Water	850805
ND (0.00060 ppb)	F152-4545-H-L	Field Blank-Well Water	850805
ND (7.3 ng/wipe)	F170-4580-W-L	Field Blank-Wipe	850919
35.2 ng/wipe	9100-4581-W-L	Wipe-Hertz rented Case1845?-cat#259-054-528.Comp.of4	850919

10-D-2772-400-S-G	Deep Soil Boring Station 10-D, 50-51.5	950406	LISTER3	12772 00
10-D-2774-401-S-G	Deep Soil Boring-Station 10-D, 52.5-54	950406	LISTER2	12774 00
10-D-2775-402-S-G	Deep Soil Boring-Station 10-D, 55-56.5	950409	LISTER3	12775 00
10-D-2776-403-S-G	Deep Soil Boring-Station 10-D, 60-61.5	950410	LISTER1	12776 00
10-D-2777-404-S-G	Deep Soil Boring Station 10-D, 62.5-64	950410	LISTER3	12777 00
10-D-2783-500-S-G	Deep Soil Boring-Station 10-D, 70-71.5	950410	LISTER1	12783 00
10-D-2784-501-S-G	Deep Soil Boring-Station 10-D, 75-76.5	950410	LISTER3	12784 00
10-D-2785-502-S-G	Deep Soil Boring-Station 10-D, 80-81.5	950410	LISTER3	12785 00
T030-2789-H-G	Travel Blank-Deep Soil Boring	950405	LISTER3	12789 00
F048-2790-H-G	Field Blank-Deep Soil Boring	950407	LISTER3	12790 00
T032-2801-H-G	Travel Blank-Deep Soil Boring	950406	LISTER3	12801 00
F047-2802-H-G	Field Blank-Deep Soil Boring	950406	LISTER3	12802 00
T033-2805-H-G	Travel Blank-Deep Soil Boring	950404	LISTER3	12805 00
F049-2806-H-G	Field Blank-Deep Soil Boring	950404	LISTER1	12806 00
F050-2820-H-G	Field Blank-Deep Soil Boring	950410	LISTER3	12820 00
A006-2935-H-L	Ambient Air-90 Lister (East)	950512	LISTER3	12935 00
A005-2936-H-L	Ambient Air 90 Lister (South)	950512	LISTER3	12936 00
F073-3024-H-L	Field Blank-Deep Soil Boring	950429	LISTER1	13024 00
F075-3035-H-G	Field Blank-Deep Soil Boring	950430	LISTER3	13035 00
F079-3040-H-L	Field Blank-Deep Soil Boring	950501	LISTER3	13040 00
T048-3176-H-L	Travel Blank-Deep Soil Boring	950512	LISTER3	13176 00
F084-3177-H-L	Field Blank-Deep Soil Boring	950512	LISTER2	13177 00
T050-3281-H-L	Travel Blank-Deep Soil Boring	950513	LISTER3	13281 00
F087-3282-H-L	Field Blank-Deep Soil Boring	950513	LISTER3	13282 00
F091-3297-H-L	Field Blank-Deep Soil Boring	950515	LISTER3	13297 00
T055-3471-H-L	Travel Blank-Deep Soil Boring	950517	LISTER1	13471 00
F093-3512-H-A	Field Blank-Deep Soil Boring	950524	LISTER3	13512 00
7-B-4128-300-S-G	Deep Soil Boring Station 7-B, 20-21.5	950604	LISTER1	14128 00
7-B-4129-301-S-G	Deep Soil Boring-Station 7-B, 25-26.5	950604	LISTER3	14129 00
7-B-4130-302-S-G	Deep Soil Boring-Station 7-B, 30-31.5	950604	LISTER1	14130 00
7-B-4131-303-S-G	Deep Soil Boring-Station 7-B, 35-36.5	950604	LISTER3	14131 00
T092-4133-H-L	Travel Blank-Deep Soil Boring	950604	LISTER3	14133 00
F100-4134-H-L	Field Blank-Deep Soil Boring	950604	LISTER3	14134 00
2-C-4282-300-S-G	Deep Soil Boring-Station 2-C, 20-21.5	950614	LISTER1	14282 00
2-C-4283-301-S-G	Deep Soil Boring-Station 2-C, 25-26.5	950614	LISTER3	14283 00
2-C-4284-302-S-G	Deep Soil Boring-Station 2-C, 30-31.5	950614	LISTER1	14284 00
2-C-4285-303-S-G	Deep Soil Boring-Station 2-C, 35-36.5	950614	LISTER1	14285 00
2-C-4286-304-S-G	Deep Soil Boring-Station 2-C, 45-46.5	950614	LISTER1	14286 00
2-C-4287-305-S-G	Deep Soil Boring-Station 2-C, 50-51.5	950617	LISTER3	14287 00
2-C-4288-306-S-G	Deep Soil Boring-Station 2-C, 55-56.5	950617	LISTER1	14288 00
2-C-4294-400-S-G	Deep Soil Boring-Station 2-C, 60-61.5	950617	LISTER1	14294 00
T090-4295-H-L	Travel Blank-Deep Soil Boring	950617	LISTER3	14295 00
F143-4296-H-L	Field Blank-Deep Soil Boring	950617	LISTER3	[illegible]
T091-42[illegible]-H-L	Travel Blank-Well Water	950617	LISTER1	142[illegible] 00
4-C-4334-300-S-G	Deep Soil Boring-Station 4-C, 20-21.5	950619	LISTER1	14334 00
4-C-4335-301-S-G	Deep Soil Boring-Station 4-C, 25-26.5	950619	LISTER3	14335 00

4-C-4336-302-S-G	Deep Soil Boring-Station 4-C, 30-31.5'	950419	LISTER2	14336 [illegible]
4-C-4337-303-S-C	Deep Soil Boring-Station 4-C, 35-36.5'	950419	LISTER1	14337 [illegible]
[illegible] 4338-304-[illegible]	Deep Soil Boring-Station 4-C, 40-41.5'	950419	LISTER2	1433[illegible]
4-C-[illegible]	Deep Soil Boring-Station 4-C, 45-46.5'	950419	LISTER[illegible]	14[illegible]
[illegible] 4344-[illegible]	Travel Blank-Deep Soil Boring	950419	LISTER3	[illegible]
F14[illegible]-43[illegible]	Field Blank Deep Soil Boring	950419	LISTER[illegible]	[illegible]

APPENDIX
D

APPENDIX D

(NO ADDITIONAL INFORMATION)

APPENDIX
E

APPENDIX E

(NO ADDITIONAL INFORMATION)

APPENDIX
F

APPENDIX F

(GROUND WATER ANALYTICAL RESULTS)

FOOTNOTES TO:

Quantitative Priority Pollutant Analytical Results Tables

ND: analyzed for, but not detected at the method detection limit for this sample, including dilution adjustments.

***:** reported value is estimated; the compound meets identification criteria but the result is less than the specified detection limit but greater than zero.

****:** detected and quantitated by GC, but detected below GC/MS DL so GC/MS confirmation not attempted; dual column GC confirmation has been performed. (Applies to pesticides only)

$: insufficient sample for analysis.

a: identification confirmed by GC/MS

b: results not available at this time

ORGANIC PRIORITY POLLUTANT
METHOD DETECTION LIMITS

Individual Compound	CAS Number	Detection Limits Low Water ug/L	Detection Limits Low Soil/Sediment ug/Kg
VOLATILES:			
1. Chloromethane	74-87-3	10	10
2. Bromomethane	74-83-9	10	10
3. Vinyl Chloride	75-01-4	10	10
4. Chloroethane	75-00-3	10	10
5. Methylene Chloride	75-09-2	5	5
6. Acetone	67-64-1	10	10
7. Carbon Disulfide	75-15-0	5	5
8. 1,1-Dichloroethene	75-35-4	5	5
9. 1,1-Dichloroethane	75-35-3	5	5
10. trans-1,2-Dichloroethene	156-60-5	5	5
11. Chloroform	67-66-3	5	5
12. 1,2-Dichloroethane	107-06-2	5	5
13. 2-Butanone	78-93-3	10	10
14. 1,1,1-Trichloroethane	71-55-6	5	5
15. Carbon Tetrachloride	56-23-5	5	5
16. Vinyl Acetate	108-05-4	10	10
17. Bromodichloromethane	75-27-4	5	5
18. 1,1,2,2-Tetrachloroethane	79-34-5	5	5
19. 1,2-Dichloropropane	78-87-5	5	5
20. trans-1,3-Dichloropropene	10061-02-6	5	5
21. Trichloroethene	79-01-6	5	5
22. Dibromochloromethane	124-48-1	5	5
23. 1,1,2-Trichloroethane	79-00-5	5	5
24. Benzene	71-43-2	5	5
25. cis-1,3-Dichloropropene	10061-01-5	5	5
26. 2-Chloroethyl Vinyl Ether	110-75-8	10	10
27. Bromoform	75-25-2	5	5
28. 2-Hexanone	591-78-6	10	10
29. 4-Methyl-2-pentanone	108-10-1	10	10
30. Tetrachloroethene	127-18-4	5	5
31. Toluene	108-88-3	5	5
32. Chlorobenzene	108-90-7	5	5
33. Ethyl Benzene	100-41-4	5	5
34. Styrene	100-42-5	5	5
35. Total Xylenes		5	5
BASE/NEUTRAL/ACIDS:			
36. N-Nitrosodimethylamine	62-75-9	10	330
37. Phenol	108-95-2	10	330
38. Aniline	62-53-3	10	330
39. bis(2-Chloroethyl)ether	111-44-4	10	330
40. 2-Chlorophenol	95-57-8	10	330

Individual Compound	CAS Number	Detection Limits Low Water ug/L	Low Soil/Sediment ug/Kg
BASE/NEUTRAL/ACIDS: (Cont'd)			
41. 1,3-Dichlorobenzene	541-73-1	10	330
42. 1,4-Dichlorobenzene	106-46-7	10	330
43. Benzyl Alcohol	100-51-6	10	330
44. 1,2-Dichlorobenzene	95-50-1	10	330
45. 2-Methylphenol	95-48-7	10	330
46. bis(2-Chloroisopropyl)ether	39638-32-9	10	330
47. 4-Methylphenol	106-44-5	10	330
48. N-Nitroso-Dipropylamine	621-64-7	10	330
49. Hexachloroethane	67-72-1	10	330
50. Nitrobenzene	98-95-3	10	330
51. Isophorone	78-59-1	10	330
52. 2-Nitrophenol	88-75-5	10	330
53. 2,4-Dimethylphenol	105-67-9	10	330
54. Benzoic Acid	65-85-0	50	1600
55. bis(2-Chloroethoxy)methane	111-91-1	10	330
56. 2,4-Dichlorophenol	120-83-2	10	330
57. 1,2,4-Trichlorobenzene	120-82-1	10	330
58. Naphthalene	91-20-3	10	330
59. 4-Chloroaniline	106-47-8	10	330
60. Hexachlorobutadiene	87-68-3	10	330
61. 4-Chloro-3-methylphenol (para-chloro-meta-cresol)	59-50-7	10	330
62. 2-Methylnaphthalene	91-57-6	10	330
63. Hexachlorocyclopentadiene	77-47-4	10	330
64. 2,4,6-Trichlorophenol	88-06-2	10	330
65. 2,4,5-Trichlorophenol	95-95-4	50	1600
66. 2-Chloronaphthalene	91-58-7	10	330
67. 2-Nitroaniline	88-74-4	50	1600
68. Dimethyl Phthalate	131-11-3	10	330
69. Acenaphthylene	208-96-8	10	330
70. 3-Nitroaniline	99-09-2	50	1600
71. Acenaphthene	83-32-9	10	330
72. 2,4-Dinitrophenol	51-28-5	50	1600
73. 4-Nitrophenol	100-02-7	50	1600
74. Dibenzofuran	132-64-9	10	330
75. 2,4-Dinitrotoluene	121-14-2	10	330
76. 2,6-Dinitrotoluene	606-20-2	10	330
77. Diethylphthalate	84-66-2	10	330
78. 4-Chlorophenyl Phenyl ether	7005-72-3	10	330
79. Fluorene	86-73-7	10	330
80. 4-Nitroaniline	100-01-6	50	1600

Individual Compound		CAS Number	Detection Limits Low Water ug/L	Low Soil/Sediment ug/Kg
BASE/NEUTRAL/ACIDS: (Cont'd)				
81.	4,6-Dinitro-2-methylphenol	534-52-1	50	1600
82.	N-nitrosodiphenylamine	86-30-6	10	330
83.	4-Bromophenyl Phenyl ether	101-55-3	10	330
84.	Hexachlorobenzene	118-74-1	10	330
85.	Pentachlorophenol	87-86-5	50	1600
86.	Phenanthrene	85-01-8	10	330
87.	Anthracene	120-12-7	10	330
88.	Di-n-butylphthalate	84-74-2	10	330
89.	Fluoranthene	206-44-0	10	330
90.	Benzidine	92-87-5	80	2600
91.	Pyrene	129-00-0	10	330
92.	Butyl Benzyl Phthalate	85-68-7	10	330
93.	3,3'-Dichlorobenzidine	91-94-1	20	660
94.	Benzo(a)anthracene	56-55-3	10	330
95.	bis(2-ethylhexyl)phthalate	117-81-7	10	330
96.	Chrysene	218-01-9	10	330
97.	Di-n-octyl Phthalate	117-84-0	10	330
98.	Benzo(b)fluoranthene	205-99-2	10	330
99.	Benzo(k)fluoranthene	207-08-9	10	330
100.	Benzo(2)pyrene	50-32-8	10	330
101.	Indeno(1,2,3-cd)pyrene	193-39-5	10	330
102.	Dibenz(a,h)anthracene	53-70-3	10	330
103.	Benzo(g,h,i)perylene	191-24-2	10	330
PESTICIDES/PCBs:				
104.	alpha-BHC	319-84-6	0.10	20.0
105.	beta-BHC	319-85-7	0.10	20.0
106.	delta-BHC	319-86-8	0.10	20.0
107.	gamma-BHC(Lindane)	58-89-9	0.10	20.0
108.	Heptachlor	76-44-8	0.10	20.0
109.	Aldrin	309-00-2	0.10	20.0
110.	Heptachlor Epoxide	1024-57-3	0.10	20.0
111.	Endosulfan I	959-98-8	0.10	20.0
112.	Dieldrin	60-57-1	0.10	20.0
113.	4,4'-DDE	72-55-9	0.10	20.0
114.	Endrin	72-20-8	0.10	20.0
115.	Endosulfan II	33213-65-9	0.10	20.0
116.	4,4'-DDD	72-54-8	0.10	20.0
117.	Endrin Aldehyde	7421-93-4	0.10	20.0
118.	Endosulfan Sulfate	1031-07-8	0.10	20.0
119.	4,4'-DDT	50-29-3	0.10	20.0

Individual Compound	CAS Number	Detection Limits Low Water ug/L	Low Soil/Sediment ug/Kg
PESTICIDES/PCBs: (Cont'd)			
120. Chlordane	57-74-9	0.10	20.0
121. Toxaphene	8001-35-2	1.0	200.0
122. AROCLOR-1016	12674-11-2	1.0	200.0
123. AROCLOR-1221	11104-28-2	1.0	200.0
124. AROCLOR-1232	11141-16-5	1.0	200.0
125. AROCLOR-1242	53469-21-9	1.0	200.0
126. AROCLOR-1248	12672-29-6	1.0	200.0
127. AROCLOR-1254	11097-69-1	1.0	200.0
128. AROCLOR-1260	11096-82-5	1.0	200.0
129. Dalapon (Dowpon)	75-99-0	1.0	100.0
130. Dicamba	1918-00-9	1.0	100.0
131. MCPP	7085-19-0	300.0	30,000.0
132. MCPA	94-74-6	300.0	30,000.0
133. Dichloroprop (2,4-DP)	120-36-5	1.0	100.0
134. 2,4-D	94-75-7	1.0	100.0
135. 2,4,5-TP (silvex)	93-72-1	1.0	100.0
136. 2,4,5-T	93-76-5	1.0	100.0
137. 2,4-DB	94-82-6	1.0	100.0
138. Dinoseb (DNBP)	88-85-7	1.0	100.0

NOTE: Specific detection limits are highly matrix dependent. The detection limits listed herein are provided for guidance and may not always be achievable. See a raw sample data for actual limits achieved for each analysis.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.0027ppb)	ND (0.0012ppb)	0.12ppb	0.038ppb
Volatile Organic Compounds (Concentration Units are in μg/L					
71-43-2	Benzene	ND	1300.	250.	19.*
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	350.	9800.	9300.	430.
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	120.*	120.*	ND

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QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	56.	410.	460.	56.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	840.	310.	7.*
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	79.	1000.	880.	64.
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

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QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	840.*	81.	13.*
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	130.*	10.*	ND
120-33-2	2,4-Dichlorophenol	9.*	6600.	200.	86.
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	130.*	ND	ND
65-85-0	Benzoic acid	16.*	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	690.*	120.	22.*

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QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	34.	6.*
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	5.*	ND	46.	5.*
541-73-1	1,3-Dichlorobenzene	6.*	ND	38.	8.*
106-46-7	1,4-Dichlorobenzene	18.*	150.*	220.	18.*
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

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QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	3.*	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	5.	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

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QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	2.*	ND
191-24-2	Benzo(GHI)perylene	ND	ND	4.*	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	4.*	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29B-OP-1.33

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Pesticides and PCBs (Continued)					
50-29-3	4,4'-DDT	ND	ND	1.5*	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	2.0**	0.19**	3.2**	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	44.	0.65**
319-85-7	beta-BHC	ND	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	28.	ND
319-86-8	delta-BHC	3.0**	ND	ND	2.0**
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

D29B-OP-1.34

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Chlorinated Herbicides (Concentration Units are in μg/L)					
75-99-0	Dalapon (Dowpon)	ND	2.0*	2.7	ND
1918-00-9	Dicamba	ND	ND	ND	ND
7085-19-0	MCPP	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	240.	336.	3.0
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND	ND
93-76-5	2,4,5-T	ND	31.	104.	10.0*
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	<0.001	<0.001	<0.001	<0.001
	Arsenic	0.079	0.014	0.021	0.024
	Beryllium	0.004	0.003	0.002	0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001
	Chromium	0.09	0.04	0.05	0.03
	Copper	0.085	0.021	0.084	0.049
	Lead	0.04	<0.01	0.10	<0.01
	Mercury	<0.001	<0.001	<0.001	<0.001
	Nickel	0.05	0.03	0.06	0.01
	Selenium	<0.01	<0.004	<0.004	<0.002

D29-OP-1.35

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985

CAS Number	Compound Name	Y4458 MW-7B	Y4459 MW-2B	Y4460 MW-2C	Y4461 MW-4B
Metals (Continued)					
	Silver	<0.002	<0.002	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	0.259	0.043	0.154	0.082
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	0.01	<0.01	<0.01	<0.01
	Total Phenols	0.02	7.80	0.41	0.10

D29-OP-1.36

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 7-B-4458-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	80. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. ---------	Unknown	500. µg/L
2. 108-88-3	Toluene	20. µg/L
3. 108-90-7	Chlorobenzene	300. µg/L
4. ---------	Unknown	100. µg/L
5. 80-07-9	1,1'-Sulfonybis (4-chloro) benzene	30. µg/L
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 2-B-4459-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. 108-88-3	Toluene	700. µg/L
2. 108-90-7	Chlorobenzene	5000. µg/L
3. ---------	Dichlorophenol isomer	700. µg/L
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		

[1] quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 2-C-4460-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. --------	Unknown	80. µg/L
2. 108-87-2	Methylcyclohexane	10. µg/L
3. 108-90-7	Chlorobenzene	300. µg/L
4. --------	Dichlorophenol isomer	10. µg/L
5. 111-76-2	Butylcellosolve	60. µg/L
6. --------	Unknown	20. µg/L
7. 94-75-7	(2,4-dichlorophenoxy) acetic acid-2,4,D	30. µg/L
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		

[1] quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 4-B-4461-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	60. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. --------	Unknown	700. µg/L
2. 108-88-3	Toluene	20. µg/L
3. --------	Unknown	20. µg/L
4. 108-90-7	Chlorobenzene	400. µg/L
5. --------	Unknown	100. µg/L
6. --------	Unknown	40. µg/L
7. 80-07-9	1,1'-Sulfonybis (4-chloro) - benzene	40. µg/L
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.00049ppb)	ND (0.0084ppb)	ND (0.00041ppb)	ND (0.0019ppb)
Volatile Organic Compounds (Concentration Units are in µg/L					
71-43-2	Benzene	22.	ND	ND	14.*
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	120.	1100.	920.	96.
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	22.*	15.*	ND

D29B-OP-1.42

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	20.	950.	360.	330.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	2.*	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	10.	190.	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

D29B-OP-1.43

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	9.*	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

D29B-1.44

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	2.*	3.*	2.*	2.*
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	3.*	3.*	13.*	9.*
541-73-1	1,3-Dichlorobenzene	7.*	3.*	2.*	4.*
106-46-7	1,4-Dichlorobenzene	11.*	15.*	17.*	5.*
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

D29B-OP-1.45

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	2.	2.	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29B-OP-1.47

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Pesticides and PCBs (Continued)					
50-29-3	4,4'-DDT	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	0.81**	0.72**	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	0.46**	0.46**	ND
319-85-7	beta-BHC	ND	0.34**	0.51**	ND
58-89-9	gamma-BHC	ND	ND	ND	ND
319-86-8	delta-BHC	3.4**	0.65**	0.56**	3.3**
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

D29B-OP-1.48

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Chlorinated Herbicides (Concentration Units are in µg/L)					
75-99-0	Dalapon (Dowpon)	ND	2.16	ND	ND
1918-00-9	Dicamba	ND	ND	ND	ND
7085-19-0	MCPP	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	7.5	2.39	3.72
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND	ND
93-76-5	2,4,5-T	ND	2.5	1.00	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	<0.001	<0.001	<0.002	<0.004
	Arsenic	0.015	0.003	0.006	0.023
	Beryllium	<0.002	0.003	<0.002	<0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001
	Chromium	0.04	0.04	0.04	0.04
	Copper	0.018	0.031	0.027	0.031
	Lead	<0.01	0.03	<0.01	<0.01
	Mercury	<0.001	<0.001	<0.001	<0.001
	Nickel	0.04	0.04	0.03	0.03
	Selenium	<0.005	<0.002	<0.01	<0.010

D29B-OP-1.49

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4462 MW-4C 7/15/85	Y4464 MW-7D 7/15/85	Y4542 MW-7D 8/05/85	Y4543 MW-4C 8/05/85
Metals (Continued)					
	Silver	<0.002	<0.002	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	0.088	0.084	0.060	0.076
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	0.01	0.01	<0.01	0.02
	Total Phenols	0.01	<0.01	0.01	0.02

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 4-C-4462-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	30. µg/L
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BASE/NEUTRAL/ACIDS:		
1. ---------	Unknown	400. µg/L
2. 108-88-3	Toluene	10. µg/L
3. ---------	Unknown	10. µg/L
4. 108-90-7	Chlorobenzene	70. µg/L
5. --------	Unknown	100. µg/L
6. --------	Unknown	20. µg/L
7. 80-07-9	1,1'-Sulfonybis (4-chloro)-benzene	40. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 7-D-4464-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. ---------	Unknown	900. µg/L
2. 108-88-3	Toluene	20. µg/L
3. 108-90-7	Chlorobenzene	700. µg/L
4. --------	Unknown	200. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 7-D-4542-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4,Dioxane	30. µg/L
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15.		
BASE/NEUTRAL/ACIDS:		
1. ----------	Methyene Chloride/Acetone Reaction Products Reported In Method Blank	~B
2. 108-90-7	Chlorobenzene	600. µg/L
3. --------	Unknown	30. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 4-C-4543-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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15.		
BASE/NEUTRAL/ACIDS:		
1. ----------	Methyene Chloride/Acetone Reaction Products Reported In Method Blank	~B
2. --------	Unknown	20. µg/L
3. 80-07-9	1,1'-Sulfonybis (4-chloro)-benzene	60. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
(Concentration units are parts per billion)					
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.002)	ND (0.005)	ND (0.005)	ND (0.005)
Volatile Organic Compounds (Concentration Units are in μg/L)					
71-43-2	Benzene	610.*	200	360.*	160
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	8500.	1600.	5500.	570.
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND

D29-OP-1

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	4100.	640.	2800.	170.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	ND	500.*	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

D29-OP-2

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in μg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	12.*	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

D29-OP-3

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Volatiles (Continued)					
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	12.*	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	1300.	260.*	240.	ND
541-73-1	1,3-Dichlorobenzene	180.*	ND	64.	ND
106-46-7	1,4-Dichlorobenzene	4700.	810.	1300.	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

D29-OP-4

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	3.*	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

D29-OP-5

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene**.	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	70.*	9300.	ND	18000.
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in μg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29-OP-6

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Pesticides and PCBs (Continued)					
50-29-3	4,4'-DDT**	17.	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	1.5**	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	7.5**	ND	ND	ND
319-85-7	beta-BHC	1.9**	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND	ND
319-86-8	delta-BHC	4.8**	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

D29-OP-7

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Chlorinated Herbicides (Concentration Units are in µg/L)					
75-99-0	Dalapon (Dowpon)	ND	ND	ND	ND
1918-00-9	Dicamba	ND	ND	ND	ND
7085-19-0	MCPP	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	ND	5.2	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND	ND
93-76-5	2,4,5-T	ND	ND	2.0	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	0.001	<0.002	0.002	0.005
	Arsenic	0.011	0.010	0.044	0.015
	Beryllium	<0.002	<0.002	0.006	0.003
	Cadmium	0.003	<0.001	0.014	<0.001
	Chromium	0.03	0.04	0.23	0.08
	Copper	0.058	0.052	0.251	0.138
	Lead	0.02	0.76	0.11	1.2
	Mercury	<0.001	0.004	<0.001	0.004
	Nickel	0.03	0.02	0.16	0.05
	Selenium	<0.006	<0.03	<0.004	0.007

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	MW-10B 12/14/84 Y1869	MW-10A 12/14/84 Y1870	MW-10B 1/8/85 Y1874	MW-10A 1/8/85 Y1875
Metals (Continued)					
	Silver	<0.002	0.003	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	0.690	1.7	2.7	1.5
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	<0.01	0.02	<0.01	<0.01
	Total Phenols	0.05	0.12	0.10	0.17

D29-0P-9

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Background Well Water OFF-SITE LOCATION: Sherwin-Williams Property

SAMPLE NO: 9650-1869-265-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	5000. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Background Well Water   OFF-SITE LOCATION: Sherwin-Williams Property

SAMPLE NO: 9650-1870-290-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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15.		
BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	600. µg/L
2. --------	Unknown	1000. µg/L
3. --------	Unknown	400. µg/L
4.		
5.		
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-OP-12

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Background Well Water   OFF-SITE LOCATION: Sherwin-Williams Property

SAMPLE NO: 9650-1874-265-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. -------	Unknown	1000. μg/L
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15.		
BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	200. μg/L
2. --------	Unknown	200. μg/L
3. 80-07-9	Bis (4-chlorophenyl) sulfoxide	30. μg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-OP-13

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Background Well Water OFF-SITE LOCATION: Sherwin-Williams Property

SAMPLE NO: 9650-1875-290-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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15.		
BASE/NEUTRAL/ACIDS:		
1. ----------	Unknown	6000. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-OP-14

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.001 ppb)	ND (0.0050 ppb)
Volatile Organic Compounds (Concentration Units are in μg/L			
71-43-2	Benzene	ND	ND
56-23-5	Carbon tetrachloride	ND	ND
108-90-7	Chlorobenzene	4.*	ND
107-06-2	1,2,-Dichloroethane	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND
75-00-3	Chloroethane	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND
67-66-3	Chloroform	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND

D29B-OP-1.55

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Volatiles (Continued)			
78-87-5	1,2-Dichloropropane	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND
100-41-4	Ethylbenzene	ND	ND
75-09-2	Methylene chloride	40.	75.
74-87-3	Chloromethane	ND	ND
74-83-9	Bromomethane	ND	ND
75-25-2	Bromoform	ND	ND
75-27-4	Bromodichloromethane	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND
124-48-1	Chlorodibromomethane	ND	ND
127-18-4	Tetrachloroethene	ND	ND
108-88-3	Toluene	1.*	ND
79-01-6	Trichloroethene	ND	ND
75-01-4	Vinyl chloride	ND	ND
67-64-1	Acetone	ND	12.
78-93-3	2-Butanone	ND	ND
75-15-0	Carbon disulfide	ND	ND

D29B-OP-1.56

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Volatiles (Continued)			
519-78-6	2-Hexanone	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND
100-42-5	Styrene	ND	ND
108-05-4	Vinyl acetate	ND	ND
95-47-6	Total Xylenes	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)			
88-06-2	2,4,6-Trichlorophenol	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND
95-57-8	2-Chlorophenol	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND
88-75-5	2-Nitrophenol	ND	ND
100-02-7	4-Nitrophenol	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND
87-86-5	Pentachlorophenol	ND	ND
108-95-2	Phenol	ND	ND
65-85-0	Benzoic acid	ND	ND
95-48-7	2-Methylphenol	ND	ND
108-39-4	4-Methylphenol	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Base/Neutral/Acids (Continued)			
83-32-9	Acenaphthene	ND	ND
92-87-5	Benzidine	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND
118-74-1	Hexachlorobenzene	ND	ND
67-72-1	Hexachloroethane	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND
206-44-0	Fluoranthene	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND

D29B-OP-1.58

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Base/Neutral/Acids (Continued)			
87-68-3	Hexachlorobutadiene	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND
78-59-1	Isophorone	ND	ND
91-20-3	Naphthalene	ND	ND
98-95-3	Nitrobenzene	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND
84-66-2	Diethyl phthalate	ND	ND
131-11-3	Dimethyl phthalate	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Base/Neutral/Acids (Continued)			
218-01-9	Chrysene	ND	ND
208-96-8	Acenaphthylene	ND	ND
120-12-7	Anthracene	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND
86-73-7	Fluorene	ND	ND
85-01-	Phenanthrene	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND
129-00-0	Pyrene	ND	ND
62-53-3	Aniline	ND	ND
100-51-6	Benzyl alcohol	ND	ND
106-47-8	4-Chloroaniline	ND	ND
132-64-9	Dibenzofuran	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND
88-74-4	2-Nitroaniline	ND	ND
99-09-2	3-Nitroaniline	ND	ND
100-01-6	4-Nitroaniline	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)			
309-00-2	Aldrin	ND	ND
60-57-1	Dieldrin	ND	ND
57-74-9	Chlordane	ND	ND

D29B-OP-1.60

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Pesticides and PCBs (Continued)			
50-29-3	4,4'-DDT	ND	ND
72-55-9	4,4'-DDE	ND	ND
72-54-8	4,4'-DDD	ND	ND
959-98-8	alpha-Endosulfan	ND	ND
33213-65-9	beta-Endosulfan	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND
72-20-8	Endrin	ND	ND
7421-93-4	Endrin aldehyde	ND	ND
76-44-8	Heptachlor	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND
319-84-6	alpha-BHC	ND	ND
319-85-7	beta-BHC	ND	ND
58-89-9	gamma-BHC	ND	ND
319-86-8	delta-BHC	ND	ND
53469-21-9	PCB-1242	ND	ND
11097-69-1	PCB-1254	ND	ND
11104-28-2	PCB-1221	ND	ND
11141-16-5	PCB-1232	ND	ND
12672-29-6	PCB-1248	ND	ND
11096-82-5	PCB-1260	ND	ND
12674-11-2	PCB-1016	ND	ND
8001-35-2	Toxaphene	ND	ND

D29B-OP-1.61

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Chlorinated Herbicides (Concentration Units are in µg/L)			
75-99-0	Dalapon (Dowpon)	8.0	ND
1918-00-9	Dicamba	1.0*	ND
7085-19-0	MCPP	ND	ND
94-74-6	MCPA	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND
94-75-7	2,4-D	2.0*	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND
93-76-5	2,4,5-T	ND	ND
94-82-6	2,4-DB	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)			
	Antimony	0.077	0.007
	Arsenic	<0.001	0.004
	Beryllium	<0.002	<0.002
	Cadmium	<0.001	<0.001
	Chromium	0.04	0.10
	Copper	0.067	0.112
	Lead	0.03	0.07
	Mercury	<0.001	<0.01
	Nickel	0.02	0.05
	Selenium	0.002	<0.008

D29B-OP-1.62

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Background Well Waters: Sherwin-Williams Property

CAS Number	Compound Name	Y4173 MW-10D 6/5/85	Y4440 MW-10D 7/15/85
Metals (Continued)			
	Silver	0.021	0.003
	Thallium	<0.02	<0.02
	Zinc	0.054	0.156
Classical Parameters (Concentration Units are in Parts per Million - ppm)			
	Total Cyanide	0.01	<0.01
	Total Phenols	0.01	0.01

D29B-OP-1.63

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 100-4173-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. ---------	Unsaturated Hydrocarbon	6. µg/L
2. ---------	Hydrocarbon	10. µg/L
3. ---------	Hydrocarbon	5. µg/L
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. ----------	Unknown	10. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 10-D-4440-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	20. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. 104-76-7	2-Ethyl hexanol	200. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.00061ppb)	0.0061ppb	0.0047ppb	ND (0.0029ppb)	ND (0.0072ppb)

Volatile Organic Compounds (Concentration Units are in μg/L

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
71-43-2	Benzene	400.	140.	15.	20.	51.
56-23-5	Carbon tetrachloride	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	1600.	1900.	360.	160.	640.
107-06-2	1,2,-Dichloroethane	ND	ND	ND	10.	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	81.*	ND	5.	ND

D29B-OP-1.14

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Volatiles (Continued)						
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	140.	550.	36.	87.	47.
74-87-3	Chloromethane	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	ND
108-88-3	Toluene	180.	120.*	11.	6.	ND
79-01-6	Trichloroethene	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	10.	140.
78-93-3	2-Butanone	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Volatiles (Continued)						
519-78-6	2-Hexanone	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)						
88-06-2	2,4,6-Trichlorophenol	1400.	520.	97.	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	11,000.	1900.	480.	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	200.	ND
65-85-0	Benzoic acid	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	1400.*	500.*	83.*	ND	ND

D29B-OP-1.16

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Base/Neutral/Acids (Continued)						
83-32-9	Acenaphthene	ND	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND	ND

D29B-OP-1.17

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Base/Neutral/Acids (Continued)						
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND	5.*
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Base/Neutral/Acids (Continued)						
218-01-9	Chrysene	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)						
309-00-2	Aldrin	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND	ND

D29B-OP-1.19

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Pesticides and PCBs (Continued)						
50-29-3	4,4'-DDT	ND	ND	ND	ND	0.41**
72-55-9	4,4'-DDE	0.31**	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	1.5**	1.8**	1.1**	12.
959-98-8	alpha-Endosulfan	ND	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	13.	ND	ND	ND
319-85-7	beta-BHC	ND	2.6**	ND	ND	ND
58-89-9	gamma-BHC	ND	7.5**	ND	ND	ND
319-86-8	delta-BHC	ND	7.4**	ND	1.1**	3.3**
53469-21-9	PCB-1242	ND	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND	ND

D29B-OP-1.20

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Chlorinated Herbicides** (Concentration Units are in μg/L)						
75-99-0	Dalapon (Dowpon)	ND	ND	ND	ND	ND
1918-00-9	Dicamba	ND	ND	1.6	ND	ND
7085-19-0	MCPP	ND	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND	2.0*
94-75-7	2,4-D	21,000.	3600.	1100.	114.	7.8
93-72-1	2,4,5-TP (Silvex)	ND	ND	10.	ND	ND
93-76-5	2,4,5-T	ND	880.	260.	ND	ND
94-82-6	2,4-DB	ND	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)						
	Antimony	0.003	0.003	<0.001	<0.01	<0.001
	Arsenic	0.011	0.024	0.022	0.047	0.041
	Beryllium	0.003	0.005	0.002	0.005	<0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001	<0.001
	Chromium	0.04	0.03	0.05	0.16	0.03
	Copper	0.013	0.025	0.050	0.168	0.020
	Lead	<0.01	<0.01	<0.01	0.04	<0.01
	Mercury	<0.001	<0.001	<0.001	<0.001	<0.001
	Nickel	0.03	<0.01	0.03	0.12	<0.01
	Selenium	<0.004	<0.008	0.004	<0.01	<0.004

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QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4435 MW-2B	Y4436 MW-2C	Y4437 MW-4B	Y4438 MW-4C	Y4439 MW-7B
Metals (Continued)						
	Silver	0.026	0.021	0.059	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02	<0.02
	Zinc	0.042	0.045	0.079	0.378	0.048
Classical Parameters (Concentration Units are in Parts per Million - ppm)						
	Total Cyanide	<0.01	<0.01	<0.01	0.01	<0.01
	Total Phenols	11.4	2.3	0.6	0.06	0.02

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 2-B-4435-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. ----------	Unknown	80. µg/L
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	10,000. µg/L
2. 104-76-7	2-Ethyl hexanol	4000. µg/L
3. --------	A dichlorophenol	2000. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 2-C-4436-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	6000. µg/L
2. 104-76-7	2-Ethyl hexanol	300. µg/L
3. --------	Dichlorophenol isomer	90. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 4-B-4437-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	20. µg/L
2. 104-76-7	2-ethyl-1-hexanol	50. µg/L
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	200. µg/L
2. --------	Dichlorophenol isomer	20. µg/L
3. 80-07-9	1,1'-Sulfonylbixs [4-chloro]-benzene	20. µg/L
4. 104-76-7	2-ethyl hexanol	600. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 4-C-4438-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	60. µg/L
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BASE/NEUTRAL/ACIDS:

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
1. 108-90-7	Chlorobenzene	60. µg/L
2. 111-96-6	1,1'-oxibis (2-methoxy)-ethane	10. µg/L
3. 104-76-7	2-ethyl hexanol	40. µg/L
4. 112-34-5	2-(2-Buloxyethoxy) ethanol	40. µg/L
5. --------	Unknown	8. µg/L
6. 80-07-9	1,1'-Sulfonylbis [4-chloro]-benzene	10. µg/L
7. 143-07-7	Dodicanoic acid	20. µg/L
8. --------	Unknown	30. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 7-B-4439-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	100. µg/L
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	70. µg/L
2. 111-96-6	1,1'-oxybis [2-methoxy]-ethane	30. µg/L
3. 104-76-7	2-ethyl hexanol	70. µg/L
4. 80-07-9	1,1'-sulfonylbis [4-chloro]-benzene	20. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	0.0034 ppb	0.0042 ppb
Volatile Organic Compounds (Concentration Units are in μg/L			
71-43-2	Benzene	24.*	1200.
56-23-5	Carbon tetrachloride	ND	ND
108-90-7	Chlorobenzene	720.	9100.
107-06-2	1,2,-Dichloroethane	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND
75-00-3	Chloroethane	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND
67-66-3	Chloroform	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND

D29B-1.2

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Volatiles (Continued)			
78-87-5	1,2-Dichloropropane	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND
100-41-4	Ethylbenzene	ND	ND
75-09-2	Methylene chloride	120.	280.
74-87-3	Chloromethane	ND	ND
74-83-9	Bromomethane	ND	ND
75-25-2	Bromoform	ND	ND
75-27-4	Bromodichloromethane	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND
124-48-1	Chlorodibromomethane	ND	ND
127-18-4	Tetrachloroethene	ND	ND
108-88-3	Toluene	ND	850.
79-01-6	Trichloroethene	ND	ND
75-01-4	Vinyl chloride	ND	ND
67-64-1	Acetone	ND	ND
78-93-3	2-Butanone	ND	ND
75-15-0	Carbon disulfide	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Volatiles (Continued)			
519-78-6	2-Hexanone	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND
100-42-5	Styrene	ND	ND
108-05-4	Vinyl acetate	ND	ND
95-47-6	Total Xylenes	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in μg/L)			
88-06-2	2,4,6-Trichlorophenol	ND	1500.
59-50-7	4-Chloro-3-methyl-phenol	ND	ND
95-57-8	2-Chlorophenol	ND	160.*
120-33-2	2,4-Dichlorophenol	ND	7200.
105-67-9	2,4-Dimethylphenol	ND	ND
88-75-5	2-Nitrophenol	ND	ND
100-02-7	4-Nitrophenol	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND
87-86-5	Pentachlorophenol	ND	ND
108-95-2	Phenol	ND	290.*
65-85-0	Benzoic acid	ND	ND
95-48-7	2-Methylphenol	ND	ND
108-39-4	4-Methylphenol	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	1500.*

D29B-OP-1.4

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Base/Neutral/Acids (Continued)			
83-32-9	Acenaphthene	ND	ND
92-87-5	Benzidine	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND
118-74-1	Hexachlorobenzene	ND	ND
67-72-1	Hexachloroethane	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND
95-50-1	1,2-Dichlorobenzene	5.*	ND
541-73-1	1,3-Dichlorobenzene	ND	ND
106-46-7	1,4-Dichlorobenzene	22.	200.*
91-94-1	3,3'-Dichlorobenzidine	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND
206-44-0	Fluoranthene	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND

D29B-OP-1.5

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Base/Neutral/Acids (Continued)			
87-68-3	Hexachlorobutadiene	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND
78-59-1	Isophorone	ND	ND
91-20-3	Naphthalene	ND	ND
98-95-3	Nitrobenzene	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	8.	ND
85-68-7	Butyl benzyl phthalate	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND
117-84-0	Di-N-octyl phthalate	25.	ND
84-66-2	Diethyl phthalate	ND	ND
131-11-3	Dimethyl phthalate	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND

D29B-OP-1.6

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Base/Neutral/Acids (Continued)			
218-01-9	Chrysene	ND	ND
208-96-8	Acenaphthylene	ND	ND
120-12-7	Anthracene	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND
86-73-7	Fluorene	ND	ND
85-01-	Phenanthrene	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND
129-00-0	Pyrene	ND	ND
62-53-3	Aniline	ND	ND
100-51-6	Benzyl alcohol	ND	ND
106-47-8	4-Chloroaniline	ND	ND
132-64-9	Dibenzofuran	ND	ND
91-57-6	2-Methylnaphthalene	2.*	ND
88-74-4	2-Nitroaniline	ND	ND
99-09-2	3-Nitroaniline	ND	ND
100-01-6	4-Nitroaniline	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)			
309-00-2	Aldrin	ND	ND
60-57-1	Dieldrin	ND	ND
57-74-9	Chlordane	ND	ND

D29B-OP-1.7

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Pesticides and PCBs (Continued)			
50-29-3	4,4'-DDT	ND	ND
72-55-9	4,4'-DDE	12.00	0.15**
72-54-8	4,4'-DDD	ND	0.32**
959-98-8	alpha-Endosulfan	ND	ND
33213-65-9	beta-Endosulfan	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND
72-20-8	Endrin	ND	ND
7421-93-4	Endrin aldehyde	ND	ND
76-44-8	Heptachlor	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND
319-84-6	alpha-BHC	ND	ND
319-85-7	beta-BHC	ND	ND
58-89-9	gamma-BHC	ND	ND
319-86-8	delta-BHC	3.60**	ND
53469-21-9	PCB-1242	ND	ND
11097-69-1	PCB-1254 ND	ND	ND
11104-28-2	PCB-1221	ND	ND
11141-16-5	PCB-1232	ND	ND
12672-29-6	PCB-1248	ND	ND
11096-82-5	PCB-1260	ND	ND
12674-11-2	PCB-1016	ND	ND
8001-35-2	Toxaphene	ND	ND

D29B-OP-1.8

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Chlorinated Herbicides (Concentration Units are in μg/L)			
75-99-0	Dalapon (Dowpon)	ND	ND
1918-00-9	Dicamba	ND	ND
7085-19-0	MCPP	ND	ND
94-74-6	MCPA	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND
94-75-7	2,4-D	2.0*	613.
93-72-1	2,4,5-TP (Silvex)	ND	ND
93-76-5	2,4,5-T	1.76	123.
94-82-6	2,4-DB	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)			
	Antimony	0.001	<0.001
	Arsenic	0.063	0.011
	Beryllium	0.003	<0.002
	Cadmium	0.004	<0.001
	Chromium	0.19	0.12
	Copper	0.294	0.020
	Lead	0.08	0.04
	Mercury	<0.001	<0.001
	Nickel	0.15	0.06
	Selenium	0.005	0.006

D29B-OP-1.9

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
80 Lister Avenue
Groundwater: Sampled June 5, 1985 and June 17, 1985

CAS Number	Compound Name	Y4301 MW-7B 6/17/85	Y4302 MW-2B 6/17/85
Metals (Continued)			
	Silver	<0.002	<0.002
	Thallium	<0.02	<0.02
	Zinc	0.632	0.045
Classical Parameters (Concentration Units are in Parts per Million - ppm)			
	Total Cyanide	0.01	0.01
	Total Phenols	0.03	9.7

D29B-OP-1.10

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 7-B-4301-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. ----------	Unknown	25. µg/L
2.		
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15.		
BASE/NEUTRAL/ACIDS:		
1. ----------	Unknown	600. µg/L
2. 108-90-7	Chlorobenzene	100. µg/L
3. ---------	Unknown	80. µg/L
4. 80-07-9	1,1'-Sulfonybis (4-chloro) benzene	30. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 80 Lister Avenue

SAMPLE NO: 2-B-4302-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
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BASE/NEUTRAL/ACIDS:		
1. 108-88-3	Toluene	800. µg/L
2. 108-90-7	Chlorobenzene	7000. µg/L
3. ---------	Dichlorophenol isomer	600. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

APPENDIX G

APPENDIX G

(NO ADDITIONAL INFORMATION)

APPENDIX
H

APPENDIX H

(NO ADDITIONAL INFORMATION)

APPENDIX I

APPENDIX I

(DRUM SAMPLE LIST)

List of Drum Samples for 80 Lister Ave. 12/18/85 16:18:20 PAGE 1

CLIENT #	SITE CODE	SAM. DESC
0001-0001-D-L	PP	Drum #1, PP, Solids crystals (purple)
0002-0002-D-L	PP	Drum #2, PP, Crystals & Powder (purple)
0003-0003-D-L	None	Drum #3, No markings, crystals & powder solids purple
0004-0004-D-L	CQ Pt	Drum #4, CQ Pt?, solid gray & white sludge
0005-0005-D-L	CQ	Drum #5, CQ, White powder (solids)
0006-0006-D-L	CQ	Drum #6, CQ, White crystalized powder
0007-0007-D-L	CQ	Drum #7, CQ, White crystalized powder
0008-0008-D-L	CQ	Drum #8, CQ, Crystalized white powder
0009-0009-D-L	CQ	Drum #9, CQ, crystalized white powder
0010-0010-D-L	CQ	Drum #10, crystalized white powder
0011-0011-D-L	CQ	Drum #11, CQ, crystalized white powder
0012-0012-D-L	CY	Drum #12, CY, white crystals
0013-0040-D-L	CY	Drum #13, CY, white crystals
0014-0041-D-L	CY	Drum #14, CY yellow & white crystals
0015-0042-D-L	CY	Drum #15, CY, yellow & white crystals
0016-0043-D-L	CQ Pt	Drum #16, CQ Part, gray & white crystals
0017-0044-D-L	CY	Drum #17, CY, yellow liquid
0018-0045-D-L	CY	Drum #18, CY white & yellow crystals
0019-0046-D-L	CY	Drum #19, CY, solids on top
0020-0047-D-L	CY	Drum #20, CY, solids, yellow crystals
0021-0064-D-L	CQ	Drum #21, CQ, yellow crystal powders
0022-0065-D-L	CQ	Drum #22, CQ, white crystalized powder
0023-0066-D-L	OB	Drum #23, OB, Brown crystalized solids
0024-0067-D-L	CY	Drum #24, CY, brown & yellow crystals
0025-0068-D-L	CY	Drum #25, CY, brown & yellow crystals
0026-0069-D-L	CY	Drum #26, CY, brown & yellow crystal
0027-0077-D-L	CY	Drum #27, CY, yellow & white crystals
0028-0078-D-L	CY	Drum #28, CY, yellow & white crystals
0029-0079-D-L	CY	Drum #29, CY, white & yellow crystal w/liquid(yellow)
0030-0080-D-L	ZA	Drum #30, ZA, liquid (black)
0031-0081-D-L	YO	Drum #31, YO, yellow liquid
0032-0082-D-L	400	Drum #32, 400, yellow liquid
0033-0083-D-L	400pt	Drum #33, 400 part, black & gold liquid
0034-0084-D-L	400	Drum #34, 400, gold liquid
0035-0086-D-L	23AA	Drum #35, 23AA, white cloudy liquid
0036-0087-D-L	LL	Drum #36, LL, brown clay solids
0037-0088-D-L	23AA	Drum #37, 23AA, brown sludge
0038-0089-D-L	23AA	Drum #38, 23AA, clear yellow liquid
0039-0090-D-L	23AA	Drum #39, 23AA, milky white liquid
0040-0091-D-L	23AA	Drum #40, 23AA, milky liquid
0041-0092-D-L	CZ	Drum #41, CZ, black liquid
0042-0093-D-L	400	Drum #42, 400, clear gold liquid
0043-0114-D-L	400	Drum #43, 400, gold clear liquid
0044-0115-D-L	400	Drum #44, 400, clear gold liquid
0045-0116-D-L	400	Drum #45, 400, clear gold liquid
0046-0117-D-L	400	Drum #46, 400, clear gold liquid

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CLIENT #	SITECODE	SAM.DESC
0047-0118-D-L	400	Drum #47, 400, clear gold liquid
0048-0119-D-L	400	Drum #48, 400, clear gold liquid
0049-0120-D-L	400	Drum #49, 400, clear gold liquid
0050-0121-D-L	400	Drum #50, 400, clear gold liquid
0051-0122-D-L	400	Drum #51, 400, clear gold liquid
0052-0123-D-L	400	Drum #52, 400, clear gold liquid
0053-0124-D-L	400	Drum #53, 400, clear gold liquid
0054-0125-D-L	400	Drum #54, 400, clear gold liquid
0055-0126-D-L	400	Drum #55, 400 clear gold liquid
0056-0127-D-L	400	Drum #56, 400, clear gold liquid
0057-0128-D-L	400	Drum #57, 400, clear gold liquid with residue in bott
0058-0129-D-L	400	Drum #58, 400, clear gold liquid
0059-0130-D-L	400	Drum #59, 400, clear gold liquid
0060-0131-D-L	400	Drum #60, 400, clear gold liquid
0061-0132-D-L	400	Drum #61, 400, clear gold liquid
0062-0133-D-L	400	Drum #62, 400, clear gold liquid
0063-0134-D-L	400	Drum #63, 400, clear gold liquid
0064-0135-D-L	400	Drum #64, 400, clear gold liquid
0065-0136-D-L	400	Drum #65, 400, clear gold liquid
0066-0137-D-L	400	Drum #66, 400, clear gold liquid
0067-0138-D-L	400	Drum #67, 400, clear gold liquid
0068-0139-D-L	400	Drum #68, 400, clear gold liquid
0069-0140-D-L	400	Drum #69, 400, clear gold liquid
0070-0141-D-L	400	Drum #70, 400, clear gold liquid
0071-0148-D-L	400	Drum #71, 400, clear gold liquid
0072-0149-D-L	A-1	Drum #72, A-1, sandy colored solid
0073-0150-D-L	A-1	Drum #73, A-1, brown grain solids
0074-0151-D-L	51T	Drum #74, 51T, white & pink thick liquid
0075-0152-D-L	15T	Drum #75, 15T, pink thick liquid
0076-0153-D-L	15T	Drum #76, 15T, pink thick liquid
0077-0154-D-L	15T	Drum #77, 15T, pink & white thick liquid
0078-0155-D-L	15T	Drum #78, 15T, pink thick liquid
0079-0156-D-L	15T	Drum #79, 15T, pink thick liquid
0080-0157-D-L	LL	Drum #80, LL, clear liquid-white solids
0081-0207-D-L	400	Drum #81, 400, clear gold liquid
0082-0208-D-L	400	Drum #82, 400, clear gold liquid
0083-0209-D-L	400	Drum #83, 400, clear gold liquid
0084-0210-D-L	400	Drum #84, 400, clear gold liquid
0085-0211-D-L	LL	Drum #85, LL, white crystal solids
0086-0212-D-L	AI	Drum #86, AI, brown grain sand (solids)
0087-0213-D-L	15T	Drum #87, 15T, pink & red thick liquid
0088-0214-D-L	15T	Drum #88, 15T, pink & red thick liquid
0089-0220-D-L	15T	Drum #89, 15T, pink & red thick liquid
0090-0221-D-L	15T	Drum #90, 15T, pink & red thick liquid
0091-0222-D-L	BB15T	Drum #91, BB15T, full (liquid)red & pink liquid
0092-0223-D-L		Drum #92, not legible, pink and red thick liquid

CLIENT #	SITECODE	SAM.DESC
0093-0224-D-L	LL	Drum #93, LL, clear liquid
0094-0225-D-L	CYH20	Drum #94, CY H20, white crystals (solids)
0095-0226-D-L	ZX	Drum #95, ZX, dirt & debris
0096-0227-D-L	ZT	Drum #96, ZT, dirt & debris
0097-0228-D-L	PP	Drum #97, PP, red clay (solids)
0098-0229-D-L	ZY	Drum #98, ZY, dirt & debris
0099-0230-D-L	ZT	Drum #99, ZT, white powder & dirt
0100-0231-D-L	ZT	Drum #100, ZT, brown grain sand
0101-0232-D-L	PP	Drum #101, PP, brown & red sand crystals
0102-0233-D-L	ZVcha	Drum #102, ZV Char, thick carmel solid & liquid
0103-0234-D-L	ZVcha	Drum #103, ZV Char, brown solid (dirt)
0104-0235-D-L	PP	Drum #104, PP, red sand & white crystals
0105-0236-D-L	PP	Drum #105, PP, red sand & white crystals
0106-0237-D-L	Pit	Drum #106, Pit, dark brown liquid
0107-0238-D-L	CZ	Drum #107, CZ, dark clear liquid
0108-0239-D-L	None	Drum #108, No markings, clay absorbant (gray)
0109-0243-D-L	CZ	Drum #109, CZ, brown liquid
0110-0244-D-L	CX	Drum #110, CX, clear liquid (solvent)
0111-0245-D-L	CZ	Drum #111, CZ, dark brown liquid
0112-0246-D-L	CZ	Drum #112, CZ, dark brown liquid
0113-0247-D-L	CZ	Drum #113, CZ, dark brown liquid
0114-0248-D-L	CZ	Drum #114, CZ, dark brown liquid
0115-0249-D-L	ZA	Drum #115, ZA, black liquid
0116-0250-D-L	AT	Drum #116, AT, dark brown liquid
0117-0253-D-L	ZA	Drum #117, ZA, dark brown (liquid)
0118-0254-D-L	CZ	Drum #118, CZ, dark brown (liquid)
0119-0255-D-L	CZ	Drum #119, CZ, dark brown liquid
0120-0256-D-L	KonKu	Drum #120, Super KonKure Harris Chemical, golden liqu
0121-0257-D-L	None	Drum #121, No markings, dark liquid & solids
0122-0258-D-L	CZ	Drum #122, CZ, dark brown liquid
0123-0259-D-L	CZ	Drum #123, CZ, dark brown liquid
0124-0260-D-L	CZH20	Drum #124, CZ & H20, dark brown liquid
0125-0261-D-L	Para	Drum #125, Liquido Paepot Para Ptopor, black liquid
0126-0262-D-L	PP	Drum #126, PP, red sand & dirt solids
0127-0263-D-L	BB	Drum #127, BB, cloudy white liquid
0128-0264-D-L	21Y	Drum #128, 21Y, black thick liquid
0129-0265-D-L	21Y	Drum #129, 21Y, white paste
0130-0266-D-L	21Y	Drum #130, 21Y, white paste (solids)
0131-0267-D-L	21Y	Drum #131, 21Y, white paste
0132-0268-D-L	21Y	Drum #132, 21Y, white paste (solids)
0133-0269-D-L	21Y	Drum #133, 21Y, white paste
0134-0270-D-L	21Y	Drum #134, 21Y, white paste
0135-0271-D-L	21Y	Drum #135, 21Y, white paste
0136-0272-D-L	21Y	Drum #136, 21Y, white paste
0137-0321-D-L	21Y	Drum #137, 21Y, white paste
0138-0322-D-L	CX	Drum #138, CX, dark liquid

CLIENT #	SITE CODE	SAM. DESC
0139-0323-D-L	BB	Drum #139, BB, white cloudy liquid (thick)
0140-0324-D-L	21Y	Drum #140, 21Y, thick white paste
0141-0325-D-L	21Y	Drum #141, 21Y, thick white paste
0142-0326-D-L	21Y	Drum #142, 21Y, thick white paste
0143-0327-D-L	21Y	Drum #143, 21Y, thick white paste
0144-0328-D-L	21Y	Drum #144, 21Y, thick white paste
0145-0329-D-L	21Y	Drum #145, 21Y, thick white paste
0146-0330-D-L	21Y	Drum #146, 21Y, thick white paste
0147-0331-D-L	21Y	Drum #147, 21Y, thick white paste
0148-0332-D-L	21Y	Drum #148, 21Y, thick white paste
0149-0333-D-L	21Y	Drum #149, 21Y, thick white paste
0150-0334-D-L	CX	Drum #150, CX, pink liquid
0151-0335-D-L	21Y	Drum #151, 21Y, thick white paste
0152-0336-D-L	21Y	Drum #152, 21Y, thick white paste
0153-0337-D-L	21Y	Drum #153, 21Y, thick white paste
0154-0338-D-L	21Y	Drum #154, 21Y, thick white paste
0155-0339-D-L	21Y	Drum #155, 21Y, very thick white paste
0156-0340-D-L	21Y	Drum #156, 21Y, thick white paste
0157-0341-D-L	21Y	Drum #157, 21Y, thick white paste
0158-0342-D-L	21Y	Drum #158, 21Y, thick white paste
0159-0343-D-L	21Y	Drum #159, 21Y, thick white paste
0160-0344-D-L	21Y	Drum #160, 21Y, thick white paste
0161-0345-D-L	21Y	Drum #161, 21Y, thick white paste
0162-0346-D-L	CX	Drum #162, CX, golden liquid
0163-0347-D-L	21Y	Drum #163, 21Y, thick white paste
0164-0348-D-L	22Y	Drum #164, 21Y, thick white paste
0165-0349-D-L	21Y	Drum #165, 21Y, thick white paste
0166-0350-D-L	21Y	Drum #166, 21Y, thick white paste
0175-0363-D-L	21Y	Drum #175, 21Y, thick white paste
0176-0364-D-L	21Y	Drum #176, 21Y, thick white paste
0177-0365-D-L	21Y	Drum #177, 21Y, thick white paste
0178-0366-D-L	21Y	Drum #178, 21Y, thick white paste
0179-0367-D-L	21Y	Drum #179, 21Y, thick white paste
0180-0368-D-L	21Y	Drum #180, 21Y, thick white paste
0181-0369-D-L	21Y	Drum #181, 21Y, thick white paste
0182-0370-D-L	21Y	Drum #182, 21Y, very thick white paste
0183-0371-D-L	QQ	Drum #183, QQ, pink & red liquid
0184-0372-D-L	QQ	Drum #184, QQ, red & pink liquid
0185-0373-D-L	QQ	Drum #185, QQ, red & pink liquid
0186-0374-D-L	QQ	Drum #186, QQ, red & pink liquid
0187-0375-D-L	21Y	Drum #187, 21Y, thick white paste
0188-0376-D-L	21Y	Drum #188, 21Y, thick white paste
0189-0377-D-L	21Y	Drum #189, 21Y, thick white paste
0190-0378-D-L	21Y	Drum #190, 21Y, thick white paste
0191-0379-D-L	QQ	Drum #191, QQ, red & pink liquid
0192-0380-D-L	QQ	Drum #192, QQ, red & pink liquid

CLIENT #	SITECODE	SAM.DESC
0167-0396-D-L	21Y	Drum #167, 21Y, thick white paste
0168-0397-D-L	21Y	Drum #168, 21Y, thick white paste
0169-0398-D-L	21Y	Drum #169, 21Y, thick white paste
0170-0399-D-L	21Y	Drum #170, 21Y, thick white paste
0171-0400-D-L	21Y	Drum #171, 21Y, thick white paste
0172-0401-D-L	21Y	Drum #172, 21Y, thick white paste
0173-0402-D-L	CZ	Drum #173, CZ, black liquid
0174-0403-D-L	21Y	Drum #174, 21Y, thick white paste
0193-0404-D-L	21Y	Drum #193, 21Y, thick white paste
0194-0405-D-L	QQ	Drum #194, QQ, red & pink liquid
0195-0459-D-L	QQ	Drum #195, QQ, pink & red liquid
0196-0460-D-L	QQ	Drum #196, QQ, pink thick liquid
0197-0461-D-L	BB	Drum #197, BB, clear liquid with white solids
0198-0462-D-L	QQ	Drum #198, QQ, red liquid
0199-0463-D-L	QQ	Drum #199, QQ, red & pink liquid
0200-0464-D-L	QQ	Drum #200, QQ, red & pink liquid
0201-0465-D-L	21Y	Drum #201, 21Y, thick white paste
0202-0466-D-L	21Y	Drum #202, 21Y, thick white paste
0203-0467-D-L	21Y	Drum #203, 21Y, thick white paste
0204-0468-D-L	21Y	Drum #204, 21Y, thick white paste
0205-0469-D-L	21Y	Drum #205, 21Y, thick white paste
0206-0470-D-L	BB	Drum #206, BB, clear liquid
0207-0471-D-L	BB	Drum #207, BB, clear liquid & white solids
0208-0472-D-L	QQ	Drum #208, QQ, red & pink liquid
0209-0473-D-L	QQ	Drum #209, QQ, pink & red liquid
0210-0474-D-L	21Y	Drum #210, 21Y, thick white paste
0211-0475-D-L	21Y	Drum #211, 21Y, thick white paste
0212-0476-D-L	21Y	Drum #212, 21Y, thick white paste
0213-0477-D-L	21Y	Drum #213, 21Y, thick white paste
0214-0478-D-L	21Y	Drum #214, 21Y, thick white paste
0215-0483-D-L	BB	Drum #215, BB, clear liquid & white solids
0216-0484-D-L	BB	Drum #216, BB, clear liquid & white solids
0217-0485-D-L	21Y	Drum #217, 21Y, thick white paste
0218-0486-D-L	BB	Drum #218, BB, clear liquid & white solids
0219-0487-D-L	BB	Drum #219, BB, clear liquid & white solids
0220-0488-D-L	BB	Drum #220, BB, clear liquid & white solids
0221-0489-D-L	BB	Drum #221, BB, clear liquid & white solids
0222-0490-D-L	BB	Drum #222, BB, clear liquid & white solids
0223-0491-D-L	BB	Drum #223, BB, clear liquid & white solids
0224-0492-D-L	BB	Drum #224, BB, clear liquid & white solids
0225-0497-D-L	21Y	Drum #225, 21Y, thick white paste
0226-0498-D-L	BB	Drum #226, BB, clear liquid & white solids
0227-0499-D-L	BB	Drum #227, BB, clear liquid & white solids
0228-0500-D-L	BB	Drum #228, BB, clear liquid & white solids
0229-0501-D-L	BB	Drum #229, BB, clear liquid & white solids
0230-0502-D-L	BB	Drum #230, BB, clear liquid & white solids

CLIENT #	SITECODE	SAM.DESC
0231-0503-D-L	BB	Drum #231, BB, clear liquid & white solids
0232-0504-D-L	BB	Drum #232, BB, clear liquid & white solids
0233-0505-D-L	BB	Drum #233, BB, white solids
0234-0506-D-L	BB	Drum #234, BB, white solids
0235-0507-D-L	BB	Drum #235, BB, white solids
0236-0508-D-L	BB	Drum #236, BB, white solids
0237-0509-D-L	BB	Drum #237, BB, white solids
0238-0510-D-L	BB	Drum #238, BB, white solids
0239-0511-D-L	BB	Drum #239, BB, white solids
0240-0512-D-L	BB	Drum #240, BB, white solids with crystals
0241-0513-D-L	BB	Drum #241, BB, white solids
0242-0514-D-L	PP	Drum #242, PP, brown crystalized solids
0243-0515-D-L	X	Drum #243, X, black powder
0244-0516-D-L	X	Drum #244, X, dirt & trash solids
0245-0517-D-L	CX"S"	Drum #245, CX "S", clear crystal
0246-0518-D-L	CX"S"	Drum #246, CX "S", black & red solids
0247-0519-D-L	CX"S"	Drum #247, CX "S", no description
0248-0520-D-L	CX"S"	Drum #248, CX "S", clear crystals solids
0249-0521-D-L	ZB	Drum #249, ZB, gray pellets & dirt
0250-0522-D-L	ZB	Drum #250, ZB sump sludge, brown sludge & liquid
0251-0523-D-L	ZB	Drum #251, ZB, brown sludge & water
0252-0524-D-L	ZB	Drum #252, ZB, brown dirt sludge
0253-0525-D-L	ZB	Drum #253, ZB, brown (solid)
0254-0526-D-L	ZB	Drum #254, ZB, dry solids (brown)
0255-0563-D-L	ZT	Drum #255, ZT, black liquid (oil)
0256-0564-D-L	ZB	Drum #256, ZB, brown dirt
0257-0565-D-L	ZB	Drum #257, ZB, water & trash
0258-0566-D-L	ZB	Drum #258, ZB, trash (solids)
0259-0567-D-L	ZB	Drum #259, ZB sump sludge, brown solids
0260-0568-D-L	ZB	Drum #260, ZB, water & solids (brown)
0261-0569-D-L	ZB	Drum #261, ZB, brown dirt solids
0262-0570-D-L	ZB	Drum #262, ZB, brown solids (sand)
0263-0571-D-L	ZZ	Drum #263, ZZ, clear liquid
0264-0572-D-L	ZB	Drum #264, ZB, brown sand solids
0265-0573-D-L	ZB	Drum #265, ZB, brown sand solids
0266-0574-D-L	ZB	Drum #266, ZB, brown liquid
0267-0575-D-L	ZB	Drum #267, ZB, brown solids (sand)
0268-0576-D-L	ZB	Drum #268, ZB, brown sludge & water
0269-0577-D-L	ZB	Drum #269, ZB, brown solid (dirt & water)
0270-0578-D-L	ZB	Drum #270, ZB, gray & brown solids
0271-0579-D-L	ZB	Drum #271, ZB, gray & brown solids
0272-0580-D-L	ZB	Drum #272, ZB, brown solids with water
0273-0581-D-L	ZD	Drum #273, ZD, golden liquid (oil)
0274-0582-D-L	ZD	Drum #274, ZD, black & brown solids
0275-0583-D-L	ZB	Drum #275, ZB, brown & gray solids
0276-0584-D-L	ZB	Drum #276, ZB, black & brown sludge

CLIENT #	SITE CODE	SAM. DESC
0277-0585-D-L	ZB	Drum #277, ZB, trash & sludge
0278-0586-D-L	ZB	Drum #278, ZB, brown & gray solids
0279-0587-D-L	ZE	Drum #279, ZE, black (liquid)
0280-0588-D-L	ZB	Drum #280, ZB, red & pink solids
0281-0589-D-L	ZB	Drum #281, ZB, golden liquid with solids
0282-0590-D-L	ZF	Drum #282, ZF, golden liquid (oil)
0283-0591-D-L	ZB	Drum #283, ZB, brown & gray solids
0284-0592-D-L	ZB	Drum #284, ZB, water & black sludge
0285-0623-D-L	None	Drum #285, no markings, golden liquid
0286-0624-D-L	None	Drum #286, no markings, clear liquid
0287-0625-D-L	ZN	Drum #287, ZN, golden liquid
0288-0626-D-L	ZL23	Drum #288, ZL23, dark liquid (oil)
0289-0627-D-L	ZL	Drum #289, ZL, red liquid
0290-0628-D-L	ZQ	Drum #290, ZQ, gray powder solids
0291-0629-D-L	ZQ	Drum #291, ZQ, golden liquid (oil and water)
0292-0630-D-L	ZB	Drum #292, ZB, liquid (black) and solids
0293-0631-D-L	ZM	Drum #293, ZM, pink liquid
0294-0632-D-L	ZL	Drum #294, ZL, black liquid
0295-0660-D-L	ZK	Drum #295, ZK, golden liquid (oil)
0296-0661-D-L	ZJ	Drum #296, ZJ, clear crystals (rock salt)
0297-0662-D-L	ZH	Drum #297, ZH, golden liquid
0298-0663-D-L	ZI	Drum #298, ZI, thick golden liquid
0299-0664-D-L	ZB	Drum #299, ZB, wood & trash with dirt
0300-0665-D-L	Pit	Drum #300, Pit, clear liquid
0301-0666-D-L	Pit	Drum #301, Pit, clear liquid
0302-0667-D-L	Pit	Drum #302, Pit, clear liquid
0303-0668-D-L	Pit	Drum #303, Pit, clear liquid
0304-0669-D-L	Pit	Drum #304, Pit, clear liquid
0305-0670-D-L	Pit	Drum #305, Pit, clear liquid
0306-0671-D-L	Pit	Drum #306, Pit, clear liquid
0307-0672-D-L	Pit	Drum #307, Pit, black liquid
0308-0673-D-L	JJ	Drum #308, JJ, thick orange liquid
0309-0674-D-L	9K	Drum #309, 9K, gold & brown crystal solids
0310-0675-D-L	9K	Drum #310, 9K, black crystal solids
0311-0676-D-L	9K	Drum #311, 9K, dark brown crystals
0312-0677-D-L	9K	Drum #312, 9K, dark brown crystals
0313-0678-D-L	9K	Drum #313, 9K, brown sludge
0314-0679-D-L	9K	Drum #314, 9K, dark brown crystals
0315-0680-D-L	JJ	Drum #315, JJ, brown & white crystals
0316-0681-D-L	JJ	Drum #316, JJ, soil & gravel
0317-0682-D-L	JJ	Drum #317, JJ, clear liquid
0318-0683-D-L	CC	Drum #318, CC, white sand
0319-0684-D-L	Pit	Drum #319, Pit, clear liquid
0320-0685-D-L	JJ	Drum #320, JJ, orange liquid
0321-0686-D-L	JJ	Drum #321, JJ, thick white paste
0322-0687-D-L	NN	Drum #322, NN, water & solids (trash)

CLIENT #	SITE CODE	SAM. DESC
0323-0688-D-L	JJ	Drum #323, JJ, thick white paste
0324-0689-D-L	NN	Drum #324, NN, thick white paste
0325-0721-D-L	NN	Drum #325, NN, black sludge
0326-0722-D-L	JJ	Drum #326, JJ, brown (tan) sandish
0327-0723-D-L	CC	Drum #327, CC, brown crystals
0328-0724-D-L		Drum #328, No markings, brown clear liquid
0329-0725-D-L	18W	Drum #329, 18W, clear liquid
0330-0726-D-L	18W	Drum #330, 18W, clear liquid
0331-0727-D-L	18W	Drum #331, 18W, clear liquid
0332-0728-D-L	18W	Drum #332, 18W, clear liquid
0333-0729-D-L	NN	Drum #333, NN, clear liquid with white sludge
0334-0730-D-L	NN	Drum #334, NN, tan silt
0335-0731-D-L	18W	Drum #335, 18W, clear liquid
0336-0732-D-L	18W	Drum #336, 18W, clear liquid
0337-0733-D-L	18W	Drum #337, 18W, clear
0338-0734-D-L	18W	Drum #338, 18W, clear liquid
0339-0735-D-L	18W	Drum #339, 18W, clear liquid
0340-0736-D-L	18W	Drum #340, 18W, clear liquid
0341-0737-D-L	LL	Drum #341, LL, brown chunks (crystals)
0342-0738-D-L	18W	Drum #342, 18W, clear liquid
0343-0739-D-L	18W	Drum #343, 18W, clear liquid
0344-0740-D-L	18W	Drum #344, 18W, clear liquid
0345-0741-D-L	JJ	Drum #345, JJ, brown liquid & white solids
0346-0742-D-L	JJ	Drum #346, JJ, white paste
0347-0743-D-L	JJ/LL	Drum #347, 1/2 JJ & 1/2 LL, brownish gray sand
0348-0744-D-L	JJ	Drum #348, JJ, white solid
0349-0745-D-L	LL	Drum #349, LL, brown sand
0350-0746-D-L	JJ	Drum #350, JJ, brown watery liquid with sand
0351-0747-D-L	JJ	Drum #351, JJ, clear liquid
0352-0748-D-L	JJ	Drum #352, JJ, clear liquid with crusty solid bottom
0353-0749-D-L	JJ	Drum #353, JJ, reddish clear liquid
0354-0750-D-L	18W	Drum #354, 18W, clear liquid
0355-0771-D-L	18W	Drum #355, 18W, clear liquid
0356-0772-D-L	18W	Drum #356, 18W, clear liquid
0357-0773-D-L	JJ	Drum #357, JJ, yellow liquid with solids
0358-0774-D-L	18W	Drum #358, 18W, clear liquid
0359-0775-D-L	18W	Drum #359, 18W, clear liquid
0360-0776-D-L	18W	Drum #360, 18W, clear liquid
0361-0777-D-L	18W	Drum #361, 18W, clear liquid
0362-0778-D-L	18W	Drum #362, 18W, clear liquid
0363-0779-D-L	18W	Drum #363, 18W
0364-0780-D-L	18W	Drum #364, 18W, clear liquid
0365-0781-D-L	18W	Drum #365, 18W, clear liquid
0366-0782-D-L	NN	Drum #366, NN, clear liquid
0367-0783-D-L	18W	Drum #367, 18W, clear liquid
0368-0784-D-L	NN	Drum #368, NN, clear liquid

CLIENT #	SITECODE	SAM. DESC
0369-0785-D-L	18W	Drum #369, 18W, clear liquid
0370-0786-D-L	18W	Drum #370, 18W, clear liquid
0371-0787-D-L	18W	Drum #371, 18W, clear liquid
0372-0788-D-L	18W	Drum #372, 18W, clear liquid
0373-0789-D-L	18W	Drum #373, 18W, clear liquid
0374-0790-D-L	18W	Drum #374, 18W, clear liquid
0375-0791-D-L	18W	Drum #375, 18W, clear liquid
0376-0792-D-L	18W	Drum #376, 18W, clear liquid
0377-0793-D-L	18W	Drum #377, 18W, clear liquid
0378-0794-D-L	18W	Drum #378, 18W, clear liquid
0379-0795-D-L	18W	Drum #379, 18W, clear liquid
0380-0796-D-L	18W	Drum #380, 18W, clear liquid
0381-0797-D-L		Drum #381, dark brown liquid
0382-0798-D-L	20X	Drum #382, 20X, golden liquid
0383-0799-D-L	20X	Drum #383, 20X, golden liquid
0384-0800-D-L	20X	Drum #384, 20X, clear liquid
0385-0813-D-L	20X	Drum #385, 20X, clear
0386-0814-D-L		Drum #386, can't read, clear liquid
0387-0815-D-L	18W	Drum #387, 18W, clear liquid
0388-0816-D-L	18W	Drum #388, 18W, clear liquid (rusty)
0389-0817-D-L	18W	Drum #389, clear liquid
0390-0818-D-L	JJ	Drum #390, JJ, golden liquid
0391-0819-D-L	JJ	Drum #391, JJ, golden liquid
0392-0820-D-L	JJ	Drum #392, JJ, golden liquid
0393-0821-D-L	JJ	Drum #393, JJ, golden liquid with solids
0394-0822-D-L	JJ	Drum #394, JJ, golden liquid
0395-0823-D-L	JJ	Drum #395, JJ, gold liquid
0396-0824-D-L	20X	Drum #396, 20X, brown dirty liquid
0397-0825-D-L	18W	Drum #397, 18W, clear liquid
0398-0826-D-L	JJ	Drum #398, JJ, golden liquid
0399-0827-D-L	JJ	Drum #399, JJ, golden liquid
0400-0828-D-L	JJ	Drum #400, JJ, golden liquid
0401-0829-D-L	JJ	Drum #401, JJ, golden liquid
0402-0830-D-L	JJ	Drum #402, JJ, rusty liquid (brown)
0403-0831-D-L	JJ	Drum #403, JJ, golden liquid
0404-0832-D-L	JJ	Drum #404, JJ, golden liquid
0405-0833-D-L	18W	Drum #405, 18W, clear liquid
0406-0834-D-L	BB	Drum #406, BB, dirt & debris solids
0407-0835-D-L	JJ	Drum #407, JJ, gold, rusty liquid
0408-0836-D-L	JJ	Drum #408, JJ, rusty liquid with solids
0409-0837-D-L	JJ	Drum #409, JJ, golden liquid
0410-0838-D-L	JJ	Drum #410, JJ, golden liquid
0411-0839-D-L	JJ	Drum #411, JJ, golden liquid
0412-0840-D-L	JJ	Drum #412, JJ, golden liquid
0413-0841-D-L	JJ	Drum #413, JJ, golden liquid with white solids
0414-0842-D-L	18W	Drum #414, 18W, clear liquid

CLIENT #	SITE CODE	SAM. DESC
0415-0896-D-L	21Y	Drum #415, 21Y, thick white paste
0416-0897-D-L	22Z	Drum #416, 22Z, very thick white paste
0417-0898-D-L	22Z	Drum #417, 22Z, thick white paste
0418-0899-D-L	22Z	Drum #418, 22Z, thick white paste
0419-0900-D-L	21Y	Drum #419, 21Y, thick white liquid
0420-0901-D-L	21Y	Drum #420, 21Y, thick white paste
0421-0902-D-L	21Y	Drum #421, 21Y, thick white paste
0422-0903-D-L	21Y	Drum #422, 21Y, thick white paste
0423-0904-D-L	21Y	Drum #423, 21Y, thick white paste
0424-0905-D-L	21Y	Drum #424, 21Y, thick white paste
0425-0908-D-L	21Y	Drum #425, 21Y, thick white paste
0426-0909-D-L	21Y	Drum #426, 21Y, thick white solids
0427-0910-D-L	22Z	Drum #427, 22Z, red liquid & white solids
0428-0911-D-L	21Y	Drum #428, 21Y, thick white paste
0429-0912-D-L	21Y	Drum #429, 21Y, thick white paste
0430-0913-D-L	21Y	Drum #430, 21Y, thick white paste
0431-0914-D-L	21Y	Drum #431, 21Y, thick white paste
0432-0915-D-L	22Z	Drum #432, 22Z, clear liquid with solids
0434-0917-D-L	JJ	Drum #434, JJ, golden liquid
0435-0922-D-L	JJ	Drum #435, JJ, orange liquid with white solids
0436-0923-D-L	NN	Drum #436, NN, white solids
0437-0924-D-L	NN	Drum #437, NN, white solids
0438-0925-D-L	NN	Drum #438, NN, white solids
0439-0926-D-L	NN	Drum #439, NN, white solids
0440-0927-D-L	NN	Drum #440, NN, white solids
0441-0928-D-L	NN	Drum #441, NN, white solids
0442-0929-D-L	21Y	Drum #442, 21Y, thick white paste
0443-0930-D-L	21Y	Drum #443, 21Y, thick white paste
0444-0931-D-L	21Y	Drum #444, 21Y, thick white paste
0445-0932-D-L	21Y	Drum #445, 21Y, thick white paste
0446-0933-D-L	DD	Drum #446, DD, white powder
0447-0934-D-L	DD	Drum #447, DD, white powder
0448-0935-D-L	DD	Drum #448, DD, white powder
0449-0936-D-L	DD	Drum #449, DD, white powder
0450-0937-D-L	DD	Drum #450, DD, white powder
0451-0938-D-L	21Y	Drum #451, 21Y, white powder
0452-0939-D-L	DD	Drum #452, DD, white powder
0453-0940-D-L	DD	Drum #453, DD, white powder
0454-0941-D-L	DD	Drum #454, DD, white powder
0455-0945-D-L	DD	Drum #455, DD, white powder
0456-0946-D-L	DD	Drum #456, DD, white powder
0457-0947-D-L	21Y	Drum #457, 21Y, thick white paste
0458-0948-D-L	S	Drum #458, S, brown liquid
0459-0949-D-L	S	Drum #459, S, clear thick liquid
0460-0950-D-L	DD	Drum #460, DD, white powder
0461-0951-D-L	21Y	Drum #461, 21Y, thick white paste

CLIENT #	SITE CODE	SAM. DESC
0462-0952-D-L	S	Drum #462, S, black thick liquid
0463-0953-D-L	BO	Drum #463, BO, clear liquid
0464-0954-D-L	None	Drum #464. No Markings, clear liquid
0465-0955-D-L	21Y	Drum #465, 21Y, thick white paste
0466-0956-D-L	S	Drum #466, S, brown liquid
0467-0957-D-L	BO	Drum #467, BO, clear liquid
0468-0958-D-L	BO	Drum #468, BO, clear liquid
0469-0959-D-L	BO	Drum #469, BO, clear liquid
0433-0916-D-L	21Y	Drum #433, 21Y, thick white paste
0470-0960-D-L	Pit 3	Drum #470, Pit 3, clear liquid w/ brown sludge
0471-0961-D-L	Pit 3	Drum #471, Pit 3, clear liquid
0472-0962-D-L	Pit 3	Drum #472, Pit 3, clear liquid
0473-0963-D-L	Pit 3	Drum #473, Pit 3, clear liquid
0474-0964-D-L	Pit 3	Drum #474, Pit 3, clear liquid
0475-0998-D-L	Pit 3	Drum #475, Pit 3, clear liquid
0476-0999-D-L	Pit 3	Drum #476, Pit 3, clear liquid with solids
0477-1000-D-L	Pit 3	Drum #477, Pit 3, brown solid
0478-1001-D-L	Pit 3	Drum #478, Pit 3, dark sand
0479-1002-D-L	Pit 3	Drum #479, Pit 3, sludge
0480-1003-D-L	PP	Drum #480, PP, sludge
0481-1004-D-L	Pit 3	Drum #481, Pit 3, dark sand
0482-1005-D-L	Pit 3	Drum #482, Pit 3, clear liquid
0483-1006-D-L	Pit 3	Drum #483, Pit 3, dark sand
0484-1007-D-L	Pit 3	Drum #484, Pit 3, sudge dark
0485-1008-D-L	Pit 3	Drum #485, Pit 3, dark sludge
0486-1009-D-L	Pit 3	Drum #486, Pit 3, dark sludge
0487-1010-D-L	Pit 3	Drum #487, Pit 3, black sludge
0488-1011-D-L	Pit 3	Drum #488, Pit 3, dark sand sludge
0489-1012-D-L	XXX	Drum #489, XXX, dirt & trash
0490-1013-D-L	PP	Drum #490, PP, pink crystal chunks
0491-1014-D-L	PP	Drum #491, PF, pink crystal chunks
0492-1015-D-L	PP	Drum #492, PP, dark liquid w/ solids
0493-1016-D-L	PP	Drum #493, PP, pink liquid w/ solids
0494-1017-D-L	PP	Drum #494, PP, pink solids w/ liquid
0495-1018-D-L	PP	Drum #495, PP, pink crystal solids
0497-1020-D-L	PP	Drum #497, PP, brown & pink crystal solids
0498-1021-D-L		Drum #498, No markings, dark sludge
0499-1022-D-L	Pit	Drum #499, Pit, dark black sludge
0500-1023-D-L	Pit 3	Drum #500, Pit 3, dry grain solids
0501-1024-D-L	Pit 3	Drum #501, Pit 3, dark black sludge
0502-1025-D-L	Pit 3	Drum #502, Pit 3, clear liquid w/pink solids
0503-1026-D-L	Pit 3	Drum #503, Pit 3, black solid w/ water
0504-1027-D-L	Pit 3	Drum #504, Pit 3, black solids w/ water
0505-1050-D-L	Pit 3	Drum #505, Pit 3, dark solids w/ water
0506-1051-D-L	Pit 3	Drum #506, Pit 3, dark solids w/ water
0507-1052-D-L	Pit 3	Drum #507, Pit 3, dark solid w/ water

CLIENT #	SITECODE	SAMP.DESC
0508-1053-D-L	Pit 3	Drum #508, Pit 3, dark solids w/ liquid
0509-1054-D-L	Pit 3	Drum #509, Pit 3, dark brown solid w/ water
0510-1055-D-L	Pit 3	Drum #510, Pit 3, clear liquid
0511-1056-D-L	Pit 3	Drum #511, Pit 3, dark solids w/ water
0512-1057-D-L	Pit 3	Drum #512, Pit 3, clear liquid
0513-1058-D-L	Pit 3	Drum #513, Pit 3, dark solids w/ water
0514-1059-D-L	Pit 3	Drum #514, Pit 3, dark solids (dry)
0515-1062-D-L	Pit 3	Drum #515, Pit 3, dark solid w/ water
0516-1063-D-L	Pit 3	Drum #516, Pit 3, dark solids (dry)
0517-1064-D-L	Pit 3	Drum #517, Pit 3, dark solids w/ water
0518-1065-D-L	Pit 3	Drum #518, Pit 3, clear liquid
0519-1066-D-L	Pit 3	Drum #519, Pit 3, clear liquid
0520-1067-D-L	Pit 3	Drum #520, Pit 3, clear liquid
0521-1068-D-L	Pit 3	Drum #521, Pit 3, clear liquid
0522-1069-D-L	Pit 3	Drum #522, Pit 3, clear liquid
0523-1070-D-L	Pit 3	Drum #523, Pit 3, clear liquid
0524-1071-D-L	Pit 3	Drum #524, Pit 3, clear liquid
0525-1092-D-L	Pit 3	Drum #525, Pit 3, clear liquid
0526-1093-D-L	Pit 3	Drum #526, Pit 3, clear liquid
0527-1094-D-L	Pit 3	Drum #527, Pit 3, clear liquid
0528-1095-D-L	Pit 3	Drum #528, Pit 3, clear liquid
0529-1096-D-L	Pit 3	Drum #529, Pit 3, clear liquid
0530-1097-D-L	Pit 3	Drum #530, Pit 3, clear liquid
0531-1098-D-L	Pit 3	Drum #531, Pit 3, clear liquid
0532-1099-D-L	Pit 3	Drum #532, Pit 3, clear liquid
0533-1100-D-L	Pit 3	Drum #533, Pit 3, clear liquid
0534-1101-D-L	Pit 3	Drum #534, Pit 3, clear liquid
0496-1019-D-L	PP	Drum #496, PP, pink crystal solids
0535-1102-D-L	Pit 3	Drum #535, Pit 3, clear liquid
0536-1103-D-L	Pit 3	Drum #536, Pit 3, clear liquid
0537-1104-D-L	Pit 3	Drum #537, Pit 3, clear liquid w/ dark solids
0538-1105-D-L	Pit 3	Drum #538, Pit 3, clear liquid
0539-1106-D-L	Pit 3	Drum #539, Pit 3, clear liquid
0540-1107-D-L	Pit 3	Drum #540, Pit 3, clear liquid
0541-1108-D-L	Pit 3	Drum #541, Pit 3, clear liquid
0542-1109-D-L	Pit 3	Drum #542, Pit 3, clear liquid
0543-1110-D-L	Pit 3	Drum #543, Pit 3, dark solids w/ liquid
0544-1111-D-L	Pit 3	Drum #544, Pit 3, dark solids
0553-1135-D-L	Pit 3	Drum # 553, Pit 3, clear liquid
0545-1127-D-L	Pit 3	Drum #545, Pit 3, dark solids
0546-1128-D-L	Pit 3	Drum #546, Pit 3, brown solids (dirt)
0547-1129-D-L	Pit 3	Drum #547, Pit 3, clear liquid
0548-1130-D-L	Pit 3	Drum #548, Pit 3, clear liquid
0549-1131-D-L	Pit 3	Drum #549, Pit 3, clear liquid
0550-1132-D-L	Pit 3	Drum #550, Pit 3, clear liquid
0551-1133-D-L	Pit 3	Drum #551, Pit 3, clear liquid

CLIENT #	SITE CODE	SAM. DESC
0552-1134-D-L	Pit 3	Drum #552, Pit 3, clear liquid
0554-1136-D-L	Pit 3	Drum #554, Pit 3, clear liquid
0555-1137-D-L	Pit 2	Drum #555, Pit 3, clear liquid
0556-1138-D-L	Pit 3	Drum #556, Pit 3, clear liquid
0557-1139-D-L	Pit 3	Drum #557, Pit 3, dark solid w/ water
0558-1140-D-L	Pit 3	Drum #558, Pit 3, dark sludge w/ water
0559-1141-D-L	Pit 3	Drum #559, Pit 3, clear liquid
0560-1142-D-L	Pit 3	Drum #560, Pit 3, clear liquid
0561-1143-D-L	Pit 3	Drum #561, Pit 3, clear liquid
0562-1144-D-L	Pit 3	Drum #562, Pit 3, clear liquid
0563-1145-D-L	Pit 3	Drum #563, Pit 3, clear liquid
0564-1146-D-L	Pit 3	Drum #564, Pit 3, clear liquid
0565-1168-D-L	Pit 3	Drum #565, Pit 3, clear liquid
0566-1169-D-L	Pit 3	Drum #566, Pit 3, clear liquid w/ green solids
0567-1170-D-L	Pit 3	Drum #567, Pit 3, clear liquid
0568-1171-D-L	Pit 3	Drum #568, Pit 3, clear liquid
0569-1172-D-L	Pit 3	Drum #569, Pit 3, clear liquid
0570-1173-D-L	Pit 3	Drum #570, Pit 3, clear liquid

APPENDIX J

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APPENDIX J

(QUALITY CONTROL RESULTS)

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/14/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
(Concentration units are parts per billion)					
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.004)	ND (0.002)	ND (0.009)	ND (0.005)
Volatile Organic Compounds (Concentration Units are in μg/L)					
71-43-2	Benzene	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	210.	43.	29.	25.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

D29-OP-19

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

D29-0P-20

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

D29-OP-21

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29-OP-22

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Pesticides and PCBs (Continued)					
50-29-3	4,4'-DDT	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	ND	ND
319-85-7	beta-BHC	ND	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND	ND
319-86-8	delta-BHC	ND	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

D29-OP-23

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Chlorinated Herbicides (Concentration Units are in µg/L)					
75-99-0	Dalapon (Dowpon)	ND	ND	ND	ND
1918-00-9	Dicamba	ND	ND	ND	ND
7085-19-0	MCPP	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND	ND
93-76-5	2,4,5-T	ND	ND	ND	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	<0.001	ND	<0.001	<0.001
	Arsenic	<0.001	ND	<0.001	<0.001
	Beryllium	<0.002	ND	<0.001	<0.001
	Cadmium	<0.001	ND	<0.001	<0.001
	Chromium	<0.01	ND	<0.01	<0.01
	Copper	<0.002	ND	<0.002	<0.002
	Lead	<0.01	ND	<0.01	<0.01
	Mercury	<0.001	ND	<0.001	<0.001
	Nickel	<0.01	ND	<0.01	<0.01
	Selenium	<0.001	ND	<0.001	<0.001

D29-OP-24

Quality Control Results
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Field/Trip Blanks Associated with Background Well Waters

CAS Number	Compound Name	Field Blank 12/13/84 Y1867	Trip Blank 12/14/84 Y1868	Field Blank 1/8/85 Y1876	Trip Blank 1/8/85 Y1877
Metals (Continued)					
	Silver	<0.002	ND	<0.002	<0.002
	Thallium	<0.02	ND	<0.02	<0.02
	Zinc	<0.001	ND	<0.002	<0.001
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	<0.01	<0.01	<0.01	<0.01
	Total Phenols	<0.01	ND	<0.01	<0.01

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip/Field Blank OFF-SITE LOCATION: ____________

SAMPLE NO: F-1-7-1867-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. ----------	Unknown	10. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
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11.		
12.		
13.		
14.		
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16.		
17.		
18.		
19.		
20.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-OP-77

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip/Field Blank OFF-SITE LOCATION: ____________

SAMPLE NO: T052-1868-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. ---------	A Chloromethane-Butene isomer	10. µg/L
2. 507-45-9	2,3-Dichloro-2-Methyl butane	8. µg/L
3.		
4.		
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12.		
13.		
14.		
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-OP-78

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip/Field Blank OFF-SITE LOCATION: ____________

SAMPLE NO: F119-1876-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1.	None Detected	
2.		
3.		
4.		
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11.		
12.		
13.		
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-OP-79

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip/Field Blank OFF-SITE LOCATION: ____________

SAMPLE NO: T053-1877-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
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17.		
18.		
19.		
20.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-OP-80

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.006 ppb)	ND (0.004 ppb)	ND (0.0011 ppb)	ND (0.00027 ppb)
Volatile Organic Compounds (Concentration Units are in μg/L					
71-43-2	Benzene	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	27.	86.	170.	84.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

D29-OP-51

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in μg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

D29-OP-52

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

D29 OP-53

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

D29-OP-54

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Y4166 Trip Blank 6/5/85	Y4167 Field Blank 6/5/85	Y4433 Trip Blank 6/25/85	Y4434 Field Blank 6/25/85
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29 OP-55

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Pesticides and PCBs (continued)					
50-29-3	4,4'-DDT	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	ND	ND
319-85-7	beta-BHC	ND	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND	ND
319-86-8	delta-BHC	ND	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Chlorinated Herbicides (Concentration Units are in µg/L)					
75-99-0	Dalapon (Dowpon)	ND	ND	ND	ND
1918-00-9	Dicamba	ND	ND	1.0	ND
7085-19-0	MCPP	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND	18.	ND
93-76-5	2,4,5-T	ND	ND	ND	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	0.002	0.001	<0.01	<0.01
	Arsenic	<0.001	<0.001	<0.001	<0.001
	Beryllium	<0.002	<0.002	0.002	<0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001
	Chromium	<0.01	<0.01	<0.01	<0.01
	Copper	0.002	<0.002	0.003	0.007
	Lead	<0.01	<0.01	<0.01	<0.01
	Mercury	<0.001	<0.001	<0.001	<0.001
	Nickel	<0.01	<0.01	<0.01	<0.01
	Selenium	<0.001	<0.001	<0.004	<0.001

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Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
	Silver	<0.002	<0.002	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	0.007	0.010	0.006	0.020
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	<0.01	<0.01	<0.01	<0.01
	Total Phenols	0.01	0.01	<0.01	<0.01

D29-OP-58

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: T085-4166-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1.	None Detected	
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

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TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Field Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: F135-4167-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: T097-4433-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1.	None Detected	
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Field Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: F152-4434-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1.	None Detected	
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.0026 ppb)	ND (0.0023 ppb)	ND (0.00072 ppb)	ND (0.00060 ppb)
Volatile Organic Compounds (Concentration Units are in μg/L)					
71-43-2	Benzene	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND

D29-OP-26

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	25.	22.	33.	510.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

D29-OP-27

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	11.*
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

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Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in μg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29-OP-31

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Pesticides and PCBs (Continued)					
50-29-3	4,4'-DDT	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	ND	ND
319-85-7	beta-BHC	ND	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND	ND
319-86-8	delta-BHC	ND	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

D29-OP-32

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Chlorinated Herbicides (Concentration Units are in µg/L)					
75-99-0	Dalapon (Dowpon)	2.0*	ND	ND	ND
1918-00-9	Dicamba	ND	ND	ND	ND
7085-19-0	MCPP	ND	ND	500.*	500.*
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	ND	ND	2.0*
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND	ND
93-76-5	2,4,5-T	ND	ND	ND	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	<0.001	<0.001	<0.004	<0.002
	Arsenic	<0.001	<0.001	0.003	0.002
	Beryllium	<0.002	0.002	0.002	<0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001
	Chromium	<0.01	<0.01	<0.01	<0.01
	Copper	0.009	0.008	0.005	0.005
	Lead	<0.01	<0.01	<0.01	<0.01
	Mercury	<0.001	<0.001	<0.001	<0.001
	Nickel	<0.01	<0.01	<0.01	<0.01
	Selenium	<0.001	<0.001	<0.001	<0.001

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Metals (Continued)					
	Silver	<0.002	<0.002	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	<0.001	<0.001	0.005	0.006
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	<0.01	<0.01	<0.01	<0.01
	Total Phenols	<0.01	<0.01	<0.01	<0.01

D29-OP-34

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: T-100-4465-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. 108-87-2	Methylcyclohexane	30. µg/L
2. 108-88-3	Toluene	10. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Field Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: F-157-4466-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. 108-87-2	Methylcyclohexane	60. µg/L
2. 108-88-3	Toluene	80. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: T103-4544-H-L

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. -----------	Methylene Chloride/Acetone Reaction Products Reported in Method Blank	~ µg/L
2.		
3.		
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Field Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: F162-4545-H-L

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
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10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1.	Methylene Chloride/Acetone Reaction Products Reported in Method Blank	~ µg/L
3.		
4.		
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19.		
20.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.0029 ppb)	ND (0.0024 ppb)
Volatile Organic Compounds (Concentration Units are in μg/L			
71-43-2	Benzene	ND	ND
56-23-5	Carbon tetrachloride	ND	ND
108-90-7	Chlorobenzene	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND
75-00-3	Chloroethane	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND
67-66-3	Chloroform	ND	5.
75-35-4	1,1,-Dichloroethene	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND

D29-OP-39

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Volatiles (Continued)			
78-87-5	1,2-Dichloropropane	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND
100-41-4	Ethylbenzene	ND	ND
75-09-2	Methylene chloride	12.	55.
74-87-3	Chloromethane	ND	ND
74-83-9	Bromomethane	ND	ND
75-25-2	Bromoform	ND	ND
75-27-4	Bromodichloromethane	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND
124-48-1	Chlorodibromomethane	ND	ND
127-18-4	Tetrachloroethene	ND	ND
108-88-3	Toluene	ND	ND
79-01-6	Trichloroethene	ND	ND
75-01-4	Vinyl chloride	ND	ND
67-64-1	Acetone	ND	ND
78-93-3	2-Butanone	ND	ND
75-15-0	Carbon disulfide	ND	ND

D29-OP-40

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Volatiles (Continued)			
519-78-6	2-Hexanone	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND
100-42-5	Styrene	ND	ND
108-05-4	Vinyl acetate	ND	ND
95-47-6	Total Xylenes	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units and in μg/L)			
88-06-2	2,4,6-Trichlorophenol	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND
95-57-8	2-Chlorophenol	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND
88-75-5	2-Nitrophenol	ND	ND
100-02-7	4-Nitrophenol	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND
87-86-5	Pentachlorophenol	ND	ND
108-95-2	Phenol	ND	73.
65-85-0	Benzoic acid	ND	ND
95-48-7	2-Methylphenol	ND	ND
108-39-4	4-Methylphenol	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND

D29-OP-41

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Base/Neutral/Acids (Continued)			
83-32-9	Acenaphthene	ND	ND
92-87-5	Benzidine	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND
118-74-1	Hexachlorobenzene	ND	ND
67-72-1	Hexachloroethane	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND
206-44-0	Fluoranthene	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Base/Neutral/Acids (Continued)			
87-68-3	Hexachlorobutadiene	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND
78-59-1	Isophorone	ND	ND
91-20-3	Naphthalene	ND	ND
98-95-3	Nitrobenzene	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	46.
85-68-7	Butyl benzyl phthalate	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND
84-66-2	Diethyl phthalate	ND	ND
131-11-3	Dimethyl phthalate	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND

D29-OP-43

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Base/Neutral/Acids (Continued)			
218-01-9	Chrysene	ND	ND
208-96-8	Acenaphthylene	ND	ND
120-12-7	Anthracene	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND
86-73-7	Fluorene	ND	ND
85-01-	Phenanthrene	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND
129-00-0	Pyrene	ND	ND
62-53-3	Aniline	ND	ND
100-51-6	Benzyl alcohol	ND	ND
106-47-8	4-Chloroaniline	ND	ND
132-64-9	Dibenzofuran	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND
88-74-4	2-Nitroaniline	ND	ND
99-09-2	3-Nitroaniline	ND	ND
100-01-6	4-Nitroaniline	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)			
309-00-2	Aldrin	ND	ND
60-57-1	Dieldrin	ND	ND
57-74-9	Chlordane	ND	ND

D29-OP-44

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Base/Neutral/Acids (Continued)			
50-29-3	4,4'-DDT	ND	ND
72-55-9	4,4'-DDE	ND	ND
72-54-8	4,4'-DDD	ND	ND
959-98-8	alpha-Endosulfan	ND	ND
33213-65-9	beta-Endosulfan	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND
72-20-8	Endrin	ND	ND
7421-93-4	Endrin aldehyde	ND	ND
76-44-8	Heptachlor	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND
319-84-6	alpha-BHC	ND	ND
319-85-7	beta-BHC	ND	ND
58-89-9	gamma-BHC	ND	ND
319-86-8	delta-BHC	ND	ND
53469-21-9	PCB-1242	ND	ND
11097-69-1	PCB-1254	ND	ND
11104-28-2	PCB-1221	ND	ND
11141-16-5	PCB-1232	ND	ND
12672-29-6	PCB-1248	ND	ND
11096-82-5	PCB-1260	ND	ND
12674-11-2	PCB-1016	ND	ND
8001-35-2	Toxaphene	ND	ND

D29-OP-45

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Pesticides and PCBs (Continued)			
Chlorinated Herbicides (Concentration Units are in μg/L)			
75-99-0	Dalapon (Dowpon)	ND	ND
1918-00-9	Dicamba	ND	ND
7085-19-0	MCPP	ND	ND
94-74-6	MCPA	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND
94-75-7	2,4-D	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND
93-76-5	2,4,5-T	ND	2.46
94-82-6	2,4-DB	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)			
	Antimony	<0.002	<0.001
	Arsenic	<0.001	<0.001
	Beryllium	<0.002	<0.002
	Cadmium	<0.001	<0.001
	Chromium	<0.01	<0.01
	Copper	<0.002	<0.002
	Lead	<0.01	<0.01
	Mercury	<0.001	<0.001
	Nickel	<0.01	<0.01
	Selenium	0.002	0.002

D29-OP-46

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling: 6/17/85
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank Y4299	Field Blank Y4300
Chlorinated Herbicides (Continued)			
	Silver	<0.002	<0.002
	Thallium	<0.02	<0.02
	Zinc	<0.001	<0.001
Classical Parameters (Concentration Units are in Parts per Million - ppm)			
	Total Cyanide	<0.01	<0.01
	Total Phenols	<0.01	<0.01

D29-OP-47

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: T091-4299-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. -----------	Unknown	.20 µg/L
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25.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-81

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Trip Blank OFF-SITE LOCATION: Groundwater Sampling

SAMPLE NO: F-145-4300-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
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9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. 108-87-2	Methycyclohexane	9. µg/L
2. 108-88-3	Toluene	10. µg/L
3. 541-05-9	Hexamethylcyclotrisiloxane	10. µg/L
4. 149-57-5	2-ethylhexanoic acid	8. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29-82

APPENDIX K

APPENDIX K

(METEOROLOGIC DATA)

ON SITE DATA

DATE September 1984

Wind Speed (WS) mph
Wind Direction (WD) - winds from nearest 10 degree

	Sept. 7		Sept. 8		Sept 9		Sept 10		Sept 11		Sept 12	
TIME	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
0100			2	270	2.5	215	3	220	5.5	230	4	250
0200			1	calm	2	260	2	235	3	200	3.5	260
0300			1	calm	1.5	250	2	295	3.5	210	3	270
0400			1.5	calm	1	calm	2	calm	2	220	4.5	300
0500			1.5	20	0.5	calm	1.5	50	3	200	8	50
0600			1.5	20	1	calm	1.5	30	2	220	7	50
0700			1.5	20	0.5	calm	2	40	2	205	7.5	50
0800			1.5	20	2	10	2.5	40	1	280	7	50
0900			1	20	1	100	3	100	1.5	280	9	50
1000			2	190	2	220	6	175	2	280	8	50
1100			3	220	5	230	8.5	160	3	190	9	50
1200			5	185	5.5	200	8.5	170	5	170	8	50
1300	2.5	130	5.5	190	7	190	9	160	5	160	7.5	60
1400	3.5	200	8.5	170	6.5	200	10	160	6	170	8.5	50
1500	5	170	9	160	6	190	10	170	5.5	210	6	50
1600	5	170	8.5	160	8.5	160	11	170	6	210	6	60
1700	5	180	9	170	10	170	10	180	7	170	5.5	65
1800	5	170	9	170	9.5	170	9	180	6	175	5	70
1900	5.5	180	8	180	8	180	6	170	5	230	4.5	60
2000	4	190	5	180	5.5	180	7	190	6	245	6	50
2100	3.5	190	6	205	5	190	6	200	5	240	3.5	40
2200	3	200	5	210	4	200	6	210	5	230	2	40
2300	3.5	230	5	210	4	210	5	210	4	230	2	calm
2400	3	260	4	215	3	210	3.5	230	4	260	1	calm

Avg 5.6 mph 25.hr

DATE Sept. 1984

	Sept. 13		Sept. 14		Sept. 15		Sept. 16		Sept. 17		Sept. 18	
TIME	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
0100	1.5	calm	5	220	6	50	4	170	4.5	320	2	270
0200	1	calm	6.5	200	4.5	60	3	270	3	330	2	40
0300	1	calm	6	220	5.5	60	3	330	3.5	195	1.5	40
0400	1.5	calm	4.5	230	5.5	50	5.5	340	4.5	340	2	40
0500	1.5	40	5	220	6.5	50	2	50	6.5	340	2.5	40
0600	3	50	4	230	6	50	2	calm	4.5	340	2	40
0700	2.5	50	5	230	8.5	50	2	200	3	40	2	30
0800	2	30	5	220	6	50	2	130	2.5	40	2.5	40
0900	3	40	4.5	240	5	50	3	260	5.5	50	4	50
1000	2.5	50	5.5	260	6	110	3	140	7	50	3	50
1100	3.5	170	5	250	5.5	130	3	140	7	50	2	100
1200	5.5	180	6	260	4.5	170	3.5	250	10.5	50	2	130
1300	7	170	6	280	5	130	4	240	7	60	3	185
1400	8.5	160	4.5	290	5	130	5	290	6	60	4	160
1500	11	160	4	290	4	180	4	280	5	60	5.5	170
1600	11.5	160	3	300	4.5	180	5	300	4.5	50	7	170
1700	9	160	5	180	6.5	180	5	300	4	60	7	160
1800	9	160	5	180	6	180	5	310	3	60	6	180
1900	6	180	5	180	4.5	330	5	285	3.5	50	5	180
2000	7	200	3.5	50	6.5	330	4.5	280	2	30	4	180
2100	6	210	3	50	5	330	3.5	290	1.5	200	3.5	200
2200	6	220	3	40	6	290	3	300	1.5	240	3	220
2300	6	220	5.5	60	6	50	2	310	2	260	2	260
2400	5	230	7	55	5.5	50	3.5	320	2.5	260	2	260

DATE Sept. 1984

TIME	Sept. 19 WS	Sept. 19 WD	Sept. 20 WS	Sept. 20 WD	Sept. 21 WS	Sept. 21 WD	Sept. 22 WS	Sept. 22 WD	Sept. 23 WS	Sept. 23 WD	Sept. 24 WS	Sept. 24 WD
0100	3	260	3	205	3.5	280	2	50	4	200	3	240
0200	2	250	2.5	230	4	305	1	Calm	4	210	3	240
0300	1	Calm	3	220	4.5	330	1.5	40	3.5	210	3	~~360~~ 260
0400	1	Calm	3	220	4	320	3	40	3.5	210	2.5	260
0500	1	calm	2.5	215	5	320	2	50	3.5	240	2.5	240
0600	1.5	215	2.5	200	5	320	1.5	30	4	230	1.5	205
0700	2.5	210	2.5	210	5	320	1	30	3.5	240	2	225
0800	2.5	245	3	230	3	330	1.5	40	4	245	1	235
0900	3	250	3	230	4	180	2.5	40	5	250	3	240
1000	5	260	3.5	230	6	110	1.5	40	4.5	250	3	220
1100	6	270	4	240	6	70	2	40	5	250	1	50
1200	6	270	5	230	6	110	3	160	5.5	230	2.5	110
1300	6.5	260	7	235	5	120	4	180	6	230	3	200
1400	6	260	7	230	5	220	4.5	180	5.5	230	3	250
1500	6	260	7.5	230	5	250	5.5	175	6	225	4	260
1600	6.5	270	8	235	4.5	240	8	160	5.5	225	3.5	280
1700	6	270	9	250	4	175	7	170	5.5	230	3	270
1800	6	270	7	250	3.5	210	7	160	5.5	230	3.5	290
1900	5	260	5.5	240	5.5	320	5.5	170	5	230	3	280
2000	5	270	3.5	250	5	330	4	180	5	230	1.5	320
2100	5	280	4	230	3	330	4	200	4.5	240	1	50
2200	3.5	300	6	250	3	45	4.5	210	5	250	2	75
2300	2.5	300	7	260	2.5	40	4	210	4	245	2	180
2400	3	200	5.5	270	2.5	40	4	210	3	230	1.5	210

1.98

23-hr

DATE Sept. 1984

	Sept. 25		Sept. 26		Sept. 27		Sept. 28		Sept. 29		Sept. 30	
TIME	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
0100	2	250	5	220	6	180	1	calm	4	70	4	50
0200	1.5	230	4	230	3.5	190	1	140	4	40	3.5	40
0300	1	50	4	230	3.5	330	4	50	4	40	3	40
0400	1	calm	3.5	230	2.5	140	4	40	4	40	3.5	40
0500	1	40	4	220	3	45	6	50	4.5	40	4	40
0600	1	40	4.5	220	3	40	7	50	4	40	4.5	40
0700	1	calm	4	220	3.5	40	7	50	4	40	4	50
0800	1	30	5	235	8	50	5	50	4	40	5.5	50
0900	1.5	30	5	250	8	50	5	50	4	50	6	50
1000	1.5	40	7	280	8	50	5	50	6	50	7	50
1100	2	125	8	200	8	50	5	70	5.5	50	7	50
1200	4	235	10	260	7	50	5	60	6	50	7	60
1300	3.5	240	8.5	260	5	50	5	60	7	50	7	70
1400	5	250	10	320	3	50	4.5	50	6	50	7	70
1500	6	240	9.5	250	3	50	5	50	5	50	7	70
1600	6	240	11	320	4	50	5	40	6	50	6.5	70
1700	6	220	9	260	4	50	6	50	5	50	4.5	70
1800	5.5	240	7.5	290	4	50	7	50	5	50	3.5	70
1900	5	230	9.5	320	4	50	6	50	4	50	2.5	70
2000	4	230	7	250	3	40	5	50	3.5	40	2.5	60
2100	4	230	7	290	3	50	4	40	3	40	1	50
2200	4	200	6	240	2.5	50	4	50	3	40	2.5	110
2300	5	200	7	180	1.5	315	4	50	3	40	4	110
2400	4	220	7	180	2	250	4	50	2.5	45	4	90

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DATE Oct. 1984

	Oct. 1		Oct. 2		Oct. 3		Oct. 4		Oct. 5		Oct. 6	
TIME	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
0100	5	70	6.5	50	4.5	290	5	270	1	Calm	3.5	50
0200	5.5	55	6.5	85	3.5	270	4	260	1.5	210	4.5	50
0300	5	50	6	160	3.5	270	4	300	1	210	3.5	50
0400	7	40	5	330	5	280	5	310	1	Calm	5	50
0500	8	40	6	150	4	275	5	310	0.5	Calm	4	60
0600	7	40	7	150	4	260	5.5	330	1.5	Calm	4	50
0700	9	50	7	160	4	260	5	320	2	310	4	50
0800	10	50	7	170	2.5	220	4	320	2	320	4	50
0900	6	50	7	180	4	230	5	300	3	260	6	60
1000	7	50	5.5	180	5	235	7	305	3	50	6	60
1100	9	50	6	320	6	250	8	310	5	320	5.5	60
1200	10	50	7	180	2	240	7	310	5	240	4	60
1300	10	55	7	325	8	245	7	310	6	200	3.5	80
1400	8	50	7	320	10	260	7	310	5.5	200	3	140
1500	9	50	7	310	9.5	240	7	310	6	190	3	50
1600	9	50	9	320	9	260	7	300	5.5	190	3	250
1700	11.5	50	10	320	9	250	6.5	300	6	310	3.5	240
1800	9	50	11	320	7	240	6.5	310	6	160	3.5	240
1900	6	70	9	330	8	250	5	320	5.5	160	4	190
2000	6	130	6	330	6	260	3	330	4	180	3	220
2100	5.5	120	5	320	6	250	2	340	6	150	3.5	215
2200	5.5	60	4	300	6	250	2	290	6	50	1	200
2300	5.5	60	5	290	5	260	1.5	235	7	50	2	245
2400	6.5	70	4.5	290	6	270	1	Calm	3	50	2	250

11 New Jersey

DATE Oct. 1984

	Oct. 7		Oct. 8		Oct. 9							
TIME	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD
0100	2	190	4	240	3	230						
0200	1.5	200	3.5	250	3.5	250						
0300	2	360	3	250	3.5	250						
0400	1	Calm	2	240	3.5	250						
0500	2	40	2	220	4	240						
0600	2	40	1.5	210	3.5	240						
0700	2.5	50	1.5	250	3	260						
0800	2	30	2.5	240								
0900	1	Calm	2	230								
1000	1.5	50	3	240								
1100	2	180	4	250								
1200	3	230	4.5	230								
1300	3	215	5	235								
1400	4	190	5	210								
1500	3.5	210	4.5	220								
1600	4	215	4.5	240								
1700	6.5	180	6	190								
1800	6	180	5.5	170								
1900	5	190	4	180								
2000	5	200	4	180								
2100	6	210	3	185								
2200	5.5	210	3.5	215								
2300	5	220	4	230								
2400	4.5	230	3	240								

MF 1-10A
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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO N.J.

DATE: 7 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ____ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING Hundreds of Feet (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (Ins) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0050	CLR	20			278	53	44	01	05		035	110 70	HW
SA	0150	CLR	20			281	54	43	02	03		036		HW
SA	0250	CLR	20			281	53	44	03	05		036		HW
SA	0350	CLR	20			281	52	44	03	05		036	203	HW
SA	0450	CLR	20			288	50	45	03	06		038		HW
SA	0550	CLR	15			298	49	46	31	04		041		HW
SA	0650	CLR	12			305	55	43	01	08		043	/224 1001 49	EH
SA	0750	CLR	10			305	58	44	01	09		043	FEW CI S	SF
SA	0850	CLR	12			308	61	46	03	09		044		SF
SA	0950	CLR	15			312	65	46	02	07		045	FEW CU E 305	SF
													1100	
SA	1050	CLR	20			312	68	44	11	06		045	FEW CU	SF
SA	1150	CLR	20			312	68	44	01	05		045	FEW CU	SF
								39						
SA	1250	CLR	20			305	69	45	17	08		043	FEW CU 805	SF
													1100 49	
SA	1350	CLR	15			301	69	45	20	07		042	FEW CU	SF
SA	1450	40 SCT	20			298	70	41	20	08		041		SF
SA	1550	45 SCT	20			301	70	37	17	08		042	503 1100	WB
SA	1650	50 SCT	20			298	70	34	17	07		041		WB
SA	1750	250 SCT	20			298	66	41	16	11		041		WB
SA	1850	250 SCT	20			305	64	43	16	08		043	303 1001 70	WB
SA	1950	CLR	20			312	64	46	15	06		046		WB
SA	2050	CLR	20			315	63	46	17	06		046		WB
SA	2150	CLR	20			318	62	47	22	06		047	214	WB
SA	2250	CLR	20			318	58	48	22	05		047		WB
SA	2350	CLR	20			322	58	49	23	06		048		HW

is entered on line following related aviation observation.

MF1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 6 SEP 1984

TO CONVERT LST TO GMT: ADD 5 hrs. SUBTRACT ____ hrs.

TYPE	TIME (LST) 2	SKY AND CEILING (Hundreds of Feet) 3	VISIBILITY (Miles) Surface 4	VISIBILITY 4a	WEATHER AND OBSTRUCTIONS TO VISION 5	SEA LEVEL PRESS. mb 6	TEMP °F 7	DEW PT °F 8	WIND DIRECTION 00-36 9	WIND SPEED Kt 10	WIND CHARACTER 11	ALTIMETER SETTING In. 12	REMARKS AND SUPPLEMENTAL CODED DATA 13	OBSERVER'S INITIALS
SA	0050	CLR	20			325	56	49	29	05		049	305 70	HW
SA	0150	CLR	20			322	56	49	25	03		048		HW
SA	0250	CLR	20			322	55	49	00	00		048		HW
SA	0350	CLR	20			325	55	49	00	00		049	500	HW
SA	0450	CLR	20			329	54	52	00	00		050		HW
SA	0550	CLR	10			332	54	51	03	04		051		HW
SA	0650	CLR	7			332	58	52	05	04		051	007 53	HW
SA	0750	CLR	10			335	63	52	29	03		052		SF
SA	0850	CLR	9			339	67	52	25	05		053		SF
SA	0950	CLR	20			335	68	51	20	06		052	FEW CU 005 1100	SF
SA	1050	CLR	20			332	70	52	20	06		051	FEW CU	SF
SA	1150	CLR	20			329	71	47	22	08		050	FEW CU	SF
SA	1250	40 SCT	20			318	71	55	14	09		047	817 1100 52	SF
SA	1350	45 SCT	20			315	72	56	14	09		046		SF
SA	1450	CLR	20			308	71	56	15	11		044	FEW CU/CI	SF
SA	1550	CLR	20			305	71	56	14	10		043	714 1100	[illegible]
SA	1650	CLR	20			301	71	55	15	11		042	FEW CU	[illegible]
SA	1750	CLR	20			298	69	54	17	11		041	FEW CU	[illegible]
SA	1850	CLR	20			298	67	54	19	08		041	607 12	[illegible]
SA	1950	CLR	20			301	66	54	19	09		042		[illegible]
SA	2050	CLR	20			301	65	55	19	08		042		[illegible]
SA	2150	CLR	20			305	64	54	18	07		043	207	[illegible]
SA	2250	CLR	20			301	62	54	22	05		042		[illegible]
SA	2350	CLR	20			298	61	53	22	06		041		HW

11, is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N J

DATE: 9 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME LST	SKY AND CEILING Hundreds of Feet	VISIBILITY Miles	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. mb	TEMP °F	DEW PT °F	WIND DIRECTION	WIND SPEED Kt	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	CLR	20		215	59	53	28	04		040	712 72	HW
SA	0150	CLR	20		288	58	53	30	04		038		HW
SA	0250	CLR	20		281	58	53	00	00		036		HW
SA	0350	CLR	20		281	57	53	20	04		036	614	HW
SA	0450	CLR	20		278	58	54	00	00		035		HW
SA	0550	CLR	20		278	57	53	23	04		035	SC SE	HW
SA	0650	CLR	9		278	60	55	00	00		035	603 56	HW
SA	0750	CLR	12		274	65	54	28	03		034		WB
SA	0850	CLR	15		274	68	54	26	05		034		WB
SA	0950	45 SCT	15		274	72	54	20	12		034	602 1100	WB
SA	1050	45 SCT	15		268	72	53	22	11		032		WB
SA	1150	40 SCT	15		261	73	54	22	08		030		WB
SA	1250	40 SCT	15		257	75	54	17	11		029	717 1100 56	WB
SA	1350	45 SCT	15		251	75	54	23	06		027		WB
SA	1450	46 SCT	15		244	76	55	20	13		025		WB
SA	1550	250-SCT	15		234	74	60	14	10		022	724 1101	WE
SA	1650	250-SCT	15		230	72	61	16	11		021	Few CU	WE
SA	1750	50 SCT 250 SCT	15		227	70	61	15	09		020		WE
SA	1850	50 SCT	15		227	69	60	17	11		020	607 1100 76	WE
SA	1950	50 SCT	15		227	70	60	17	08		020		WE
SA	2050	50 SCT	15		227	68	61	18	07		020		WE
SA	2150	CLR	15		227	67	61	18	07		020	400 1100	WE
SA	2250	250-SCT	15		224	66	62	21	05		019		WE
SA	2350	120 SCT 250-BKN	15		220	66	63	20	05		018		HW

"11" is entered at line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 10 SEP 1984

TO CONVERT LST TO GMT: ADD 5 hrs. SUBTRACT ___ hrs.

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY TOWER	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kts)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	INITIALS
SA	0050	120SCT 250SCT	15			213	65	64	20	05		016	714 1042 76	HW
SA	0150	13SCT M49BKN	12			213	63	62	31	05		016		HW
SA	0250	13SCT M49BKN	10			213	64	63	31	03		016		HW
SA	0350	13SCT M49BKN	7			210	65	64	00	00		015	703 1500	HW
SP	0358	M11 BKN49 OVC	6		F				00	00		015		HW
SA	0450	M10 BKN49 OVC	6		F	210	65	64	00	00		015		HW
RS	0550	M9 BKN49 OVC	6		F	210	66	65	00	00		015		HW
SP	0613	M8 BKN49 OVC	6		F				00	00		015		HW
SA	0650	M7 OVC	7			210	68	67	13	05		015	602 16[illegible] 62	HW
SA	0750	M7 BKN	7			207	71	67	17	05		014		WB
SP	0801	7SCT 250SCT	7						17	04		014		WB
SA	0850	40SCT 250SCT	10			203	75	66	15	08		013		WB
[illegible]	0950	M26BKN 250BKN	10			200	75	66	17	09		012	708 1601	WB
SA	1050	M27BKN 40BKN	10			193	78	67	14	07		010		WB
RS	1150	25SCT E50BKN	10			190	78	69	15	08		009		WB
SA	1250	30SCT E50BKN	12			183	80	69	18	13		007	717 1100 62	WB
SA	1350	M35BKN 50OVC	12			176	77	65	17	07		005		WB
SA	1450	30SCT E55BKN	15			173	79	68	15	11		004		WB
SA	1550	35SCT E55BKN	15			166	78	66	17	12		002	717 1800	WB
SA	1650	25SCT 55SCT	15			166	76	68	17	12		002		[illegible]
SA	1750	25SCT 37SCT M75BKN	15			166	75	69	17	10		002		[illegible]
SA	1850	37SCT M75BKN	15			166	75	68	17	10		002	400 1530 80	[illegible]
SA	1950	25SCT M65BKN	15			173	74	69	17	09		004		[illegible]
SA	2050	25SCT M75BKN	15			173	73	69	18	08		004		[illegible]
SA	2150	25SCT M75BKN	15			176	72	69	21	07		005	210 1130	[illegible]
SA	2250	M75BKN	15			173	71	68	22	08		004		[illegible]
SA	2350	75SCT	12			169	70	67	20	08		003		ST

"M" is entered on line following related aviation observation

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 11 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) Surface (4)	Tower (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (14)
SA	0050	CLR	15			166	69	67	20	05		002	610 80	SF
SA	0150	CLR	15			159	68	67	19	05		001		SF
SA	0250	CLR	15			159	68	66	22	04		001		SF
SA	0350	CLR	10			159	68	66	17	06		001	608 1070	SF
SA	0450	CLR	10			163	66	66	23	04		001		SF
SA	0550	250-OVC	10			163	67	66	18	04		001		SF
SA	0650	250-OVC	5		F	163	69	66	21	04		001	105 1001 66	SF
SA	0750	250-BKN	6		F	166	71	66	29	05		002		WB
SA	0850	250SCT	7			166	75	66	21	03		002	Few Cu	WB
SA	0950	50SCT	7			166	75	66	03	04		002	103 1100	WB
SA	1050	50SCT	10			163	78	67	15	06		001		WB
SA	1150	55 SCT	10			159	80	67	22	05		001		WB
SA	1250	E55 BKN	10			146	81	67	18	07		996	820 1100 66	WB
SA	1350	E45 BKN	10			142	81	67	[illegible]	[illegible]		993		[illegible]
SA	1450	M35 BKN	12			135	81	67	13	04		993		[illegible]
SA	1550	M35 BKN	12			135	80	68	17	09		993	610 1100	[illegible]
SA	1650	35 SCT	15			135	81	69	22	10		993		[illegible]
SA	1750	35SCT M110 BKN	15			136	80	68	21	10		993		[illegible]
SA	1850	M120 BKN	12			135	78	69	22	07		993	300 1030 83	[illegible]
SA	1950	120 SCT	12			139	76	69	22	07		994		[illegible]
SA	2050	CLR	12			139	75	69	19	07		994	Few AC	[illegible]
SA	2150	CLR	12			139	74	70	19	07		994	103	[illegible]
SA	2250	CLR	10			142	73	72	21	07		995		[illegible]
SA	2350	CLR	10			146	71	70	23	09		996		[illegible]

VTI. Is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION WSO Newark, N. J

DATE 12 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ____ hrs

SURFACE WEATHER OBSERVATIONS

TYPE	TIME	SKY AND CEILING	VISIBILITY (Miles)		WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS	TEMP	DEW PT	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING (In)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
EA	0050	E 30 BKN	6		F	149	70	68	23	06		997	208 1500 83	SF
SP	0145	M 29 OVC	6		F				26	05		998		SF
SA	0150	M 27 OVC	6		F	152	70	70	26	05		998		SF
EP	0239	M 37 BKN	8						30	08		999		SF
EA	0250	M 37 BKN 70 OVC	9			159	71	70	31	08		000		SF
EP	0316	M 20 BKN 35 OVC	10						34	11		001		SF
SA	0350	M 21 OVC	15			169	69	65	02	13		003	322 15//	SF
SA	0450	M 27 OVC	15			180	70	62	03	12		006		SF
RS	0550	27 SCT M 85 BKN	15			186	67	62	03	11		008		SF
SA	0650	30 SCT 80 SCT	15			196	66	60	02	15		011	227 1530 66	EM
SA	0750	35 SCT 80 SCT	15			196	66	59	02	12		011		WB
SA	0850	90 SCT	15			203	70	57	02	13		013		WB
SA	0950	90 SCT	15			208	72	55	03	12		012	003 1040	WB
SA	1050	CLR	20			213	75	54	04	14		011	FEW AC	WB
SA	1150	CLR	20			213	75	53	05	10		016	FEW Ci	WB
SA	1250	CLR	20			217	77	51	04	12		017	217 1001 66	WB
SA	1350	CLR	20			217	75	51	05	11		017		WB
SA	1450	250 SCT	20			217	78	52	05	10		017	FEW CU	WB
SA	1550	250 -BKN	20			220	78	54	09	10		018	303 1001	WB
SA	1650	250 -BKN	20			220	77	55	06	07		018	FEW CU	WB
SA	1750	40 SCT 250 -BKN	15			220	74	56	07	09		018		LA
SA	1850	40 SCT E 250 BKN	15			224	72	55	04	10		019	303 1106 79	LB
SA	1950	250 -BKN	15			227	71	55	04	08		020		LB
SA	2050	250 SCT	15			227	69	58	04	04		020		LB
SA	2150	250 SCT	15			227	69	55	11	04		020	103 1008	LB
SA	2250	CLR	15			230	67	56	04	04		021		LB
EA	2350	CLR	15			230	66	56	03	05		021		SF

"/"/, is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 13 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY TWR	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS (Mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	CLR	15			230	66	56	07	03		021	022 79	SF
SA	0150	CLR	15			227	65	56	01	04		020		SF
SA	0250	CLR	15			227	63	57	36	05		020		SF
SA	0350	80 SCT	15			23[illegible]	62	57	02	06		021	500 1070	SF
SA	0450	80 SCT 250 SCT	15			230	62	59	03	07		021		SF
SA	0550	80 SCT 250 SCT	15			234	60	56	02	06		022		SF
SA	0650	CLR	10			230	63	57	01	05		021	FEW CI 000	SF
													1001 60	
SA	[illegible]	CLR	6		H	[illegible]4	[illegible]	57	12	06		[illegible]		WB
SA	[illegible]	CLR	6		H	22[illegible]	70	60	[illegible]3	05		022	Few CU	WB
SA	[illegible]	40 SCT	7			230	72	59	18	06		021	00[illegible] 1100	WB
SA	[illegible]50	40 SCT	7			[illegible]	74	60	[illegible]	07		019		WB
SA	1150	40 SCT	15			2[illegible]7	75	63	16	[illegible]		017		WB
SA	[illegible]50	45 SCT	15			210	76	[illegible]	16	09		[illegible]5	720 1100 60	WB
SA	[illegible]50	40 SCT	15			[illegible]	75	[illegible]	16	0[illegible]		01[illegible]		WB
SA	1450	40 SCT	15			1[illegible]	76	66	15	11		008		HW
SA	1550	40 SCT 60 SCT	15			180	76	67	15	10		006	832 1500	HW
SA	1650	40 SCT	15			173	74	68	15	10		004		HW
SA	1750	M41 OVC	10			169	76	69	18	11		003	BINOVC	HW
SP	1818	23 SCT M29 BKN 41 OVC	9						18	09		003		HW
SA	1850	21 SCT M26 BKN 41 OVC	10			166	76	70	19	13		002	912 15// 76	HW
SP	1927	26 SCT 35 SCT M41 OVC	10						20	11		003		HW
SA	1950	35 SCT M41 OVC	11			169	75	69	20	11		003		HW
SP	2053	15 SCT M29 BKN 41 OVC	10						20	11		002		HW
SA	2050	14 SCT M28 BKN 41 OVC	10			169	74	70	20	10		003	MOON OCNLY VSB	HW
SA	2150	12 SCT M25 OVC	10			169	73	70	21	12		003	102 15//	HW
SA	2250	M13 BKN 31 OVC	8			166	73	70	21	09		002	MOON OCNLY VSB	HW
SP	2336	13 SCT 30 SCT	7						18	08		999		SF
SA	2350	13 SCT 30 SCT	7			156	73	70	21	08		999		SF

11, is entered on line following related aviation observation

MF1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 14 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs. SUBTRACT ___ hrs.

TYPE 1	TIME (LST) 2	SKY AND CEILING (Hundreds of Feet) 3	VISIBILITY (Miles) 4	5	WEATHER AND OBSTRUCTIONS TO VISION 6	SEA LEVEL PRESS. (mb) 7	TEMP (°F) 7	DEW PT (°F) 8	WIND DIRECTION (100-36) 9	WIND SPEED (Kt) 10	WIND CHARACTER 11	ALTIMETER SETTING (In.) 12	REMARKS AND SUPPLEMENTAL CODED DATA 13	OBSERVER'S INITIALS
SP	0008	M 13 BKN 20 OVC	6		F				20	09		998		SF
SP	0038	M 9 BKN 13 OVC	5		F				19	10		996		SF
SA	0050	M 9 OVC	5		F	142	72	71	21	10		995	825 15// 76	SF
SP	0110	M 8 OVC	5		F				21	10		993		SF
SA	0150	M 7 OVC	4		F	135	72	71	22	12		993		SF
SP	0218	9 SCT M 18 OVC	4		F				23	11		994		SF
SA	0250	M 10 BKN 20 OVC	5		F	135	73	71	22	09		993	BINOVC OVHD	SF
SA	0350	M 12 BKN 23 OVC	5		F	132	73	71	23	11		992	712 15//	SF
SA	0450	12 SCT M 22 OVC	5		F	132	74	72	24	09		992		SF
SA	0550	M 27 BKN 250 OVC	4		F	129	73	71	22	11		991		SF
SA	0650	M27 BKN 40 BKN	4		F	125	74	71	22	13		990	/805 1500 72	EM
L	0731	M12 BKN 250 OVC	4		F				23	14		990		EM
SA	0750	M12 BKN 250 OVC	4		F	125	76	72	24	12		990	/BINOVC	EM
SA	0850	M14 BKN 250 OVC	4		FH	129	77	71	24	11		991	/BINOVC	EM
SA	0950	15 SCT M25 OVC	4		FH	129	78	71	23	12		991	/BINOVC 103 15//	EM
SA	1050	15 SCT E25 BKN	6		H	125	79	71	25	11		990		EM
SA	1150	15 SCT M28 BKN	7			122	80	71	26	12		989		EM
SA	1250	M27 BKN 50 OVC	7			115	81	70	30	11		989	/814 15// 72	EM
SP	1334	M34 BKN 50 OVC	8						27	08		987		EM
SA	1350	34 SCT M55 OVC	8			112	80	70	30	08		986		EM
SA	1450	34 SCT M55 BKN 850 OVC	8			108	81	70	31	08		985		HW
SA	1550	28 SCT M34 BKN 41 OVC	9			108	79	70	33	12		985	607 15//	HW
SA	1650	28 SCT M34 BKN 55 OVC	10			108	76	62	35	12		985		HW
SA	1750	25 SCT E30 BKN 70 OVC	10			108	74	63	36	12		985	RWU W-NE	HW
SA	1850	M35 BKN 70 OVC	10			112	73	64	02	06		986	302 157/ 81	HW
SA	1950	M41 OVC	10			115	74	65	01	09		987		HW
SA	2050	28 SCT M41 OVC	10		RW-	119	73	64	01	10		988	RB49	HW
SP	2120	M26 BKN 41 OVC	10		RW-				01	10		989		HW
SA	2150	M26 BKN 41 OVC	9		R-	122	70	67	04	10		989	21000 152/	HW
SP	2157	M26 BKN 41 OVC	8		TR				04	11		989	TB58 E MOVG E OCNL	HW
													LTGIC	
SP	2218	18 SCT M26 BKN 46 OVC	5		R				03	11		988	TE18 MOVD E	HW
RS	2250	18 SCT 26 SCT M41 OVC	7		R-	112	66	65	04	09		986	TB0025 E18 MOVD E	HW
													R- OCNLY R	
SA	2350	M 41 OVC	10			108	66	62	04	10		986	RE45	SF

/// is entered on line following related aviation observation

SURFACE WEATHER OBSERVATIONS

WSO Newark, N J

15 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT

Type	Time	Sky and Ceiling	Visibility	Weather and Obstruction to Vision	Sea Level Press	Temp	Dew Pt	Wind Dir	Wind Speed	Wind Gusts/Char	Altimeter Setting	Remarks and Supplemental Coded Data	Initials
SA	0050	30 SCT M 37 OVC	6	R-F	112	61	61	06	08		986	RB0456 50843	SF
/												172/ 81	/
SA	0150	M 46 OVC	6	F	098	63	61	03	09		982	RE32	SF
SA	0250	M 39 OVC	6	F	095	64	62	02	10		981		SF
SA	0350	M 35 OVC	9		085	63	61	04	11		978	72704 15//	SF
SA	0450	17 SCT M 35 OVC	8		088	64	61	03	10		979		SF
SP	0457	M 15 BKN 35 OVC	7					03	10		978		SF
SA	0550	M 15 OVC	7		088	64	60	03	10		979		SF
SA	0650	M 20 OVC	7	R-	085	63	61	03	10		978	00025 15//	SF
/												61 20048	/
/												RB25	/
SA	0750	M 18 OVC	5	R-F	088	62	62	03	10		979		LR
R	0850	18 SCT M 41 OVC	7	R-	088	60	60	02	12		979		LR
SA	0950	10 SCT M 41 OVC	4	R-F	098	60	60	02	07		982	51408 172/	LR
SP	1004	8 SCT M 13 BKN 41 OVC	2	R-F				01	08		983		LR
SP	1032	9 SCT M 15 BKN 41 OVC	4	R-F				01	10		984		LR
SA	1050	9 SCT M 18 OVC	5	R-F	105	60	60	01	09		984		LR
SA	1150	M 13 BKN 40 OVC	5	R-F	108	60	59	02	08		985		LR
SP	1238	9 SCT M 17 BKN 50 OVC	5	R-F				35	09		985		LR
SA	1250	9 SCT M 12 BKN 50 OVC	6	R-F	112	59	59	35	10		986	21416 172/ 59	LR
SA	1350	14 SCT M 24 BKN 55 OVC	7		115	62	58	34	10		987	RE 1755	LR
SA	1450	17 SCT M 21 OVC	7		119	62	58	34	08		988		LR
SA	1550	12 SCT M 18 BKN 26 OVC	9	L-	125	61	57	36	14		990	RB10E35LF35	HW
/												21400 17//	/
SP	1630	12 SCT 18 SCT M 32 BKN 41 OVC	9	[illegible]				35	11		993		HW
SA	1650	12 SCT 18 SCT E 35 BKN 41 OVC	15	RW-	139	59	55	35	12		994	LE RB37 PCPN INTMT	HW
SA	1750	15 SCT 26 SCT M 37 BKN 55 BKN	15		152	58	56	31	10		998	RE05 B25 E40	HW
SA	1850	55 SCT 80 SCT	20		163	56	52	32	11	G16	001	23700 1140 63	HW
SA	1950	80 SCT	20		173	55	51	33	10		004	FEW SC	HW
SA	2050	80 SCT	20		180	53	49	34	10		006	FEW SC	HW
SP	2139	M 24 BKN 41 BKN	20					35	11		010		HW
SA	2150	M 21 BKN 41 BKN	20	RW-	193	55	49	01	10		010	RB45 23000 1800	HW
SP	2201	20 SCT 32 SCT M 41 BKN	20					36	12		011		HW
SP	2236	M 21 BKN 41 BKN	20					02	10		012		HW
SA	2250	M 21 BKN 32 BKN 41 BKN	20		200	55	50	02	11		012	RE0255	HW
SP	2337	20 SCT 40 SCT	20					02	09		014		WB
SA	2350	20 SCT	20		207	51	48	01	08		014		WB

A synoptic observation in WMO code format FM12 VII, is entered on line following related aviation observation.

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: WSO Newark, N.J.

DATE: 16 SEP 1984

TO CONVERT LST TO GMT: ADD 5 hrs. SUBTRACT ___ hrs.

SURFACE WEATHER OBSERVATIONS

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles)		WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (kt)	WIND CHARACTER	ALTIMETER SETTING (in.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
1	2	3	4	4a	5	6	7	8	9	10	11	12	13	14
SA	0050	CLR	20			213	50	46	34	08		016	2 27000 66	WB
SA	0150	30 SCT	15			217	50	45	34	09		017		WB
SA	0250	CLR	15			227	40	43	34	08		[illegible]		WB
SA	0350	CLR	15			227	46	42	20	03		020	114	WB
SA	0450	CLR	15			237	44	42	26	04		023		WB
SA	0550	250 SCT	15			244	44	42	24	03		025		WB
SA	0650	CLR	15			254	44	42	31	04		028	227 1500 42	WB
													20016	
SA	0750	CLR	20			261	56	41	31	06		030		[illegible]
SA	0850	CLR	20			264	55	39	33	05		031		[illegible]
SA	0950	CLR	25			264	57	38	01	04		031	110	[illegible]
SA	1050	CLR	25			264	59	36	35	05		031	FEW CU	[illegible]
SA	1150	35 SCT	25			261	60	37	33	10		030		[illegible]
SA	1250	40 SCT	25			257	61	37	32	08		029	807 1100 42	[illegible]
SA	1350	50 SCT	25			251	62	38	[illegible]	07		027		[illegible]
SA	1450	65 SCT	25			249	63	38	[illegible]	08		026		[illegible]
SA	1550	50 SCT 65 SCT	25			244	64	40	32	10		025	714 1400	HW
SA	1650	50 SCT 65 SCT	25			247	63	41	30	11		026		HW
SA	1750	70 SCT	25			251	62	44	26	10		027		HW
SA	1850	CLR	25			254	61	46	26	08		028	208 1040 67	HW
SA	1950	CLR	25			264	59	46	25	07		031		HW
SA	2050	CLR	25			268	57	48	27	07		032		HW
SA	2150	CLR	25			268	56	48	27	06		032	115	HW
SA	2250	CLR	25			271	53	47	27	05		033		HW
SA	2352	CLR	25			274	54	48	18	04		034		LH

11, is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 17 SEP 1984

TO CONVERT LST TO GMT: ADD 5 hrs. SUBTRACT ___ hrs.

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles)		WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb.)	TEMP. (°F)	DEW PT. (°F)	WIND DIRECTION (100's)	WIND SPEED (Kts.)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
1	2	3	4	4a	5	6	7	8	9	10	11	12	13	14
SA	0053	CLR	25			275	53	46	23	03		035	208 67	LH
SA	0153	CLR	25			381	52	45	33	09		036		LH
SA	0253	CLR	25			284	51	45	32	08		037		LH
SA	0351	CLR	25			284	51	45	33	09		037	108	LH
SA	0452	CLR	25			295	50	45	31	06		040		LH
SA	0552	CLR	25			301	50	45	01	09		042		LH
SA	0650	CLR	25			308	56	45	02	08		044	/224 49	~~GH~~
SA	0750	CLR	25			312	57	43	02	15		045		~~GH~~
SA	0850	CLR	25			318	60	42	02	14		047		~~GH~~
SA	0950	CLR	25			318	63	43	01	13		047	/ 110	~~GH~~
SA	1050	CLR	25			318	64	39	04	15		047		~~GH~~
SA	1150	CLR	25			315	65	40	02	11		046		~~GH~~
SA	1250	CLR	25			312	67	40	04	11		045	/807 49	~~GH~~
SA	1350	CLR	25			305	68	40	01	11		043		~~GH~~
SA	1450	CLR	25			301	68	40	01	10		042		HW
SA	1550	CLR	25			298	69	40	36	08		041	614	HW
SA	1650	CLR	25			301	69	39	04	07		042		HW
SA	1750	CLR	25			301	67	38	03	07		042		HW
SA	1850	CLR	25			301	65	46	18	05		042	102 70	HW
SA	1950	CLR	25			305	62	48	18	05		043		HW
SA	2050	CLR	25			305	61	48	18	04		043		HW
SA	2150	CLR	20			308	59	50	21	05		044	K NW-NE 208	HW
SA	2250	CLR	20			312	56	48	26	04		045	K NW-NE	HW
SA	2353	CLR	20			312	55	47	30	06		045		LH

"1", is entered on line following related aviation observation

K-17

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MF 1-10A

U.S. DEPARTMENT OF COMMERCE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 18 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ____ hrs

TYPE	TIME	SKY AND CEILING	VISIBILITY (Miles)	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS.	TEMP	DEW PT	WIND DIRECTION	WIND SPEED	WIND CHARACTER	ALTIMETER SETTING	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0053	CLR	20		308	56	46	01	04		044	000 10	LH
SA	0153	CLR	20		308	55	49	03	05		044		LH
SA	0251	CLR	20		301	53	49	05	05		[illegible]		LH
SA	0351	CLR	20		301	51	49	02	04		043	607	LH
SA	0451	CLR	20		305	50	47	02	05		043		LH
SA	0553	250 -SCT	15		308	49	47	01	06		044	FEW CU SE	LH
SA	0653	250 -SCT	15		305	56	47	04	06		043	FEW AC SE 003[?]	LH
												1071 49	
SA	0750	250-SCT	12		305	58	48	05	06		043		SF
SA	0850	250-SCT	10		305	62	48	04	05		043		SF
SA	0950	250-SCT	12		298	64	48	02	05		041	FEW CU 807 1101	SF
SA	1050	250-SCT	10		291	65	48	18	06		039	FEW CU	SF
SA	1150	250-SCT	12		281	67	49	18	07		036	FEW CU	SF
SA	1250	250-SCT	12		271	68	47	17	06		033	FEW CU 727	SF
												1101 49	
SA	1350	250-BKN	15		264	68	47	18	08		031	FEW CU	SF
SA	1450	250-SCT	15		261	68	45	15	08		030		SF
SA	1550	250-SCT	15		257	67	47	18	08		029	715 1001	HW
SA	1650	250-SCT	15		254	68	41	16	08		028		HW
SA	1750	250-SCT	15		247	66	47	14	06		026		HW
SA	1850	CLR	15		244	64	50	16	06		025	812 1001 61	HW
SA	1950	CLR	15		240	62	50	18	04		024		HW
SA	2050	CLR	15		237	60	51	20	04		023		HW
SA	2150	CLR	15		[illegible]	59	52	21	03		021	714	HW
SA	2250	CLR	15		224	58	51	23	06		019	K NW-NE	HW
SA	2353	CLR	15		220	56	~~52~~ 51	[illegible]	07		016		

/// Is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 19 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles)		WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kts)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
[illegible]	0[illegible]	CLR	[illegible]			[illegible]	[illegible]	52	[illegible]	[illegible]		[illegible]	717 69	[illegible]
[illegible]	[illegible]	CLR	15				[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	K NE-E	[illegible]
[illegible]	[illegible]	CLR	[illegible]				[illegible]	51	[illegible]	[illegible]		[illegible]	K NE-E	[illegible]
[illegible]	[illegible]	CLR	15			[illegible]	[illegible]	51	21	0[illegible]		[illegible]	714	[illegible]
[illegible]	[illegible]	CLR	15			[illegible]	50	50	[illegible]	[illegible]		[illegible]		[illegible]
[illegible]	[illegible]	250 -SCT	15			[illegible]	[illegible]	50	21	[illegible]		[illegible]		[illegible]
[illegible]	[illegible]	250 SCT	12			[illegible]	54	51	21	07		[illegible]	802 1001 5C	[illegible]
SA	0150	250 -SCT	10			193	59	53	22	07		015		[illegible]
SA	0850	CLR	10			140	63	51	22	09		009	FEW CI	[illegible]
SA	0950	CLR	10			182	67	52	22	10		[illegible]	715	[illegible]
SA	1050	CLR	10			169	69	51	23	14		003		[illegible]
SA	[illegible]	CLR	[illegible]			[illegible]	71	52	27	11		[illegible]		[illegible]
SA	[illegible]	CLR	[illegible]			[illegible]	[illegible]	[illegible]	2[illegible]	[illegible]		[illegible]	734 50	[illegible]
SA	[illegible]	CLR	15			[illegible]	75	51	[illegible]	14		[illegible]		[illegible]
SA	[illegible]	CLR	15			[illegible]	[illegible]	50	[illegible]	13		[illegible]		[illegible]
[illegible]	[illegible]	CLR	15			[illegible]	76	52	29	11		[illegible]	727	[illegible]
[illegible]	1650	CLR	15			125	[illegible]	[illegible]	29	[illegible]		[illegible]		[illegible]
[illegible]	17[illegible]	CLR	12			[illegible]	73	53	26	11		[illegible]		[illegible]
S[illegible]	1850	CLR	[illegible]			[illegible]	71	[illegible]	26	11		[illegible]	000 76	[illegible]
S	19[illegible]	CLR	[illegible]			125	69	54	26	09		[illegible]		[illegible]
S[illegible]	20[illegible]	CLR	15			127	67	55	29	07		[illegible]		[illegible]
S[illegible]	2150	CLR	15			125	65	55	19	0[illegible]		97[illegible]	005	[illegible]
[illegible]	2250	M [illegible] BKN	10			125	64	5[illegible]	19	0[illegible]		9[illegible]		[illegible]
[illegible]	[illegible]	[illegible] SCT	[illegible]			[illegible]	6[illegible]	[illegible]	21	07		[illegible]		[illegible]

/11, is entered on line following related aviation observation.

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N J

DATE: 20 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY TWR	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
1	2	3	4	4	5	6	7	8	9	10	11	12	13	14
SA	0051	CLR	15			119	63	56	22	07		188	807 76	LH
SA	0150	CLR	15			115	61	55	22	07		187		LH
SA	0250	CLR	12			115	60	55	22	08		187		LH
SA	0352	CLR	12			112	60	56	21	06		986	607	LH
SA	0450	CLR	12			115	58	55	21	05		987		LH
SA	0550	CLR	10			119	58	56	22	06		988	FEW AC E	LH
SA	0650	CLR	7			119	61	56	22	07		988	/ 107 58	EH
SA	0750	CLR	7			119	65	57	21	09		988	/ HAZY	SF
SA	0850	CLR	7			119	70	59	24	08		988	/ HAZY	EH
SA	0950	CLR	7			112	74	59	25	08		986	/ HAZY 807	EH
SA	1050	CLR	7			102	78	61	24	14		983	/ HAZY	EH
SA	1150	CLR	9			091	80	62	24	14G22		980	/ HAZY	EH
SA	1250	40 SCT	9			081	81	62	24	16G23		977	/ 730 1100 58	EH
SA	1350	250 -SCT	10			071	83	62	23	17G24		974	/ FEW CU	EH
SA	1450	450 -SCT	10			064	83	62	22	16G22		972		EH
SA	1550	CLR	10			054	83	60	23	16G24		969	727	SF
SA	1650	250 -SCT	10			054	82	61	24	15		969		SF
SA	1750	250 -SCT	10			054	79	63	23	14		969		SF
SA	1850	CLR	10			064	77	64	24	11		972	310 83	SF
SA	1950	CLR	10			071	75	63	23	12		974		SF
SA	2050	CLR	10			071	74	62	23	15		974		SF
SA	2150	250 SCT	10			071	73	61	25	12		974	207 1001	SF
SA	2250	250 SCT	10			075	71	60	24	11		975		CF
SA	2350	250 SCT	8			085	70	61	24	07		978		WE

/11, is entered on line following related aviation observation.

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

STATION: WSO Newark, N. J

SURFACE WEATHER OBSERVATIONS

DATE: 21 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING	VISIBILITY (Miles)	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS	TEMP	DEW PT	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	CLR	7		041	67	61	25	05		980	220 83	[illegible]
SA	0150	CLR	8		098	67	61	00	00		982		[illegible]
SA	0250	CLR	10		115	66	59	31	05		984		[illegible]
SA	0350	CLR	12		115	65	49	25	05		987	224	[illegible]
SA	0450	CLR	12		125	63	48	32	13		990		[illegible]
SA	0550	CLR	15		139	60	50	34	11		994		[illegible]
SA	0650	CLR	15		146	63	50	33	09		996	/ 130 60	[illegible]
SA	0750	CLR	15		156	67	52	35	09		999		[illegible]
SA	0850	CLR	15		166	69	53	01	11		002		[illegible]
SA	0950	CLR	15		169	71	52	36	11		003	/ 124 110D	[illegible]
SA	1050	CLR	15		169	73	50	01	12		003	/ FEW CU	[illegible]
SA	1150	CLR	15		173	74	50	32	08		004	/ FEW CU	[illegible]
SA	1250	CLR	15		173	75	49	36	12		004	/ 103 1120 60	[illegible]
SA	1350	CLR	15		169	76	47	32	08		003	/ FEW CU	[illegible]
SA	1450	CLR	15		173	76	47	31	07		004	/ FEW CU	[illegible]
SA	1550	CLR	15		176	75	46	32	10		005	302	SF
SA	1650	CLR	20		183	73	46	29	10		007		SF
SA	1750	CLR	20		190	71	45	32	10		009		SF
SA	1850	CLR	20		200	71	45	33	09		012	224 76	SF
SA	1950	CLR	20		207	67	47	33	08		014		SF
SA	2050	CLR	20		213	65	45	34	07		016		SF
SA	2150	CLR	20		227	65	47	36	08		020	227	SF
SA	2250	CLR	20		230	63	48	03	06		021		SF
SA	2350	CLR	20		237	62	47	01	05		023		[illegible]

11, is entered on line following related aviation observation.

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 22 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY TOWER	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (Mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	CLR	20			240	61	48	02	07		024	115 76	WE
SA	0150	CLR	20			244	60	48	04	05		025		WE
SA	0250	CLR	20			251	57	49	03	07		027		WE
SA	0350	CLR	15			257	56	50	05	04		029	217	WE
SA	0450	CLR	15			264	55	51	04	05		031		WE
SA	0550	CLR	13			268	55	50	02	05		032		WE
SA	0650	CLR	12			274	58	50	03	06		034	217 55	WE
SA	0752	CLR	15			278	62	52	01	05		035	FEW CU NW-N	LH
SA	0853	CLR	15			284	66	52	04	03		037	FEW AC SW-NE	LH
SA	0954	CLR	15			284	68	49	12	05		037	110 1070	LH
SA	1053	90 SCT	20			281	69	48	10	05		036		LH
SA	1150	250 SCT	20			278	71	49	15	07		035		LH
SA	1251	250 -SCT	20			271	73	51	19	08		033	814 1101 55	LH
SA	1352	250 -SCT	20			264	74	54	18	08		031	FEW CU S	LH
SA	1452	250 SCT	20			264	74	55	11	10		031	FEW CU S	LH
SA	1550	250-SCT	20			264	74	55	14	10		031	608 1004	HW
SA	1650	250-BKN	20			261	72	59	14	10		030		HW
SA	1750	250-OVC	20			264	70	58	16	11		031		HW
SA	1850	250-OVC	20			264	69	59	18	07		031	102 1001 75	HW
SA	1950	250-OVC	20			268	68	60	20	06		032		HW
SA	2050	250-OVC	20			271	68	60	20	07		033		HW
SA	2150	250-OVC	20			268	67	60	20	07		032	003 1001	HW
SA	2250	250-OVC	20			268	67	60	21	08		032		HW
SA	2350	250-OVC	20			268	65	60	20	07		032		WE

11, is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 23 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY (Miles) TWR	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	E 250 OVC	20			268	65	61	22	08		032	080 1007 75	[illegible]
SA	0150	E250 BKN	15			264	65	61	21	06		031		[illegible]
SA	0250	E250 BKN	10			257	63	61	22	07		029		[illegible]
SA	0350	250 SCT	8			257	62	61	23	07		029	610 1008	[illegible]
SA	0450	250 SCT	7			257	63	61	23	06		029		[illegible]
SA	0550	250-BKN	7			257	62	61	22	06		029		[illegible]
SP	0640	9 SCT 250-BKN	4		F				23	10		029		[illegible]
RS	0650	M 8 OVC	4		F	257	62	62	23	10		029	400 16// 61	[illegible]
SA	0750	M 7 OVC	6		F	257	62	62	24	10		029		SF
SP	0808	M 9 OVC	6		F				25	10		030		SF
SP	0826	M 10 OVC	6		F				25	08		030		SF
SA	0850	M 12 OVC	8			261	66	63	23	09		030		SF
SP	0937	12 SCT 250-BKN	9						23	10		029		SF
SA	0950	15 SCT 250 SCT	9			254	70	64	25	11		028	805 1501	SF
SA	1050	250-BKN	10			244	74	65	24	10		025		SF
SA	1150	250-OVC	10			237	78	65	23	12		023	FEW CU	SF
SA	1250	E 250 BKN	10			227	79	65	25	12		020	727 1008 61	SF
SA	1350	250 SCT	10			220	81	65	24	11		018	FEW CU	SF
SA	1450	250-SCT	9			213	82	66	21	12		016		SF
SA	1552	250 -OVC	11			210	82	65	24	13		015	617 1001	LH
SA	1653	250 -OVC	11			207	82	66	23	12		014		LH
SA	1750	150 SCT 250 -BKN	11			207	81	65	22	10		014		LH
SA	1853	150 SCT E250 BKN	12			210	79	65	22	08		015	500 1018 83	LH
SA	1950	130 SCT E250 OVC	14			210	77	65	24	11		015		LH
SA	2053	120 SCT E250 BKN	13			213	75	65	24	09		016		LH
SA	2153	E250 OVC	12			217	74	65	23	09		017	305 1007	LH
SA	2250	M140 BKN 250 OVC	13			213	73	65	24	10		016		LH
SA	2350	M120 BKN 250 OVC	10			217	73	66	22	07		017		WE

PTL is entered on line following related aviation observation.

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 24 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles)	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kt)	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	M 120 OVC	8		213	72	66	23	08	016	802 107/ 83	WZ
SA	0150	M 110 OVC	8		213	71	66	25	06	016		WZ
SA	0250	M 85 OVC	7	RW-	210	71	66	23	06	015	RB36	WZ
SA	0350	60 SCT M 85 OVC	7		213	70	66	24	06	016	RE23/50000 157/	WZ
SA	0450	M 70 OVC	7		210	71	68	20	06	015	RB04E37	WZ
SA	0550	M 65 OVC	5	F	213	70	68	22	05	016		WZ
SA	0650	M 70 BKN 85 OVC	4	F	217	70	68	26	05	017	30300 107/ 70	WZ
SA	0750	E 100 BKN	6	H	217	73	67	26	07	017		SF
SA	0850	E 100 BKN	5	H	213	78	68	27	05	016	ROOF TEMP	SF
SA	0950	80 SCT 100 SCT	7		210	81	68	22	05	015	ROOF TEMP 808 1570	SF
SA	1050	50 SCT 100 SCT	8		209	81	68	18	05	013		SF
SA	1150	50 SCT 100 SCT 250 SCT	9		200	84	67	34	06	012		SF
SA	1250	M 41 BKN	8		190	84	68	28	06	009	719 1200 70	SF
SA	1350	M 41 OVC	8		186	83	67	29	12	008	BINOVC OVHD	SF
SA	1450	M 55 OVC	8		183	83	67	27	08	007	BINOVC OVHD	SF
SA	1553	40 SCT M65 BKN	9		180	82	67	28	09	006	710 1230	LH
SA	1653	40 SCT M70 BKN	9		183	82	68	27	09	007		LH
SA	1754	60 SCT M70 OVC	10		183	80	68	28	07	007	BINOVC	LH
SA	1854	M 70 OVC	12		183	80	68	32	05	007	BINOVC 103 103/ 85	LH
SA	1950	M 65 OVC	12		186	79	68	[illegible]	05	008	BINOVC	LH
SA	2051	M 50 OVC	10		186	78	69	16	05	008		LH
SA	2153	M 43 BKN 50 BKN 75 OVC	3		186	77	70	16	04	008	103 157/	LH
SA	2251	43 SCT M50 BKN 65 BKN	3		183	76	70	22	05	007		LH
SA	2350	M 41 BKN 85 BKN	5	H	183	75	70	24	06	007		WZ

*11, is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 25 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ____ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) Surface	VISIBILITY Tower	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb)	TEMP (°F)	DEW PT (°F)	WIND DIREC-TION	WIND SPEED (kt)	WIND CHAR-ACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	41 SCT 85 SCT	4		H	180	74	70	20	04		006	607 1530 85	LA
SA	0150	41 SCT E85 BKN	4		F	176	72	70	22	04		005		LA
SA	0250	E85 BKN	4		F	176	71	70	30	06		005		LA
SA	0350	E85 BKN	4		F	176	71	69	21	03		005	603 1030	LA
SA	0450	E85 BKN	4		F	176	69	69	24	03		005		LA
SA	0550	85 SCT 250 SCT	3		F	176	69	69	24	04		005		LA
SP	0554	85 SCT 250 SCT	2½		F				00	00		005		LA
SA	0650	M85 OVC	2½		FK	176	72	70	16	04		005	400 103/ 69	LA
SA	0750	M85 OVC	2½		FH	180	74	69	27	04		006	BINOVC	SF
SA	0850	M85 OVC	2½		H	183	77	68	23	03		007	BINOVC	SF
SP	0916	M85 BKN	3		H				22	03		006		SF
SA	0950	E85 BKN	4		H	180	80	69	22	05		006	002 1070	SF
SA	1050	M75 BKN	4		H	176	82	69	20	07		005		SF
SA	1150	40 SCT M50 BKN 75 OVC	6		H	169	84	69	24	02		003		SF
SA	1250	40 SCT	6		H	159	86	68	[illegible]	13		000	819 1120 69	SF
SA	1350	40 SCT 80 SCT	7			149	86	68	21	11		997		SF
SA	1450	40 SCT 80 SCT	7			146	86	68	21	14		996		SF
SA	1553	40 SCT 80 SCT	8			142	85	67	20	12		995	617 1170	LH
SA	1651	40 SCT	7			139	84	69	22	12		994		LH
SA	1753	40 SCT 80 SCT 250 -BKN	7			139	82	68	24	11		994		LH
SA	1853	250 -SCT	9			135	80	68	22	09		993	707 100R 38	LH
SA	1951	250 -SCT	7			139	78	68	18	06		994		LH
SA	2053	250 -SCT	6		H	139	76	70	20	06		994		LH
SP	2153	250 SCT	6		H	139	75	70	18	08		994	103 1001	LH
SA	2255	250 -BKN	6		H	135	75	70	21	09		993		[illegible]
SA	2350	250 -OVC	4		F	135	74	70	21	09		993		HW

'11, is entered on line following related aviation observation

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 26 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY TOWER	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS.	TEMP.	DEW PT.	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING (Ins.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
[illegible]	0050	E250 OVC	4		F	135	72	70	22	03		[illegible]	503 1002 88	[illegible]
[illegible]	0150	65SCT 85SCT E250 OVC	4		F	129	73	70	21	08		111		[illegible]
[illegible]	0250	E80BKN 120BKN 250 OVC	4		F	125	73	70	22	09		[illegible]		[illegible]
[illegible]	0350	80SCT 120SCT E250 OVC	4		F	[illegible]	72	[illegible]	22	09		108	717 1072	[illegible]
[illegible]	0450	80SCT E250 OVC	4		F	115	71	68	20	08		107		[illegible]
[illegible]	0550	80SCT E250-OVC	3		F	115	70	69	22	09		107		[illegible]
[illegible]	0650	80SCT E250 OVC	3		F	119	72	68	22	11		108	502 1042 70	[illegible]
[illegible]	0750	M75 BKN 250 OVC	3		FH	112	73	69	24	10		109		[illegible]
[illegible]	[illegible]	M18 BKN 25 BKN 45 OVC	5		FH				33	20	G29	104	PRESRR	[illegible]
[illegible]	0850	18 SCT M25 BKN 45 OVC	7		RW-	112	68	63	33	20	G29	105	~~FRESR~~ R016 PRESRR	[illegible]
[illegible]	0901	25 SCT M46 OVC	12						33	16	G25	105		[illegible]
[illegible]	0950	M35 OVC	[illegible]		RW-	[illegible]	[illegible]	[illegible]	32	13	G28	100	RE1352B46	[illegible]
													34103 15//	
[illegible]	[illegible]	M41 OVC	12		RW-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	G32	104	RE 1451 B18E 20B38	[illegible]
[illegible]	[illegible]	M50 BKN 70 BKN	15			[illegible]	[illegible]	[illegible]	34	11	G20	[illegible]	RE 1555 B[illegible]E30	[illegible]
[illegible]	[illegible]	70 SCT E250 BKN	15			[illegible]	[illegible]	47	[illegible]	[illegible]	G24	[illegible]	11103 [illegible]78 57	[illegible]
[illegible]	[illegible]	60 SCT E250 BKN	20			[illegible]	[illegible]	[illegible]	31	17		107		[illegible]
[illegible]	1450	60 SCT E 250 SCT	20			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	G30	[illegible]		[illegible]
[illegible]	[illegible]	70 SCT 250 SCT	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	3 5 10[illegible]	[illegible]
[illegible]	[illegible]	60 SCT 250 SCT	20			[illegible]	65	43	33	17		[illegible]		[illegible]
[illegible]	[illegible]	250 SCT	20			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	G2[illegible]	[illegible]	FEW AC SE	[illegible]
[illegible]	[illegible]	250 SCT	20			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	241 10[illegible] 14	[illegible]
[illegible]	[illegible]	CLR	20			[illegible]	[illegible]	[illegible]	[illegible]	14		[illegible]		[illegible]
[illegible]	[illegible]	CLR	20			[illegible]	[illegible]	[illegible]	[illegible]	16		[illegible]		[illegible]
[illegible]	[illegible]	CLR	20			[illegible]	[illegible]	[illegible]	[illegible]	15		[illegible]	129	[illegible]
[illegible]	[illegible]	CLR	25			[illegible]	50	36	[illegible]	10		[illegible]		[illegible]
[illegible]	2350	CLR	25			264	50	35	36	09		031		[illegible]

'1', is entered on line following related aviation observation

MF 1-10
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 27 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ____ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY (Miles)	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION (100s °)	WIND SPEED (Kts)	WIND CHARACTER	ALTIMETER SETTING (Ins.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	CLR	25			268	50	35	35	10		032	307 74	HW
SA	0150	CLR	25			268	49	36	36	09		032		HW
SA	0250	80 SCT	25			270	48	36	36	06		034		HW
SA	0350	80 SCT	25			281	48	36	36	08		036	312 1040	HW
SA	0450	80 SCT	25			289	47	37	01	09		038		HW
SP	0553	80 SCT 140 -BKN	25			298	47	36	02	10		041	CU DSNT N	HW
SA	0650	80 SCT E140 BKN	25			301	47	33	03	14	621	042	222 1570 47 20003	HW
SA	0750	E 100 BKN	15			305	53	35	01	13		043	FEW CU	SF
SA	0850	E 100 BKN	15			312	51	30	02	14		045		SF
SA	0950	E 90 BKN 250 OVC	20			305	52	31	02	13		044	005 1071	SF
SA	1050	E 90 BKN 250 OVC	20			305	54	31	04	09		043		SF
SA	1150	E 100 BKN 250 OVC	20			301	56	31	34	08		042		SF
SA	1250	100 SCT E 250 OVC	20			295	55	30	05	07		040	812 1077 47	SF
SA	1350	100 SCT E 250 OVC	20			288	55	29	04	06		039		SF
SA	1450	E 100 OVC	15			281	57	30	01	07		036		SF
SA	1551	M 150 OVC	20			271	55	29	35	08		036	614 1071	[illegible]
SA	1650	M [illegible] OVC	20			[illegible]	55	34	04	08		035		[illegible]
SA	1751	M 35 OVC	20			[illegible]	54	36	02	07		035		[illegible]
SA	1853	M 45 OVC	20			[illegible]	54	39	03	07		036	500 1071 38	[illegible]
SA	1953	M 40 OVC	15			284	54	40	[illegible]	07		037		[illegible]
SA	2050	M 33 OVC	14		S-	[illegible]	52	34	[illegible]	05		033	R E10	[illegible]
SA	2153	M 46 OVC	14		R--	291	48	40	[illegible]	03		[illegible]	10504 ~~[illegible]~~ 1711	[illegible]
SA	2253	M 50 OVC	11		R--	[illegible]	47	4[illegible]	[illegible]	03		[illegible]		[illegible]
SA	2350	M15 BKN 41 BKN 80 OVC	10		R-	288	47	46	[illegible]	05		038		[illegible]

"11" is entered on line following related aviation observation

MF1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 28 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles)		WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS (mb)	TEMP (°F)	DEW PT (°F)	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
SA	0050	32SCT E40 OVC	9		R-	288	47	43	03	05		038	60210 152/ 58	HW
SA	0150	E32 BKN 40 OVC	8		R-	284	46	43	03	08		037		HW
SA	0250	15SCT E32 OVC	7		R-	284	45	45	02	08		037		HW
SA	0350	15SCT E40 OVC	7		R-	278	44	44	02	12		035	71020 172/	HW
SA	0450	10SCT E40 OVC	7		R-	281	43	43	03	10		036		HW
SA	0550	10SCT E40 OVC	7		R-	281	45	45	03	09		036		HW
SA	0650	15SCT E40 OVC	7		R-	278	45	45	01	10		035	00035 172/ 43 20045	HW
SA	0750	18 SCT M 46 OVC	8			278	46	46	02	10		035	RE35	SF
SA	0850	18 SCT M 31 OVC	10			274	47	47	02	11		034		SF
SP	0940	15 SCT M 28 OVC	10						01	11		034		SF
SA	0950	15 SCT M 27 OVC	10		R-	274	48	47	01	10		034	RB45 70500 15//	SF
SA	1050	M 23 OVC	9		R-	268	47	47	01	11		032	RE 1452 843	SF
SA	1150	10 SCT M 19 OVC	6		L-F	264	49	48	22	11		031	LB30 RE32	SF
SP	1237	M 9 BKN 18' OVC	4		L-F				02	10		029		SF
SA	1250	M 9 BKN 18 OVC	4		L-F	254	50	50	03	10		028	LE0523 81900 17// 43	SF
SP	1333	M 6 BKN 9 OVC	4		L-F				02	11		026		SF
SA	1350	M 7 OVC	4		F	247	51	51	22	11		026	LE40	SF
SP	1913	M 9 BKN 25 OVC	7						36	10		025		SF
SP	1425	9 SCT M 34 OVC	8						02	11		025		SF
SA	1450	20 SCT M60 OVC	8			240	53	51	02	11		024		SF
SA	1550	21 SCT M55 OVC	8			237	53	51	03	10		023	7/700 172/	[illegible]
SA	1650	21 SCT M55 OVC	5		L-F	237	53	52	02	08		023	LB37	[illegible]
SA	1750	20 SCT M55 OVC	5		F	234	53	52	03	10		022	LE18	[illegible]
SA	1850	20 SCT M55 OVC	6		L-F	234	52	51	02	11		022	LB27/60300 172/ 54	[illegible]
SA	1950	M49 OVC	6		L-F	240	52	52	02	09		024		[illegible]
SA	2050	26 SCT M49 OVC	5		L-F	237	52	52	02	10		023		[illegible]
RS	2150	8 SCT M49 OVC	6		F	230	52	52	02	10		021	LE22/80300 172/	[illegible]
SA	2250	M50 OVC	5		F	227	52	52	02	11		020		[illegible]
SA	2350	M41 OVC	5		F	224	52	52	01	10		019		HW

1. Is entered on line following related aviation observation

DEP\DA0100435

MF 1-10A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: VSO Newark, N. J.

DATE: 29 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles) SURFACE	VISIBILITY TOWER	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS	TEMP	DEW PT	WIND DIRECTION	WIND SPEED (Kt)	WIND CHARACTER	ALTIMETER SETTING	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER'S INITIALS
[illegible]	[illegible]	M41 OVC	9			220	52	52	02	10		018	71000 15// 54	HW
[illegible]	[illegible]	M41 OVC	9			217	53	51	02	09		017		[illegible]
[illegible]	[illegible]	M41 OVC	9			210	53	50	02	10		015		[illegible]
[illegible]	[illegible]	15SCT M41 OVC	9			213	53	50	02	10		016	508 15//	[illegible]
[illegible]	[illegible]	M41 OVC	9			213	53	49	02	10		016		[illegible]
[illegible]	[illegible]	M41 OVC	10			220	53	49	02	09		016		[illegible]
[illegible]	[illegible]	M46 BKN 70 OVC	10			220	53	49	04	10		016	108 157/ 52	[illegible]
[illegible]	[illegible]	M40 BKN 70 OVC	10			[illegible]	57	49	04	08		020	/BINOVC	[illegible]
[illegible]	[illegible]	M41 BKN 70 OVC	10			[illegible]	59	[illegible]	[illegible]	12		[illegible]	/BINOVC	[illegible]
[illegible]	[illegible]	45 SCT M70 OVC	10			221	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	/BINOVC 107 157/	[illegible]
[illegible]	[illegible]	45 SCT M70 OVC	10			220	64	41	03	11		[illegible]	/BINOVC	[illegible]
[illegible]	[illegible]	45 SCT M70 BKN	10			[illegible]	[illegible]	46	[illegible]	10		[illegible]		[illegible]
[illegible]	[illegible]	45 SCT 70 SCT E250 BKN	10			[illegible]	[illegible]	[illegible]	[illegible]	11		[illegible]	/ 720 1571 52	[illegible]
[illegible]	[illegible]	45 SCT 70 SCT E250 BKN	10			[illegible]	67	[illegible]	[illegible]	07		[illegible]		[illegible]
[illegible]	[illegible]	[illegible] E250 OVC	15			[illegible]	[illegible]	49	03	[illegible]		[illegible]	BINOVC	[illegible]
[illegible]	[illegible]	[illegible] E250 OVC	15			203	[illegible]	47	[illegible]	08		[illegible]	[illegible] 1538	[illegible]
[illegible]	[illegible]	[illegible] E250 OVC	15			203	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]
[illegible]	[illegible]	[illegible] E250 BKN	15			203	[illegible]	44	[illegible]	[illegible]		[illegible]		[illegible]
[illegible]	[illegible]	[illegible] E250 BKN	15			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	307 [illegible] 68	[illegible]
[illegible]	[illegible]	[illegible] E250 BKN	[illegible]			213	60	44	[illegible]	06		016		[illegible]
[illegible]	[illegible]	[illegible] E250 OVC	[illegible]			[illegible]	[illegible]	48	[illegible]	08		[illegible]		[illegible]
[illegible]	[illegible]	[illegible] E250 [illegible]	15			213	57	48	[illegible]	08		011	103 1058	[illegible]
[illegible]	[illegible]	[illegible] E250 BKN	15			[illegible]	[illegible]	48	[illegible]	[illegible]		[illegible]		[illegible]
[illegible]	[illegible]	E200 OVC	15			[illegible]	54	49	02	09		[illegible]		[illegible]

"M", is entered on line following related aviation observation

MF 1-10A
1-84

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 30 SEP 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS. (mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (100-360) (9)	SPEED (Kt) (10)	CHARACTER (11)	ALTIMETER SETTING (In.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0050	E200 OVC	15			210	53	46	03	09		015	603 1002 68	HW
SA	0150	200-OVC	15			210	52	47	03	09		015		HW
SA	0250	200-BKN	15			207	51	46	01	10		014		HW
SA	0350	200-BKN	15			213	51	47	03	08		016	303 1001	HW
SA	0450	200-BKN	15			217	51	46	03	09		017		HW
SA	0550	200-SCT	15			220	50	46	03	08		018	FEW AC	HW
SA	0650	250-SCT	10			224	52	46	03	11		019	208 1041 50	HW
SA	0750	250-SCT	15			224	56	46	02	11		019		LH
SA	0853	250 -SCT	15			227	60	47	03	11		020		LH
SA	0953	250 - BKN	20			227	63	45	05	12		020	FEW CU 103 1104	LH
SA	1052	45 SCT 250 -OVC	20			227	65	45	08	12		020		LH
SA	1150	50 SCT 250 -OVC	20			220	67	43	05	12		018		LH
SA	1252	55 SCT E120 BKN	20			210	65	41	06	13		015	815 1134 ~~23~~ 50	LH
/		250 OVC												/
SA	1352	55 SCT 120 SCT	20			207	66	42	07	11		014	BINOVC	LH
/		E250 OVC												/
SA	1450	55 SCT 120 SCT	20			200	64	40	08	11		012		LH
/		E250 BKN												
SA	1550	55 SCT 120 SCT E250 BKN	20			200	64	40	06	09		012	610 1138	WE
SA	1650	55 SCT M120 BKN 250 BKN	20			203	64	44	08	07		013		WE
SA	1750	120 SCT 250 SCT	20			203	62	45	06	06		013		WE
SA	1850	120 SCT 250 SCT	15			207	62	45	07	07		014	107 1031 67	WE
SA	1950	M120 OVC	15			207	62	47	08	06		014		WE
SA	2050	41 SCT M110 OVC	15			210	60	48	07	07		015		WE
SA	2150	41 SCT M110 OVC	15			210	60	48	08	08		015	103 1571	WE
SA	2250	41 SCT M85 OVC	15			200	60	45	06	09		012		WE
SA	2350	M 110 OVC	20			193	60	46	06	10		010		SF

11, is entered on line following related aviation observation

MF 1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 1 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

Type	Time (LST)	Sky and Ceiling (Hundreds of Feet)	Visibility Surface (Miles)	Visibility Twr	Weather and Obstructions to Vision	Sea Level Press (mb)	Temp (°F)	Dew Pt (°F)	Wind Direction	Wind Speed (Kts)	Wind Character	Altimeter Setting (Ins)	Remarks and Supplemental Coded Data	Observer's Initials
SA	0050	M 110 OVC	20			146	59	47	07	09		018	624 107/ 67	SF
SA	0150	M 95 OVC	15			166	59	48	05	08		018		SF
SA	0250	M 85 OVC	15			156	58	46	03	10		018		SF
SA	0350	M 75 OVC	15			183	56	44	34	10		017	803 157/	SF
SA	0450	M 70 OVC	15			176	55	45	04	[illegible]		015		SF
SA	0550	M 65 OVC	15			173	55	46	04	11	G18	014	FEW SC RB04E10	SF
SP	0619	M 26 BKN 60 OVC	12						04	12		015		SF
SA	0650	M 25 OVC	8		RW-	176	54	50	03	12		005	RB09E11B34	SF
													50800 15// 54	
SA	0750	M 11 BKN 50 OVC	7		RW-	1[illegible]6	52	50	02	12		015		LH
SP	0820	21 SCT E50 BKN 76 OVC	2 1/2		RW				05	11		014		LH
RS	0852	M26 BKN 65 OVC	2 1/2		RW	160	51	51	03	10		016		LH
SP	0901	M21 OVC	1 1/2		RWF				04	09		017		LH
SP	0941	20 SCT E70 OVC	4	2 1/2	R-F				04	15		015	SFC VSBY 4	LH
SA	0952	E70 OVC	5	2 1/2	R-F	173	51	51	02	14		014	SFC VSBY 5	LH
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~		003	80229 102/	LH
RS	1052	9 SCT 38 SCT M70 OVC	5	2 1/2	RF	167	51	51	03	13		003	SFC VSBY 5	LH
SP	1118	M18 BKN 75 OVC	3	4	R-F				03	13		003	SFC VSBY 3	LH
RS	1153	[illegible] SCT M75 OVC	3	4	R-F	160	51	51	03	13		002	SFC VSBY 6	LH
SP	1222	M16 BKN 75 OVC	7	4	R-F				03	15		999	SFC VSBY 7	LH
SA	1252	M11 OVC	11		R-	156	52	52	03	13		999	51148 17// 51	LH
SA	1354	M13 BKN 40 OVC	11		R-	142	53	51	03	17		015		LH
RS	1450	11 SCT E70 OVC	7		R-	142	53	52	03	17		015	719 0A	LH
SA	1550	12 SCT M85 OVC	7		R-	135	53	52	03	15		013	~~[illegible]~~ 172/	[illegible]
SP	1607	M13 BKN 85 OVC	7		R-				02	19		014		[illegible]
SA	1650	M12 BKN 90 OVC	5		R-F	142	53	52	02	13		015		[illegible]
SA	1750	M12 OVC	5		R-F	149	52	52	01	10		997		[illegible]
SA	1850	M12 OVC	5		R-F	149	51	51	01	12		997	11421 17// 54	[illegible]
SA	1950	M13 OVC	5		R-F	156	52	51	01	12		999		[illegible]
SA	2050	M18 OVC	3		R-	156	52	50	01	13		999		[illegible]
SA	2150	M20 OVC	10			152	51	50	02	13		998	RE23/00304 151/	[illegible]
SA	2250	M20 OVC	12			156	51	48	36	11		999		[illegible]
SA	2350	M22 OVC	15			152	51	48	02	12		998		SF

/1/, is entered on line following related aviation observation

MF 1-10A
1-8c

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 2 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (L.S.T.) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TWR (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (MB) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kt) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (Ins) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0050	M 21 OVC	10		RW-	156	51	47	36	12		999	RB48 32304	SF
/													15// 60	/
SA	0150	M 15 OVC	3		R-F	163	49	49	34	10		001		SF
SA	0250	15 SCT M 23 OVC	3		R-F	159	49	49	34	09		000	PCPN VRY LGT	SF
SA	0350	15 SCT M 23 OVC	6		R-F	152	49	49	35	13	G20	998	80310 172/	SF
RS	0450	12 SCT M 34 OVC	6		L-F	156	49	48	35	12		999	RELE10	SF
SA	0550	10 SCT M 31 BKN 37 OVC	7		L-	156	48	47	34	12		999	PCPN VRY LGT	SF
SA	0650	15 SCT M 34 OVC	9			159	48	47	34	13		000	LE1057 30710	SF
/													15// 48 20083	/
SA	0751	15 SCT M32 OVC	15			159	50	46	36	12		000		LH
SA	0851	15 SCT 35 SCT E50 OVC	15		R-	163	51	47	33	11		001	RB30 PCPN VRY LGT	LH
/													BINOVC N	
SP	0947	M22 BKN 50 OVC	15		RW-		~~52~~		34	13		002		LH
SA	0953	M20 BKN 50 OVC	15		RW-	166	52	46	34	13		002	RE15E30 PCPN VRY	LH
/													LGT 30501 178/	/
SA	1052	M20 BKN 50 OVC	20			163	56	45	34	13		001	BINOVC RE 1455	LH
SP	1135	24 SCT M49 OVC	20						32	13		000	BINOVC	LH
SA	1151	28 SCT M55 OVC	20			159	56	45	33	11		000	BINOVC	LH
SA	1254	24 SCT M49 ~~OVC~~ BKN	20			149	58	45	30	12		997	81501 1500 48	LH
SP	1353	35 SCT M49 BKN	20			146	57	45	28	14	G24	996		LH
SA	1450	35 SCT M46 OVC	20			146	57	45	28	15		996	BINOVC	LH
SA	1550	34 SCT M 41 BKN	20			146	56	44	30	18		996	603 1806	WG
SA	1650	41 SCT 120 SCT	20			149	56	46	33	17		997		[illegible]
SA	1750	41 SCT 120 SCT	20			152	53	42	29	09		998		[illegible]
SA	1850	CLR	20			156	51	41	29	28		999	210 1530 59	[illegible]
SA	1950	CLR	20			163	50	42	29	06		001		[illegible]
SA	2050	CLR	20			166	49	42	27	07		002		[illegible]
SA	2150	CLR	20			166	48	42	26	06		002	110	[illegible]
SA	2250	CLR	20			163	46	39	24	06		001		[illegible]
SA	2350	CLR	20			163	45	40	24	08		001		SF

/11, is entered on line following related aviation observation.

MF1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION WSO Newark, N. J.

DATE 3 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

Type (1)	Time (LST) (2)	Sky and Ceiling (Hundreds of Feet) (3)	Visibility (Miles) Surface (4)	Visibility Tower (4a)	Weather and Obstructions to Vision (5)	Sea Level Press. (mb) (6)	Temp (°F) (7)	Dew Pt (°F) (8)	Wind Direction (9)	Wind Speed (kt) (10)	Wind Character (11)	Altimeter Setting (In.) (12)	Remarks and Supplemental Coded Data (13)	Observer's Initials (14)
SA	0050	CLR	20			162	46	41	[illegible]	09		001	603 59	SF
SA	0150	CLR	20			163	44	41	22	06		001		SF
SA	0250	CLR	20			157	43	41	26	06		000		SF
SA	0350	CLR	20			159	42	40	23	[illegible]		000	603	SF
SA	0450	CLR	20			157	42	40	21	06		000		SF
SA	0550	CLR	15			163	42	40	23	07		001		SF
SA	0650	250 -SCT	12			156	46	40	21	08		999	803 1001 41	SF
													20001	
SA	0753	250 -BKN	12			156	53	42	25	11		949		LH
SA	0853	250 -BKN	15			146	56	43	24	13		91[illegible]		LH
SA	0953	250 -SCT	15			137	59	43	24	13		9[illegible]	817 1001	LH
SA	1050	250 -SCT	15			[illegible]	63	43	23	17		9[illegible]		LH
SA	1152	250 SCT	15			115	67	45	23	16		96[illegible]	FEW CU FEW AC	LH
SA	1253	M45 BKN	15			[illegible]	65	41	24	1[illegible]	G26	[illegible]	FEW CU E 737	LH
													1153 41	
SA	1350	M45 OVC	15			[illegible]	[illegible] 60	41	[illegible]	[illegible]		977	BINOVC	LH
SA	1451	M[illegible] BKN	15			[illegible]	66	43	24	15		[illegible]		LH
SA	1550	CLR	[illegible]			07[illegible]	67	43	22	18		9[illegible]	725 150[illegible]	LH
SA	1650	CLR	15			072	66	44	23	18		9[illegible]	AC DSNT NW	LH
SA	1750	CLR	15			[illegible]	64	44	2[illegible]	13		[illegible]	AC DSNT NW	LH
SA	1850	CLR	15			071	63	44	23	13		[illegible]	315 1040 70	LH
SA	1950	CLR	15			[illegible]	60	45	23	13		[illegible]		LH
SA	2050	CLR	15			[illegible]	60	[illegible]	24	11		[illegible]		LH
SA	2150	70 SCT	15			102	59	47	24	10		[illegible]	208 1070	LH
SA	2250	55 SCT	15			112	58	46	30	08		986	WSHFT 42 FROPA	LH
SA	2350	CLR	15			119	57	47	25	09		988		SF

"T", is entered on line following relat[illegible]ation observation.

MF 1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J.

DATE: 4 OCT 1984

TO CONVERT LST TO GMT: ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY (Miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (Mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (100–36) (9)	WIND SPEED (Kt) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (Ins) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0050	CLR	15			125	54	48	25	09		990	125 70	SF
SA	0150	CLR	15			132	53	47	27	07		992	FEW CU E	SF
SA	0250	CLR	15			139	51	45	29	07		994		SF
SA	0350	CLR	20			149	53	42	27	08		997	322	SF
SA	0450	CLR	20			157	50	44	29	10		000		SF
SA	0550	CLR	20			166	50	42	29	09		002	FEW-AC N	SF
SA	0650	CLR	20			180	53	43	28	10		006	FEW AC/CI N 232	SF
/													1071 49	/
SA	0750	CLR	15			190	55	42	29	10		009	FEW AC/CI	WR
SA	0850	35 SCT	20			193	58	42	30	11		010		WR
SA	0950	39 SCT	20			196	58	43	32	15		011	117 1100	WR
SA	1050	41 SCT	20			196	60	41	31	12		011		WR
SA	1150	CLR	25			196	63	42	34	14		011	FEW CU	WR
SA	1250	CLR	25			193	63	41	31	12		010	803 1100 49	WR
SA	1350	CLR	25			193	64	40	32	11		010		WR
SA	1410	CLR	25			193	65	40	30	13		010		WR
SA	1550	250 SCT	25			193	66	41	31	11		010	400 1004	HW
SA	1650	250-SCT	25			193	64	40	30	12		010		HW
SA	1750	250-SCT	25			200	61	41	30	08		012		HW
SA	1850	250-SCT	25			207	61	40	29	06		014	314 1001 67	HW
SA	1950	250 SCT	25			213	59	41	28	05		016	K SE-SW-W	HW
SA	2050	CLR	25			217	56	42	29	05		017	K SE-SW-W OCNLY	HW
/													DRFTG OVR FLD	/
SA	2150	CLR	25			220	55	41	22	04		018	K N 112	HW
SA	2250	250-SCT	25			220	54	43	22	05		018	K NW-NE	HW
SA	2350	CLR	20			217	51	44	21	04		017	FEW CI	SF

"/" is entered on line following related aviation observation

MF 1-10A
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N.J

DATE: 5 OCT 1984

TO CONVERT LST TO GMT ADD 2 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY (Miles) TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kt) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (In.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
[illegible]	[illegible]	250-SCT	20			217	51	41	21	02		017	502 1001 67	SF
SA	0150	250 SCT	20			217	50	41	21	04		017		SF
SA	0250	250 SCT	20			[illegible]	49	43	20	02		015		SF
SA	0350	250 SCT	20			217	48	44	27	04		020	508 1008	SF
SA	0450	250 SCT	20			230	47	44	22	02		021		SF
SA	0550	100 SCT E 250 BKN	20			237	47	43	22	05		023		SF
SA	0650	M 120 BKN 250 BKN	12			247	52	43	28	04		026	320 1078 48	SF
SA	0750	M 110 BKN 250 BKN	10			251	57	45	33	05		027		WB
SA	0850	M 120 BKN 250 BKN	12			261	59	46	32	09		030		WB
SA	0950	M 120 BKN 250 BKN	12			261	60	46	32	10		030	115 1018	WB
SA	1050	M 130 BKN 250 BKN	12			264	60	46	31	09		031		WB
SA	1150	120 SCT 250 SCT	12			[illegible]	[illegible]	45	36	15		030		WB
SA	1250	130 SCT 250 SCT	14			[illegible]	65	45	34	14		029	803 1041 48	WB
SA	1350	130 SCT 250 SCT	15			254	65	45	32	12		026	FEW CU	WB
SA	1450	130 SCT 250 SCT	15			254	65	44	32	11		028	FEW CU	KA
SA	1550	250-BKN	20			[illegible]	[illegible]	42	32	09		[illegible]	603 1101	[illegible]
SA	1650	250-BKN	25			261	65	37	36	12		030	FEW CU	[illegible]
SA	1750	250-SCT	25			[illegible]	[illegible]	33	[illegible]	11		032	FEW CU	[illegible]
[illegible]	1850	250-SCT	[illegible]			[illegible]	[illegible]	31	[illegible]	11		[illegible]	322 1001 [illegible]	[illegible]
[illegible]	1950	CLR	25			292	59	33	02	14		038		[illegible]
[illegible]	2050	CLR	25			[illegible]	55	[illegible]	03	09		[illegible]		[illegible]
[illegible]	2150	CLR	[illegible]			312	[illegible]	32	02	10		[illegible]	234	[illegible]
[illegible]	2250	CLR	25			312	50	31	03	09		[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	03	07		[illegible]		
END		[illegible]												

*11, is entered on line following related aviation observation

MF1-10A
(1-82)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J

DATE: 6 OCT 1984

TO CONVERT LST TO GMT: ADD 5 hrs SUBTRACT ____ hrs

Type (1)	Time (LST) (2)	Sky and Ceiling (Hundreds of Feet) (3)	Visibility (Miles) Surface (4)	Visibility Tower (4a)	Weather and Obstructions to Vision (5)	Sea Level Press. (mb) (6)	Temp (°F) (7)	Dew Pt (°F) (8)	Wind Direction (00-36) (9)	Wind Speed (Kt) (10)	Wind Character (11)	Altimeter Setting (Ins.) (12)	Remarks and Supplemental Coded Data (13)	Observer's Initials (15)
SA	0053	CLR	25			329	46	24	04	09		050	219 67	LH
SA	0150	CLR	25			329	45	24	02	09		050		LH
SA	0250	CLR	25			322	43	25	03	10		051		LH
SA	0350	CLR	25			331	42	28	02	09		053	310	LH
SA	0454	CLR	25			345	40	26	02	10		055		LH
SA	0554	CLR	25			349	40	23	03	11		056		LH
SA	0650	CLR	25			359	43	23	02	10		059	FEW AC S-W 319	LH
													1070 ~~37~~ 37	
SA	0750	CLR	20			366	45	22	02	12		061		[illegible]
SA	0850	CLR	20			369	[illegible]	22	01	09		062		[illegible]
SA	0950	CLR	20			369	50	18	02	06		062	112	[illegible]
SA	1050	CLR	20			366	51	19	02	06		061		[illegible]
SA	1150	CLR	25			359	53	20	03	04		059		[illegible]
SA	1250	CLR	25			349	55	21	03	06		056	820 39	[illegible]
SA	1350	CLR	25			339	56	21	17	07		053		[illegible]
SA	1450	CLR	25			332	57	22	5	04		051		[illegible]
SA	1550	250-SCT	25			332	59	23	14	05		051	619 1004	HW
SA	1650	250-SCT	25			329	57	27	15	07		050		HW
SA	1750	250-SCT	25			332	55	27	16	04		051		HW
SA	1850	250-SCT	25			335	53	32	20	06		052	303 1001 60	HW
SA	1950	CLR	25			335	51	36	20	04		052		HW
SA	2050	CLR	25			342	50	37	21	05		054		HW
SA	2150	CLR	25			345	46	37	29	06		055	312	HW
SA	2250	CLR	25			349	46	37	24	05		056		HW
SA	2352	CLR	25			349	47	37	20	04		056		LH

(1), is entered on line following related aviation observation.

MF 1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 7 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kt) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (In.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0050	CLR	25			349	45	37	00	00		056	102 60	LH
SA	0152	CLR	25			342	43	39	00	00		054		LH
SA	0252	CLR	20			345	41	38	[illegible]	[illegible]		[illegible]		LH
SA	0354	CLR	20			342	42	38	00	00		054	605	LH
SA	0450	CLR	15			345	42	39	04	05		055		LH
SA	0553	250 SCT	15			349	41	38	04	05		056		LH
SA	0650	250 -SCT	15			352	41	37	03	04		057	K NW-N 208 1001 40	LH
SA	0750	250 -SCT	10			356	44	38	00	00		058		[illegible]
SA	0850	250 -BKN	10			362	54	42	20	04		060		[illegible]
SA	0950	250 -BKN	10			356	56	42	23	07		058	005 1001	[illegible]
SA	1050	250 -BKN	12			352	58	43	22	05		057		[illegible]
SA	1150	250 -BKN	15			342	62	42	22	03		054	[illegible]	[illegible]
SA	1250	250 -BKN	15			335	64	42	18	08		052	820 1008 40	[illegible]
SA	1350	250 -BKN	15			329	64	42	[illegible]	07		052		[illegible]
SA	1450	E250 OVC	15			322	65	45	[illegible]	[illegible]		048		[illegible]
SA	1550	E250 OVC	15			315	61	45	15	09		046	720 1007	[illegible]
SA	1650	E250 OVC	15			315	60	47	15	07		046		[illegible]
SA	1750	E250 OVC	15			315	60	46	[illegible]	07		046		[illegible]
[illegible]	1850	E250 OVC	15			318	52	46	19	07		047	302 1007 65	[illegible]
[illegible]	1950	E250 OVC	15			315	56	43	[illegible]	07		046	AC SW	[illegible]
[illegible]	2050	M120 BKN 250 OVC	15			315	56	42	[illegible]	07		046		[illegible]
[illegible]	2150	M120 OVC	15			315	[illegible]	41	[illegible]	09		046	603 1012	[illegible]
[illegible]	2250	M120 OVC	15			308	55	42	[illegible]	06		044		[illegible]
[illegible]	[illegible]	M120 OVC	[illegible]			305	54	42	[illegible]	07		043		[illegible]

*"/" is entered on line following related aviation observation

MF 1-10A
(1-82)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 8 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS. (mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (100s °) (9)	WIND SPEED (Kt) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (In.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0051	M120 OVC	20			301	54	12	23	06		042	THIN SPOTS IN OVC	LH
													612 107/ 65	
SA	0154	M120 OVC	20			295	53	42	24	05		040	THIN SPOTS IN OVC	LH
SA	0253	40 SCT M120 OVC	20			291	53	43	21	04		039	F INOVC	LH
SA	0354	M120 OVC	20			288	53	42	22	04		038	BINOVC 714 157/ FEW SC W	LH
SA	0454	37 SCT E140 BKN 250 OVC	20			284	53	43	21	03		037		LH
SA	0550	M34 BKN 140 OVC	20			284	52	44	20	05		037	BINOVC E-SE	LH
SA	0651	37 SCT E140 BKN 250 OVC	15			284	53	43	22	05		037	BINOVC SE 603 1578 52	LH
SA	0750	39 SCT M120 BKN 250 OVC	15			288	55	43	21	06		038		LB
SA	0850	M110 BKN 250 OVC	12			288	58	44	16	04		035		LB
SA	0950	M85 OVC	10			288	60	45	22	08		038	103 107/	LB
SA	1050	M85 BKN 250 OVC	10			281	62	45	22	09		036		LB
SA	1150	46 SCT 85 SCT E250 OVC	12			271	64	42	20	07		033		LB
SA	1250	46 SCT M110 OVC	12			264	66	43	25	08		031	724 117/ 52	LB
SA	1350	46 SCT E110 BKN 250 BKN	15			254	67	43	23	10		028		LB
SA	1450	46 SCT E65 BKN 250 BKN	15			247	68	46	22	08		026		LB
SA	1550	M41 BKN 80 BKN 250 OVC	15			244	67	48	18	08		025	622 1577	SF
SA	1650	40 SCT M120 BKN 250 OVC	15			244	66	49	16	06		025		SF
SA	1750	M37 BKN 70 BKN 250 OVC	15			247	65	49	19	06		026		SF
SA	1850	35 SCT M120 BKN 250 OVC	15			247	63	53	18	06		026	103 1577 69	SF
SA	1950	35 SCT M85 BKN 120 OVC	15			244	63	53	20	07		025		SF
SA	2050	40 SCT M50 OVC	15			244	63	53	21	09		025		SF
SA	2150	M50 OVC	15			244	62	52	23	09		025	703 157/	SF
SA	2250	M50 OVC	15			240	62	51	22	09		024		SF
SA	2354	32 SCT M50 BKN 95 OVC	15			237	62	51	20	07		023	LB40E5C	LH

"1" is entered on line following related aviation observation

MF 1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 9 OCT 1984

TO CONVERT LST TO GMT: ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME LST (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS. (mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kt) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0054	M31 BKN 50 OVC	15			240	61	52	22	07		024	50200 15// 69	LH
SP	0146	M28 BKN 43 OVC	12		R-				21	06		023		LH
SA	0150	M29 BKN 43 OVC	12		R-	234	61	54	22	06		022	RB40	LH
SP	0240	M31 OVC	12		R-				22	08		022		LH
SA	0252	M31 OVC	12		R-	237	60	56	23	10		023		LH
SA	0354	31 SCT M46 OVC	7		R-	234	58	57	23	10		022	60701 17// RELB19	LH
SA	0451	43 SCT M70 OVC	12		L-	234	58	57	21	06		022	RELB20 LERB30	LH
SP	0510	6 SCT M34 BKN 70 OVC	10		R-				24	07		022		LH
SA	0550	6 SCT M37 BKN 75 OVC	6		R-F	234	58	57	24	07		022	LERB0955	LH
SA	0651	6 SCT M55 BKN 75 OVC	5		F	237	59	58	23	08		023	RE20 30303 157/ 58 20003	LH
SA	0751	7 SCT M55 OVC	4		F	244	60	59	24	07		025		WB
SA	0851	M70 OVC	5		F	244	61	59	25	06		025		WB
SA	0950	M65 OVC	5		R-F	247	63	59	29	04		026	RB40 21000 107/	WB
SA	1050	M65 OVC	6		F	247	67	61	03	06		026	REID BINOVC	WB
SA	1150	M70 BKN	6		H	244	69	58	12	05		025		WB
SA	1250	75 SCT	6		H	237	70	57	11	03		023	81000 1070 58	WB
SA	1350	75 SCT	6		H	234	70	58	09	04		022		WB
SA	1450	90 SCT	6		H	234	73	58	09	05		022		WB
SA	1550	80 SCT	8			234	72	59	16	06		022	705 1070	SF
SA	1650	CLR	8			234	70	59	16	06		022		SF
SA	1750	80 SCT	10			240	66	59	16	05		024		SF
SA	1850	250 SCT	10			244	64	59	24	04		025	312 1001 73	SF
SA	1950	M70 BKN	10			251	65	60	18	04		027		SF
SA	2050	M75 BKN	10			251	65	60	14	03		027		SF
SA	2150	M85 OVC	5		F	254	64	60	00	00		028	BINOVC 108 107/	SF
SA	2250	M50 BKN	4		F	254	64	60	00	00		028		SF
SA	2350	-X M85 OVC	3		F	257	64	60	00	00		029	F2	SF

7/1, is entered on line following related aviation observation.

MF 1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J

DATE: 10 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS. (mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (Ins.) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
RS	0050	-X M39 BKN 85 OVC	2½		F	261	65	60	00	00		030	F2 308 157/ 73	LH
SA	0150	-X M50 OVC	2½		F	261	64	60	05	04		030	BINOVC	LH
													F2	
SA	0251	M85 OVC	6	2½	F	264	63	60	12	06		031	SFC VSBY 6	LH
RS	0354	8 SCT M95 OVC	5	3	F	264	62	60	17	05		031	SFC VSBY 5 303	LH
													167/	
SA	0430	M8 BKN 70 ~~OVC~~ BKN	5	3	F		[illegible]		09	04		031	SFC VSBY 5	LH
		85 OVC												
SA	0454	M8 BKN 95 OVC	4		F	268	63	60	09	05		032		LH
SP	0532	4 SCT 60 SCT	4		F				07	05		033		LH
		M95 OVC												
SA	0550	55 SCT M95 OVC	4		F	271	62	59	12	05		033		LH
SA	0652	M46 BKN 95 OVC	7			274	64	58	08	05		034	310 157/ 62	LH
SA	0750	35SCT M41 BKN 60 OVC	6		H	284	64	57	13	05		037	STFRA SW	HW
SA	0850	13SCT M35 BKN 41 OVC	6		RW-H	291	64	56	14	05		039	RB45	HW
SP	0920	13SCT M26 BKN 41 OVC	6		RW-H				14	04		039		HW
SA	0950	13SCT M29 BKN 41 OVC	6		H	291	64	58	14	04		039	RE35 1100 18//	HW
SP	1027	E30 BKN 41 OVC	6		H				14	05		039		HW
SA	1050	E30 BKN 41 OVC	6		H	291	64	58	15	05		039		HW
SA	1150	E30 BKN 41 OVC	9			291	65	57	14	05		039		HW
SA	1250	13SCT E30 BKN 41 OVC	9			288	65	57	14	05		038	80500 18// 62	HW
SA	1350	30SCT M41 BKN 70 OVC	9			284	65	56	14	05		037	THIN SPOTS 10VC	HW
													FEW STFRA	
SA	1450	30SCT 41 SCT M70 OVC	9			281	65	56	13	06		036	FEW STFRA	HW
SA	1550	M 75 OVC	10			278	65	56	15	05		035	710 107/	SF
SA	1650	M 75 OVC	10			278	64	56	12	05		035		SF
SA	1750	M 75 BKN	10			278	63	57	17	05		035		SF
SA	1850	M 75 OVC	12			278	62	57	18	04		035	302 107/ 66	SF
SA	1950	50 SCT M65 OVC	10			278	61	57	14	04		036	035	SF
SA	2050	75 SCT	12			281	62	57	16	04		036		SF
SA	2150	35 SCT	12			284	61	57	23	03		037	305 1500	SF
SA	2250	18 SCT	12			281	59	57	22	03		036		SF
SP	2317	M16 BKN	10						24	03		036		[illegible]
SA	2350	M15 BKN	10			281	60	58	30	06		036		[illegible]

11, is entered on line following related aviation observation.

MF 1-10B (1-82)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J.

DATE: 11 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

Type (1)	Time (LST) (2)	Sky and Ceiling (Hundreds of Feet) (3)	Visibility (Miles) Surface (4)	Visibility Tower (4a)	Weather and Obstructions to Vision (5)	Sea Level Press. (Mbs.) (6)	Temp (°F) (7)	Dew Pt (°F) (8)	Wind Direction (00-36) (9)	Wind Speed (Kts) (10)	Wind Character (11)	Altimeter Setting (Ins.) (12)	Remarks and Supplemental Coded Data (13)	Observer's Initials (15)
SA	0050	M15 OVC	10			284	60	58	29	04		037	302 15// 66	WB
SA	0150	M21 OVC	10			278	60	58	29	05		035		WB
SA	0250	M14 OVC	10			274	60	57	30	05		034		WB
RS	0350	M7 OVC	10			274	58	57	33	06		034	610 16//	WB
SP	0421	M16 OVC	10			[redacted]	[redacted]	[redacted]	34	03		035		WB
SA	0450	6SCT M15OVC	7			278	60	58	32	04		035		WB
SA	0550	M18 OVC	7			279	62	58	02	04		035		WB
SP	0628	M32 OVC	3		F				01	07		036		WB
SA	0650	M34 OVC	3		F	284	62	58	01	06		037	210 16// 58	WB
SA	0750	M32OVC	3		H	288	65	58	06	06		038		HW
SP	0754	M32OVC	2		H				06	06		038		HW
SP	0832	M35OVC	3		H				03	08		039		HW
SA	0850	M37OVC	5		H	291	64	56	04	09		039	STFRA NW THN SPOTS IOVC	HW
SA	0950	M37OVC	9			291	65	52	04	10		039	BINOVC 005 15//	HW
SA	1050	40SCT	9			288	68	53	36	08		038	FEW CU	HW
SA	1150	M32 BKN	9			281	70	52	36	04		036		HW
SA	1250	M32 BKN	9			271	70	52	15	06		033	820 1100 58	HW
SA	1350	35SCT	9			264	71	52	19	04		031		HW
SA	1450	40SCT	9			261	73	52	27	04		030		HW
SA	1550	CLR	9			254	73	52	01	05		028	715	SF
SA	1650	CLR	8			254	70	55	14	04		028		SF
SA	1750	CLR	10			247	68	56	34	07		026		SF
SA	1850	CLR	10			254	67	56	12	05		028	502 73	SF
SA	1950	CLR	10			254	65	55	18	04		028		SF
SA	2050	CLR	10			254	63	56	20	05		028		SF
SA	2150	CLR	8			254	61	55	22	06		028	302	SF
SA	2250	CLR	10			247	59	52	22	04		026		SF
SA	2350	CLR	8			247	60	52	07	03		026		WB

RS

*11, is entered on line following related aviation observation.

MF 1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N J

DATE: 12 OCT 1984

TO CONVERT LST TO GMT: ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	VISIBILITY TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (Mbs) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (00-36) (9)	WIND SPEED (Kts) (10)	WIND CHARACTER (11)	ALTIMETER SETTING (Ins) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0050	CLR	8			247	58	49	02	04		026	607 73	WB
SA	0150	CLR	8			240	57	50	03	06		024		WB
SA	0250	CLR	8			237	56	50	05	04		023		WB
SA	0350	CLR	8			237	55	51	02	06		023	610	WB
SA	0450	250-SCT	8			240	55	50	02	07		024	MOON VSB	WB
SA	0550	100 SCT 250 SCT	8			237	58	51	03	08		023		WB
SA	0650	100 SCT 250 SCT	7			234	56	52	03	02		022	/HAZY 803 1031 55	EH
SA	0750	250 SCT	6		H	237	60	52	02	07		023	/1 FEW AC	EH
SA	0850	250 SCT	6		H	234	64	51	02	11		022	/FEW AC	EH
SA	0950	250 SCT	7			230	67	51	02	11		021	/HAZY 803 1001	EH
SA	1050	250-BKN	7			227	70	51	02	12		020	/HAZY	EH
SA	1150	E250 BKN	8			224	72	51	01	10		019		EH
SA	1250	E250 BKN	8			217	74	51	04	05		017	/814 1008 55	EH
SA	1350	E250 BKN	8			213	74	52	03	07		016		EH
SA	1450	E 250 BKN	10			207	73	53	04	10		014		SF
SA	1550	E 250 BKN	10			203	72	53	04	09		013	714 1008	SF
SA	1650	E 250 BKN	10			203	72	49	04	09		013		SF
SA	1750	E 250 BKN	12			200	70	50	06	07		012		SF
SA	1850	E 250 OVC	12			203	67	51	03	05		013	500 1007 74	SF
SA	1950	250 SCT	12			203	65	51	03	05		013		SF
SA	2050	250 SCT	12			203	65	51	04	04		013		SF
SA	2150	E 250 BKN	12			200	63	52	02	07		012	803 1008	SF
SA	2250	250 SCT	12			207	61	53	03	05		014		SF
SA	2335	250 SCT	10			203	60	54	02	07		013		WB

*1, is entered on line following related aviation observation.

MF 1-10A
1-82

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

SURFACE WEATHER OBSERVATIONS

STATION: WSO Newark, N. J

DATE: 13 OCT 1984

TO CONVERT LST TO GMT ADD 5 hrs SUBTRACT ___ hrs

TYPE (1)	TIME (LST) (2)	SKY AND CEILING (Hundreds of Feet) (3)	VISIBILITY (Miles) SURFACE (4)	TOWER (4a)	WEATHER AND OBSTRUCTIONS TO VISION (5)	SEA LEVEL PRESS (Mb) (6)	TEMP (°F) (7)	DEW PT (°F) (8)	WIND DIRECTION (100-360) (9)	SPEED (Kts) (10)	CHARACTER (11)	ALTIMETER SETTING (Ins) (12)	REMARKS AND SUPPLEMENTAL CODED DATA (13)	OBSERVER'S INITIALS (15)
SA	0050	E250 BKN	10			200	60	54	02	07		012	010 1008 74	WB
SA	0150	250-BKN	10			196	60	54	04	09		011	LARGE HALO	WB
/		/	/			/			/			/		/
SA	0250	250-BKN	10			196	58	52	02	09		011		WB
SA	0350	250-BKN	10			193	58	51	02	11		010	707 1008	WB
SA	0450	250-BKN	10			190	58	51	04	11		009		WB
SA	0550	250-BKN	8			193	58	50	04	10		010		WB
SA	0650	100SCT E250 ~~BKN~~ OVC	7			193	58	50	03	09		010	500 ~~000~~ 1057 57	WB
SP	0728	M23 BKN 250 OVC	7						02	12		011		WB
SA	0750	M23BKN200OVC	9			196	60	51	02	11		011		HW
RS	0850	25SCT E200OVC	9			196	63	51	04	14		011		HW
SA	0950	25SCT E200OVC	9			193	65	50	07	16	G22	010	802 1507	HW
SA	1050	25SCT 40SCT E200 OVC	9			186	65	50	05	15	G24	008		HW
SA	1150	200-OVC	10			183	68	45	06	14		007	FEW SC	HW
SA	1250	200-OVC	10			173	67	46	06	12		004	819 1007 57	HW
SA	1350	200-OVC	10			166	69	45	06	14		002		HW
SA	1450	200-OVC	10			159	68	48	05	10		000		HW
SA	1553	E150 BKN 200 OVC	12			152	67	51	04	11		998	722 1028	LH
SA	1652	E120 BKN 200 OVC	12			156	65	52	04	09		999	BINOVC	LH
SA	1753	120 SCT E200 BKN	15			152	63	52	05	10		998		LH
SA	1853	E100 BKN 200 OVC	15			159	62	48	03	10		000	308 1078 70	LH
SA	1954	E120 BKN 200 OVC	15			159	61	45	04	12		000		LH
SA	2054	120 SCT E200 OVC	20			152	60	45	04	12		998		LH
SA	2154	25 SCT 120 SCT E200 OVC	20			146	58	46	04	12		996	815 1578	LH
SP	2225	M25 BKN 120 BKN 200 OVC	20						03	13		995		LH
SA	2250	M25 BKN 200 OVC	20			139	57	46	03	12		994		LH
SA	2350	M23 BKN 200 OVC	15			135	56	46	04	11		993		WB

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DEP\DA0100450

CHAPTER II

SUMMARY OF RESPONSES
TO NJDEP'S JULY 16, 1985 AND
NOVEMBER 15, 1985 COMMENTS
ON SITE EVALUATION REPORT
120 LISTER AVENUE

JULY 16, 1985 COMMENTS

Item 1 - Ambient Air Monitoring

Five archived ambient air samples have been analyzed for dioxin to replace ones that did not yield reportable results as addressed in the Site Evaluation Report. See Section 5.1, Page 5-1 of the addendum, and in particular Table 5.1-2 for final results and general physical locations of the samples.

Item 2 - Well Evacuation

A revised method for the calculation of the volume of water to be evacuated prior to sampling was submitted to the NJDEP on July 31, 1985 in a letter attachment entitled, "Responses to NJDEP's July 16, 1985 Comments on Site Evaluation Report, 120 Lister Avenue." See Page 4-11 of addendum for application with respect to 120 Lister Avenue site.

Item 3 - Monitoring Wells

This item was addressed in July 31, 1985 response from Diamond Shamrock to NJDEP on July 16, 1985 comments.

Item 4 - Ground Water Contour Maps

Ground water information was provided to NJDEP in September 1985 report entitled "Updated Response to New Jersey Department of Environmental Protection July 16, 1985 Comments On Site Evaluation Report, 120 Lister Avenue."

Additional information is provided in Section 5.5 of the addendum, Page 5-10.

Item 5 - Geologic Profiles

North-South cross sections depicting subsurface conditions were submitted to the state in the September 1985 report entitled," Updated Response to New Jersey Department of Environmental Protection July 16, 1985 Comments on Site

Evaluation Report, 120 Lister Avenue." Figures depicting areal distribution of contamination for semivolatile and soil pesticide concentrations were submitted at that time.

This item is further addressed in Section 5.4.1 of the addendum, Page 5-3.

Item 6 - Areas of High Contamination

Three samples collected at grid location G-9-D have been analyzed for dioxin. Results are given in Section 5.4.2.1, Page 5-8, of the addendum.

Item 7 - Inclinometers/Piezometer

This item was addressed in a formal report to the state dated September 1985 entitled, "Earth Movement Monitoring System Interim Status Report, 120 Lister Avenue."

Item 8 - Subsurface Piping

Subsurface piping was addressed in July 31, 1985 response from Diamond Shamrock to the NJDEP on July 16, 1985 comments. It is further addressed in Section 6.5, Page 6-1, of the addendum.

Item 9 - Quality Assurance

This item was addressed in July 31, 1985 response from Diamond Shamrock to the NJDEP on July 16, 1985 comments. Additional quality assurance/quality control information is provided in Section 5.8 of the addendum.

NOVEMBER 15, 1985 COMMENTS

Item 8 - Subsurface Piping

All information known about the subsurface piping on 120 Lister Avenue has been supplied to NJDEP and is further addressed in Section 6.5, Page 6-1, of the addendum. Figure 6.5-1 has been revised and included in the addendum to indicate relationship of piping to site structures.

Additional ambient air samples and soil samples from grid location G-9-D are addressed under Item 1 and Item 6, respectively, of this summary.

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120 LISTER AVENUE

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CHAPTER II

1.0 INTRODUCTION

The 120 Lister Avenue Site Evaluation Report was submitted to the New Jersey Department of Environmental Protection (NJDEP) in May 1985, in response to Administrative Consent Order II (ACO II) dated December 21, 1984. The following text presents the results of the site evaluation and remediation activities conducted at the 120 Lister Avenue site since the first report was issued.

2.0 SITE HISTORY AND EXISTING CONDITIONS

(No additional information)

3.0 REGIONAL SETTING

3.4 HYDROLOGY (Page 3-2)

The first sentence in the third paragraph should read: "Ground water in the bedrock moves primarily through a system of joints and fractures, and bedrock wells often draw water from more than one water-bearing zone."

4.0 SITE INVESTIGATION

Delete the last section of Page 4-3 and add the following:

Analytical testing for the project was performed at the following laboratories by the IT Analytical Services (ITAS) division of IT Corporation (IT):

ITAS-Directors Drive Laboratory Knoxville, Tennessee	Dioxin
ITAS-Middlebrook Pike Laboratory Knoxville, Tennessee	Inorganics (metals, cyanide, phenols); Base/Neutral/Acid (BNA) Priority Pollutants plus 25; and Volatile Organic Priority Pollutants, plus 15
ITAS-Cerritos Laboratory Cerritos, California	Volatile Organic Priority Pollutants plus 15; BNA Priority Pollutants plus 25; and Pesticides, Herbicides, and Polychlorinated Biphenyls (PCBs)
ITAS-Santa Clara Laboratory Santa Clara, California	Pesticides, Herbicides, and PCBs

4.1 GENERAL PROGRAMS

4.1.3 Analytical Quality Assurance/Quality Control (Page 4-6)

The first sentence should read: ". . . similarly applied to the 120 Lister Avenue and off-sites assessment/remediation work."

4.1.4 Analytical Methods (Page 4-8)

In reference to the first paragraph on Page 4-10: Final clarification on Appendix B compounds defined the need to analyze for 4,5'-dichlorodiphenyl-sulfone (bis(4-chlorophenyl)sulfone), p-chlorophenyl-p-chlorobenzene sulfonate (Ovex), 2,2-dichlorophenyl-p-chlorobenzene sulfonate, and 4,4'-dichlorodiphenyl sulfonamide in addition to the 13 compounds currently analyzed as part of the priority pollutant analyses. Five samples were selected for analysis, of which only one was from 120 Lister Avenue.

Analytical standards could only be found for bis(4-chlorophenyl)sulfone and Ovex. The search included the U.S. Environmental Protection Agency (EPA) library. The analytical procedure used was EPA Method 3550 (sonication with dichloromethane) for extraction, and Method 8080 (gas chromatography with the electron capture detector) for final measurement.

The last sentence of the last paragraph should read: ". . . the designated acceptable level of 7.0 parts per billion (ppb) for the 120 Lister Avenue site and 1.0 ppb for the remaining off-site locations."

4.2 SAMPLING, MONITORING, AND PHYSICAL TESTING

4.2.1 Ambient Air (Page 4-10)

Delete the last two sentences in the last paragraph of this section.

4.2.2 Industrial Hygiene (Page 4-11)

Delete the first two points and insert the following:

- Atmospheric Samples for Dioxin - A total of seven samples and two field blanks were taken through December 1985. Six of the samples were with GFF pads. One sample and one field blank were GFF pads with corresponding XAD-2 backup tubes. In addition, a spiked GFF pad and backup XAD-2 tube were analyzed. These samples were primarily personnel samples to define potential employee exposure and required respiratory protection.

- Wipe Samples for Dioxin - A total of 17 wipe samples were taken, including three field blanks. Most of these samples were taken to determine clean levels after equipment had been decontaminated. Six of the samples were taken in the employee decontamination area.

- Cold Stress Measurements - Cold stress was measured continuously on days of concern to establish a work-rest regime to help prevent cold stress related problems.

4.2.4 Soils (Page 4-13)

Insert the following after the last paragraph in Section 4.2.4:

Four additional deep borings (from 35.5 to 103.2 feet) were drilled on the 120 Lister Avenue site from April to July of 1985. These borings were drilled within ten feet of the original boring locations: B-101, B-102, and B-103. They were designated as "B," "C," or "D" for upper intermediate borings, lower intermediate borings, or bedrock borings, respectively.

One shallow boring (11.0 feet) was drilled in an area of elevated dioxin concentration and was designated as B-111, or Grid Designation J-8-F. Four additional shallow ("A") borings were also drilled to replace the original three shallow monitoring wells from April to July 1985. Locations of all drilled borings and near-surface samples are provided in revised Figure 4.2.4-1. Locations of the soil borings and monitoring wells installed from April to July 1985, relative to the site coordinate system and ground surface elevations relative to the New Jersey Geodetic Vertical Control Datum, are provided in Table 4.2.4-2. The "as-built" site drawing is provided in Figure 4.2.4-2. Additional boring logs are provided in Appendix A of the addendum.

4.2.4.1 Drilled Borings

4.2.4.1.1 Drilling Procedures (Page 4-13)

Insert the following after the last paragraph in Section 4.2.4.1.1:

An additional nine borings (four deep and five shallow) were drilled at the locations shown in Figure 4.2.4-1. The shallow boring (B-111) was sampled continuously using the following sampling intervals:

- 0.0 to 0.5 foot
- 0.5 to 1.0 foot
- 1.0 to 2.0 feet
- 2.0 to 3.5 feet
- In increments of 1.5 feet to the bottom of the fill.

The sample from 0.0 to 0.5 foot was collected using a decontaminated hand trowel and composited in a decontaminated aluminum pan. The boring was then advanced through the surficial fill material with a 12-inch-outside-diameter

(O.D.), 6-inch-inside-diameter (I.D.), hollow-stem auger. The fill material was sampled continuously ahead of the auger using a 2-inch-O.D. split-barrel soil sampler driven by a 140-pound hammer with a 30-inch vertical drop. The drilling progressed with the taking of samples and subsequent advancement of the auger until the fill/silt interface was encountered. At this point, drilling was halted and the hollow-stem augers were filled through a tremie pipe with a grout composed of Type I portland cement with 5 percent bentonite added. The auger was slowly withdrawn with a minimum of a 2-foot head of grout inside the auger to maintain the borehole at a ±12-inch diameter until the borehole was grouted to the surface. Each of the four shallow borings to replace the "A" monitoring wells was located within ten feet of a previously sampled boring, and thus was not sampled.

Each of the deep borings (B-101B, B-101D, B-102D, and B-103D) was located within ten feet of a previously sampled boring; therefore, sampling was not repeated for the depths already sampled.

The deep borings were advanced through the surficial fill material and up to 6 inches into the silt interval with a 12-inch steel casing driven with a 1,000-pound hammer. The steel casing was cleaned out to the fill/silt interface with a 12-inch-O.D. and 6-inch-I.D. hollow-stem auger. If the silt interval had been previously sampled, the auger was advanced to the silt/sand interface. Otherwise, a Shelby tube sample was continuously obtained by hydraulically pushing the Shelby tube a maximum of two feet ahead of the auger, allowing the tubes to "rest" for 15 minutes to allow the material to rebound, and then removing the tube from the borehole to obtain an undisturbed sample. The auger was then advanced to the depth of the previous Shelby tube sample, and the process was repeated until the silt/sand interface was encountered. At this point, drilling was halted, the auger was filled with grout composed of Type I portland cement with 5 percent bentonite added, and the auger was slowly withdrawn while keeping a minimum of a two-foot head of grout within the auger to maintain the borehole at ±12 inches. The grouting was continued until the grout was one to two feet above the bottom of the 12-inch steel casing and the borehole was sealed against any contaminant transport downward. An 8-inch polyvinyl chloride (PVC) casing with a bottom cap was then pushed from the ground surface to the silt/sand interface. Any remaining annular space between the 8-inch PVC and 12-inch steel casing was grouted, and the grout was left overnight to obtain partial strength.

At the beginning of the next shift, the bottom cap of the 8-inch PVC casing was removed by wet rotary drilling with a 6-inch tricone roller bit and water, and/or driving a nominal 6-inch-I.D. steel casing through the cap. The boring was advanced to the desired depth by driving a nominal 6-inch steel casing with an 800-pound hammer. The casing was advanced a maximum distance of five feet, and the material within the casing was flushed out using a 3-7/8-inch tricone roller bit and water. The soil was sampled ahead of the casing using a 2- or 3-inch-O.D. split-barrel soil sampler.

At the completion of the deep borings to their desired depths, a ground water monitoring well was installed. All auger cuttings, drilling fluids, and other waste generated during the drilling and well installation process were collected, placed in drums, and stored on site.

4.2.4.1.2 Sample Collection Procedures (Page 4-15)
Insert the following after the last paragraph on Page 4-15:

The sampling strategy for the deep borings was as follows:

- The silt interval was sampled, where required, with Shelby tubes. These samples were hydraulically pushed a maximum of two feet, allowed to rest in the boring hole for 15 minutes to allow for material rebound, then removed from the borehole.

- The glaciofluvial sands were sampled every five feet with a 2- or 3-inch-O.D. split-barrel soil sampler.

The field geologist retained the right to modify the sampling interval where stratigraphic changes or subsurface conditions dictated the need for closer sampling.

Insert the following after the last paragraph in Section 4.2.4.1.2, Page 4-16:

All nine samples obtained from shallow Boring B-111 were analyzed for dioxin only. All the samples obtained from the deep borings drilled from April to

July of 1985 were initially stored in an on-site archive until the hole was completed. At this time, the project geologist selected the samples to be submitted for analysis using a staggered testing scheme. Twelve samples from the deep borings (B-101D and B-103D) were analyzed for dioxin only.

4.2.4.3 Excavated and Backfilled Areas (Page 4-18)

Delete the existing section and insert the following text:

Areas with the highest presence of dioxin and/or other chemical compounds were selected and are shown in Figure 4.2.4.3-1 of the Site Evaluation Report as shaded areas. These "hot spot" areas, designated as 1 through 6, were excavated to remove the dioxin-containing soil, covered with six-mil PVC liner, and backfilled in the period from March 9 to April 2, 1985. Area No. 1 was excavated to the depth of six to nine inches, sampled, and backfilled with clean material. Areas Nos. 2 through 5 were excavated to the depth of 12 to 15 inches with an additional six inches excavated in Area No. 2. Postremedial sampling was performed prior to backfilling. Area No. 6 was excavated to a depth of 24 inches, covered with six-mil PVC, and backfilled. No postremedial sampling was performed as per the NJDEP On-Site Coordinator (OSC).

Five backfill samples were collected for analysis of dioxin and full priority pollutants.

4.2.5 Ground Water (Page 4-18)

Delete the existing section and insert the following text:

Three shallow monitoring wells (MW-101A, MW-102A, and MW-103A) were installed in January and February of 1985 to evaluate the hydrogeologic regime and nature of compounds present in the ground water. Monitoring Well MW-103A was damaged prior to the March sampling and was reinstalled (Monitoring Well MW-103A-2) within five feet of the damaged monitoring well. The damaged well was grouted up to eliminate the possibility of it becoming a "pipeline" from the fill to underlying strata and ground water. Subsequent damage to all three wells required them to be grouted up from the bottom of the casing to the top of the protective steel casing and reinstalled within ten feet of the damaged monitoring wells during the April through July 1985 program. Monitoring Well MW-103A was replaced twice. All the final shallow wells (designated as "A") were completed in the surficial fill material with the bottom of the well screen contacting the fill/silt interface.

Four deeper monitoring wells were installed on site during the April to July 1985 program to further evaluate the hydrogeology and nature of chemical compounds in the deeper ground water systems. One upper intermediate monitoring well (designated as "B") was installed in the glaciofluvial sands with the bottom of the ten-foot PVC well screen set approximately 35.0 feet below the ground surface. This monitoring well was designated as MW-101B. One lower intermediate monitoring well (designated as "C") was also installed in the glaciofluvial sands with the base of the ten-foot PVC well screen set at a cohesive zone interface. This monitoring well was designated as MW-102C, and the base of the well screen was installed at 49.0 feet. The two remaining deep wells (designated as "D") were installed with the screens at or near the glaciofluvial sand/bedrock interface. These monitoring wells were designated as MW-101D and MW-103D, and the base of the well screens was set at a depth of 90.0 feet. Locations of the eight existing on-site ground water monitoring wells are shown in revised Figure 4.2.5-1.

Monitoring well installation logs for wells installed from April to July of 1985 are provided in Appendix A of the addendum.

4.2.5.1 Monitoring Well Installation

Renumber Section 4.2.5.1 of the Site Evaluation Report, Shallow Monitoring Well Installation, to Section 4.2.5.1.1.

4.2.5.1.1 Shallow Monitoring Well Installation ("A" Wells) (Page 4-18)

Four shallow replacement wells (MW-101A, MW-102A, and MW-103A twice) were installed from April through July of 1985 in the same manner as presented in the Site Evaluation Report.

4.2.5.1.2 Upper Intermediate Monitoring Well Installation ("B" Wells)

The upper intermediate monitoring well was installed on the 120 Lister Avenue site during May 1985 and was designated as Monitoring Well MW-101B. Since the well is located within ten feet of a previously sampled boring, no soil sampling was done at depths that were previously sampled during prior borings.

Reference Section 4.2.4.1.1 of the addendum for details of drilling procedures. The boring for Monitoring Well MW-101B was advanced to a depth of 36.5 feet. A Schedule 40, flush threaded, two-inch-diameter PVC well casing with a ten-foot, No. 10 slot (0.010 inch) PVC screen and unglued slip cap was installed at 35 feet. A filter pack of clean, bagged sand approved by the NJDEP for use on site was installed from the bottom of the boring to a depth of approximately 6 feet above the well screen or approximately 20 feet below the ground surface. A bentonite seal of approximately one foot in thickness was installed above the filter pack to discourage the infiltration of uncured grout into the filter pack. A tremie pipe was placed on top of the bentonite seal and a cement grout with 5 percent bentonite added was introduced as the nominal six-inch steel casing was withdrawn. A two-foot-plus head of grout was maintained while the casing was withdrawn to ensure displacement of the drilling fluids by the cement grout.

After the boring was grouted to the ground surface, a protective seal outer casing with a keyed lock was installed over the PVC riser pipe and was locked upon completion. A protective cement collar 1.5 feet square and 1.0 to 1.5 feet thick was poured around the outer steel protective casing. Vent holes were provided in both the PVC well riser pipe and the protective steel casing. A schematic diagram of a typical upper intermediate monitoring well (designated as "B") is shown in Figure 4.2.5.1.2-1.

4.2.5.1.3 Lower Intermediate Monitoring Well Installation ("C" Wells)

One lower intermediate monitoring well was installed on the 120 Lister Avenue site as shown in Figure 4.2.5-1 and was designated as Monitoring Well MW-102C.

Monitoring Well MW-102C was installed somewhat differently than the "B" well since the soil boring extended into the lower glaciofluvial sands. At the completion of the soil boring, the boring was backfilled with cement grout with 5 percent bentonite added to the cohesive zone interface with the casing being withdrawn to this depth. A layer of bagged sand approximately 12 inches thick was installed on the grout to reduce the infiltration of uncured grout into the actual filter pack and PVC well screen. The well installation procedures for the completion of Monitoring Well MW-102C past this point were the same as previously described for the upper intermediate monitoring well ("B" well). A schematic drawing of a typical lower intermediate monitoring well ("C" well) is shown in Figure 4.2.5.1.3-1.

4.2.5.1.4 Deep Monitoring Well Installation ("D" Wells)

Two deep monitoring wells were located and installed on the 120 Lister Avenue site, as shown in revised Figure 4.2.5-1, and were designated as Monitoring Wells MW-101D and MW-103D. The well installation procedures for the deep wells were the same as previously described for the upper intermediate monitoring wells ("B" wells) with the following exceptions:

- The nominal six-inch steel casing was advanced to the glaciofluvial sand/bedrock interface
- The boring was continued for five feet into the rock using a 3-7/8-inch tricone roller bit and water to confirm the presence of bedrock
- The boring was backfilled with cement grout with 5 percent bentonite added up to the glaciofluvial sand/bedrock interface
- A six-inch layer of bagged sand was installed above the grout to reduce infiltration of uncured grout into the PVC well screen and filter pack.

The well installation past this point followed the procedures described previously for the upper intermediate monitoring well ("B" well). A schematic diagram for a typical deep monitoring well ("D" well) is shown in Figure 4.2.5.1.4-1.

4.2.5.2 Well Development (Page 4-19)

Insert the following at the end of Section 4.2.5.2:

Well development of the four shallow monitoring wells reinstalled from April to July 1985 was performed at several stages during the drilling. The shallow monitoring wells (MW-101A, MW-102A, and MW-103A twice) were developed using the same techniques previously described for the January 1985 well development with the exception that well development was performed at least three days after well completion.

Well development of the four deeper monitoring wells installed on the 120 Lister Avenue site from April to July 1985 was also performed at several stages during the drilling, using both bailing and pumping techniques. Monitoring Well MW-101B was developed for a minimum of one hour, or until a turbid-free discharge was obtained using a stainless steel and teflon well-dedicated bailer. The remaining monitoring wells (MW-101D, MW-102C, and MW-103D) were developed for a minimum of 1-1/2 hours, or until a turbid-free discharge was obtained using a decontaminated Isco well sampling pump. These wells were developed at least three days after completion to minimize the potential for drawing uncured grout into the filter pack of the well. All the water generated during well development was collected in drums and stored on site.

4.2.5.3 Water Level Monitoring (Page 4-19)
Delete the existing section and insert the following:

The ground water levels in the three shallow monitoring wells on the 120 Lister Avenue site were recorded on February 13 and March 6, 1985 during the well excavation prior to water sampling. Elevations were derived from the measured distance from the top of the well riser pipe to the water level as recorded by a water level indicator. The probe of the indicator was rinsed with hexane between wells to reduce the potential for cross contamination of the wells.

Additional rounds of ground water level readings were taken at all the monitoring wells on both the 80 and 120 Lister Avenue sites during May, June, and July of 1985 to evaluate the ground water flow. These readings were taken on May 11, May 18, May 25, June 1, July 3, and July 8, 1985 by the same procedures used for the earlier readings.

4.2.5.4 Ground Water Sampling (Page 4-20)
Delete the last paragraph of this section and insert the following text:

In addition, a 500-milliliter (ml) bottle was filled to be used for field analyses. These field tests included pH, specific conductance, temperature, salinity, and dissolved oxygen content and were performed immediately after the sampling of each well. At the completion of the sampling procedures, a laboratory-cleaned bailer was filled with organic-free water. This water was then used to fill six 40-ml vials that were used as field blanks for a check on the bailer decontamination technique. The bailers used in the sampling were then returned to the decontamination area for decontamination and subsequent return to the Knoxville laboratory.

Further well sampling was conducted on the 80 Lister and 120 Lister Avenue sites on June 5, June 25, July 15, and August 5, 1985 to sample the monitoring wells that were installed during the April to July 1985 drilling program. The sampling on June 5 was performed on Monitoring Wells MW-101A, MW-101B, MW-101D, MW-102A, and MW-103D. The sampling on June 25 was performed on Monitoring Wells MW-4B, MW-4C, MW-101B, MW-101D, MW-103A, and MW-103D. The sampling on July 15 was performed on Monitoring Wells MW-4B, MW-4C, and MW-102C. The sampling on August 5 included Monitoring Wells MW-4C and MW-102C. The wells were purged using laboratory cleaned, well-dedicated stainless steel and teflon bailers prior to sampling with three to five casing volumes of water removed or until the well went dry. The minimum required volume of water (number of bails) to be removed during the purging was calculated in the same manner as previously described in the Site Evaluation Report.

The method for calculation of the volume of water to be evacuated prior to sampling was revised as per responses to the NJDEP's July 16, 1985 comments on the Site Evaluation Report, 120 Lister Avenue. These changes were not confirmed in time to be incorporated into the June to August sampling sessions.

The well sampling was completed within two hours of evacuation after sufficient recharge had occurred. The following sample bottles were provided by IT and were filled and transferred under chain-of-custody protocol:

- Two 40-ml volatile organic analysis (VOA) vials
- Six 1-liter amber glass bottles
- One 1-liter nalgene bottle
- One 1-gallon amber glass jug
- One 500-ml amber glass jar for field analysis.

Prior to purging of the last well, the laboratory-cleaned bailer dedicated for that well was filled with organic-free water. The water was then used to fill the following bottles for use as a field blank to check the bailer decontamination technique:

- Two 40-ml VOA vials
- Six 1-liter amber glass bottles
- One 1-liter nalgene bottle
- One 1-gallon amber glass jug.

Bailers used for sampling were returned to the decontamination area for decontamination and subsequent return to the Middlebrook Pike Laboratory in Knoxville.

4.2.5.5 Aquifer Evaluation (Page 4-21)
Delete the entire section and insert the following text:

Slug testing and aquifer evaluation for the three shallow monitoring wells on the 120 Lister Avenue site (MW-101A, MW-102A, and MW-103A) were originally scheduled for March 11 and 12, 1985 to evaluate the transmissivity of the water-bearing fill material. Since two of the wells (MW-101A, MW-103A) were damaged prior to this date by on-site construction, the slug testing was postponed until after damaged wells were reinstalled.

Slug testing for three of the shallow monitoring wells (MW-101A, MW-102A, and MW-103A), in addition to three of the deeper wells (MW-101D, MW-102C, and MW-103D), was performed following the second round of ground water sampling on the wells on June 5, 1985. Slug test data as well as aquifer evaluations are discussed in Section 5.5.2 of this report.

5.0 DATA PRESENTATION

Through December 1985, 483 samples were collected at 120 Lister Avenue. Of the 483 samples, 163 have been archived for possible future dioxin analyses. A total of 281 dioxin analyses and 86 priority pollutant analyses were performed. Results of these analyses are summarized in the tables and illustrated in the figures presented herein. Complete laboratory analysis summaries and other supporting data are presented in appendices at the end of this report. Files of raw data as reported from the laboratories will be provided separately to the NJDEP.

5.1 AMBIENT AIR (Page 5-1)

Insert the following text at the end of Section 5.1:

During the period from April 8 to December 1, 1985, an additional 27 ambient air samples were collected on the 120 Lister Avenue site. Of the 27 samples collected, 13 samples (48 percent) were analyzed for dioxin. The remaining samples were archived in Knoxville, Tennessee.

Table 5.1-2 contains the dioxin results for the 13 analyses of the polyurethane foam (PUF) samples taken April through December 1985. Of the 13 samples, 12 had nondetected dioxin concentrations with an average detection limit of 3.9 picograms per cubic meter (pg/m^3). Sample A006-2861-A-L has an identified dioxin level of 8.0 pg/m^3.

Ambient air Sample A006-2861-A-L was a composite sample from the northeast sampler taken from 11:50 a.m. on April 18 to 2:15 p.m. on April 23, 1985. The wind was blowing from the west. The source of detected airborne dioxin is unknown. Site activities on those days included grading and compacting of gravel for the container platform, dismantling and deconning of three transformers and power poles on site, and deconning of containers staged on site. Similar activities took place during subsequent sampling periods; however, as indicated in Table 5.1-2, dioxin results for Samples A006-2886-A-L and A006-2887-A-L show nondetectable concentrations. A field blank was not taken for Sample A006-2861-A-L; therefore, cross contamination prior to sampling cannot be ruled out.

One ambient air field blank (F047-2796-A-L) was analyzed and had a dioxin concentration of ND (3.8) nanograms per sample.

Also included in Table 5.1-2 are dioxin analysis results for five ambient air samples proposed to and agreed upon by the NJDEP in response to July 16, 1985 comments on the Site Evaluation Report, 120 Lister Avenue. All indicated no detectable concentrations of dioxin.

5.2 INDUSTRIAL HYGIENE

5.2.1 Atmospheric Samples for Dioxin (Page 5-2)

Insert the following at the last paragraph in Section 5.2.1:

One additional personnel (glass-fiber filter) sample was collected during work on 120 Lister Avenue from April to December 1985. This sample was taken with an XAD-2 backup tube to collect breakthrough dioxin. Both the GFF and the XAD-2 samples were analyzed for dioxin. Both samples showed no detectable levels of dioxin.

In addition to the personnel sample, there were two field blanks (the GFF pad and corresponding XAD-2 tube) and a spiked GFF pad and corresponding XAD-2 backup tube. All samples produced nondetectable levels of dioxin except the spiked pad which had a dioxin level of 2.2 nanograms per cubic meter (ng/m^3). Results are listed in Table 5.2.1-2.

5.2.2 Wipe Samples for Dioxin (Page 5-2)

The third sentence should read: "Seven of the nine . . ."

Insert after the last sentence in Section 5.2.2:

Sample 9100-2850-W-L had a positive result of 14.4 ng/m^2, which was below the acceptable level of 130 ng/m^2.

Five additional industrial hygiene wipe samples were collected for dioxin analysis from April to December 1985. All of these samples were from equipment used on site after being cleaned for release. Three field blanks were also collected. Results are given in Table 5.2.1-2. Six of the eight samples showed no detectable levels of dioxin. Samples 9100-2856-W-L and 9100-2858-W-L indicated positive results but were less than 130 ng/m^2. The equipment was released to the owners.

5.2.3 Cold Stress

Thermometer and wind speed readings were used during January and February to measure the potential for cold stress. The measured results were compared to the American Conference of Governmental Industrial Hygienists (ACGIH) Recommended Threshold Limit Values (TLV). To help work in the colder weather, long johns and thermal insulated suits were purchased for personnel to wear under the protective clothing. Heaters were also placed in the work area for the workers to warm up. Adjustments were made in the work-rest regime with the additional clothing worn.

5.3 BUILDINGS AND STRUCTURES

5.3.2 Wipe Sample Results (Page 5-4)

The title to Table 5.3.2-1 should read: "2,3,7,8-TCDD Results, 120 Lister Avenue Wipe Samples."

5.4 SOILS

5.4.1 Subsurface Lithology (Page 5-4)

Delete the existing section and insert the following text:

Twenty-three geotechnical borings were drilled on the 120 Lister Avenue site (revised Figure 4.2.4-1). Split-spoon and Shelby tube samples from borings were logged according to both the Unified Soil Classification System (USCS) and Burmister classification system. Information from the borings drilled at 80 Lister Avenue was also used to aid in the definition of subsurface conditions. Subsurface cross sections have been developed from the boring log data (Appendix A).

The plan locations of the north-south cross sections are shown in revised Figure 4.2.4-1. Cross Sections A-A', B-B', C-C', and D-D' have been revised to reflect the additional borings covered in this addendum. The cross sections are presented in revised Figures 5.4.1-1 through 5.4.1-4. North-south cross sections were provided to the state in the September 1985 formal report entitled: "Updated Response to New Jersey Department of Environmental Protection, July 16, 1985 Comments on Site Evaluation Report." Cross Sections G-G' and J-J' have been revised to reflect actual boring log information. They are included in the addendum as Figures 5.4.1-5 and 5.4.1-6.

As can be seen from the figures, fill material ranging in thickness from 6.0 to 12.0 feet is present at the surface. The fill is underlain by a layer of organic silt and peat. This silt layer, in turn, is underlain by glaciofluvial sands then bedrock consisting of soft, red-brown, interbedded shale and sandstone. Standard penetration resistance (blow count) data are provided on the subsurface cross sections when recorded.

The ground surface at the 120 Lister Avenue site has been extensively modified during the construction of the container pad. The ground elevation of the container pad is approximately 4.0 feet higher than the original fill material. Ditches have been installed around the container pad to facilitate drainage. No features of the natural ground surface are visible at this time. The site has been graded and is currently covered with geofabric, or geofabric underlying heat-welded 30-mil, black, polyethylene plastic underlying gravel.

5.4.1.1 Fill

The surficial fill material at the 120 Lister Avenue site is generally a very loose to medium dense, brown to black sand and gravel fill of man-made origin. It also contains bricks, cinders, ash, wood fragments, glass, porcelain, metal fragments, organic material, and construction debris. The fill material is fairly uniformly mixed and no abrupt changes in composition were observed. Fill thickness ranges from 12.0 feet at the northwest corner of the site, to approximately 6.5 feet along the southern boundary of the property, to approximately 6.0 feet in thickness along the northeast boundary.

5.4.1.2 Silt

The silt interval at the 120 Lister Avenue site is composed of an upper unit of highly organic silt and peat (locally referred to as "meadowmat") and a lower silt unit with interbedded sand and clay lenses with some organic material. These two units were found at all the borings on the site except Boring B-103D which had only the lower unit.

The upper silt unit ranged in thickness from zero to three feet across the site with no observed trend in deposition. The organic silt layer is composed of decaying marsh grasses that were rooted in organic-rich material produced by earlier plant growth and its subsequent decay. Organic material has decayed to the present deposit of highly fibrous, organic peat with interbedded silt and humus.

The lower silt unit is a fine-grained sediment deposited in a low-energy environment, probably by tidal flat processes. Included within this unit are thin, interbedded lenses of clay and sand as well as some organic material and root hairs. The stratigraphic contacts between the two silt units and the underlying glaciofluvial sands are predominantly gradational. The lower silt unit ranges in thickness from two to eight feet with the thicker sections found in the northwest corner of the site.

The greatest total silt interval thickness was observed in the central portion of the 120 Lister Avenue site with a thinning of the silt interval toward the Passaic River. This thinning is possibly due to the thinning and eventual absence of the upper "meadowmat" peat unit near the river.

5.4.1.3 Glaciofluvial Sands

The glaciofluvial sands found beneath the 120 Lister Avenue site are part of the Pleistocene deposition of sediments transported by glacial meltwater. These sediments (clays, silts, sands, and gravels) were sorted hydraulically prior to deposition and generally formed discontinuous layers across the site. Total thickness of the glaciofluvial sediments ranged from approximately 75 to 95 feet across the site. Based on published data and limited soil boring information, these deposits are expected to thicken to the northwest following bedrock contours (Lovegreen, 1974). The glaciofluvial sediments may be divided into three subunits: an upper silty sand, a cohesive zone, and a lower sand unit. A discussion of each subunit follows.

The upper glaciofluvial sand unit is typically a black to brown, medium- to fine-grained silty sand of varying density that becomes reddish brown with depth. A two-foot-thick lens of medium- to fine-grained sand was noted at Boring STB-3 at a depth of 21.0 feet. Boring STB-5 encountered at least 25.0 feet of sand beginning at a depth of 25.3 feet. These borings were drilled and sampled by IT personnel during the first phase of the field investigation, completed in the fall of 1984. A lens of dense, red-brown, medium to fine gravel with a trace of coarse- to fine-grained sand ranging in thickness from 4.5 to 8.5 feet was encountered in three borings at a depth of approximately 29 to 34 feet. The gravel lens extended areally from Borings B-101D to B-102D to STB-3.

There do not appear to be any identifiable characteristics related to the changes in thickness of the unit. The density of the sediments is typically loose to medium dense in the upper area, becoming medium dense to very dense in the lower area. Gravels are randomly mixed throughout the sequence but appear to increase with depth.

A cohesive zone was encountered in all the borings drilled deeper than approximately 60 feet on both the 80 and 120 Lister Avenue sites except Boring B-101D where it was absent. The cohesive zone was encountered at greater depths in the northern portion of the site. This would seem appropriate since published data indicate a thickening of sediments to the northwest following bedrock contours (Lovegreen, 1974).

The cohesive zone is typically described as a medium to low plastic, red-brown silt and/or clay with varying amounts of clay, silt, sand, and occasionally well-rounded gravels. The density of the material ranged from medium dense to dense across the 120 Lister Avenue site. This cohesive material appears to be significantly less permeable than the overlying and underlying sand units and possibly acts as an aquiclude.

The lower glaciofluvial sand unit is primarily a medium dense to very dense, reddish-brown, medium- to fine-grained silty sand with some occasional fine gravels and coarse-grained sands and ranges in thickness from approximately 11.5 feet at the south to 37.5 feet at the north. A lens of dense, red-brown silty clay with some medium to fine gravel and a trace of medium- to fine-grained sand was noted in Borings B-101D and B-103D at depths of 79.8 and 80.0 feet with a thickness of 3.8 to 14.5 feet, respectively. The total areal extent of the clay lens is unknown since no other borings were advanced to this depth on the 120 Lister Avenue site and the clay lens cannot be correlated to any of the deep borings on the 80 Lister Avenue site. No gravel zones within the lower sand unit were detected in the two deep borings on the 120 Lister Avenue site, contrary to the findings on the 80 Lister Avenue site. Gravels randomly mixed throughout the lower sand unit were found in Borings B-101D and B-103D, however, and increased with depth in Boring B-103D.

A relatively thick glaciolacustrine deposit of very hard, red-brown silt and silty clay with some medium to fine gravel was found overlying the bedrock at the two deep borings (B-101D and B-103D) on the 120 Lister Avenue site. It should be noted that the glaciolacustrine clay layer was not present on the 80 Lister Avenue site where the predominant bedrock is a sandstone sequence. The clay layer was approximately five to seven feet thick and is presumed to be associated with the shale bedrock sequence. This trend follows published data that indicate a glaciolacustrine clay layer is found between the glaciofluvial sands and shale bedrock in many parts of the area (Nichols, 1968).

5.4.1.4 Bedrock

The bedrock beneath the general site area is the interbedded red-brown sandstones and shales of the Passaic Formation (Olsen, 1980) with a hard sandstone sequence underlying most of the 80 Lister Avenue site and a firm to hard shale sequence underlying the 120 Lister Avenue site. This unit is more commonly known as the prebasalt portion of the Brunswick Formation (Olsen, 1980). The varying bedrock type across the site area is due to a downcutting erosional surface that dips to the north-northeast at 2 to 3 degrees while the bedrock tends to dip to the northwest according to published data (Lovegreen, 1974). The bedrock is highly fractured in the area and is a local source of potable water. Bedrock was encountered at depths of 96.5 and 103.2 feet below the surface at Borings B-101D and B-103D, respectively.

5.4.2 Analytical Laboratory Testing (Page 5-5)

Insert the following after the last paragraph in Section 5.4.2:

One additional grid location, J-8-F (B-111), was sampled for dioxin analysis from April to December of 1985. Three samples from Location G-9-D were also pulled from the archives for analysis as per the NJDEP in the July 16, 1985 comments on the Site Evaluation Report, 120 Lister Avenue.

Soil samples were also collected during the drilling of deep borings for Monitoring Wells MW-101D and MW-103D. Seven samples were taken during the drilling of Boring B-101D ranging at depths from 6.5 to 87.5 feet. Five samples were collected during drilling of Boring B-103D ranging in depth from 15.0 to 76.5 feet. All of the samples were analyzed for dioxin only.

5.4.2.1 Summary Dioxin Results (Page 5-5)

Delete the existing section and insert the following text:

A total of 119 soil samples from the 120 Lister Avenue site investigation were analyzed for dioxin. Appendix C contains a list of the final dioxin results for the 21 soil samples collected from April 8 to December 31, 1985 and for the three samples for Grid Location G-9-D pulled from the archives.

Revised Table 5.4.2.1-1 summarizes the dioxin results according to sample depths; results are also shown on the cross sections in Figures 5.4.1-1 through 5.4.1-4. With the exception of very high levels detected in all samples from E-11-F (B-105), a clear decrease in dioxin concentration with depth is apparent.

Revised Figures 5.4.2.1-1 through 5.4.2.1-3 present the results of the dioxin analyses for soils at 0 to 6 inches, 6 to 12 inches, and 12 to 24 inches, respectively, according to their location on site.

Appendix B contains results of all samples analyzed for dioxin since January 15, 1985.

5.4.2.2 Summary Priority Pollutant Results (Page 5-6)

There were no additional 120 Lister Avenue site soil samples analyzed for full priority pollutant parameters not covered in the original 120 Lister Avenue report. Near-surface Soil Sample E-11-F-2167-102-S-4 priority pollutant analyses were in progress at the compilation of the Site Evaluation Report. The priority pollutant results for this sample are provided in their entirety in Appendix D.

Tables 5.4.2.2-1 through 5.4.2.2-3 of the Site Evaluation Report summarize the organic compounds (volatiles, BNAs, pesticides, PCBs, herbicides, and dioxin) detected in the soil samples analyzed according to sample depth. Table 5.4.2.2-1 has been revised to include E-11-F results and is provided in the addendum.

Insert the following after the fourth paragraph in Section 5.4.2.2, 120 Lister Site Evaluation Report:

Because of the history of chemicals used on site, several semivolatile compounds are of more interest than others. Summary figures were provided to the state in the September 1985 report entitled "Updated Response to New Jersey Department of Environmental Protection, July 16, 1985, Comments on Site Evaluation Report." Figures 10 through 12 in the September report presented the semivolatile concentrations of 2,4,5-trichlorophenol, 2,4,6-trichlorophenol, 2,4-dichlorophenol, and hexachlorobenzene as a function of sample depth; 0 to 6 inches, 1 to 2 feet, and 9.5 to 11 feet. Figures 13 through 15 presented the soil pesticide concentrations, 4,4'-DDT, 2,4-D, 4,4'-DDE, 2,4,5-T, 4,4'-DDD and Dalapon, at similar depth intervals.

5.4.2.2.1 Appendix B Results

Thirteen of the 26 compounds listed in Appendix B of the off-site Work Plan were analyzed as part of the priority pollutant analyses with results reported in Section 5.4.2.2. Soil Sample D-12-D-2205-104-S-Y was additionally tested for bis(4-chlorophenyl)sulfone and Ovex. Results indicated no detectable levels of Ovex or bis(4-chlorophenyl)sulfone in the sample. The detection limit was 10 micrograms per kilogram (μg/kg) for both compounds.

5.4.2.3 Dioxin Results - Postremedial Soil Samples (Page 5-7)

Insert the following after the last sentence of the paragraph:

Excavation No. 6 was excavated to 24 inches with no postremedial sampling as per the NJDEP OSC.

Table 5.4.2.3-1 was in error; the revised table is included in this addendum.

5.4.2.4 Backfill Priority Pollutant Results

Five samples were taken of the backfill material used during excavation activities. Samples included railroad ballast, crushed stone, and sand from the Stavolla Quarry and concrete and bank run from Dallenbach Sand Company. Complete priority pollutant result summaries are provided in Appendix D.

Chloroform, methylene chloride, and acetone were detected at concentrations which are typically attributable to background levels associated with sample handling either during collection, shipping, or in the laboratory.

5.5 GROUND WATER (Page 5-7)

Delete the existing paragraph and insert the following text:

The ground water investigation results are presented in the following sections. Results include the site hydrogeologic model, ground water level measurements, hydraulic conductivities from field slug test data, and the chemical analysis data for ground water samples.

Site Hydrogeologic Model

There are three significant aquifers beneath the site area found within the fill material, the glaciofluvial sand deposit, and in the bedrock of the Brunswick Formation. The aquifers in the fill material and the glaciofluvial sand deposit are separated by an organic silt and peat interval that ranges in thickness from 2 to 12 feet across the site.

The aquifer found in the fill material is a "surficial aquifer" and the organic silt and peat layer underlying the fill has a lower permeability, restricting the downward flow of ground water from the fill. Water level data from the monitoring wells in the fill material indicate a saturated thickness within the fill material of 4 to 6 feet. The saturated thickness of the fill at Monitoring Well MW-103A can be expected to vary due to the close proximity of the monitoring well to the Passaic River and its resulting tidal influence on the aquifer. Although the fill material is denoted as a surficial aquifer, it is very limited in extent and does not supply potable water or water for industrial usage.

The glaciofluvial sand deposit beneath the silt interval is a major water-bearing unit with possible industrial ground water usage. The deep borings on the 120 Lister Avenue site indicated a sand deposit thickness ranging from approximately 79 to 95 feet at Borings B-101D and B-103D, respectively.

Intervals of clayey silt appear to be discontinuous across the 120 Lister Avenue site. A clayey silt/silty clay cohesive zone was present in both Borings B-102D and B-103D but absent in Boring B-101D. Head differentials of up to 0.60 foot were observed during the ground water level monitoring program between wells located at different depths within the sand unit. The resulting data, as well as field observations, are consistent with the probable glaciofluvial origin of the sand unit resulting in very localized facies changes due to changes in the depositional environmental. The presence of these glaciolacustrine clay/silt units significantly reduces the potential for downward ground water flow into the bedrock unit.

Bedrock beneath the 120 Lister Avenue site is composed of Triassic shales and sandstones of the Brunswick Formation. Information from area well logs indicates that the Brunswick Formation is highly fractured. The Brunswick aquifer is the source for the area's potable water.

5.5.1 Ground Water Levels (Page 5-7)
Insert the following text at the end of Section 5.5.1:

Ground water levels were also observed on the following dates during the April to July 1985 drilling campaign: May 11, May 18, May 25, June 1, July 3, and July 8. The ground water data were presented to the state in the September

1985 report entitled "Updated Response to New Jersey Department of Environmental Protection, July 16, 1985 Comments on Site Evaluation Report." The values reported in Table 1 of the September report were in error. A revised presentation of ground water level data is provided in Table 5.5.1-2.

5.5.1.1 Ground Water Levels in the Fill

Ground water levels in the shallow "A" wells screened in the fill ranged from 0.40 to 7.24 feet below the ground surface. Tidal fluctuations were observed in Monitoring Well MW-103A during the water level monitoring and water sampling programs, indicating the ground water in the fill near the river is highly influenced by tidal effects. Monitoring Wells MW-101A, MW-102A, and MW-4A showed virtually no tidal fluctuations, indicating the southern two-thirds of the site is not directly influenced by the river's tidal cycles.

5.5.1.2 Ground Water Levels in the Glaciofluvial Sands

Ground water levels observed in the six monitoring wells (MW-4B, MW-4C, MW-101B, MW-101D, MW-102C, and MW-103D) screened in the glaciofluvial sand interval indicated minimal variations due to tidal influences. A continuous-reading In Situ SE1000A hydrological monitor, installed on Monitoring Well MW-10B from July 3 to 10, 1985 on the Sherwin Williams property adjacent to the 80 Lister Avenue site, also displayed minor variations on the ground water levels due to tidal influences. The ground water levels of the four monitoring wells screened in the upper glaciofluvial sand unit ranged from 4.28 to 6.87 feet below the ground water levels observed in the fill at the same location and time, with the average difference across the site of approximately 5.8 feet. The ground water levels for the lower glaciofluvial sand unit ranged from 0.35 foot below to 0.61 foot above the ground water levels for the upper sand unit at the one well location where both sand units were screened (Monitoring Wells MW-101B and MW-101D). This suggests that communication between the upper and lower aquifer exists at this location. Here, the cohesive silt/clay interface was not encountered in the soil boring.

5.5.2 Hydraulic Conductivities (Page 5-7)

Insert the following at the end of Section 5.5.2:

Estimates of horizontal hydraulic conductivities of the fill and underlying glaciofluvial sands were obtained from field permeability tests on Monitoring Wells MW-101A, MW-101D, MW-102A, MW-102C, MW-103A, and MW-103D on July 17, 1985. No permeability tests were performed on the organic silt layer separating the fill and glaciofluvial sands. The horizontal hydraulic conductivities were determined using the method outlined in the Site Evaluation Report. A compilation of the test results indicating the horizontal hydraulic conductivities is presented in Table 5.5.2-1.

5.5.2.1 Hydraulic Conductivity of the Fill

Measured in situ horizontal hydraulic conductivities are summarized in Table 5.5.2-1. The range in the hydraulic conductivity of the fill is from 2.14 to 185 feet per day with a mean value of 89.6 feet per day. This is a relatively high figure and indicates that the fill material does not significantly retard the flow of ground water.

5.5.2.2 Hydraulic Conductivity of the Organic Silt

Based upon comparison with values reported for similar materials in the literature, it is estimated that 0.003 foot per day (1.0×10^{-6} centimeter per second) is a reasonable value for the average vertical hydraulic conductivity of the silt. This is a low value and indicates a significant potential for retarding the flow of ground water downward from the fill.

5.5.2.3 Hydraulic Conductivity of the Glaciofluvial Sand Unit

Measured in situ horizontal hydraulic conductivities for the upper glaciofluvial sand range from 1.79 to 3.09 feet per day with a mean value of 2.32 feet per day. These values are also relatively high and indicate that the upper glaciofluvial sand deposits will not significantly retard the ground water flow.

The horizontal hydraulic conductivity for the lower glaciofluvial sand ranges from 0.42 to 0.08 foot per day with a mean value of 0.23 foot per day. This is a moderate value and indicates that the lower glaciofluvial sand also will not significantly retard the flow of ground water.

5.5.3 Ground Water Flow

Based upon the ground water level measurements and slug tests performed in the monitoring wells, estimates of the ground water flow directions and rates were calculated. Estimates of the vertical flow of ground water from the fill material through the silt to the glaciofluvial sand deposit were also determined.

5.5.3.1 Ground Water Flow in the Fill Material

Ground water level elevations and approximate water level contours for the fill material at the site are shown in addendum Figures 5.5.3.1-1 and 5.5.3.1-2 for May 25 and July 8, 1985, respectively.

Ground water flow velocities in the surficial fill at the site were computed from the gradients (piezometric head divided by distance) developed from Figure 5.5.3.1-2 and hydraulic conductivities from Table 5.5.2-1. Computed horizontal ground water velocities range from 2.2 to 3.1 feet per day at the center of the site north toward the river and from 0.3 to 0.6 foot per day from the center of the site to the southern boundary.

Figures 5.5.3.1-1 and 5.5.3.1-2 are based on off-site well information as well as on-site well data. These data verify the existence of an east-west trending ground water mound across the center of the site. Observations during the site investigation indicated that surface drainage was very poor in the west-central part of the site, particularly around an area bounded by Monitoring Wells MW-101, MW-4 and MW-8 on the 80 Lister Avenue site. Over one foot of standing water was observed at times in that area. As can be observed from Figures 5.5.3.1-1 and 5.5.3.1-2, the ground water level at the southern end of the site is approximately 2.5 to 5.0 feet higher than that at the northern end and varies due to tidal effects.

5.5.3.2 Ground Water Flow in the Silt

The vertical hydraulic gradient between the fill and underlying glaciofluvial sand was determined at the location of Monitoring Wells MW-101A and MW-101B from data recorded on July 3 and 8, 1985 and presented in Table 5.5.1-2. The vertical hydraulic gradients and an estimate of the vertical hydraulic conductivity of the silt layer were used to calculate the ground water velocities from the fill through the silt into the glaciofluvial unit. Assuming an average silt layer thickness of 8.5 feet from the boring logs, the average computed velocity was 1.6×10^{-3} feet per day. Thus, the silt layer retards the flow of ground water from the fill to the sand. Lateral flow in the silt is not a concern because the overlying fill and underlying sand have much higher hydraulic conductivities.

5.5.3.3 Ground Water Flow in the Glaciofluvial Deposits

Four monitoring wells were installed in the glaciofluvial sand with two of the wells screened in the upper sand zone and two in the lower sand zone. Hydraulic conductivity testing on July 17, 1985 indicated an average value of 2.32 feet per day in the upper sand unit and 0.23 foot per day in the lower sand unit. Insufficient data were collected to develop potentiometric contour maps for the glaciofluvial sands. Ground water levels measured July 3, 1985 are shown relative to the site in Figures 5.5.3.3-1, 5.5.3.3-2, and 5.5.3.3-3 for "B," "C," and "D" wells, respectively.

5.5.3.4 Ground Water Flow in the Bedrock

No monitoring wells were installed in the bedrock. Therefore, no information is available to make estimates of flow rates and direction in the bedrock.

5.5.4 Analytical Laboratory Testing (Page 5-8)

Delete existing Section 5.5.3 and insert the following text:

Ground water samples were collected from each of the three on-site monitoring wells (MW-101A, MW-102A, and MW-103A) on February 13, 1985. A second sampling effort on March 6, 1985 yielded samples from Monitoring Wells MW-101A and MW-102A; Monitoring Well MW-103A was damaged, making collection impossible. Four additional monitoring wells of increasing depth were installed within ten feet of the original wells from April to July 1985. During that period, the original wells were damaged and replaced, Monitoring Well MW-103A for the second time. The locations of all of the wells are presented in revised Figure 4.2.5-1. Monitoring Wells MW-101A, MW-101B, MW-101D, MW-102A, and MW-103D were sampled on June 5, 1985. Monitoring Wells MW-4B an MW-4C on 80 Lister Avenue and Monitoring Wells MW-101B, MW-101D, MW-103A, and MW-103D were sampled on June 25, 1985. Monitoring Wells MW-4B and MW-4C on 80 Lister Avenue and Monitoring Well MW-102C were sampled on July 15, 1985. Monitoring Wells MW-4C and MW-102C were sampled on August 5. All 20 ground water samples collected were analyzed for full priority pollutants and dioxin; complete results are tabulated in Appendix E for the 11 samples on 120 Lister Avenue.

Table 5.5.4-1 of the addendum summarizes the results of field tests performed immediately after the sampling of each well. These tests included pH, specific conductance, temperature, salinity, and dissolved oxygen content.

Table 5.5.4-2 (revised Table 5.5.3-1) summarizes the detected organic compounds in the 16 ground water samples for 120 Lister Avenue. Dioxin was not detected in any of the water samples; a total of 47 organic compounds were detected at least once. Benzene, chlorobenzene, 2,4-D, and 4'4-DDT were detected with the highest frequency. Methylene chloride was detected in all of the samples, but at levels attributable to contamination associated with sample handling.

Table 5.5.4-3 (revised Table 5.5.3-2) summarizes the detected inorganic parameters in the ground water samples. Zinc, chromium, lead, and copper show the highest concentrations of all the metals. Zinc, chromium, and copper were detected in every water sample. The highest total cyanide and phenols values observed were 0.06 and 3.3 parts per million (ppm), respectively.

5.6 DRUM SAMPLES (Page 5-9)

The first sentence should read: "The 18 drum samples listed . . ."

5.7 ADDITIONAL SAMPLES

5.7.1 Surface Water (Page 5-9)

The first sentence should read: ". . . Biochemical oxygen demand (BOD), total organic carbon (TOC), and total suspended solids (TSS)."

The surface water was sampled an additional time on June 5, 1985. The sample was analyzed for dioxin, chemical oxygen demand (COD), BOD, TOC, and TSS. Results are provided in Table 5.7.1-2 of the addendum.

Insert the following after Section 5.7.3:

5.7.4 Drainage Ditch Sediment

A sample of sediment from the drainage ditch west of the 120 Lister Avenue site was collected for dioxin analysis. The result was negative. A field blank, F104-3873-H-L, and a travel blank, T058-3874-H-L, were taken at the same time. Both resulted in nondetectable levels of dioxin. Results are included in Table 5.7.4-1 of the addendum.

5.8 ANALYTICAL RESULTS FOR QUALITY ASSURANCE/QUALITY CONTROL CHECKS (Page 5-10)

Delete existing section and all subsections and insert the following:

All of the 120 Lister Avenue and off-sites samples collected between January and September of 1985 were analyzed as a single, continuous project group by each of the participating laboratories; they were not, in any way, segregated by site location once they arrived at the laboratories. Therefore, the following sections constitute a complete discussion of the results for all quality control activities performed in association with the entire set of samples collected from January through September 1985. The overall conclusions from these quality control efforts were applicable to the data collected from each of the individual off-site locations. For samples collected and data generated after October 1, 1985, a separate quality control report will be prepared since a new phase of off-site work was initiated at that time.

Quality assurance/quality control checks were performed routinely throughout the project sampling and analysis activities. Several levels of quality control checks were implemented, including field/trip blanks, individual laboratory analysis-specific quality control measures, and specific quality control samples initiated by the NJDEP.

Precision, accuracy, and completeness objectives used for the analytical program were those established in the 80 Lister Avenue Work Plan and are presented in Table 5.8-1. Similar quality control acceptance criteria were available for those analyses performed under EPA's Contract Laboratory Program (CLP) protocol. Where available, these analysis-specific acceptance limits were applied.

5.8.1 Sampling Quality Control Checks: Field and Trip Blanks

Table 5.8.1-1 summarizes the field blanks collected in association with each sample matrix and the percent of blanks to total samples collected for each case. The overall goal (number of blanks equal to at least 5 percent of the total number of samples collected) was realized. Trip blanks were collected with each field blank (i.e., a field and trip blank pair) for solid and water samples.

Analytical results for all field and trip blanks analyzed for full priority pollutants in association with ground water samples or volatile organics only in association with solid samples are presented in Appendix G. No significant contamination was detected in any of these blanks. Volatile analysis did consistently indicate low levels of methylene chloride in most of the blanks; chloroform and acetone were detected less consistently and at very low levels. This contamination may have occurred as part of the sample handling process, in the field or at the laboratories. None of the results, however, were high enough to significantly affect the quality of the associated sample results.

By May 1985, soil samples were being collected for analysis of dioxin only; associated field and trip blank pairs were concurrently adjusted in preparation to provide sufficient volume of blank water for the dioxin analysis. Volatile analysis of soil-associated blanks was discontinued at this time. Appendix G contains the dioxin results for the 24 field and trip blank pairs associated with all "dioxin-only" soil sampling. No dioxin was detected in any of these blank samples, satisfactorily verifying sample integrity during all collection and handling procedures.

Dioxin results for the 21 field blanks associated with wipe samples are also presented in Appendix G; no dioxin was detected. The single field blank associated with chip sampling showed no detectable level of dioxin.

5.8.2 Individual Laboratory Quality Control Checks

Each of the four participating analytical laboratories performed specific quality control checks in association with analysis of the 120 Lister Avenue and off-site samples, including regular instrument calibration, use of surrogate and internal standards, and a minimum of one spike/duplicate pair for every set of 20 samples analyzed. All of the off-site samples were analyzed as a single project group by the laboratories, i.e., they were not segregated by site location; therefore, the following is a complete summary of the quality control results for all Diamond Shamrock Chemicals Company (DSCC) off-site samples collected for analysis of priority pollutants and dioxin from January through September 1985.

5.8.2.1 Organic Priority Pollutant Analyses

VOA and BNA analyses were performed on water and solid samples at either the ITAS-Cerritos laboratory or the ITAS facility at Middlebrook Pike in Knoxville. All analyses for pesticides and herbicides were performed at either the ITAS-Cerritos laboratory or the ITAS-Santa Clara facility. For all parameters (except herbicides), EPA CLP procedures were followed. EPA Method SWA 8150 was used for the chlorinated herbicide analyses; these compounds are not included in the CLP protocols and are, therefore, not subject to the same quality control criteria.

Method detection limits for each organic analyte are listed in Appendix G. Each laboratory performing organic analyses for DSCC project samples met at least these detection limits, unless dilution was required due to matrix interferences or high analyte levels. Sample-specific detection limits are reported in the full laboratory raw data batch reports.

Instrument calibrations were performed and documented every eight hours. Support data for these quality control checks are contained in the completed laboratory batch reports provided with each set of sample results. Laboratory blanks were also analyzed at least once every eight hours for each type of analysis performed. No significant contamination was observed in the laboratory blanks for extractable parameters (BNA, pesticide, herbicide). Volatile blanks did consistently show low levels of methylene chloride--generally below the quantitation limit. Complete data for all laboratory blanks are also contained in the batch reports.

Surrogate standards were added to every sample analyzed to monitor percent recovery. Representative compounds not on the priority pollutant parameter list are used for each analysis fraction (VOA, BNA, pesticide). The quality control acceptance limits for surrogate recoveries are listed in Table 5.8.2.1-1.

A matrix spike (MS) and matrix spike duplicate (MSD) pair were analyzed at least once for each set of 20 samples of a given matrix; the sample for MS/MSD analysis was selected randomly. Spike compounds were selected from the priority pollutant lists for each analysis fraction. Recovery data were used to evaluate method accuracy. Comparison of the results for each spike compound in the MS to the analogous results in the MSD allows calculation of Relative Percent Difference (RPD), a measure of method precision. The quality control advisory limits for spike recoveries and RPDs are listed in Table 5.8.2.1-2.

The discussions below summarize the quality control check sample results for the samples analyzed at all participating laboratories for organic priority pollutants. The results are matrix-specific for the two major sample types analyzed: soil and water.

5.8.2.1.1 Soil Quality Control Summary

Surrogate Recoveries

Tables 5.8.2.1.1-1, 5.8.2.1.1-2, 5.8.2.1.1-3, and 5.8.2.1.1-4 summarize the surrogate recovery results for all soil samples. Average recoveries have been calculated for each individual analysis fraction (VOA, BNA, pesticide), both for the samples analyzed at a single laboratory and for the total project samples analyzed for that fraction at the combined laboratories. Recoveries outside the stated quality control limits, per Table 5.8.2.2.1-1, have not been included in the calculation of average percent recovery for each surrogate compound. Excluding the pesticide surrogate, outside recoveries represent only 5.7 percent of the total analyses performed on these samples. This is within the completeness objective of 90 percent and, therefore, does not adversely affect overall data quality. The number of recoveries outside of the quality control limits for each surrogate compound is also summarized in Tables 5.8.2.1.1-1, 5.8.2.1.1-2, 5.8.2.1.1-3, and 5.8.2.1.1-4. With a single exception, all of the pesticide surrogate outside recoveries were due to matrix interferences; no recoveries were obtainable for these samples. All of the BNA surrogate outside recoveries were due to dilution effects.

As presented in Tables 5.8.2.1.1-1, 5.8.2.1.1-2, 5.8.2.1.1-3, and 5.8.2.1.1-4, all average percent recoveries for surrogate compounds are well within the stated quality control acceptance criteria for soil samples; no significant difference in surrogate recoveries between the laboratories performing analyses is noted. The consistency of the recovery results, as measured by the standard deviation, is also acceptable for each compound.

Matrix Spike/Matrix Spike Duplicates

Table 5.8.2.1.1-5 summarizes the number of MS/MSD pairs analyzed with soil samples at each laboratory, by analysis fraction and level. All quality control check frequencies are greater than the minimum 5 percent quality assurance objective.

Tables 5.8.2.1.1-6 through 5.8.2.1.1-12 summarize the average percent recoveries and RPDs for VOA, BNA, pesticide, and herbicide spike compounds, for both the individual and combined laboratories performing analyses. Recoveries outside quality control acceptance limits are not included in these calculations. Excluding the herbicide results, 10 percent of the recovery results are outside the quality control acceptance limits; this is just within the quality assurance objective for completeness of 90 percent, and, therefore, does not adversely affect the overall data quality.

More than half of the outlier recovery results occurred in both halves of MS/MSD pairs; this reproducibility supports the assertion that the majority of the outliers are the result of sample matrix effects or dilutions. Also, because the recoveries are properly duplicated in the MS/MSD pair, the RPDs tend to fall in the acceptable ranges: only 2 percent of the RPD results fall outside the quality control advisory limits.

The average percent recoveries and average RPD values for VOA, BNA, and pesticide spike compounds are all well within the acceptable quality control limits; no significant differences in recoveries between the two laboratories performing analyses are noted.

The average recoveries for all herbicide fraction spike compounds range from 36 to 71 percent, with the exception of Dinoseb, which averaged only 14 percent recovery. Reproducibility was relatively high (all RPDs less than 50), but recoveries were widely scattered between sample pairs (high standard deviations).

5.8.2.1.2 Water Quality Control Summary

Surrogate Recoveries

Tables 5.8.2.1.2-1, 5.8.2.1.2-2, and 5.8.2.1.2-3 summarize the surrogate recovery results for all water samples. Average percent recoveries have been calculated for each individual analysis fraction (VOA, BNA, and pesticide), both for the samples analyzed at a single laboratory and for the total project samples analyzed at the combined laboratories. Recoveries outside the stated quality control limits shown in Table 5.8.2.1-1 have not been included in the calculation of average percent recovery for each surrogate compound. The outside surrogate recoveries including pesticides represent 9.4 percent of the total analyses performed on these samples. Therefore, more than 90 percent of all average percent recoveries for surrogate compounds are within the stated quality control acceptance criteria for water samples. This maintains the completeness objective of 90 percent, so the outside values do not adversely affect overall data quality. The number of recoveries outside the CLP quality control criteria for each surrogate compound is also summarized in Tables 5.8.2.1.2-1, 5.8.2.1.2-2, and 5.8.2.1.2-3.

Approximately 80 percent of the outlying BNA surrogate recoveries were due to either severe matrix interferences or dilution effects. Half of the pesticide surrogate outside recoveries were the direct result of dilution effects.

As shown in Tables 5.8.2.1.2-1 and 5.8.2.1.2-3, no significant difference in surrogate recoveries between the laboratories performing the analyses is noted. The precision of the recovery analyses for each compound is also acceptable, as demonstrated by the standard deviation.

Matrix Spike/Matrix Spike Duplicates

Table 5.8.2.1.2-4 summarizes the number of MS/MSD pairs analyzed with water samples at each laboratory by analysis fraction and level. All quality control check frequencies for water samples are greater than the minimum 5 percent quality assurance objective.

Tables 5.8.2.1.2-5 through 5.8.2.1.2-9 summarize the average percent recoveries and RPDs for VOA, BNA, pesticide, and herbicide spike compounds for both the individual and combined laboratories performing the analyses. Recoveries outside quality control acceptance limits are not included in these calculations. Excluding the pesticide results and an anomalous BNA spiked sample, only 3.2 percent of the recovery results are outside the quality control acceptance limits. This is well within the 90 percent quality assurance objective for completeness. The spike compound recoveries for the anomalous BNA MS are all very low due to dilution effects, a situation which was repeated in the MSD for this sample. More than half of the outside recoveries of the pesticide spike compounds occurred in both the MS and MSD; this reproducibility supports the assertion that an out-of-range value is the result of sample matrix interferences or dilution effects. The RPD values are just within the completeness objective, with 10 percent out-of-range results. No significant differences in recoveries between the laboratories performing the analyses are noted. Also, the different laboratories show similar duplication capabilities as shown in close RPD values.

The average recoveries for all herbicide fraction spike compounds range from 33 to 139. Reproducibility was relatively high (all RPDs less than 30, except for Dalapon which averaged 44), but recoveries were widely scattered between samples and spike pairs as shown in high standard deviations.

5.8.2.2 Inorganic Priority Pollutant and Classical Analyses

A total of 127 soil and 46 water samples were analyzed for priority pollutant metals, total cyanide, and total phenols at the ITAS-Middlebrook Pike laboratory. EPA methods, as specified in the Work Plan, were used for analysis.

Calibration standards and laboratory blanks were analyzed and documented a minimum of once per eight-hour shift. Contamination of sufficient concentration to affect results was not observed in any of the laboratory-prepared blanks. Full documentation of all standards, blanks, and daily control charts is contained in the laboratory files.

Table 5.8.2.2-1 summarizes the number of spike and duplicate analyses performed for each sample matrix. In all cases, quality control check frequencies exceeded the target frequency of 5 percent of total samples analyzed.

Table 5.8.2.2-2 summarizes the RPD values for inorganic/classical analysis duplicates (blind splits) on water and soil matrices. Many of the RPD values are greater than 20 percent, indicating relatively low reproducibility between original and duplicate sample results. However, regularly analyzed check standards indicate that the method itself is precise to within 20 percent over the period of sample analyses; these data are maintained in the laboratory project files. Two explanations could account for the observed RPDs:
(1) many of the measurements are at or near the detection limits where, by definition, the method is at the limit of its precision and accuracy; and
(2) sample nonhomogeneity and/or matrix interferences make it difficult to reproduce results precisely, regardless of the degree of homogenization.

The average percent recovery for each spiked compound, separated according to sample matrix, is shown in Table 5.8.2.2-3. All of these average recoveries are well within the quality assurance objectives, per Table 5.8-1.

5.8.2.3 Dioxin Analysis - ITAS-Directors Drive Laboratory

EPA procedures, as detailed and modified in the Work Plan, were applied for the analysis of dioxin in a total of 593 soil, air, water, and wipe samples at the ITAS-Directors Drive high hazard laboratory.

Instrument calibrations were performed and documented every eight hours; method blanks were also run every eight hours, or at least once for each batch of up to 20 samples; support data for these routine checks are contained in the complete laboratory batch reports. Contamination was not detected in any method blanks.

Surrogate standards were added to every sample prior to extraction; comparison of the ^{37}Cl-TCDD recovery to the ^{13}C-TCDD recovery yields a value of "Percent Accuracy," as described by the EPA method. This percent accuracy result was within the quality control acceptable limits of 60 to 140 percent for all but three of the 593 samples reported. One of the out of range results was initially saturated with dioxin and reanalyzed as an extract dilution; the surrogates were then too dilute to measure. The other two were above the upper accuracy limit primarily due to severe matrix interferences. These outlying values only account for 0.5 percent of all reported dioxin results.

A minimum of one sample spike and duplicate pair were analyzed for every set of 20 samples analyzed. A total of 26 quality control sample pairs were analyzed, representing 8.7 percent of the soil samples analyzed for dioxin.

Table 5.8.2.3-1 presents a summary of the duplicate results. RPDs have been calculated. Only two are above 40 percent, a value determined to be an acceptable level for this analysis based on the percent recovery requirements. Both of these outlying values were calculated from results that are at or near the minimum detection limits for the method. Fourteen of the duplicate pairs gave ND results in at least one of the two analyses; eleven of those gave ND results in both the original and the duplicate; and the other three gave an ND and a small positive result. The two outlying RPDs and the ND duplicate pairs have been excluded from calculation of the average RPD, which is 19 (±9.0 percent). This is well within acceptable limits for the analytical method.

Table 5.8.2.3-2 presents the spike recovery data for the quality control samples. The acceptable range for percent recovery has been established as 60 to 140 percent for this analysis. Four of the values were out of range, three of these were likely due to original sample concentrations that were very close to the detection limit. Excluding the out-of-range values, the average percent recovery was calculated to be 99 (±19) percent; this is within acceptable limits for the analytical method. Even without these outlying recovery values, a 7.0 percent quality control frequency check is maintained.

Partial scan Gas Chromatography/Mass Spectrometry (GC/MS) confirmations were performed on 15 samples with positive dioxin results. Of these, five passed all criteria required for a final confirmation of the presence of dioxin. Backup documentation of these analyses is contained in the dioxin laboratory batch reports.

5.8.2.4 NJDEP-Designated Quality Control Checks

The NJDEP OSC initiated two types of quality control samples: (1) collection of sample splits in the field, for analysis at an independent laboratory in addition to the IT laboratories, and (2) assignment of soil proficiency samples for dioxin analysis. Table 5.8.2.4-1 lists the 120 Lister Avenue and off-site samples split at the time of collection, at the direction of the OSC. These splits were shipped to California Analytical Laboratories for independent analysis. IT results for these samples, for the analyses indicated, are reported with all other analytical results from each off-site location. Several samples were shipped to the NJDEP-designated laboratory only, i.e., there was no IT split. These included one site soil sample, three proficiency samples, and two trip and field blank pairs associated with ground water samples, which are also listed in Table 5.8.2.4-1. No analytical results have been received by IT for any of these independent laboratory splits.

Table 5.8.2.4-2 lists the dioxin results obtained for the NJDEP soil proficiency samples assigned to the project from January through September of 1985.

6.0 SITE PREPARATION ACTIVITIES FOR CONTAINER STORAGE

6.5 UNDERGROUND PIPING (Page 6-4)
Insert the following text at the end of Section 6.5:

The sewers and drains presumed to be located on the 120 Lister Avenue site are shown in relationship to site structures in revised Figure 6.5-1. Two drainage trenches were dug for the container storage area along the perimeter of the site; no additional pipes were located. There is no reason to assume that additional underground piping exists on the 120 Lister Avenue site. There will be no further efforts made to locate underground piping.

6.7 FENCE (Page 6-5)
The fence surrounding the 120 Lister Avenue site is intact. Access is through the gate at the southwest corner of the site.

6.8 CONTAINER STORAGE (Page 6-5)
Insert the following text at the end of Section 6.8:

As of December 1, 1985, 849 containers have been stacked on the 120 Lister Avenue container pad. Receiving and stacking activities continue daily from off-site remediation.

Prior to the start of container placement at the 120 Lister Avenue site, it was concluded by analysis and investigation that the possibility of subsurface shear failure within the silt layer existed at the container pad location. Bearing pressure, settlement, and stability analyses have been conducted for the 120 Lister Avenue site based upon previously acquired data. A program to monitor earth movement was instituted.

Three slope inclinometers were installed April 19 through 23, 1985 between the bulkhead of the Passaic River and the northern side of the container pad; settlement monuments were installed around the periphery of the loaded area along with alignment pins set on the existing bulkhead. On May 13 through 22, six pressure transducers were added to the monitoring system. Six container stack monitoring points were also placed in early July to measure movement of the container pile. Locations of the silt are shown in Figure 1 of the report to the NJDEP "Earth Movement Monitoring System Interim Status Report, 120 Lister Avenue," submitted in September 1985. Addendum Figure 4.2.4-2, the "as-built," also shows the locations of inclinometers and pressure transducers/ piezometers. Daily earth movement monitoring is enforced. Adjustments have been made when necessary based on piezometer and inclinometer readings.

TABLES

TABLES

TABLE 4.2.4-2

COORDINATES AND ELEVATIONS OF
SOIL BORINGS AND MONITORING WELLS
INSTALLED FROM APRIL TO JULY 1985

IDENTIFICATION	COORDINATES (a) NORTH	EAST	GROUND SURFACE ELEVATION (b)
Monitoring Wells			
MW-101A	264.0	426.0	6.0
MW-101B	259.7	427.6	6.1
MW-101D	265.6	427.9	5.9
MW-102A	132.9	580.3	6.9
MW-102C	133.5	572.9	6.9
MW-103A	479.3	556.0	7.3
MW-103A-2	476.7	563.2	7.1
MW-103D	481.9	563.7	7.3
Borings			
B-101A	264.0	426.0	6.0
B-101B	259.7	427.6	6.1
B-101D	265.6	427.9	5.9
B-102A	132.9	580.3	6.9
B-102D	133.5	572.9	6.9
B-103A	479.3	556.0	7.3
B-103A-2	476.7	563.2	7.1
B-103D	481.9	563.7	7.3
B-111	440.0	387.0	6.0

(a)Coordinates are with respect to site grid.
(b)Ground surface elevations are with respect to New Jersey Geodetic
Vertical Control Datum.

TABLE 5.1-2

AMBIENT AIR RESULTS FROM 120 LISTER AVENUE FOR 2,3,7,8-TCDD
APRIL 8, 1985 TO DECEMBER 1, 1985

SAMPLE NUMBER	METEROLOGICAL CONDITIONS	SAMPLER LOCATION(a)	WIND SPEED MAXIMUM(b) (mph)	PREVAILING WIND DIRECTION(c)	SAMPLE PERIOD START (date/time)	SAMPLE PERIOD STOP (date/time)	VOLUME SAMPLE (m^3)
A006-2803-A-L	Sunny/60°'s	Northeast	13	Variable	4-13/1010	4-18/1130	836.8
A006-2804-A-L	Sunny/60°'s	East	13	Variable	4-13/1025	4-18/1145	755.9
A006-2861-A-L	Partly Cloudy/60°-80°	Northeast	11.5	W	4-18/1150	4-23/1415	606.0
A006-2886-A-L	Rain/50°'s-60°'s	East	7.5	Variable	4-23/1430	4-25/1158	569.3
A006-2887-A-L	Rain/50°'s-60°'s	South	7.5	Variable	4-23/1400	4-25/1139	471.4
A006-3109-A-L	Sunny/60°'s-80°'s	Northeast	-	-	5-10/1457	(d)	(d)
A006-3110-A-L	Sunny/60°s-80°'s	East	-	-	5-10/1440	(d)	(d)
A006-3111-A-L	Sunny/60°s-80°'s	South	-	-	5-10/1425	(d)	(d)
A006-3513-A-L	-	South	10	Variable	6-1/1200	6-4/1448	788.3
A006-3514-A-L	-	East	10	Variable	6-1/1200	6-4/1500	882.4
A006-3515-A-L	-	Northeast	10	Variable	6-1/1200	6-4/1511	691.1
A006-4274-A-L	-	South	11.5	WNW	6-11/1711	6-17/1235	1890.3
A006-4275-A-L	-	Northeast	11.5	WNW	6-11/1725	6-17/1250	1433.9
A006-2037-A-L	Snow/20°s	Northeast	33	NW	1-16/1115	1-17/1210	270.1
A006-2157-A-L	Partly Cloudy/20°s	Southwest	25	W	1-23/1251	1-24/1442	93.1
A006-2225-A-L	Sunny/20°s-30°s	Northeast	5.5	Variable	1-24/1505	1-28/1520	521.0
A006-2326-A-L	Snow/20°s-30°s	Southwest	4.5	NW	2-4/1135	2-7/1507	741.7
A006-2575-A-L	Sunny/40°s	Southwest	10.0	W	2-27/1100	2-28/1348	337.6

(a)Sample locations are denoted as per Section 4.2.1, Site Evaluation Report.

(b)Wind speed is a maximum recorded for a one-hour average.

(c)Prevailing wind direction is reported as the direction from which wind was blowing.

(d)Stop time and flow rate not recorded. Results reported in nanograms/sample.

TABLE 5.2.1-2

ADDITIONAL INDUSTRIAL HYGIENE MONITORING RESULTS

SAMPLE NO.	DESCRIPTION	DIOXIN RESULT
A006-3028-A-L	IH Glass Fiber Filter: Personnel	ND (0.38 ng/m^3)
A006-3029-A-L	IH XAD-2 Backup Tube	ND (0.42 ng/m^3)
F077-3038-A-L	IH Glass Fiber Filter: Field Blank	ND (0.50 ng/m^3)
F078-3039-A-L	IH XAD-2 Tube: Field Blank	ND (0.60 ng/m^3)
A006-2920-A-L	IH Spiked Glass Fiber Filter	2.2 ng/m^3
A006-2921-A-L	IH XAD-2 Backup Tube	ND (0.36 ng/m^3)
91100-2856-W-L	IH Wipe: DS Cat Dozer Serial #375	6.0 ng/m^2
9100-2857-W-L	IH Wipe: Fork Lift Chassis # T341100713	ND (10.8 ng/m^2)
9100-2858-W-L	IH Wipe: Case bobcat 1845 B Hertz # 259-05-4521	6.8 ng/m^2
9100-2878-W-L	IH Wipe: Case 5800 Backhoe #K2-1121-80	ND (14.8 ng/m^2)
9100-3026-W-L	IH Wipe: 580E CASC Backhoe I.C. #220054600	ND (116 ng/m^2)
F0055-2851-W-L	IH Wipe: Field Blank	ND (4.3 ng/wipe)
F057-2859-W-L	IH Wipe: Field Blank	ND (0.24 ng/wipe)
F075-3027-W-L	IH Wipe: Field Blank	ND (2.0 ng/wipe)

TABLE 5.4.2.1-1

SUMMARY OF 2,3,7,8-TCDD RESULTS WITH DEPTH
120 LISTER AVENUE SOILS

DEPTH	NO. OF SAMPLES ANALYZED	NO. OF POSITIVE RESULTS	CONCENTRATION RANGE (ppb)	CONCENTRATION RANGE (ppb) EXCLUDING E-11-F SAMPLES
0.0'-0.5'	27	23	0.48-94.0	0.48-94.0
0.5'-1.0'	21	14	0.58->490.	0.58-24.3
1.0'-2.0'	18	12	0.76-97.0	0.76-11.0
2.0'-3.5'	7	5	0.34-155.	0.34-6.1
3.5'-5.0'	7	5	0.19-73.5	0.19-4.0
5.0'-6.5'	6	4	0.23-93.7	0.23-0.72
6.5'-8.0'	6	2	0.60-61.5	0.60
8.0'-9.5'	4	2	0.84-69.1	0.84
9.5'-11.0'	4	2	0.54-17.4	0.54

TABLE 5.4.2.2-1

SUMMARY OF DETECTED ORGANIC COMPOUNDS (0-2.0 FEET)
120 LISTER AVENUE SOILS

COMPOUND	0-0.5 feet NO. OF SAMPLES ANALYZED	0-0.5 feet NO. OF POSITIVE RESULTS	0-0.5 feet CONCENTRATION RANGE (ppb or µg/kg)	0.5-1.0 feet NO. OF SAMPLES ANALYZED	0.5-1.0 feet NO. OF POSITIVE RESULTS	0.5-1.0 feet CONCENTRATION RANGE (ppb or µg/kg)	1.0-2.0 feet NO. OF SAMPLES ANALYZED	1.0-2.0 feet NO. OF POSITIVE RESULTS	1.0-2.0 feet CONCENTRATION RANGE (ppb or µg/kg)
2,3,7,8-TCDD	8	8	0.56-71.0	8	7	0.58->490.	7	5	0.76-97.0
Benzene	8	1	52.	8	1	35.	7	1	23.
Chlorobenzene	8	1	25.	8	1	120.	7	0	-
Methylene Chloride	8	8	59.-280.	8	8	95.-750.	7	7	71.-240.
Acetone	8	0	-	8	1	83.	7	1	97.
2,4-Dichlorophenol	8	0	-	8	1	800.	7	0	-
2,4-Dimethylphenol	8	1	330.	8	0	-	7	1	290.
Phenol	8	1	200.	8	0	-	7	1	220.
Benzoic Acid	8	1	130.-920.	8	0	-	7	1	510.
2-Methylphenol	8	1	930.	8	1	260.	7	1	640.
4-Methylphenol	8	1	490.	8	0	-	7	1	380.
2,4,5-Trichlorophenol	8	1	160.	8	1	3,500.	7	0	-
Acenaphthene	8	1	260.	8	1	2,400.	7	3	350.-1,600.
1,2,4-Trichlorobenzene	8	2	130.-850.	8	5	170.-660.	7	2	160.-640.
Hexachlorobenzene	8	4	190.-5,900.	8	6	1,000.-44,000.	7	4	530.-11,000.
1,2-Dichlorobenzene	8	0	-	8	1	190.	7	0	-
1,4-Dichlorobenzene	8	1	230.	8	2	160.-910.	7	0	-
Fluoranthene	8	7	160.-4,900.	8	8	530.-14,000.	7	6	690.-15,000
Isophorone	8	1	1,500.	8	1	6,900.	7	1	5,800.
Naphthalene	8	1	160.	8	1	600.	7	2	320.-1,800.
Bis (2-ethylhexyl) phthalate	8	8	360-5,500.	8	7	170.-5,100.	7	6	230.-74,000.
Butyl benzyl phthalate	8	0	-	8	0	-	7	1	220.
Di-N-butyl phthalate	8	7	360.1,300.	8	8	230.-2,900.	7	6	230.-2,100.
Di-N-octyl phthalate	8	1	160.	8	0	-	7	0	-
Diethyl phthalate	8	1	330.	8	1	160.	7	1	510.
Benzo(A)anthracene	8	7	160.-4,400.	8	6	750.-10,000.	7	6	560.-16,000.
Benzo(A)pyrene	8	4	270.-4,400.	8	6	430.-6,500.	7	5	630.-16,000.
Benzo(B)fluoranthene	8	4	370.-820.	8	8	560.-4,100.	7	4	490.-3,000.
Benzo(K) fluoranthene	8	1	5,400.	8	1	4,100.	7	5	490.-3,000.
Chrysene	8	7	190.-4,000.	8	7	430.-7,500.	7	5	690.-12,000.
Acenaphthylene	8	1	330.	8	2	230.-2,000.	7	4	170.-1,600.
Anthracene	8	3	160.-1,100.	8	6	170.-3,900.	7	6	130.-3,000.
Benzo(GHI)perylene	8	3	130.-1,700.	8	3	370.-3,800.	7	4	460.-3,700.
Fluorene	8	1	360.	8	1	2,500.	7	3	480.-1,400.
Phenanthrene	8	4	330.-4,200.	8	8	230.-15,000.	7	6	390.-13,000.
Dibenzo(A,H)anthracene	8	0	-	8	3	170.-1,000.	7	2	340.-1,500
Indeno(1,2,3-CD)pyrene	8	1	1,700.	8	4	330.-3,900.	7	6	130.-4,000.
Pyrene	8	8	230.-7,200.	8	8	460.-16,000.	7	6	890.-39,000.
Benzyl alcohol	8	1	430.	8	0	-	7	1	2,000
Dibenzofuran	8	1	200.	8	1	1,700.	7	3	220.-4500.
2-Methylnaphthalene	8	1	200.	8	1	1,500.	7	2	190.-15,000.
3-Nitroaniline	8	0	-	8	1	4,800.	7	0	-
4,4'-DDT	8	8	190.-480,000.	8	7	720.-260,000.	7	6	60.-14,000.
4,4'-DDE	8	8	10.-7,000.	8	7	440.-7,500	7	6	40.-5,400.
4,4'-DDD	8	7	50.-17,100.	8	5	3,000.-6,800.	7	5	70.-6,600.
Alpha-BHC	8	0	-	8	0	-	7	1	4,800.
Beta-BHC	8	4	1,000.-37,000.	8	2	28,000.-50,000.	7	1	12,000.
2,4-D	8	1	120.	8	3	180.-280.	7	2	120.-210.
2,4,5-T	8	0	-	8	1	400.	7	0	-

TABLE 5.4.2.3-1

2,3,7,8-TCDD RESULTS:
120 LISTER POST-REMEDIAL SOIL SAMPLES

SAMPLE NO.	DESCRIPTION	CONCENTRATION (ppb)
RS-1-2624-100-S-L	Excavation No. 1 - Composite of 5 0-3" takes from excavation grade (6")	ND(0.66)
RS-2-2625-100-S-L	Excavation No. 2 - Composite of 5 0-3" takes from excavation grade (12")	7.5
RS-2-2714-100-S-L	Excavation No. 2 - Composite of 5 0-3" takes from new excavation grade (18")	0.47
RS-3-2626-100-S-L	Excavation No. 3 - Composite of 5 0-3" takes from excavation grade (12")	2.5
RS-4-2627-100-S-L	Excavation No. 4 - Composite of 5 0-3" takes from excavation grade (12")	19.1
RS-5-2628-100-S-L	Excavation No. 5 - Composite of 5 0-3" takes from excavation grade (12")	31.0

TABLE 5.5.1-2

GROUND WATER ELEVATION READINGS
(Elevation in Feet, New Jersey Geodetic Vertical Control)

WELL NUMBER	ELEVATION OF TOP OF WELL RISER PIPE (ft)	GROUND WATER ELEVATION (ft)					
		5/11/85	5/18/85	5/25/85	6/1/85	7/3/85	7/8/85
80 Lister Avenue							
MW-4A	8.74		6.14	6.24	6.25	5.99	5.64
MW-4B	11.02					-0.28	-0.68
MW-4C	11.02					-0.88	-0.63
120 Lister Avenue							
MW-101A	8.76		5.31	5.41	5.60	3.96	4.56
MW-101B	8.58					-0.32	-0.62
MW-101D	9.43					-0.67	-0.01
MW-102A	10.23		4.73	4.88	0.01	5.18	4.88
MW-102C	10.44					-0.56	-0.96
MW-103A	11.36	1.31	4.06	1.86		5.56	0.06
MW-103D	10.11	-1.94	-0.99	-1.79	-1.44	-0.49	-1.39

TABLE 5.5.2-1

RESULTS OF SLUG TEST ANALYSES

WELL NUMBER	FALLING HEAD OR RISING HEAD	HYDRAULIC CONDUCTIVITY OF PERMEABLE ZONE (ft/day): METHOD OF COOPER BREDEHOEFT AND PAPADOPULOS	METHOD OF BOUWER AND RICE: USING DIAMETER OF CASING AND SCREEN	METHOD OF BOUWER AND RICE: USING DIAMETER OF DRILLED HOLE
Fill Material:				
MW-101A	FH	130	156	24.4
MW-102A	FH	185	83.9	127
	RH	2.14	42.5	6.44
MW-103A	FH	131	158	122
Glacio-Fluvial Sands:				
MW-101D	FH		0.33	0.42
MW-102C	FH	1.79	2.40	3.09
	RH	1.94	2.06	2.65
MW-103D	FH	0.165	0.08	0.11
	RH		0.22	0.28

TABLE 5.5.4-1

FIELD WATER QUALITY DATA

DATE	WELL NUMBER	pH	TEMPERATURE °C	CONDUCTIVITY µmhos/cm	SALINITY(a)	DISSOLVED OXYGEN mg/l
2/13/85	101A	8.4	3	110	1	12.6
2/13/85	102A	6.8	4	30	<1	13.2
2/13/85	103A	6.5	5	>500	5	11.0
3/6/85	101A	8.76	6.5	1250	1	1.7
3/6/85	102A	7.88	8.5	320	2	3.2
6/5/85	101A	8.89	16.1	760	3	0.3
6/5/85	101B	6.78	15.3	1010	7	3.0
6/5/85	101D	7.36	15.5	690	4	1.5
6/5/85	102A	8.02	17.7	610	2	1.7
6/5/85	103D	10.69	15.3	890	5	2.5
6/25/85	101B	6.90	21.5	1090	8	1.6
6/25/85	101D	7.23	22.1	1040	7	3.4
6/25/85	103A	7.18	21.9	5300	34	4.8
6/25/85	103D	11.19	21.8	2380	17	3.7
7/15/85	102C	11.71	22.0	2300	15	5.3
8/5/85	102C	(b)	23.0	1900	2	(b)

(a)Parts per thousand.

(b)Equipment problems.

TABLE 5.5.4-2

SUMMARY OF DETECTED ORGANIC COMPOUNDS
120 LISTER AVENUE GROUND WATER

COMPOUND	NUMBER OF SAMPLES ANALYZED	NUMBER OF POSITIVE RESULTS	CONCENTRATION RANGE (ppb)
2,3,7,8-TCDD	16	0	-
Benzene	16	9	3.0-530.
Chlorobenzene	16	14	12.-9300.
1,2,-Dichloroethane	16	4	62.-690.
1,1,1-Trichloroethane	16	1	23.
Chloroform	16	2	3.
trans-1,2-Dichloroethene	16	4	19.-400.
Methylene Chloride	16	16	2.0-880.
Tetrachloroethene	16	1	1.0
Toluene	16	2	0.8-2.8
Trichloroethene	16	5	1.0-950.
Acetone	16	5	3.6-1300.
2-Chlorophenol	16	2	150.-320.
2,4-Dichlorophenol	16	4	3.-790.
2,4-Dimethylphenol	16	2	2.-210.
Phenol	16	1	10.
Benzoic acid	16	1	9.
2-Methylphenol	16	2	3.-35.
4-Methylphenol	16	2	5.-23.
2,4,5-Trichlorophenol	16	1	46.
Acenaphthene	16	2	4.-11.
1,2,4-Trichlorobenzene	16	4	23.-610.
1,2-Dichlorobenzene	16	5	4.-110.
1,3-Dichlorobenzene	16	4	38.-82.
1,4-Dichlorobenzene	16	6	6.-330.
Fluoranthene	16	2	5.-57.
Naphthalene	16	1	18.
Bis(2-ethylhexyl) phthalate	16	6	2.0-24.
Di-N-octyl phthalate	16	1	7.
Benzo(A)anthracene	16	1	19.
Benzo(B)fluoranthene	16	1	21.
Anthracene	16	1	19.
Phenanthrene	16	3	8.-57.
Pyrene	16	3	3.0-55.
4,4'-DDT	16	8	0.3-290.
4,4'-DDE	16	4	0.1-3.2
4,4'-DDD	16	6	0.1-48.
alpha-BHC	16	4	2.1-190.
β-BHC	16	5	0.3-1.4
gamma-BHC	16	4	1.4-310.
delta BHC	16	2	77.-120.
Dalapon	16	2	2.0-4.0
MCPA	16	1	1300
Dichloroprop (2,4-DP)	16	1	14.
2,4-D	16	8	2.0-50.
2,4,5-TP (Silvex)	16	1	1.0
2,4,5-T	16	7	1.0-14.

TABLE 5.5.4-3

SUMMARY OF DETECTED INORGANIC COMPOUNDS
120 LISTER AVENUE GROUND WATER

COMPOUND	NUMBER OF SAMPLES ANALYZED	NUMBER OF POSITIVE RESULTS	CONCENTRATION RANGE (ppb)
Antimony	16	6	.001-.07
Arsenic	16	12	.016-.279
Beryllium	16	12	.002-.024
Cadmium	16	5	.005-.02
Chromium	16	16	.02-1.0
Copper	16	16	.010-11.
Lead	16	11	.06-6.6
Mercury	16	9	.001-0.12
Nickel	16	15	.01-.54
Selenium	16	1	0.011
Silver	16	11	.002-.02
Thallium	16	1	.02
Zinc	16	16	.025-36.
Total Cyanide	16	7	.01-.06
Total Phenols	16	15	.01-3.3

TABLE 5.7.1-2

ADDITIONAL SURFACE WATER SAMPLE
120 LISTER AVENUE

SAMPLE NO.	COLLECTION DATE	ANALYTICAL PARAMETER	RESULT
9000-4195-H-L	6/5/85	2,3,7,8-TCDD	0.0011 ppb
		BOD5	65 mg/l (ppm)
		COD	206 mg/l (ppm)
		TOC	81 mg/l (ppm)
		TSS	124 mg/l (ppm)
		pH	9.92

TABLE 5.7.4-1

ANALYTICAL RESULTS: DRAINAGE DITCH SEDIMENT

SAMPLE NO.	COLLECTION DATE	ANALYTICAL PARAMETER	RESULTS (ppb)
9900-3872-M-L	5/23/85	Dioxin	ND (0.11)(a)
F104-3873-H-L	5/23/85	Dioxin	ND (0.0037)
T058-3874-H-L	5/23/85	Dioxin	ND (0.0019)

(a)Parameter was undetected at the indicated detection level.

TABLE 5.8.2.1-1

QUALITY CONTROL ACCEPTANCE CRITERIA
SURROGATE RECOVERIES

SURROGATE COMPOUND	ACCEPTABLE PERCENT RECOVERY RANGE*	
	WATER	SOIL
VOA:		
1,2-Dichloroethane-d4	77-120	50-160
Toluene-d8	86-119	50-160
4-Bromofluorobenzene	85-121	50-160
B/N/A:		
Nitrobenzene-d5	41-120	20-140
2-Fluorobiphenyl	44-119	20-140
p-Terphenyl-d14	33-128	20-150
2-Fluorophenol	23-121	20-140
Phenol-d5	15-103	20-140
2,4,6-Tribromophenol	10-130	10-140
Pesticide:		
Dibutyl chlorendate**	48-136	20-150

*In accordance with EPA contract laboratory program requirements.

**Advisory limits only.

TABLE 5.8.2.1-2

QUALITY CONTROL ACCEPTANCE CRITERIA
SPIKE RECOVERIES AND RPD

SURROGATE COMPOUND	ACCEPTABLE PERCENT* RECOVERY RANGE		ACCEPTABLE* RPD (%)	
	WATER	SOIL	WATER	SOIL
VOA:				
1,1-Dichloroethylene	61-145	59-172	<14	<22
Trichloroethylene	71-120	62-137	<14	<24
Benzene	76-127	66-142	<11	<21
Toluene	76-125	59-139	<13	<21
Chlorobenzene	75-130	60-133	<13	<21
B/N/A:				
1,2,4-Trichlorobenzene	39-98	38-107	<28	<23
Acenaphthene	46-118	31-137	<31	<19
2,4-Dinitrotoluene	24-96	28-89	<38	<47
Di-n-butylphthalate	11-117	29-135	<40	<47
Pyrene	26-127	35-142	<31	<36
N-Nitrosodi-n-propylamine	41-116	41-126	<38	<38
1,4-Dichlorobenzene	36-97	28-104	<28	<27
Pentachlorophenol	9-103	17-109	<50	<47
4-Chloro-3-methylphenol	23-97	26-103	<42	<33
Phenol	12-89	26-90	<42	<35
2-Chlorophenol	27-123	25-102	<40	<50
4-Nitrophenol	10-80	11-114	<50	<50
Pesticide:				
Lindane	56-123	46-127	<15	<50
Heptachlor	40-131	35-130	<20	<31
Aldrin	40-120	34-132	<22	<43
Dieldrin	52-126	31-134	<18	<38
Endrin	56-121	42-139	<21	<45
p,p'-DDT	38-127	23-134	<27	<50

*In accordance with EPA contract laboratory program requirements.

TABLE 5.8.2.1.1-1

QUALITY CONTROL SUMMARY DATA
ORGANIC PRIORITY POLLUTANT SURROGATE
RECOVERY RESULTS

Soils, ITAS-Cerritos

A. AVERAGE PERCENT RECOVERY (± Std.Dev.)

SURROGATE COMPOUND / ANALYSIS	LOW VOLATILE	LOW BASE/NEUTRAL/ACID	MEDIUM BASE/NEUTRAL/ACID
Toluene-d8	102 (±5.3)	-	-
4-Bromofluorobenzene	94 (±7.3)	-	-
1,2-Dichloroethane-d4	99 (±9.6)	-	-
Nitrobenzene-d5	-	63 (±17)	60 (±15)
2-Fluorobiphenyl	-	62 (±17)	51 (±9.2)
p-Terphenyl-d14	-	72 (±28)	74 (±23)
Phenol-d5	-	60 (±19)	48 (±12)
2-Fluorophenol	-	59 (±17)	63 (±6.1)
2,4,6-Tribromophenol	-	56 (±19)	65 (±14)

B. NUMBER OUTLIERS/TOTAL NUMBER ANALYSES

SURROGATE COMPOUND	LOW VOLATILE	LOW BASE/NEUTRAL/ACID	MEDIUM BASE/NEUTRAL/ACID
Toluene-d8	0/78	-	-
4-Bromofluorobenzene	0/78	-	-
1,2-Dichloroethane-d4	0/78	-	-
Nitrobenzene-d5	-	14/86	0/5
2-Fluorobiphenyl	-	2/86	0/5
p-Terphenyl-d14	-	2/86	0/5
Phenol-d5	-	4/86	0/5
2-Fluorophenol	-	5/86	0/5
2,4,6-Tribromophenol	-	5/86	0/5

TABLE 5.8.2.1.1-2

QUALITY CONTROL SUMMARY DATA
ORGANIC PRIORITY POLLUTANT SURROGATE
RECOVERY RESULTS

Soils, ITAS-Middlebrook

A. AVERAGE PERCENT RECOVERY (± Std.Dev.)

SURROGATE COMPOUND / ANALYSIS	LOW VOLATILE	LOW BASE/NEUTRAL/ACID	MEDIUM BASE/NEUTRAL/ACID
Toluene-d8	103 (±8.3)	-	-
4-Bromofluorobenzene	93 (±8.8)	-	-
1,2-Dichloroethane-d4	94 (±4.0)	-	-
Nitrobenzene-d5	-	65 (±13)	-
2-Fluorobiphenyl	-	66 (±11)	-
p-Terphenyl-d14	-	81 (±26)	-
Phenol-d5	-	69 (±14)	-
2-Fluorophenol	-	67 (±16)	-
2,4,6-Tribromophenol	-	56 (±18)	-

B. NUMBER OUTLIERS/TOTAL NUMBER ANALYSES

SURROGATE COMPOUND / ANALYSIS	LOW VOLATILE	LOW BASE/NEUTRAL/ACID	MEDIUM BASE/NEUTRAL/ACID
Toluene-d8	0/56	-	-
4-Bromofluorobenzene	0/56	-	-
1,2-Dichloroethane-d4	0/56	-	-
Nitrobenzene-d5	-	1/42	-
2-Fluorobiphenyl	-	0/42	-
p-Terphenyl-d14	-	10/42	-
Phenol-d5	-	0/42	-
2-Fluorophenol	-	1/42	-
2,4,6-Tribromophenol	-	0/42	-

TABLE 5.8.2.1.1-3

QUALITY CONTROL SUMMARY DATA
ORGANIC PRIORITY POLLUTANT SURROGATE
RECOVERY RESULTS

Soils, ITAS-Cerritos and
Middlebrook Combined

A. AVERAGE PERCENT RECOVERY (± Std.Dev.)

SURROGATE COMPOUND / ANALYSIS	LOW VOLATILE	LOW BASE/NEUTRAL/ACID	MEDIUM BASE/NEUTRAL/ACID
Toluene-d8	103 (±6.7)	-	-
4-Bromofluorobenzene	94 (±7.9)	-	-
1,2-Dichloroethane-d4	97 (±8.2)	-	-
Nitrobenzene-d5	-	64 (±16)	-
2-Fluorobiphenyl	-	63 (±16)	-
p-Terphenyl-d14	-	74 (±27)	-
Phenol-d5	-	63 (±18)	-
2-Fluorophenol	-	62 (±17)	-
2,4,6-Tribromophenol	-	56 (±19)	-

B. NUMBER OUTLIERS/TOTAL NUMBER ANALYSES

SURROGATE COMPOUND	LOW VOLATILE	LOW BASE/NEUTRAL/ACID	MEDIUM BASE/NEUTRAL/ACID
Toluene-d8	0/134	-	-
4-Bromofluorobenzene	0/134	-	-
1,2-Dichloroethane-d4	0/134	-	-
Nitrobenzene-d5	-	15/128	-
2-Fluorobiphenyl	-	2/128	-
p-Terphenyl-d14	-	12/128	-
Phenol-d5	-	4/128	-
2-Fluorophenol	-	6/128	-
2,4,6-Tribromophenol	-	5/128	-

TABLE 5.8.2.1.1-4

QUALITY CONTROL SUMMARY DATA
ORGANIC PRIORITY POLLUTANT SURROGATE
RECOVERY RESULTS

Soils

A. AVERAGE PERCENT RECOVERY (± Std.Dev.)

ANALYSIS/LAB SURROGATE COMPOUND	PESTICIDE ITAS-CERRITOS	PESTICIDE ITAS-SANTA CLARA	PESTICIDE CERRITOS/SANTA CLARA COMBINED
Dibutylchlorendate	75 (±17)	115 (±15)	112 (±18)

B. NUMBER OUTLIERS/TOTAL NUMBER ANALYSES

ANALYSIS/LAB SURROGATE COMPOUND	PESTICIDE ITAS-CERRITOS	PESTICIDE ITAS-SANTA CLARA	PESTICIDE CERRITOS/SANTA CLARA COMBINED
Dibutylchlorendate	1/6	54/127	55/133

TABLE 5.8.2.1.1-5

LABORATORY QUALITY CONTROL CHECK FREQUENCIES

SOILS

ANALYSIS (LEVEL) AND LABORATORY	NUMBER OF SAMPLES ANALYZED	NUMBER OF MS/MSD PAIRS ANALYZED	QC CHECK FREQUENCY (%)
VOA (low)			
ITAS-Cerritos	78	5	6.4
ITAS-Middlebrook	56	5	8.9
Total	134	10	7.5
BNA (low)			
ITAS-Cerritos	86	6	7.0
ITAS-Middlebrook	42	3	7.1
Total	128	9	7.0
BNA (medium)			
ITAS-Cerritos only	5	2	40
Pesticides (low)			
ITAS-Cerritos	6	1	17
ITAS-Santa Clara	127	14	11
Total	133	15	11
Herbicides (low)			
ITAS-Cerritos	6	1	17
ITAS-Santa Clara	127	15	12
Total	133	16	12

TABLE 5.8.2.1.1-6

QUALITY CONTROL SUMMARY DATA
VOLATILE PRIORITY POLLUTANT SPIKE RECOVERY
AND DUPLICATE RESULTS

SOILS

SPIKE COMPOUND	LOW VOLATILE ANALYSIS AVERAGE % RECOVERY (± Std.Dev.)	AVERAGE RPD (± Std.Dev.)
A. ITAS-Cerritos		
1,1-Dichloroethylene	108 (±20)	6.6 (±5.5)
Trichloroethylene	102 (±13)	5.8 (±3.9)
Chlorobenzene	102 (±9.1)	5.2 (±4.3)
Toluene	102 (±18)	7.0 (±5.5)
Benzene	101 (±19)	4.4 (±5.3)
B. ITAS-Middlebrook		
1,1-Dichloroethylene	106 (±10)	2.8 (±2.8)
Trichloroethylene	96 (±12)	1.9 (±1.9)
Chlorobenzene	103 (±6.9)	2.8 (±2.3)
Toluene	107 (±14)	2.6 (±1.7)
Benzene	94 (±5.6)	2.9 (±1.9)
C. ITAS-Cerritos/Middlebrook Combined		
1,1-Dichloroethylene	107 (±16)	4.7 (±4.6)
Trichloroethylene	99 (±12)	3.8 (±3.6)
Chlorobenzene	102 (±7.9)	4.5 (±3.7)
Toluene	104 (±16)	4.8 (±4.5)
Benzene	98 (±14)	3.6 (±3.8)

TABLE 5.8.2.1.1-7

QUALITY CONTROL SUMMARY DATA
BASE/NEUTRAL/ACID PRIORITY POLLUTANT
SPIKE RECOVERY AND DUPLICATE RESULTS

Soils, ITAS-Cerritos

SPIKE COMPOUND	LOW BNA ANALYSIS		MEDIUM BNA ANALYSIS	
	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
1,2,4-Trichlorobenzene	83 (±13)	7.7 (±6.1)	73 (±5.9)	6.0 (±7.1)
Acenaphthene	85 (±13)	7.3 (±7.0)	62 (±43)	0.5 (±0.7)
2,6-Dinitrotoluene	37 (±4.9)	10 (±13)	43 (±13)	15 (±0.0)
Di-n-butylphthalate	82 (±24)	11 (±8.3)	78 (±18)	2.5 (±2.1)
Pyrene	90 (±22)	12 (±10)	92 (±14)	18 (±11)
N-nitroso-di-n-propylamine	87 (±8.9)	12 (±9.0)	82 (±26)	12 (±3.5)
1,4-Dichlorobenzene	88 (±11)	4.5 (±7.0)	65 (±4.2)	9.5 (±6.4)
Pentachlorophenol	76 (±26)	10 (±9.6)	88 (±9.9)	14 (±2.1)
Phenol	71 (±9.4)	11 (±9.9)	63 (±7.5)	20 (±6.4)
2-Chlorophenol	78 (±14)	10 (±6.2)	65 (±7.5)	18 (±5.7)
4-Chloro-3-methylphenol	76 (±8.7)	8.0 (±5.4)	62 (±3.7)	7.5 (±0.7)
4-Nitrophenol	45 (±12)	13 (±7.9)	40 (±7.7)	22 (±11)

TABLE 5.8.2.1.1-8

QUALITY CONTROL SUMMARY DATA
BASE/NEUTRAL/ACID PRIORITY POLLUTANT SPIKE
RECOVERY AND DUPLICATE RESULTS

Soils, ITAS-Middlebrook

SPIKE COMPOUND	LOW BNA ANALYSIS AVERAGE % RECOVERY (± Std.Dev.)	AVERAGE RPD (± Std.Dev.)
1,2,4-Trichlorobenzene	66 (±18)	20 (±12)
Acenaphthene	64 (±18)	11 (±2.3)
2,6-Dinitrotoluene	47 (±17)	31 (±24)
Di-n-butylphthalate	90 (±22)	18 (±26)
Pyrene	79 (±50)	31*
N-nitroso-di-n-propylamine	86 (±17)	18 (±14)
1,4-Dichlorobenzene	57 (±18)	16 (±10)
Pentachlorophenol	37 (±3.5)	38 (±47)
Phenol	60 (±22)	16 (±3.2)
2-Chlorophenol	59 (±21)	17 (±6.1)
4-Chloro-3-methylphenol	58 (±20)	22 (±9.7)
4-Nitrophenol	42 (±30)	48*

*Only one value in acceptable range.

TABLE 5.8.2.1.1-9

QUALITY CONTROL SUMMARY DATA
BASE/NEUTRAL/ACID PRIORITY POLLUTANT SPIKE
RECOVERY AND DUPLICATE RESULTS

Soils, ITAS-Cerritos and Middlebrook Combined

SPIKE COMPOUND	LOW BNA ANALYSIS AVERAGE % RECOVERY (± Std.Dev.)	AVERAGE RPD (± Std.Dev.)
1,2,4-Trichlorobenzene	78 (±16)	11 (±9.1)
Acenaphthene	78 (±18)	8 (±6.3)
2,6-Dinitrotoluene	41 (±11)	17 (±19)
Di-n-butylphthalate	84 (±23)	13 (±15)
Pyrene	88 (±25)	14 (±12)
N-nitroso-di-n-propylamine	86 (±11)	14 (±10)
1,4-Dichlorobenzene	78 (±20)	8.4 (±10)
Pentachlorophenol	68 (±28)	20 (±28)
Phenol	66 (±17)	12 (±8.6)
2-Chlorophenol	71 (±19)	12 (±6.7)
4-Chloro-3-methylphenol	70 (±16)	13 (±9.4)
4-Nitrophenol	44 (±19)	19 (±16)

TABLE 5.8.2.1.1-10

QUALITY CONTROL SUMMARY DATA
PESTICIDE/HERBICIDE
SPIKE RECOVERY AND DUPLICATE RESULTS

Soils, ITAS-Santa Clara

SPIKE COMPOUND	LOW PESTICIDE ANALYSIS		HERBICIDE ANALYSIS	
	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
Lindane	94 (±11)	4.1 (±4.1)	-	-
Heptachlor	85 (±9.2)	7.5 (±7.4)	-	-
Aldrin	92 (±15)	4.1 (±2.2)	-	-
Dieldrin	84 (±20)	4.1 (±3.8)	-	-
Endrin	85 (±16)	4.5 (±3.1)	-	-
p,p'-DDT	96 (±11)	9.2 (±8.7)	-	-
Dalapon	-	-	25 (±9.2)	45 (±25)
Dicamba	-	-	68 (±49)	31 (±29)
Dichloroprop	-	-	54 (±23)	27 (±23)
2,4-D	-	-	62 (±31)	34 (±28)
2,4,5-TP	-	-	55 (±28)	23 (±22)
2,4,5-T	-	-	54 (±26)	24 (±22)
2,4-DB	-	-	58 (±25)	28 (±25)
Dinoseb	-	-	9.2 (±5.3)	46 (±43)

TABLE 5.8.2.1.1-11

QUALITY CONTROL SUMMARY DATA
PESTICIDE/HERBICIDE
SPIKE RECOVERY AND DUPLICATE RESULTS

Soils, ITAS-Cerritos

SPIKE COMPOUND	LOW PESTICIDE ANALYSIS		HERBICIDE ANALYSIS	
	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
Lindane	NC	NC	-	-
Heptachlor	NC	NC	-	-
Aldrin	NC	NC	-	-
Dieldrin	NC	NC	-	-
Endrin	NC	NC	-	-
p,p'-DDT	NC	NC	-	-
Dalapon	-	-	176 (±40)	33
Dicamba	-	-	117 (±50)	60
Dichloroprop	-	-	95 (±24)	36
2,4-D	-	-	103 (±18)	26
2,4,5-TP	-	-	88 (±31)	49
2,4,5-T	-	-	165 (±21)	18
2,4-DB	-	-	6.9 (±0.6)	12
Dinoseb	-	-	26 (±20)	106

NC: Not calculatable - all recoveries were zero due to dilution (single MS/MSD pair)

TABLE 5.8.2.1.1-12

QUALITY CONTROL SUMMARY DATA
PESTICIDE/HERBICIDE
SPIKE RECOVERY AND DUPLICATE RESULTS

Soils, ITAS-Santa Clara and
Cerritos Combined

SPIKE COMPOUND	LOW PESTICIDE ANALYSIS*		HERBICIDE ANALYSIS	
	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
Lindane	95 (±11)	4.1 (±4.1)	-	-
Heptachlor	85 (±9.2)	7.5 (±7.4)	-	-
Aldrin	92 (±15)	4.1 (±2.2)	-	-
Dieldrin	84 (±20)	4.1 (±3.8)	-	-
Endrin	85 (±16)	4.5 (±3.1)	-	-
p,p'-DDT	96 (±11)	9.2 (±8.7)	-	-
Dalapon	-	-	36 (±41)	44 (±24)
Dicamba	-	-	71 (±50)	33 (±29)
Dichloroprop	-	-	57 (±25)	27 (±23)
2,4-D	-	-	65 (±32)	34 (±27)
2,4,5-TP	-	-	57 (±29)	25 (±22)
2,4,5-T	-	-	61 (±37)	24 (±21)
2,4-DB	-	-	55 (±27)	27 (±24)
Dinoseb	-	-	14 (±12)	61 (±46)

*The combined values are identical to the ITAS - Santa Clara values since the Cerritos pesticide values could not be calculated.

TABLE 5.8.2.1.2-1

QUALITY CONTROL SUMMARY DATA
ORGANIC PRIORITY POLLUTANT SURROGATE
RECOVERY RESULTS

WATERS, LOW VOLATILE ANALYSES

SURROGATE COMPOUND	AVERAGE PERCENT RECOVERY (± Std.Dev.)	NUMBER OUTLIERS / TOTAL NUMBER ANALYSES
	ITAS-Middlebrook	
Toluene-d8	97 (±7.5)	0/10
4-Bromofluorobenzene	98 (±3.0)	0/10
1,2-Dichloroethane-d4	92 (±3.8)	0/10
	ITAS-Cerritos	
Toluene-d8	99 (±4.2)	0/72
4-Bromofluorobenzene	99 (±4.6)	0/72
1,2-Dichloroethane-d4	100 (±7.6)	0/72
	ITAS-Middlebrook and Cerritos Combined	
Toluene-d8	99 (±4.7)	0/82
4-Bromofluorobenzene	99 (±4.5)	0/82
1,2-Dichloroethane-d4	99 (±7.6)	0/82

TABLE 5.8.2.1.2-2

QUALITY CONTROL SUMMARY DATA
ORGANIC PRIORITY POLLUTANT SURROGATE
RECOVERY RESULTS

WATERS, LOW-LEVEL BASE/NEUTRAL/ACID

ANALYSES

ITAS-Cerritos

SURROGATE COMPOUND	AVERAGE PERCENT RECOVERY (± Std.Dev.)	NUMBER OUTLIERS / TOTAL NUMBER ANALYSES
Nitrobenzene-d5	68 (±15)	6/45
2-Fluorobiphenyl	79 (±19)	4/45
p-Terphenyl-d14	68 (±18)	9/45
Phenol-d5	52 (±19)	7/45
2-Fluorophenol	61 (±17)	8/45
2,4,6-Tribromophenol	54 (±28)	6/45

TABLE 5.8.2.1.2-3

QUALITY CONTROL SUMMARY DATA
ORGANIC PRIORITY POLLUTANT SURROGATE
RECOVERY RESULTS

WATERS, Pesticide

A. AVERAGE PERCENT RECOVERY (± Std.Dev.)

ANALYSIS/LAB SURROGATE COMPOUND	ITAS-CERRITOS	ITAS-SANTA CLARA	CERRITOS/SANTA CLARA COMBINED
Dibutylchlorendate	82 (±21)	101 (±12)	86 (±21)

B. NUMBER OUTLIERS/TOTAL NUMBER ANALYSES

	ITAS-CERRITOS	ITAS-SANTA CLARA	CERRITOS/SANTA CLARA COMBINED
Dibutylchlorendate	12/37	1/8	13/45

TABLE 5.8.2.1.2-4

LABORATORY QUALITY CONTROL CHECK FREQUENCIES

WATERS

ANALYSIS (LEVEL) AND LABORATORY	NUMBER OF SAMPLES ANALYZED	NUMBER OF MS/MSD PAIRS ANALYZED	QC CHECK FREQUENCY (%)
VOA (low)			
ITAS-Cerritos	72	5	6.9
ITAS-Middlebrook	10	2	20.0
Total	82	7	8.5
BNA (low)			
ITAS-Cerritos only	45	3	6.7
Pesticides (low)			
ITAS-Cerritos	37	2	5.4
ITAS-Santa Clara	8	2	25.0
Total	45	4	8.9
Herbicides (low)			
ITAS-Cerritos	37	3	8.1
ITAS-Santa Clara	8	2	25.0
Total	45	5	11.0

TABLE 5.8.2.1.2-5

QUALITY CONTROL SUMMARY DATA
PRIORITY POLLUTANT SPIKE RECOVERY
AND DUPLICATE RESULTS

LOW VOLATILE ORGANIC ANALYSES

WATERS

SPIKE COMPOUND	LOW VOLATILE ANALYSIS	
	AVERAGE % RECOVERY (± Std.Dev.)	AVERAGE RPD (± Std.Dev.)
A. ITAS-Cerritos		
1,1-Dichloroethylene	108 (±12)	7.0 (±3.2)
Trichloroethylene	96 (±6.5)	6.2 (±4.9)
Chlorobenzene	102 (±8.5)	7.0 (±3.1)
Toluene	102 (±6.7)	6.8 (±4.8)
Benzene	106 (±6.4)	5.0 (±4.1)
B. ITAS-Middlebrook		
1,1-Dichloroethylene	108 (±10)	2.0 (±0.0)
Trichloroethylene	107 (±7.6)	22 (±28)
Chlorobenzene	104 (±3.4)	2.5 (±0.7)
Toluene	96 (±3.0)	1.0 (±1.4)
Benzene	96 (±3.0)	1.0 (±1.4)
C. ITAS-Cerritos/Middlebrook Combined		
1,1-Dichloroethylene	108 (±11)	5.6 (±3.6)
Trichloroethylene	98 (±8.1)	11 (±14)
Chlorobenzene	102 (±7.3)	5.7 (±3.4)
Toluene	100 (±6.5)	5.1 (±4.8)
Benzene	103 (±7.0)	3.9 (±3.9)

TABLE 5.8.2.1.2-6

QUALITY CONTROL SUMMARY DATA
BASE/NEUTRAL/ACID PRIORITY POLLUTANT
SPIKE RECOVERY AND DUPLICATE RESULTS

Waters, ITAS-Cerritos

SPIKE COMPOUND	LOW BNA ANALYSIS AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
1,2,4-Trichlorobenzene	68 (±7.5)	2.7 (±4.6)
Acenaphthene	58 (±11)	8.3 (±1.5)
2,6-Dinitrotoluene	46 (±0.7)	7.0 (±5.7)
Di-n-butylphthalate	30 (±3.7)	20 (±3.5)
Pyrene	59 (±22)	15 (±14)
N-nitroso-di-n-propylamine	74 (±6.6)	8.7 (±2.1)
1,4-Dichlorobenzene	76 (±11)	3.7 (±4.0)
Pentachlorophenol	40 (±28)	18 (±16)
Phenol	50 (±21)	11 (±8.9)
2-Chlorophenol	55 (±18)	3.3 (±5.8)
4-Chloro-3-methylphenol	69 (±7.9)	11 (±9.8)
4-Nitrophenol	34 (±15)	7.5 (±3.5)

TABLE 5.8.2.1.2-7

QUALITY CONTROL SUMMARY DATA
PESTICIDE/HERBICIDE
SPIKE RECOVERY AND DUPLICATE RESULTS

<u>Waters, ITAS-Santa Clara</u>

SPIKE COMPOUND	LOW PESTICIDE ANALYSIS		HERBICIDE ANALYSIS	
	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
Lindane	81 (±9.2)	15*	-	-
Heptachlor	110 (±17)	12 (±2.1)	-	-
Aldrin	98 (±22)	12 (±3.5)	-	-
Dieldrin	94 (±26)	16 (±3.5)	-	-
Endrin	88 (±11)	16 (±0.0)	-	-
p,p'-DDT	94 (±7.1)	15 (±5.7)	-	-
Dalapon	-	-	50 (±9.8)	24 (±35)
Dicamba	-	-	95 (±7.8)	0.5 (±0.7)
Dichloroprop	-	-	95 (±2.6)	2.5 (±2.1)
2,4-D	-	-	189 (±66)	53 (±13)
2,4,5-TP	-	-	94 (±16)	4.0 (±4.2)
2,4,5-T	-	-	103 (±24)	32 (±36)
2,4-DB	-	-	86 (±15)	9*
Dinoseb	-	-	57 (±19)	14 (±14)

*Only one value in range.

TABLE 5.8.2.1.2-8

QUALITY CONTROL SUMMARY DATA
PESTICIDE/HERBICIDE
SPIKE RECOVERY AND DUPLICATE RESULTS

Waters, ITAS-Cerritos

SPIKE COMPOUND	LOW PESTICIDE ANALYSIS		HERBICIDE ANALYSIS	
	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
Lindane	88 (±13)	-*	-	-
Heptachlor	96 (±25)	9.5	-	-
Aldrin	81 (±26)	13	-	-
Dieldrin	92 (±26)	9.7	-	-
Endrin	98 (±21)	14 (±10)	-	-
p,p'-DDT	70 (±30)	15 (±9.9)	-	-
Dalapon	-	-	21 (±8.7)	64 (±44)
Dicamba	-	-	147 (±24)	4.6 (±1.3)
Dichloroprop	-	-	92 (±32)	3.9 (±5.4)
2,4-D	-	-	99 (±39)	2.6 (±3.7)
2,4,5-TP	-	-	120 (±60)	5.5 (±2.5)
2,4,5-T	-	-	110 (±38)	5.6 (±0.8)
2,4-DB	-	-	85 (±40)	3.8 (±5.4)
Dinoseb	-	-	37 (±3.8)	15 (±8.8)

*Values out of QC range.

TABLE 5.8.2.1.2-9

QUALITY CONTROL SUMMARY DATA
PESTICIDE/HERBICIDE
SPIKE RECOVERY AND DUPLICATE RESULTS

Soils, ITAS-Santa Clara and

Cerritos Combined

SPIKE COMPOUND	LOW PESTICIDE ANALYSIS		HERBICIDE ANALYSIS	
	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)	AVERAGE % RECOVERY (±Std.Dev.)	AVERAGE RPD (±Std.Dev.)
Lindane	85 (±10)	15*	-	-
Heptachlor	101 (±22)	11 (±1.9)	-	-
Aldrin	91 (±23)	13 (±2.5)	-	-
Dieldrin	93 (±23)	14 (±4.2)	-	-
Endrin	94 (±16)	15 (±6.1)	-	-
p,p'-DDT	78 (±26)	15 (±6.6)	-	-
Dalapon	-	-	33 (±18)	44 (±40)
Dicamba	-	-	121 (±32)	2.6 (±0.7)
Dichloroprop	-	-	93 (±23)	3.2 (±3.5)
2,4-D	-	-	139 (±68)	28 (±30)
2,4,5-TP	-	-	108 (±45)	4.8 (±3.0)
2,4,5-T	-	-	107 (±31)	19 (±26)
2,4-DB	-	-	86 (±32)	5.5 (±4.8)
Dinoseb	-	-	47 (±17)	14 (±9.6)

*Only one value in range.

TABLE 5.8.2.2-1

QUALITY CONTROL CHECK SAMPLE FREQUENCIES
INORGANIC/CLASSICAL ANALYSES

	SOIL	WATER
Total Number of Samples Analyzed	127	46
Number of Spikes	14	6
Frequency	11%	13%
Number of Blind Splits	15	6
Frequency	12%	13%

TABLE 5.8.2.2-2

QUALITY CONTROL SUMMARY DATA
INORGANIC/CLASSICAL BLIND SPLIT
ANALYSIS RESULTS

	RELATIVE PERCENT DIFFERENCE (± Std Dev)	
ANALYTE	SOIL	WATER
Antimony	32 (±24)	-(a)
Arsenic	30 (±21)	27 (±23)
Beryllium	23 (±26)	0(b)
Cadmium	21 (±21)	-(a)
Chromium	14 (±11)	6.7 (±11)
Copper	27 (±29)	29 (±28)
Lead	19 (±18)	-(a)
Mercury	30 (±32)	100(b)
Nickel	19 (±9.6)	0(±0)
Selenium	62 (±57)	40(b)
Silver	26 (±21)	18(b)
Thallium	15 (±17)	-(a)
Zinc	11 (±8.3)	21 (±9.6)
Cyanide	16 (±14)	50(b)
Phenols	35 (±30)	18 (±25)

(a)No positive results obtained for any of the split sample pairs.

(b)A single split pair gave positive results; therefore, no standard deviation calculation is possible for the RPD.

TABLE 5.8.2.2-3

QUALITY CONTROL SUMMARY DATA
INORGANIC/CLASSICAL SPIKE
RECOVERY RESULTS

ANALYTE	AVERAGE PERCENT RECOVERY (±Std. Dev.) SOIL	WATER
Antimony	97 (±25)	98 (±15)
Arsenic	99 (±23)	92 (±8.2)
Beryllium	102 (±8.1)	99 (±7.8)
Cadmium	102 (±13)	106 (±9.1)
Chromium	101 (±3.9)	101 (±5.6)
Copper	98 (±7.4)	101 (±5.0)
Lead	99 (±12)	101 (±4.0)
Mercury	102 (±18)	111 (±25)
Nickel	107 (±7.4)	107 (±5.2)
Selenium	95 (±20)	92 (±25)
Silver	103 (±14)	96 (±7.9)
Thallium	103 (±8.0)	103 (±6.0)
Zinc	100 (±11)	111 (±14)
Cyanide	83 (±22)	88 (±7.5)
Phenols	92 (±11)	103 (±7.9)

TABLE 5.8.2.3-1

LABORATORY DUPLICATE RESULTS SUMMARY
2,3,7,8-TCDD

BATCH NUMBER	SAMPLE TYPE	ORIGINAL* RESULT (ppb)	DUPLICATE* RESULT (ppb)	RPD (%)
195	Soil	ND (0.07)	ND (0.30)	-
196	Soil	0.48	0.36	28
201	Soil	0.67	ND (0.16)	-
202	Soil	ND (1.5)	2.7	-
203	Soil	0.23	ND (0.30)	-
213	Soil	4.7	3.9	19
215	Soil	6.1	5.0	20
216	Soil	ND (0.60)	ND (0.20)	-
220	Soil	ND (0.30)	ND (0.20)	-
221	Soil	40.9	37.7	8.1
231	Soil	61.5	50.6	19
241	Soil	ND (0.52)	ND (0.03)	-
250	Soil	7.5	7.8	3.9
276	Soil	1.3	1.7	27
284	Soil	0.47	1.4	99
289	Soil	ND (0.11)	ND (0.14)	-
297	Soil	ND (0.38)	ND (0.04)	-
299	Soil	0.60	0.55	26
312	Soil	ND (0.18)	ND (0.28)	-
313	Soil	ND (0.55)	0.17	-
330	Soil	ND (0.02)	ND (0.048)	-
331	Soil	5.4	4.8	12
372	Soil	0.88	1.2	31
380	Soil	2.2	0.85	88
390	Soil	ND (0.75)	ND (0.74)	-
391	Soil	ND (0.43)	ND (0.58)	-

*For ND results, value in parentheses is the detection limit.

TABLE 5.8.2.3-2

LABORATORY SPIKE RECOVERY
RESULTS SUMMARY - 2,3,7,8-TCDD

SAMPLE TYPE	ORIGINAL RESULT (ppb)	AMOUNT SPIKED (ppb)	THEORET. CONC. SAMPLE + SPIKE (ppb)	SPIKE RESULT (ppb)	PERCENT RECOVERY
Soil	ND	17.0	17.0	16.6	98
Soil	0.48	17.0	17.5	17.0	97
Soil	0.67	17.0	17.7	16.6	94
Soil	ND	17.0	17.0	17.8	105
Soil	0.23	17.0	17.2	18.1	105
Soil	4.7	1.0	5.7	14.0	246
Soil	6.1	1.0	7.1	4.4	62
Soil	ND	1.0	1.0	0.93	93
Soil	ND	1.0	1.0	1.1	110
Soil	40.9	1.0	41.9	27.9	66
Soil	61.5	1.0	62.5	44.5	71
Soil	ND	1.0	1.0	1.2	120
Soil	7.5	1.0	8.5	10.0	118
Soil	1.3	1.0	2.3	2.8	122
Soil	0.47	1.0	1.5	7.1	473
Soil	ND	1.0	1.0	0.99	99
Soil	ND	1.0	1.0	1.1	110
Soil	0.6	1.0	1.6	1.6	100
Soil	ND	1.0	1.0	1.4	140
Soil	ND	1.0	1.0	1.0	100
Soil	ND	1.0	1.0	1.1	110
Soil	5.4	1.0	6.4	4.7	73
Soil	0.88	1.0	1.9	1.8	95
Soil	2.2	1.0	3.2	1.1	34
Soil	ND	1.0	1.0	1.4	140
Soil	ND	1.0	1.0	0.5	50

TABLE 5.8.2.4-1

NJDEP-DESIGNATED SPLIT SAMPLES
120 LISTER AVENUE AND OFF SITES

IT SAMPLE NUMBER	TYPE	SITE LOCATION	COLLECTION DATE	IT ANALYSES PERFORMED	NJDEP SPLIT SAMPLE IDENTIFICATION
G-11-D-2111-100-S-L	Soil	120 Lister	1/19/85	TCDD	Cal Bottle #2-D
G-11-D-2111-101-S-L	Soil	120 Lister	1/19/85	TCDD	Cal Bottle #3-D
9400-2257-S-Y	Soil	Parkway	1/28/85	Full PP	Cal Bottle #4-D
D-11-G-2344-101-S-L	Soil	120 Lister	2/5/85	TCDD	Cal Bottle #6-D
E-10-L-2376-100-S-L	Soil	120 Lister	2/6/85	TCDD	Cal Bottle #8-D
9400-2393-S-Y	Soil	Parkway	2/6/85	Full PP	Cal Bottle #7-D
MB-5-2469-S-Y	Soil	Brady	2/12/85	Full PP	Cal Bottle #9-D
F-9-G-2599-298-H-Y	Water	120 Lister	3/6/85	Full PP	Cal Bottles #C-1, P-1,M-1,A-1,A-2, V-5,V-6
9300-2728-100-S-Y	Soil	Boxboard	3/28/85	Full PP	Cal Bottle #12-D
9440-2406-S-Y	Soil	Parkway	4/11/85	Full PP	Cal Bottle #20-D
9700-2840-S-Y	Soil	Conrail	4/15/85	Full PP	Cal Bottle #13-D
9700-2831-S-L*	Soil	Conrail	4/16/85	TCDD	Cal Bottle #22-D
7-B-4439-298-H-Y	Water	80 Lister	6/25/85	Full PP	(none listed)
---------------------- Samples sent to NJDEP-Designated Lab Only ----------------------					
-	Soil	Conrail	3/20/85	-	SG9
-	Soil	Proficiency	2/5/85	-	Q4521/Cal Bottle #31-D
-	Soil	Proficiency	2/5/85	-	60203/Sm.amber bottle
-	Soil	Proficiency	6/12/85	-	64R06/no bottle #
-	Water	Trip blank	3/6/85	-	TB01-06/Bottles # C5,P5,M5,A5,V7,V9
-	Water	Field blank	3/6/85	-	FB01-06/Bottles # C2,P2,M2,A3,V3,V4
-	Water	Trip blank	6/25/85	-	7B Trip Blank/no bottle #
-	Water	Field blank	6/25/85	-	7B Field Blank/no bottle #

*This sample is listed as 9700-2381-S-L on the NJDEP-prepared chain of custody; given date and identification, however, 2831 is more likely the correct IT split number.

TABLE 5.8.2.4-2

NJDEP PROFICIENCY SAMPLE RESULTS
2,3,7,8-TCDD

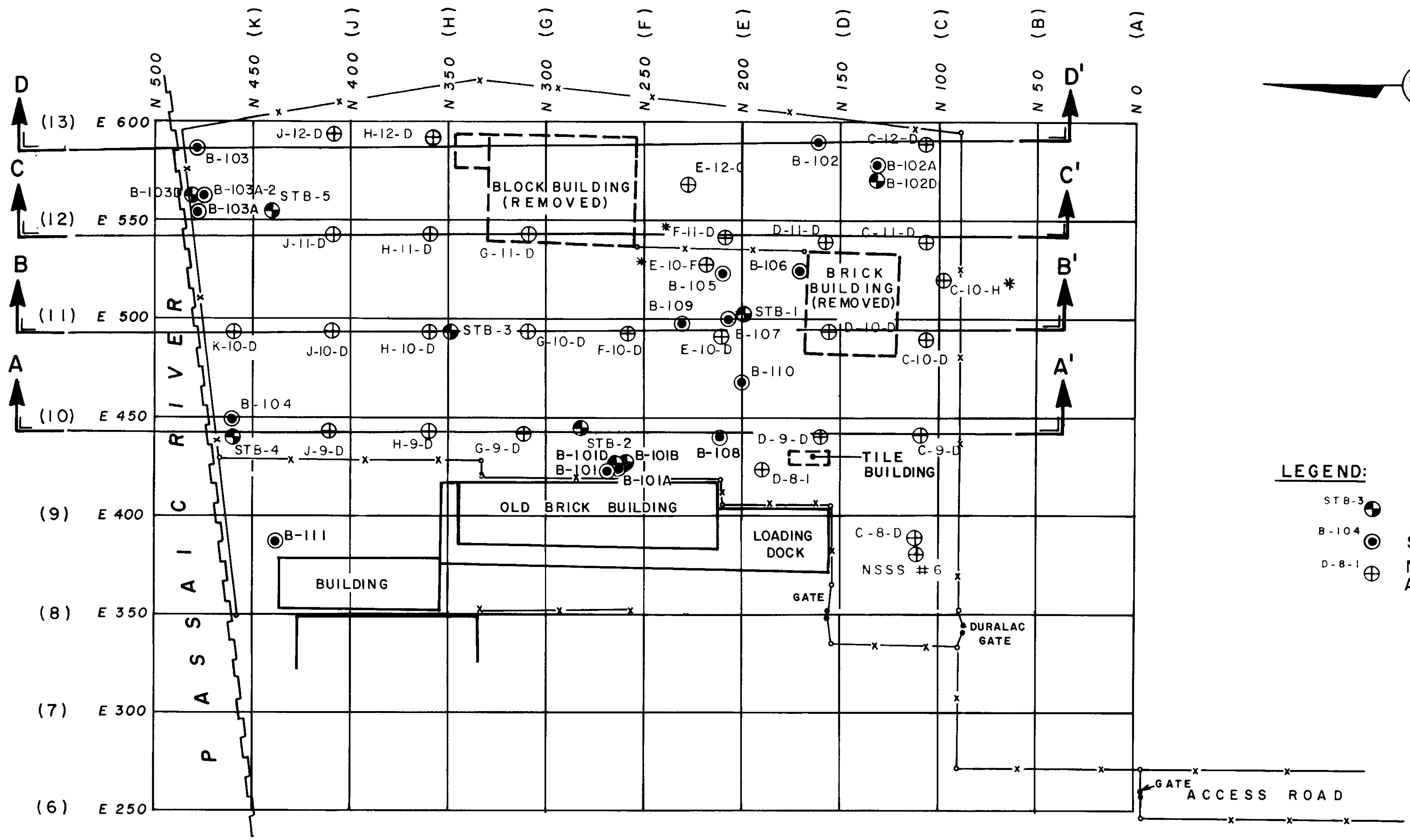
IT SAMPLE NUMBER	DESCRIPTION	RESULT (ppb)*
X9709-2270-P-F-L	NJDEP No. X9709	10.3
3Y604-2386-P-F-L	NJDEP No. 3Y604	4.2
4V102-2499-P-F-L	NJDEP No. 4V102	5.4
J3910-2500-P-F-L	NJDEP No. J3910	9.9
D2917-2529-P-F-L	NJDEP No. D2917	ND (0.05)
L7411-2530-P-F-L	NJDEP No. L7411	10.0
7X306-2665-P-F-L	NJDEP No. 7X306	4.2
2K807-2670-P-F-L	NJDEP No. 2K807	9.2
X1213-2701-P-F-L	NJDEP No. X1213	ND (0.32)
Z1020-2708-P-F-L	NJDEP No. Z1020	ND (0.08)
2W205-2731-P-F-L	NJDEP No. 2W205	4.0
C5915-2747-P-F-L	NJDEP No. C5915	ND (0.02)
E7612-2825-P-F-L	NJDEP No. E7612	9.5
Y6414-2852-P-F-L	NJDEP No. Y6414	ND (0.03)
M1122-2853-P-F-L	NJDEP No. M1122	ND (0.02)
76L04-4143-P-F-L	NJDEP No. 76L04	ND (0.19)
52W01-4256-P-F-L	NJDEP No. 52W01	ND (0.50)
04F07-4280-P-F-L	NJDEP No. 04F07	ND (0.33)
16F05-4281-P-F-L	NJDEP No. 16F05	ND (0.14)

*For ND results value in parentheses is the detection limit.

FIGURES

FIGURES

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
J. LOGRECO 4-19-85	ND 5-1-85	DHE 5-1-85	846722-B2



LEGEND:

STB-3 DEEP BORING LOCATION AND NUMBER

B-104 SHALLOW BORING AND NUMBER

D-8-1 NEAR SURFACE SOIL SAMPLE AND NUMBER

SCALE

0 60 120 FEET

NOTE:

* SAMPLES OR BORINGS WHICH HAVE BEEN RELOCATED ARE PLOTTED BY NORTH AND EAST COORDINATES ONLY. LETTER COORDINATES MAY NOT MATCH GRID.

FIGURE 4.2.4-1

NEAR SURFACE SOIL SAMPLE AND BORING LOCATION PLAN

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

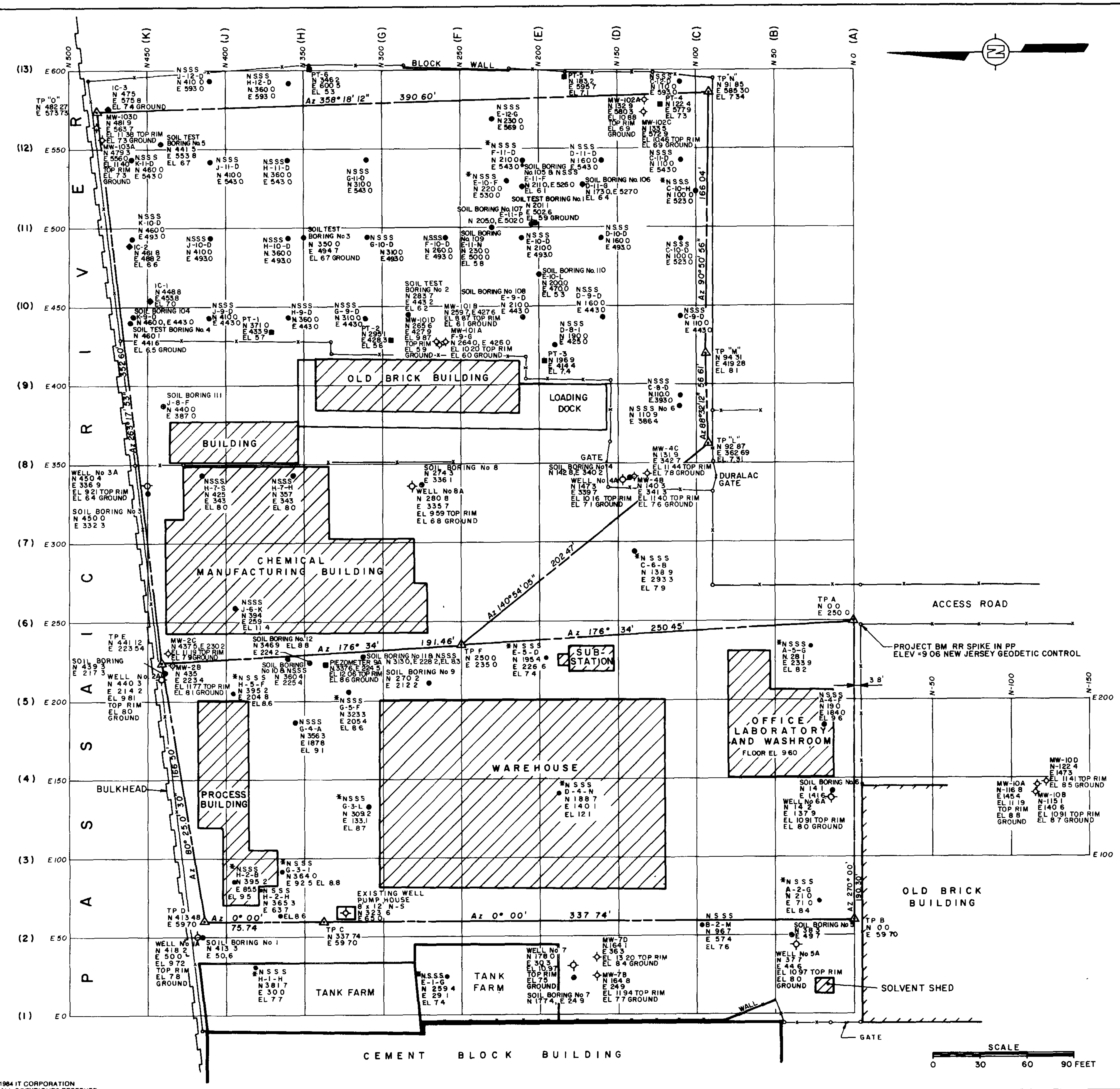
IT ... Creating a Safer Tomorrow

REVISION:
1 GENERAL REVISION 12/85

65360

"Do Not Scale This Drawing"

DEP\DA0100551



*LETTER GRID KEY

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

(6) E 250 — N 150 (D) — N 100 (C) — (5) E 200

NOTE:

*SAMPLES OR BORINGS WHICH HAVE BEEN RELOCATED ARE PLOTTED BY NORTH AND EAST COORDINATES ONLY. LETTER COORDINATES MAY NOT MATCH LETTER GRID

LEGEND:

- ● NEAR SURFACE SOIL SAMPLE (NSSS)
- ⊕ BORING
- ▲ TRAVERSE CONTROL POINT
- MW-101A ✧ MONITORING WELL
- PT-2 ■ PIEZOMETER (No 2)
- IC-3 ◆ INCLINOMETER (No 3)

FIGURE 4.2.4-2

"AS-BUILT"
FIELD SURVEY AND
BORING AND TEST SAMPLING LOCATIONS

120 LISTER AND SERGENT SITES

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
J. LoGreco 11 23 84	9-3-85	9-4-85	846248-E7

DEP\DA0100552

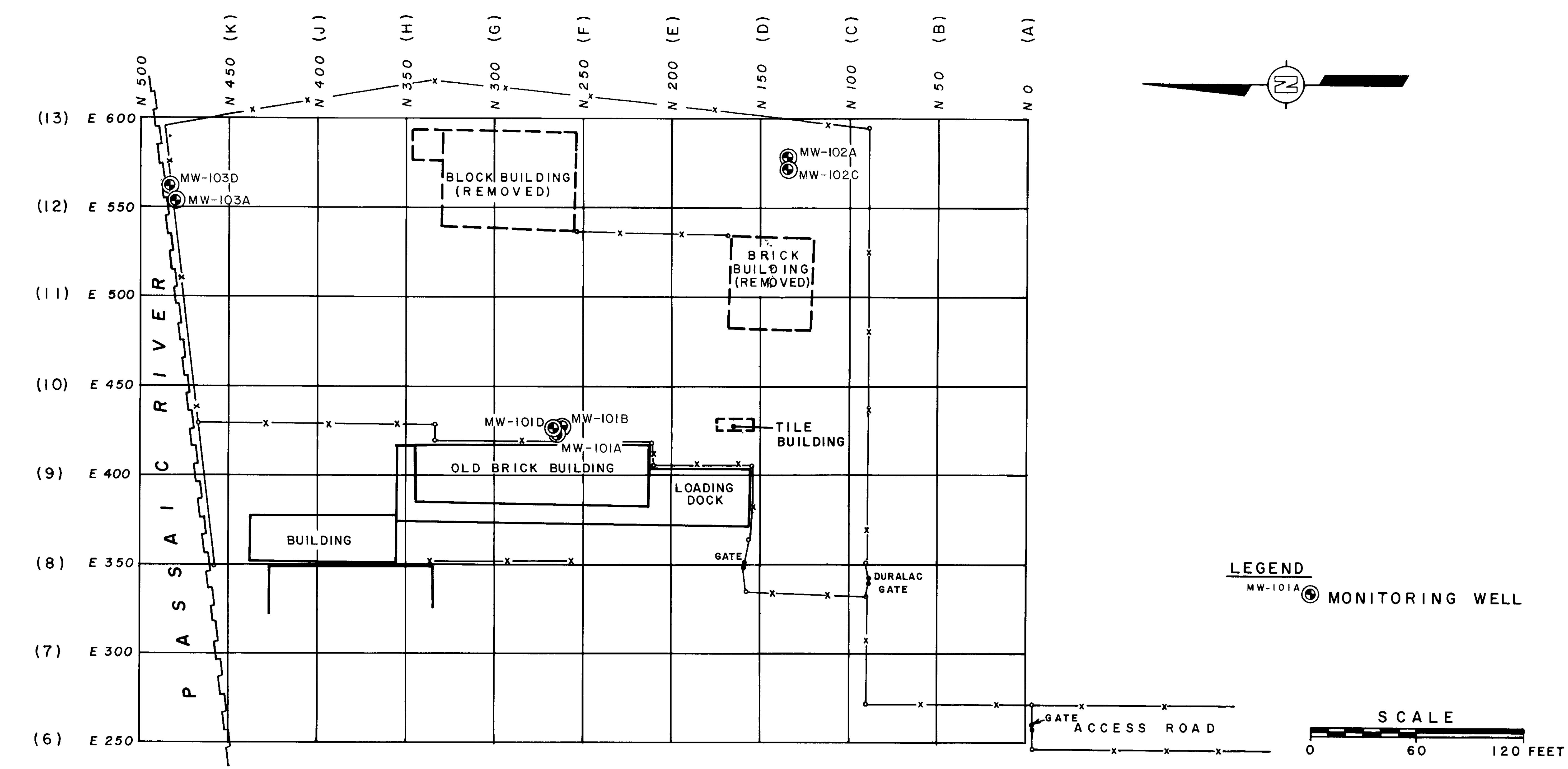

FIGURE 4.2.5-1

MONITORING WELL LOCATION PLAN

PREPARED FOR

DIAMOND SHAMROCK
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ORG.	100	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
2	2	J. LOGRECO 4-19-85	ND 5-1-85	DHE 5-1-85	846722-B3

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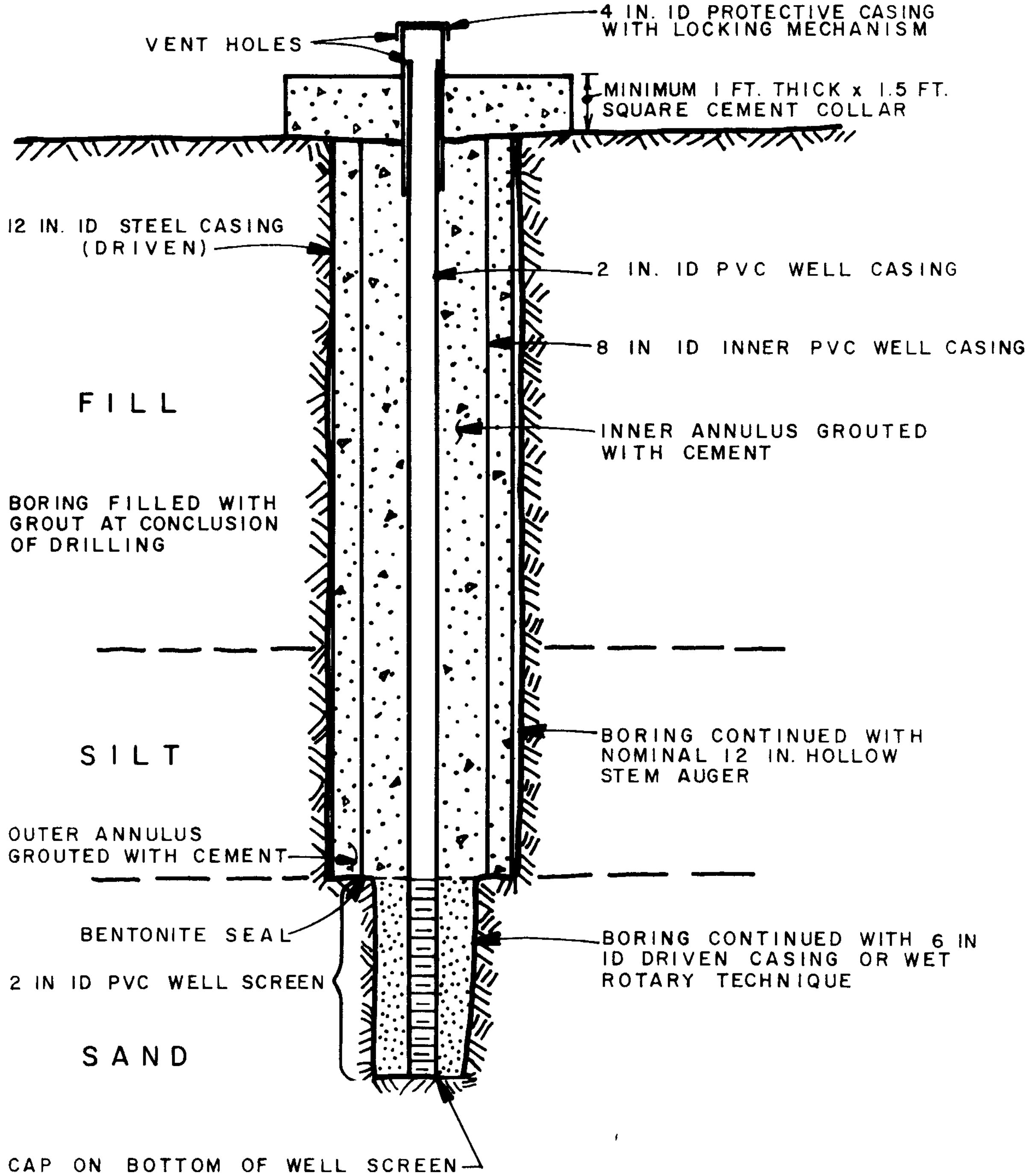
DEP\DA0100553

DRAWING NUMBER 846733-A6

DRAWN BY J LOGRECO 12 9 85

CHECKED BY

APPROVED BY



"NOT TO SCALE"

FIGURE 4.2.5.1.2-1

TYPICAL UPPER INTERMEDIATE (B) MONITORING WELL

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DRAWING NUMBER 846733-A4

DRAWN BY R. WEIBLE 12-9-85

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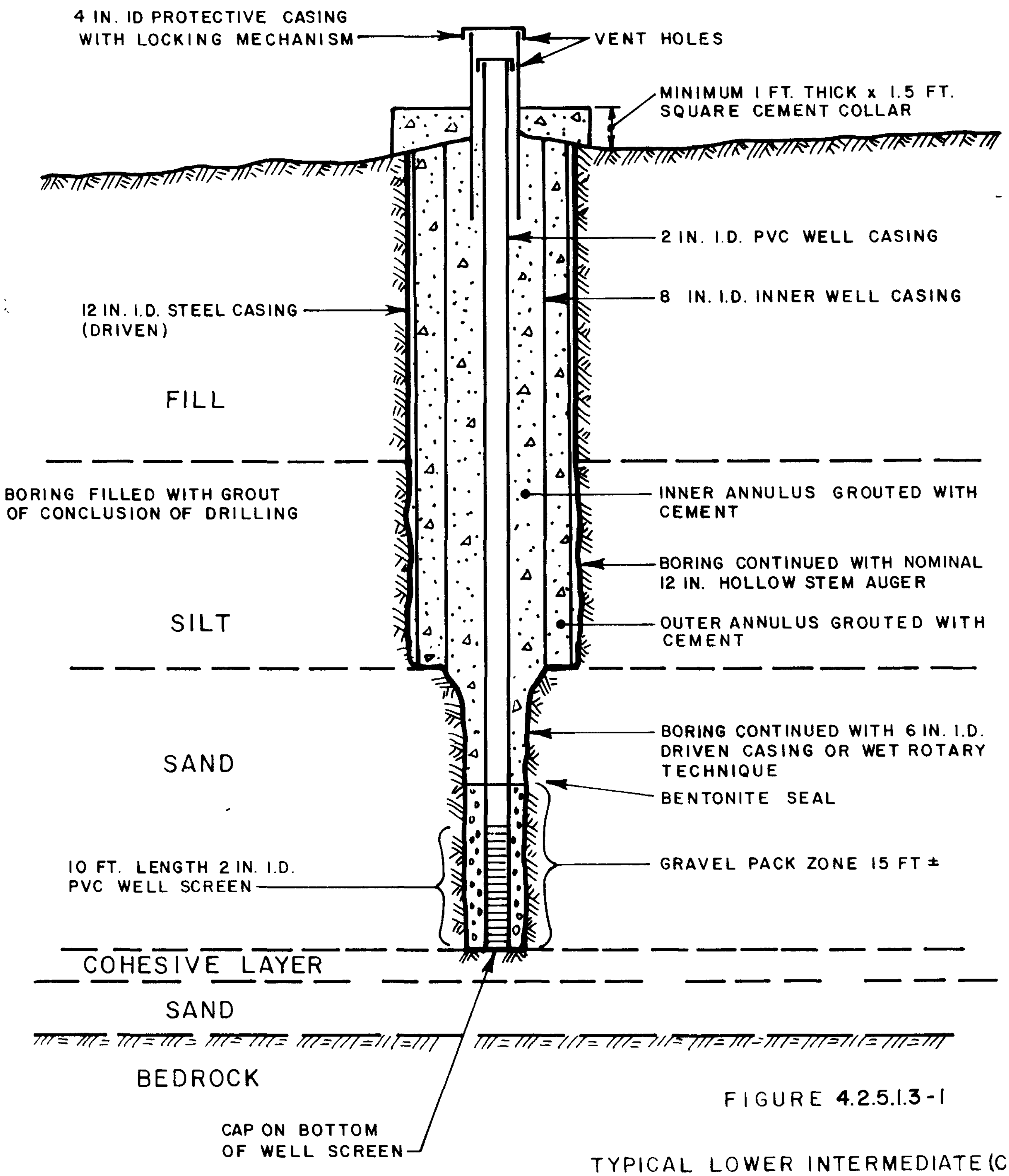

FIGURE 4.2.5.1.3-1

TYPICAL LOWER INTERMEDIATE (C)
MONITORING WELL

PREPARED FOR

DIAMOND SHAMROCK
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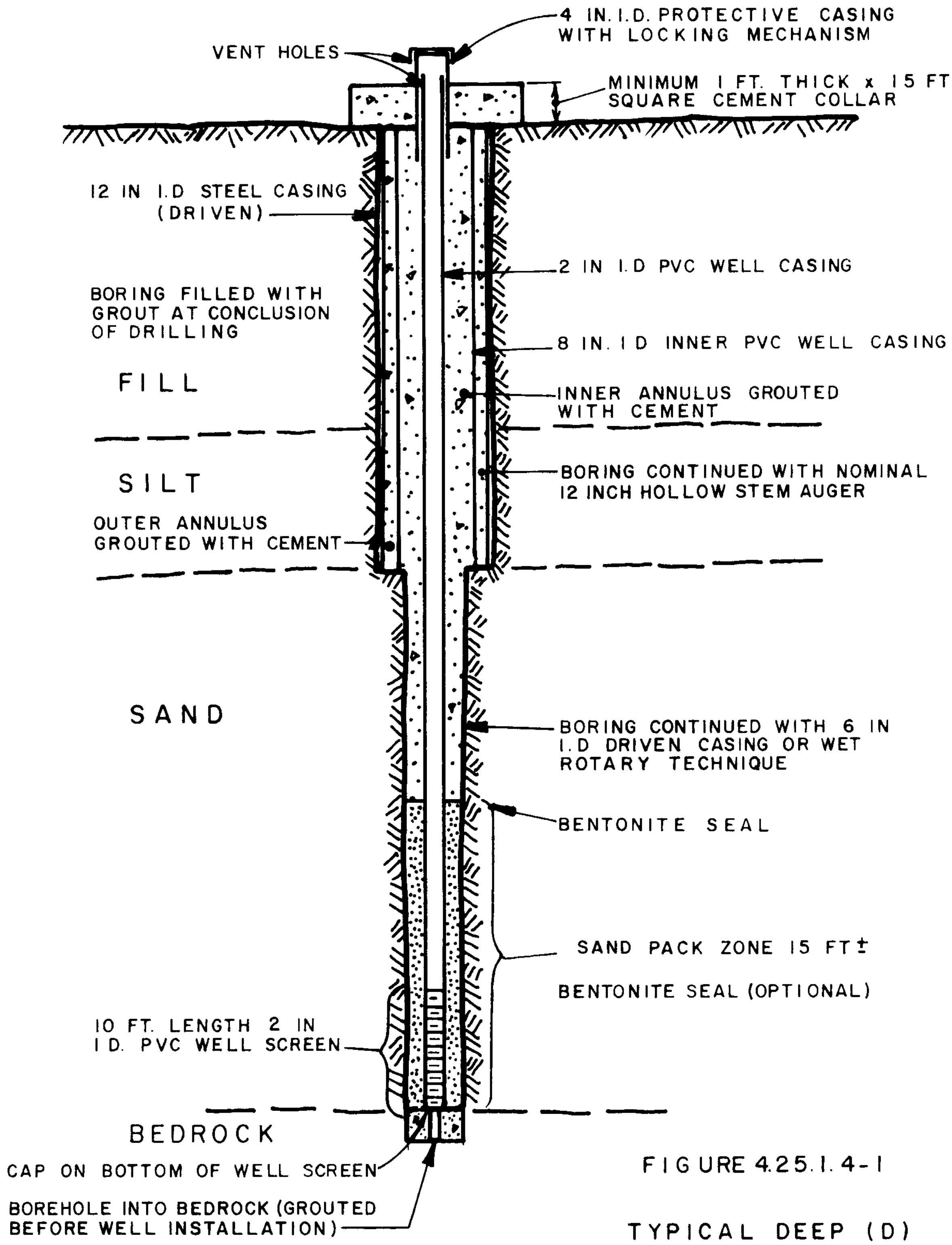
Do Not Scale This Drawing



"NOT TO SCALE"

FIGURE 4.25.1.4-1

TYPICAL DEEP (D) MONITORING WELL

PREPARED FOR

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DRAWING NUMBER 846733-A5

DRAWN BY J. LOGRECO 12/11/85

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APPROVED BY

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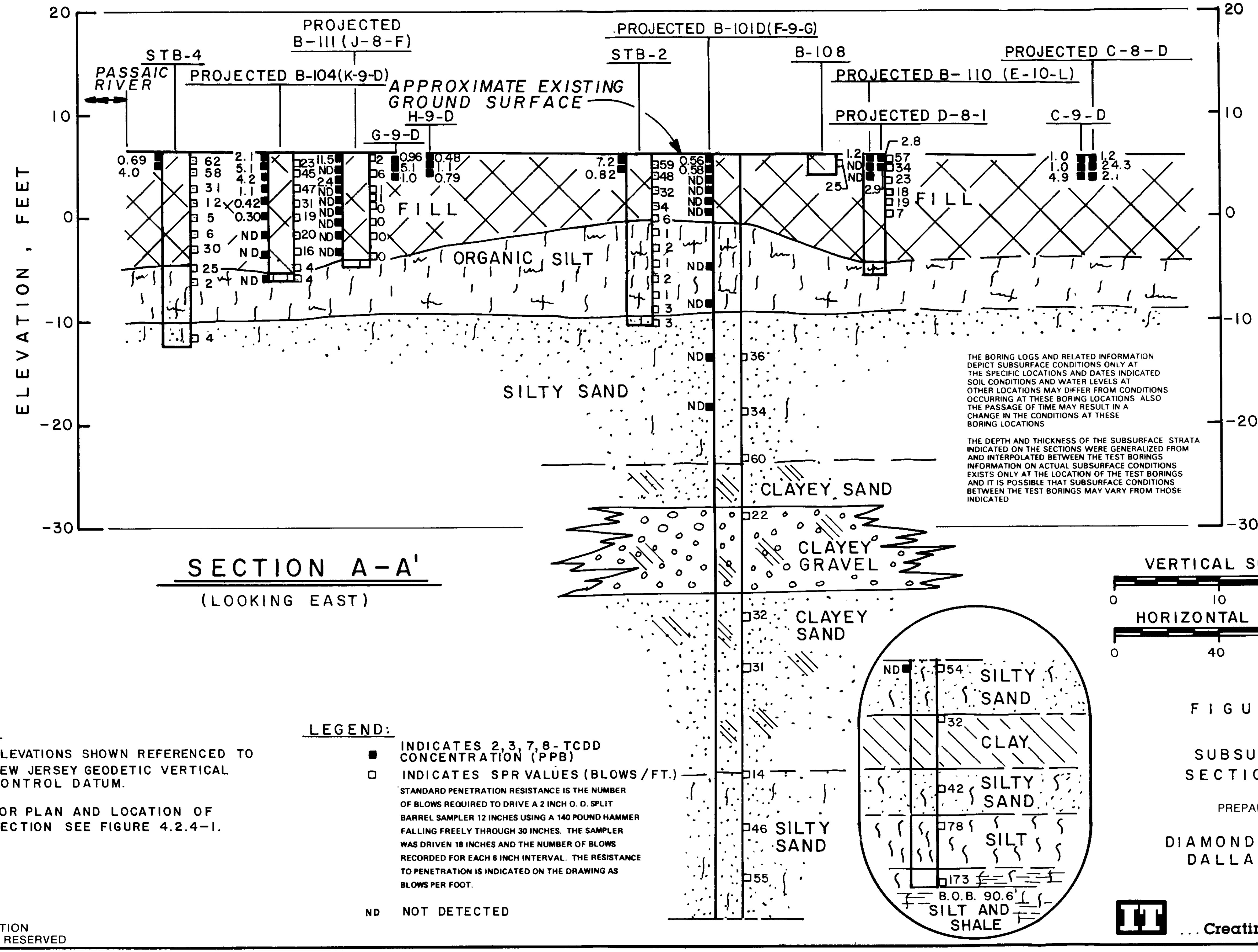

SECTION A-A'

(LOOKING EAST)

VERTICAL SCALE

0 10 20 FEET

HORIZONTAL SCALE

0 40 80 FEET

NOTES:

1. ELEVATIONS SHOWN REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.
2. FOR PLAN AND LOCATION OF SECTION SEE FIGURE 4.2.4-1.

LEGEND:

- ■ INDICATES 2,3,7,8-TCDD CONCENTRATION (PPB)
- □ INDICATES SPR VALUES (BLOWS/FT.) STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2 INCH O. D. SPLIT BARREL SAMPLER 12 INCHES USING A 140 POUND HAMMER FALLING FREELY THROUGH 30 INCHES. THE SAMPLER WAS DRIVEN 18 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6 INCH INTERVAL. THE RESISTANCE TO PENETRATION IS INDICATED ON THE DRAWING AS BLOWS PER FOOT.
- ND NOT DETECTED

FIGURE 5.4.1-1

SUBSURFACE SECTION A-A'

PREPARED FOR

DIAMOND SHAMROCK DALLAS, TEXAS

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DRAWN BY	J. LOGREO	4-22-85	CHECKED BY	ND	5-1-85	APPROVED BY	DHE	5-1-85	DRAWING NUMBER	846722-B13

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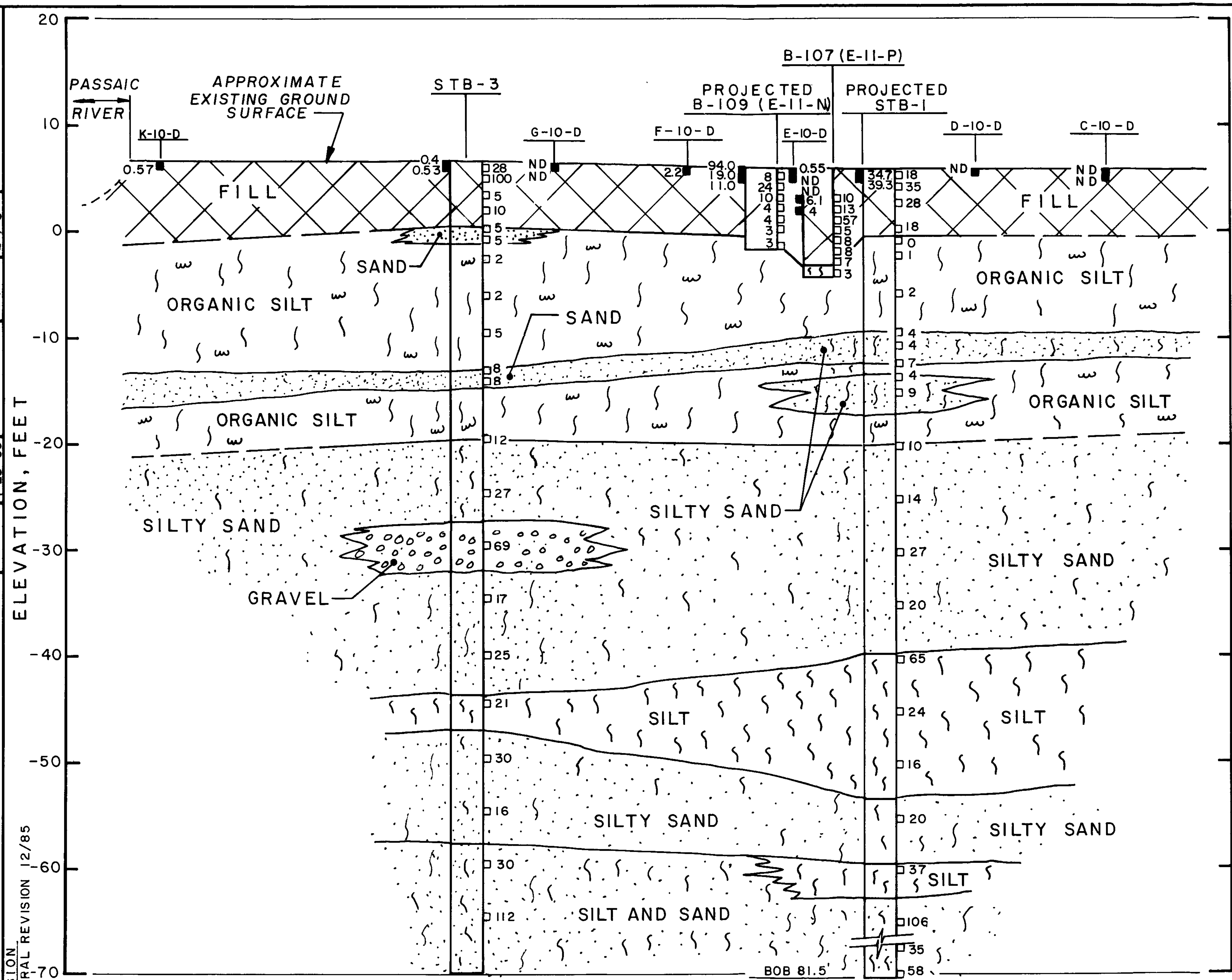

SECTION B-B'

(LOOKING EAST)

LEGEND:

- ■ INDICATES 2,3,7,8-TCDD CONCENTRATION
- □ INDICATES SPR VALUES (BLOWS/FT.) STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2 INCH O. D. SPLIT BARREL SAMPLER 12 INCHES USING A 140 POUND HAMMER FALLING FREELY THROUGH 30 INCHES. THE SAMPLER WAS DRIVEN 18 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6 INCH INTERVAL. THE RESISTANCE TO PENETRATION IS INDICATED ON THE DRAWING AS BLOWS PER FOOT
- ND NOT DETECTED

NOTES:

1. ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM
2. FOR PLAN AND LOCATION OF SECTION SEE FIGURE 4.2.4-1

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS. ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED

HORIZONTAL SCALE 0 40 80 FEET

VERTICAL SCALE 0 10 20 FEET

FIGURE 5.4.1-2

SUBSURFACE SECTION B-B'

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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D. Weick 4-23-85	ND 5-1-85	DHE 5-1-85	846722-B6

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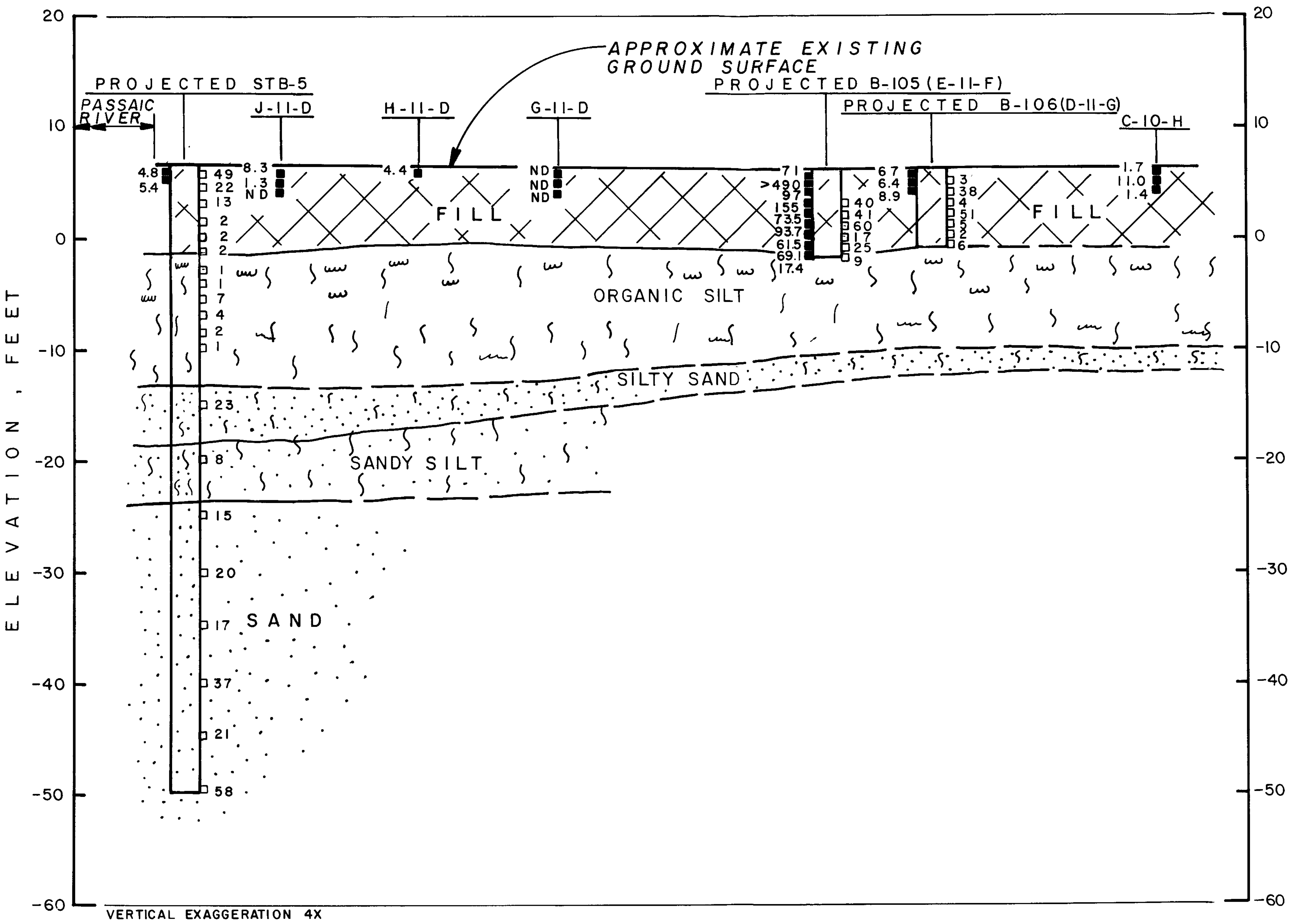

SECTION C-C'

(LOOKING EAST)

VERTICAL SCALE 0 10 20 FEET

HORIZONTAL SCALE 0 40 80 FEET

LEGEND:

■ INDICATES 2,3,7,8-TCDD CONCENTRATION (PPB)

□ INDICATES SPR VALUES (BLOWS / FT.)

STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2 INCH O D SPLIT BARREL SAMPLER 12 INCHES USING A 140 POUND HAMMER FALLING FREELY THROUGH 30 INCHES THE SAMPLER WAS DRIVEN 18 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6 INCH INTERVAL THE RESISTANCE TO PENETRATION IS INDICATED ON THE DRAWING AS BLOWS PER FOOT

ND NOT DETECTED

NOTES:

1. ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM
2. FOR PLAN AND LOCATION OF SECTION SEE FIGURE 4.2.4-1.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED

FIGURE 5.4.1-3

SUBSURFACE SECTION C-C'

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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DRAWN BY	J. LOBRECO 4-23-85	CHECKED BY	ND 5-1-85	DRAWING NUMBER	846722-B11
		APPROVED BY	DHE 5-1-85		

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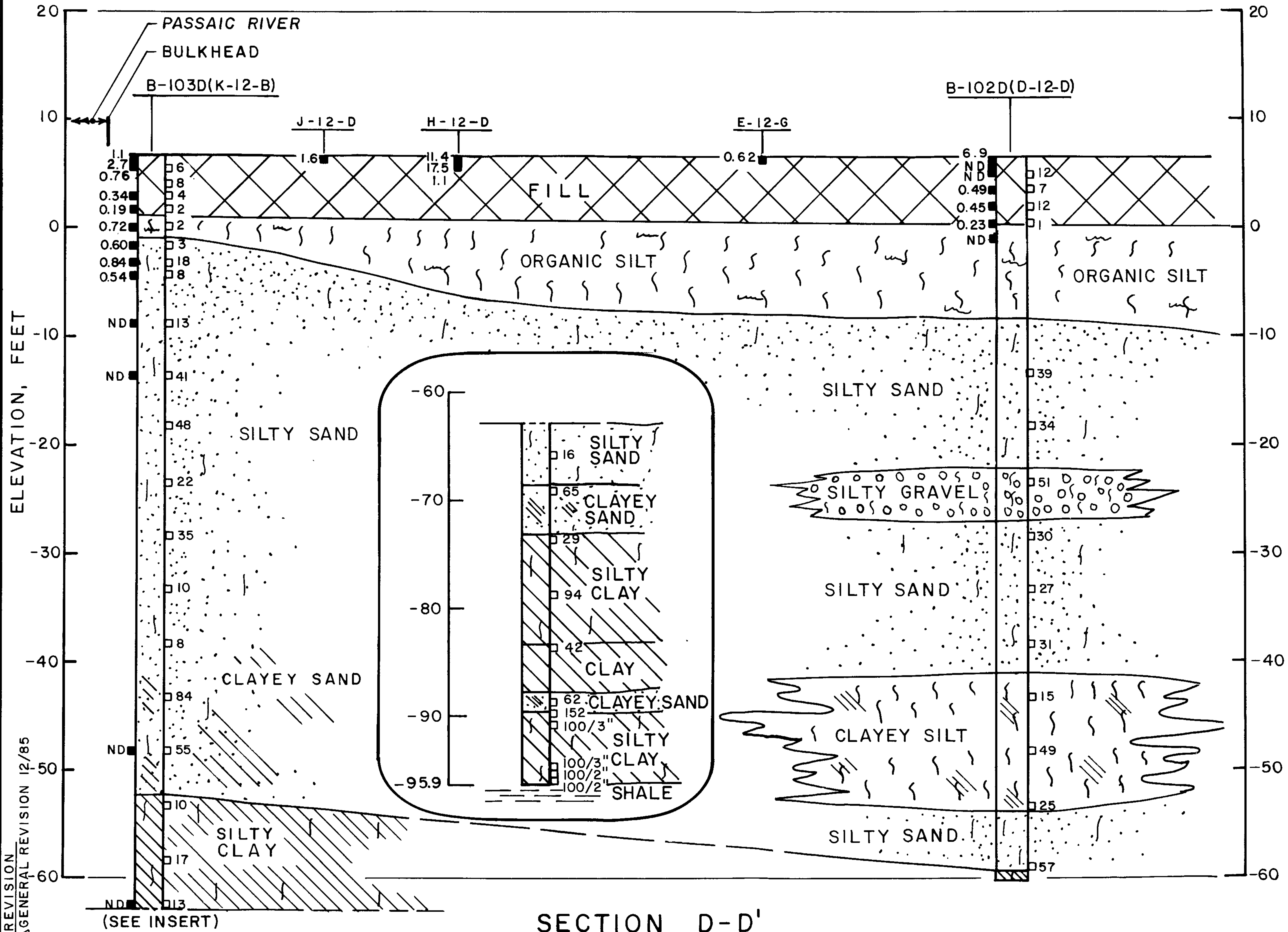
DEP\DA0100559



SECTION D-D'

(LOOKING EAST)

LEGEND:

■ INDICATES 2,3,7,8,-TCDD CONCENTRATION (PPB)

□ INDICATES SPR VALUES (BLOWS/FT.)

STANDARD PENETRATION RESISTANCE IS THE NUMBER OF BLOWS REQUIRED TO DRIVE A 2 INCH O. D. SPLIT BARREL SAMPLER 12 INCHES USING A 140 POUND HAMMER FALLING FREELY THROUGH 30 INCHES. THE SAMPLER WAS DRIVEN 18 INCHES AND THE NUMBER OF BLOWS RECORDED FOR EACH 6 INCH INTERVAL. THE RESISTANCE TO PENETRATION IS INDICATED ON THE DRAWING AS BLOWS PER FOOT

ND NOT DETECTED

NOTES:

1. ELEVATIONS SHOWN REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.
2. FOR PLAN AND LOCATION OF SECTION SEE FIGURE 4.2.4-1.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED

VERTICAL SCALE: 0 10 20 FEET

HORIZONTAL SCALE: 0 40 80 FEET

FIGURE 5.4.1-4

SUBSURFACE SECTION D-D'

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D. Welck 4-23-85	ND 5-1-85	DHE 5-1-85	846722-B12

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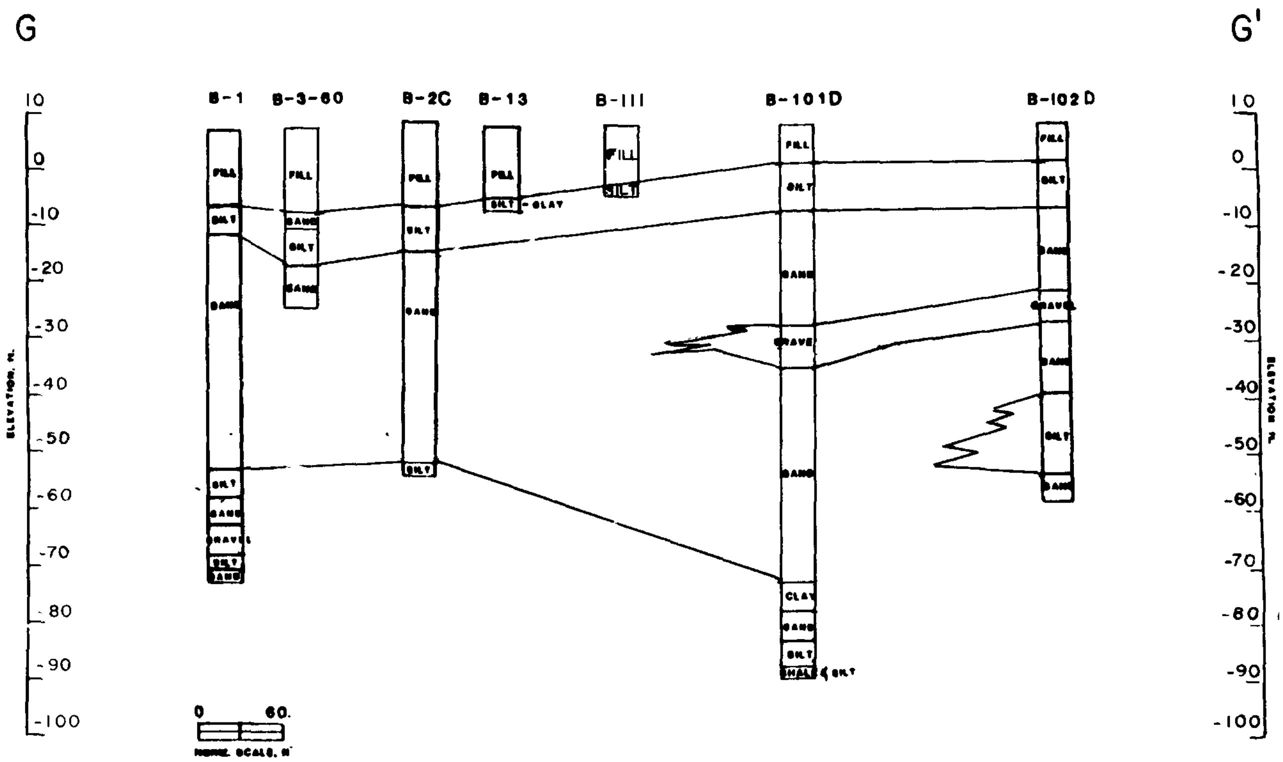
DEP\DA0100560

DRAWING NUMBER 846722-A54

CHECKED BY

APPROVED BY

DRAWN BY mel 8-30-85



SECTION G-G'

NOTE:

ELEVATIONS WITH RESPECT TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM

FIGURE 5.4.1-5

GEOLOGIC CROSS SECTION
SECTION G-G'

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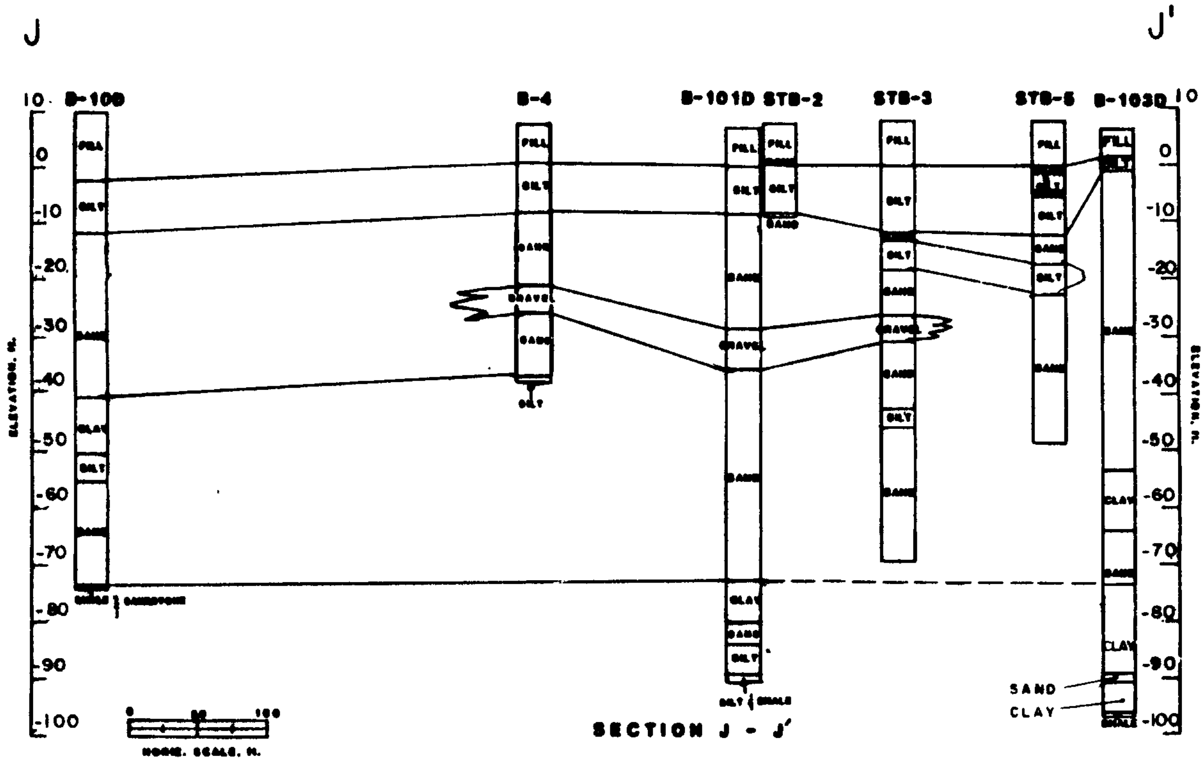

NOTE:
ELEVATIONS WITH RESPECT TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

FIGURE 5.4.1-6

GEOLOGIC CROSS SECTION
SECTION J-J'

PREPARED FOR

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CHECKED BY
APPROVED BY
DRAWING NUMBER 846722-A57

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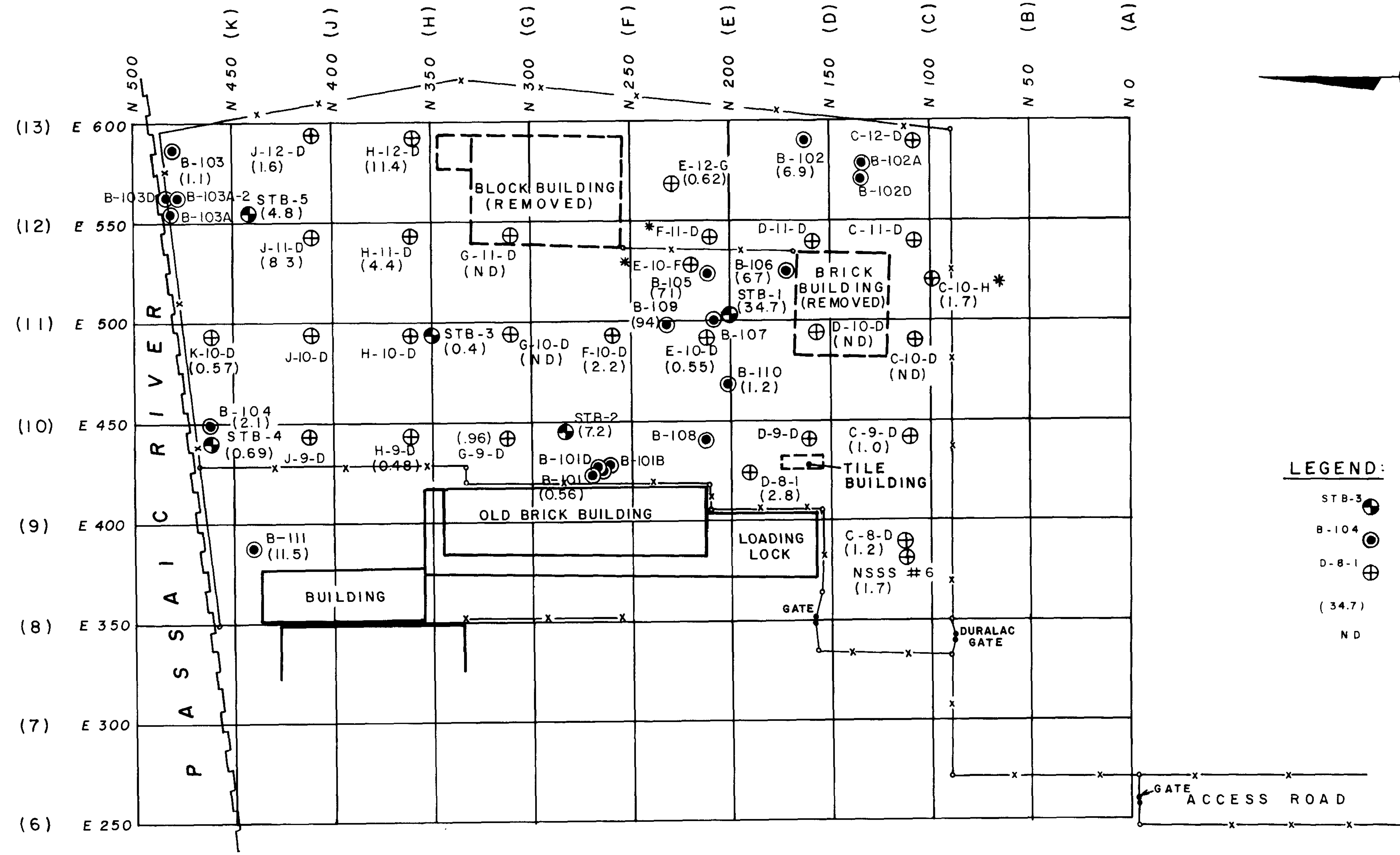

LEGEND:

STB-3	DEEP BORING LOCATION AND NUMBER
B-104	BORING LOCATION AND NUMBER
D-8-1	NEAR SURFACE SOIL SAMPLE AND NUMBER.
(34.7)	INDICATES CONCENTRATIONS (ppb)
ND	NOT DETECTED

SCALE

0 60 120 FEET

NOTE:

✱ SAMPLE OR BORINGS WHICH HAVE BEEN RELOCATED ARE PLOTTED BY NORTH AND EAST COORDINATES ONLY. LETTER COORDINATES MAY NOT MATCH GRID.

FIGURE 5.4.2.1-1

2,3,7,8-TCDD CONCENTRATIONS IN SOILS 0-TO 6-INCH DEPTH INTERVAL

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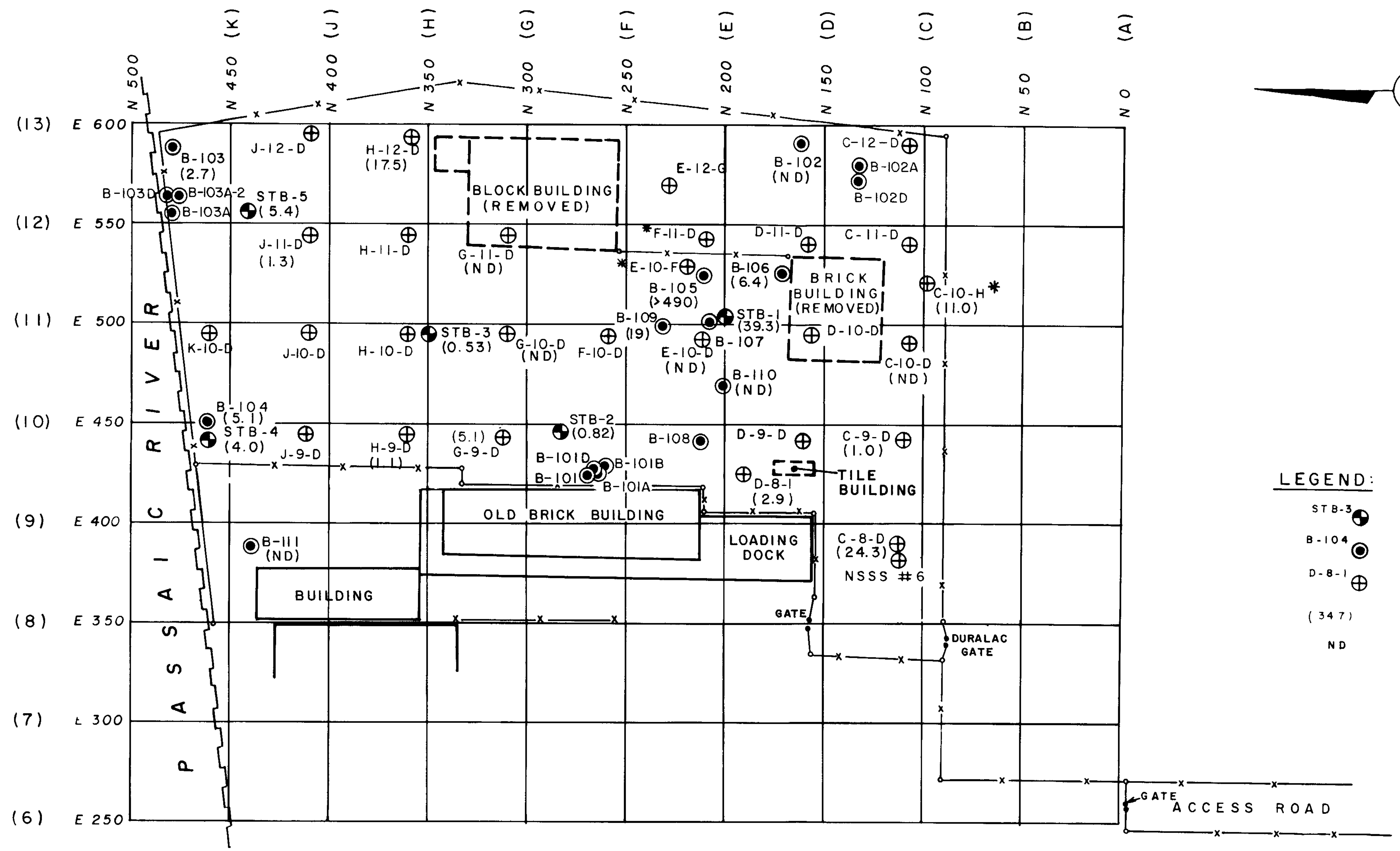
CHECKED BY	ND 5-1-85	APPROVED BY	DHE 5-1-85
DRAWING NUMBER	846722-B7		



LEGEND:

STB-3 DEEP BORING LOCATION AND NUMBER

B-104 BORING LOCATION AND NUMBER

D-8-1 NEAR SURFACE SOIL SAMPLE AND NUMBER.

(347) INDICATES CONCENTRATIONS (ppb)

ND NOT DETECTED

SCALE

0 60 120 FEET

NOTE:

* SAMPLE OR BORINGS WHICH HAVE BEEN RELOCATED ARE PLOTTED BY NORTH AND EAST COORDINATES ONLY. LETTER COORDINATES MAY NOT MATCH GRID.

FIGURE 5.4.2.1-2

2, 3, 7, 8-TCDD CONCENTRATIONS IN SOILS 6-TO 12-INCH DEPTH INTERVAL

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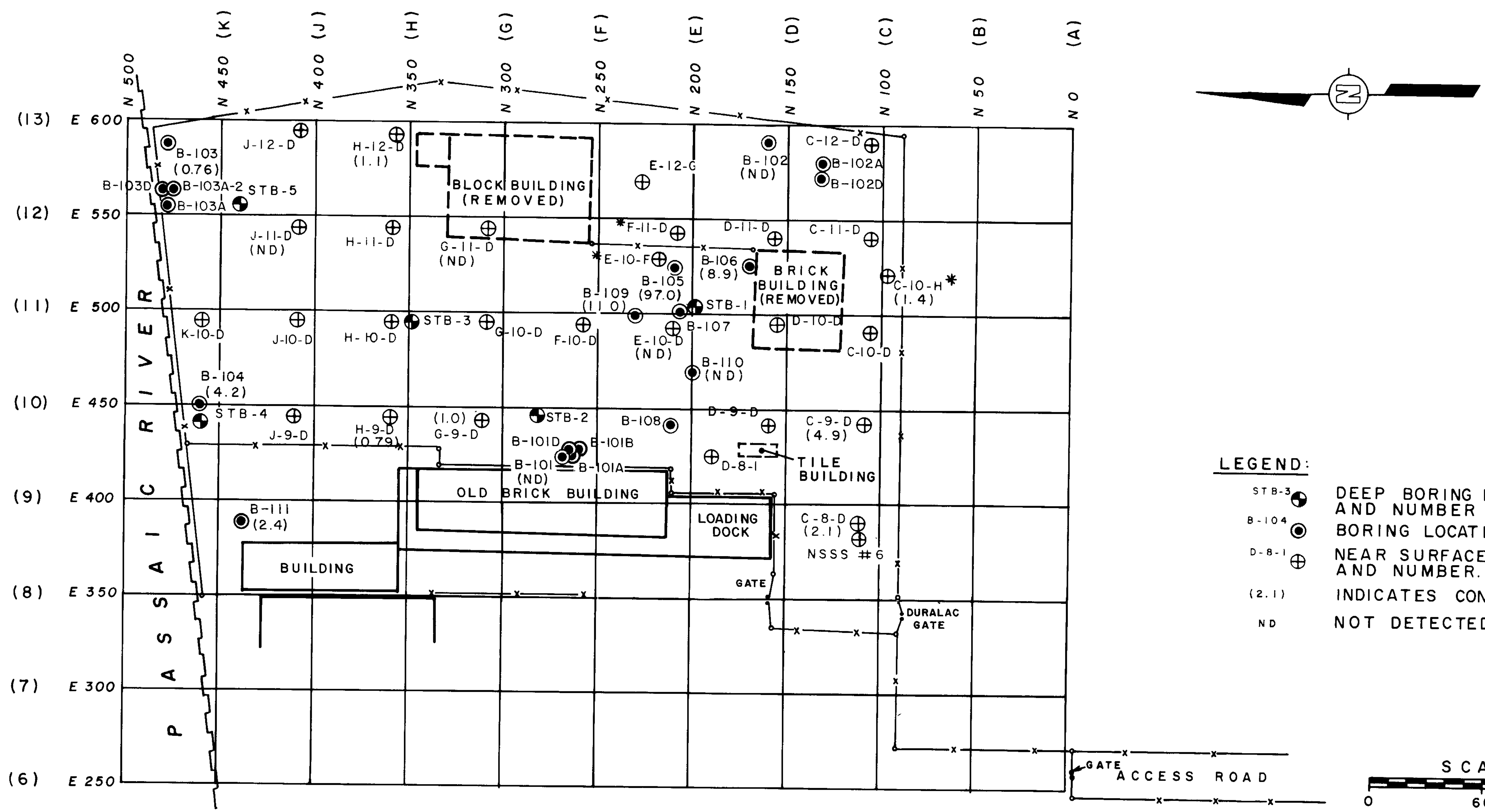
100 5	DRAWN BY	J. LOGRECO 4·19·85	CHECKED BY / APPROVED BY	ND / DHE	5-1-85 / 5-1-85	DRAWING NUMBER 846722-B8
ORG. 5					



LEGEND:

STB-3	DEEP BORING LOCATION AND NUMBER
B-104	BORING LOCATION AND NUMBER
D-8-1	NEAR SURFACE SOIL SAMPLE AND NUMBER.
(2.1)	INDICATES CONCENTRATIONS (ppb)
ND	NOT DETECTED

NOTE:

* SAMPLE OR BORINGS WHICH HAVE BEEN RELOCATED ARE PLOTTED BY NORTH AND EAST COORDINATES ONLY. LETTER COORDINATES MAY NOT MATCH GRID.

FIGURE 5.4.2.1-3

2,3,7,8-TCDD CONCENTRATIONS IN SOILS 12-TO 24-INCH DEPTH INTERVAL

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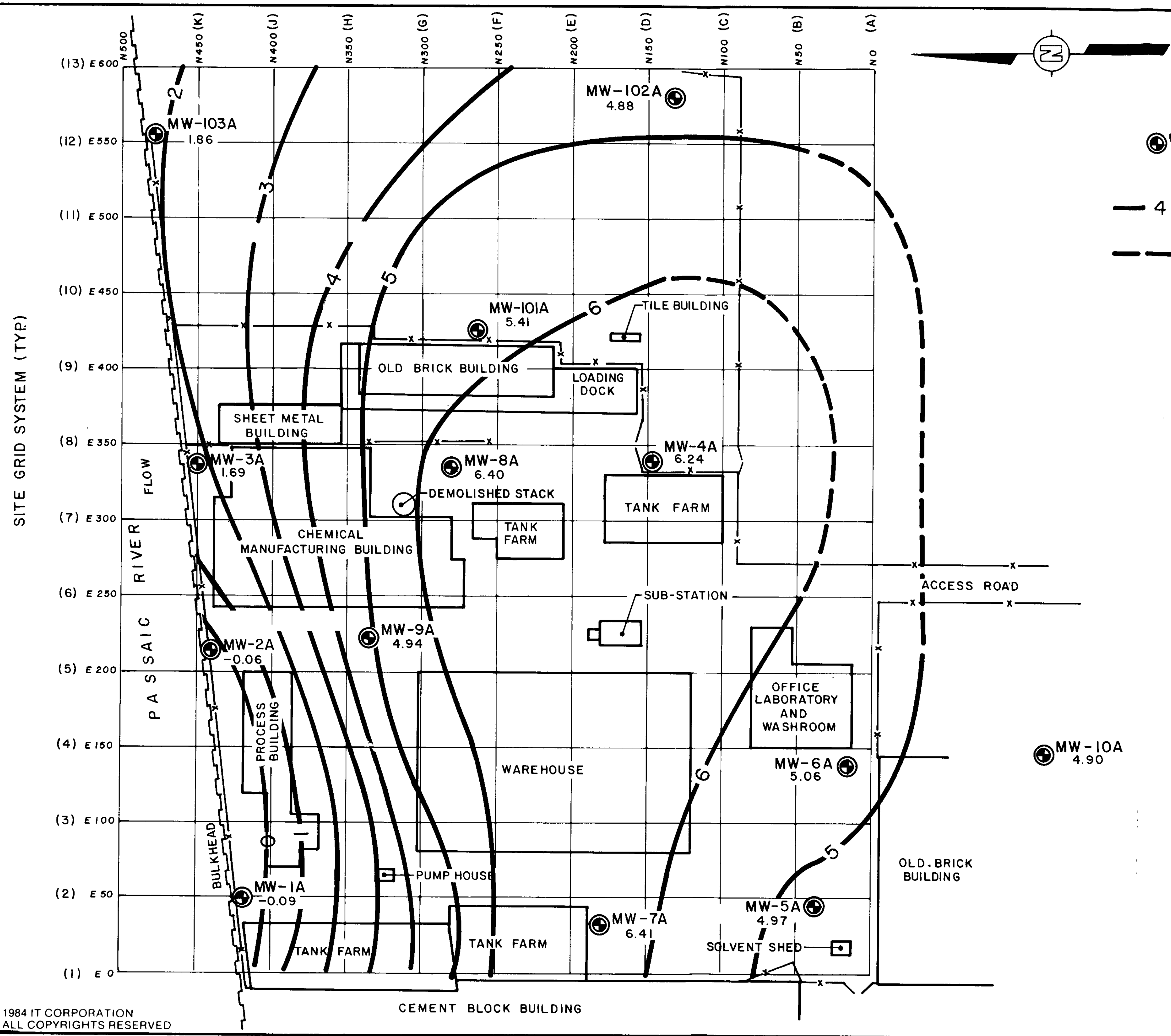
100 6	DRAWN BY	J.LOGRECO 4-25-85	CHECKED BY / APPROVED BY	ND / DHE	5-1-85 / 5-1-85	DRAWING NUMBER 846722-B9



LEGEND

MW-10A 4.90 SHALLOW DEPTH MONITORING WELL AND WATER LEVEL EL. ON MAY 25, 1985.

— 4 — POTENTIOMETRIC CONTOUR INTERPOLATED FROM SITE DATA

— — — INFERRED POTENTIOMETRIC CONTOUR

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.5.3.1-1

SHALLOW MONITORING WELLS AND POTENTIOMETRIC CONTOURS OF GROUND WATER ON MAY 25, 1985
80 AND 120 LISTER AVENUE

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DIAMOND SHAMROCK
DALLAS, TEXAS

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DRAWN BY	RW	CHECKED BY		DRAWING NUMBER
100° 3B BLUE 3B	12-2-85	APPROVED BY	2-17-86	846733-B9

65360

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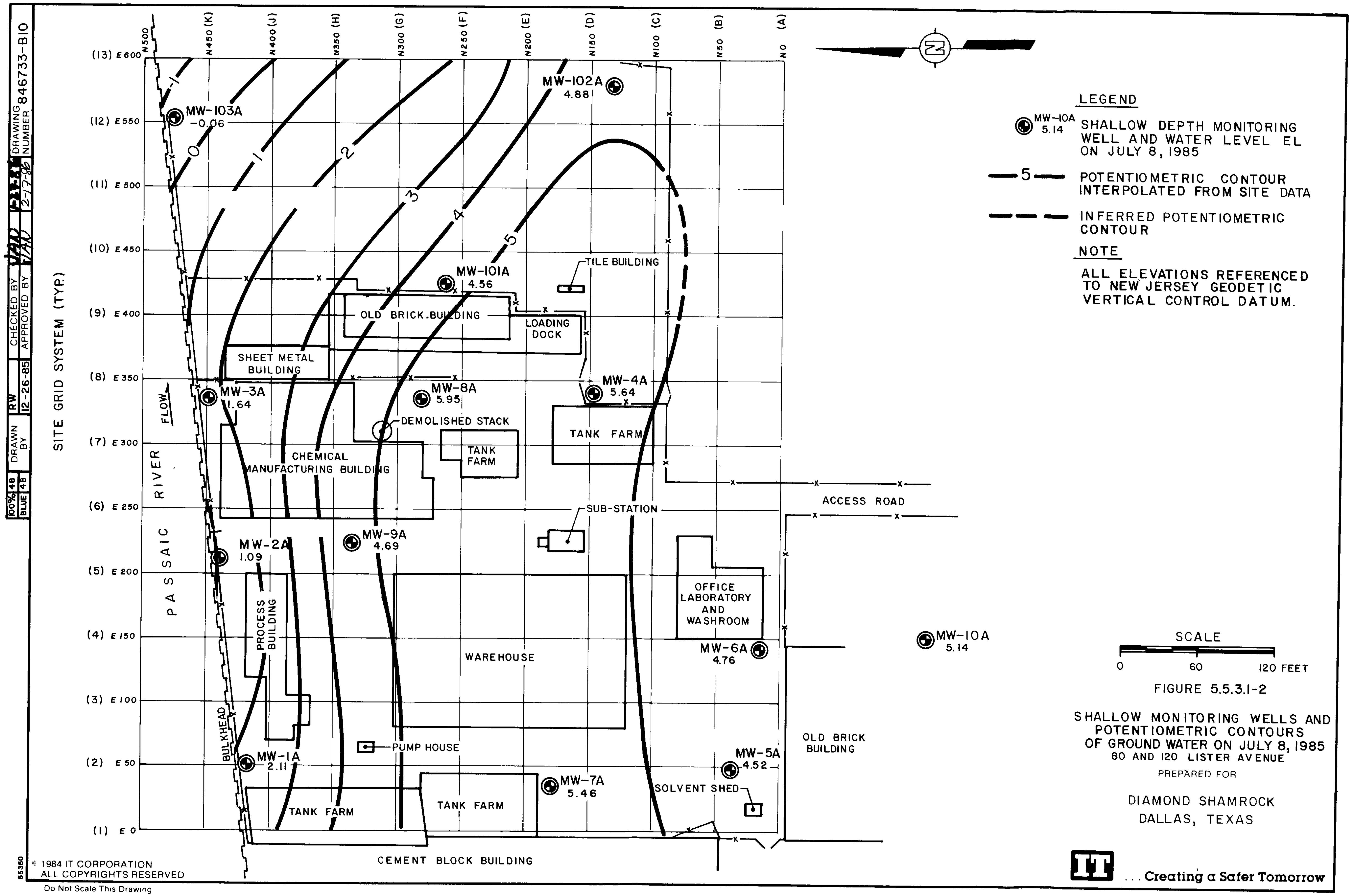

FIGURE 5.5.3.1-2

SHALLOW MONITORING WELLS AND POTENTIOMETRIC CONTOURS OF GROUND WATER ON JULY 8, 1985
80 AND 120 LISTER AVENUE

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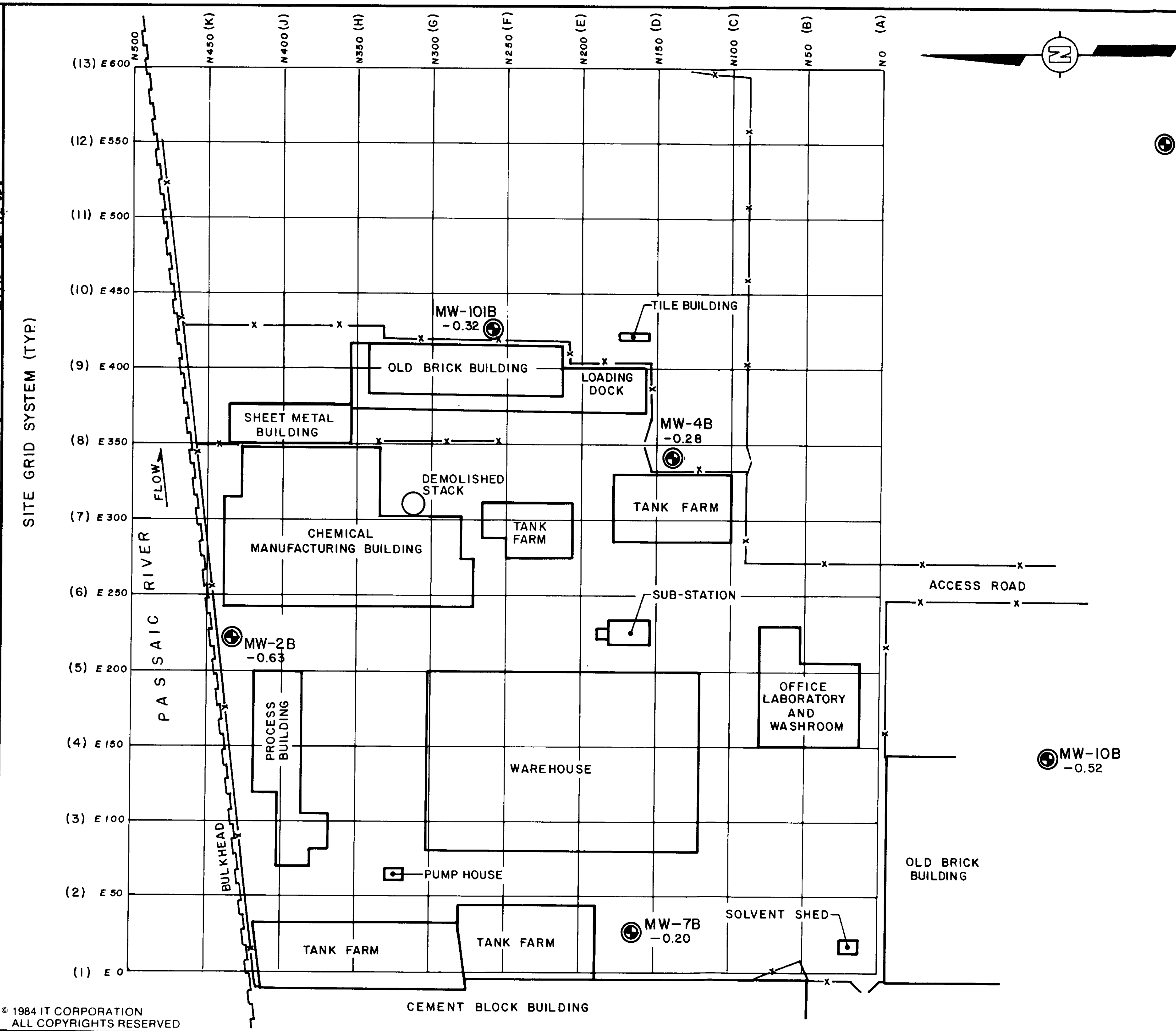
DRAWN BY	RW	CHECKED BY		DRAWING NUMBER 846733-B10
100% 4B BLUE 4B	12-26-85	APPROVED BY	2-7-86	

DEP\DA0100567



LEGEND

MW-4B -0.28 UPPER INTERMEDIATE DEPTH MONITORING WELL AND WATER LEVEL EL.

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.5.3.3-1

WATER LEVELS MEASURED IN UPPER INTERMEDIATE "B" WELLS ON JULY 3, 1985

80 AND 120 LISTER AVENUE

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DRAWN BY	RW	CHECKED BY		DRAWING NUMBER	846733-B11
	12-27-85	APPROVED BY	2-13-86		

65360

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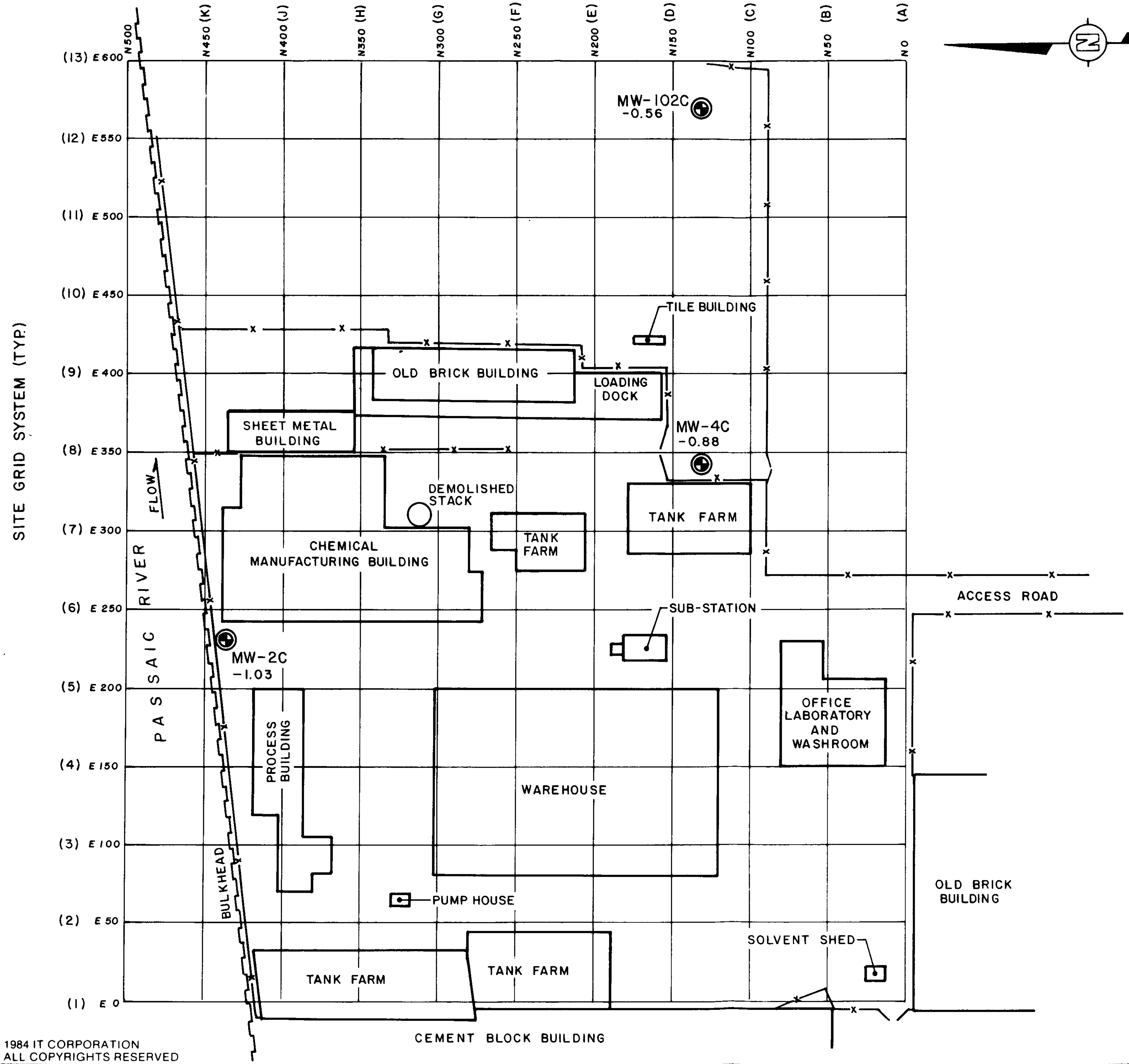

LEGEND

MW-4C -0.88 LOWER INTERMEDIATE DEPTH MONITORING WELL AND WATER LEVEL EL.

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM

SCALE

0 60 120 FEET

FIGURE 5.5.3.3-2

WATER LEVELS MEASURED IN LOWER INTERMEDIATE "C" WELLS ON JULY 3, 1985

80 AND 120 LISTER AVENUE

PREPARED FOR

DIAMOND SHAMROCK

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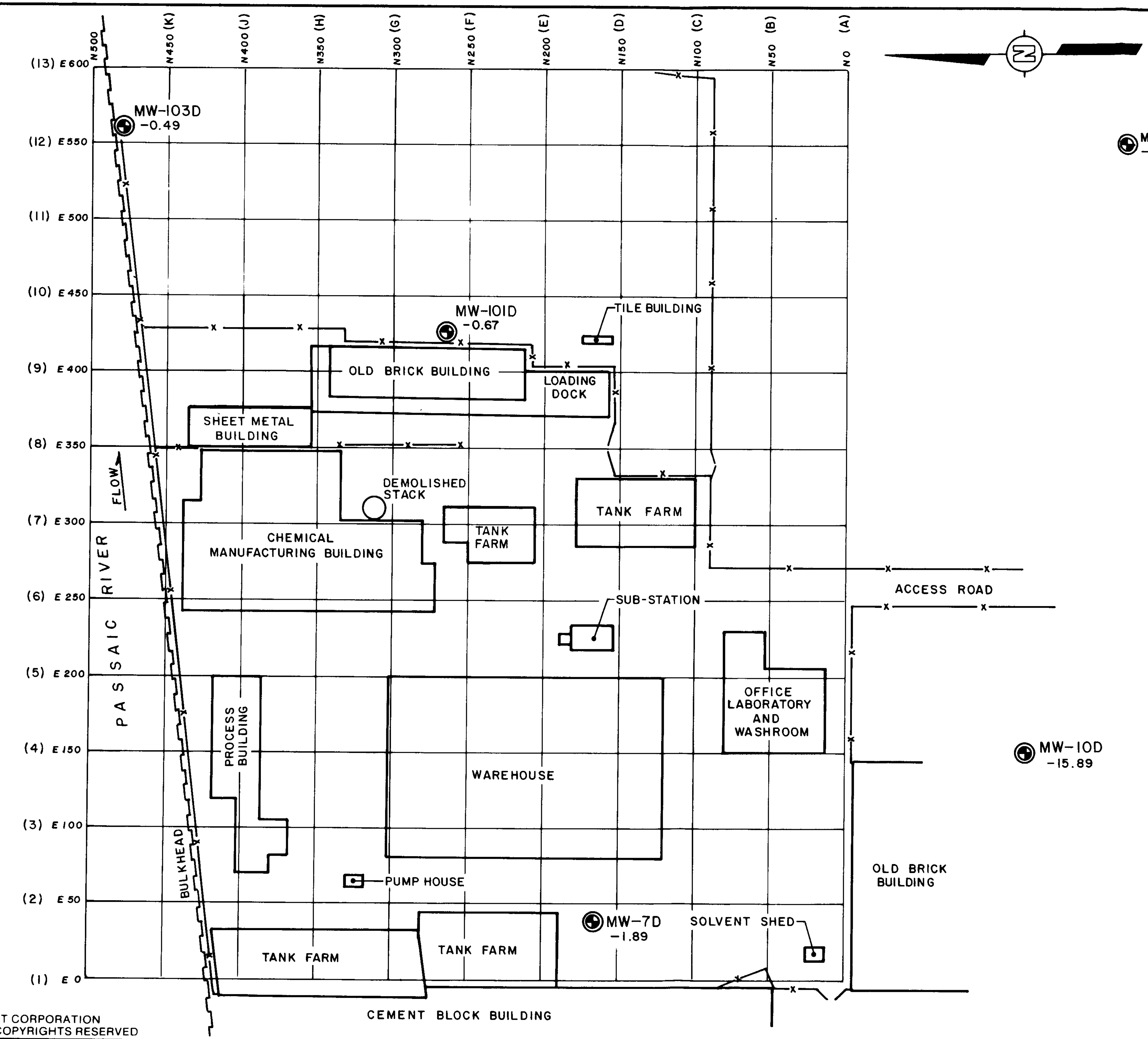
DRAWN BY	RW	CHECKED BY	[signature]	DRAWING NUMBER	846733-B12
	12-27-85	APPROVED BY	[signature]	2-17-86	

65380

DEP\DA0100569



LEGEND

MW-7D -1.89 DEEP DEPTH MONITORING WELL AND WATER LEVEL EL.

NOTE:

ALL ELEVATIONS REFERENCED TO NEW JERSEY GEODETIC VERTICAL CONTROL DATUM.

SCALE

0 60 120 FEET

FIGURE 5.5.3.3-3

WATER LEVELS MEASURED IN DEEP "D" WELLS ON JULY 3, 1985

80 AND 120 LISTER AVENUE

PREPARED FOR

DIAMOND SHAMROCK
DALLAS, TEXAS

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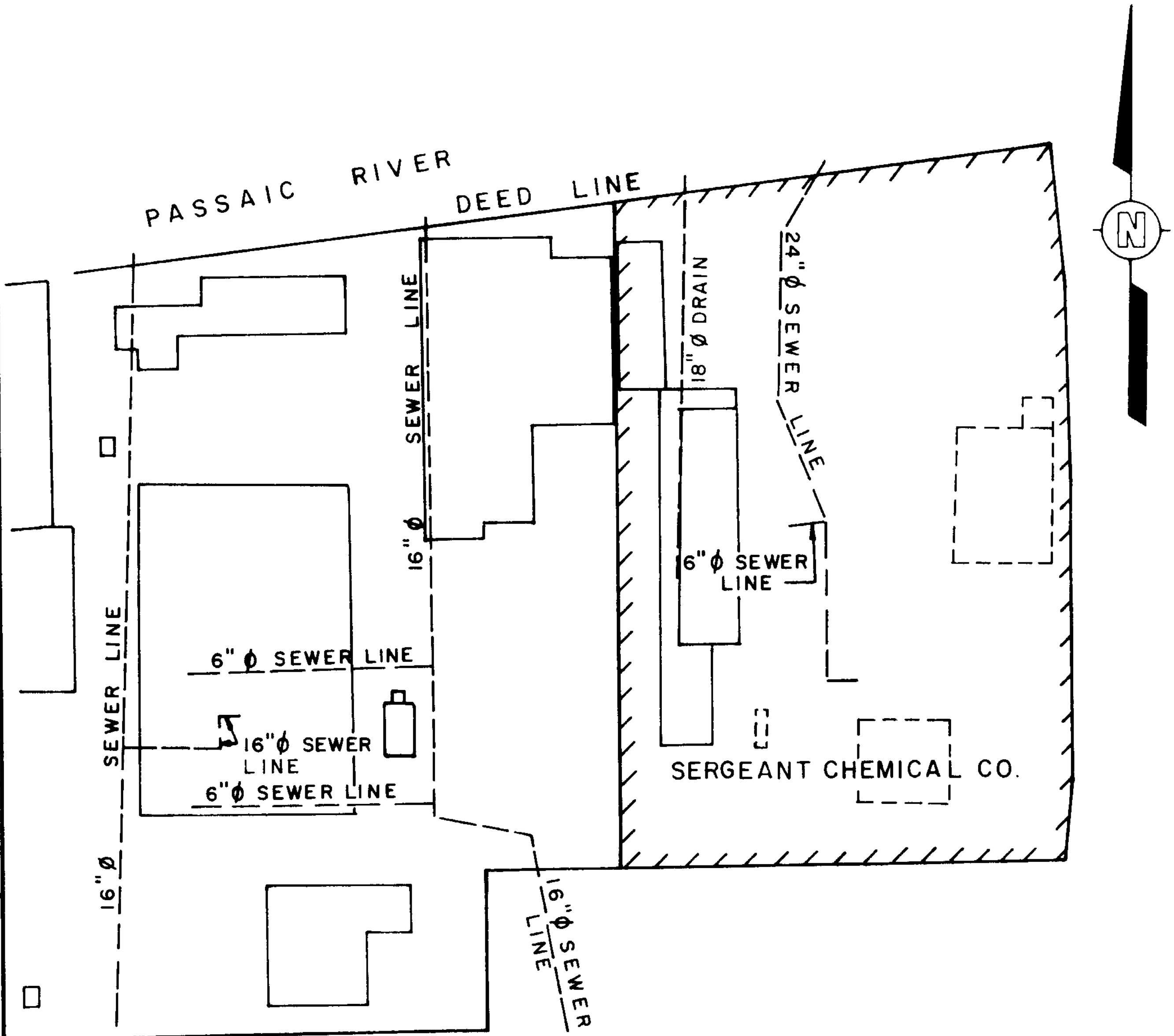
DRAWN BY		CHECKED BY		DRAWING NUMBER
RW		JAD	1-29-86	846733-B13
	12-27-85	APPROVED BY JAD	2-7-86	



SCALE
0 100 200FEET

FIGURE 6.5-1

PRESUMED LOCATION OF
ABANDONED SEWER LINES

PREPARED FOR

DIAMOND SHAMROCK
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DRAWN BY	D Weick	4-17-85
CHECKED BY	ND	5-1-85
APPROVED BY	DHE	5-1-85
DRAWING NUMBER	846722-A22	

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APPENDIX A

APPENDIX A

(BORING AND MONITORING WELL LOGS)

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-101A

Project 120 Lister Avenue

Location Newark, N.J.

Project No 85C7782-30 Installed By Empire Soils

Date 5/14/85 Time 9:30 a.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

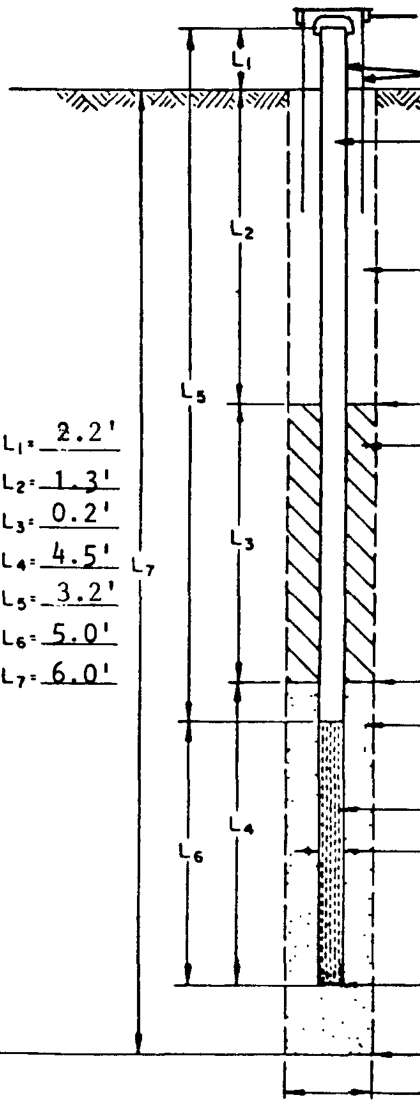
LOG OF BORING AND MONITORING WELL

BORING			
Depth in ft.	Description	Symbol	
	See boring log B-101 for detailed soil description		

Type of Well Groundwater sampling

Ground Elev. 6.0'

Top of Riser Elev. 8.8'



L1= 2.2'
L2= 1.3'
L3= 0.2'
L4= 4.5'
L5= 3.2'
L6= 5.0'
L7= 6.0'

I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)

Top of Seal Elev 4.7'

Type of Seal Material Bentonite pellets

Top of Filter Elev 4.5'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev 0.0'

Bottom of Boring Elev 0.0'

Diameter of Boring 12"

Remarks

Figure B-1

Inspected By J.T. Moore

WOODWARD – CLYDE CONSULTANTS

DEP\DA0100574

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-101B

Project 120 Lister Avenue

Location Newark, N.J.

Project No 85C7782-30 Installed By Empire Soils

Date 5/31/85 Time 3:30 p.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

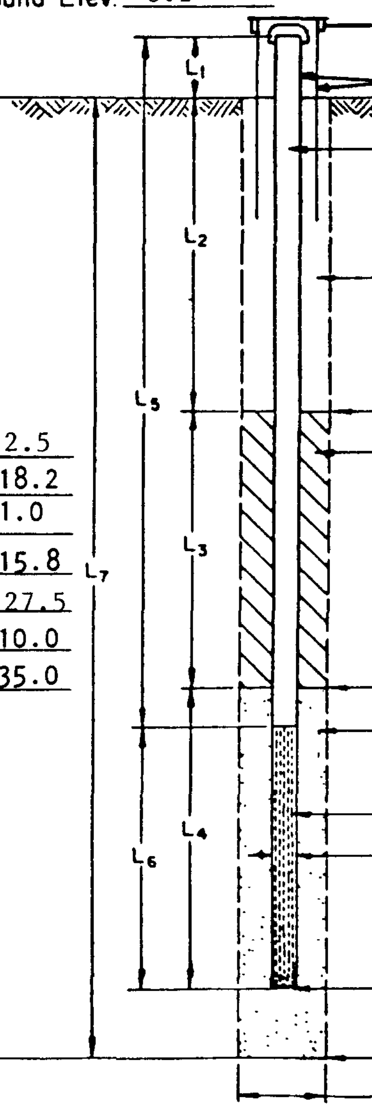
BORING

Depth in ft.	Description	Symbol
	See boring log B-101B for detailed soil description	

Type of Well Monitoring well

Ground Elev. 6.1'

Top of Riser Elev. 8.6'



- Protective steel casing with locking cap
- Vent holes
- I.D. of Riser Pipe 2"
- Type of Pipe Schedule 40 PVC
- Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)
- Top of Seal Elev -12.1
- Type of Seal Material Bentonite pellets
- Top of Filter Elev -13.1
- Type of Filter Material Graded sand
- Size of Openings 0.010"
- Diameter of Piezometer Tip 2"
- Bottom of Well Elev -28.9
- Bottom of Boring Elev -28.9
- Diameter of Boring 6"

L1= 2.5
L2= 18.2
L3= 1.0
L4= 15.8
L5= 27.5
L6= 10.0
L7= 35.0

Remarks

Figure B-2

Inspected By James Moore

WOODWARD – CLYDE CONSULTANTS

DEP\DA0100575

MONITORING WELL INSTALLATION REPORT

Project 120 Lister Avenue

Project No. 85C7782-30 Installed By Empire Soils

Monitoring Well No. MW-101D

Location Newark, N.J.

Date 5/30/85 Time 1:00 p.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

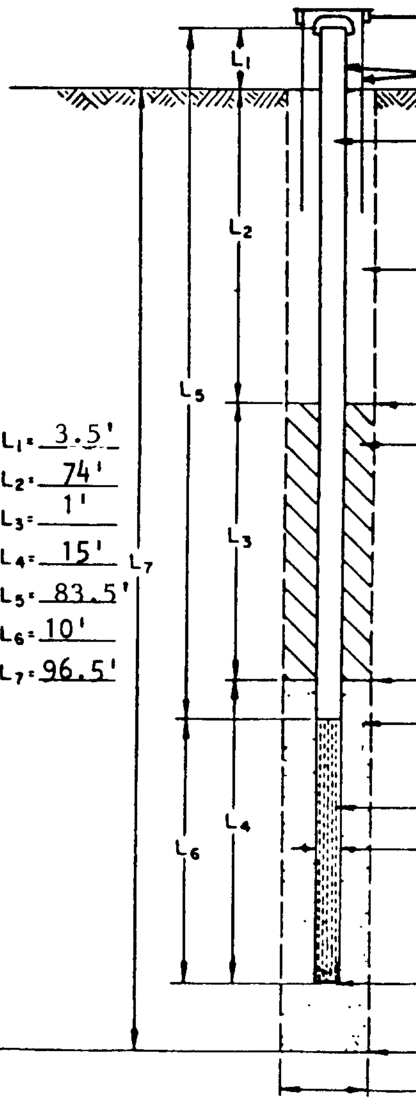
BORING

Depth in ft.	Description	Symbol
	See boring log for B-101D for detailed soil description	

Type of Well Monitoring well

Ground Elev. 5.9'

Top of Riser Elev. 9.4'



L_1= 3.5'
L_2= 74'
L_3= 1'
L_4= 15'
L_5= 83.5'
L_6= 10'
L_7= 96.5'

I.D of Riser Pipe 9.7'

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)

Top of Seal Elev -68.1

Type of Seal Material Graded sand

Top of Filter Elev -69.1'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev. -84.1'

Bottom of Boring Elev -90.6'

Diameter of Boring 6"

Remarks

Figure B-3

Inspected By James T. Moore

WOODWARD – CLYDE CONSULTANTS

DEP\DA0100576

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-102A

Project: 120 Lister Avenue

Location: Newark, N.J.

Project No. 85C7782-30

Installed By: Empire Soils

Date: 5/10/85

Time: 10:47 a.m.

Method of Installation: Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

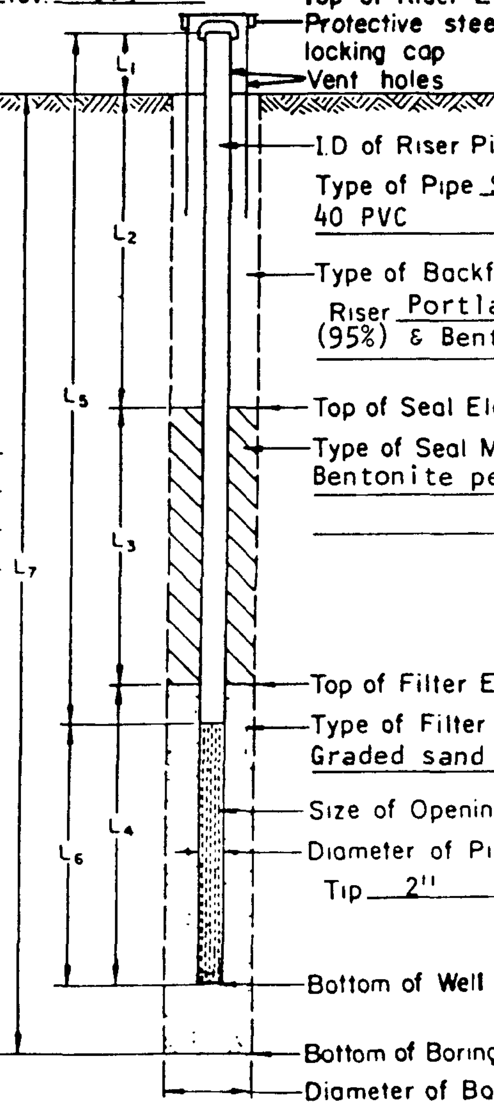
BORING

Depth in ft.	Description	Symbol
	See boring log B-102A for detailed soil description	

Type of Well: Monitor well

Ground Elev. 6.9'

Top of Riser Elev 10.2'



Protective steel casing with locking cap

Vent holes

I.D of Riser Pipe 2"

Type of Pipe: Schedule 40 PVC

Type of Backfill Around Riser: Portland cement (95%) & Bentonite (5%)

Top of Seal Elev 5.9'

Type of Seal Material: Bentonite pellets

Top of Filter Elev 5.7

Type of Filter Material: Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev 0.4'

Bottom of Boring Elev 0.4'

Diameter of Boring 12"

L_1 = 3.3'
L_2 = 1.0'
L_3 = 0.2'
L_4 = 5.3'
L_5 = 5.8'
L_6 = 4.0'
L_7 = 6.5'

Remarks

Figure B-5

Inspected By: James Moore

DEP\DA0100577

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-102C

Project 120 Lister Avenue

Location Newark, N.J.

Project No. 85C7782-30 Installed By Empire Soils Date 6/22/85 Time 4:36

Method of Installation Drilled with CME-55 Rig. Installation as per the project work plan.

LOG OF BORING AND MONITORING WELL

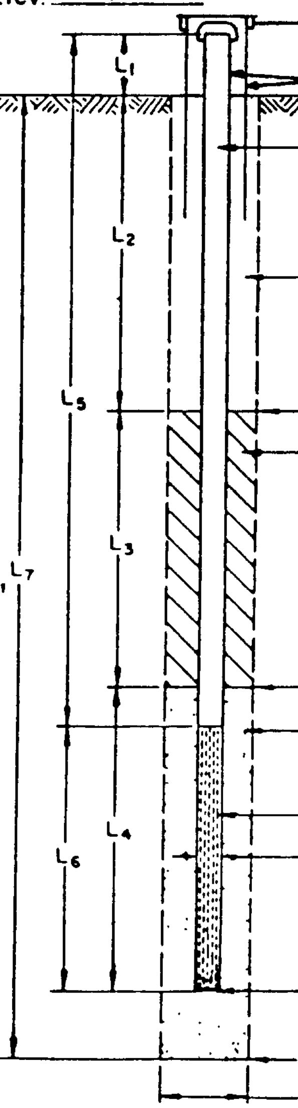
BORING

Depth in ft.	Description	Symbol
	See boring log B-102 D for detailed soil description	

Type of Well Groundwater sampling

Ground Elev. 6.9'

Top of Riser Elev. 10.4'



- Protective steel casing with locking cap
- Vent holes
- I.D. of Riser Pipe 2"
- Type of Pipe Schedule 40 PVC
- Type of Backfill Around Riser Portland cement (95%) & bentonite (5%)
- Top of Seal Elev -26.3
- Type of Seal Material bentonite pellets
- Top of Filter Elev -27.8
- Type of Filter Material Graded sand
- Size of Openings 0.010"
- Diameter of Piezometer Tip 2"
- Bottom of Well Elev -42.1
- Bottom of Boring Elev. -59.6
- Diameter of Boring 6"

L_1 = 3.5'
L_2 = 33.2
L_3 = 1.5
L_4 = 14.3
L_5 = 42.5'
L_6 = 10.0
L_7 = 66.5

Remarks

Figure B-4

Inspected By James T. Moore

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-103A

Project 120 Lister Avenue

Location Newark, N.J.

Project No. 85C7782-30 Installed By Empire Soils

Date 6/1/85 Time 11:00 a.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

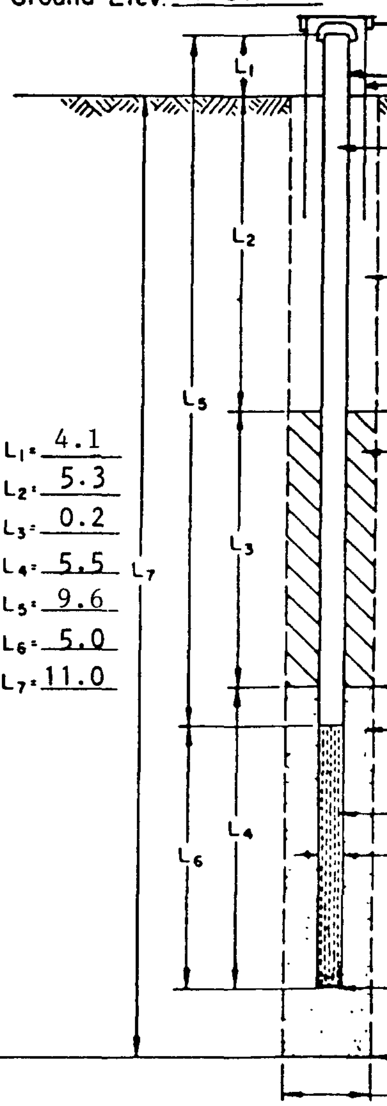
BORING

Depth in ft.	Description	Symbol
	See boring log B-103A for detailed soil description	

Type of Well Monitoring well

Ground Elev. 7.30'

Top of Riser Elev. 11.4'



Protective steel casing with locking cap

Vent holes

I D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland cement (95%) & Bentonite (5%)

Top of Seal Elev 2.00'

Type of Seal Material Graded sand

L1 = 4.1
L2 = 5.3
L3 = 0.2
L4 = 5.5
L5 = 9.6
L6 = 5.0
L7 = 11.0

Top of Filter Elev 1.80'

Type of Filter Material Graded sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev. -3.70'

Bottom of Boring Elev. -3.70'

Diameter of Boring 12"

Remarks This is the third 103A well installed.

Figure B-6

Inspected By James T. Moore

WOODWARD - CLYDE CONSULTANTS

MONITORING WELL INSTALLATION REPORT

Project: 120 Lister Avenue
Project No. 85C7782-30 Installed By: Empire Soils
Monitoring Well No. MW-103A-2
Location: Newark, N.J.
Date: 4/16/85 Time: 4:00 p.m.

Method of Installation: Drilled with CME-55 rig. Installation as per the project work plan

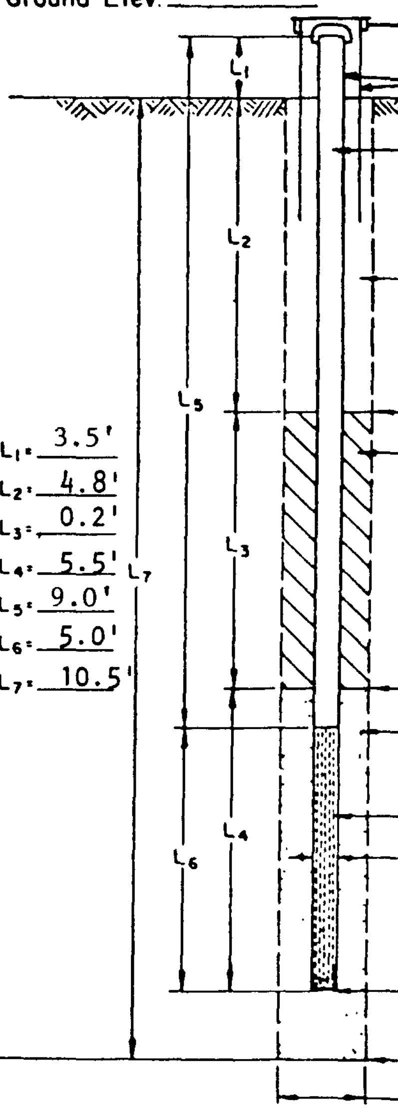
LOG OF BORING AND MONITORING WELL

BORING

Depth in ft.	Description	Symbol
	See boring log B-103 for detailed soil description	

Type of Well: Groundwater sampling

Ground Elev. 7.3'



L1 = 3.5'
L2 = 4.8'
L3 = 0.2'
L4 = 5.5'
L5 = 9.0'
L6 = 5.0'
L7 = 10.5'

Top of Riser Elev 10.8'
Protective steel casing with locking cap
Vent holes
I.D of Riser Pipe 2"
Type of Pipe Schedule 40 PVC
Type of Backfill Around Riser Portland Cement (95%) & Bentonite (5%)
Top of Seal Elev 2.50'
Type of Seal Material Bentonite pellets
Top of Filter Elev 2.30'
Type of Filter Material Graded sand
Size of Openings 0.010"
Diameter of Piezometer Tip 2"
Bottom of Well Elev. -3.20'
Bottom of Boring Elev -3.20'
Diameter of Boring 12"

Remarks: Bottom of well screen sealed with unglued slip cap. A 1.5' X 1.5' X 1.5' protective cement collar was poured around the protective steel casing.
This is second 103A well installed.

Figure B-7

Inspected By: R. Fessler/J. Moore

WOODWARD - CLYDE CONSULTANTS

DEP\DA0100580

MONITORING WELL INSTALLATION REPORT

Monitoring Well No. MW-103D

Project 120 Lister Avenue

Location Newark, N.J.

Project No. 85C7782-30 Installed By Empire Soils

Date 5/7/85 Time 9:00 a.m.

Method of Installation Drilled with CME-55 rig. Installation as per the project work plan

LOG OF BORING AND MONITORING WELL

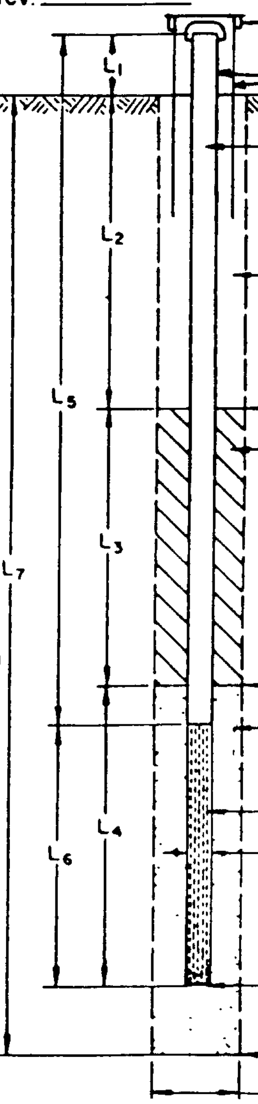
BORING

Depth in ft.	Description	Symbol
	See boring log B-103D for detailed soil description	

Type of Well Groundwater sampling

Ground Elev. 7.3'

Top of Riser Elev. 10.1'



Protective steel casing with locking cap

Vent holes

I.D of Riser Pipe 2"

Type of Pipe Schedule 40 PVC

Type of Backfill Around Riser Portland Cement (95%) & Bentonite (5%)

Top of Seal Elev -60.5'

Type of Seal Material Bentonite pellets

Top of Filter Elev -61.6'

Type of Filter Material Graded fine sand

Size of Openings 0.010"

Diameter of Piezometer Tip 2"

Bottom of Well Elev. -82.7'

Bottom of Boring Elev -95.9'

Diameter of Boring 6"

L_1 = 2.8'
L_2 = 67.8'
L_3 = 1.0'
L_4 = 21.2'
L_5 = 82.8'
L_6 = 10.0'
L_7 = 103.2'

Remarks Sand level was established at 75' in the 6" casing before the 80' to 85' section of casing was removed. When the casing was removed a flowing sand pushed up into 6" casing to a level of 68.8' and stabilized at that depth.

Figure B-8

Inspected By R. Fessler/ J. Moore

WOODWARD - CLYDE CONSULTANTS

DEP\DA0100581

BORING LOG

A-9

SHEET 1 OF 2

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 5-31-85

B-101B

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 6.1 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose, black, medium to fine Gravel FILL with coarse to fine grained sand, some silt, and trace of organics Loose, black, coarse to fine grained Sand FILL with trace of silt, brick fragments, cinders With rock chips With rock fragments	Black coarse to fine SAND and medium to fine Gravel, trace Silt. Fill. Black and reddish-brown coarse to fine SAND, trace Silt. Fill: brick fragments cinders	Boring advanced with 12" steel casing driven with 1000 lb. hammer
5						
	U	24/24	P	Soft, brown, organic SILT and PEAT with trace of clay	Brown Organic SILT and PEAT, trace Clay.	12" steel casing set at 6.5'. Boring continued with 12" O.D. HSA.
10	U	24/24	P			
	U	24/24	P	Soft, brownish-gray, SILT with trace of clay and organic material	Brownish gray SILT, trace Peat and Organic Material, trace (-) Clay.	
	U	24/24	P	Soft, brown, SILT with trace of clay	Brown SILT, trace(-) Clay.	
15	U	24/24	P	Loose, black, coarse to fine grained Silty SAND	Black coarse to medium (+) to fine SAND, trace Silt.	8" PVC casing set at 15.0' and grouted. Boring cont. with 6" nominal steel casing.
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-1

DEP\DA0100582

BORING LOG

A-10

SHEET 2 OF 2

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

B-101B

DATE 5-31-85

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 6.1 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20	S	8/18	18 18 18	Dense, brownish black, coarse to fine grained Silty SAND	Brownish black coarse to medium(+) to fine SAND, little Silt.	Thin lense of silt and wood fragments in split spoon
25	S	5/18	13 10 24		Brownish black coarse to fine SAND, trace Silt.	
30	S	7/18	12 18 42	Very dense, blackish red, coarse to fine grained, Clayey SAND with some medium to fine gravel	Blackish red coarse to medium(+) to fine SAND, little(+) medium to fine(+) Gravel, trace(+) Clay.	
35	S	3/18	4 4 18	Medium dense, dark brown, medium to fine grained, Clayey GRAVEL with trace coarse to fine grained sand	Dark brown medium to fine (+) GRAVEL trace(+), coarse to medium to fine Sand, trace Clay.	Bottom of boring 36.5' Well installed at 35.0'
40						

Note:

Depth	IT Sample #
6.5'-8.5'	3473
8.5'-10.5'	3474
10.5'-12.5'	3475
12.5'-14.5'	3476
14.5'-16.5'	3477
20.0'-21.5'	3479
25.0'-26.5'	3480
30.0'-31.5'	3481
35.0'-36.5'	3482

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-2

DEP\DA0100583

BORING LOG

A-11

SHEET 1 OF 5

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 5-15-85 to 5-30-85

B-101D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 5.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose, black, medium to fine Gravel FILL with coarse to fine grained sand, some silt, and trace of organics	Black coarse to fine SAND and medium to fine Gravel, trace Silt. Fill.	Boring advanced with 12" steel casing driven with 1000 lb. hammer
				Loose, black, coarse to fine grained Sand FILL with trace of silt, brick fragments, cinders	Black and reddish-brown coarse to fine SAND, trace Silt. Fill: brick fragments cinders.	
				With rock chips		
				With rock fragments		
5						
				Very loose, brown, organic SILT and PEAT with trace of clay	Brown Organic SILT and PEAT, trace Clay..	12" steel casing set at 6.5'. Boring continued with 12" O.D. HSA.
10						
				Loose, brownish-gray, SILT with trace of clay and organic material	Brownish gray SILT, trace Peat and Organic Material, trace (-) Clay.	
				Loose, brown, SILT with trace of clay	Brown SILT, trace(-) Clay.	
15				Loose, black, coarse to fine grained Silty SAND	Black coarse to medium (+) to fine SAND, trace Silt.	8" PVC casing set at 15.0' and grouted. Boring cont. with 6" nominal steel casing.
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-3

DEP\DA0100584

BORING LOG

SHEET 2 OF 5

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-

B-101D

DATE 5-15-85 to 5-30-

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 5.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20				Dense, brownish black, coarse to fine grained Silty SAND	Brownish black coarse to medium(+) to fine SAND, little Silt.	Thin lense of silt and wood fragments in split spoon
25					Brownish black coarse to fine SAND, trace Silt.	
30				Very dense, blackish red, coarse to fine grained, Clayey SAND with some medium to fine gravel	Blackish red coarse to medium(+) to fine SAND, little(+) medium to fine(+) Gravel, trace(+) Clay,	
35				Medium dense, dark brown, medium to fine grained, Clayey GRAVEL with trace coarse to fine grained sand	Dark brown medium to fine (+) GRAVEL trace(+), coarse to medium to fine Sand, trace Clay.	
40						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO A-4

BORING LOG

A-13

SHEET 3 OF 5

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 5/15-30/85

RIG CME-55

B-101D

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 5.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
40	S	0/18	-	SAME: Medium dense, dark brown, fine to medium grained Clayey GRAVEL with trace of coarse to fine-grained sand	SAME: Dark brown medium to fine(+) GRAVEL trace(+), coarse to medium to fine Sand, trace Clay.	A sample was attempted 2 times from 40.0'-41.5' but no recovery was obtained
45	S	5/18	9 14 18	Dense, red brown, coarse to fine grained, Clayey SAND with trace silt	Red brown coarse to medium (+) to fine SAND, trace(+) Clay, trace(-) Silt.	
50	S	4/18	6 9 22			
55	S	0/18	-			No sample was recovered due to sand blowing up into the casing.

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-5

DEP\DA0100586

BORING LOG

SHEET 4 OF 5

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 5/15-30/85

B-101D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 5.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
60	S	6/18	7 7 7	Medium dense, reddish brown, medium to fine grained Silty SAND	Reddish brown medium to fine(+) SAND, little Silt.	
65	S	5/18	18 27 19	Dense, reddish brown, coarse to fine grained, Silty SAND with trace medium to fine gravel and clay	Reddish brown coarse to medium(+) to fine SAND, little(+) Silt, trace(+) medium to fine Gravel, trace Clay.	
70	S	0/10	5 50/4"	Dense, reddish brown, fine grained, Silty SAND with layers of fine gravel	Reddish brown fine SAND, little(-) Silt, trace (+) fine Gravel in layers.	No recovery due to sand repeatedly blowing up into casing
75	S	7/18	10 22 32			Loss of drilling fluid
80						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-6

BORING LOG

SHEET 5 OF 5

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 5/15-30/85

B-101D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 5.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
80	S	10/18	5 10 22	Dense, reddish brown CLAY with some medium to fine grained gravel, trace of medium to fine grained sand and silt	Reddish brown CLAY trace, medium to fine Sand, some medium to fine(+) Gravel, trace(-) Silt.	
85	S	15/18	7 20 22	Dense, reddish brown, medium to fine grained, Silty SAND with trace of medium to fine grained gravel and clay	Reddish brown medium to fine SAND, little(-) Silt, trace(+) Clay, trace(-) medium to fine(+) Gravel.	
90	S	17/18	13 24 54	Very dense, reddish brown, SILT with some medium to fine gravel, little coarse to fine grained sand and trace of clay	Reddish brown SILT little (-), coarse to fine Sand, some medium to fine(+) Gravel, trace(-) Clay.	
95	S	16/18	52 69 104	Very dense, reddish brown SILT and SHALE fragments with little medium to fine gravel and trace of coarse to fine grained sand and clay	Reddish brown SILT and SHALE trace(-), coarse to fine Sand, little medium to fine(+) Gravel, trace(+) Clay.	Bottom of boring 96.5' MW-101D installed at 90'
100						

Note:

Depth	IT Sample #	Depth	IT Sample #
45.0'-46.5'	3483	75.0'-76.5'	3501
50.0'-51.5'	3484	80.0'-81.5'	3502
60.0'-61.5'	3485	85.0'-86.5'	3503
65.0'-66.5'	3490	90.0'-91.5'	3504
		95.0'-96.5'	3505

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-7

BORING LOG

SHEET 1 OF 1

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 5-10-85

B-102A

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods; at 5.0 (Est.)

SURFACE ELEVATION 6.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0	T	6/6	--	Loose, black, coarse to fine grained Sand FILL with trace medium to fine gravel, ash, cinders	Black coarse to medium (+) to fine SAND, little(+) Silt, trace(+) medium to fine Gravel. Fill: ash, cinders	Boring advanced with hand trowel (T) and 12" OD HSA
	S	5/6	8			
	S	6/12	7 5	Grading down to: loose, brown, coarse to fine grained, Silty Sand FILL with trace medium to fine gravel, brick fragments, cinders	Grading to: Brown coarse to medium(+) to fine SAND, trace medium to fine Gravel, trace Silt. Fill: brick fragments, cinders	Water detected ATD (Estimated)
	S	8/18	3 3 4			
	S	3/18	5 6 6	Loose, brown, coarse to fine grained silty Sand FILL with trace medium to fine gravel	Brown coarse to medium(+) to fine SAND, trace medium to fine(+) Gravel, trace(-) Silt. Fill.	Rock wedged in split spoon tip.
5	S	3/12	1 0	Loose, brown, coarse to fine grained Sand FILL with some medium to fine gravel, and trace silt	Brown coarse to medium(+) to fine SAND, little(-) medium to fine Gravel, trace(-) Silt. Fill	
						Bottom of boring 6.0'
						Note: 0.5' of concrete was drilled through before soil was sampled
10						
15						
20						

Note:

Depth	IT Sample #
0.0'-0.5'	3156
0.5'-1.0'	3157
1.0'-2.0'	3158
2.0'-3.5'	3159
3.5'-5.0'	3160
5.0'-6.0'	3165

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-8

BORING LOG

SHEET 1 OF 4

PROJECT NO. 85C7782-30

DATE 5-11-85 to 5-12-85

RIG CME-55

WATER ENTERS Not determined due to drilling methods

PROJECT NAME 120 LISTER AVENUE

B-102D

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

SURFACE ELEVATION 6.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose, black, coarse to fine grained Sand FILL with trace medium to fine gravel, ash, cinders Grading down to: loose, brown, coarse to fine grained, Silty Sand FILL with trace medium to fine gravel, brick fragments, cinders Loose, brown, coarse to fine grained silty Sand FILL with trace medium to fine gravel	Black coarse to medium (+) to fine SAND, little(+) Silt, trace(+) medium to fine Gravel. Fill: ash, cinders Grading to: Brown coarse to medium(+) to fine SAND, trace medium to fine Gravel, trace Silt. Fill: brick fragments, cinders Brown coarse to medium(+) to fine SAND, trace medium to fine(+) Gravel, trace(-) Silt. Fill.	Boring advanced with 12" steel casing driven with 1000 lb. hammer
5				Loose, brown, coarse to fine grained Sand FILL with some medium to fine gravel, and trace silt	Brown coarse to medium(+) to fine SAND, little(-) medium to fine Gravel, trace(-) Silt. Fill	12" steel casing set at 6.5'. Boring continued with 12" O.D. HSA
	U	18/24	P	Loose, brown, slightly plastic, organic SILT with trace of clay, organic matter and wood fragments	Brown Organic SILT, trace (-) Clay: organic material, wood fragments	
	U	18/24	P			
10	U	24/24	P	Loose, brownish-gray, slightly plastic SILT with trace of clay	Brownish gray Organic SILT, trace(-) Clay	
	U	24/24	P	Loose, gray, slightly plastic SILT with trace of clay	Gray Organic SILT, trace(-) Clay: increasing organic material	
15				Medium dense, black, coarse to fine-grained silty SAND	Black, coarse to medium (+) to fine SAND, trace Silt.	8" PVC casing set at 15.0'.. Boring continued with 6" nominal steel casing driven with 800 lb. hammer.
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-9

BORING LOG

A-18

SHEET 2 OF 4

PROJECT NO. 85C7782-30

DATE 6/20/85 - 6/22/85

RIG CME-55

WATER ENTERS Not determined due to drilling methods

PROJECT NAME 120 LISTER AVENUE

B-102D

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

SURFACE ELEVATION 6.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20	S	11/18	15 19 20	Dense, black, medium to fine-grained Silty SAND	Black coarse to medium (+)	
25	S	11/18	10 12 22	Dense, black, coarse to fine-grained Silty SAND with a little medium to fine gravel	Black coarse to medium (+) to fine SAND, little (-) medium to fine Gravel, trace Silt.	
30	S	2/18	11 24 27	Very dense, brownish-black, medium to fine Silty GRAVEL with some coarse to fine-grained sand and a trace of clay	Brown black medium to fine GRAVEL some (-), coarse to fine Sand, trace Silt, trace (-) Clay.	
35	S	2/18	11 12 18	Medium dense, dark brown, coarse to fine-grained Silty SAND with trace fine gravel	Dark brown coarse to medium (+) to fine SAND, trace (+) fine Gravel, trace Silt.	
40						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-10

BORING LOG

A-19

SHEET 3 OF 4

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/20/85 - 6/22/85

B-102D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods.

SURFACE ELEVATION 6.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
40	S	4/18	16 16 11	Medium dense, red brown, coarse to fine-grained Silty SAND with a trace of clay	Red brown coarse to medium (+) to fine SAND, trace Silt, trace (-) Clay.	
45	S	11/18	13 15 16	Medium dense, red brown, medium to fine-grained Silty SAND with a trace of clay	Red brown medium to fine (+) SAND, trace (+) Silt, trace Clay.	
50	S	8/18	8 8 7	Medium dense, red brown, Clayey SILT	Red brown SILT, trace (+) Clay.	
55	S	18/18	15 19 30	Becoming dense with a trace of fine-grained sand	Red brown SILT trace (-), fine Sand, trace (+) Clay.	
60						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-11

BORING LOG

SHEET 4 OF 4

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 6/20/85 - 6/22/85

B-102D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods.

SURFACE ELEVATION 6.9 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
60	S	18/18	13 15 10	Medium dense, red brown, Clayey SILT with a trace fine-grained sand	Red brown SILT trace, fine Sand, little (-) Clay.	
				Dense, red brown, medium dense, medium to fine grained Silty SAND	Red brown medium to fine (+) SAND, trace Silt.	
65	S	9/18	25 29 28	Very dense, red-brown, medium to fine-grained Silty SAND with a trace of Clay.	Red brown medium to fine SAND, trace (+) Silt, trace (-) Clay.	Bottom of Boring 66.5' Boring was back-filled with grout to 51.0' and sand to 50.0'. MW-102C was installed at 50.0
70						
75						
80						

Note:

Depth	IT Sample No.
6.5'-8.5'	3166
8.5'-10.5'	3167
10.5'-12.5'	3168
12.5'-14.5'	3169
20'-21.5'	4354
25.0'-26.5'	4355
30.0'-31.5'	4356
35.0'-36.5'	4357
40.0'-41.5'	4358
45.0'-46.5'	4359
50.0'-51.5'	4371
55.0'-56.5'	4372
60.0'-60.5'	4373
60.5'-61.5'	4384
65.0'-66.5'	4385

BORING LOG

SHEET 1 OF 6

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 4/18 to 5/4-85

B-103D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.3 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0				Loose, brown, medium to fine Gravel FILL with trace Silt.	Brown medium to fine GRAVEL trace, coarse Sand, trace Silt. Fill.	
				Loose, brown-black, Silt FILL with trace fine grained sand	Brown black SILT trace, fine Sand. Fill.	
				Medium dense, brown, coarse to fine grained Sand FILL with some silt, trace of organic material	Brown coarse medium(+) to fine SAND, trace Silt. Fill: organic material.	
5				Loose, red-brown, coarse to fine grained Sand FILL with some silt in thin lenses	Red brown coarse medium(+) to fine SAND, some Silt in thin lenses. Fill.	
				Medium dense, grayish-brown, SILT with lenses of fine grained sand	Grayish brown SILT some, fine Sand in thin lenses.	
				Medium dense, brown, coarse to fine grained, SAND with trace of silt	Brown coarse to fine SAND, trace Silt.	
10				Becoming siltier	Black coarse to fine SAND, and Silt.	
	U	6/24	P	Medium dense, blackish-brown, coarse to fine grained, Silty SAND	Blackish brown coarse to fine SAND, little(-) Silt.	12" steel casing set at 11.0'. Boring continued with 12" O.D. HSA
	S	2/24	P	Becoming black	Black coarse to medium(+) to fine SAND, trace(-) Silt.	
15	S	6/18	6 6 7	Loose, black, medium to to fine grained, Silty SAND	Black coarse to medium(+) to fine SAND, trace(+) Silt.	8" PVC casing set at 15.0' and grouted. Boring continued with 6" nominal steel casing driven with 800 lb. hammer
20						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-13

DEP\DA0100594

BORING LOG

SHEET 2 OF 6

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

B-103D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.3 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
20	S	14/18	9 19 22	Dense, black, coarse to fine grained Silty SAND with trace of fine gravel	Black coarse to fine SAND, little(-) Silt, trace fine Gravel.	
25	S	15/18	11 19 29			1st attempt yielded no recovery. 2nd attempt made with 3" split spoon sampler
30	S	4/18	9 10 12	Medium dense, black, medium to fine grained Silty SAND	Black medium to fine(+) SAND, trace Silt.	
35	S	5/18	13 15 20	Dense, brown, medium to fine grained Silty SAND	Brown medium(+) to fine SAND, trace Silt.	
40						

BORING LOG

SHEET 3 OF 6

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

B-103D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.3 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
40	S	13/18	4 4 6	Loose to medium dense, black, coarse to fine grained, Silty SAND	Black coarse(+) to fine SAND, trace(-) Silt.	
45	S	9/18	4 6 2	Loose, black, coarse to fine grained Clayey SAND with trace silt	Black coarse to medium(+) to fine SAND, trace(+) Clay, trace(-) Silt.	Sample retained on 3rd attempt
50	S	18/18	36 40 44	Very dense, reddish brown, coarse to fine grained Clayey SAND with trace of silt	Reddish brown coarse to medium(+) to fine SAND, trace(+) Clay, trace(-) Silt.	
55	S	8/18	14 26 29	with some fine gravel	Reddish brown coarse to medium(+) to fine SAND, little(-) fine Gravel, trace(+) Clay.	
60						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-1

BORING LOG

SHEET 4 OF 6

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

B-103D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.3 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
60	S	10/18	8 4 6	Stiff, red brown, medium plastic Silty CLAY	Red brown Clay, little Silt.	
65	S	15/18	9 9 8	Very stiff, red brown, low plastic Silty CLAY	Red brown CLAY, little (+) Silt.	
	U/S	24/24	P	- with some medium to fine grained SAND	Red brown CLAY some, medium to fine(+) Sand, trace(+) Silt .	Shelby tube attempt from 67 to 69 ft. yielded no recovery; resampled with 3" split spoon.
70	S	2/24	4 6 6 7			
	S	8/24	8 6 8 8	Medium dense, red brown, coarse to fine grained, Silty SAND with a little fine gravel and trace of clay	Red brown coarse to medium (+) to fine SAND, little(-) fine Gravel, trace(+) Silt, trace(-) Clay.	
75	S	18/18	25 34 31	Very dense, red brown, coarse to fine grained, Clayey SAND with some medium to fine gravel	Red brown coarse to fine SAND, some(-) medium to fine Gravel, little(-) Clay.	Alternating lenses of coarse clean sand fine sand, and clayey gravel with trace of silt.
80						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-16

DEP\DA0100597

BORING LOG

A-25

SHEET 5 OF 6

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

B-103D

PROJECT LOCATION Newark, New Jersey

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS Not determined due to drilling methods

SURFACE ELEVATION 7.3 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
80	S	9/18	12 11 18	Very stiff, red brown, medium plastic Silty CLAY	Red brown CLAY, little Silt.	
				Hard, red brown, low plastic Silty CLAY with some medium to fine gravel	Red brown CLAY, little(+) Silt, little (-) medium to fine Gravel.	
85	S	13/18	16 32 62			
90	S	7/18	5 14 28	Hard, red brown, low plastic CLAY with some medium to fine gravel & trace of silt	Red brown CLAY, some medium to fine(+) Gravel, trace(-) Silt.	
95	S	7/18	16 24 38	Very dense, red brown, coarse to fine grained, Clayey SAND with some medium to fine gravel	Red brown coarse to fine SAND, some medium to fine (+) Gravel, little(-) Clay.	Boring cont. with 4" steel casing driven with 800 lb. hammer
	S	18/18	36 35 117	Very hard, red brown, Silty CLAY with some medium to fine gravel, with root hairs	Red brown CLAY, some medium to fine(+) Gravel, trace Silt: root hairs.	
	S	3/3	100/3"			
100						

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-17

DEP\DA0100598

BORING LOG

SHEET 6 OF 6

PROJECT NO. 85C7782-30

DATE 4-18 to 5-4-85

RIG CME-55

WATER ENTERS Not determined due to drilling methods

PROJECT NAME 120 LISTER AVENUE

B-103D

PROJECT LOCATION Newark, New Jersey

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

SURFACE ELEVATION 7.3 ELEVATION DATUM NJGVC

DEPTH	SAMPLE TYPE	SAMPLE REC.	SAMPLE RESIST	DESCRIPTION U.S.C.	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
100	S	3/3	100/3"	SAME: Very hard, red brown, Silty CLAY with some medium to fine gravel and trace of root hairs	SAME: Red brown CLAY, some medium to fine(+) Gravel, trace Silt: root hairs.	
	S	2/2	100/2"			
	S	2/2	100/2"	SHALE: Hard, red brown	Red brown SHALE.	Bottom of boring 103.2'
105						MW-103D installed at 95.0'

Note:

Depth	IT Sample #
11.0'-13.0'	
13.0'-15.0'	
15.0'-16.5'	
20.0'-21.5'	2894
25.0'-26.5'	2895
30.0'-31.5'	2896
35.0'-36.5'	2897
40.0'-41.5'	2898
45.0'-46.5'	2899
50.0'-51.5'	2900
55.0'-56.6'	2901
60.0'-61.5'	2904
65.0'-66.5'	2905
67.0'-69.0'	2906
69.0'-71.0'	2907
71.0'-73.0'	2912
75.0'-76.5'	2913
80.0'-81.5'	2914
85.0'-86.5'	2915
90.0'-91.5'	2916
95.0'-96.5'	2917
96.5'-98.0'	2918
98.0'-98.3'	2919
100.0'-101.0'	3042
101.5'-103.0'	
103.0'-103.2'	3043

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-18

BORING LOG

SHEET 1 OF 1

PROJECT NAME 120 LISTER AVENUE

PROJECT NO. 85C7782-30

J-8-F
B-111

PROJECT LOCATION Newark, New Jersey

DATE 4-18-85

RIG CME-55

LOGGED BY Moore/Fessler DRILLED BY Empire Soils

WATER ENTERS

SURFACE ELEVATION ELEVATION DATUM

DEPTH	SAMPLE TYPE	REC	RESIST	DESCRIPTION U.S.C	DESCRIPTION BURMISTER	SPECIAL NOTES AND FIELD OBSERVATIONS
0	T	6/6	-	Loose, black, coarse to fine-grained SAND FILL with some medium to fine Gravel trace ash, cinders,	Black coarse to medium (+) to fine SAND, and medium to fine (+) Gravel. FILL: ash, cinders	Boring advanced with 12" OD HSA and hand trowel (T).
	S	6/6	2			
	S	8/12	2 4	Loose, brownish black, coarse to fine-grained SAND FILL with a little medium to fine Gravel	Black coarse medium (+) to fine SAND, little (-) medium to fine Gravel, FILL.	
	S	6/18	3 0 1			Water entered ATD
	S	7/18	1 0 1	Loose, black to red-brown, coarse to fine-grained SAND FILL with trace medium to fine Gravel, Silt	Black to reddish-brown coarse medium (+) to fine SAND, trace (+) medium to fine (+) Gravel, trace (-)	Sample becoming fluid-like
5	S	12/18	1 0 0	Very loose, black, coarse to fine-grained SAND FILL with a little Silt, trace Clay, ashes, cinders	Black, coarse, medium to fine SAND, little Silt, trace (-) Clay, FILL	Split-spoon went 18" under the weight of 1 blow of the hammer
	S	6/18	1 0 0	Very loose, black, coarse to fine-grained SAND FILL with trace of fine Gravel, Silt.	Black, coarse medium (+) to fine SAND, trace fine Gravel Silt, FILL.	
	S	6/18	1 0 0		Black, coarse medium (+) to fine SAND, trace (-) fine Gravel, Silt. FILL.	Note: Sample #109 was composited from 9.5-10.5'.
10	S	14/18	1 0 0			
				Very loose, blackish gray, low plastic SILT with trace of medium to fine grained sand	Blackish gray SILT trace, medium (+) to fine Sand.	Bottom of Boring 11.0' Boring was grouted from bottom to surface following the sampling operation.
15						

Note:

Depth	IT Sample #
0.0'-0.5'	2863
0.5'-1.0'	2864
1.0'-2.0'	2865
2.0'-3.5'	2866
3.5'-5.0'	2867
5.0'-6.5'	2868
6.5'-8.0'	2869
8.0'-9.5'	2870
9.5'-11.0'	2872

WOODWARD-CLYDE CONSULTANTS

FIGURE NO. A-19

APPENDIX B

APPENDIX B

(FINAL DIOXIN RESULTS)

RSLT.LNE	CLIENT #	SAM.DESC	SORT 2	TACK
1.2 ppb	C-8-D-2000-100-S-L	Near Surface Soil-Station C-8-D, 1-6"	850115	SARGENT2
24.3 ppb	C-8-D-2001-101-S-L	Near Surface Soil-Station C-8-D, 6-12"	850115	SARGENT2
2.1 ppb	C-8-D-2002-102-S-L	Near Surface Soil-Station C-8-D, 12-24"	850115	SARGENT2
0.48 ppb	H-9-D-2003-100-S-L	Near Surface Soil-Station H-9-D, 0-16"	850115	SARGENT2
1.1 ppb	H-9-D-2004-101-S-L	Near Surface Soil-Station H-9-D, 6-12"	850115	SARGENT2
0.79 ppb	H-9-D-2005-102-S-L	Near Surface Soil-Station H-9-D, 12-24"	850115	SARGENT2
8.3 ppb	J-11-D-2006-100-S-L	Near Surface Soil-Station J-11-D, 0-6"	850115	SARGENT2
1.3 ppb	J-11-D-2007-101-S-L	Near Surface Soil-Station J-11-D, 6-12"	850115	SARGENT2
ND (0.07 ppb)	J-11-D-2008-102-S-L	Near Surface Soil-Station J-11-D, 12-24"	850115	SARGENT2
0.57 ppb	K-10-D-2009-100-S-L	Near Surface Soil-Station K-10-D, 0-6"	850116	SARGENT2
0.27 ppb	4100-2014-C-L	Chip-Brick Bldg, Interior, N.W. Corner	850115	SARGENT2
ND (0.30 ppb)	4501-2015-C-L	Chip-Brick Bldg, Exterior, N.W. Corner	850115	SARGENT2
0.48 ppb	4100-2016-C-L	Chip-Brick Bldg, Interior, S.E. Corner	850115	SARGENT2
1.1 ppb	4400-2017-C-L	Chip-Brick Bldg, Roof	850115	SARGENT2
0.13 ppb	4100-2018-C-L	Chip-Brick Bldg, Floor	850115	SARGENT2
ND (0.30 ppb)	4503-2019-C-L	Chip-Brick Bldg, Exterior, S.E. Corner	850115	SARGENT2
ND (1.3 ng/sample)	A006-2037-A-L	Ambient Air-120 Lister (Northeast)	850117	SARGENT2
ND (0.30 ppb)	5100-2057-C-L	Chip-Block Bldg, Interior, N.W. Corner	850116	SARGENT2
ND (0.23 ppb)	5501-2058-C-L	Chip-Block Bldg, Exterior, N.W. Corner	850116	SARGENT2
ND (5.0 ppb)	5100-2059-C-L	Chip-Block Bldg, Interior, S.E. Corner	850116	SARGENT2
ND (0.10 ppb)	5300-2060-C-L	Chip-Block Bldg, Exterior, S.E. Corner	850116	SARGENT2
ND (0.40 ppb)	5100-2061-C-L	Chip-Block Bldg, High Traffic	850116	SARGENT2
0.39 ppb	5400-2062-C-L	Chip-Block Bldg, Roof	850116	SARGENT2
ND (0.72 ppb)	G-10-D-2063-100-S-L	Near Surface Soil-Station G-10-D, 0-6"	850116	SARGENT2
ND (0.50 ppb)	G-10-D-2064-101-S-L	Near Surface Soil-Station G-10-D, 6-12"	850116	SARGENT2
0.55 ppb	E-10-D-2066-100-S-L	Near Surface Soil-Station E-10-D, 0-6"	850116	SARGENT2
ND (0.08 ppb)	E-10-D-2067-101-S-L	Near Surface Soil-Station E-10-D, 6-12"	850116	SARGENT2
ND (0.58 ppb)	E-10-D-2068-102-S-L	Near Surface Soil-Station E-10-D, 12-24"	850116	SARGENT2
ND (0.7 ppb)	D-10-D-2069-100-S-L	Near Surface Soil-Station D-10-D, 0-6"	850119	SARGENT2
1.1 ppb	K-12-B-2072-100-S-Y	Soil Boring-Station K-12-B, 0-6"	850117	SARGENT2
2.7 ppb	K-12-B-2073-101-S-Y	Soil Boring-Station K-12-B, 6-12"	850117	SARGENT2
0.76 ppb	K-12-B-2074-102-S-Y	Soil Boring-Station K-12-B, 12-24"	850117	SARGENT2
ND (0.82 ng/sample)	A006-2101-A-L	Ambient Air-120 Lister (Southwest)	850118	SARGENT2
ND (0.40 ng/sample)	A006-2102-A-L	Ambient Air-120 Lister (Northeast)	850118	SARGENT2
1.0 ppb	C-9-D-2103-100-S-L	Near Surface Soil-Station C-9-D, 0-6"	850117	SARGENT2
1.0 ppb	C-9-D-2104-101-S-L	Near Surface Soil-Station C-9-D, 6-12"	850117	SARGENT2
4.9 ppb	C-9-D-2105-102-S-L	Near Surface Soil-Station C-9-D, 12-24"	850117	SARGENT2
11.4 ppb	H-12-D-2108-100-S-Y	Near Surface Soil-Station H-12-D, 0-6"	850117	SARGENT2
17.5 ppb	H-12-D-2109-101-S-Y	Near Surface Soil-Station H-12-D, 6-12"	850117	SARGENT2
1.1 ppb	H-12-D-2110-102-S-Y	Near Surface Soil-Station H-12-D, 12-24"	850117	SARGENT2
ND (0.10 ppb)	G-11-D-2111-100-S-L	Near Surface Soil-Station G-11-D, 0-6"	850119	SARGENT2
ND (0.3 ppb)	G-11-D-2112-101-S-L	Near Surface Soil-Station G-11-D, 6-12"	850119	SARGENT2
ND (1.5 ppb)	G-11-D-2113-102-S-L	Near Surface Soil-Station G-11-D, 12-24"	850119	SARGENT2
0.62 ppb	E-12-G-2114-100-S-L	Near Surface Soil-Station E-12-G, 0-6"	850119	SARGENT2
6.9 ppb	D-12-D-2117-100-S-Y	Soil Boring-Station D-12-D, 0-6"	850118	SARGENT2
ND (3.0 ppb)	D-12-D-2118-101-S-Y	Soil Boring-Station D-12-D, 6-12"	850118	SARGENT2

RSLT.LNE	CLIENT#	SAM.DESC	SORT2	TASK
ND (1.7 ppb)	D-12-D-2119-102-S-Y	Soil Boring-Station D-12-D, 12-24"	850118	SARGENT2
ND (2.5 ng/sample)	A006-2157-A-L	Ambient Air-120 Lister (Southwest)	850123	SARGENT2
1.7 ppb	C-10-H-2159-100-S-Y	Near Surface Soil-Station C-10-H, 0-6"	850119	SARGENT2
11.0 ppb	C-10-H-2160-101-S-Y	Near Surface Soil-Station C-10-H, 6-12"	850119	SARGENT2
1.4 ppb	C-10-H-2161-102-S-Y	Near Surface Soil-Station C-10-H, 12-24"	850119	SARGENT2
[illegible].8 ppb	D-8-I-2162-100-S-Y	Near Surface Soil-Station D-8-I, 0-6"	850119	SARGENT2
2.9 ppb	D-8-I-2163-101-S-Y	Near Surface Soil-Station D-8-I, 6-12"	850119	SARGENT2
71. ppb	E-11-F-2165-100-S-Y	Near Surface Soil-Station E-11-F, 0-6"	850119	SARGENT2
> 490. ppb	E-11-F-2166-101-S-Y	Near Surface Soil-Station E-11-F, 6-12"	850119	SARGENT2
97.0 ppb	E-11-F-2167-102-S-Y	Near Surface Soil-Station E-11-F, 12-24"	850119	SARGENT2
2.1 ppb	K-9-D-2168-100-S-Y	Soil Boring-Station K-9-D, 0-6"	850119	SARGENT2
[illegible].1 ppb	K-9-D-2169-101-S-Y	Soil Boring-Station K-9-D, 6-12"	850119	SARGENT2
4.2 ppb	K-9-D-2170-102-S-Y	Soil Boring-Station K-9-D, 12-24"	850119	SARGENT2
1.1 ppb	K-9-D-2171-103-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2
0.42 ppb	K-9-D-2172-104-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2
0.30 ppb	K-9-D-2173-105-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2
ND (0.20 ppb)	K-9-D-2174-106-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2
ND (0.20 ppb)	K-9-D-2175-107-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2
ND (0.07 ppb)	K-9-D-2177-109-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2
1.1 ppb	9300-2178-C-L	Chip-Tile Bldg,NW Corner,Interior,High/Mid/Low ea wal	850119	SARGENT2
1.9 ppb	9300-2179-C-L	Chip-Tile Bldg,SE Corner,Interior,High/Mid/Low ea wal	850119	SARGENT2
ND (1.0 ppb)	9300-2180-C-L	Chip-Tile Bldg,NW Corner,Exterior,High/Mid/Low ea wal	850119	SARGENT2
ND (0.90 ppb)	9300-2181-C-L	Chip-Tile Bldg,SE Corner,Exterior,High/Mid/Low ea wal	850119	SARGENT2
6.3 ppb	9300-2182-C-L	Chip-Tile Bldg, Floor, High Traffic Area	850119	SARGENT2
0.67 ppb	9300-2183-C-L	Chip-Tile Bldg, Roof	850119	SARGENT2
ND (0.01 ppb)	F008-2184-C-L	Field Blank-Chip	850119	SARGENT2
0.56 ppb	F-9-G-2185-100-S-Y	Soil Boring-Station F-9-G, 0-6"	850123	SARGENT2
0.58 ppb	F-9-G-2186-101-S-Y	Soil Boring-Station F-9-G, 6-12"	850123	SARGENT2
ND (0.30 ppb)	F-9-G-2187-102-S-Y	Soil Boring-Station F-9-G, 12-24"	850123	SARGENT2
ND (0.30 ppb)	F-9-G-2188-103-S-Y	Soil Boring-Station F-9-G, 18" interval	850123	SARGENT2
ND (0.30 ppb)	F-9-G-2189-104-S-Y	Soil Boring-Station F-9-G, 18" interval	850123	SARGENT2
ND (0.60 ppb)	F-9-G-2194-109-S-Y	Soil Boring-Station F-9-G, 18" interval	850123	SARGENT2
0.34 ppb	K-12-B-2197-103-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2
0.19 ppb	K-12-B-2198-104-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2
0.72 ppb	K-12-B-2199-105-S-Y	Soil Boring-Station K-12-B, 18" interva	850124	SARGENT2
0.60 ppb	K-12-B-2200-106-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2
0.84 ppb	K-12-B-2201-107-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2
0.54 ppb	K-12-B-2203-109-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2
0.49 ppb	D-12-D-2204-103-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2
0.45 ppb	D-12-D-2205-104-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2
0.23 ppb	D-12-D-2206-105-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2
ND (0.40 ppb)	D-12-D-2210-109-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2
ND (1.3 ng/sample)	A006-2224-A-L	Ambient Air-120 Lister (Southwest)	850128	SARGENT2
ND (0.98 ng/sample)	A006-2225-A-L	Ambient Air-120 Lister (Northeast)	850128	SARGENT2
ND (54 ng/meter2)	9300-2231-W-L	Wipe-Composite of vert.tank 1 & horiz. tank 2,in&out	850128	SARGENT2
ND (54 ng/meter2)	9300-2232-W-L	Wipe-Composite of horiz. tank 3 & vert. tank 4,in&out	850128	SARGENT2

RSLT.LNE	CLIENT #	SAM.DESC	SORT2	TASK
ND (10 ng/meter2)	9300-2233-W-L	Wipe-Composite of horiz. tank 5 & 6, outside legs	850128	SARGENT2
ND (10 ng/meter2)	9300-2234-W-L	Wipe-Composite of Blower 7 & duct elbow 8, in & out	850128	SARGENT2
ND (4.0 ng/meter2)	9300-2235-W-L	Wipe-Composite of Horiz. tank 9 & 10, outside	850128	SARGENT2
ND (2.0 ng/wipe)	F012-2236-W-L	Field Blank-Wipe	850128	SARGENT2
ND (12 ng/meter2)	9300-2237-W-L	Wipe-Comp. of Vert. tank 11 out & Horiz. tank 12.out	850128	SARGENT2
7.9 ng/meter2	9300-2238-W-L	Wipe-Comp. of #13 sheet metal hood & #14 column	850128	SARGENT2
ND (8.3 ng/meter2)	9300-2239-W-L	Wipe-Comp. of Trough # 15 & 16, in & out	850128	SARGENT2
11.0 ng/meter2	9300-2240-W-L	Wipe-Comp. of Vert. tank 17 & 18, outside	850128	SARGENT2
ND (5.8 ng/meter2)	9300-2241-W-L	Wipe-Comp. of Vert. tank 19 & 20, outside	850128	SARGENT2
10.3 ppb	X-9709-2270-P-F-L	NJ DEP Proficiency Sample X9709	850128	SARGENT2
ND (0.83 ppb)	C-10-D-2271-100-S-L	Near Surface Soil-Station C-10-D, 0-6" (N110,E493)	850129	SARGENT2
ND (0.86 ppb)	C-10-D-2272-101-S-L	Near Surface Soil-Station C-10-D, 6-12" (N110,E493)	850129	SARGENT2
2.2 ppb	F-10-D-2293-100-S-L	Near Surface Soil-Station F-10-D, 0-6" (N260,E493)	850131	SARGENT2
0.96 ppb	G-9-D-2296-100-S-Y	Near Surface Soil-Station G-9-D, 0-6" (N310,E443)	851126	SARGENT2
5.1 ppb	G-9-D-2297-101-S-Y	Near Surface Soil-Station G-9-D, 6-12" (N310,E443)	850131	SARGENT2
1.0 ppb	G-9-D-2298-102-S-Y	Near Surface Soil-Station G-9-D, 12-24" (N310,E443)	850131	SARGENT2
4.4 ppb	H-11-D-2308-100-S-L	Near Surface Soil-Station H-11-D, 0-6" (N360,E543)	850131	SARGENT2
1.6 ppb	J-12-D-2314-100-S-L	Near Surface Soil-Station J-12-D, 0-6" (N410,E593)	850201	SARGENT2
ND (1.4 ng/sample)	A006-2326-A-L	Ambient Air-120 Lister (Southwest)	850207	SARGENT2
155. ppb	E-11-F-2328-103-S-L	Soil Boring-Station E-11-F, 24-36"	850204	SARGENT2
73.5 ppb	E-11-F-2329-104-S-L	Soil Boring-Station E-11-F, 36-48"	850204	SARGENT2
93.7 ppb	E-11-F-2330-105-S-L	Soil Boring-Station E-11-F, 12" interval	850204	SARGENT2
61.5 ppb	E-11-F-2331-106-S-L	Soil Boring-Station E-11-F, 12" interval	850204	SARGENT2
69.1 ppb	E-11-F-2332-107-S-L	Soil Boring-Station E-11-F, 12" interval	850204	SARGENT2
17.4 ppb	E-11-F-2334-109-S-L	Soil Boring-Station E-11-F, 12' interval	850204	SARGENT2
0.013 ppb	9100-2335-H-L	Decon Water-Tank #02, Grab sample after agitation	850202	SARGENT2
6.1 ppb	E-11-F-2336-103-S-L	Soil Boring-Station E-11-F, 24-36" (N201.1,E502.6)	850205	SARGENT2
4.0 ppb	E-11-F-2337-104-S-L	Soil Boring-Station E-11-F, 36-48" (N201.1,E502.6)	850205	SARGENT2
67. ppb	D-11-G-2343-100-S-L	Soil Boring-Station D-11-G, 0-6"	850205	SARGENT2
5.4 ppb	D-11-G-2344-101-S-L	Soil Boring-Station D-11-G, 6-12"	850205	SARGENT2
8.9 ppb	D-11-G-2345-102-S-L	Soil Boring-Station D-11-G, 12-24"	850205	SARGENT2
30.7 ng/wipe	9100-2353-W-L	Wipe-120 Lister (Decon)	850207	SARGENT2
ND (5.0 ng/wipe)	9100-2354-W-L	Wipe-120 Lister, Shower Trailer	850207	SARGENT2
ND (4.0 ng/sample)	9100-2355-W-L	Wipe-120 Lister, Respirators	850212	SARGENT2
94.0 ppb	E-11-N-2366-100-S-L	Soil Boring-Station E-11-N, 0-6"	850206	SARGENT2
19.0 ppb	E-11-N-2367-101-S-L	Soil Boring-Station E-11-N, 6-12"	850206	SARGENT2
11.0 ppb	E-11-N-2368-102-S-L	Soil Boring-Station E-11-N, 12-24"	850206	SARGENT2
1.2 ppb	E-10-L-2376-100-S-L	Soil Boring-Station E-10-L, 0-6"	850206	SARGENT2
ND (0.48 ppb)	E-10-L-2377-101-S-L	Soil Boring-Station E-10-L, 6-12"	850206	SARGENT2
ND (1.2 ppb)	E-10-L-2378-102-S-L	Soil Boring-Station E-10-L, 12-24"	850206	SARGENT2
4.2 ppb	3Y604-2386-P-F-L	NJ DEP Proficiency Sample 3Y604		SARGENT2
ND (3.0 ng/sample)	F020-2422-W-L	Field Blank-Wipe	850207	SARGENT2
ND (4.1 ng/wipe)	9200-2459-W-L	Wipe-80 Lister (Empire Drill Rig, High Sample Point)	850212	SARGENT2
ND (0.001 ppb)	T019-2480-H-Y	Travel Blank-Monitoring Well	850213	SARGENT2
ND (0.0005 ppb)	F-9-G-2482-298-H-Y	Monitoring Well MW-101 (120 Lister)	850213	SARGENT2
ND (0.004 ppb)	D-12-D-2483-298-H-Y	Monitoring Well MW-102 (120 Lister)	850213	SARGENT2

RESULT.LINE	CLIENT #	SAM.DESC	SORT2	TASK
ND (0.002 ppb)	K-12-B-2484-29A-H-Y	Monitoring Well MW-103 (120 Lister)	850213	SARGENT2
12.4 ng/wipe	F024-2485-W-L	Field Blank-Wipe	850212	SARGENT2
ND (1.0 ng/sample)	A006-2490-A-L	Ambient Air-120 Lister (Northeast)	850215	SARGENT2
5.4 ppb	4V102-2499-P-F-L	NJ DEP Proficiency Sample 4V102		SARGENT2
9.9 ppb	J3910-2500-P-F-L	NJ DEP Proficiency Sample J3910		SARGENT2
ND (31 ng/meter2)	9300-2501-W-L	Wipe-Tank Trailer, Ser.#UNP461001, Comp. of 2	850214	SARGENT2
ND (8.0 ng/meter2)	9300-2511-W-L	Wipe-Trailer #503, Comp. of 2, top & under carriage	850215	SARGENT2
ND (4.0 ng/meter2)	9300-2512-W-L	Wipe-Tank #S-01, Blue Fiberglass, Comp. of 2 wipes	850301	SARGENT2
ND (4.0 ng/meter2)	9300-2513-W-L	Wipe-Tank # S-02, Rusty steel vessel, Comp. of 2 wipe	850216	SARGENT2
0.013 ppb	9000-2514-H-X	Water-Lake Newark, Effluent from CanSorbs	850218	SARGENT2
ND (8.0 ng/sample)	A006-2516-A-L	Ambient Air-120 Lister (Northeast)	850216	SARGENT2
ND (4.3 ng/wipe)	F027-2517-W-L	Field Blank-Wipe	850215	SARGENT2
ND (20 ng/meter2)	9300-2518-W-L	Wipe-Truck Axle #S-03, Composite of 2 wipes	850216	SARGENT2
ND (4.3 ng/meter2)	9300-2519-W-L	Wipe-Truck Fifth Wheel #S-04, Comp. of 2 wipes	850216	SARGENT2
ND (0.05 ppb)	D2917-2529-P-F-L	NJ DEP Proficiency Sample D2917		SARGENT2
10.0 ppb	L7411-2530-P-F-L	NJ DEP Proficiency Sample L7411		SARGENT2
ND (7.6 ng/sample)	A006-2537-A-L	Ambient Air-120 Lister (Personnel)	850227	SARGENT2
ND (6.8 ng/sample)	A006-2538-A-L	Ambient Air-120 Lister (Personnel)	850227	SARGENT2
ND (7.0 ng/sample)	A006-2539-A-L	Ambient Air-120 Lister (Personnel)	850227	SARGENT2
ND (1.1 ng/sample)	A006-2575-A-L	Ambient Air-120 Lister (Southwest)	850228	SARGENT2
ND (0.52 ppb)	9500-2588-S-Y	Backfill Sand from Stavola Quarry, med to fine orang	850301	SARGENT2
ND (0.070 ppb)	9500-2589-R-Y	Backfill Railroad Ballast Rock from Stavola Quarry	850301	SARGENT2
ND (0.035 ppb)	9500-2590-R-Y	Backfill Crushed Stone from Stavola Quarry	850301	SARGENT2
0.0022 ppb	9100-2596-H-X	Decon Water from Tank Farm, Comp. of 00 , 003, 004	850301	SARGENT2
ND (0.0013 ppb)	F-9-G-2599-298-H-Y	Monitoring Well MW-101 (120 Lister)	850306	SARGENT2
ND (0.0012 ppb)	D-12-D-2600-298-H-Y	Monitoring Well MW-102 (120 Lister)	850306	SARGENT2
ND (0.0021 ppb)	T022-2602-H-Y	Travel Blank-Monitoring Well Water	850306	SARGENT2
ND (0.0004 ppb)	F035-2603-H-Y	Field Blank-Monitoring Well Water	850306	SARGENT2
ND (0.66 ppb)	RS-1-2624-100-S-L	Soil-Excavation#1,Comp.of 5 0-3"takes fr.exc.grade 6"	850312	SARGENT2
7.5 ppb	RS-2-2625-100-S-L	Soil-Excavation#2,Comp.of 5 0-3"takes fr.exc.grade12"	850311	SARGENT2
2.5 ppb	RS-3-2626-100-S-L	Soil-Excavation#3,Comp.of 5 0-3"takes fr.exc.grade12"	850320	SARGENT2
19.1 ppb	RS-4-2627-100-S-L	Soil-Excavation#4,Comp.of 5 0-3"takes fr.exc.grade12"	850320	SARGENT2
31.0 ppb	RS-5-2628-100-S-L	Soil-Excavation#5,Comp.of 5 0-3"takes fr.exc.grade12"	850320	SARGENT2
ND (0.0033 ppb)	F037-2629-H-L	Field Blank-Remedial Soils	850320	SARGENT2
ND (0.011 ppb)	T023-2630-H-L	Travel Blank-Remedial Soils	850320	SARGENT2
ND (1.2 ng/sample)	A006-2631-A-L	Ambient Air-120 Lister (Personnel)	850319	SARGENT2
ND (1.0 ng/sample)	A006-2632-A-L	Ambient Air-120 Lister (Personnel)	850319	SARGENT2
ND (0.80 ng/sample)	A006-2633-A-L	Ambient Air-120 Lister (Personnel)	850319	SARGENT2
ND (0.47 ng/sample)	A006-2635-A-L	Field Blank-Ambient Air (Personnel)	850319	SARGENT2
ND (1.7 ng/sample)	A006-2637-A-L	Ambient Air-120 Lister (Northeast)	850307	SARGENT2
ND (0.85 ng/sample)	A006-2640-A-L	Ambient Air-120 Lister (Northeast)	850309	SARGENT2
ND (0.06 ppb)	9500-2658-S-Y	Backfill Concrete Sand from Dallenbach Sand Co	850308	SARGENT2
ND (0.30 ppb)	9500-2659-S-Y	Backfill Bank Run Sand from Dallenbach Sand Co.	850308	SARGENT2
4.2 ppb	7X306-2665-P-F-L	NJ DEP Proficiency Sample 7X306		SARGENT2
ND (2.2 ng/sample)	A006-2668-A-L	Ambient Air-120 Lister (Southwest)	850313	SARGENT2
ND (1.1 ng/sample)	A006-2669-A-L	Ambient Air-120 Lister (Northeast)	850313	SARGENT2

RSLT.LNE	CLIENT #	SAMP.DESC	SORT 2	TASK
9.2 ppb	2K807-2670-P-F-L	NJ DEP Proficiency Sample 2K807		SARGENT2
ND (5.3 ng/wipe)	9100-2671-W-L	Wipe-Decon Floor @ step-off point into the Break Area	850329	SARGENT2
ND (18.8 ng/wipe)	9100-2672-W-L	Wipe-Shower Trailer Floor @ Decon entrance	850329	SARGENT2
ND (0.40 ng/wipe)	9100-2675-W-L	Wipe-Lab Trailer Floor just inside main door	850329	SARGENT2
ND (2.0 ng/sample)	A006-2685-A-L	Ambient Air-120 Lister (Northeast)	850319	SARGENT2
ND (0.32 ppb)	X1213-2701-P-F-L	NJ DEP Proficiency Sample X1213		SARGENT2
ND (2.8 ng/sample)	A006-2707-A-L	Ambient Air-120 Lister (Northeast)	850326	SARGENT2
ND (0.08 ppb)	Z1020-2708-P-F-L	NJ DEP Proficiency Sample Z1020		SARGENT2
0.47 ppb	RS-2-2714-100-S-L	Soil-Excavation#2,Comp.of 5 0-3"takes fr.exc.grade12"	850322	SARGENT2
ND (3.1 ng/sample)	A006-2717-A-L	Ambient Air-120 Lister (Southwest)	850328	SARGENT2
ND (12.8 ng/sample)	A006-2718-A-L	Ambient Air-120 Lister (SCA/East)	850328	SARGENT2
4.0 ppb	2W205-2731-P-F-L	NJ DEP Proficiency Sample 2W205		SARGENT2
ND (3.8 ng/sample)	A006-2732-A-L	Ambient Air-120 Lister (East)	850330	SARGENT2
ND (0.0019 ppb)	9100-2733-H-X	Lake Newark Water,Tank Farm,Tank#001,Comp.of grabs	850327	SARGENT2
ND (0.015 ppb)	C5915-2747-P-F-L	NJ DEP Proficiency Sample C5915, Bottle # 11-D	850328	SARGENT2
ND (0.42 ng/sample)	A006-2749-A-L	Ambient Air-120 Lister (Northeast)	850401	SARGENT2
8.9 ng/sample	A006-2756-A-L	Ambient Air-120 Lister (East)	850402	SARGENT2
ND (0.44 ng/sample)	T031-2795-A-L	Travel Blank-Ambient Air	850404	SARGENT2
ND (3.8 ng/sample)	F047-2796-A-L	Field Blank-Ambient Air	850404	SARGENT2
ND (1.0 ng/sample)	A006-2803-A-L	Ambient Air-120 Lister (Northeast)	850418	SARGENT2
ND (4.0 ng/sample)	A006-2804-A-L	Ambient Air-120 Lister (East)	850418	SARGENT2
ND (1.0 ng/wipe)	9100-2814-W-L	Wipe-Steel auger used to set telephone poles @ 120Lis	850409	SARGENT2
9.5 ppb	E7612-2825-P-F-L	NJ DEP Proficiency Sample E7612	850411	SARGENT2
6.8 ng/wipe	9100-2850-W-L	Wipe-Komatsu Track Hoe used in excav. hotspots,Comp.2	850414	SARGENT2
ND (4.3 ng/wipe)	F055-2851-W-L	Field Blank-Wipe	850414	SARGENT2
ND (0.03 ppb)	Y6414-2852-P-F-L	NJ DEP Proficiency Sample Y6414	850415	SARGENT2
ND (0.02 ppb)	M1122-2853-P-F-L	NJ DEP Proficiency Sample M1122	850415	SARGENT2
1.5 ng/wipe	9100-2856-W-L	Wipe-D5 Cat Dozer Serial # 375, Composite of 2 wipes	850417	SARGENT2
ND (2.7 ng/wipe)	9100-2857-W-L	Wipe-Fork Lift Chassis # T341100712, Comp. of 2 wipes	850417	SARGENT2
1.7 ng/wipe	9100-2858-W-L	Wipe-Case Bobcat 1845B,Hertz#259-05-4521,Comp. of 2	850417	SARGENT2
ND (0.24 ng/wipe)	F057-2859-W-L	Field Blank-Wipe	850417	SARGENT2
4.9 ng/sample	A006-2861-A-L	Ambient Air-120 Lister (Northeast)	850423	SARGENT2
11.5 ppb	J-8-F-2863-100-S-L	Soil Boring-Station J-8-F, 0-6"	850418	SARGENT2
ND (0.81 ppb)	J-8-F-2864-101-S-L	Soil Boring-Station J-8-F, 6-12"	850418	SARGENT2
2.4 ppb	J-8-F-2865-102-S-L	Soil Boring-Station J-8-F, 12-25'	850418	SARGENT2
ND (0.70 ppb)	J-8-F-2866-103-S-L	Soil Boring-Station J-8-F, 2-3.5'	850418	SARGENT2
ND (0.5 ppb)	J-8-F-2867-104-S-L	Soil Boring-Station J-8-F, 3.5-5.0	850418	SARGENT2
ND (0.2 ppb)	J-8-F-2868-105-S-L	Soil Boring-Station J-8-F, 5-6.5'	850418	SARGENT2
ND (0.2 ppb)	J-8-F-2869-106-S-L	Soil Boring-Station J-8-F, 6.5-8'	850418	SARGENT2
ND (0.9 ppb)	J-8-F-2870-107-S-L	Soil Boring-Station J-8-F, 8-9.5'	850418	SARGENT2
ND (0.06 ppb)	J-8-F-2872-109-S-L	Soil Boring-Station J-8-F, 9.5-10.5'	850418	SARGENT2
ND (0.0015 ppb)	T040-2876-H-L	Travel Blank-Soil Boring	850418	SARGENT2
ND (0.0013 ppb)	F059-2877-H-L	Field Blank-Soil Boring	850418	SARGENT2
ND (3.7 ng/wipe)	9100-2879-W-L	Wipe-Case 5800 Backhoe #K2-1121-90, Comp. of 2 wipes	850417	SARGENT2
ND (5.1 ng/sample)	A006-2886-A-L	Ambient Air-120 Lister (East)	850425	SARGENT2
ND (0.62 ng/sample)	A006-2887-A-L	Ambient Air-120 Lister (South)	850424	SARGENT2

RSLT.LNE	CLIENT #	SAM.DESC	SORT Z	TASK
ND (0.090 ppb)	K-12-B-2893-300-S-L	Deep Soil Boring #103D-Station K-12-B, 15-16.5'	850424	SARGENT2
ND (0.045 ppb)	K-12-B-2894-301-S-L	Deep Soil Boring #103D-Station K-12-B, 20-21.5'	850424	SARGENT2
ND (0.040 ppb)	K-12-B-2901-308-S-L	Deep Soil Boring #103D-Station K-12-B, 55-56.5'	850426	SARGENT2
ND (0.060 ppb)	K-12-B-2912-500-S-L	Deep Soil Boring #103D-Station K-12-B, 71-73	850429	SARGENT2
ND (0.18 ppb)	K-12-B-2913-501-S-L	Deep Soil Boring #103D-Station K-12-B, 75-76.5	850429	SARGENT2
6.8 ng/sample	A006-2920-A-L	Spiked GFF & pad with clean back-up pad	850423	SARGENT2
ND (1.1 ng/sample)	A006-2921-A-L	XAD back-up tube	850423	SARGENT2
ND (29. ng/wipe)	9100-3026-W-L	Wipe-580E CASC Back Hoe I.C.#220054600.Comp.of2wipes	850430	SARGENT2
ND (2.0 ng/wipe)	F075-3027-W-L	Field Blank-Wipe	850430	SARGENT2
ND (0.55 ng/sample)	A006-3028-A-L	Ambient Air-120 Lister (Personnel, GFF Tube)	850430	SARGENT2
ND (0.60 ng/sample)	A006-3029-A-L	Ambient Air-120 Lister (Personnel, XAD)	850430	SARGENT2
ND (0.50 ng/sample)	F077-3038-A-L	Field Blank-Ambient Air (Personnel, GFF)	850430	SARGENT2
ND (0.60 ng/sample)	F078-3039-A-L	Field Blank-Ambient Air (Personnel, XAD)	850430	SARGENT2
ND (5.9 ng/sample)	A006-3109-A-L	Ambient Air-120 Lister (Northeast)	850531	SARGENT2
ND (3.2 ng/sample)	A006-3110-A-L	Ambient Air-120 Lister (East)	850531	SARGENT2
ND (2.2 ng/sample)	A006-3111-A-L	Ambient Air-120 Lister (South)	850531	SARGENT2
ND (0.43 ppb)	101-D-3473-200-S-G	Deep Soil Boring-Station 101-D, 6.5-8.5'	850515	SARGENT2
ND (0.32 ppb)	101-D-3475-202-S-G	Deep Soil Boring-Station 101-D, 10.5-12.5'	850515	SARGENT2
ND (0.26 ppb)	101-D-3477-204-S-G	Deep Soil Boring-Station 101-D, 14.5-16.5'	850515	SARGENT2
ND (0.19 ppb)	101-D-3479-300-S-G	Deep Soil Boring-Station 101-D, 20-21.5	850516	SARGENT2
ND (0.10 ppb)	101-D-3480-301-S-G	Deep Soil Boring-Station 101-D, 25-26.5'	850516	SARGENT2
ND (0.092 ppb)	101-D-3501-500-S-G	Deep Soil Boring-Station 101-D, 75-76.5'	850524	SARGENT2
ND (0.16 ppb)	101-D-3503-502-S-G	Deep Soil Boring-Station 101-D, 86-87.5'	850524	SARGENT2
ND (1.7 ng/sample)	A006-3513-A-L	Ambient Air-120 Lister (South)	850604	SARGENT2
ND (3.1 ng/sample)	A006-3514-A-L	Ambient Air-120 Lister (East)	850604	SARGENT2
ND (1.8 ng/sample)	A006-3515-A-L	Ambient Air-120 Lister (Northeast)	850604	SARGENT2
ND (0.11 ppb)	9900-3872-M-L	Sediment-Drainage ditch W of 120 Lister site	850523	SARGENT2
ND (0.0037 ppb)	F104-3873-H-L	Field Blank-Rinsed trowel used to collect sediment	850523	SARGENT2
ND (0.0019 ppb)	T058-3874-H-L	Travel Blank-Sediment from 120 Lister	850523	SARGENT2
3.9 ppb	1H301-3877-S-L	NJDEP Proficiency Sample # 1H301	850517	SARGENT2
6.8 ppb	64E08-4045-P-F-L	NJ DEP Proficiency Sample 64E08	850531	SARGENT2
ND (0.006 ppb)	T085-4166-H-Y	Travel Blank-Well Water	850605	SARGENT2
ND (0.004 ppb)	F135-4167-H-Y	Field Blank-Well Water	850605	SARGENT2
ND (0.009 ppb)	101A-4168-298-H-Y	Well Water-Station 101A	850605	SARGENT2
ND (0.003 ppb)	101B-4169-298-H-Y	Well Water-Station 101B	850605	SARGENT2
ND (0.0053 ppb)	101D-4170-298-H-Y	Well Water-Station 101D	850605	SARGENT2
ND (0.003 ppb)	102A-4171-298-H-Y	Well Water-Station 102A	850605	SARGENT2
ND (0.0009 ppb)	103D-4172-298-H-Y	Well Water-Station 103D	850605	SARGENT2
1.1 ppt	9000-4195-H-L	Surface H2O entering run-off ditch W side Cont.Storag	850605	SARGENT2
ND (7.9 ng/sample)	A006-4274-A-L	Ambient Air-120 Lister (South)	850617	SARGENT2
ND (3.6 ng/sample)	A006-4275-A-L	Ambient Air-120 Lister (Northeast)	850617	SARGENT2
ND (0.23 ppb)	04F07-4280-P-F-L	NJ DEP Proficiency Sample 04F07	850611	SARGENT2
ND (0.14 ppb)	16F05-4281-P-F-L	NJ DEP Proficiency Sample 16F05	850612	SARGENT2
ND (0.0011 ppb)	T097-4433-H-Y	Travel Blank-Well Water	850625	SARGENT2
ND (0.00027 ppb)	F152-4434-H-Y	Field Blank-Well Water	850625	SARGENT2
ND (0.0045 ppb)	101-B-4441-298-H-Y	Well Water-Station 101-B	850625	SARGENT2

RSLT.LINE	CLIENT #	SAM.DESC	SORT 2	TAGY
ND (0.0019 ppb)	101-D-4442-298-H-Y	Well Water-Station 101-D	850625	SARGENT2
ND (0.0018 ppb)	103-A-4443-298-H-Y	Well Water-Station 103-A	850625	SARGENT2
ND (0.00075 ppb)	103-D-4444-298-H-Y	Well Water-Station 103-D	850625	SARGENT2
ND (0.0014 ppb)	102-C-4463-398-H-Y	Well Water-Station 102C	850715	SARGENT2
ND (0.0014 ppb)	102-C-4541-H-Y	Well Water-Station 102C	850805	SARGENT2

APPENDIX C

APPENDIX C

(SOIL DIOXIN RESULTS)

RSLT.LNE	CLIENT #	SAM.DESC	SORT 2	TAGY
0.96 ppb	G-9-D-2296-100-S-Y	Near Surface Soil-Station G-9-D, 0-6" (N310,E443)	851126	SARGENT2
5.1 ppb	G-9-D-2297-101-S-Y	Near Surface Soil-Station G-9-D, 6-12" (N310,E443)	850131	SARGENT2
1.0 ppb	G-9-D-2298-102-S-Y	Near Surface Soil-Station G-9-D, 12-24" (N310,E443)	850131	SARGENT2
11.5 ppb	J-8-F-2863-100-S-L	Soil Boring-Station J-8-F, 0-6'	850418	SARGENT2
ND (0.81 ppb)	J-8-F-2864-101-S-L	Soil Boring-Station J-8-F, 6-12"	850418	SARGENT2
2.4 ppb	J-8-F-2865-102-S-L	Soil Boring-Station J-8-F, 12-25"	850418	SARGENT2
ND (0.70 ppb)	J-8-F-2866-103-S-L	Soil Boring-Station J-8-F, 2-3.5'	850418	SARGENT2
ND (0.5 ppb)	J-8-F-2867-104-S-L	Soil Boring-Station J-8-F, 3.5-5.0'	850418	SARGENT2
ND (0.2 ppb)	J-8-F-2868-105-S-L	Soil Boring-Station J-8-F, 5-6.5'	850418	SARGENT2
ND (0.2 ppb)	J-8-F-2869-106-S-L	Soil Boring-Station J-8-F, 6.5-8	850418	SARGENT2
ND (0.9 ppb)	J-8-F-2870-107-S-L	Soil Boring-Station J-8-F, 8-9.5'	850418	SARGENT2
ND (0.06 ppb)	J-8-F-2872-109-S-L	Soil Boring-Station J-8-F, 9.5-10.5'	850418	SARGENT2
ND (0.0015 ppb)	T040-2876-H-L	Travel Blank-Soil Boring	850418	SARGENT2
ND (0.0013 ppb)	F059-2877-H-L	Field Blank-Soil Boring	850418	SARGENT2
ND (0.090 ppb)	K-12-B-2893-300-S-L	Deep Soil Boring #103D-Station K-12-B, 15-16.5'	850424	SARGENT2
ND (0.045 ppb)	K-12-B-2894-301-S-L	Deep Soil Boring #103D-Station K-12-B, 20-21.5'	850424	SARGENT2
ND (0.040 ppb)	K-12-B-2901-308-S-L	Deep Soil Boring #103D-Station K-12-B, 55-56.5'	850426	SARGENT2
ND (0.060 ppb)	K-12-B-2912-500-S-L	Deep Soil Boring #103D-Station K-12-B, 71-73'	850429	SARGENT2
ND (0.18 ppb)	K-12-B-2913-501-S-L	Deep Soil Boring #103D-Station K-12-B, 75-76.5'	850429	SARGENT2
ND (0.43 ppb)	101-D-3473-200-S-G	Deep Soil Boring-Station 101-D, 6.5-8.5'	850515	SARGENT2
ND (0.32 ppb)	101-D-3475-202-S-G	Deep Soil Boring-Station 101-D, 10.5-12.5'	850515	SARGENT2
ND (0.26 ppb)	101-D-3477-204-S-G	Deep Soil Boring-Station 101-D, 14.5-16.5'	850515	SARGENT2
ND (0.19 ppb)	101-D-3479-300-S-G	Deep Soil Boring-Station 101-D, 20-21.5'	850516	SARGENT2
ND (0.10 ppb)	101-D-3480-301-S-G	Deep Soil Boring-Station 101-D, 25-26.5'	850516	SARGENT2
ND (0.092 ppb)	101-D-3501-500-S-G	Deep Soil Boring-Station 101-D, 75-76.5'	850524	SARGENT2
ND (0.16 ppb)	101-D-3503-502-S-G	Deep Soil Boring-Station 101-D, 86-87.5'	850524	SARGENT2

APPENDIX
D

APPENDIX D

(PRIORITY POLLUTANT RESULTS FOR SOILS)

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165 0-0.5'	Y2166 0.5'-1.0'	Y2167 1.0'-2.0'
(Concentration units are parts per billion)				
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	71.	>490.	97.0
Volatile Organic Compounds (Concentration Units are in μg/kg)				
71-43-2	Benzene	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND
107-06-2	1,2-Dichloroethane	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND
75-34-3	1,1-Dichloroethane	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND
75-35-4	1,1-Dichloroethene	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Volatiles (Continued)				
78-87-5	1,2-Dichloropropane	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND
75-09-2	Methylene chloride	130.	120.	76.
74-87-3	Chloromethane	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND
108-88-3	Toluene	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND
67-64-1	Acetone	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Volatiles (Continued)				
519-78-6	2-Hexanone	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND
100-42-5	Styrene	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/kg)				
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	800.*	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND
108-95-2	Phenol	ND	ND	ND
65-85-0	Benzoic acid	200.*	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	160.*	3500.*	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Base/Neutral/Acids (Continued)				
83-32-9	Acenaphthene	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	400.*	ND
118-74-1	Hexachlorobenzene	ND	44,000.	11,000.
67-72-1	Hexachloroethane	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND
206-44-0	Fluoranthene	820.*	570.*	2000.
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Base/Neutral/Acids (Continued)				
87-68-3	Hexachlorobutadiene	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	490.*	ND	500.
85-68-7	Butyl benzyl phthalate	ND	ND	ND
84-74-2	Di-N-butyl phthalate	1300.	830.*	590.
117-84-0	Di-N-octyl phthalate	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND
56-55-3	Benzo(A)anthracene	530.*	ND	660.*
50-32-8	Benzo(A)pyrene	630.*	660.*	ND
205-99-2	Benzo(B)fluor-anthene	820.*	860.*	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Base/Neutral/Acids (Continued)				
218-01-9	Chrysene	530.*	430.*	690.*
208-96-8	Acenaphthylene	ND	ND	ND
120-12-7	Anthracene	160.*	170.*	230.*
191-24-2	Benzo(GHI)perylene	ND	370.*	ND
86-73-7	Fluorene	ND	ND	ND
85-01-8	Phenanthrene	430.*	230.*	1300.
53-70-3	Dibenzo(A,H) anthracene	ND	170.*	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	330.*	130.*
129-00-0	Pyrene	660.*	530.*	1300.
62-53-3	Aniline	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	2000.
106-47-8	4-Chloroaniline	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/kg)				
309-00-2	Aldrin	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Pesticides and PCBs (Continued)				
50-29-3	4,4'-DDT	480,000.[c]	260,000.[c]	14,000.**
72-55-9	4,4'-DDE	6200.**	7500.**	2200.**
72-54-8	4,4'-DDD	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND
72-20-8	Endrin	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	ND
319-85-7	beta-BHC	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND
319-86-8	delta-BHC	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Chlorinated Herbicides (Concentration Units are in µg/kg)				
75-99-0	Dalapon (Dowpon)	ND	ND	ND
1918-00-9	Dicamba	ND	ND	ND
7085-19-0	MCPP	ND	ND	ND
94-74-6	MCPA	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND
94-75-7	2,4-D	ND	ND	120.
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND
93-76-5	2,4,5-T	ND	400.	ND
94-82-6	2,4-DB	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)				
	Antimony	9.0	3.8	5.5
	Arsenic	7.5	9.7	14.
	Beryllium	0.4	0.8	0.8
	Cadmium	4.1	0.7	0.9
	Chromium	29.	33.	32.
	Copper	84.	63.	45.
	Lead	260.	370.	210.
	Mercury	0.9	1.9	0.3
	Nickel	21.	18.	22.
	Selenium	<2.	<3.	<3.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Near Surface Soil: Station E-11-F

CAS Number	Compound Name	Y2165	Y2166	Y2167
Metals (Continued)				
	Silver	0.4	<0.2	<0.2
	Thallium	<2.	<2.	<2.
	Zinc	340.	330.	460.
Classical Parameters (Concentration Units are in Parts per Million - ppm)				
	Total Cyanide	0.05	0.17	1.48
	Total Phenols	0.44	1.59	1.45

D2A-QP-0-1 to 9

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Soil Station E-10-F   OFF-SITE LOCATION: 120 Lister Ave.

SAMPLE NO: E-10-F-2167-102-S-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	NONE DETECTED	
2.		
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BASE/NEUTRAL/ACIDS:		
1. 108-88-3	Toluene	910. µg/kg
2. 108-21-4	Acetic acid, 1-methylester	1400. µg/kg
3. 123-86-4	4-Hydroxy-4-methyl-2-pentanone	29,000. µg/kg
4. --	Unknown	1900. µg/kg
5. --	Hexachlorocyclohexane	790. µg/kg
6. 938-10-3	Benzene sulfonylazide	1100. µg/kg
7. 8033-4	4-chloro-4-chlorophenylester Benzene sulfonic acid	750. µg/kg
8. --	Chloroalkyl benzene	1400. µg/kg
9. --	Chloroalkyl benzene	3400. µg/kg
10. --	Chloroalkyl benzene	3100. µg/kg
11. --	Chloroalkyl benzene	7300. µg/kg
12. --	Chloroalkyl benzene acetic acid	560. µg/kg
13. --	Hydrocarbon PAH	800. µg/kg
14. --	Hydrocarbon PAH	770. µg/kg
15. --	Unknown hydrocarbon	610. µg/kg
16. --	Unknown	580. µg/kg
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
(Concentration units are parts per billion)				
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND(0.52)	ND(0.06)	ND(0.30)
Volatile Organic Compounds (Concentration Units are in µg/kg)				
71-43-2	Benzene	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND
107-06-2	1,2-Dichloroethane	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND
75-34-3	1,1-Dichloroethane	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND
67-66-3	Chloroform	4.6	ND	ND
75-35-4	1,1-Dichloroethene	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Volatiles (Continued)				
78-87-5	1,2-Dichloropropane	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND
75-09-2	Methylene chloride	6.3	110.	170.
74-87-3	Chloromethane	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND
108-88-3	Toluene	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND
67-64-1	Acetone	2.6	ND	ND
78-93-3	2-Butanone	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Volatiles (Continued)				
519-78-6	2-Hexanone	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND
100-42-5	Styrene	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/kg)				
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND
108-95-2	Phenol	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Base/Neutral/Acids (Continued)				
83-32-9	Acenaphthene	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Base/Neutral/Acids (Continued)				
87-68-3	Hexachlorobutadiene	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	32.*	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND
205-99-2	Benzo(B)fluor-anthene	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Base/Neutral/Acids (Continued)				
218-01-9	Chrysene	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND
85-01-8	Phenanthrene	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND
62-53-3	Aniline	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/kg)				
309-00-2	Aldrin	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Pesticides and PCBs (Continued)				
50-29-3	4,4'-DDT	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND
72-54-8	4,4'-DDD	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND
72-20-8	Endrin	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	ND
319-85-7	beta-BHC	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND
319-86-8	delta-BHC	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Chlorinated Herbicides (Concentration Units are in µg/kg)				
75-99-0	Dalapon (Dowpon)	ND	ND	ND
1918-00-9	Dicamba	ND	ND	ND
7085-19-0	MCPP	ND	ND	ND
94-74-6	MCPA	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND
94-75-7	2,4-D	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND
93-76-5	2,4,5-T	ND	ND	ND
94-82-6	2,4-DB	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)				
	Antimony	<0.1	<0.1	<0.1
	Arsenic	0.2	<0.1	5.0
	Beryllium	<0.2	<0.2	0.6
	Cadmium	<0.1	<0.1	<0.1
	Chromium	5.6	3.0	10.
	Copper	0.6	1.4	3.5
	Lead	<1.	<1.	<1.
	Mercury	<0.1	<0.1	<0.1
	Nickel	<1.	<1.	8.0
	Selenium	<0.1	<0.2	<0.4

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Backfill Sand Samples

CAS Number	Compound Name	Stavolla Quarry Y2588	Dallenbach Sand Co. Concrete Y2658	Dallenbach Sand Co. Bank Run Y2659
Metals (Continued)				
	Silver	1.2	3.4	1.5
	Thallium	<2.	<2.	<2.
	Zinc	1.0	1.3	14.
Classical Parameters (Concentration Units are in Parts per Million - ppm)				
	Total Cyanide	0.13	0.81	0.60
	Total Phenols	0.28	0.20	0.20

D2C-QP-U-1 to 9

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Backfill Sand OFF-SITE LOCATION: Stavolla Quarry

SAMPLE NO: 9500-2588-S-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 110-54-3	Hexane	4. µg/kg
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BASE/NEUTRAL/ACIDS:		
1. 79-00-5	1,1,2-trichloroethane	300. µg/kg
2. 79-34-5	1,1,2,2-tetrachloroethane	800. µg/kg
3. --	Unknown	90. µg/kg
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[1] quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Backfill Concrete Sand   OFF-SITE LOCATION: Dallenbach Sand Co.

SAMPLE NO: 9500-2658-S-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	NONE DETECTED	
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BASE/NEUTRAL/ACIDS:		
1. 108-87-2	Methylcyclohexane	90. µg/kg
2. 79-00-5	1,1,2-trichloroethane	200. µg/kg
3. 79-34-5	1,1,2,2-tetrachloroethane	300. µg/kg
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Backfill Bank Run Sand   OFF-SITE LOCATION: Dallenbach Sand Co.

SAMPLE NO: 9500-2659-S-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	NONE DETECTED	
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BASE/NEUTRAL/ACIDS:		
1. 108-87-2	Methylcyclohexane	90. μg/kg
2. 79-00-5	1,1,2-trichloroethane	200. μg/kg
3. 79-34-5	1,1,2,2-tetrachloroethane	500. μg/kg
4. --	Hydrocarbon	90. μg/kg
5. --	Hydrocarbon	100. μg/kg
6. --	Hydrocarbon	90. μg/kg
7. --	Hydrocarbon	90. μg/kg
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Railroad Ballast Y2589	Crushed Stone Y2590
(Concentration units are parts per billion)			
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND(0.70)	ND(0.04)
Volatile Organic Compounds (Concentration Units are in μg/kg)			
71-43-2	Benzene	ND	ND
56-23-5	Carbon tetrachloride	ND	ND
108-90-7	Chlorobenzene	ND	ND
107-06-2	1,2-Dichloroethane	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND
75-34-3	1,1-Dichloroethane	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND
75-00-3	Chloroethane	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND
67-66-3	Chloroform	4.2	3.4
75-35-4	1,1-Dichloroethene	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Volatiles (Continued)			
78-87-5	1,2-Dichloropropane	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND
100-41-4	Ethylbenzene	ND	ND
75-09-2	Methylene chloride	6.5	6.1
74-87-3	Chloromethane	ND	ND
74-83-9	Bromomethane	ND	ND
75-25-2	Bromoform	ND	ND
75-27-4	Bromodichloromethane	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND
124-48-1	Chlorodibromomethane	ND	ND
127-18-4	Tetrachloroethene	ND	ND
108-88-3	Toluene	ND	ND
79-01-6	Trichloroethene	ND	ND
75-01-4	Vinyl chloride	ND	ND
67-64-1	Acetone	37.	47.
78-93-3	2-Butanone	ND	ND
75-15-0	Carbon disulfide	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Volatiles (Continued)			
519-78-6	2-Hexanone	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND
100-42-5	Styrene	ND	ND
108-05-4	Vinyl acetate	ND	ND
95-47-6	Total Xylenes	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/kg)			
88-06-2	2,4,6-Trichlorophenol	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND
95-57-8	2-Chlorophenol	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND
88-75-5	2-Nitrophenol	ND	ND
100-02-7	4-Nitrophenol	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND
87-86-5	Pentachlorophenol	ND	ND
108-95-2	Phenol	ND	ND
65-85-0	Benzoic acid	ND	ND
95-48-7	2-Methylphenol	ND	ND
108-39-4	4-Methylphenol	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Base/Neutral/Acids (Continued)			
83-32-9	Acenaphthene	ND	ND
92-87-5	Benzidine	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND
118-74-1	Hexachlorobenzene	ND	ND
67-72-1	Hexachloroethane	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND
206-44-0	Fluoranthene	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Base/Neutral/Acids (Continued)			
87-68-3	Hexachlorobutadiene	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND
78-59-1	Isophorone	ND	ND
91-20-3	Naphthalene	ND	ND
98-95-3	Nitrobenzene	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND
84-66-2	Diethyl phthalate	ND	ND
131-11-3	Dimethyl phthalate	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND
205-99-2	Benzo(B)fluor-anthene	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Base/Neutral/Acids (Continued)			
218-01-9	Chrysene	ND	ND
208-96-8	Acenaphthylene	ND	ND
120-12-7	Anthracene	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND
86-73-7	Fluorene	ND	ND
85-01-8	Phenanthrene	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND
129-00-0	Pyrene	ND	ND
62-53-3	Aniline	ND	ND
100-51-6	Benzyl alcohol	ND	ND
106-47-8	4-Chloroaniline	ND	ND
132-64-9	Dibenzofuran	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND
88-74-4	2-Nitroaniline	ND	ND
99-09-2	3-Nitroaniline	ND	ND
100-01-6	4-Nitroaniline	ND	ND
Pesticides and PCBs (Concentration Units are in μg/kg)			
309-00-2	Aldrin	ND	ND
60-57-1	Dieldrin	ND	ND
57-74-9	Chlordane	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Pesticides and PCBs (Continued)			
50-29-3	4,4'-DDT	ND	ND
72-55-9	4,4'-DDE	ND	ND
72-54-8	4,4'-DDD	ND	ND
959-98-8	alpha-Endosulfan	ND	ND
33213-65-9	beta-Endosulfan	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND
72-20-8	Endrin	ND	ND
7421-93-4	Endrin aldehyde	ND	ND
76-44-8	Heptachlor	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND
319-84-6	alpha-BHC	ND	ND
319-85-7	beta-BHC	ND	ND
58-89-9	gamma-BHC	ND	ND
319-86-8	delta-BHC	ND	ND
53469-21-9	PCB-1242	ND	ND
11097-69-1	PCB-1254	ND	ND
11104-28-2	PCB-1221	ND	ND
11141-16-5	PCB-1232	ND	ND
12672-29-6	PCB-1248	ND	ND
11096-82-5	PCB-1260	ND	ND
12674-11-2	PCB-1016	ND	ND
8001-35-2	Toxaphene	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Chlorinated Herbicides (Concentration Units are in µg/kg)			
75-99-0	Dalapon (Dowpon)	ND	ND
1918-00-9	Dicamba	ND	ND
7085-19-0	MCPP	ND	ND
94-74-6	MCPA	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND
94-75-7	2,4-D	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND
93-76-5	2,4,5-T	ND	ND
94-82-6	2,4-DB	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)			
	Antimony	<0.1	<0.1
	Arsenic	<0.1	<0.1
	Beryllium	<0.2	<0.2
	Cadmium	<0.1	<0.1
	Chromium	<1.0	6.8
	Copper	<0.2	0.2
	Lead	<1.	<1.
	Mercury	<0.1	<0.1
	Nickel	<1.	<1.
	Selenium	<0.1	<0.1

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Backfill Samples: Stavolla Quarry

CAS Number	Compound Name	Y2589	Y2590
Metals (Continued)			
	Silver	<0.2	<0.2
	Thallium	<2.	2.
	Zinc	<0.1	<0.1
Classical Parameters (Concentration Units are in Parts per Million - ppm)			
	Total Cyanide	0.60	0.25
	Total Phenols	0.60	0.30

D2E-QP-AA-1 to 9

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Backfill Sample: Railroad Ballast OFF-SITE LOCATION: Stavolla Quarry

SAMPLE NO: 9500-2589-R-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	NONE DETECTED	
2.		
3.		
4.		
5.		
6.		
7.		
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11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. 79-00-5	1,1,2-trichloroethane	60. µg/kg
2. 79-34-5	1,1,2,2-tetrachloroethane	200. µg/kg
3. --	Unknown	20. µg/kg
4. --	Unknown	70. µg/kg
5. --	Unknown	70. µg/kg
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Backfill Sample: Crushed Stone OFF-SITE LOCATION: Stavolla Quarry

SAMPLE NO: 9500-2590-R-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	NONE DETECTED	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. 79-00-5	1,1,2-trichloroethane	70. µg/kg
2. --	Unknown	600. µg/kg
3. 79-34-5	1,1,2,2-tetrachloroethane	400. µg/kg
4.		
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

APPENDIX
E

APPENDIX E
(PRIORITY POLLUTANT RESULTS FOR GROUND WATER)

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.0045ppb)	ND (0.0019ppb)	ND (0.0018ppb)	ND (0.00075ppb)
Volatile Organic Compounds (Concentration Units are in μg/L					
71-43-2	Benzene	240.*	4.	ND	21.
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	5300.	18.	ND	17.
107-06-2	1,2,-Dichloroethane	690.	64.	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	23.*
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	3.*	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	28.	ND	390.

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QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	140.	82.	32.	100.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	27.	ND	810.
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	1300.	ND	ND	69.
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

D29-OP-79

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	610.	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	62.	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	38.	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	130.	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

D29-OP-80

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	2.*	ND	ND	4.*
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	7.*
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

D29-OP-81

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in μg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29-OP-82

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Pesticides and PCBs (Continued)					
50-29-3	4,4'-DDT	290.	0.45**	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	48.	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	180.	2.1**	ND	ND
319-85-7	beta-BHC	ND	0.55**	ND	ND
58-89-9	gamma-BHC	310.	1.4**	ND	ND
319-86-8	delta-BHC	120.	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

D29-OP-83

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Chlorinated Herbicides (Concentration Units are in μg/L)					
75-99-0	Dalapon (Dowpon)	ND	ND	ND	ND
1918-00-9	Dicamba	ND	ND	ND	ND
7085-19-0	MCPP	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	1300.	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND	ND
93-76-5	2,4,5-T	ND	ND	ND	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	<0.001	<0.01	<0.01	<0.001
	Arsenic	0.016	0.033	0.276	<0.002
	Beryllium	0.006	0.009	0.016	<0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001
	Chromium	0.09	0.38	1.0	0.19
	Copper	0.090	0.282	11.	0.018
	Lead	<0.01	0.17	1.8	<0.01
	Mercury	0.003	<0.001	0.12	<0.001
	Nickel	0.06	0.35	0.54	0.09
	Selenium	<0.007	<0.03	<0.03	<0.003

D29-OP-84

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 25, 1985

CAS Number	Compound Name	Y4441 MW-101B (F-9-G)	Y4442 MW-101D (F-9-G)	Y4443 MW-103A (K-12-D)	Y4444 MW-103D (K-12-D)
Metals (Continued)					
	Silver	<0.002	<0.002	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	0.138	0.801	4.1	0.049
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	<0.01	<0.01	0.01	0.01
	Total Phenols	0.04	0.01	0.03	0.01

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 101B-4441-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
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9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. 108-90-71	Chlorobenzene	800. µg/L
2. 111-96-6	1,1'-oxybis (2-methoxy) ethane	40. µg/L
3. ---------	Trichlorobenzene isomer	100. µg/L
4. ---------	Hexachlorocyclohexane isomer	40. µg/L
5. ---------	Hexachlorocyclohexane isomer	40. µg/L
6. ---------	Hexachlorocyclohexane isomer	10. µg/L
7. 10544-50-0	Sulfur	8. µg/L
8. 80-07-9	1,1'-Sulfonylbis (4-chloro) benzene	100. µg/L
9. 80-07-9	DDD isomer	40. µg/L
10. 80-07-9	DDD or DDT isomer	40. µg/L
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

D29B-86

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 101-D-4442-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4 - Dioxane	30. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

BASE/NEUTRAL/ACIDS:

1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
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23.		
24.		
25.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 103-A-4443-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 1066-40-6	Trimethyl Silanol	200. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. 104-76-7	2-ethyl-1-Hexanol	10. µg/L
2. --------	Unknown	10. µg/L
3. --------	Unknown	20. µg/L
4. --------	Unknown	20. µg/L
5. --------	Unknown	9. µg/L
6. --------	Unknown	50. µg/L
7. --------	Unknown	60. µg/L
8.		
9.		
10.		
11.		
12.		
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23.		
24.		
25.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 103-D-4444-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 109-99-9	Tetrahydrofuran	80. µg/L
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. ---------	A phthalate	20. µg/L
2. ---------	A phthalate	10. µg/L
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
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16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		

[1] quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.0014 ppb)	ND (0.0014 ppb)
Volatile Organic Compounds (Concentration Units are in µg/L			
71-43-2	Benzene	390.	530.
56-23-5	Carbon tetrachloride	ND	ND
108-90-7	Chlorobenzene	5800.	9300.
107-06-2	1,2,-Dichloroethane	ND	650.
71-55-6	1,1,1-Trichloroethane	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND
75-00-3	Chloroethane	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND
67-66-3	Chloroform	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND

D29-OP-90

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Volatiles (Continued)			
78-87-5	1,2-Dichloropropane	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND
100-41-4	Ethylbenzene	ND	ND
75-09-2	Methylene chloride	880.	610.
74-87-3	Chloromethane	ND	ND
74-83-9	Bromomethane	ND	ND
75-25-2	Bromoform	ND	ND
75-27-4	Bromodichloromethane	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND
124-48-1	Chlorodibromomethane	ND	ND
127-18-4	Tetrachloroethene	ND	ND
108-88-3	Toluene	ND	ND
79-01-6	Trichloroethene	ND	ND
75-01-4	Vinyl chloride	ND	ND
67-64-1	Acetone	1300.	ND
78-93-3	2-Butanone	ND	ND
75-15-0	Carbon disulfide	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Volatiles (Continued)			
519-78-6	2-Hexanone	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND
100-42-5	Styrene	ND	ND
108-05-4	Vinyl acetate	ND	ND
95-47-6	Total Xylenes	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)			
88-06-2	2,4,6-Trichlorophenol	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND
95-57-8	2-Chlorophenol	ND	ND
120-33-2	2,4-Dichlorophenol	3.*	ND
105-67-9	2,4-Dimethylphenol	2.*	ND
88-75-5	2-Nitrophenol	ND	ND
100-02-7	4-Nitrophenol	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND
87-86-5	Pentachlorophenol	ND	ND
108-95-2	Phenol	ND	ND
65-85-0	Benzoic acid	ND	ND
95-48-7	2-Methylphenol	3.*	35.
108-39-4	4-Methylphenol	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND

D29-OP-92

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Base/Neutral/Acids (Continued)			
83-32-9	Acenaphthene	ND	ND
92-87-5	Benzidine	ND	ND
120-82-1	1,2,4-Trichlorobenzene	23.	42.
118-74-1	Hexachlorobenzene	ND	ND
67-72-1	Hexachloroethane	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND
95-50-1	1,2-Dichlorobenzene	35.	110.
541-73-1	1,3-Dichlorobenzene	68.	82.
106-46-7	1,4-Dichlorobenzene	330.	250.
91-94-1	3,3'-Dichlorobenzidine	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND
206-44-0	Fluoranthene	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND

D29-OP-93

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Base/Neutral/Acids (Continued)			
87-68-3	Hexachlorobutadiene	ND	ND
77-47-4	Hexachlorocyclo- pentadiene	ND	ND
78-59-1	Isophorone	ND	ND
91-20-3	Naphthalene	ND	ND
98-95-3	Nitrobenzene	ND	ND
62-75-9	N-nitrosodimethyl- amine	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND
621-64-7	N-nitrosodipropyla- mine	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	3.	4.
85-68-7	Butyl benzyl phthalate	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND
84-66-2	Diethyl phthalate	ND	ND
131-11-3	Dimethyl phthalate	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND
205-99-2	Benzo(B&K)fluor- anthene	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND

D29-0P-94

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Base/Neutral/Acids (Continued)			
218-01-9	Chrysene	ND	ND
208-96-8	Acenaphthylene	ND	ND
120-12-7	Anthracene	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND
86-73-7	Fluorene	ND	ND
85-01-	Phenanthrene	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND
129-00-0	Pyrene	ND	ND
62-53-3	Aniline	ND	ND
100-51-6	Benzyl alcohol	ND	ND
106-47-8	4-Chloroaniline	ND	ND
132-64-9	Dibenzofuran	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND
88-74-4	2-Nitroaniline	ND	ND
99-09-2	3-Nitroaniline	ND	ND
100-01-6	4-Nitroaniline	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)			
309-00-2	Aldrin	ND	ND
60-57-1	Dieldrin	ND	ND
57-74-9	Chlordane	ND	ND

D29-OP-95

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Pesticides and PCBs (Continued)			
50-29-3	4,4'-DDT	ND	ND
72-55-9	4,4'-DDE	ND	ND
72-54-8	4,4'-DDD	ND	ND
959-98-8	alpha-Endosulfan	ND	ND
33213-65-9	beta-Endosulfan	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND
72-20-8	Endrin	ND	ND
7421-93-4	Endrin aldehyde	ND	ND
76-44-8	Heptachlor	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND
319-84-6	alpha-BHC	ND	ND
319-85-7	beta-BHC	0.90**	1.4**
58-89-9	gamma-BHC	ND	ND
319-86-8	delta-BHC	ND	ND
53469-21-9	PCB-1242	ND	ND
11097-69-1	PCB-1254	ND	ND
11104-28-2	PCB-1221	ND	ND
11141-16-5	PCB-1232	ND	ND
12672-29-6	PCB-1248	ND	ND
11096-82-5	PCB-1260	ND	ND
12674-11-2	PCB-1016	ND	ND
8001-35-2	Toxaphene	ND	ND

D29-OP-96

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Chlorinated Herbicides (Concentration Units are in μg/L)			
75-99-0	Dalapon (Dowpon)	4.0	ND
1918-00-9	Dicamba	ND	ND
7085-19-0	MCPP	ND	ND
94-74-6	MCPA	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND
94-75-7	2,4-D	16.	6.5
93-72-1	2,4,5-TP (Silvex)	ND	ND
93-76-5	2,4,5-T	1.0	1.0*
94-82-6	2,4-DB	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)			
	Antimony	<0.002	<0.004
	Arsenic	<0.002	<0.001
	Beryllium	<0.002	<0.002
	Cadmium	<0.001	<0.001
	Chromium	0.02	0.12
	Copper	0.010	0.016
	Lead	<0.01	<0.01
	Mercury	<0.001	<0.001
	Nickel	<0.01	0.07
	Selenium	<0.002	<0.009

D29-OP-97

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled July 15, 1985 and August 5, 1985

CAS Number	Compound Name	Y4463 MW-102C (D-12-D) 7/15/85	Y4541 MW-102C (D-12-D) 8/05/85
Metals (Continued)			
	Silver	0.006	<0.002
	Thallium	<0.02	<0.02
	Zinc	0.034	0.058
Classical Parameters (Concentration Units are in Parts per Million - ppm)			
	Total Cyanide	<0.01	<0.01
	Total Phenols	0.05	0.13

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 102-C-4463-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. ---------	Unknown	90. µg/L
2. 108-87-2	Methylcyclohexane	10. µg/L
3. 15045-43-9	Tetrahydro-2,2,5,5-Tetra-methylfuran	20. µg/L
4. 108-90-7	Chlorobenzene	400. µg/L
5. ---------	Unknown	10. µg/L
6. ---------	Trichlorobenzene isomer	10. µg/L
7. 101-84-8	1,1,-oxybis-benzene	10. µg/L
8. 42141-19-5	2H-1,2,3-Benzothiadiazine, 2-(2,4-Dinitrophenyl)-5,6,7,8 Tetrahydro	20. µg/L
9. 57-10-3	Hexadecanoic acid	20. µg/L
10. ---------	Carboxylic acid	10. µg/L
11. 80-07-9	1,1'-Sulfonylbis (4-chloro) benzene	20. µg/L
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 102-C-4541-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
BASE/NEUTRAL/ACIDS:		
1. ---------	Methylene Chloride/Acetone Reaction Products Reported in Method Blank	~ B
2. 108-90-7	Chlorobenzene	200. μg/L
3. 42141-19-5	2-(2,4-dinitrophenyl)-5,6,7,8-tetrahydro-2H-1,2,3-benzothiadiazine	10. μg/L
4. 80-07-9	1,1'-sulfonylbis (4-chloro) benzene	20. μg/L
5. --------	Unknown	10. μg/L
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		

[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.009ppb)	ND (0.003ppb)	ND (0.0053ppb)	ND (0.003ppb)	ND (0.0009ppb)
Volatile Organic Compounds (Concentration Units are in μg/L						
71-43-2	Benzene	450.	400.	ND	23.	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	850.	8400.	28.	81.	23.*
107-06-2	1,2,-Dichloroethane	ND	ND	62.	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	3.*	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	19.	ND	400.

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Volatiles (Continued)						
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	69.	380.	95.	79.	54.
74-87-3	Chloromethane	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	27.	ND	950.
75-01-4	Vinyl chloride	ND	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND	ND

D29-OP-64

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Volatiles (Continued)						
519-78-6	2-Hexanone	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)						
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	150.	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	160.	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	210.	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND	ND
108-95-2	Phenol	10.*	ND	ND	ND	ND
65-85-0	Benzoic acid	9.*	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND	ND
106-44-5	4-Methylphenol	5.*	23.*	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	46.*	ND	ND	ND	ND

D29-OP-65

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Base/Neutral/Acids (Continued)						
83-32-9	Acenaphthene	4.*	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	600.	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	4.*	75.	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	55.	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	7.*	170.	ND	6.*	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	5.*	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND
39638-32-9	Bis(2-chloroisopropyl)ether	ND	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND	ND

D29-OP-66

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Base/Neutral/Acids (Continued)						
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND	ND
77-47-4	Hexachlorocyclo- pentadiene	ND	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl- amine	ND	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla- mine	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND	5.*
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor- anthene	ND	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND	ND

D29-OP-67

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Base/Neutral/Acids (Continued)						
218-01-9	Chrysene	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	8.*	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND	ND
129-00-0	Pyrene	5.*	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in μg/L)						
309-00-2	Aldrin	ND	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND	ND

D29-OP-68

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Pesticides and PCBs (Continued)						
50-29-3	4,4'-DDT	ND	ND	1.3**	1.8**	ND
72-55-9	4,4'-DDE	ND	ND	ND	2.0**	ND
72-54-8	4,4'-DDD	ND	ND	0.26**	0.96**	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	190.	2.6**	ND	ND
319-85-7	beta-BHC	ND	ND	0.78**	ND	ND
58-89-9	gamma-BHC	ND	220.	1.6**	ND	ND
319-86-8	delta-BHC	ND	77.	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND	ND

D29-OP-69-1

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Chlorinated Herbicides (Concentration Units are in µg/L)						
75-99-0	Dalapon (Dowpon)	ND	ND	2.0*	ND	ND
1918-00-9	Dicamba	ND	ND	5.	ND	ND
7085-19-0	MCPP	ND	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	14.	ND	ND
94-75-7	2,4-D	50.	2.*	7.	2.0*	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND	1.0*	ND	ND
93-76-5	2,4,5-T	14.	1.0*	1.0*	1.0*	1.0*
94-82-6	2,4-DB	ND	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)						
	Antimony	0.017	0.001	0.033	<0.001	<0.001
	Arsenic	0.148	0.105	0.024	0.042	<0.001
	Beryllium	0.005	0.010	0.011	0.006	<0.002
	Cadmium	0.009	0.006	<0.001	<0.001	<0.001
	Chromium	0.09	0.32	0.31	0.18	0.04
	Copper	0.316	0.383	0.271	0.233	0.014
	Lead	2.3	0.06	0.13	0.31	<0.01
	Mercury	0.002	<0.001	<0.001	0.001	<0.001
	Nickel	0.09	0.22	0.35	0.10	0.01
	Selenium	<0.001	<0.001	<0.001	<0.001	0.011

D29-OP-69

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
120 Lister Avenue
Groundwater: Sampled June 5, 1985

CAS Number	Compound Name	Y4168 MW-101A (F-9-G)	Y4169 MW-101B (F-9-G)	Y4170 MW-101D (F-9-G)	Y4171 MW-102A (D-12-D)	Y4172 MW-103D (K-12-D)
Metals (Continued)						
	Silver	0.008	0.008	0.009	0.007	0.005
	Thallium	<0.02	<0.02	<0.02	<0.02	<0.02
	Zinc	3.8	0.853	0.840	0.708	0.025
Classical Parameters (Concentration Units are in Parts per Million - ppm)						
	Total Cyanide	0.03	0.01	<0.01	0.01	<0.01
	Total Phenols	2.0	0.36	0.02	0.02	<0.01

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 101A-4168-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	100. µg/L
2. --------	Unknown	20. µg/L
3. --------	Unknown	40. µg/L
4. --------	Unknown	30. µg/L
5. --------	Unknown	30. µg/L
6. 108-90-7	A Chlorophenol	200. µg/L
7. 94-75-7	(2-4-Dichlorophenoxyl-Acetic Acid	20. µg/L
8. --------	Unknown	10. µg/L
9. --------	Unknown	20. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 101B-4169-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	400. µg/L
2. 111-96-6	1,1'-oxybis [2-Methoxyethane]	50. µg/L
3. --------	Dimethylphenol isomer	100. µg/L
4. 80-07-9	1,1'-Sulfonylbis [4-chlorobenzene]	70. µg/L
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 101D-4170-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1. 123-91-1	1,4-Dioxane	7. µg/L
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BASE/NEUTRAL/ACIDS:

1.	None Detected	
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 102A-4171-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1. 108-90-7	Chlorobenzene	60. µg/L
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[1] quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

TENTATIVELY IDENTIFIED COMPOUNDS
SEMI-QUANTITATIVE RESULTS

SAMPLE DESCRIPTION: Groundwater OFF-SITE LOCATION: 120 Lister Avenue

SAMPLE NO: 103D-4172-298-H-Y

CAS #	COMPOUND IDENTIFICATION	ESTIMATED CONCENTRATION[1]
VOLATILES:		
1.	None Detected	
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BASE/NEUTRAL/ACIDS:		
1.	None Detected	
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[1]quantitated by direct peak height comparison to the nearest internal standard peak, assuming a response factor of 1.

APPENDIX
F

APPENDIX F

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CLIENT #	SAMP. DESC	DATE S	TASK	SAMPLE #
C-8-D-2000-100-S-L	Near Surface Soil-Station C-8-D, 1-6"	850115	SARGENT2	L2000 00
C-8-D-2001-101-S-L	Near Surface Soil-Station C-8-D, 6-12"	850115	SARGENT2	L2001 00
C-8-D-2002-102-S-L	Near Surface Soil-Station C-8-D, 12-24"	850115	SARGENT2	L2002 00
H-9-D-2003-100-S-L	Near Surface Soil-Station H-9-D, 0-16"	850115	SARGENT2	L2003 00
H-9-D-2004-101-S-L	Near Surface Soil-Station H-9-D, 6-12"	850115	SARGENT2	L2004 00
H-9-D-2005-102-S-L	Near Surface Soil-Station H-9-D, 12-24"	850115	SARGENT2	L2005 00
J-11-D-2006-100-S-L	Near Surface Soil-Station J-11-D, 0-6"	850115	SARGENT2	L2006 00
J-11-D-2007-101-S-L	Near Surface Soil-Station J-11-D, 6-12"	850115	SARGENT2	L2007 00
J-11-D-2008-102-S-L	Near Surface Soil-Station J-11-D, 12-24"	850115	SARGENT2	L2008 00
K-10-D-2009-100-S-L	Near Surface Soil-Station K-10-D, 0-6"	850115	SARGENT2	L2009 00
T001-2012-H-C	Travel Blank-Soil	850115	SARGENT2	C2012 00
F001-2013-H-C	Field Blank-Soil	850115	SARGENT2	C2013 00
4100-2014-C-L	Chip-Brick Bldg, Interior, N.W. Corner	850115	SARGENT2	L2014 00
4501-2015-C-L	Chip-Brick Bldg, Exterior, N.W. Corner	850115	SARGENT2	L2015 00
4100-2016-C-L	Chip-Brick Bldg, Interior, S.E. Corner	850115	SARGENT2	L2016 00
4400-2017-C-L	Chip-Brick Bldg, Roof	850115	SARGENT2	L2017 00
4100-2018-C-L	Chip-Brick Bldg, Floor	850115	SARGENT2	L2018 00
4503-2019-C-L	Chip-Brick Bldg, Exterior, S.E. Corner	850115	SARGENT2	L2019 00
K-9-D-2024-100-S-Y	Soil Boring-Station K-9-D, 0-6"	850115	SARGENT2	Y2024 00
K-9-D-2025-101-S-Y	Soil Boring-Station K-9-D, 6-12"	850115	SARGENT2	Y2025 00
K-9-D-2026-102-S-Y	Soil Boring-Station K-9-D, 12-24"	850115	SARGENT2	Y2026 00
K-9-D-2027-103-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2027 00
K-9-D-2028-104-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2028 00
K-9-D-2029-105-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2029 00
K-9-D-2030-106-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2030 00
K-9-D-2031-107-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2031 00
K-9-D-2033-109-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2033 00
A006-2037-A-L	Ambient Air-120 Lister (Northeast)	850117	SARGENT2	L2037 00
F-9-G-2038-100-S-Y	Soil Boring-Station F-9-G, 0-6"	850116	SARGENT2	Y2038 00
F-9-G-2039-101-S-Y	Soil Boring-Station F-9-G, 6-12"	850116	SARGENT2	Y2039 00
F-9-G-2040-102-S-Y	Soil Boring-Station F-9-G, 12-24"	850116	SARGENT2	Y2040 00
F-9-G-2041-103-S-L	Soil Boring-Station F-9-G, 18" interval	850116	SARGENT2	L2041 00
F-9-G-2042-104-S-L	Soil Boring-Station F-9-G, 18" interval	850116	SARGENT2	L2042 00
F-9-G-2047-109-S-L	Soil Boring-Station F-9-G, 18" interval	850116	SARGENT2	L2047 00
T003-2048-H-C	Travel Blank-Soil	850116	SARGENT2	C2048 00
F003-2049-H-C	Field Blank-Soil	850116	SARGENT2	C2049 00
5100-2057-C-L	Chip-Block Bldg, Interior, N.W. Corner	850116	SARGENT2	L2057 00
5501-2058-C-L	Chip-Block Bldg, Exterior, N.W. Corner	850116	SARGENT2	L2058 00
5100-2059-C-L	Chip-Block Bldg, Interior, S.E. Corner	850116	SARGENT2	L2059 00
5300-2060-C-L	Chip-Block Bldg, Exterior, S.E. Corner	850116	SARGENT2	L2060 00
5100-2061-C-L	Chip-Block Bldg, High Traffic	850116	SARGENT2	L2061 00
5400-2062-C-L	Chip-Block Bldg, Roof	850116	SARGENT2	L2062 00
G-10-D-2063-100-S-L	Near Surface Soil-Station G-10-D, 0-6"	850116	SARGENT2	L2063 00
G-10-D-2064-101-S-L	Near Surface Soil-Station G-10-D, 6-12"	850116	SARGENT2	L2064 00
E-10-D-2066-100-S-L	Near Surface Soil-Station E-10-D, 0-6"	850116	SARGENT2	L2066 00
E-10-D-2067-101-S-L	Near Surface Soil-Station E-10-D, 6-12"	850116	SARGENT2	L2067 00

CLIENT #	SAM. DESC	SORT 2	TASK	SAMPLE #
E-10-D-2068-102-S-L	Near Surface Soil-Station E-10-D, 12-24"	850116	SARGENT2	L2068 00
D-10-D-2069-100-S-L	Near Surface Soil-Station D-10-D, 0-6"	850119	SARGENT2	L2069 00
K-12-B-2072-100-S-Y	Soil Boring-Station K-12-B, 0-6"	850117	SARGENT2	Y2072 00
K-12-B-2073-101-S-Y	Soil Boring-Station K-12-B, 6-12"	850117	SARGENT2	Y2073 00
K-12-B-2074-102-S-Y	Soil Boring-Station K-12-B, 12-24"	850117	SARGENT2	Y2074 00
K-12-B-2075-103-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2075 00
K-12-B-2076-104-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2076 00
K-12-B-2077-105-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2077 00
K-12-B-2078-106-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2078 00
K-12-B-2079-107-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2079 00
K-12-B-2081-109-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2081 00
T005-2082-H-C	Travel Blank-Soil	850117	SARGENT2	C2082 00
F004-2083-H-C	Field Blank-Soil	850117	SARGENT2	C2083 00
A006-2101-A-L	Ambient Air-120 Lister (Southwest)	850118	SARGENT2	L2101 00
A006-2102-A-L	Ambient Air-120 Lister (Northeast)	850118	SARGENT2	L2102 00
C-9-D-2103-100-S-L	Near Surface Soil-Station C-9-D, 0-6"	850117	SARGENT2	L2103 00
C-9-D-2104-101-S-L	Near Surface Soil-Station C-9-D, 6-12"	850117	SARGENT2	L2104 00
C-9-D-2105-102-S-L	Near Surface Soil-Station C-9-D, 12-24"	850117	SARGENT2	L2105 00
H-12-D-2108-100-S-Y	Near Surface Soil-Station H-12-D, 0-6"	850117	SARGENT2	Y2108 00
H-12-D-2109-101-S-Y	Near Surface Soil-Station H-12-D, 6-12"	850117	SARGENT2	Y2109 00
H-12-D-2110-102-S-Y	Near Surface Soil-Station H-12-D, 12-24"	850117	SARGENT2	Y2110 00
G-11-D-2111-100-S-L	Near Surface Soil-Station G-11-D, 0-6"	850119	SARGENT2	L2111 00
G-11-D-2112-101-S-L	Near Surface Soil-Station G-11-D, 6-12"	850119	SARGENT2	L2112 00
G-11-D-2113-102-S-L	Near Surface Soil-Station G-11-D, 12-24"	850119	SARGENT2	L2113 00
E-12-G-2114-100-S-L	Near Surface Soil-Station E-12-G, 0-6"	850119	SARGENT2	L2114 00
D-12-D-2117-100-S-Y	Soil Boring-Station D-12-D, 0-6"	850118	SARGENT2	Y2117 00
D-12-D-2118-101-S-Y	Soil Boring-Station D-12-D, 6-12"	850118	SARGENT2	Y2118 00
D-12-D-2119-102-S-Y	Soil Boring-Station D-12-D, 12-24"	850118	SARGENT2	Y2119 00
D-12-D-2120-103-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2120 00
D-12-D-2121-104-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2121 00
D-12-D-2122-105-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2122 00
D-12-D-2126-109-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2126 00
T006-2127-H-C	Travel Blank-Soil	850118	SARGENT2	C2127 00
F006-2128-H-C	Field Blank-Soil	850118	SARGENT2	C2128 00
A006-2157-A-L	Ambient Air-120 Lister (Southwest)	850123	SARGENT2	L2157 00
A006-2158-A-L	Ambient Air-120 Lister (Northeast)	850123	SARGENT2	L2158 00
C-10-H-2159-100-S-Y	Near Surface Soil-Station C-10-H, 0-6"	850119	SARGENT2	Y2159 00
C-10-H-2160-101-S-Y	Near Surface Soil-Station C-10-H, 6-12"	850119	SARGENT2	Y2160 00
C-10-H-2161-102-S-Y	Near Surface Soil-Station C-10-H, 12-24"	850119	SARGENT2	Y2161 00
D-8-I-2162-100-S-Y	Near Surface Soil-Station D-8-I, 0-6"	850119	SARGENT2	Y2162 00
D-8-I-2163-101-S-Y	Near Surface Soil-Station D-8-I, 6-12"	850119	SARGENT2	Y2163 00
E-11-F-2165-100-S-Y	Near Surface Soil-Station E-11-F, 0-6"	850119	SARGENT2	Y2165 00
E-11-F-2166-101-S-Y	Near Surface Soil-Station E-11-F, 6-12"	850119	SARGENT2	Y2166 00
E-11-F-2167-102-S-Y	Near Surface Soil-Station E-11-F, 12-24"	850119	SARGENT2	Y2167 00
K-9-D-2168-100-S-Y	Soil Boring-Station K-9-D, 0-6"	850119	SARGENT2	Y2168 00
K-9-D-2169-101-S-Y	Soil Boring-Station K-9-D, 6-12"	850119	SARGENT2	Y2169 00

CLIENT #	SAM.DESC	COF? Z	TASK	SAMFILE #
K-9-D-2170-102-S-Y	Soil Boring-Station K-9-D, 12-24"	850119	SARGENT2	Y2170 00
K-9-D-2171-103-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2	Y217 00
K-9-D-2172-104-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2	Y2172 00
K-9-D-2173-105-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2	Y2173 00
K-9-D-2174-106-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2	Y2174 00
K-9-D-2175-107-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2	Y2175 00
K-9-D-2177-109-S-Y	Soil Boring-Station K-9-D, 18" interval	850119	SARGENT2	Y2177 00
9300-2178-C-L	Chip-Tile Bldg,NW Corner,Interior,High/Mid/Low ea wal	850119	SARGENT2	L2178 00
9300-2179-C-L	Chip-Tile Bldg,SE Corner,Interior,High/Mid/Low ea wal	850119	SARGENT2	L2179 00
9300-2180-C-L	Chip-Tile Bldg,NW Corner,Exterior,High/Mid/Low ea wal	850119	SARGENT2	L2180 00
9300-2181-C-L	Chip-Tile Bldg,SE Corner,Exterior,High/Mid/Low ea wal	850119	SARGENT2	L2181 00
9300-2182-C-L	Chip-Tile Bldg, Floor, High Traffic Area	850119	SARGENT2	L2182 00
9300-2183-C-L	Chip-Tile Bldg, Roof	850119	SARGENT2	L2183 00
F008-2184-C-L	Field Blank-Chip	850119	SARGENT2	L2184 00
F-9-G-2185-100-S-Y	Soil Boring-Station F-9-G, 0-6"	850123	SARGENT2	Y2185 00
F-9-G-2186-101-S-Y	Soil Boring-Station F-9-G, 6-12"	850123	SARGENT2	Y2186 00
F-9-G-2187-102-S-Y	Soil Boring-Station F-9-G, 12-24"	850123	SARGENT2	Y2187 00
F-9-G-2188-103-S-Y	Soil Boring-Station F-9-G, 18" interval	850123	SARGENT2	Y2188 00
F-9-G-2189-104-S-Y	Soil Boring-Station F-9-G, 18" interval	850123	SARGENT2	Y2189 00
F-9-G-2194-109-S-Y	Soil Boring-Station F-9-G, 18" interval	850123	SARGENT2	Y2194 00
T007-2195-H-C	Travel Blank-Soil	850119	SARGENT2	C2195 00
F009-2196-H-C	Field Blank-Soil	850119	SARGENT2	C2196 00
K-12-B-2197-103-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2	Y2197 00
K-12-B-2198-104-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2	Y2198 00
K-12-B-2199-105-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2	Y2199 00
K-12-B-2200-106-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2	Y2200 00
K-12-B-2201-107-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2	Y2201 00
K-12-B-2203-109-S-Y	Soil Boring-Station K-12-B, 18" interval	850124	SARGENT2	Y2203 00
D-12-D-2204-103-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2	Y2204 00
D-12-D-2205-104-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2	Y2205 00
D-12-D-2206-105-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2	Y2206 00
D-12-D-2210-109-S-Y	Soil Boring-Station D-12-D, 18" interval	850123	SARGENT2	Y2210 00
T008-2220-H-C	Travel Blank-Soil	850123	SARGENT2	C2220 00
F010-2221-H-C	Field Blank-Soil	850123	SARGENT2	C2221 00
T009-2222-H-C	Travel Blank-Soil	850124	SARGENT2	C2222 00
F011-2223-H-C	Field Blank-Soil	850124	SARGENT2	C2223 00
A006-2224-A-L	Ambient Air-120 Lister (Southwest)	850128	SARGENT2	L2224 00
A006-2225-A-L	Ambient Air-120 Lister (Northeast)	850128	SARGENT2	L2225 00
9300-2231-W-L	Wipe-Composite of vert.tank 1 & horiz. tank 2,in&out	850128	SARGENT2	L2231 00
9300-2232-W-L	Wipe-Composite of horiz. tank 3 & vert. tank 4,in&out	850128	SARGENT2	L2232 00
9300-2233-W-L	Wipe-Composite of horiz. tank 5 & 6, outside legs	850128	SARGENT2	L2233 00
9300-2234-W-L	Wipe-Composite of Blower 7 & duct elbow 8, in & out	850128	SARGENT2	L2234 00
9300-2235-W-L	Wipe-Composite of Horiz. tank 9 & 10, outside	850128	SARGENT2	L2235 00
F012-2236-W-L	Field Blank-Wipe	850128	SARGENT2	L2236 00
9300-2237-W-L	Wipe-Comp. of Vert. tank 11 out & Horiz. tank 12,out	850128	SARGENT2	L2237 00
9300-2238-W-L	Wipe-Comp. of #13 sheet metal hood & #14 column	850128	SARGENT2	L2238 00

CLIENT #	SAMP. DESC	SORT 2	TASK	SAMPID #
9300-2239-W-L	Wipe-Comp. of Trough # 15 & 16, in & out	850128	SARGENT2	L2239 00
9300-2240-W-L	Wipe-Comp. of Vert. tank 17 & 18, outside	850128	SARGENT2	L2240 00
9300-2241-W-L	Wipe-Comp. of Vert. tank 19 & 20, outside	850128	SARGENT2	L2241 00
A006-2260-A-L	Ambient Air-120 Lister (Southwest)	850129	SARGENT2	L2260 00
A006-2261-A-L	Ambient Air-120 Lister (Northeast)	850129	SARGENT2	L2261 00
C-12-D-2262-100-S-L	Near Surface Soil-Station C-12-D, 0-6" (N110,E593)	850129	SARGENT2	L2262 00
C-12-D-2263-101-S-L	Near Surface Soil-Station C-12-D, 6-12" (N110,E593)	850129	SARGENT2	L2263 00
C-12-D-2264-102-S-L	Near Surface Soil-Station C-12-D, 12-24" (N110,E593)	850129	SARGENT2	L2264 00
C-11-D-2265-100-S-L	Near Surface Soil-Station C-11-D, 0-6" (N110,E543)	850129	SARGENT2	L2265 00
C-11-D-2266-101-S-L	Near Surface Soil-Station C-11-D, 6-12" (N110,E543)	850129	SARGENT2	L2266 00
C-11-D-2267-102-S-L	Near Surface Soil-Station C-11-D, 12-24" (N110,E543)	850129	SARGENT2	L2267 00
X-9709-2270-P-F-L	NJ DEP Proficiency Sample X9709	850129	SARGENT2	L2270 00
C-10-D-2271-100-S-L	Near Surface Soil-Station C-10-D, 0-6" (N110,E493)	850129	SARGENT2	L2271 00
C-10-D-2272-101-S-L	Near Surface Soil-Station C-10-D, 6-12" (N110,E493)	850129	SARGENT2	L2272 00
C-10-D-2273-102-S-L	Near Surface Soil-Station C-10-D, 12-24" (N110,E493)	850129	SARGENT2	L2273 00
A006-2274-A-L	Ambient Air-120 Lister (Southwest)	850131	SARGENT2	L2274 00
A006-2275-A-L	Ambient Air-120 Lister (Northeast)	850131	SARGENT2	L2275 00
A006-2279-A-L	Ambient Air-120 Lister (Southwest)	850201	SARGENT2	L2279 00
A006-2280-A-L	Ambient Air-120 Lister (Northeast)	850201	SARGENT2	L2280 00
D-11-D-2284-100-S-L	Near Surface Soil-Station D-11-D, 0-6" (N160,E543)	850130	SARGENT2	L2284 00
D-11-D-2285-101-S-L	Near Surface Soil-Station D-11-D, 6-12" (N160,E543)	850130	SARGENT2	L2285 00
D-11-D-2286-102-S-L	Near Surface Soil-Station D-11-D, 12-24" (N160,E543)	850130	SARGENT2	L2286 00
D-9-D-2287-100-S-L	Near Surface Soil-Station D-9-D, 0-6" (N160,E443)	850130	SARGENT2	L2287 00
D-9-D-2288-101-S-L	Near Surface Soil-Station D-9-D, 6-12" (N160,E443)	850130	SARGENT2	L2288 00
D-9-D-2289-102-S-L	Near Surface Soil-Station D-9-D, 12-24" (N160,E443)	850130	SARGENT2	L2289 00
E-11-D-2290-100-S-L	Near Surface Soil-Station E-11-D, 0-6" (N210,E543)	850130	SARGENT2	L2290 00
E-11-D-2291-101-S-L	Near Surface Soil-Station E-11-D, 6-12" (N210,E543)	850130	SARGENT2	L2291 00
F-10-D-2293-100-S-Y	Near Surface Soil-Station F-10-D, 0-6" (N260,E493)	850131	SARGENT2	L2293 00
F-10-D-2294-101-S-Y	Near Surface Soil-Station F-10-D, 6-12" (N260,E493)	850131	SARGENT2	L2294 00
F-10-D-2295-102-S-Y	Near Surface Soil-Station F-10-D, 12-24" (N260,E493)	850131	SARGENT2	L2295 00
G-9-D-2296-100-S-Y	Near Surface Soil-Station G-9-D, 0-6" (N310,E443)	850131	SARGENT2	L2296 00
G-9-D-2297-101-S-Y	Near Surface Soil-Station G-9-D, 6-12" (N310,E443)	850131	SARGENT2	L2297 00
G-9-D-2298-102-S-Y	Near Surface Soil-Station G-9-D, 12-24" (N310,E443)	850131	SARGENT2	L2298 00
A006-2302-A-L	Ambient Air-120 Lister (Southwest)	850204	SARGENT2	L2302 00
A006-2303-A-L	Ambient Air-120 Lister (Northeast)	850204	SARGENT2	L2303 00
H-10-D-2305-100-S-Y	Near Surface Soil-Station H-10-D, 0-6" (N360,E493)	850131	SARGENT2	L2305 00
H-10-D-2306-101-S-L	Near Surface Soil-Station H-10-D, 6-12" (N360,E493)	850131	SARGENT2	L2306 00
H-10-D-2307-102-S-L	Near Surface Soil-Station H-10-D, 12-24" (N360,E493)	850131	SARGENT2	L2307 00
H-11-D-2308-100-S-Y	Near Surface Soil-Station H-11-D, 0-6" (N360,E543)	850131	SARGENT2	L2308 00
H-11-D-2309-101-S-Y	Near Surface Soil-Station H-11-D, 6-12" (N360,E543)	850131	SARGENT2	L2309 00
H-11-D-2310-102-S-L	Near Surface Soil-Station H-11-D, 12-24" (N360,E543)	850131	SARGENT2	L2310 00
J-12-D-2314-100-S-L	Near Surface Soil-Station J-12-D, 0-6" (N410,E593)	850201	SARGENT2	L2314 00
J-12-D-2315-101-S-L	Near Surface Soil-Station J-12-D, 6-12" (N410,E593)	850201	SARGENT2	L2315 00
J-12-D-2316-102-S-L	Near Surface Soil-Station J-12-D, 12-24" (N410,E593)	850201	SARGENT2	L2316 00
A006-2326-A-L	Ambient Air-120 Lister (Southwest)	850207	SARGENT2	L2326 00
A006-2327-A-L	Ambient Air-120 Lister (Northeast)	850207	SARGENT2	L2327 00

CLIENT ID	SAMP. DESC	SORT 2	SEEK	SAMPLE ID
E-11-F-2328-103-S-L	Soil Boring-Station E-11-F, 24-36"	850204	SARGENT2	L2328 00
E-11-F-2329-104-S-L	Soil Boring-Station E-11-F, 36-48"	850204	SARGENT2	L2329 00
E-11-F-2330-105-S-L	Soil Boring-Station E-11-F, 12" interval	850204	SARGENT2	L2330 00
E-11-F-2331-106-S-L	Soil Boring-Station E-11-F, 12" interval	850204	SARGENT2	L2331 00
E-11-F-2332-107-S-L	Soil Boring-Station E-11-F, 12" interval	850204	SARGENT2	L2332 00
E-11-F-2334-109-S-L	Soil Boring-Station E-11-F, 12" interval	850204	SARGENT2	L2334 00
9100-2335-H-L	Decon Water-Tank #03, Grab sample after agitation	850202	SARGENT2	L2335 00
E-11-P-2336-103-S-L	Soil Boring-Station E-11-P, 24-36" (N201.1,E502.6)	850205	SARGENT2	L2336 00
E-11-P-2337-104-S-L	Soil Boring-Station E-11-P, 36-48" (N201.1,E502.6)	850205	SARGENT2	L2337 00
E-11-P-2338-105-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2338 00
E-11-P-2339-106-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2339 00
E-11-P-2340-107-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2340 00
E-11-P-2341-108-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2341 00
E-11-P-2342-109-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2342 00
D-11-G-2343-100-S-L	Soil Boring-Station D-11-G, 0-6"	850205	SARGENT2	L2343 00
D-11-G-2344-101-S-L	Soil Boring-Station D-11-G, 6-12"	850205	SARGENT2	L2344 00
D-11-G-2345-102-S-L	Soil Boring-Station D-11-G, 12-24"	850205	SARGENT2	L2345 00
D-11-G-2346-103-S-L	Soil Boring-Station D-11-G, 12" interval	850205	SARGENT2	L2346 00
D-11-G-2347-104-S-L	Soil Boring-Station E-11-G, 12" interval	850205	SARGENT2	L2347 00
D-11-G-2348-105-S-L	Soil Boring-Station D-11-G, 12" interval	850205	SARGENT2	L2348 00
D-11-G-2349-106-S-L	Soil Boring-Station D-11-G, 12" interval	850205	SARGENT2	L2349 00
D-11-G-2352-109-S-L	Soil Boring-Station D-11-G, 12" interval	850205	SARGENT2	L2352 00
9100-2353-W-L	Wipe-120 Lister (Decon)	850207	SARGENT2	L2353 00
9100-2354-W-L	Wipe-120 Lister, Shower Trailer	850207	SARGENT2	L2354 00
9100-2355-W-L	Wipe-120 Lister, Respirators	850212	SARGENT2	L2355 00
A006-2356-A-L	Ambient Air-120 Lister (Southwest)	850212	SARGENT2	L2356 00
A006-2357-A-L	Ambient Air-120 Lister (Northeast)	850212	SARGENT2	L2357 00
E-11-N-2366-100-S-L	Soil Boring-Station E-11-N, 0-6"	850206	SARGENT2	L2366 00
E-11-N-2367-101-S-L	Soil Boring-Station E-11-N, 6-12"	850206	SARGENT2	L2367 00
E-11-N-2368-102-S-L	Soil Boring-Station E-11-N, 12-24"	850206	SARGENT2	L2368 00
E-11-N-2369-103-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2369 00
E-11-N-2370-104-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2370 00
E-11-N-2371-105-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2371 00
E-11-N-2375-109-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2375 00
E-10-L-2376-100-S-L	Soil Boring-Station E-10-L, 0-6"	850206	SARGENT2	L2376 00
E-10-L-2377-101-S-L	Soil Boring-Station E-10-L, 6-12"	850206	SARGENT2	L2377 00
E-10-L-2378-102-S-L	Soil Boring-Station E-10-L, 12-24"	850206	SARGENT2	L2378 00
E-10-L-2379-103-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2379 00
E-10-L-2380-104-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2380 00
E-10-L-2381-105-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2381 00
E-10-L-2383-107-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2383 00
E-10-L-2382-106-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2382 00
E-10-L-2385-109-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2385 00
3Y604-2386-P-F-L	NJ DEP Proficiency Sample 3Y604		SARGENT2	L2386 00
E-9-D-2388-100-S-L	Near Surface Soil-Station E-9-D, 0-6"	850206	SARGENT2	L2388 00
E-9-D-2389-101-S-L	Near Surface Soil-Station E-9-D, 6-12"	850206	SARGENT2	L2389 00

CLIENT #	SAMP. DESC	SORT 2	TASK	SAMPLE #
E-9-D-2390-102-S-L	Near Surface Soil-Station E-9-D, 12-24"	850206	SARGENT2	L2390 00
F020-2422-W-L	Field Blank-Wipe	850207	SARGENT2	L2422 00
0001-2423-D-W	Drum #B, very light yellow translucent liquid	850208	SARGENT2	W2423 00
0003-2425-D-W	Drum #G, hard white paint-like solid w/ tan gel top	850208	SARGENT2	W2425 00
0004-2426-D-W	Drum #J, brown & black paint-like liquid	850208	SARGENT2	W2426 00
0006-2428-D-W	Drum #M, translucent forest green liquid	850208	SARGENT2	W2428 00
0007-2429-D-W	Drum #N, translucent pink liquid like syrup	850209	SARGENT2	W2429 00
0008-2430-D-W	Drum #O, translucent green liquid like syrup	850208	SARGENT2	W2430 00
0009-2431-D-W	Drum #P, brownish-orange paste-like liquid	850208	SARGENT2	W2431 00
0010-2432-D-W	Drum #Q, brown paste-like liquid	850208	SARGENT2	W2432 00
0011-2433-D-W	Drum #R, slightly viscous brown liquid with debris	850208	SARGENT2	W2433 00
0012-2434-D-W	Drum #S, medium brown viscous liquid	850208	SARGENT2	W2434 00
9200-2459-W-L	Wipe-80 Lister (Empire Drill Rig, High Sample Point)	850213	SARGENT2	L2459 00
A006-2478-A-L	Ambient Air-120 Lister (Southwest)	850214	SARGENT2	L2478 00
A006-2479-A-L	Ambient Air-120 Lister (Northeast)	850214	SARGENT2	L2479 00
T019-2480-H-Y	Travel Blank-Monitoring Well	850213	SARGENT2	C2480 00
F023-2481-H-Y	Field Blank-Monitoring Well	850213	SARGENT2	C2481 00
F-9-G-2482-298-H-Y	Monitoring Well MW-101 (120 Lister)	850213	SARGENT2	Y2482 00
D-12-D-2483-298-H-Y	Monitoring Well MW-102 (120 Lister)	850213	SARGENT2	Y2483 00
K-12-B-2484-298-H-Y	Monitoring Well MW-103 (120 Lister)	850213	SARGENT2	Y2484 00
F024-2485-W-L	Field Blank-Wipe	850212	SARGENT2	L2485 00
A006-2489-A-L	Ambient Air-120 Lister (Southwest)	850215	SARGENT2	L2489 00
A006-2490-A-L	Ambient Air-120 Lister (Northeast)	850215	SARGENT2	L2490 00
4V102-2499-P-F-L	NJ DEP Proficiency Sample 4V102		SARGENT2	L2499 00
J3910-2500-P-F-L	NJ DEP Proficiency Sample J3910		SARGENT2	L2500 00
9300-2501-W-L	Wipe-Tank Trailer, Ser.#UNP461001. Comp. of 2	850214	SARGENT2	L2501 00
0013-2504-D-W	Drum #C, Red gel-like elastic solid	850220	SARGENT2	W2504 00
0014-2505-D-W	Drum #F, Brownish-yellow elastic solid w/ paint@botto	850220	SARGENT2	W2505 00
A006-2506-A-L	Ambient Air-120 Lister (Southwest)	850216	SARGENT2	L2506 00
A006-2507-A-L	Ambient Air-120 Lister (Northeast)	850216	SARGENT2	L2507 00
9300-2511-W-L	Wipe-Trailer #503, Comp. of 2, top & under carriage	850215	SARGENT2	L2511 00
9300-2512-W-L	Wipe-Tank #S-01, Blue Fiberglass, Comp. of 2 wipes	850301	SARGENT2	L2512 00
9300-2513-W-L	Wipe-Tank # S-02, Rusty steel vessel, Comp. of 2 wipe	850216	SARGENT2	L2513 00
9000-2514-H-X	Water-Lake Newark, Effluent from CanSorbs	850218	SARGENT2	L2514 00
A006-2515-A-L	Ambient Air-120 Lister (Southwest)	850218	SARGENT2	L2515 00
A006-2516-A-L	Ambient Air-120 Lister (Northeast)	850218	SARGENT2	L2516 00
F027-2517-W-L	Field Blank-Wipe	850215	SARGENT2	L2517 00
9300-2518-W-L	Wipe-Truck Axle #S-03, Composite of 2 wipes	850216	SARGENT2	L2518 00
9200-2519-W-L	Wipe-Truck Fifth Wheel #S-04, Comp. of 2 wipes	850216	SARGENT2	L2519 00
A006-2520-A-L	Ambient Air-120 Lister (Southwest)	850219	SARGENT2	L2520 00
A006-2521-A-L	Ambient Air-120 Lister (Southwest)	850220	SARGENT2	L2521 00
T020-2525-H-C	Travel Blank-Water	850218	SARGENT2	L2525 00
F028-2526-H-C	Field Blank-Water	850218	SARGENT2	L2526 00
D2917-2529-P-F-L	NJ DEP Proficiency Sample D2917		SARGENT2	L2529 00
L7411-2530-P-F-L	NJ DEP Proficiency Sample L7411		SARGENT2	L2530 00
9200-2531-W-L	Wipe-Mack Truck Tailgate #S-05, composite of 2 wipes	850219	SARGENT2	L2531 00

CLIENT #	SAM. DESC	SORT 2	MASK	SAMPLE #
9200-2532-W-L	Wipe-Mack Truck Tailgate #S-10, composite of 2 wipes	850219	SARGENT2	L2532 00
9200-2533-W-L	Wipe-Truck Fuel Tank #S-13, composite of 2 wipes	850219	SARGENT2	L2533 00
9200-2534-W-L	Wipe-Truck Fuel Tank #S-14, composite of 2 wipes	850219	SARGENT2	L2534 00
A006-2535-A-L	Ambient Air-120 Lister (Southwest)	850220	SARGENT2	L2535 00
A006-2537-A-L	Ambient Air-120 Lister (Personnel)	850227	SARGENT2	L2537 00
A006-2538-A-L	Ambient Air-120 Lister (Personnel)	850227	SARGENT2	L2538 00
A006-2539-A-L	Ambient Air-120 Lister (Personnel)	850227	SARGENT2	L2539 00
A006-2542-A-L	Ambient Air-120 Lister (Northeast)	850222	SARGENT2	L2542 00
9200-2546-W-L	Wipe-Truck Fuel Tank #S-20, Composite of 2 wipes	850306	SARGENT2	L2546 00
F030-2547-W-L	Field Blank-Wipes	850306	SARGENT2	L2547 00
A006-2551-A-L	Ambient Air-120 Lister (Northeast)	850225	SARGENT2	L2551 00
A006-2555-A-L	Ambient Air-120 Lister (Northeast)	850227	SARGENT2	L2555 00
A006-2559-A-L	Ambient Air-120 Lister (Northeast)	850228	SARGENT2	L2559 00
9200-2560-W-L	Wipe-Trailer #50-222, Composite of 2 wipes	850306	SARGENT2	L2560 00
0016-2562-D-W	Drum #T, Greenish liquid w/ sludge on drum bottom	850227	SARGENT2	W2562 00
0017-2563-D-W	Drum #U, Very viscous yellow liquid	850227	SARGENT2	W2563 00
0018-2564-D-W	Drum #V, Highly viscous orange liquid	850227	SARGENT2	W2564 00
A006-2575-A-L	Ambient Air-120 Lister (Southwest)	850228	SARGENT2	L2575 00
A006-2582-A-L	Ambient Air-120 Lister (Southwest)	850301	SARGENT2	L2582 00
A006-2583-A-L	Ambient Air-120 Lister (Northeast)	850301	SARGENT2	L2583 00
9500-2588-S-Y	Backfill Sand from Stavolla Quarry, med to fine orang	850301	SARGENT2	Y2588 00
9500-2589-R-Y	Backfill Railroad Ballast Rock from Stavolla Quarry	850301	SARGENT2	Y2589 00
9500-2590-R-Y	Backfill Crushed Stone from Stavolla Quarry	850301	SARGENT2	Y2590 00
A006-2591-A-L	Ambient Air-120 Lister (Southwest)	850304	SARGENT2	L2591 00
A006-2592-A-L	Ambient Air-120 Lister (Northeast)	850304	SARGENT2	L2592 00
9100-2596-H-X	Decon Water from Tank Farm, Comp. of 002, 003, 004	850301	SARGENT2	L2596 00
F-9-S-2599-298-H-Y	Monitoring Well MW-101 (120 Lister)	850306	SARGENT2	Y2599 00
D-12-D-2600-298-H-Y	Monitoring Well MW-102 (120 Lister)	850306	SARGENT2	Y2600 00
T022-2602-H-Y	Travel Blank-Monitoring Well Water	850306	SARGENT2	Y2602 00
F035-2603-H-Y	Field Blank-Monitoring Well Water	850306	SARGENT2	Y2603 00
A006-2604-A-L	Ambient Air-120 Lister (Southwest)	850305	SARGENT2	L2604 00
A006-2605-A-L	Ambient Air-120 Lister (Northeast)	850305	SARGENT2	L2605 00
A006-2609-A-L	Ambient Air-120 Lister (Southwest)	850306	SARGENT2	L2609 00
A006-2610-A-L	Ambient Air-120 Lister (Northeast)	850306	SARGENT2	L2610 00
9200-2614-W-L	Wipe-Vessel #S-30, Composite of 2 wipes	850305	SARGENT2	L2614 00
9200-2615-W-L	Wipe-Pipe #S-31, Composite of 2 wipes	850305	SARGENT2	L2615 00
9200-2616-W-L	Wipe-Pipe #S-32, Composite of 2 wipes	850305	SARGENT2	L2616 00
9200-2617-W-L	Wipe-Pipe #S-33, Composite of 2 wipes	850305	SARGENT2	L2617 00
9200-2618-W-L	Wipe-Vessel #S-34, Composite of 2 wipes	850305	SARGENT2	L2618 00
9200-2619-W-L	Wipe-Vessel #S-35, Composite of 2 wipes	850305	SARGENT2	L2619 00
9200-2620-W-L	Wipe-Box Trailer #S-36, Composite of 2 wipes	850305	SARGENT2	L2620 00
F036-2621-W-L	Field Blank-Wipe	850305	SARGENT2	L2621 00
9200-2622-W-L	Wipe-Vessel #S-37, Composite of 2 wipes	850306	SARGENT2	L2622 00
9200-2623-W-L	Wipe-Vessel #S38, Composite of 2 wipes	850306	SARGENT2	L2623 00
RS-1-2624-100-S-L	Soil-Excavation#1,Comp.of 5 0-3"takes fr.exc.grade 6"	850312	SARGENT2	L2624 00
RS-2-2625-100-S-L	Soil-Excavation#2,Comp.of 5 0-3"takes fr.exc.grade12"	850311	SARGENT2	L2625 00

CLIENT #	SAMP.DESC	SORT 2	TEST	SAMPLE #
RS-3-2626-100-S-L	Soil-Excavation#3,Comp.of 5 0-3"takes fr.exc.grade12"	850328	SARGENT2	L2626 00
RS-4-2627-100-S-L	Soil-Excavation#4,Comp.of 5 0-3"takes fr.exc.grade12"	850320	SARGENT2	L2627 00
RS-5-2628-100-S-L	Soil-Excavation#5,Comp.of 5 0-3"takes fr exc.grade12"	850320	SARGENT2	L2628 00
F037-2629-H-L	Field Blank-Remedial Soils	850320	SARGENT2	L2629 00
T023-2630-H-L	Travel Blank-Remedial Soils	850320	SARGENT2	L2630 00
A006-2631-A-L	Ambient Air-120 Lister (Personnel)	850319	SARGENT2	L2631 00
A006-2632-A-L	Ambient Air-120 Lister (Personnel)	850319	SARGENT2	L2632 00
A006-2633-A-L	Ambient Air-120 Lister (Personnel)	850319	SARGENT2	L2633 00
A006-2635-A-L	Field Blank-Ambient Air (Personnel)	850319	SARGENT2	L2635 00
A006-2636-A-L	Ambient Air-120 Lister (Southwest)	850307	SARGENT2	L2636 00
A006-2637-A-L	Ambient Air-120 Lister (Northeast)	850307	SARGENT2	L2637 00
A006-2639-A-L	Ambient Air-120 Lister (Southwest)	850308	SARGENT2	L2639 00
A006-2640-A-L	Ambient Air-120 Lister (Northeast)	850308	SARGENT2	L2640 00
A006-2648-A-L	Ambient Air-120 Lister (Southwest)	850311	SARGENT2	L2648 00
A006-2649-A-L	Ambient Air-120 Lister (Northeast)	850311	SARGENT2	L2649 00
A006-2653-A-L	Ambient Air-120 Lister (Southwest)	850312	SARGENT2	L2653 00
A006-2654-A-L	Ambient Air-120 Lister (Northeast)	850312	SARGENT2	L2654 00
9500-2658-S-Y	Backfill Concrete Sand from Dallenbach Sand Co.	850308	SARGENT2	Y2658 00
9500-2659-S-Y	Backfill Bank Run Sand from Dallenbach Sand Co.	850308	SARGENT2	Y2659 00
0026-2662-D-W	Drum #W, Brown liquid with some solids	850311	SARGENT2	W2662 00
0027-2663-D-W	Drum #Y, Brown liquid with solids	850311	SARGENT2	W2663 00
0028-2664-D-W	Drum #Z, Green solids and water	850311	SARGENT2	W2664 00
7X306-2665-P-P-L	NJ DEP Proficiency Sample 7X306		SARGENT2	L2665 00
A006-2668-A-L	Ambient Air-120 Lister (Southwest)	850313	SARGENT2	L2668 00
A006-2669-A-L	Ambient Air-120 Lister (Northeast)	850313	SARGENT2	L2669 00
2K807-2670-P-P-L	NJ DEP Proficiency Sample 2K807		SARGENT2	L2670 00
9100-2671-W-L	Wipe-Decon Floor @ step-off point into the Break Area	850329	SARGENT2	L2671 00
9100-2672-W-L	Wipe-Shower Trailer Floor @ Decon entrance	850329	SARGENT2	L2672 00
9100-2675-W-L	Wipe-Lab Trailer Floor just inside main door	850329	SARGENT2	L2675 00
A006-2678-A-L	Ambient Air-120 Lister (Southwest)	850314	SARGENT2	L2678 00
A006-2679-A-L	Ambient Air-120 Lister (Northeast)	850314	SARGENT2	L2679 00
A006-2682-A-L	Ambient Air-120 Lister (Southwest)	850318	SARGENT2	L2682 00
A006-2683-A-L	Ambient Air-120 Lister (Northeast)	850318	SARGENT2	L2683 00
A006-2684-A-L	Ambient Air-120 Lister (Southwest)	850319	SARGENT2	L2684 00
A006-2685-A-L	Ambient Air-120 Lister (Northeast)	850319	SARGENT2	L2685 00
A006-2688-A-L	Ambient Air-120 Lister (Southwest)	850319	SARGENT2	L2688 00
A006-2689-A-L	Ambient Air-120 Lister (Northeast)	850319	SARGENT2	L2689 00
0029-2691-D-W	Drum #S-AA, clear amber liquid,viscosity of motor oil	850419	SARGENT2	W2691 00
0030-2692-D-W	Drum #S-AB,clear liquid,viscosity of lgt.machine oil	850419	SARGENT2	W2692 00
X1213-2701-P-P-L	NJ DEP Proficiency Sample X1213		SARGENT2	L2701 00
A006-2704-A-L	Ambient Air-120 Lister (Southwest)	850322	SARGENT2	L2704 00
A006-2705-A-L	Ambient Air-120 Lister (Northeast)	850322	SARGENT2	L2705 00
A006-2706-A-L	Ambient Air-120 Lister (Southwest)	850322	SARGENT2	L2706 00
A006-2707-A-L	Ambient Air-120 Lister (Northeast)	850328	SARGENT2	L2707 00
Z1020-2708-P-P-L	NJ DEP Proficiency Sample Z1020		SARGENT2	L2708 00
RS-2-2714-100-S-L	Soil-Excavation#2,Comp.of 5 0-3"takes fr.exc.grade12"	850322	SARGENT2	L2714 00

CLIENT #	SAMP. DESC	SORT 2	TASK	SAMPLE #
T025-2715-H-L	Travel Blank-Remedial Soil	850322	SARGENT2	L2715 00
F041-2716-H-L	Field Blank-Remedial Soil	850322	SARGENT2	L2716 00
A006-2717-A-L	Ambient Air-120 Lister (Southwest)	850328	SARGENT2	L2717 00
A006-2718-A-L	Ambient Air-120 Lister (SCA/East	850328	SARGENT2	L2718 00
A006-2719-A-L	Ambient Air-120 Lister (Southwest)	850330	SARGENT2	L2719 00
A006-2720-A-L	Ambient Air-120 Lister (Northeast)	850330	SARGENT2	L2720 00
2W205-2731-P-F-L	NJ DEP Proficiency Sample 2W205		SARGENT2	L2731 00
A006-2732-A-L	Ambient Air-120 Lister (East)	850330	SARGENT2	L2732 00
9100-2733-H-X	Lake Newark Water,Tank Farm,Tank#001,Comp.of grabs	850327	SARGENT2	L2733 00
C5915-2747-P-F-L	NJ DEP Proficiency Sample C5915, Bottle # 11-D	850328	SARGENT2	L2747 00
A006-2748-A-L	Ambient Air-120 Lister (South)	850401	SARGENT2	L2748 00
A006-2749-A-L	Ambient Air-120 Lister (Northeast)	850401	SARGENT2	L2749 00
A006-2750-A-L	Ambient Air-120 Lister (East)	850401	SARGENT2	L2750 00
9800-2752-S-G	Near Surface Soil-Hot Spot in Excavation,Comp.5 0-3"	850402	SARGENT2	L2752 00
A006-2754-A-L	Ambient Air-120 Lister (South)	850402	SARGENT2	L2754 00
A006-2755-A-L	Ambient Air-120 Lister (Northeast)	850402	SARGENT2	L2755 00
A006-2756-A-L	Ambient Air-120 Lister (East)	850402	SARGENT2	L2756 00
A006-2757-A-L	Ambient Air-120 Lister (South)	850408	SARGENT2	L2757 00
A006-2758-A-L	Ambient Air-120 Lister (Northeast)	850404	SARGENT2	L2758 00
A006-2759-A-L	Ambient Air-120 Lister (East)	850404	SARGENT2	L2759 00
A006-2792-A-L	Ambient Air-120 Lister (Northeast)	850408	SARGENT2	L2792 00
A006-2793-A-L	Ambient Air-120 Lister (East)	850408	SARGENT2	L2793 00
T031-2795-A-L	Travel Blank-Ambient Air	850404	SARGENT2	L2795 00
F047-2796-A-L	Field Blank-Ambient Air	850404	SARGENT2	L2796 00
A006-2803-A-L	Ambient Air-120 Lister (Northeast)	850418	SARGENT2	L2803 00
A006-2804-A-L	Ambient Air-120 Lister (East)	850418	SARGENT2	L2804 00
A006-2807-A-L	Ambient Air-120 Lister (Northeast)	850416	SARGENT2	L2807 00
A006-2808-A-L	Ambient Air-120 Lister (East)	850416	SARGENT2	L2808 00
9100-2814-W-L	Wipe-Steel auger used to set telephone poles @ 120Lis	850409	SARGENT2	L2814 00
E7612-2825-P-F-L	NJ DEP Proficiency Sample E7612	850411	SARGENT2	L2825 00
9100-2850-W-L	Wipe-Komatsu Track Hoe used in excav. hotspots-Comp.2	850414	SARGENT2	L2850 00
F055-2851-W-L	Field Blank-Wipe	850414	SARGENT2	L2851 00
Y6414-2852-P-F-L	NJ DEP Proficiency Sample Y6414	850415	SARGENT2	L2852 00
M1122-2853-P-F-L	NJ DEP Proficiency Sample M1122	850415	SARGENT2	L2853 00
9100-2856-W-L	Wipe-D5 Cat Dozer Serial # 375, Composite of 2 wipes	850417	SARGENT2	L2856 00
9100-2857-W-L	Wipe-Fork Lift Chassis # T341100713. Comp. of 2 wipes	850417	SARGENT2	L2857 00
9100-2858-W-L	Wipe-Case Bobcat 1845B,Hertz#259-05-4521,Comp. of 2	850417	SARGENT2	L2858 00
F057-2859-W-L	Field Blank-Wipe	850417	SARGENT2	L2859 00
A006-2861-A-L	Ambient Air-120 Lister (Northeast)	850423	SARGENT2	L2861 00
A006-2862-A-L	Ambient Air-120 Lister (East)	850423	SARGENT2	L2862 00
J-8-F-2863-100-S-L	Soil Boring-Station J-8-F, 0-6"	850418	SARGENT2	L2863 00
J-8-F-2864-101-S-L	Soil Boring-Station J-8-F, 6-12"	850418	SARGENT2	L2864 00
J-8-F-2865-102-S-L	Soil Boring-Station J-8-F, 12-25"	850418	SARGENT2	L2865 00
J-8-F-2866-103-S-L	Soil Boring-Station J-8-F, 2-3.5'	850418	SARGENT2	L2866 00
J-8-F-2867-104-S-L	Soil Boring-Station J-8-F, 3.5-5.0'	850418	SARGENT2	L2867 00
J-8-F-2868-105-S-L	Soil Boring-Station J-8-F, 5-6.5'	850418	SARGENT2	L2868 00

CLIENT #	SAM. DESC	SORT 2	TASK	SAMPLE #
J-8-F-2869-106-S-L	Soil Boring-Station J-8-F, 6.5-8'	850418	SARGENT2	L2869 00
J-8-F-2870-107-S-L	Soil Boring-Station J-8-F, 8-9.5'	850418	SARGENT2	L2870 00
J-8-F-2872-109-S-L	Soil Boring-Station J-8-F, 9.5-10.5'	850418	SARGENT2	L2872 00
T040-2876-H-L	Travel Blank-Soil Boring	850418	SARGENT2	L2876 00
F059-2877-H-L	Field Blank-Soil Boring	850418	SARGENT2	L2877 00
9100-2878-W-L	Wipe-Case 5800 Backhoe #K2-1121-80, Comp. of 2 wipes	850417	SARGENT2	L2878 00
9100-2883-W-L	Wipe-Composite of 4 electrical transformers	850422	SARGENT2	L2883 00
F063-2884-W-L	Field Blank-Wipe	850422	SARGENT2	L2884 00
A006-2886-A-L	Ambient Air-120 Lister (East)	850425	SARGENT2	L2886 00
A006-2887-A-L	Ambient Air-120 Lister (South)	850424	SARGENT2	L2887 00
K-12-B-2893-300-S-L	Deep Soil Boring #103D-Station K-12-B, 15-16.5'	850424	SARGENT2	L2893 00
K-12-B-2894-301-S-L	Deep Soil Boring #103D-Station K-12-B, 20-21.5'	850424	SARGENT2	L2894 00
K-12-B-2895-302-S-L	Deep Soil Boring #103D-Station K-12-B, 25-26.5'	850424	SARGENT2	L2895 00
K-12-B-2896-303-S-L	Deep Soil Boring #103D-Station K-12-B, 30-31.5'	850424	SARGENT2	L2896 00
K-12-B-2897-304-S-L	Deep Soil Boring #103D-Station K-12-B, 35-36.5'	850425	SARGENT2	L2897 00
K-12-B-2898-305-S-L	Deep Soil Boring #103D-Station K-12-B, 40-41.5'	850425	SARGENT2	L2898 00
K-12-B-2899-306-S-L	Deep Soil Boring #103D-Station K-12-B, 45-46.5'	850425	SARGENT2	L2899 00
K-12-B-2900-307-S-L	Deep Soil Boring #103D-Station K-12-B, 50-51.5'	850425	SARGENT2	L2900 00
K-12-B-2901-308-S-L	Deep Soil Boring #103D-Station K-12-B, 55-56.5'	850426	SARGENT2	L2901 00
K-12-B-2904-400-S-L	Deep Soil Boring #103D-Station K-12-B, 60-61.5'	850426	SARGENT2	L2904 00
K-12-B-2905-401-S-L	Deep Soil Boring #103D-Station K-12-B, 65-66.5	850426	SARGENT2	L2905 00
K-12-B-2906-402-S-L	Deep Soil Boring #103D-Station K-12-B, 67-69'	850429	SARGENT2	L2906 00
K-12-B-2907-403-S-L	Deep Soil Boring #103D-Station K-12-B, 69-71'	850429	SARGENT2	L2907 00
K-12-B-2912-500-S-L	Deep Soil Boring #103D-Station K-12-B, 71-73'	850429	SARGENT2	L2912 00
K-12-B-2913-501-S-L	Deep Soil Boring #103D-Station K-12-B, 75-76.5'	850429	SARGENT2	L2913 00
K-12-B-2914-502-S-L	Deep Soil Boring #103D-Station K-12-B, 80-81.5'	850429	SARGENT2	L2914 00
K-12-B-2915-503-S-L	Deep Soil Boring #103D-Station K-12-B, 85-86.5'	850429	SARGENT2	L2915 00
K-12-B-2916-504-S-L	Deep Soil Boring #103D-Station K-12-B, 90-91.5	850430	SARGENT2	L2916 00
K-12-B-2917-505-S-L	Deep Soil Boring #103D-Station K-12-B, 95-96.5'	850430	SARGENT2	L2917 00
K-12-B-2918-506-S-L	Deep Soil Boring #103D-Station K-12-B, 96.5-98'	850502	SARGENT2	L2918 00
K-12-B-2919-507-S-L	Deep Soil Boring #103D-Station K-12-B, 98-100'	850502	SARGENT2	L2919 00
A006-2920-A-L	Spiked GFF & pad with clean back-up pad	850423	SARGENT2	L2920 00
A006-2921-A-L	XAD back-up tube	850423	SARGENT2	L2921 00
9100-3026-W-L	Wipe-580E CASE Back Hoe I.C.#220054600,Comp.of2wipes	850430	SARGENT2	L3026 00
F075-3027-W-L	Field Blank-Wipe	850430	SARGENT2	L3027 00
A006-3028-A-L	Ambient Air-120 Lister (Personnel, GFF Tube)	850430	SARGENT2	L3028 00
A006-3029-A-L	Ambient Air-120 Lister (Personnel, XAD)	850430	SARGENT2	L3029 00
F077-3038-A-L	Field Blank-Ambient Air (Personnel, GFF)	850430	SARGENT2	L3038 00
F078-3039-A-L	Field Blank-Ambient Air (Personnel, XAD)	850430	SARGENT2	L3039 00
K-12-B-3042-508-S-L	Deep Soil Boring #103D-Station K-12-B, 100-101'	850502	SARGENT2	L3042 00
K-12-B-3043-509-S-L	Deep Soil Boring #103D-Station K-12-B, 103-105'	850504	SARGENT2	L3043 00
A006-3109-A-L	Ambient Air-120 Lister (Northeast)	850531	SARGENT2	L3109 00
A006-3110-A-L	Ambient Air-120 Lister (East)	850531	SARGENT2	L3110 00
A006-3111-A-L	Ambient Air-120 Lister (South)	850531	SARGENT2	L3111 00
102-D-3156-100-S-G	Deep Soil Boring-Station 102-D, 0-0.5'	850510	SARGENT2	L3156 00
102-D-3157-101-S-G	Deep Soil Boring-Station 102-D, 0.5-1.0'	850510	SARGENT2	L3157 00

CLIENT #	SAMP.DESC	SOPT 2	TASK	SAMPLE #
102-D-3158-102-S-G	Deep Soil Boring-Station 102-D, 1-2'	850510	SARGENT2	L3158 00
102-D-3159-103-S-G	Deep Soil Boring-Station 102-D, 2-3.5'	850510	SARGENT2	L3159 00
102-D-3160-104-S-G	Deep Soil Boring-Station 102-D, 3.5-5'	850510	SARGENT2	L3160 00
102-D-3165-109-S-G	Deep Soil Boring-Station 102-D, 5-6'	850510	SARGENT2	L3165 00
102-D-3166-200-S-G	Deep Soil Boring-Station 102-D, 6.5-8.5'	850513	SARGENT2	L3166 00
102-D-3167-201-S-G	Deep Soil Boring-Station 102-D, 8.5-10.5'	850513	SARGENT2	L3167 00
102-D-3168-202-S-G	Deep Soil Boring-Station 102-D, 10.5-12.5'	850513	SARGENT2	L3168 00
102-D-3169-203-S-G	Deep Soil Boring-Station 102-D, 12.5-14.5'	850513	SARGENT2	L3169 00
101-D-3473-200-S-G	Deep Soil Boring-Station 101-D, 6.5-8.5'	850515	SARGENT2	L3473 00
101-D-3474-201-S-G	Deep Soil Boring-Station 101-D, 8.5-10.5'	850515	SARGENT2	L3474 00
101-D-3475-202-S-G	Deep Soil Boring-Station 101-D, 10.5-12.5'	850515	SARGENT2	L3475 00
101-D-3476-203-S-G	Deep Soil Boring-Station 101-D, 12.5-14.5'	850515	SARGENT2	L3476 00
101-D-3477-204-S-G	Deep Soil Boring-Station 101-D, 14.5-16.5'	850515	SARGENT2	L3477 00
101-D-3479-300-S-G	Deep Soil Boring-Station 101-D, 20-21.5	850516	SARGENT2	L3479 00
101-D-3480-301-S-G	Deep Soil Boring-Station 101-D 25-26.5'	850520	SARGENT2	L3480 00
101-D-3481-302-S-G	Deep Soil Boring-Station 101-D, 30-31.5'	850520	SARGENT2	L3481 00
101-D-3482-303-S-G	Deep Soil Boring-Station 101-D, 35-36.5'	850520	SARGENT2	L3482 00
101-D-3483-304-S-G	Deep Soil Boring-Station 101-D, 45-46.5'	850520	SARGENT2	L3483 00
101-D-3484-305-S-G	Deep Soil Boring-Station 101-D, 50-51.5'	850520	SARGENT2	L3484 00
101-D-3485-306-S-G	Deep Soil Boring-Station 101-D, 60-61.5'	850520	SARGENT2	L3485 00
101-D-3490-400-S-G	Deep Soil Boring-Station 101-D, 65-66.5'	850520	SARGENT2	L3490 00
101-D-3501-500-S-G	Deep Soil Boring-Station 101-D, 75-76.5'	850524	SARGENT2	L3501 00
101-D-3502-501-S-G	Deep Soil Boring-Station 101-D, 80-81.5'	850529	SARGENT2	L3502 00
101-D-3503-502-S-G	Deep Soil Boring-Station 101-D, 86-87.5'	850529	SARGENT2	L3503 00
101-D-3504-503-S-G	Deep Soil Boring-Station 101-D, 90-91.5'	850529	SARGENT2	L3504 00
101-D-3505-504-S-G	Deep Soil Boring-Station 101-D, 95-96.5'	850529	SARGENT2	L3505 00
A006-3513-A-L	Ambient Air-120 Lister (South)	850604	SARGENT2	L3513 00
A006-3514-A-L	Ambient Air-120 Lister (East	850604	SARGENT2	L3514 00
A006-3515-A-L	Ambient Air-120 Lister (Northeast)	850604	SARGENT2	L3515 00
9900-3872-M-L	Sediment-Drainage ditch W of 120 Lister site	850523	SARGENT2	L3872 00
F104-3873-H-L	Field Blank-Rinsed trowel used to collect sediment	850523	SARGENT2	L3873 00
T058-3874-H-L	Travel Blank-Sediment from 120 Lister	850523	SARGENT2	L3874 00
1H301-3877-S-L	NJDEP Proficiency Sample # 1H301	850517	SARGENT2	L3877 00
64E08-4045-P-F-L	NJ DEP Proficiency Sample 64E08	850531	SARGENT2	L4045 00
A006-4144-A-L	Ambient Air-120 Lister (Northeast)	850606	SARGENT2	L4144 00
A006-4145-A-L	Ambient Air-120 Lister (East)	850606	SARGENT2	L4145 00
A006-4146-A-L	Ambient Air-120 Lister (South)	850604	SARGENT2	L4146 00
T085-4166-H-Y	Travel BlanK-Well Water	850605	SARGENT2	Y4166 00
F135-4167-H-Y	Field Blank-Well Water	850605	SARGENT2	Y4167 00
101A-4168-298-H-Y	Well Water-Station 101A	850605	SARGENT2	Y4168 00
101B-4169-298-H-Y	Well Water-Station 101B	850605	SARGENT2	Y4169 00
101D-4170-298-H-Y	Well Water-Station 101D	850605	SARGENT2	Y4170 00
102A-4171-298-H-Y	Well Water-Station 102A	850605	SARGENT2	Y4171 00
103D-4172-298-H-Y	Well Water-Station 103D	850605	SARGENT2	Y4172 00
9000-4195-H-L	Surface H2O entering run-off ditch W side Cont.Storag	850605	SARGENT2	L4195 00
A006-4200-A-L	Ambient Air-120 Lister (South)	850612	SARGENT2	L4200 00

CLIENT #	SAMP. DESC	SORT 2	TASK	SAMPLE #
A006-4201-A-L	Ambient Air-120 Lister (East)	850612	SARGENT2	L4201 00
A006-4202-A-L	Ambient Air-120 Lister (Northeast)	850612	SARGENT2	L4202 00
A006-4274-A-L	Ambient Air-120 Lister (South)	850617	SARGENT2	L4274 00
A006-4275-A-L	Ambient Air-120 Lister (Northeast)	850617	SARGENT2	L4275 00
04F07-4280-P-F-L	NJ DEP Proficiency Sample 04F07	850611	SARGENT2	L4280 00
16F05-4281-P-F-L	NJ DEP Proficiency Sample 16F05	850612	SARGENT2	L4281 00
A006-4303-A-L	Ambient Air-120 Lister (South)	850621	SARGENT2	L4303 00
A006-4304-A-L	Ambient Air-120 Lister (Northeast)	850621	SARGENT2	L4304 00
T097-4433-H-Y	Travel Blank-Well Water	850625	SARGENT2	Y4433 00
F152-4434-H-Y	Field Blank-Well Water	850625	SARGENT2	Y4434 00
101-B-4441-298-H-Y	Well Water-Station 101-B	850625	SARGENT2	Y4441 00
101-D-4442-298-H-Y	Well Water-Station 101-D	850625	SARGENT2	Y4442 00
103-A-4443-298-H-Y	Well Water-Station 103-A	850625	SARGENT2	Y4443 00
103-D-4444-298-H-Y	Well Water-Station 103-D	850625	SARGENT2	Y4444 00
102-C-4463-298-H-Y	Well Water-Station 102C	850715	SARGENT2	Y4463 00
102-C-4541-H-Y	Well Water-Station 102C	850805	SARGENT2	Y4541 00

CLIENT #	SAMP.DESC	SORT 2	TASK	SAMFILE #
K-9-D-2024-100-S-Y	Soil Boring-Station K-9-D, 0-6"	850115	SARGENT2	Y2024 00
K-9-D-2025-101-S-Y	Soil Boring-Station K-9-D, 6-12"	850115	SARGENT2	Y2025 00
K-9-D-2026-102-S-Y	Soil Boring-Station K-9-D, 12-24"	850115	SARGENT2	Y2026 00
K-9-D-2027-103-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2027 00
K-9-D-2028-104-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2028 00
K-9-D-2029-105-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2029 00
K-9-D-2030-106-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2030 00
K-9-D-2031-107-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2031 00
K-9-D-2033-109-S-L	Soil Boring-Station K-9-D, 18" interval	850115	SARGENT2	L2033 00
F-9-G-2038-100-S-Y	Soil Boring-Station F-9-G, 0-6"	850116	SARGENT2	Y2038 00
F-9-G-2039-101-S-Y	Soil Boring-Station F-9-G, 6-12"	850116	SARGENT2	Y2039 00
F-9-G-2040-102-S-Y	Soil Boring-Station F-9-G, 12-24"	850116	SARGENT2	Y2040 00
F-9-G-2041-103-S-L	Soil Boring-Station F-9-G, 18" interval	850116	SARGENT2	L2041 00
F-9-G-2042-104-S-L	Soil Boring-Station F-9-G, 18" interval	850116	SARGENT2	L2042 00
F-9-G-2047-109-S-L	Soil Boring-Station F-9-G, 18" interval	850116	SARGENT2	L2047 00
K-12-B-2075-103-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2075 00
K-12-B-2076-104-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2076 00
K-12-B-2077-105-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2077 00
K-12-B-2078-106-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2078 00
K-12-B-2079-107-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2079 00
K-12-B-2081-109-S-L	Soil Boring-Station K-12-B, 18" interval	850117	SARGENT2	L2081 00
D-12-D-2120-103-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2120 00
D-12-D-2121-104-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2121 00
D-12-D-2122-105-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2122 00
D-12-D-2126-109-S-L	Soil Boring-Station D-12-D, 18" interval	850118	SARGENT2	L2126 00
A006-2158-A-L	Ambient Air-120 Lister (Northeast)	850123	SARGENT2	L2158 00
A006-2260-A-L	Ambient Air-120 Lister (Southwest)	850129	SARGENT2	L2260 00
A006-2261-A-L	Ambient Air-120 Lister (Northeast)	850129	SARGENT2	L2261 00
C-12-D-2262-100-S-L	Near Surface Soil-Station C-12-D, 0-6" (N110,E593)	850129	SARGENT2	L2262 00
C-12-D-2263-101-S-L	Near Surface Soil-Station C-12-D, 6-12" (N110,E593)	850129	SARGENT2	L2263 00
C-12-D-2264-102-S-L	Near Surface Soil-Station C-12-D, 12-24" (N110,E593)	850129	SARGENT2	L2264 00
C-11-D-2265-100-S-L	Near Surface Soil-Station C-11-D, 0-6" (N110,E543)	850129	SARGENT2	L2265 00
C-11-D-2266-101-S-L	Near Surface Soil-Station C-11-D, 6-12" (N110,E543)	850129	SARGENT2	L2266 00
C-11-D-2267-102-S-L	Near Surface Soil-Station C-11-D, 12-24" (N110,E543)	850129	SARGENT2	L2267 00
C-10-D-2273-102-S-L	Near Surface Soil-Station C-10-D, 12-24" (N110,E493)	850129	SARGENT2	L2273 00
A006-2274-A-L	Ambient Air-120 Lister (Southwest)	850131	SARGENT2	L2274 00
A006-2275-A-L	Ambient Air-120 Lister (Northeast)	850131	SARGENT2	L2275 00
A006-2279-A-L	Ambient Air-120 Lister (Southwest)	850201	SARGENT2	L2279 00
A006-2280-A-L	Ambient Air-120 Lister (Northeast)	850201	SARGENT2	L2280 00
D-11-D-2284-100-S-L	Near Surface Soil-Station D-11-D, 0-6" (N160,E543)	850130	SARGENT2	L2284 00
D-11-D-2285-101-S-L	Near Surface Soil-Station D-11-D, 6-12" (N160,E543)	850130	SARGENT2	L2285 00
D-11-D-2286-102-S-L	Near Surface Soil-Station D-11-D, 12-24" (N160,E543)	850130	SARGENT2	L2286 00
D-9-D-2287-100-S-L	Near Surface Soil-Station D-9-D, 0-6" (N160,E443)	850130	SARGENT2	L2287 00
D-9-D-2288-101-S-L	Near Surface Soil-Station D-9-D, 6-12" (N160,E443)	850130	SARGENT2	L2288 00
D-9-D-2289-102-S-L	Near Surface Soil-Station D-9-D, 12-24" (N160,E443)	850130	SARGENT2	L2289 00
E-11-D-2290-100-S-L	Near Surface Soil-Station E-11-D, 0-6" (N210,E543)	850130	SARGENT2	L2290 00

CLIENT #	SAM. DESC	SORT 2	TASK	SAMPLE #
E-11-D-2291-101-S-L	Near Surface Soil-Station E-11-D, 6-12" (N210,E543)	850130	SARGENT2	L2291 00
F-10-D-2294-101-S-Y	Near Surface Soil-Station F-10-D, 6-12" (N260,E493)	850131	SARGENT2	L2294 00
F-10-D-2295-102-S-Y	Near Surface Soil-Station F-10-D, 12-24" (N260,E493)	850131	SARGENT2	L2295 00
A006-2302-A-L	Ambient Air-120 Lister (Southwest)	850204	SARGENT2	L2302 00
A006-2303-A-L	Ambient Air-120 Lister (Northeast)	850204	SARGENT2	L2303 00
H-10-D-2305-100-S-Y	Near Surface Soil-Station H-10-D, 0-6" (N360,E493)	850131	SARGENT2	L2305 00
H-10-D-2306-101-S-L	Near Surface Soil-Station H-10-D, 6-12" (N360,E493)	850131	SARGENT2	L2306 00
H-10-D-2307-102-S-L	Near Surface Soil-Station H-10-D, 12-24" (N360,E493)	850131	SARGENT2	L2307 00
H-11-D-2309-101-S-Y	Near Surface Soil-Station H-11-D, 6-12" (N360,E543)	850131	SARGENT2	L2309 00
H-11-D-2310-102-S-L	Near Surface Soil-Station H-11-D, 12-24" (N360,E543)	850131	SARGENT2	L2310 00
J-12-D-2315-101-S-L	Near Surface Soil-Station J-12-D, 6-12" (N410,E593)	850201	SARGENT2	L2315 00
J-12-D-2316-102-S-L	Near Surface Soil-Station J-12-D, 12-24" (N410,E593)	850201	SARGENT2	L2316 00
A006-2327-A-L	Ambient Air-120 Lister (Northeast)	850207	SARGENT2	L2327 00
E-11-P-2338-105-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2338 00
E-11-P-2339-106-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2339 00
E-11-P-2340-107-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2340 00
E-11-P-2341-108-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2341 00
E-11-P-2342-109-S-L	Soil Boring-Station E-11-P, 12"interval (N201.1,E502.	850205	SARGENT2	L2342 00
D-11-G-2346-103-S-L	Soil Boring-Station D-11-G, 12" interval	850205	SARGENT2	L2346 00
D-11-G-2347-104-S-L	Soil Boring-Station E-11-G, 12" interval	850205	SARGENT2	L2347 00
D-11-G-2348-105-S-L	Soil Boring-Station D-11-G, 12" interval	850205	SARGENT2	L2348 00
D-11-G-2349-106-S-L	Soil Boring-Station D-11-G, 12" interva	850205	SARGENT2	L2349 00
D-11-G-2352-109-S-L	Soil Boring-Station D-11-G, 12" interval	850205	SARGENT2	L2352 00
A006-2356-A-L	Ambient Air-120 Lister (Southwest)	850212	SARGENT2	L2356 00
A006-2357-A-L	Ambient Air-120 Lister (Northeast)	850212	SARGENT2	L2357 00
E-11-N-2369-103-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2369 00
E-11-N-2370-104-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2370 00
E-11-N-2371-105-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2371 00
E-11-N-2375-109-S-L	Soil Boring-Station E-11-N, 12" interval	850206	SARGENT2	L2375 00
E-10-L-2379-103-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2379 00
E-10-L-2380-104-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2380 00
E-10-L-2381-105-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2381 00
E-10-L-2383-107-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2383 00
E-10-L-2382-106-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2382 00
E-10-L-2385-109-S-L	Soil Boring-Station E-10-L, 12" interval	850206	SARGENT2	L2385 00
E-9-D-2388-100-S-L	Near Surface Soil-Station E-9-D, 0-6"	850206	SARGENT2	L2388 00
E-9-D-2389-101-S-L	Near Surface Soil-Station E-9-D, 6-12"	850206	SARGENT2	L2389 00
E-9-D-2390-102-S-L	Near Surface Soil-Station E-9-D, 12-24"	850206	SARGENT2	L2390 00
A006-2478-A-L	Ambient Air-120 Lister (Southwest)	850214	SARGENT2	L2478 00
A006-2479-A-L	Ambient Air-120 Lister (Northeast)	850214	SARGENT2	L2479 00
A006-2489-A-L	Ambient Air-120 Lister (Southwest)	850215	SARGENT2	L2489 00
A006-2506-A-L	Ambient Air-120 Lister (Southwest)	850216	SARGENT2	L2506 00
A006-2507-A-L	Ambient Air-120 Lister (Northeast)	850216	SARGENT2	L2507 00
A006-2515-A-L	Ambient Air-120 Lister (Southwest)	850218	SARGENT2	L2515 00
A006-2520-A-L	Ambient Air-120 Lister (Southwest)	850219	SARGENT2	L2520 00
A006-2521-A-L	Ambient Air-120 Lister (Southwest)	850220	SARGENT2	L2521 00

CLIENT #	SAMP. DESC	SORT E	TASK	RAW FLE #
9200-2531-W-L	Wipe-Mack Truck Tailgate #S-05, composite of 2 wipes	850219	SARGENT2	L2531 00
9200-2532-W-L	Wipe-Mack Truck Tailgate #S-10, composite of 2 wipes	850219	SARGENT2	L2532 00
9200-2533-W-L	Wipe-Truck Fuel Tank #S-13, composite of 2 wipes	850219	SARGENT2	L2533 00
9200-2534-W-L	Wipe-Truck Fuel Tank #S-14, composite of 2 wipes	850219	SARGENT2	L2534 00
A006-2535-A-L	Ambient Air-120 Lister (Southwest)	850220	SARGENT2	L2535 00
A006-2542-A-L	Ambient Air-120 Lister (Northeast)	850222	SARGENT2	L2542 00
9200-2546-W-L	Wipe-Truck Fuel Tank #S-20, Composite of 3 wipes	850306	SARGENT2	L2546 00
F030-2547-W-L	Field Blank-Wipes	850306	SARGENT2	L2547 00
A006-2551-A-L	Ambient Air-120 Lister (Northeast)	850225	SARGENT2	L2551 00
A006-2555-A-L	Ambient Air-120 Lister (Northeast)	850227	SARGENT2	L2555 00
A006-2559-A-L	Ambient Air-120 Lister (Northeast)	850229	SARGENT2	L2559 00
9200-2560-W-L	Wipe-Trailer #SO-222, Composite of 2 wipes	850306	SARGENT2	L2560 00
A006-2582-A-L	Ambient Air-120 Lister (Southwest)	850301	SARGENT2	L2582 00
A006-2583-A-L	Ambient Air-120 Lister (Northeast)	850301	SARGENT2	L2583 00
A006-2591-A-L	Ambient Air-120 Lister (Southwest)	850304	SARGENT2	L2591 00
A006-2592-A-L	Ambient Air-120 Lister (Northeast)	850304	SARGENT2	L2592 00
A006-2604-A-L	Ambient Air-120 Lister (Southwest)	850305	SARGENT2	L2604 00
A006-2605-A-L	Ambient Air-120 Lister (Northeast)	850305	SARGENT2	L2605 00
A006-2609-A-L	Ambient Air-120 Lister (Southwest)	850306	SARGENT2	L2609 00
A006-2610-A-L	Ambient Air-120 Lister (Northeast)	850306	SARGENT2	L2610 00
9200-2614-W-L	Wipe-Vessel #S-30, Composite of 2 wipes	850305	SARGENT2	L2614 00
9200-2615-W-L	Wipe-Pipe #S-31, Composite of 2 wipes	850305	SARGENT2	L2615 00
9200-2616-W-L	Wipe-Pipe #S-32, Composite of 2 wipes	850305	SARGENT2	L2616 00
9200-2617-W-L	Wipe-Pipe #S-33, Composite of 2 wipes	850305	SARGENT2	L2617 00
9200-2618-W-L	Wipe-Vessel #S-34, Composite of 2 wipes	850305	SARGENT2	L2618 00
9200-2619-W-L	Wipe-Vessel #S-35, Composite of 2 wipes	850305	SARGENT2	L2619 00
9200-2620-W-L	Wipe-Box Trailer #S-36, Composite of 2 wipes	850305	SARGENT2	L2620 00
F036-2621-W-L	Field Blank-Wipe	850305	SARGENT2	L2621 00
9200-2622-W-L	Wipe-Vessel #S-37, Composite of 2 wipes	850306	SARGENT2	L2622 00
9200-2623-W-L	Wipe-Vessel #S38, Composite of 2 wipes	850306	SARGENT2	L2623 00
A006-2636-A-L	Ambient Air-120 Lister (Southwest)	850307	SARGENT2	L2636 00
A006-2639-A-L	Ambient Air-120 Lister (Southwest)	850308	SARGENT2	L2639 00
A006-2648-A-L	Ambient Air-120 Lister (Southwest)	850311	SARGENT2	L2648 00
A006-2649-A-L	Ambient Air-120 Lister (Northeast)	850311	SARGENT2	L2649 00
A006-2653-A-L	Ambient Air-120 Lister (Southwest)	850312	SARGENT2	L2653 00
A006-2654-A-L	Ambient Air-120 Lister (Northeast)	850313	SARGENT2	L2654 00
A006-2678-A-L	Ambient Air-120 Lister (Southwest)	850314	SARGENT2	L2678 00
A006-2679-A-L	Ambient Air-120 Lister (Northeast)	850314	SARGENT2	L2679 00
A006-2682-A-L	Ambient Air-120 Lister (Southwest)	850318	SARGENT2	L2682 00
A006-2683-A-L	Ambient Air-120 Lister (Northeast)	850318	SARGENT2	L2683 00
A006-2684-A-L	Ambient Air-120 Lister (Southwest)	850319	SARGENT2	L2684 00
A006-2688-A-L	Ambient Air-120 Lister (Southwest)	850319	SARGENT2	L2688 00
A006-2689-A-L	Ambient Air-120 Lister (Northeast)	850319	SARGENT2	L2689 00
A006-2704-A-L	Ambient Air-120 Lister (Southwest)	850322	SARGENT2	L2704 00
A006-2705-A-L	Ambient Air-120 Lister (Northeast)	850322	SARGENT2	L2705 00
A006-2706-A-L	Ambient Air-120 Lister (Southwest)	850322	SARGENT2	L2706 00

CLIENT #	SAM.DESC	SORT 2	TASK	SAMPLE #
A006-2719-A-L	Ambient Air-120 Lister (Southwest)	850330	SARGENT2	L2719 00
A006-2720-A-L	Ambient Air-120 Lister (Northeast)	850330	SARGENT2	L2720 00
A006-2748-A-L	Ambient Air-120 Lister (South)	850401	SARGENT2	L2748 00
A006-2750-A-L	Ambient Air-120 Lister (East)	850401	SARGENT2	L2750 00
9800-2752-S-G	Near Surface Soil-Hot Spot in Excavation,Comp.5 0-2"	850402	SARGENT2	L2752 00
A006-2754-A-L	Ambient Air-120 Lister (South)	850402	SARGENT2	L2754 00
A006-2755-A-L	Ambient Air-120 Lister (Northeast)	850402	SARGENT2	L2755 00
A006-2757-A-L	Ambient Air-120 Lister (South)	850409	SARGENT2	L2757 00
A006-2758-A-L	Ambient Air-120 Lister (Northeast)	850404	SARGENT2	L2758 00
A006-2759-A-L	Ambient Air-120 Lister (East)	850404	SARGENT2	L2759 00
A006-2792-A-L	Ambient Air-120 Lister (Northeast)	850408	SARGENT2	L2792 00
A006-2793-A-L	Ambient Air-120 Lister (East)	850408	SARGENT2	L2793 00
A006-2807-A-L	Ambient Air-120 Lister (Northeast)	850416	SARGENT2	L2807 00
A006-2808-A-L	Ambient Air-120 Lister (East)	85041[illegible]	SARGENT2	L2808 00
A006-2862-A-L	Ambient Air-120 Lister (East)	850423	SARGENT2	L2862 00
9100-2883-W-L	Wipe-Composite of 4 electrical transformers	850422	SARGENT2	L2883 00
F063-2884-W-L	Field Blank-Wipe	850422	SARGENT2	L2884 00
K-12-B-2895-302-S-L	Deep Soil Boring #103D-Station K-12-B, 25-26.5'	850424	SARGENT2	L2895 00
K-12-B-2896-303-S-L	Deep Soil Boring #103D-Station K-12-B, 30-31.5'	850424	SARGENT2	L2896 00
K-12-B-2897-304-S-L	Deep Soil Boring #103D-Station K-12-B, 35-36.5'	850425	SARGENT2	L2897 00
K-12-B-2898-305-S-L	Deep Soil Boring #103D-Station K-12-B, 40-41.5	850425	SARGENT2	L2898 00
K-12-B-2899-306-S-L	Deep Soil Boring #103D-Station K-12-B, 45-46.5'	850425	SARGENT2	L2899 00
K-12-B-2900-307-S-L	Deep Soil Boring #103D-Station K-12-B, 50-51.5'	850425	SARGENT2	L2900 00
K-12-B-2904-400-S-L	Deep Soil Boring #103D-Station K-12-B, 60-61.5'	850426	SARGENT2	L2904 00
K-12-B-2905-401-S-L	Deep Soil Boring #103D-Station K-12-B, 65-66.5'	850426	SARGENT2	L2905 00
K-12-B-2906-402-S-L	Deep Soil Boring #103D-Station K-12-B, 67-69	850429	SARGENT2	L2906 00
K-12-B-2907-403-S-L	Deep Soil Boring #103D-Station K-12-B, 69-71'	850429	SARGENT2	L2907 00
K-12-B-2914-502-S-L	Deep Soil Boring #103D-Station K-12-B, 80-81.5'	850429	SARGENT2	L2914 00
K-12-B-2915-503-S-L	Deep Soil Boring #103D-Station K-12-B, 85-86.5'	850429	SARGENT2	L2915 00
K-12-B-2916-504-S-L	Deep Soil Boring #103D-Station K-12-B, 90-91.5'	850430	SARGENT2	L2916 00
K-12-B-2917-505-S-L	Deep Soil Boring #103D-Station K-12-B, 95-96.5	850430	SARGENT2	L2917 00
K-12-B-2918-506-S-L	Deep Soil Boring #103D-Station K-12-B, 96.5-98'	850502	SARGENT2	L2918 00
K-12-B-2919-507-S-L	Deep Soil Boring #103D-Station K-12-B, 98-100'	850502	SARGENT2	L2919 00
K-12-B-3042-508-S-L	Deep Soil Boring #103D-Station K-12-B, 100-101	850502	SARGENT2	L3042 00
K-12-B-3043-509-S-L	Deep Soil Boring #103D-Station K-12-B, 103-105'	850504	SARGENT2	L3043 00
102-D-3156-100-S-G	Deep Soil Boring-Station 102-D, 0-0.5'	850510	SARGENT2	L3156 00
102-D-3157-101-S-G	Deep Soil Boring-Station 102-D, 0.5-1.0'	850510	SARGENT2	L3157 00
102-D-3158-102-S-G	Deep Soil Boring-Station 102-D, 1-2'	850510	SARGENT2	L3158 00
102-D-3159-103-S-G	Deep Soil Boring-Station 102-D, 2-3.5'	850510	SARGENT2	L3159 00
102-D-3160-104-S-G	Deep Soil Boring-Station 102-D, 3.5-5'	850510	SARGENT2	L3160 00
102-D-3165-109-S-G	Deep Soil Boring-Station 102-D, 5-6'	850510	SARGENT2	L3165 00
102-D-3166-200-S-G	Deep Soil Boring-Station 102-D, 6.5-8.5'	850513	SARGENT2	L3166 00
102-D-3167-201-S-G	Deep Soil Boring-Station 102-D, 8.5-10.5'	850513	SARGENT2	L3167 00
102-D-3168-202-S-G	Deep Soil Boring-Station 102-D, 10.5-12.5	850513	SARGENT2	L3168 00
102-D-3169-203-S-G	Deep Soil Boring-Station 102-D, 12.5-14.5'	850513	SARGENT2	L3169 00
101-D-3474-201-S-G	Deep Soil Boring-Station 101-D, 8.5-10.5'	850515	SARGENT2	L3474 00

CLIENT #	SAM.DESC	SORT 2	TASK	SAMPLE #
101-D-3476-203-S-G	Deep Soil Boring-Station 101-D, 12.5-14.5'	850515	SARGENT2	L3476 00
101-D-3481-302-S-G	Deep Soil Boring-Station 101-D, 30-31.5'	850520	SARGENT2	L3481 00
101-D-3482-303-S-G	Deep Soil Boring-Station 101-D, 35-36.5'	850520	SARGENT2	L3482 00
101-D-3483-304-S-G	Deep Soil Boring-Station 101-D, 45-46.5'	850520	SARGENT2	L3483 00
101-D-3484-305-S-G	Deep Soil Boring-Station 101-D, 50-51.5'	850520	SARGENT2	L3484 00
101-D-3485-306-S-G	Deep Soil Boring-Station 101-D, 60-61.5'	850520	SARGENT2	L3485 00
101-D-3490-400-S-G	Deep Soil Boring-Station 101-D, 65-66.5'	850520	SARGENT2	L3490 00
101-D-3502-501-S-G	Deep Soil Boring-Station 101-D, 80-81.5	850529	SARGENT2	L3502 00
101-D-3504-503-S-G	Deep Soil Boring-Station 101-D, 90-91.5	850529	SARGENT2	L3504 00
101-D-3505-504-S-G	Deep Soil Boring-Station 101-D, 95-96.5'	850529	SARGENT2	L3505 00
A006-4144-A-L	Ambient Air-120 Lister (Northeast)	850606	SARGENT2	L4144 00
A006-4145-A-L	Ambient Air-120 Lister (East)	850606	SARGENT2	L4145 00
A006-4146-A-L	Ambient Air-120 Lister (South)	850606	SARGENT2	L4146 00
A006-4200-A-L	Ambient Air-120 Lister (South)	850612	SARGENT2	L4200 00
A006-4201-A-L	Ambient Air-120 Lister (East)	850612	SARGENT2	L4201 00
A006-4202-A-L	Ambient Air-120 Lister (Northeast)	850612	SARGENT2	L4202 00
A006-4303-A-L	Ambient Air-120 Lister (South)	850621	SARGENT2	L4303 00
A006-4304-A-L	Ambient Air-120 Lister (Northeast)	850621	SARGENT2	L4304 00

APPENDIX
G

APPENDIX G

(QA/QC)

FOOTNOTES TO:

Quantitative Priority Pollutant Analytical Results Tables

ND: analyzed for, but not detected at the method detection limit for this sample, including dilution adjustments.

***:** reported value is estimated; the compound meets identification criteria but the result is less than the specified detection limit but greater than zero.

****:** detected and quantitated by GC, but detected below GC/MS DL so GC/MS confirmation not attempted; dual column GC confirmation has been performed. (Applies to pesticides only)

$: insufficient sample for analysis.

a: identification confirmed by GC/MS

b: results not available at this time

ORGANIC PRIORITY POLLUTANT
METHOD DETECTION LIMITS

Individual Compound	CAS Number	Detection Limits Low Water ug/L	Detection Limits Low Soil/Sediment ug/Kg
VOLATILES:			
1. Chloromethane	74-87-3	10	10
2. Bromomethane	74-83-9	10	10
3. Vinyl Chloride	75-01-4	10	10
4. Chloroethane	75-00-3	10	10
5. Methylene Chloride	75-09-2	5	5
6. Acetone	67-64-1	10	10
7. Carbon Disulfide	75-15-0	5	5
8. 1,1-Dichloroethene	75-35-4	5	5
9. 1,1-Dichloroethane	75-35-3	5	5
10. trans-1,2-Dichloroethene	156-60-5	5	5
11. Chloroform	67-66-3	5	5
12. 1,2-Dichloroethane	107-06-2	5	5
13. 2-Butanone	78-93-3	10	10
14. 1,1,1-Trichloroethane	71-55-6	5	5
15. Carbon Tetrachloride	56-23-5	5	5
16. Vinyl Acetate	108-05-4	10	10
17. Bromodichloromethane	75-27-4	5	5
18. 1,1,2,2-Tetrachloroethane	79-34-5	5	5
19. 1,2-Dichloropropane	78-87-5	5	5
20. trans-1,3-Dichloropropene	10061-02-6	5	5
21. Trichloroethene	79-01-6	5	5
22. Dibromochloromethane	124-48-1	5	5
23. 1,1,2-Trichloroethane	79-00-5	5	5
24. Benzene	71-43-2	5	5
25. cis-1,3-Dichloropropene	10061-01-5	5	5
26. 2-Chloroethyl Vinyl Ether	110-75-8	10	10
27. Bromoform	75-25-2	5	5
28. 2-Hexanone	591-78-6	10	10
29. 4-Methyl-2-pentanone	108-10-1	10	10
30. Tetrachloroethene	127-18-4	5	5
31. Toluene	108-88-3	5	5
32. Chlorobenzene	108-90-7	5	5
33. Ethyl Benzene	100-41-4	5	5
34. Styrene	100-42-5	5	5
35. Total Xylenes		5	5
BASE/NEUTRAL/ACIDS:			
36. N-Nitrosodimethylamine	62-75-9	10	330
37. Phenol	108-95-2	10	330
38. Aniline	62-53-3	10	330
39. bis(2-Chloroethyl)ether	111-44-4	10	330
40. 2-Chlorophenol	95-57-8	10	330

Individual Compound	CAS Number	Detection Limits Low Water ug/L	Detection Limits Low Soil/Sediment ug/Kg
BASE/NEUTRAL/ACIDS: (Cont'd)			
41. 1,3-Dichlorobenzene	541-73-1	10	330
42. 1,4-Dichlorobenzene	106-46-7	10	330
43. Benzyl Alcohol	100-51-6	10	330
44. 1,2-Dichlorobenzene	95-50-1	10	330
45. 2-Methylphenol	95-48-7	10	330
46. bis(2-Chloroisopropyl)ether	39638-32-9	10	330
47. 4-Methylphenol	106-44-5	10	330
48. N-Nitroso-Dipropylamine	621-64-7	10	330
49. Hexachloroethane	67-72-1	10	330
50. Nitrobenzene	98-95-3	10	330
51. Isophorone	78-59-1	10	330
52. 2-Nitrophenol	88-75-5	10	330
53. 2,4-Dimethylphenol	105-67-9	10	330
54. Benzoic Acid	65-85-0	50	1600
55. bis(2-Chloroethoxy)methane	111-91-1	10	330
56. 2,4-Dichlorophenol	120-83-2	10	330
57. 1,2,4-Trichlorobenzene	120-82-1	10	330
58. Naphthalene	91-20-3	10	330
59. 4-Chloroaniline	106-47-8	10	330
60. Hexachlorobutadiene	87-68-3	10	330
61. 4-Chloro-3-methylphenol (para-chloro-meta-cresol)	59-50-7	10	330
62. 2-Methylnaphthalene	91-57-6	10	330
63. Hexachlorocyclopentadiene	77-47-4	10	330
64. 2,4,6-Trichlorophenol	88-06-2	10	330
65. 2,4,5-Trichlorophenol	95-95-4	50	1600
66. 2-Chloronaphthalene	91-58-7	10	330
67. 2-Nitroaniline	88-74-4	50	1600
68. Dimethyl Phthalate	131-11-3	10	330
69. Acenaphthylene	208-96-8	10	330
70. 3-Nitroaniline	99-09-2	50	1600
71. Acenaphthene	83-32-9	10	330
72. 2,4-Dinitrophenol	51-28-5	50	1600
73. 4-Nitrophenol	100-02-7	50	1600
74. Dibenzofuran	132-64-9	10	330
75. 2,4-Dinitrotoluene	121-14-2	10	330
76. 2,6-Dinitrotoluene	606-20-2	10	330
77. Diethylphthalate	84-66-2	10	330
78. 4-Chlorophenyl Phenyl ether	7005-72-3	10	330
79. Fluorene	86-73-7	10	330
80. 4-Nitroaniline	100-01-6	50	1600

Individual Compound	CAS Number	Detection Limits Low Water ug/L	Low Soil/Sediment ug/Kg
BASE/NEUTRAL/ACIDS: (Cont'd)			
81. 4,6-Dinitro-2-methylphenol	534-52-1	50	1600
82. N-nitrosodiphenylamine	86-30-6	10	330
83. 4-Bromophenyl Phenyl ether	101-55-3	10	330
84. Hexachlorobenzene	118-74-1	10	330
85. Pentachlorophenol	87-86-5	50	1600
86. Phenanthrene	85-01-8	10	330
87. Anthracene	120-12-7	10	330
88. Di-n-butylphthalate	84-74-2	10	330
89. Fluoranthene	206-44-0	10	330
90. Benzidine	92-87-5	80	2600
91. Pyrene	129-00-0	10	330
92. Butyl Benzyl Phthalate	85-68-7	10	330
93. 3,3'-Dichlorobenzidine	91-94-1	20	660
94. Benzo(a)anthracene	56-55-3	10	330
95. bis(2-ethylhexyl)phthalate	117-81-7	10	330
96. Chrysene	218-01-9	10	330
97. Di-n-octyl Phthalate	117-84-0	10	330
98. Benzo(b)fluoranthene	205-99-2	10	330
99. Benzo(k)fluoranthene	207-08-9	10	330
100. Benzo(2)pyrene	50-32-8	10	330
101. Indeno(1,2,3-cd)pyrene	193-39-5	10	330
102. Dibenz(a,h)anthracene	53-70-3	10	330
103. Benzo(g,h,i)perylene	191-24-2	10	330
PESTICIDES/PCBs:			
104. alpha-BHC	319-84-6	0.10	20.0
105. beta-BHC	319-85-7	0.10	20.0
106. delta-BHC	319-86-8	0.10	20.0
107. gamma-BHC(Lindane)	58-89-9	0.10	20.0
108. Heptachlor	76-44-8	0.10	20.0
109. Aldrin	309-00-2	0.10	20.0
110. Heptachlor Epoxide	1024-57-3	0.10	20.0
111. Endosulfan I	959-98-8	0.10	20.0
112. Dieldrin	60-57-1	0.10	20.0
113. 4,4'-DDE	72-55-9	0.10	20.0
114. Endrin	72-20-8	0.10	20.0
115. Endosulfan II	33213-65-9	0.10	20.0
116. 4,4'-DDD	72-54-8	0.10	20.0
117. Endrin Aldehyde	7421-93-4	0.10	20.0
118. Endosulfan Sulfate	1031-07-8	0.10	20.0
119. 4,4'-DDT	50-29-3	0.10	20.0

Individual Compound	CAS Number	Detection Limits Low Water ug/L	Low Soil/Sediment ug/Kg
PESTICIDES/PCBs: (Cont'd)			
120. Chlordane	57-74-9	0.10	20.0
121. Toxaphene	8001-35-2	1.0	200.0
122. AROCLOR-1016	12674-11-2	1.0	200.0
123. AROCLOR-1221	11104-28-2	1.0	200.0
124. AROCLOR-1232	11141-16-5	1.0	200.0
125. AROCLOR-1242	53469-21-9	1.0	200.0
126. AROCLOR-1248	12672-29-6	1.0	200.0
127. AROCLOR-1254	11097-69-1	1.0	200.0
128. AROCLOR-1260	11096-82-5	1.0	200.0
129. Dalapon (Dowpon)	75-99-0	1.0	100.0
130. Dicamba	1918-00-9	1.0	100.0
131. MCPP	7085-19-0	300.0	30,000.0
132. MCPA	94-74-6	300.0	30,000.0
133. Dichloroprop (2,4-DP)	120-36-5	1.0	100.0
134. 2,4-D	94-75-7	1.0	100.0
135. 2,4,5-TP (silvex)	93-72-1	1.0	100.0
136. 2,4,5-T	93-76-5	1.0	100.0
137. 2,4-DB	94-82-6	1.0	100.0
138. Dinoseb (DNBP)	88-85-7	1.0	100.0

NOTE: Specific detection limits are highly matrix dependent. The detection limits listed herein are provided for guidance and may not always be achievable. See a raw sample data for actual limits achieved for each analysis.

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.006 ppb)	ND (0.004 ppb)	ND (0.0011 ppb)	ND (0.00027 ppb)
Volatile Organic Compounds (Concentration Units are in µg/L					
71-43-2	Benzene	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND

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Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	27.	86.	170.	84.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

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Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

D29-OP-52

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

D29-OP-54

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Y4166 Trip Blank 6/5/85	Y4167 Field Blank 6/5/85	Y4433 Trip Blank 6/25/85	Y4434 Field Blank 6/25/85
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in µg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29 OP-55

Quality Assurance/Quality Control: Trip and Field Blanks Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Pesticides and PCBs (continued)					
50-29-3	4,4'-DDT	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	ND	ND
319-85-7	beta-BHC	ND	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND	ND
319-86-8	delta-BHC	ND	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
Chlorinated Herbicides (Concentration Units are in μg/L)					
75-99-0	Dalapon (Dowpon)	ND	ND	ND	ND
1918-00-9	Dicamba	ND	ND	1.0	ND
7085-19-0	MCPP	ND	ND	ND	ND
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	ND	ND	ND
93-72-1	2,4,5-TP (Silvex)	ND	ND	18.	ND
93-76-5	2,4,5-T	ND	ND	ND	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	0.002	0.001	<0.01	<0.01
	Arsenic	<0.001	<0.001	<0.001	<0.001
	Beryllium	<0.002	<0.002	0.002	<0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001
	Chromium	<0.01	<0.01	<0.01	<0.01
	Copper	0.002	<0.002	0.003	0.007
	Lead	<0.01	<0.01	<0.01	<0.01
	Mercury	<0.001	<0.001	<0.001	<0.001
	Nickel	<0.01	<0.01	<0.01	<0.01
	Selenium	<0.001	<0.001	<0.004	<0.001

D29-0P-57

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 6/5/85 Y4166	Field Blank 6/5/85 Y4167	Trip Blank 6/25/85 Y4433	Field Blank 6/25/85 Y4434
	Silver	<0.002	<0.002	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	0.007	0.010	0.006	0.020
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	<0.01	<0.01	<0.01	<0.01
	Total Phenols	0.01	0.01	<0.01	<0.01

D29-OP-58

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
1746-01-6	2,3,7,8-Tetrachloro-dibenzo-p-dioxin	ND (0.0026 ppb)	ND (0.0023 ppb)	ND (0.00072 ppb)	ND (0.00060 ppb)
Volatile Organic Compounds (Concentration Units are in μg/L)					
71-43-2	Benzene	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Volatiles (Continued)					
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ND	ND	ND	ND
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	25.	22.	33.	510.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND

D29-OP-27

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Volatiles (Continued)					
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	11.*
95-47-6	Total Xylenes	ND	ND	ND	ND
Base/Neutral and Acid Organic Compounds (Concentration Units are in µg/L)					
88-06-2	2,4,6-Trichlorophenol	ND	ND	ND	ND
59-50-7	4-Chloro-3-methyl-phenol	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ND	ND	ND	ND
120-33-2	2,4-Dichlorophenol	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ND	ND	ND	ND
108-95-2	Phenol	ND	ND	ND	ND
65-85-0	Benzoic acid	ND	ND	ND	ND
95-48-7	2-Methylphenol	ND	ND	ND	ND
108-39-4	4-Methylphenol	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ND	ND	ND	ND

Quality Assurance/Quality Control: Trip and Field Blanks Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Base/Neutral/Acids (Continued)					
83-32-9	Acenaphthene	ND	ND	ND	ND
92-87-5	Benzidine	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ND	ND	ND	ND
67-72-1	Hexachloroethane	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl) ether	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ND	ND	ND	ND
122-66-7	1,2-Diphenylhydrazine	ND	ND	ND	ND
206-44-0	Fluoranthene	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ND	ND	ND	ND
39638-32-9	Bis(2-chloroiso-propyl)ether	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy) methane	ND	ND	ND	ND

D29-OP-29

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Base/Neutral/Acids (Continued)					
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND
77-47-4	Hexachlorocyclo-pentadiene	ND	ND	ND	ND
78-59-1	Isophorone	ND	ND	ND	ND
91-20-3	Naphthalene	ND	ND	ND	ND
98-95-3	Nitrobenzene	ND	ND	ND	ND
62-75-9	N-nitrosodimethyl-amine	ND	ND	ND	ND
86-30-6	N-nitrosodiphenylamine	ND	ND	ND	ND
621-64-7	N-nitrosodipropyla-mine	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ND	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ND	ND	ND	ND
84-74-2	Di-N-butyl phthalate	ND	ND	ND	ND
117-84-0	Di-N-octyl phthalate	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ND	ND	ND	ND
56-55-3	Benzo(A)anthracene	ND	ND	ND	ND
50-32-8	Benzo(A)pyrene	ND	ND	ND	ND
205-99-2	Benzo(B&K)fluor-anthene	ND	ND	ND	ND
207-08-9	Benzo(K)fluoranthene	ND	ND	ND	ND

D29-0P-30

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Base/Neutral/Acids (Continued)					
218-01-9	Chrysene	ND	ND	ND	ND
208-96-8	Acenaphthylene	ND	ND	ND	ND
120-12-7	Anthracene	ND	ND	ND	ND
191-24-2	Benzo(GHI)perylene	ND	ND	ND	ND
86-73-7	Fluorene	ND	ND	ND	ND
85-01-	Phenanthrene	ND	ND	ND	ND
53-70-3	Dibenzo(A,H) anthracene	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-CD)pyrene	ND	ND	ND	ND
129-00-0	Pyrene	ND	ND	ND	ND
62-53-3	Aniline	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ND	ND	ND	ND
132-64-9	Dibenzofuran	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ND	ND	ND	ND
Pesticides and PCBs (Concentration Units are in μg/L)					
309-00-2	Aldrin	ND	ND	ND	ND
60-57-1	Dieldrin	ND	ND	ND	ND
57-74-9	Chlordane	ND	ND	ND	ND

D29-OP-31

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Pesticides and PCBs (Continued)					
50-29-3	4,4'-DDT	ND	ND	ND	ND
72-55-9	4,4'-DDE	ND	ND	ND	ND
72-54-8	4,4'-DDD	ND	ND	ND	ND
959-98-8	alpha-Endosulfan	ND	ND	ND	ND
33213-65-9	beta-Endosulfan	ND	ND	ND	ND
1031-07-8	Endosulfan sulfate	ND	ND	ND	ND
72-20-8	Endrin	ND	ND	ND	ND
7421-93-4	Endrin aldehyde	ND	ND	ND	ND
76-44-8	Heptachlor	ND	ND	ND	ND
1024-57-3	Heptachlor epoxide	ND	ND	ND	ND
319-84-6	alpha-BHC	ND	ND	ND	ND
319-85-7	beta-BHC	ND	ND	ND	ND
58-89-9	gamma-BHC	ND	ND	ND	ND
319-86-8	delta-BHC	ND	ND	ND	ND
53469-21-9	PCB-1242	ND	ND	ND	ND
11097-69-1	PCB-1254	ND	ND	ND	ND
11104-28-2	PCB-1221	ND	ND	ND	ND
11141-16-5	PCB-1232	ND	ND	ND	ND
12672-29-6	PCB-1248	ND	ND	ND	ND
11096-82-5	PCB-1260	ND	ND	ND	ND
12674-11-2	PCB-1016	ND	ND	ND	ND
8001-35-2	Toxaphene	ND	ND	ND	ND

D29-OP-32

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Chlorinated Herbicides (Concentration Units are in µg/L)					
75-99-0	Dalapon (Dowpon)	2.0*	ND	ND	ND
1918-00-9	Dicamba	ND	ND	ND	ND
7085-19-0	MCPP	ND	ND	500.*	500.*
94-74-6	MCPA	ND	ND	ND	ND
120-36-5	Dichloroprop (2,4-DP)	ND	ND	ND	ND
94-75-7	2,4-D	ND	ND	ND	2.0*
93-72-1	2,4,5-TP (Silvex)	ND	ND	ND	ND
93-76-5	2,4,5-T	ND	ND	ND	ND
94-82-6	2,4-DB	ND	ND	ND	ND
88-85-7	Dinoseb (DNBP)	ND	ND	ND	ND
Metals (Concentration Units are in Parts per Million - ppm)					
	Antimony	<0.001	<0.001	<0.004	<0.002
	Arsenic	<0.001	<0.001	0.003	0.002
	Beryllium	<0.002	0.002	0.002	<0.002
	Cadmium	<0.001	<0.001	<0.001	<0.001
	Chromium	<0.01	<0.01	<0.01	<0.01
	Copper	0.009	0.008	0.005	0.005
	Lead	<0.01	<0.01	<0.01	<0.01
	Mercury	<0.001	<0.001	<0.001	<0.001
	Nickel	<0.01	<0.01	<0.01	<0.01
	Selenium	<0.001	<0.001	<0.001	<0.001

D29-OP-33

Quality Assurance/Quality Control: Trip and Field Blanks
Associated with Groundwater Sampling
QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS

CAS Number	Compound Name	Trip Blank 7/15/85 Y4465	Field Blank 7/15/85 Y4466	Trip Blank 8/5/85 Y4544	Field Blank 8/5/85 Y4545
Metals (Continued)					
	Silver	<0.002	<0.002	<0.002	<0.002
	Thallium	<0.02	<0.02	<0.02	<0.02
	Zinc	<0.001	<0.001	0.005	0.006
Classical Parameters (Concentration Units are in Parts per Million - ppm)					
	Total Cyanide	<0.01	<0.01	<0.01	<0.01
	Total Phenols	<0.01	<0.01	<0.01	<0.01

D29-0P-34

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks (I)

CAS Number	Compound Name	C2012 1/15/85	C2049 1/16/85	C2083 1/17/85	C2128 1/18/85	C2196 1/19/85
Volatile Organic Compounds (Concentration Units are in μg/L)						
71-43-2	Benzene	ND	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ND	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
75-34-3	1,1-Dichloroethane	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	2.*	2.*	1.*
75-35-4	1,1-Dichloroethene	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks (I)

CAS Number	Compound Name	C2012	C2049	C2083	C2128	C2196
Volatiles (Continued)						
100-41-4	Ethylbenzene	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	7.	8.	23.	11.	22.
74-87-3	Chloromethane	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND	6.
79-01-6	Trichloroethene	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND	ND
519-78-6	2-Hexanone	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND	ND

D2A-QP-P-1 to 2

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks (II)

CAS Number	Compound Name	C2221 1/23/85	C2223 1/24/85
Volatile Organic Compounds (Concentration Units are in μg/L)			
71-43-2	Benzene	ND	ND
56-23-5	Carbon tetrachloride	ND	ND
108-90-7	Chlorobenzene	ND	ND
107-06-2	1,2-Dichloroethane	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND
75-34-3	1,1-Dichloroethane	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND
75-00-3	Chloroethane	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND
67-66-3	Chloroform	ND	ND
75-35-4	1,1-Dichloroethene	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks (II)

CAS Number	Compound Name	C2221	C2223
Volatiles (Continued)			
100-41-4	Ethylbenzene	ND	ND
75-09-2	Methylene chloride	19.	14.
74-87-3	Chloromethane	ND	ND
74-83-9	Bromomethane	ND	ND
75-25-2	Bromoform	ND	ND
75-27-4	Bromodichloromethane	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND
124-48-1	Chlorodibromomethane	ND	ND
127-18-4	Tetrachloroethene	ND	ND
108-88-3	Toluene	ND	ND
79-01-6	Trichloroethene	ND	ND
75-01-4	Vinyl chloride	ND	ND
67-64-1	Acetone	ND	ND
78-93-3	2-Butanone	ND	ND
75-15-0	Carbon disulfide	ND	ND
519-78-6	2-Hexanone	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND
100-42-5	Styrene	ND	ND
108-05-4	Vinyl acetate	ND	ND
95-47-6	Total Xylenes	ND	ND

D2A-QP-Q-1 to 2

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks III

CAS Number	Compound Name	C2253 1/25/85	C2259 1/28/85	C2410 2/07/85	L2421 2/09/85	L2449 2/11/85
Volatile Organic Compounds (Concentration Units are in µg/L						
71-43-2	Benzene	ND	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
67-66-3	Chloroform	2.*	ND	1.*	1.9*	1.8*
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND	ND

D29C-QCS-16

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks III

CAS Number	Compound Name	C2253 1/25/85	C2259 1/28/85	C2410 2/07/85	L2421 2/09/85	L2449 2/11/85
Volatiles (Continued)						
100-41-4	Ethylbenzene	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	17.	9.	10.	2.4	2.3
74-87-3	Chloromethane	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND	1.9
78-93-3	2-Butanone	ND	ND	ND	2.4	2.9
75-15-0	Carbon disulfide	ND	ND	ND	ND	ND
519-78-6	2-Hexanone	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND	ND

D29C-QCS-17

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks IV

CAS Number	Compound Name	L2474 2/12/85	C2730 3/26/85	C2822 4/11/85	C2849 4/15/85
Volatile Organic Compounds (Concentration Units are in µg/L					
71-43-2	Benzene	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND
67-66-3	Chloroform	1.9*	3.*	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND

D29C-QCS-25

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Field Blanks IV

CAS Number	Compound Name	L2474 2/12/85	C2730 3/26/85	C2822 4/11/85	C2849 4/15/85
Volatiles (Continued)					
100-41-4	Ethylbenzene	ND	ND	ND	ND
75-09-2	Methylene chloride	2.0	27.	4.*	7.
74-87-3	Chloromethane	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND
78-93-3	2-Butanone	1.3*	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND
519-78-6	2-Hexanone	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND

D29C-QCS-26

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks (I)

CAS Number	Compound Name	C2013 1/15/85	C2048 1/16/85	C2082 1/17/85	C2127 1/18/85	C2195 1/19/85
Volatile Organic Compounds (Concentration Units are in μg/L)						
71-43-2	Benzene	ND	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ND	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
75-34-3	1,1-Dichloroethane	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro- ethane	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro- ethane	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND	ND
75-35-4	1,1-Dichloroethene	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro- ethene	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro- propene	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro- propene	ND	ND	ND	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks (I)

CAS Number	Compound Name	C2013	C2048	C2082	C2127	C2195
Volatiles (Continued)						
100-41-4	Ethylbenzene	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	9.	6.	34.	15.	23.
74-87-3	Chloromethane	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND	ND
519-78-6	2-Hexanone	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND	ND

D2A-QP-R-1 to 2

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks (II)

CAS Number	Compound Name	C2220 1/23/85	C2222 1/24/85
Volatile Organic Compounds (Concentration Units are in µg/L)			
71-43-2	Benzene	ND	ND
56-23-5	Carbon tetrachloride	ND	ND
108-90-7	Chlorobenzene	ND	ND
107-06-2	1,2-Dichloroethane	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND
75-34-3	1,1-Dichloroethane	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND
75-00-3	Chloroethane	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND
67-66-3	Chloroform	ND	ND
75-35-4	1,1-Dichloroethene	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks (II)

CAS Number	Compound Name	C2220	C2222
Volatiles (Continued)			
100-41-4	Ethylbenzene	ND	ND
75-09-2	Methylene chloride	41.	17.
74-87-3	Chloromethane	ND	ND
74-83-9	Bromomethane	ND	ND
75-25-2	Bromoform	ND	ND
75-27-4	Bromodichloromethane	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND
124-48-1	Chlorodibromomethane	ND	ND
127-18-4	Tetrachloroethene	ND	ND
108-88-3	Toluene	ND	ND
79-01-6	Trichloroethene	ND	ND
75-01-4	Vinyl chloride	ND	ND
67-64-1	Acetone	ND	ND
78-93-3	2-Butanone	ND	ND
75-15-0	Carbon disulfide	ND	ND
519-78-6	2-Hexanone	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND
100-42-5	Styrene	ND	ND
108-05-4	Vinyl acetate	ND	ND
95-47-6	Total Xylenes	ND	ND

D2A-QP-S-1 to 2

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks III

CAS Number	Compound Name	C2252 1/25/85	C2258 1/28/85	C2409 2/7/85	L2420 2/9/85	L2448 2/11/85
Volatile Organic Compounds (Concentration Units are in µg/L						
71-43-2	Benzene	4.*	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND	ND

D29C-QCS-1

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks III

CAS Number	Compound Name	C2252 1/25/85	C2258 1/28/85	C2409 2/7/85	L2420 2/9/85	L2448 2/11/85
Volatiles (Continued)						
100-41-4	Ethylbenzene	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	20.	10.	22.	6.1	6.1
74-87-3	Chloromethane	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	ND
108-88-3	Toluene	1.*	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	3.1	3.7
75-15-0	Carbon disulfide	ND	ND	ND	ND	ND
519-78-6	2-Hexanone	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND	ND

D29C-QCS-2

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks IV

CAS Number	Compound Name	L2473 2/12/85	C2729 3/26/85	C2821 4/11/85	C2848 4/15/85	C2854 4/17/85
Volatile Organic Compounds (Concentration Units are in µg/L						
71-43-2	Benzene	ND	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ND	ND	ND	ND	ND
107-06-2	1,2,-Dichloroethane	ND	ND	ND	ND	ND
71-55-6	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
75-34-3	1,1,-Dichloroethane	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloro-ethane	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloro-ethane	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ND	ND	ND	ND	ND
542-88-1	Bis(chloromethyl) ether	ND	ND	ND	ND	ND
110-75-8	2-Chloroethylvinyl ether	ND	ND	ND	ND	ND
67-66-3	Chloroform	ND	ND	ND	ND	ND
75-35-4	1,1,-Dichloroethene	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloro-ethene	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloro-propene	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloro-propene	ND	ND	ND	ND	ND

D29B-QCS-9

QUANTITATIVE PRIORITY POLLUTANT ANALYTICAL RESULTS
Quality Control Samples: Trip Blanks IV

CAS Number	Compound Name	L2473 2/12/85	C2729 3/26/85	C2821 4/11/85	C2848 4/15/85	C2854 4/17/85
Volatiles (Continued)						
100-41-4	Ethylbenzene	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	6.9	32.	4.*	9.	9.
74-87-3	Chloromethane	ND	ND	ND	ND	ND
74-83-9	Bromomethane	ND	ND	ND	ND	ND
75-25-2	Bromoform	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoro-methane	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoro-methane	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	ND
108-88-3	Toluene	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ND	ND	ND	ND	ND
67-64-1	Acetone	ND	ND	ND	ND	ND
78-93-3	2-Butanone	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ND	ND	ND	ND	ND
519-78-6	2-Hexanone	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone	ND	ND	ND	ND	ND
100-42-5	Styrene	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ND	ND	ND	ND	ND
95-47-6	Total Xylenes	ND	ND	ND	ND	ND

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RSLT.LNE	CLIENT #	SAM.DESC	SORT 2	TA X
ND (0.05 ppb)	T010-2247-H-L	Travel Blank--Near Surface Soil	850204	BRADY1
ND (0.0596 ppb)	F013-2248-H-L	Field Blank--Near Surface Soil	850204	BRADY1
ND (0.0034 ppb)	T021-2597-H-L	Travel Blank-Water	850301	LISTER2
ND (0.00058 ppb)	F034-2598-H-L	Field Blank-Water	850301	LISTER2
ND (0.0033 ppb)	F037-2629-H-L	Field Blank-Remedial Soils	850320	SARGENT2
ND (0.011 ppb)	T023-2630-H-L	Travel Blank-Remedial Soils	850320	SARGENT2
ND (0.0026 ppb)	T024-2699-H-L	Travel Blank-Near Surface Soil	850318	MISC
ND (0.0017 ppb)	F040-2700-H-L	Field Blank-Near Surface Soil	850318	MISC
ND (0.00030 ppb)	T029-2745-H-L	Travel Blank-Near Surface Soil	850329	CONRAIL1
ND (0.00079 ppb)	F045-2746-S-L	Field Blank-Near Surface Soil	850329	CONRAIL1
ND (0.0010 ppb)	T035-2823-H-L	Travel Blank-Near Surface Soil	850411	LISTER2
ND (0.0056 ppb)	F052-2824-H-L	Field Blank-Near Surface Soil	850411	LISTER2
ND (0.00095 ppb)	T036-2846-H-L	Travel Blank-Near Surface Soil	850415	CONRAIL1
ND (0.0010 ppb)	F053-2847-H-L	Field Blank-Near Surface Soil	850415	CONRAIL1
ND (0.0015 ppb)	T040-2876-H-L	Travel Blank-Soil Boring	850418	SARGENT2
ND (0.0013 ppb)	F059-2877-H-L	Field Blank-Soil Boring	850418	SARGENT2
ND (0.0056 ppb)	T055-3641-H-L	Travel Blank-Near Surface Soil	850517	CONRAIL1
ND (0.0012 ppb)	F096-3642-H-L	Field Blank-Near Surface Soil	850517	CONRAIL1
ND (0.0037 ppb)	F104-3873-H-L	Field Blank-Rinsed trowel used to collect sediment	850523	SARGENT2
ND (0.0019 ppb)	T058-3874-H-L	Travel Blank-Sediment from 120 Lister	850523	SARGENT2
ND (0.0046 ppb)	T071-3953-H-L	Travel Blank-Soil Boring	850530	BRADY2
ND (0.0094 ppb)	F115-3954-H-L	Field Blank-Soil Boring	850530	BRADY2
ND (0.0075 ppb)	T072-3955-H-L	Travel Blank-Test Pit Soil	850530	BRADY2
ND (0.013 ppb)	F118-3956-H-L	Field Blank-Test Pit Soil	850530	BRADY2
ND (0.017 ppb)	T075-4018-H-L	Travel Blank-Soil Boring	850531	BRADY2
ND (0.0088 ppb)	F120-4019-H-L	Field Blank-Soil Boring	850531	BRADY2
ND (0.0072 ppb)	T075-4020-H-L	Travel Blank-Near Surface Soil (Test Pit)	850531	BRADY2
ND (0.011 ppb)	F121-4021-H-L	Field Blank-Near Surface Soil (Test Pit)	850531	BRADY2
ND (0.014 ppb)	T077-4061-H-L	Travel Blank-Soil Boring	850601	BRADY2
ND (0.014 ppb)	F124-4062-H-L	Field Blank-Soil Boring	850601	BRADY2
ND (0.020 ppb)	T078-4092-H-L	Travel Blank-Soil Boring	850604	BRADY2
ND (0.012 ppb)	F126-4093-H-L	Field Blank-Soil Boring	850604	BRADY2
ND (0.32 ppb)	T079-4124-H-L	Travel Blank-Soil Boring	850603	BRADY2
ND (0.0048 ppb)	F127-4125-H-L	Field Blank-Soil Boring	850603	BRADY2
ND (0.012 ppb)	T083-4138-H-L	Travel Blank-Near Surface Soil	850604	BRADY2
ND (0.0031 ppb)	F133-4139-H-L	Field Blank-Near Surface Soil	850604	BRADY2
ND (0.0064 ppb)	T084-4164-H-L	Travel Blank-Soil Boring	850605	BRADY2
ND (.027 ppb)	F134-4165-H-L	Field Blank-Soil Boring	850605	BRADY2
ND (0.0035 ppb)	T086-4191-H-L	Travel Blank-Soil Boring	850607	BRADY2
ND (0.0046 ppb)	F137-4192-H-L	Field Blank-Soil Boring	850607	BRADY2
ND (0.0041 ppb)	T087-4257-H-L	Travel Blank-Near Surface Soil	850613	OFFSITES1
ND (0.0041 ppb)	F138-4258-H-L	Field Blank-Near Surface Soil	850613	OFFSITES1
ND (0.0020 ppb)	T088-4259-H-L	Travel Blank-Near Surface Soil	850611	OFFSITES1
ND (0.0020 ppb)	F141-4260-H-L	Field Blank-Near Surface Soil	850611	OFFSITES1
ND (0.0052 ppb)	T089-4278-H-L	Travel Blank-Near Surface Soil	850612	OFFSITES1
ND (0.0052 ppb)	F142-4279-H-L	Field Blank-Near Surface Soil	850612	OFFSITES1

REPT.LINE	CLIENT #	SAMP.DESC	SORT2	TAGY
ND (0.0034 ppb)	T093-4348-H-L	Travel Blank-Near Surface Soil	850619	OFFSITES1
ND (0.0067 ppb)	F147-4349-H-L	Field Blank-Near Surface Soil	850619	OFFSITES1

RSLT.LWE	CLIENT #	SAM.DESC	RPRT 2	TASK
ND (6.3 ng/wipe)	F005-2100-W-L	Field Blank-Wipe	850117	NEWARKBOX1
ND (10.0 ng/wipe)	F025-2498-W-L	Field Blank-Wipe	850214	MORRIS1
ND (2.0 ng/wipe)	F026-2503-W-L	Field Blank-Wipe	850216	BRADY1
ND (4.0 ng/wipe)	F029-2536-W-L	Field Blank-Wipe	850220	LISTER2
ND (2.3 ng/wipe)	F038-2645-W-L	Field Blank-Wipe	850316	BRADY1
ND (0.046 ng/wipe)	F049-2815-W-L	Field Blank-Wipe	850409	CONRAIL1
ND (0.24 ng/wipe)	F057-2859-W-L	Field Blank-Wipe	850417	SARGENT2
ND (1.7 ng/wipe)	F062-2882-W-L	Field Blank-Wipe	850419	LISTER2
ND (3.0 ng/wipe)	F064-2892-W-L	Field Blank-Wipe	850423	BRADY1
ND (0.90 ng/wipe)	F068-2930-W-L	Field Blank-Wipe	850424	BRADY1
ND (0.70 ng/wipe)	F069-2932-W-L	Field Blank-Wipe	850425	LISTER2
ND (1.5 ng/wipe)	F072-2943-W-L	Field Blank-Wipe	850502	HILDMANN1
ND (2.0 ng/wipe)	F075-3027-W-L	Field Blank-Wipe	850430	SARGENT2
ND (2.2 ng/wipe)	F103-3871-W-L	Field Blank-Wipe	850523	BRADY2
ND (1.7 ng/wipe)	F127-4267-W-L	Field Blank-Wipe	850607	BRADY1
ND (3.0 ng/wipe)	F140-4277-W-L	Field Blank-Wipe	850611	BRADY2
ND (1.5 ng/wipe)	F148-4351-W-L	Field Blank-Wipe	850620	BRADY2
ND (3.1 ng/wipe)	F152-4396-W-L	Field Blank-Wipe	850624	BRADY2
ND (1.7 ng/wipe)	F154-4447-W-L	Field Blank-Wipe	850627	BRADY2
ND (5.7 ng/wipe)	F156-4452-W-L	Field Blank--Wipe	850712	LISTER3
ND (7.3 ng/wipe)	F170-4580-W-L	Field Blank-Wipe	850919	LISTER3