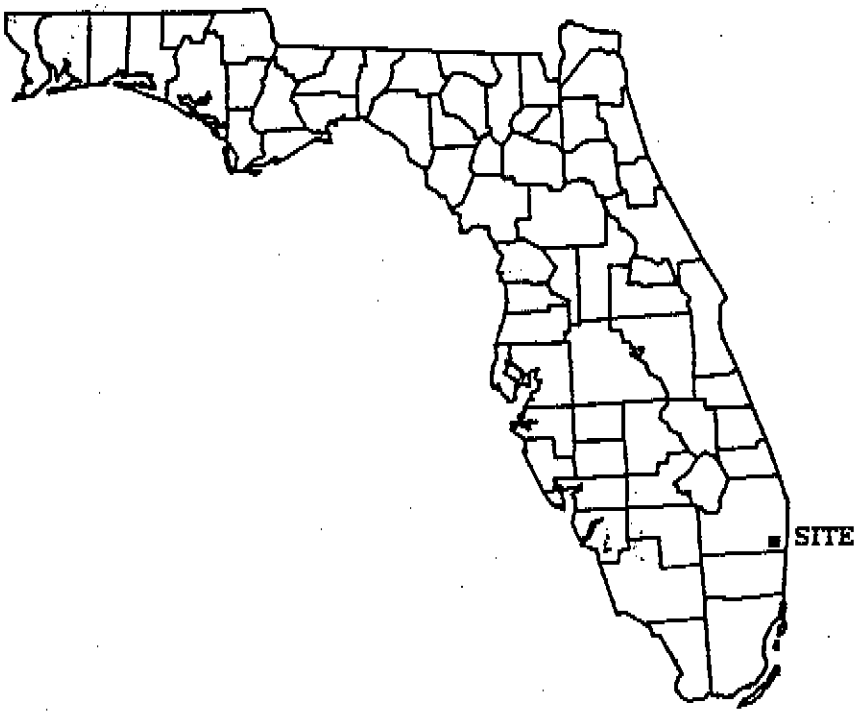
CONTAMINATION ASSESSMENT REPORT

To: Steve Krupa
SFWMD

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA



PREPARED FOR:

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL
REGULATION
TALLAHASSEE, FL.

CONTRACT # WM-316

MAY 1991

PREPARED BY:

Woodward-Clyde Consultants

CONSULTING ENGINEERS, GEOLOGISTS AND ENVIRONMENTAL SCIENTISTS
547 NORTH MONROE, SUITE 201 TALLAHASSEE, FLORIDA 32301

WCC FILE NO. 91C5233

PROFESSIONAL SEAL

In accordance with Chapter 492, Florida Statutes and Chapter 17-770, Florida Administrative Code, this report has been reviewed and approved by the undersigned Florida Professional Geologist.

Woodward-Clyde Consultants (WCC) has conducted this investigation in a manner consistent with sound geologic practices and that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar circumstances. Information provided to WCC by client representatives has been accepted in good faith and is assumed to be accurate.

Contact for Woodward Clyde
Phil Ciaravella Paul Hurst
904-574-3197

Signed: Thomas Kwader

Thomas Kwader, Ph.D., P.G.
Senior Associate
Registered Professional Geologist
Florida License No. 254

Date: 5-17-91

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Woodward-Clyde Consultants

May 3, 1991

Revised Copy

Mr. Nicholas A. Brown
Project Manager/Geologist
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Contamination Assessment Report
Aero-Dri Corporation
Delray Beach, Florida

Dear Mr. Brown:

Enclosed are nine copies of the referenced report. Woodward-Clyde Consultants appreciates the opportunity to assist you with this project. If you have any questions or comments regarding this report, please do not hesitate to contact me.

Sincerely,
WOODWARD-CLYDE CONSULTANTS

Philip J. Ciaravella
Project Geologist

PJC/lyw

Enclosures

91C5233-07
A:L166NB05.391

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES
(Continued)

LIST OF APPENDICES

1.0 INTRODUCTION

In February 1991, Woodward-Clyde Consultants (WCC) was retained by the Florida Department of Environmental Regulation (FDER) under FDER contract WM-316 to investigate the extent of groundwater contamination at the Aero-Dri site in Delray Beach, Florida (Figure 1).

The purpose of this investigation was to expand upon several previous investigations by further assessing: 1) the areal and vertical extent of groundwater contamination at the Aero-Dri facility; 2) the direction of groundwater flow at the site; and, 3) the effects of groundwater withdrawals at the Series 20 Well Field. The scope of work for this investigation was presented in the Contamination Assessment Plan (CAP) submitted to FDER on November 8, 1990. The CAP was approved by the FDER Project Manager on February 14, 1991.

1.1 Site Background and History

The Aero-Dri Corporation (Aero-Dri) site is located on S.W. 10th Street in Delray Beach, Florida (Figure 2). The site, no longer in operation, was leased to Aero-Dri, a division of Davey Compressor Company by the property owner, L&J Enterprises. Aero-Dri reportedly was in the business of cleaning and rebuilding compressors.

In July 1987, the volatile organic chemical, tetrachloroethene was detected in water at the City of Delray Water Treatment Plant. Subsequent analysis of the City's largest capacity well field, the Series 20 Well Field, showed that four of the production wells were contaminated with tetrachloroethene, trichloroethene and cis-1,2-dichloroethene. By February 1988, the City was forced to close

five of the six Series 20 wells until granulated activated carbon systems could be put into operation.

The Aero-Dri site, located approximately 1000 feet southeast of the contaminated production wells, was inspected by FDER on September 31, 1987. As a result of this hazardous waste inspection, FDER presented a draft Consent Order to Aero-Dri and L&J Enterprises in December 1987.

Aero-Dri conducted a preliminary investigation of the site in October 1987. Two monitoring wells were installed at the southwest corner of the Aero-Dri building in the area of the suspected spill and four soil samples were taken during well installation. Soil analyses showed tetrachloroethene levels ranging from 26 to 585,000 parts per billion (ppb). Analysis of groundwater samples collected from the two wells showed tetrachloroethene levels of 5,600 ppb in the well screened at 20 to 25 feet and 531,000 ppb in the well screened at 40 to 45 feet. Trichloroethene, benzene, ethylbenzene and xylene were also detected in the groundwater samples. These compounds and toluene were found in soil samples. These data were submitted to FDER on December 21, 1987, and in a preliminary Contamination Assessment Report (CAR).

FDER requested Aero-Dri prepare a CAP to evaluate the extent of contamination. By November 28, 1988 Aero-Dri had a completed CAR based on the CAP submitted to FDER. During field activities performed between April 1 and July 28, 1988, 28 groundwater monitoring wells and 18 on-site soil borings were installed. The construction details of monitoring wells installed during this investigation and the Series 20 production wells are presented in Table 1. Groundwater samples, soil samples and water level measurements were taken. In addition, on May 31, 1988 Aero-Dri put a vapor extraction system (VES) into operation to remove

tetrachloroethene from the vadose zone of the suspected spill area (Figure 2). The system consists of one central well and five radial collector wells.

The CAR concluded that tetrachloroethene contamination at the Aero-Dri site had migrated downward with little horizontal movement. At a depth of approximately 80 feet, contamination entered a zone of secondary permeability allowing rapid vertical movement and the possibility of lateral movement to the north-northwest. A plan to supplement the vapor extraction system with a recovery well/air stripper system was proposed to remediate tetrachloroethene contamination of the groundwater. This system has not been installed.

The City of Delray Beach retained CH_2M-Hill, Inc. to conduct a Contamination Assessment (CA) to obtain information confirming that the Aero-Dri site was the source of tetrachloroethene contamination and to provide an estimate of the size of the contaminant plume affecting the City's Series 20 Well Field.

The preliminary CAR completed by CH_2M-Hill in December 1988 contained results of field activities that included a private well inventory, geophysical logging, soil sampling, monitoring well installation, groundwater sampling, and groundwater flow modeling of the City's Series 20 and Golf Course well fields which provide potable water to the City of Delray Beach. The results of the CH_2M-Hill assessment are summarized as follows:

1) tetrachloroethene contamination is present at the Aero-Dri site. The highest concentrations in soil are located in the area west and northwest of the Aero-Dri building;

2) geophysical logs indicated that no confining layers are present that would significantly impede the vertical migration of contamination in the Series 20 Well Field vicinity;

3) although the regional direction of groundwater flow is to the east, water level data and groundwater flow modeling indicate withdrawals by the Series 20 Well Field have caused groundwater at the site to flow west-northwest, towards the Series 20 production wells; and

4) groundwater flow modeling indicates that the Series 20 Well Field must continue to operate to prevent contamination from migrating to the Golf Course well field.

Prior to the current investigation conducted by WCC, the most recent water quality data was collected by CH_2M-Hill in December 1989. These data indicate the highest concentrations of volatile organic compounds (VOCs) and tetrachloroethene in groundwater were found at the southwest corner of the Aero-Dri building and west and northwest of the Aero-Dri site. Concentrations east and south of the site were found to be generally lower, indicating the dissolved VOCs and tetrachloroethene are migrating towards the Series 20 production wells located west and northwest of the site.

1.2 Approach and Rationale

The water quality data collected in December 1989 indicated the horizontal and vertical extent of contamination had not been defined. To achieve the stated CAP objectives, a phased approach was proposed. The first phase of work was designed to evaluate groundwater flow patterns, the horizontal and vertical extent of

groundwater contamination, and the presence of a free non-aqueous phase of tetrachloroethene at the base of the surficial aquifer. The second phase of work was designed to include the installation of additional monitoring wells, and collection of additional water level and water quality data, if necessary, to achieve the CAP objectives. The scope of work for both phases of field work conducted by WCC was developed in conjunction with, and approved by FDER.

2.0 FIELD ACTIVITIES

Field work for the CA was conducted by WCC in two phases. Phase I was conducted from February 19, 1991 to March 6, 1991. The second phase of field work, Phase II was conducted from April 2, 1991 to April 4, 1991.

2.1 Phase I

The Phase I field work consisted of the tasks listed below:

1) Installation of monitoring wells P-1 and P-2 to depths of 255 feet below land surface (bls) and 245 feet bls, respectively.

2) Collection of water samples from monitoring wells P-1, P-2, selected existing monitoring wells, and the Series 20 production wells.

3) Collection of water level measurements from all monitoring wells and accessible Series 20 production wells.

2.1.1 Phase I Monitoring Well Installation

During Phase I, monitoring wells P-1 and P-2 were installed at the locations shown in Figure 3. The wells were installed by Groundwater Protection, Inc. (GPI) using mud-rotary drilling methods. Each well is triple cased and was constructed using a telescoping design. The construction details of each well are presented in Table 1 and the well construction schematics are included as Figures 4 and 5. The total depth of well P-1 is 255 feet bls; the total depth of P-2 is 245 feet bls. The well depths were selected based on geophysical logs of the boreholes, and split-spoon sampling to confirm the lithology indicated by previous studies, and drill cuttings. Lithologic and geologic logs of wells P-1 and P-2 are presented in Appendix A. The procedure used to determine the well depths is described below:

1) A 8-inch diameter borehole was drilled at well P-2 to a depth of 350 feet bls. A suite of natural gamma and electric logs was obtained from the borehole.

2) Review of the gamma log from P-2 indicated the presence of a clay unit at a depth of 240 feet bls. The gamma log also indicated this unit was approximately 5 feet thick. However, the log also showed the clay content of the underlying deposits to be significantly higher than above the 240 feet bls horizon.

3) A 8-inch diameter borehole was drilled at well P-1 to a depth of 170 feet bls. A suite of gamma and electric logs were then obtained from the borehole.

4) Comparison of the logs obtained from P-1 and P-2 indicated the lithologic units dipped approximately 5

feet from well P-2 to well P-1, or at approximately 30 feet per mile towards the southeast.

5) A split-spoon sample was collected at P-1 from a depth of 243 to 245 feet bls to confirm the presence of clay at this depth. The split-spoon sample was cream to olive colored clay with minor amounts of silt and sand.

6) The P-1 borehole was then deepened to 255 feet bls and geophysically logged. This log also indicates the presence of clay at the 245-foot interval.

Based on the data collected in the field, and discussions with the FDER Project Manager, well depths of 255 feet at P-1 and 245 feet at P-2 were selected. Prior to installing the well casing and screen at well P-2, the borehole was filled with sand from a depth of 350 to 300 feet bls. A bentonite grout seal was then placed from 300 to 250 feet bls.

Each well is constructed of mechanically coupled Schedule 80 PVC casing and screen. Each well is fitted with 20 feet of machine slotted (0.02-inch opening) well screen. The annular space opposite the well screen is filled with 6/20 size silica sand installed by the tremie method. A fine sand cap was placed on top of the sand pack through a tremie to prevent migration of grout into the sand pack. The remaining annular space was sealed to land surface with cement/bentonite grout placed through a tremie pipe. The wells were completed below land surface in protective manholes and a concrete pad was constructed around each well (Figures 4 and 5).

Each well was developed for approximately 2 hours by surging and pumping until clear, sediment-free discharge was obtained. During

development, well P-1 produced water at an average of 2 gallons per minute (gpm). Well P-2 produced water at an average rate of 1½ gpm.

2.1.2 Groundwater Sampling

Groundwater samples were collected from wells P-1 and P-2 and from the 25 monitoring wells designated on Figure 6. These wells were selected to obtain a current picture of the lateral extent of tetrachloroethene and dissolved VOCs in groundwater.

The monitoring wells were purged of three to five volumes prior to sampling using a centrifugal pump with new polyethylene tubing. The polyethylene tubing, with a Teflon leader in the water column, was maintained at the top of the water column and lowered to accommodate well drawdown. Temperature, pH and specific conductance of the purge water from each well was measured during purging (Table 2). After the wells were purged and the field parameters stabilized, the tubing was removed. Groundwater samples were collected with a decontaminated stainless steel bailer and carefully poured into the appropriate, labeled sample containers. The analytical results of this sampling are discussed in Section 5.0. Laboratory reports are presented in Appendix B.

All groundwater sampling equipment was thoroughly decontaminated prior to each sampling in accordance with WCC's FDER-approved Generic Quality Assurance Plan (QAP) and site-specific Quality Assurance Project Plan (QAPP). Samples were documented (date, time, sampler, analyses, etc.), immediately preserved, placed on ice in sealed coolers, and delivered to Savannah Laboratories and Environmental Services, Inc. (SLES), Tallahassee, Florida for analyses. Chain-of-custody reports were maintained and are kept on file by WCC.

2.2 Phase II

The Phase II field work was conducted from April 2 to April 6, 1991. The work consisted of installing monitoring wells P-3 and P-4; collection of water samples from these wells; resampling wells P-1 and P-2; and sampling well MWC-1C.

2.2.1 Phase II Monitoring Well Installation

Monitoring wells P-3 and P-4 were constructed at the locations shown on Figure 3. The wells were installed by GPI using mud-rotary drilling methods. Each well is 150 feet in depth and is double cased and telescoped. The construction details of each well are presented in Table 1 and the well construction schematics are included as Figures 7 and 8. The outer casing is 10-inch diameter Schedule 40 PVC and extends to a depth of 80 feet bls in both wells. The well casing and screen are 4-inch diameter (mechanically coupled) Schedule 40 PVC. Both wells have 20 feet of machine slotted screen (0.02-inch slot size) extending from 130 to 150 feet bls. The annular space opposite the screen is filled with a 6/20 size silica sand to a depth at least 2 feet above the top of the well screen. A 2-foot thick fine sand cap is present on top of the sand pack to prevent migration of grout into the sand pack. The sand pack and fine sand cap were both placed by the tremie method. The remaining annular space was filled to land surface with cement/grout placed by the tremie method. The monitoring wells were completed below land surface in protective manholes and a concrete pad was installed around each well.

Each well was developed by pumping and surging for approximately 1½ hours or until clear sediment-free discharge was produced by each well. During development, well P-3 produced water at an average

rate of 15 gpm. Well P-4 produced water at an average rate of 10 gpm.

2.2.2 Groundwater Sampling

Water samples were collected from wells P-1 through P-4 and well MWC-1C. First, a grab sample was collected from the bottom of wells P-1 and P-2 using a Teflon thief sampler provided by FDER. The purpose of these samples was to determine if free-phase tetrachloroethene or dissolved tetrachloroethene was present at the bottom of the wells. After the grab samples were collected, samples were collected from wells P-1 through P-4 and MWC-1C using the purging and sampling procedure described in Section 2.1.2. Measurements of pH, temperature and specific conductance are presented in Table 2.

2.3 Health and Safety

Prior to initiating the field activities, WCC briefed GPI (drilling subcontractor) on WCC's site-specific Health and Safety Plan (HSP). Participating Groundwater Protection employees agreed to comply with the health and safety rules outlined by WCC.

An organic vapor analyzer (OVA) was used to monitor air quality during drilling and well construction activities. Air measurements were frequently taken in the breathing zone and 6 inches above the drilling mud pit. Organic vapors were not detected by the OVA during installation of the on-site monitoring wells. No health and safety infractions or serious incidents occurred during the Phase I or Phase II field work.

3.0 LABORATORY ANALYSES

All groundwater samples collected at the site were delivered to SLES for analysis. Each sample was analyzed for VOCs by Environmental Protection Agency (EPA) Methods 601 and 602. In addition, selected samples were analyzed by SLES for total dissolved solids (TDS), chloride and sulfate content. Laboratory reports of analysis are presented in Appendix B. Results of the analyses are discussed in Section 5.0.

4.0 SITE GEOLOGY AND HYDROLOGY

Lithologic logs of wells P-1 through P-4, and geophysical logs of wells P-1 and P-2 are presented in Appendix A. Data collected during the drilling investigation indicate the upper sediments at the site consist primarily of fine to medium grained sands of the Pamlico Formation to a depth of 35 to 50 feet bls. Below this depth the sand becomes indurated; shell deposits and scattered thin lenses of grey clay may occur. The shell content of the formation tends to decrease with depth. Below a depth of approximately 85 feet bls, the cemented sand unit becomes highly permeable exhibiting secondary porosity with numerous solution cavities and voids. Drilling fluid circulation was lost in this zone during the construction of well P-1.

Drilling fluid loss in this zone was also reported during earlier investigations. This zone of high permeability is the production zone of the Series 20 Well Field and other wells in the vicinity of Delray Beach. Although highly permeable, scattered lenses of white calcareous clay were noted in this zone at a depth of approximately 140 feet bls during the construction of wells P-3 and P-4. This well indurated, highly productive sand is considered to be the Anastasia Formation. It extends to a depth of approximately 240 to

250 feet bls. At this depth, the clay content of the formation begins to increase significantly, forming the base of the surficial aquifer.

The Pamlico and Anastasia Formations comprise the surficial aquifer in the vicinity of Delray Beach. The base of the surficial aquifer at the site appears to occur at a depth approximately 250 feet bls. The clays of the Hawthorn Group underlie the surficial aquifer. Published data indicate the Hawthorn Group in eastern Palm Beach County is between 600 and 700 feet thick. Beneath the Hawthorn are the limestones and dolomites of the Floridan Aquifer.

4.1 Direction of Groundwater Flow

The measuring point elevation of wells P-1 through P-4 was determined by Boca Land Surveyors, Inc. of Boca Raton, Florida. The depth to water at each monitoring well was measured using an electric tape on February 25, 1991 and April 6, 1991. Water level data could not be obtained from the Series 20 wells because the access holes at each well were blocked. The depth to water at each well was referenced to mean sea level. The measuring point elevation, depth-to-water measurements, and water level elevations for February 25 and April 6, 1991 are presented on Tables 3 and 4, respectively. These data were used to prepare maps of the water table for February 25 and April 6, 1991, presented as Figures 9 and 10, respectively.

Both of these maps show the direction of groundwater flow in the surficial aquifer at the site is northwest towards the Series 20 production wells. Published data indicates the natural direction of groundwater flow in the surficial aquifer in Eastern Palm Beach County is towards the east. The water level data show that

groundwater withdrawal at the Series 20 Well Field has reversed the direction of groundwater flow at the site.

Although the shape of the water-level contours is similar on both maps, the cone of depression caused by the Series 20 Well Field appears to be more pronounced on February 25, 1991 than April 6, 1991. The water level elevations are higher near the Series 20 production wells on April 6 than February 25, 1991. These fluctuations in the water table may be caused by many factors including variations in pumping rates at the Series 20 Well Field, local rainfall, and the water levels in nearby canals and other surface water bodies.

Water level data from wells P-1 and P-2 indicate there are no significant hydraulic head differences between the upper and lower parts of the surficial aquifer. Groundwater flow in the lower part of the surficial aquifer at the site also appears to be towards the northwest.

5.0 EXTENT OF GROUNDWATER CONTAMINATION

The concentration of VOCs detected in the groundwater samples collected during the investigation are presented in Table 5. Figure 11 illustrates the horizontal distribution of tetrachloroethene and total VOCs in the surficial aquifer.

5.1 Horizontal Extent of Groundwater Contamination

Seven VOCs were detected in the wells sampled. The VOCs detected most frequently were tetrachloroethene and trichloroethene. These compounds were detected in 15 of the 31 wells sampled. In general, the concentrations of tetrachloroethene were higher than trichloroethene.

Figure 11 illustrates the horizontal distribution of tetrachloroethene and total VOCs at the site. The highest concentrations of VOCs and tetrachloroethene were detected in monitoring well MW-2. Tetrachloroethene was detected in each of the Series 20 production and in several of the monitoring wells sampled west and northwest of the site. Tetrachloroethene was not detected in wells south and east of the Aero-Dri building and in wells P-3 and P-4 located north of the site.

Tetrachloroethene and other VOCs were not detected at well W-1 located west of the Series 20 wells. Because tetrachloroethene was not detected south and east of the Aero-Dri building and west of the Series 20 production wells, it appears the Series 20 production wells are effectively capturing the VOCs and tetrachloroethene present in groundwater west and northwest of the Aero-Dri building.

5.2 Vertical Extent of Groundwater Contamination

Wells P-1 and P-2 were installed to evaluate the vertical extent of contamination and the presence of a free phase of tetrachloroethene in the lower part of the surficial aquifer. Water samples were collected from wells P-1 and P-2 upon their completion in March 1991. These samples were collected by purging the well with a centrifugal pump and collecting a water sample with a stainless steel bailer. Tetrachloroethene was not detected in samples collected from either well. VOCs were not detected in well P-1. However chloroform was detected in P-2 at a concentration of 6.5 micrograms per liter (ug/l).

In April 1991, wells P-1 and P-2 were sampled by: 1) collecting a grab sample from the bottom of each well using a teflon thief sampler, and 2) by purging the well with a centrifugal pump and collecting a sample with a stainless steel bailer. VOCs were not

detected in the grab samples collected from either well, or the stainless steel bailer sample collected form well P-1. However, chloroform at a concentration of 4.3 ug/l and 1.1 ug/l of toluene were detected in the stainless steel bailer sample collected from well P-2. A free-phase of tetrachloroethene was not detected in the grab samples collected from the bottom of these wells using a stainless steel bailer and a Teflon thief sampler.

The deepest monitoring well in which tetrachloroethene was detected during the February 1989 sampling is W-4. This well is 150 feet deep. Tetrachloroethene was not detected at MW-4 which is 205 feet deep. This indicates the plume of dissolved tetrachloroethene is between 150 feet and 205 feet thick.

5.3 Changes in Water Quality

Table 6 compares the concentration of tetrachloroethene and VOCs in December 1989 to the concentration of these compounds in February 1991. These data indicate the concentration of tetrachloroethene has decreased by an average of 57 percent since December 1989. The concentration decreased in every well in which tetrachloroethene was detected except for MWC-1B where the concentration increased by 15 percent.

The same pattern is found for total VOCs. The average decrease in total VOC concentration is 64 percent. The concentration of VOCs decreased at every well sampled except for wells MWC-1A and MWC-1B where the VOC concentration increased 7 percent and 13 percent, respectively.

Table 7 compares the concentration of tetrachloroethene to the concentration of the tetrachloroethene degradation products: trichloroethene, dichloroethene, chloroethane and vinyl chloride.

In December 1989, the concentration of tetrachloroethene averaged approximately 7.0 times greater than the concentration of its degradation products. In December, this ratio decreased to 2.6. These data indicate the concentration of tetrachloroethene has decreased in relation to its degradation products. However, it is still the most common VOC found at the site.

5.4 Quality Assurance Results

Laboratory results of analysis of the quality assurance samples collected during the field investigation are included in Appendix B. The quality assurance samples were collected in accordance with the QAPP.

Fire Hydrant Water Sample

Water used during drilling operations was obtained from a City of Delray Beach fire hydrant located at the intersection of Southwest 10th Street and Southwest 12th Avenue. Chloroform, bromodichloromethane, cis-1,3-dichloropropene, and dibromochloromethane were detected in a sample of water from the hydrant at concentrations of 180 ug/l, 21 ug/l, 2.3 ug/l and 1.7 ug/l, respectively. The sample was collected directly from the hydrant outlet into a 40 milliliter volatile organic aromatic vial.

Trip Blank

Trip blanks were used to evaluate if the samples are contaminated due to improper sample container cleaning or during storage and

transportation. Four trip blanks were submitted for analysis. VOCs were not detected in the trip blanks.

Equipment Blanks

Equipment blanks are used to evaluate the effectiveness of field cleaning procedures. They are collected only when sampling equipment is cleaned in the field and reused for subsequent sample collection.

Two equipment blanks were collected from the stainless steel bailers used during the Phase I sampling. VOCs were not detected in the Phase I blanks.

During the Phase II sampling, one equipment blank was collected from a stainless steel bailer and one blank was collected from the thief sampler. Chloroform, 1,1-dichloroethene and 1,1,1-trichloroethene were detected in the equipment blank collected from the bailer. The concentrations of these compounds were low: chloroform (2.3 ug/l); 1,1-dichloroethene (1.5 ug/l); and 1,1,1-trichloroethane (1.4 ug/l). The source of these compounds is not known. Chloroform was detected in monitoring wells P-2 and P-4. However, based upon the suite of target analytes and the concentration of compounds detected in groundwater samples, their presence is interpreted to not have biased the sample results.

Chloroform at a concentration of 1.5 ug/l was detected in the equipment blank collected from the thief sampler. No other VOCs were detected.

Duplicate Samples

Duplicate samples were collected from wells MWC-3A, W-4 and MWC-1C. Analytical results from the duplicate samples compare favorably.

6.0 SUMMARY OF FINDINGS

The findings of this investigation are summarized below:

1) The surficial aquifer consists primarily of unconsolidated sands to a depth of 50 feet bls. Underlying the unconsolidated sands are cemented sands and shells of the Anastasia Formation. Solution cavities and other secondary porosity structures may occur in this zone.

2) The base of the surficial aquifer occurs at a depth of approximately 250 feet. The clay content of the underlying deposits increases significantly below this depth.

3) Groundwater in the surficial aquifer at the site flows northwest towards the Series 20 wells. Groundwater withdrawals at the Series 20 Well Field has reversed the natural direction of groundwater flow at the site.

4) There are no significant hydraulic head differences between the upper and lower parts of the surficial aquifer. Groundwater flow in the lower part of the surficial aquifer at the site is also towards the northwest.

5) Tetrachloroethene is present in the Series 20 production wells and monitoring wells west and northwest of the Aero-Dri site. Tetrachloroethene was not detected in monitoring wells east, south or north of the Aero-Dri building.

6) Dissolved or free-phase tetrachloroethene was not found in the lower portion of the surficial aquifer.

7) The concentrations of tetrachloroethene and VOCs have decreased since December 1989.

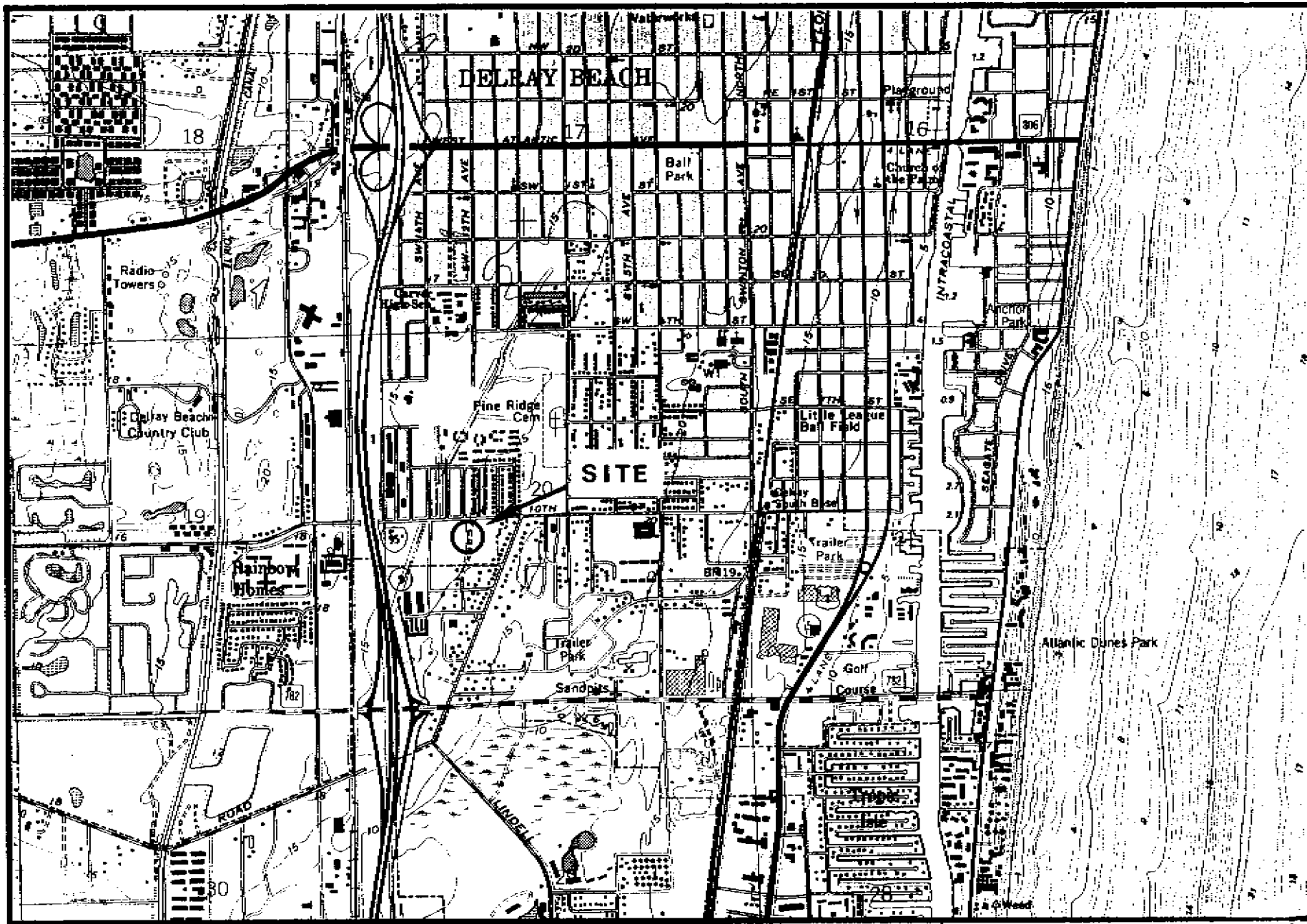
7.0 REFERENCES

Cline, P. and Viste D., 1984. Migration and Degradation Patterns of Volatile Organic Compounds: Fifth National Conference on Uncontrolled Hazardous Waste Sites, Washington, DC.

Scott, T.M., 1988. The Lithostratigraphy of the Hawthorn Group (Miocene) of Florida: Florida Geological Survey Bulletin No. 59.

Shine, M.J., Padgett, D.J. and Barfknecht, 1989. Groundwater Resource Assessment of Eastern Palm Beach County Florida: South Florida Water Management District Technical Publication 89-4.

FIGURES



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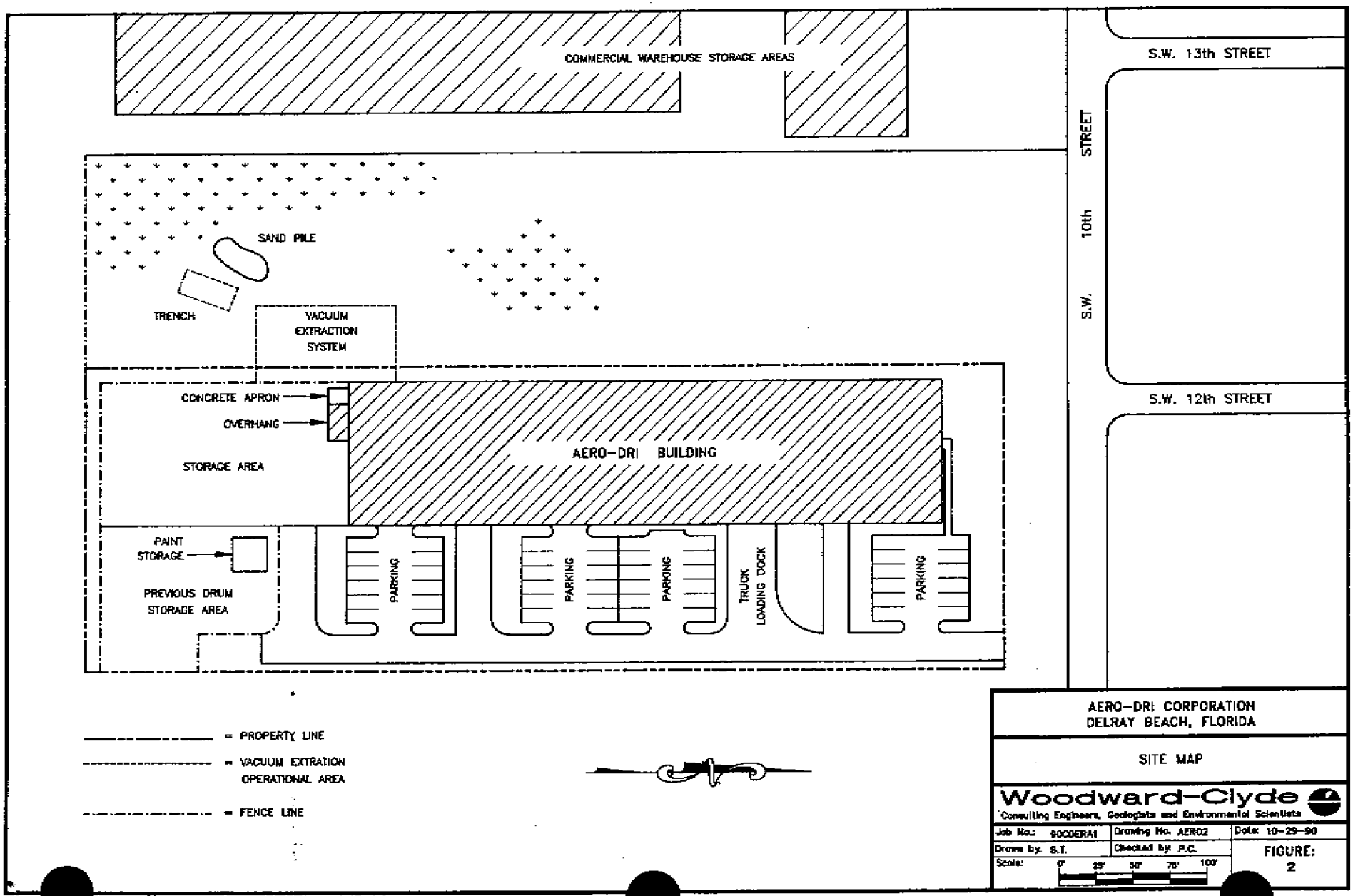
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CONCRETE APRON
OVERHANG
STORAGE AREA
AERO-DRI BUILDING
PAINT STORAGE
PREVIOUS DRUM STORAGE AREA
PARKING
PARKING
PARKING
TRUCK LOADING DOCK
PARKING
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= PROPERTY LINE
= VACUUM EXTRATION OPERATIONAL AREA
= FENCE LINE
AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA
SITE MAP
Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists
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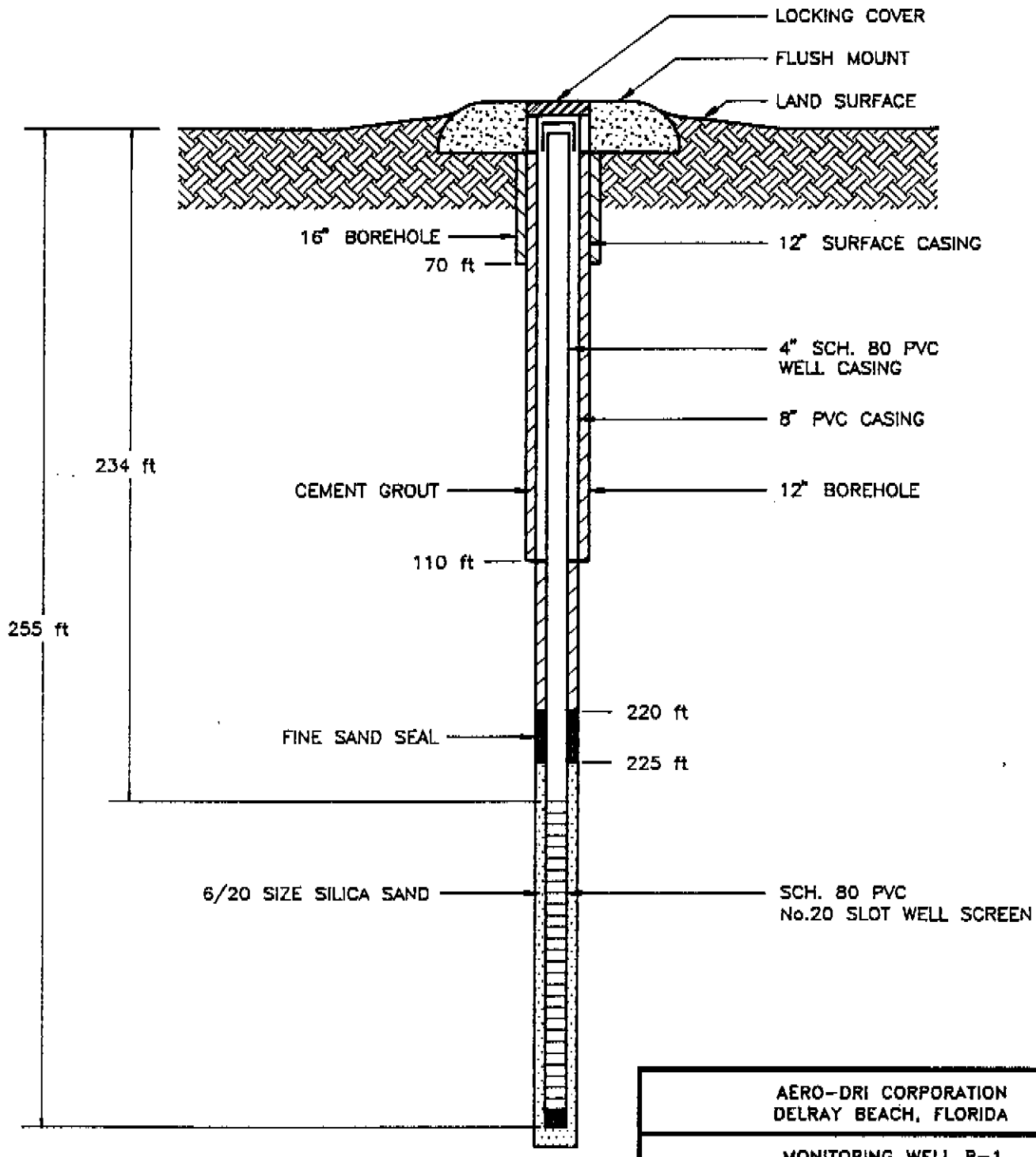
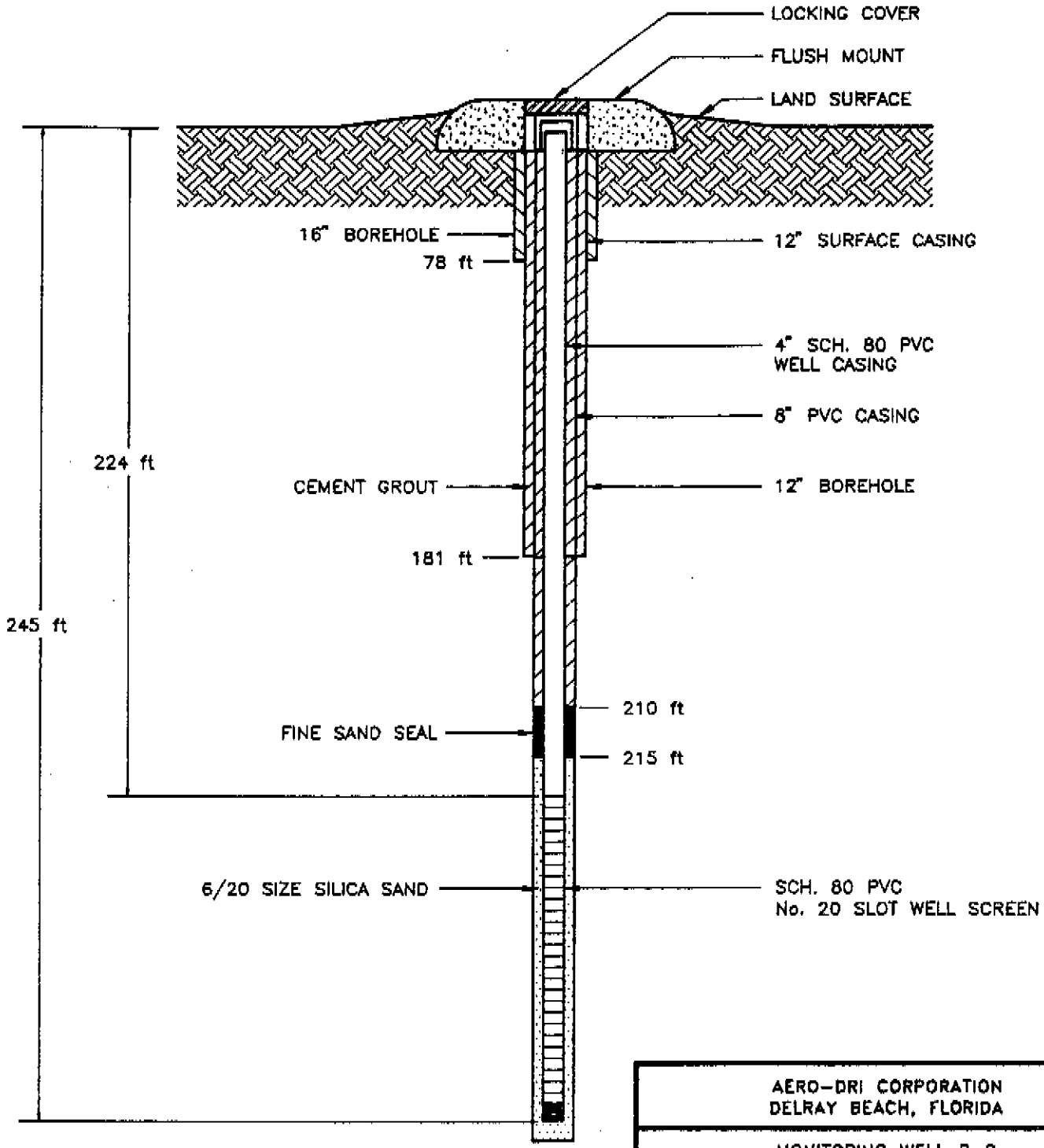


AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

MONITORING WELL P-1
CONSTRUCTION SCHEMATIC

Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists

Job No.: 91C5233	Drawing No. AERO21	Date: 4-28-91
Drawn by: C.B.	Checked by: P.C.	FIGURE: 4
Scale: AS NOTED		

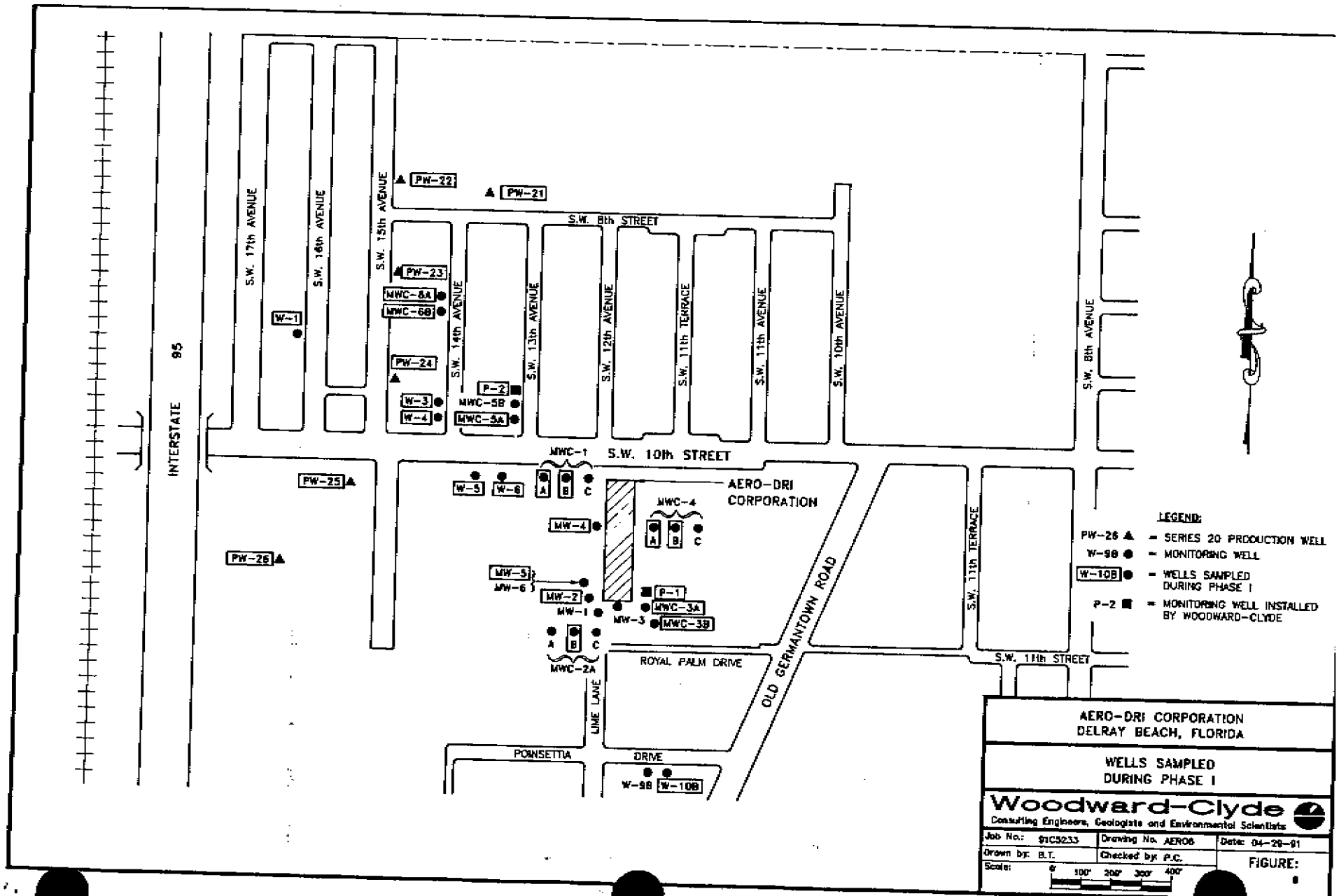


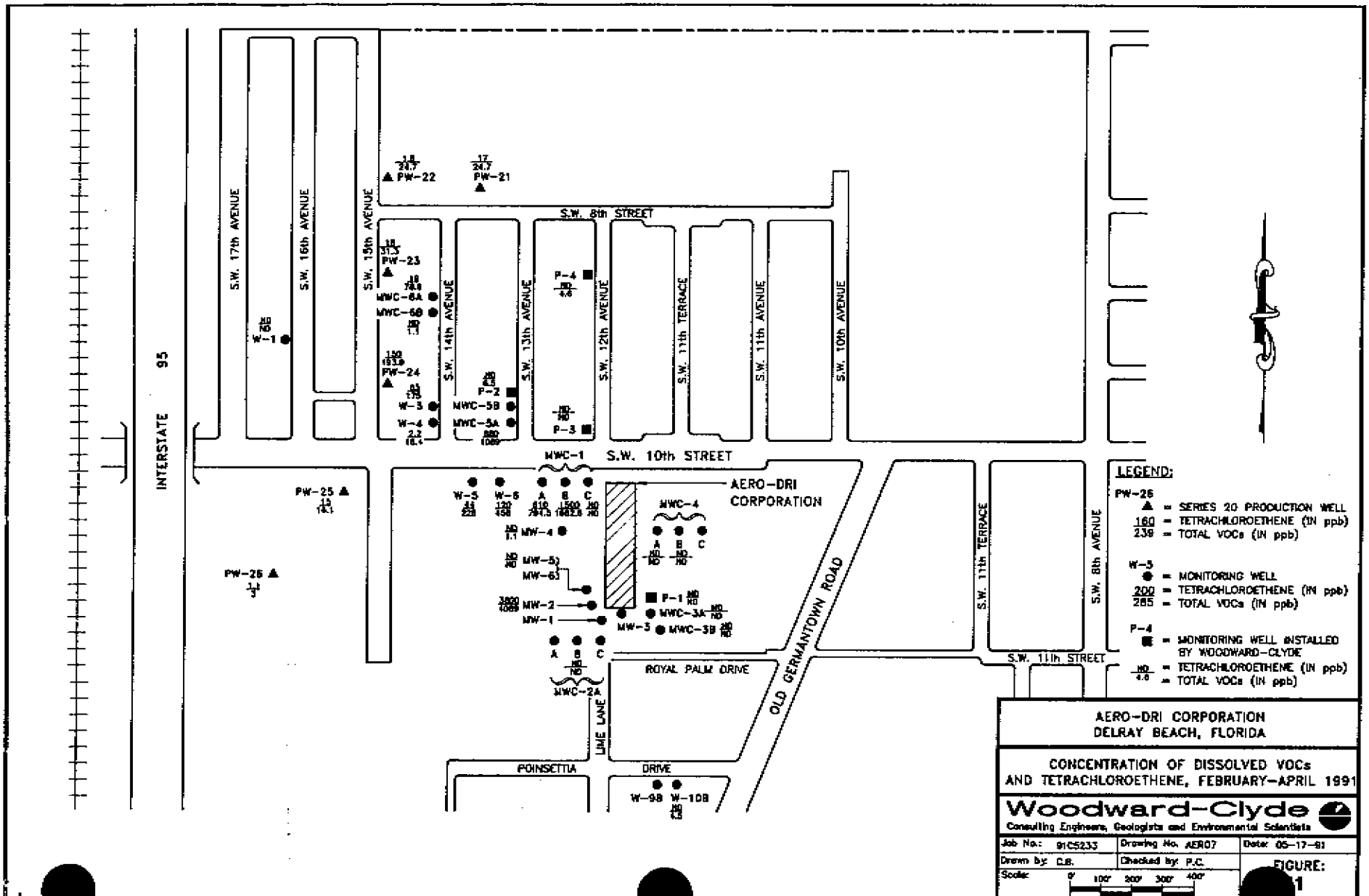
AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

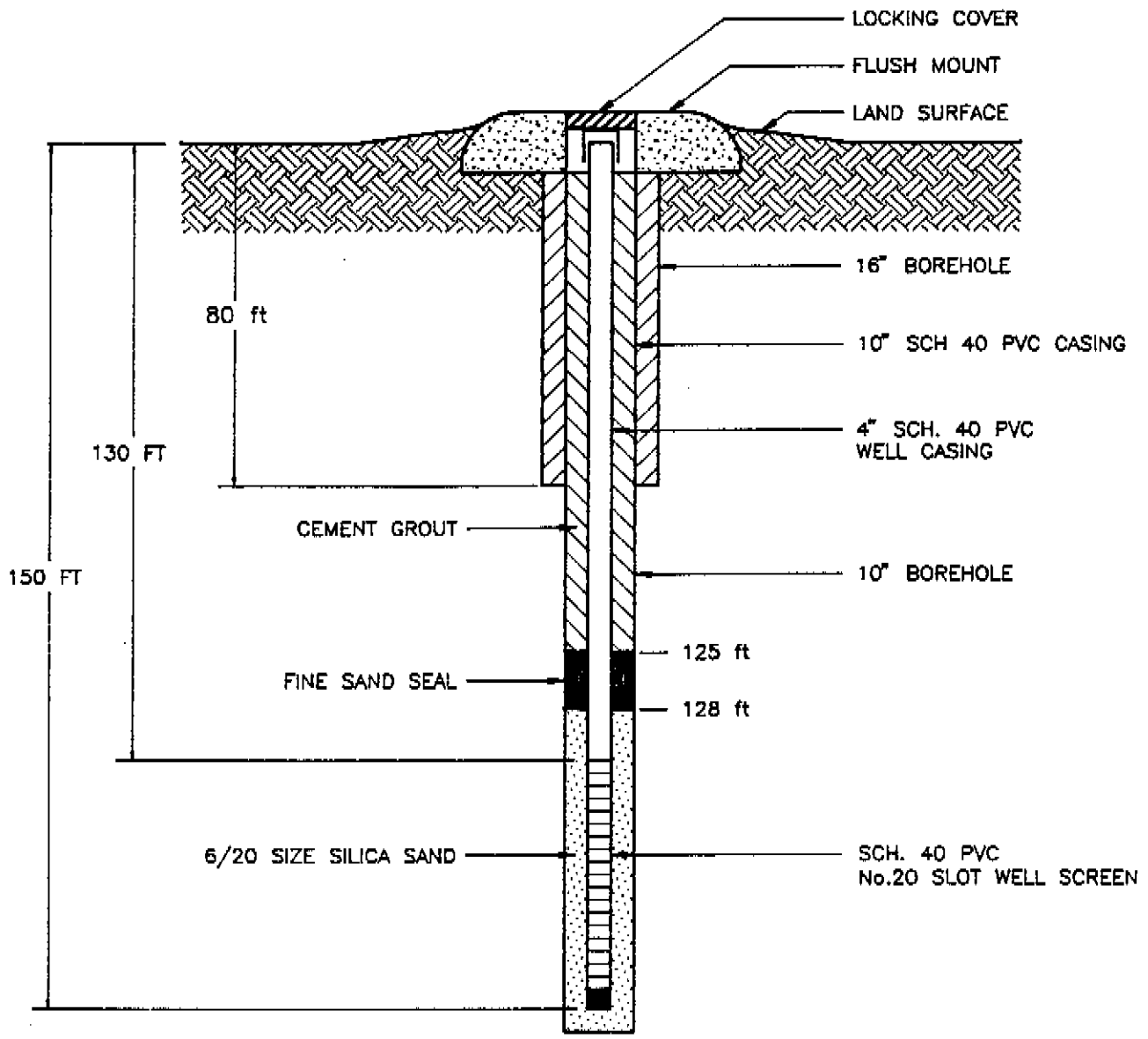
MONITORING WELL P-2
CONSTRUCTION SCHEMATIC

Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists

Job No.: 91C5233	Drawing No. AERO22	Date: 4-26-91
Drawn by: C.B.	Checked by: P.C.	FIGURE: 5
Scale: AS NOTED		


INTERSTATE 95
S.W. 17th AVENUE
S.W. 16th AVENUE
S.W. 15th AVENUE
S.W. 14th AVENUE
S.W. 13th AVENUE
S.W. 12th AVENUE
S.W. 11th TERRACE
S.W. 11th AVENUE
S.W. 10th AVENUE
S.W. 8th AVENUE
S.W. 8th STREET
S.W. 10th STREET
S.W. 11th STREET
ROYAL PALM DRIVE
POINSETTIA DRIVE
LIME LANE
OLD GERMANTOWN ROAD
AERO-DRI CORPORATION
PW-22
PW-21
PW-23
PW-24
PW-25
PW-26
MWC-6A
MWC-6B
MWC-5B
MWC-5A
MWC-1
MWC-4
MWC-2A
MWC-3A
MWC-3B
W-1
W-3
W-4
W-5
W-6
P-2
MW-4
MW-5
MW-6
MW-2
MW-1
MW-3
P-1
W-98
W-108
LEGEND:
PW-26 ▲ = SERIES 20 PRODUCTION WELL
W-98 ● = MONITORING WELL
W-108 ● = WELLS SAMPLED DURING PHASE I
P-2 ■ = MONITORING WELL INSTALLED BY WOODWARD-CLYDE
AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA
WELLS SAMPLED
DURING PHASE I
Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists
Job No.: 91C5233
Drawing No. AERO6
Date: 04-26-91
Drawn by: B.T.
Checked by: P.C.
Scale: 0' 100' 200' 300' 400'
FIGURE:
8


INTERSTATE 95
S.W. 17th AVENUE
S.W. 16th AVENUE
S.W. 15th AVENUE
S.W. 14th AVENUE
S.W. 13th AVENUE
S.W. 12th AVENUE
S.W. 11th TERRACE
S.W. 11th AVENUE
S.W. 10th AVENUE
S.W. 8th AVENUE
S.W. 8th STREET
S.W. 10th STREET
S.W. 11th STREET
OLD GERMANTOWN ROAD
ROYAL PALM DRIVE
POINSETTIA DRIVE
LIME LANE
AERO-DRI CORPORATION
PW-21
PW-22
PW-23
PW-24
PW-25
PW-26
W-1
W-3
W-4
W-5
W-6
W-98
W-108
P-1
P-2
P-3
P-4
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MWC-1
MWC-2A
MWC-3A
MWC-3B
MWC-4
MWC-5A
MWC-5B
MWC-6A
MWC-6B
LEGEND:
PW-26 = SERIES 20 PRODUCTION WELL
160 = TETRACHLOROETHENE (IN ppb)
239 = TOTAL VOCs (IN ppb)
W-5 = MONITORING WELL
200 = TETRACHLOROETHENE (IN ppb)
285 = TOTAL VOCs (IN ppb)
P-4 = MONITORING WELL INSTALLED BY WOODWARD-CLYDE
ND = TETRACHLOROETHENE (IN ppb)
4.8 = TOTAL VOCs (IN ppb)
AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA
CONCENTRATION OF DISSOLVED VOCs
AND TETRACHLOROETHENE, FEBRUARY-APRIL 1991
Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists
Job No.: 91C5233
Drawing No. AERO7
Date: 05-17-91
Drawn by: C.B.
Checked by: P.C.
Scale: 0' 100' 200' 300' 400'
FIGURE:
1

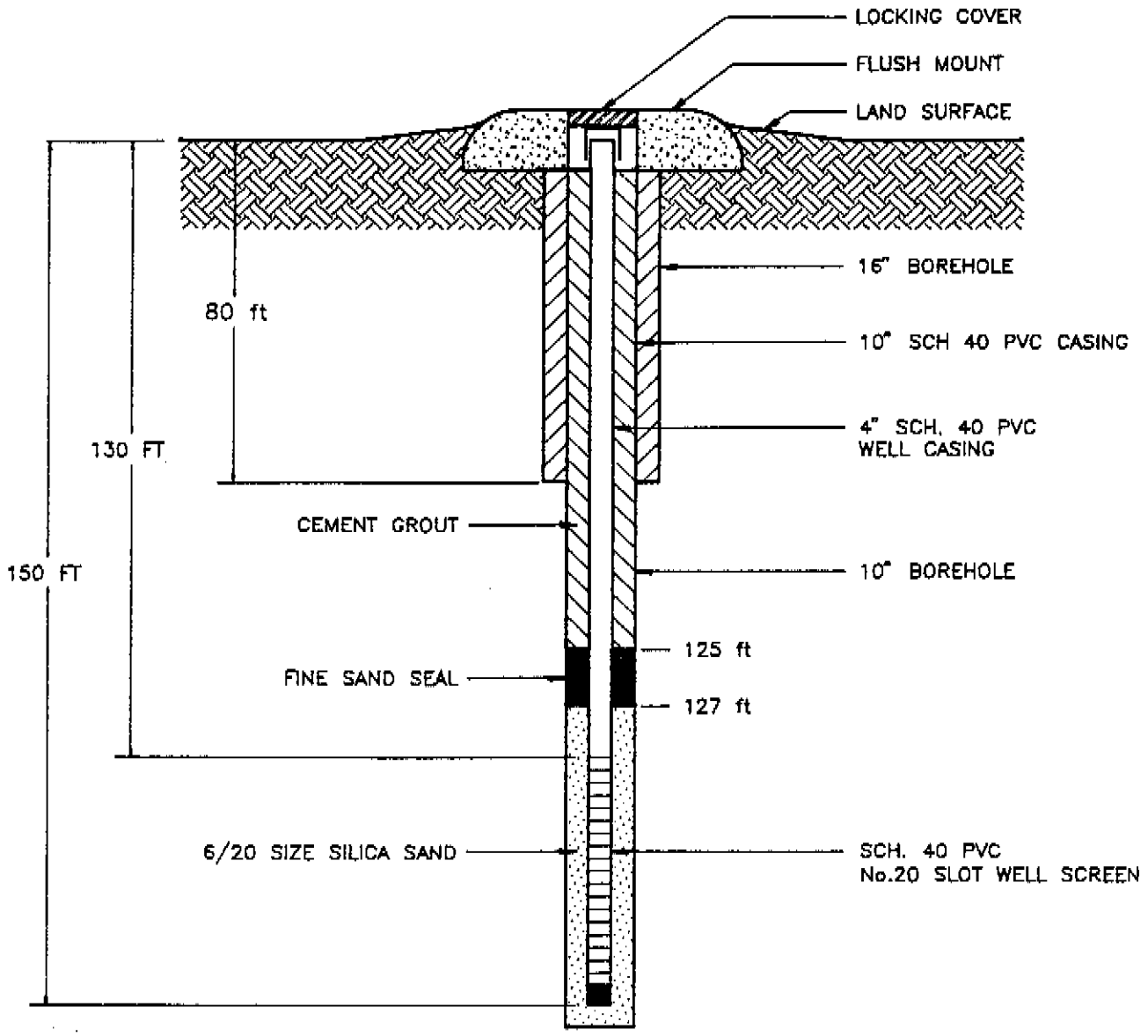


AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

MONITORING WELL P-3
CONSTRUCTION SCHEMATIC

Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists

Job No.: 91C8233	Drawing No. AERO23	Date: 4-28-91
Drawn by: C.B.	Checked by: P.C.	FIGURE: 7
Scale: AS NOTED		



AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

MONITORING WELL P-4
CONSTRUCTION SCHEMATIC

Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists

Job No.: 91C5233	Drawing No. AERO24	Date: 4-28-91
Drawn by: C.B.	Checked by: P.C.	FIGURE: 8
Scale: AS NOTED		

TABLES

TABLE 1

WELL CONSTRUCTION DATA

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

WELL NUMBER	DIAMETER (inches)	SCREENED INTERVAL (feet)	TOTAL DEPTH (feet)
P-1[1]	4	234-254	255
P-2[1]	4	224-244	245
P-3[1]	4	130-150	150
P-4[1]	4	130-150	150
W-1	2	145-155	155
W-3	2	110-120	120
W-4	2	140-150	150
W-5	2	90-100	160
W-6	2	130-140	140
W-9B	2	123-133	133
W-10B	2	142-152	152
MW-1	2	15-25	25
MW-2	2	35-45	45
MW-3	2	20-30	30
MW-4	4	175-205	205
MW-5	2	135-145	145
MW-6	2	110-120	120
MWC-1A	2	90-100	100
MWC-1B	2	70-80	80
MWC-1C	2	50-60	60
MWC-2A	2	80-90	90
MWC-2B	2	60-70	70
MWC-2C	2	40-50	50
MWC-3A	2	70-80	80
MWC-3B	2	50-60	60
MWC-4A	2	60-70	70
MWC-4B	2	40-50	50
MWC-4C	2	20-30	30
MWC-5A	2	105-125	125
MWC-5B	2	70-90	90
MWC-6A	2	102-122	122
MWC-6B	2	72-92	92
PW-21[2]	12	110-150	150
PW-22[2]	12	110-150	150
PW-23[2]	12	100-140	140
PW-24[2]	12	110-150	150
PW-25[2]	12	110-150	150
PW-26[2]	12	110-150	150

[1] = Installed by Woodward-Clyde Consultants.

[2] = City of Delray Beach Production Well.

91C5233-07
A:T166WCD4.91

TABLE 2

TEMPERATURE, pH, AND SPECIFIC CONDUCTANCE OF GROUNDWATER SAMPLES

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

WELL NUMBER	TEMPERATURE °C	pH	SPECIFIC CONDUCTANCE (umhos/cm)
P-1	29.4	6.45	500
P-2	28.1	8.30	700
P-3	25.0	7.50	420
P-4	29.0	7.20	630
W-1	27.6	7.33	445
W-3	28.3	7.08	445
W-4	28.0	7.28	500
W-5	28.2	6.93	440
W-6	28.1	6.84	470
W-10B	27.9	7.13	420
MW-2	30.7	6.80	510
MW-4	27.4	7.29	475
MW-5	28.9	6.87	550
MWC-1A	28.4	6.78	500
MWC-1B	30.3	7.14	510
MWC-1C	27.0	6.40	800
MWC-2B	26.2	7.05	415
MWC-3A	26.0	7.30	580
MWC-3B	25.8	7.22	810
MWC-4A	25.5	7.10	510
MWC-4B	32.6	7.30	620

TABLE 2
(Continued)

TEMPERATURE, pH, AND SPECIFIC
CONDUCTANCE OF GROUNDWATER SAMPLES

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

WELL NUMBER	TEMPERATURE °C	pH	SPECIFIC CONDUCTANCE (umhos/cm)
MWC-5A	25.8	7.15	465
MWC-6A	27.9	6.56	495
MWC-6B	28.6	7.11	475
PW-21	26.0	7.38	550
PW-22	25.6	7.00	451
PW-23	25.6	7.20	495
PW-24	25.6	6.94	500
PW-25	25.3	6.96	450
PW-26	20.80	7.24	400

TABLE 3

WATER LEVEL DATA
FEBRUARY 25, 1991

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

WELL NUMBER	MEASURING POINT ELEVATION (ft msl)[1]	DEPTH TO WATER (ft)	WATER LEVEL ELEVATION (ft msl)[1]
MW-1	17.50	18.04	-0.54
MW-2	17.80	18.36	-0.56
MW-3	14.97	15.12	-0.15
MW-4	17.77	19.88	-2.11
MW-5	17.41	18.60	-1.19
MW-6	17.77	18.94	-1.17
MWC1-A	15.16	17.58	-2.42
MWC1-B	14.88	17.22	-2.34
MWC1-C	14.60	17.44	-2.84
MWC2-A	17.49	18.12	-0.63
MWC2-B	17.48	17.82	-0.34
MWC2-C	17.23	17.46	-0.23
MWC3-A	11.94	11.70	+0.24
MWC3-B	12.54	11.95	+0.59
MWC4-A	17.99	18.34	-0.35
MWC4-B	18.01	18.34	-0.33
MWC4-C	18.53	18.84	-0.31
MWC5-A	13.45	17.98	-4.53
MWC5-B	13.69	18.04	-4.35
MWC6-A	13.07	20.13	-7.06
MWC6-B	13.76	20.53	-6.77
W-1	14.60	19.90	-5.30
W-3	12.92	19.48	-6.56
W-4	12.55	19.34	-6.79
W-5	14.04	18.76	-4.72
W-6	14.45	17.99	-3.54
W-9B	15.78	15.42	+0.36
W-10B	15.91	15.46	+0.45

[1] ft msl = Feet mean sea level.

91C5233-07
A:T166WCD4.91

TABLE 4

WATER LEVEL DATA
APRIL 6, 1991

AERO-DRI CORPORATION
DEL RAY BEACH, FLORIDA

WELL NUMBER	MEASURING POINT ELEVATION (ft msl)[1]	DEPTH TO WATER (ft)	WATER LEVEL ELEVATION (ft msl)[1]
P-1	13.76	14.50	-0.74
P-2	13.49	17.35	-3.86
P-3	13.65	16.30	-2.65
P-4	13.55	16.99	-3.44
MW-1	17.50	18.72	-1.22
MW-2	17.80	19.20	-1.40
MW-3	14.97	15.84	-0.87
MW-4	17.77	19.96	-2.19
MW-5	17.41	18.98	-1.57
MW-6	17.77	19.34	-1.57
MWC1-A	15.16	17.80	-2.64
MWC1-B	14.88	17.50	-2.62
MWC1-C	14.60	17.24	-2.64
MWC2-A	17.49	18.62	-1.13
MWC2-B	17.48	18.46	-0.98
MWC2-C	17.23	18.16	-0.93
MWC3-A	11.94	12.59	-0.65
MWC3-B	12.54	13.11	-0.57
MWC4-A	17.99	19.20	-1.21
MWC4-B	18.01	19.40	-1.39
MWC4-C	18.53	19.55	-1.02
MWC5-A	13.45	17.55	-4.10
MWC5-B	13.69	17.60	-3.91
MWC6-A	13.07	18.09	-5.02
MWC6-B	13.76	18.87	-5.11
W-1	14.60	17.98	-3.38
W-3	12.92	19.14	-6.22
W-4	12.55	18.89	-6.34
W-5	14.04	18.71	-4.67
W-6	14.45	17.99	-3.54
W-9B	15.78	16.08	-0.30
W-10B	15.91	16.10	-0.19

[1] ft msl = Feet mean sea level.

TABLE 5

VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER
SAMPLES COLLECTED BY WOODWARD-CLYDE CONSULTANTS

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

	WELL NUMBER					
COMPOUND	P-1	P-2	P-3	P-4	W-1	W-3
Chloroform		6.5		4.6		
1,2-Dichloroethane						12
1,1-Dichloroethene						
Cis/trans-1,2-Dichloroethene						
Methylene Chloride						
Tetrachloroethene						63
1,1,1-Trichloroethane						
Trichloroethene						100
Toluene						
TOTAL VOCs	ND	6.5	ND	4.6	ND	175

91C5233-07
A:T166VOC4.91

TABLE 5
(Continued)

VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER
SAMPLES COLLECTED BY WOODWARD-CLYDE CONSULTANTS

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

	WELL NUMBER					
COMPOUND	W-4	W-5	W-6	W-10B	MW-2	MW-4
Chloroform						
1,2-Dichloroethane	1.9	6.4	19	4.5		
1,1-Dichloroethene						
Cis/trans-1,2-Dichloroethene	5.3	8.2	39		26	
Methylene Chloride					1.6	
Tetrachloroethene	2.2	44	120		3800	
1,1,1-Trichloroethane						
Trichloroethene	9.0	170	280		260	1.1
Toluene					1.4	
TOTAL VOCs	**18.4**	**228.6**	**458**	**4.5**	**4089**	**1.1**

TABLE 5
(Continued)

VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER
SAMPLES COLLECTED BY WOODWARD-CLYDE CONSULTANTS

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

	WELL NUMBER					
COMPOUND	MW-5	MWC-1A	MWC-1B	MWC-1C	MWC-2B	MWC-3A
Chloroform						
1,2-Dichloroethane						
1,1-Dichloroethene						
Cis/trans-1,2-Dichloroethene		4.5	2.6			
Methylene Chloride						
Tetrachloroethene		610	1500			
1,1,1-Trichloroethane						
Trichloroethene		180	180			
Toluene						
TOTAL VOCs	ND	794.5	1682.6	ND	ND	ND

91C5233-07
A:T166VOC4.91

TABLE 5
(Continued)

VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER
SAMPLES COLLECTED BY WOODWARD-CLYDE CONSULTANTS

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

	WELL NUMBER					
COMPOUND	MWC-3B	MWC-4A	MWC-4B	MWC-5A	MWC-6A	MWC-6B
Chloroform						
1,2-Dichloroethane						1.1
1,1-Dichloroethene						
Cis/trans-1,2-Dichloroethene				29	7.6	
Methylene Chloride						
Tetrachloroethene				880	19	
1,1,1-Trichloroethane						
Trichloroethene				180	52	
Toluene						
TOTAL VOCs	**ND**	**ND**	**ND**	**1089**	**78.6**	**1.1**

TABLE 5
(Continued)

VOLATILE ORGANIC COMPOUNDS DETECTED IN GROUNDWATER
SAMPLES COLLECTED BY WOODWARD-CLYDE CONSULTANTS

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

	WELL NUMBER					
COMPOUND	PW-21	PW-22	PW-23	PW-24	PW-25	PW-26
Chloroform						1.9
1,2-Dichloroethane						
1,1-Dichloroethene						
Cis/trans-1,2-Dichloroethene		7.9	1.3	2.9		
Methylene Chloride						
Tetrachloroethene	17	1.8	18	150	15	1.1
1,1,1-Trichloroethane						
Trichloroethene	7.7	15	12	41	1.1	
Toluene						
TOTAL VOCs	**24.7**	**24.7**	**31.3**	**193.9**	**16.1**	**3.0**

APPENDIX A

LITHOLOGIC AND GEOPHYSICAL LOGS

LITHOLOGIC LOG OF MONITORING WELL P-1

Description	Depth (ft)	Thickness (ft)
Sand, fine to medium grained, loose, brown	0 - 20	3
Sand, fine to medium grained, loose gray	20 - 25	22
Sand, fine to medium grained, gray, loose, with shell fragments	25 - 45	20
Sand, fine grained, cemented, hard, gray, with shell fragments	45 - 85	40
Lost circulation, no samples.	85 - 110	25
Sand, fine grained, cemented, hard, gray, drilling fluid loss, few shell fragments	110 - 195	85
Sand, fine, grained, cemented, hard, gray, with fragments of tan, fossiliferous limestone	195 - 225	30
Sand, fine grained, cemented, hard, gray, with fragments of tan, fossiliferous limestone and trace of gray clay	225 - 240	15
Clay, olive to cream, with trace of sand and silt	240 - 255	15

TABLE 7

COMPARISON OF TETRACHLOROETHENE CONCENTRATIONS TO
CONCENTRATION OF TETRACHLOROETHENE DEGRADATION PRODUCTS

AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA

WELL NUMBER	TETRACHLOROETHENE 1989 (ug/l)	DEGRADATION PRODUCTS (ug/l)	RATIO	TETRACHLOROETHENE 1991 (ug/l)	DEGRADATION PRODUCTS (ug/l)	RATIO
W-1	ND	ND	1	ND	ND	1
W-3	380	88	4.3	63	112	0.6
W-4	120	52	2.3	2.2	16.2	0.1
W-5	200	67	2.9	44	184.6	0.2
W-6	580	140	4.1	120	331	0.4
W-10B	ND	ND	1	ND	4.5	0.1
MW-2	13,000	200	65	3800	286	13.3
MW-4	37	12	3.1	ND	1.1	0.5
MW-5	ND	ND	1	ND	ND	1
MWC-1A	620	66	9.4	610	184.5	3.3
MWC-1B	1300	70	18.6	1500	182.6	8.2
MWC-1C	4	2	2	ND	ND	1
MWC-2B	3	ND	6	ND	ND	1
MWC-3A	1	ND	2	ND	ND	1
MWC-3B	ND	ND	1	ND	ND	1
MWC-4A	2	ND	4	ND	ND	1
MWC-4B	5	ND	10	ND	ND	1
MWC-5A	1500	250	6	880	209	4.2
MWC-6B	17	2	8.5	ND	1.1	0.5
PW-21	3	2	1.5	17	7.7	2.2
PW-23	4	28	0.1	18	13.3	1.4
PW-24	160	66	2.4	150	43.9	3.4
PW-25	17	3	5.7	15	1.1	13.6
			Average Ratio = 7.0			Average Ratio = 2.6

ND = Not Detected; concentration assumed to be 0.5 ug/l

TABLE 6

CHANGE IN CONCENTRATION
OF TETRACHLOROETHENE AND TOTAL VOCS
DECEMBER 1989 THROUGH FEBRUARY 1991

AERO-DRI CORPORATION
DEL RAY BEACH, FLORIDA

	TETRACHLOROETHENE (ug/l)			TOTAL VOCs (ug/l)		
WELL NUMBER	DECEMBER 1989	FEBRUARY 1991	PERCENT CHANGE IN CONCENTRATION	DECEMBER 1989	FEBRUARY 1991	PERCENT CHANGE IN CONCENTRATION
W-1	ND	ND	0	99	ND	-100
W-3	380	63	-83	506	175	-65
W-4	120	2.2	-99	188	18.4	-10
W-5	200	44	-78	285	228.6	-80
W-6	580	120	-79	763	458	-40
W-10B	ND	ND	0	88	4.5	-5
MW-2	13,000	3800	-71	14,410	4089	-72
MW-4	37	ND	-100	88	1.1	-98
MW-5	ND	ND	0	10	ND	-100
MWC-1A	620	610	-2	745	794.5	+7
MWC-1B	1300	1500	+15	1485	1682.6	+13
MWC-1C	4	ND	-100	18	ND	-100
MWC-2B	3	ND	-100	12	ND	-100
MWC-3A	1	ND	-100	10	ND	-100
MWC-3B	ND	ND	0	14	ND	-100
MWC-4A	3	ND	-100	5	ND	-100
MWC-4B	5	ND	-100	8	ND	-100
MWC-5A	1500	880	-41	1874	1089	-42
MWC-6B	17	ND	-100	25	1.1	-96
		Average Change =	-57%		Average Change =	-64%

ND = Not Detected

LITHOLOGIC LOG OF MONITORING WELL P-2

Description	Depth (ft)	Thickness (ft)
Sand, fine to medium grained, loose, tan	0 - 5	5
Sand, fine grained, white	5 - 30	25
Sand, fine grained, loose, white to gray with shell fragments	30 - 55	25
Sand, fine to medium grained, cemented, hard, grey, with shell fragments.	55 - 85	30
Sand, fine grained, cemented, grey, with shell fragments and a trace of grey clay.	85 - 120	35
Sand, fine grained, cemented, hard, grey, few shell fragments.	120 - 200	80
Sand, fine grained, cemented, hard, gray, with shell fragments and fragments of tan, fossiliferous limestone	200 - 235	35
Sand, fine grained, cemented, hard, gray, with clay	235 - 255	20
Sand, fine grained, cemented, hard, gray, clayey, with fragments of tan, fossiliferous limestone	255 - 310	55
Clay, sandy cream, with gray, cemented, fine grained sand	310 - 335	25
Sand, fine grained, cemented, creamy, very clayey	335 - 350	15

LITHOLOGIC LOG OF MONITORING WELL P-3

Description	Depth (ft)	Thickness (ft)
Sand, fine, grained, loose, brown. .	0 - 6	6
Sand, fine grained, loose, gray, gray, with shell fragments	6 - 50	44
Sand, fine grained, cemented, hard, gray, with shell fragments	50 - 80	30
Sand, fine grained, cemented, hard, gray, with shell fragments and traces of gray, sandy clay.	80 - 90	10
Sand, fine grained, cemented, hard, gray, with shell fragments	90 - 135	45
Sand, fine grained, cemented, hard, gray, with shell fragments and a trace of white clay	135 - 140	5
Sand, fine grained, cemented, hard, gray, with scattered shell fragments.	140 - 150	10

LITHOLOGIC LOG OF MONITORING WELL P-4

Description	Depth (ft)	Thickness (ft)
Sand, fine, grained, loose, brown. .	0 - 3	3
Sand, fine grained, loose, tan to gray, with scattered shell fragments	3 - 55	52
Sand, fine grained, gray, with shell shell fragments	55 - 80	25
Sand, fine grained, hard, gray, with shell fragments and traces of gray sandy, clay	80 - 85	5
Sand, fine grained, hard, gray, with shell fragments	85 - 130	45
Sand, fine grained, hand, gray, with shell fragments and a trace of white clay	130 - 140	10
Sand, fine grained, hand, gray, with shell fragments.	140 - 150	10

APPENDIX B

LABORATORY REPORTS OF WATER QUALITY ANALYSIS

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

2846 Industrial Plaza Drive (32301) • P.O. Box 13056 • Tallahasse, FL 32317-3056 • (904) 878-3994 • Fax (904) 878-9504

LOG NO: T1-00587

Received: 07 MAR 91

Mr. Phil Ciaravella
Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri/91C5233

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00587-1	P-1	Client
00587-2	P-2	

PARAMETER	00587-1	00587-2
1,1,2,2-Tetrachloroethane, ug/l	<1.0	<1.0
Tetrachloroethene, ug/l	<1.0	<1.0
1,1,1-Trichloroethane, ug/l	<1.0	<1.0
1,1,2-Trichloroethane, ug/l	<1.0	<1.0
Trichloroethene, ug/l	<1.0	<1.0
Trichlorofluoromethane, ug/l	<1.0	<1.0
Vinyl Chloride, ug/l	<1.0	<1.0
Purgeable Aromatics (602)		
Benzene, ug/l	<1.0	<1.0
Chlorobenzene, ug/l	<1.0	<1.0
1,2-Dichlorobenzene, ug/l	<1.0	<1.0
1,3-Dichlorobenzene, ug/l	<1.0	<1.0
1,4-Dichlorobenzene, ug/l	<1.0	<1.0
Ethylbenzene, ug/l	<1.0	<1.0
Toluene, ug/l	<1.0	<1.0
Xylenes, ug/l	<1.0	<1.0
Methyl-Tert-Butyl-Ether (MTBE), ug/l	<10	<10

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Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri/91C5233

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00587-3	Trip Blank	Client

PARAMETER	00587-3
Purgeable Halocarbons (601)	
Bromodichloromethane, ug/l	<1.0
Bromoform, ug/l	<5.0
Bromomethane, ug/l	<1.0
Carbon tetrachloride, ug/l	<1.0
Chlorobenzene, ug/l	<1.0
Chloroethane, ug/l	<1.0
2-Chloroethylvinyl ether, ug/l	<10
Chloroform, ug/l	<1.0
Chloromethane, ug/l	<1.0
Dibromochloromethane, ug/l	<1.0
1,2-Dichlorobenzene, ug/l	<1.0
1,3-Dichlorobenzene, ug/l	<1.0
1,4-Dichlorobenzene, ug/l	<1.0
Dichlorodifluoromethane, ug/l	<1.0
1,1-Dichloroethane, ug/l	<1.0
1,2-Dichloroethane, ug/l	<1.0
1,1-Dichloroethene, ug/l	<1.0
cis/trans-1,2-Dichloroethylene, ug/l	<1.0
1,2-Dichloropropane, ug/l	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0
trans-1,3-Dichloropropene, ug/l	<1.0
Methylene chloride, ug/l	<1.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0

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Tallahassee, FL 32301

Project: Aero-Dri/91C5233

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00587-3	Trip Blank	Client

PARAMETER	00587-3
Tetrachloroethene, ug/l	<1.0
1,1,1-Trichloroethane, ug/l	<1.0
1,1,2-Trichloroethane, ug/l	<1.0
Trichloroethene, ug/l	<1.0
Trichlorofluoromethane, ug/l	<1.0
Vinyl Chloride, ug/l	<1.0
Purgeable Aromatics (602)	
Benzene, ug/l	<1.0
Chlorobenzene, ug/l	<1.0
1,2-Dichlorobenzene, ug/l	<1.0
1,3-Dichlorobenzene, ug/l	<1.0
1,4-Dichlorobenzene, ug/l	<1.0
Ethylbenzene, ug/l	<1.0
Toluene, ug/l	<1.0
Xylenes, ug/l	<1.0
Methyl-Tert-Butyl-Ether (MTBE), ug/l	<10

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547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri/91C5233

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , REPORT FOR LIQUID SAMPLES	SAMPLED BY
00587-4	Lab Blank	Client
00587-5	Accuracy (% Recovery)	
00587-6	Precision (% RPD)	

PARAMETER	00587-4	00587-5	00587-6
Purgeable Halocarbons (601)			
Bromodichloromethane, ug/l	<1.0	---	---
Bromoform, ug/l	<5.0	---	---
Bromomethane, ug/l	<1.0	---	---
Carbon tetrachloride, ug/l	<1.0	---	---
Chlorobenzene, ug/l	<1.0	---	---
Chloroethane, ug/l	<1.0	105 %	0 %
2-Chloroethylvinyl ether, ug/l	<10	---	---
Chloroform, ug/l	<1.0	---	---
Chloromethane, ug/l	<1.0	---	---
Dibromochloromethane, ug/l	<1.0	---	---
1,2-Dichlorobenzene, ug/l	<1.0	---	---
1,3-Dichlorobenzene, ug/l	<1.0	---	---
1,4-Dichlorobenzene, ug/l	<1.0	---	---
Dichlorodifluoromethane, ug/l	<1.0	---	---
1,1-Dichloroethane, ug/l	<1.0	---	---
1,2-Dichloroethane, ug/l	<1.0	---	---
1,1-Dichloroethene, ug/l	<1.0	114 %	2.6 %
cis/trans-1,2-Dichloroethylene, ug/l	<1.0	---	---
1,2-Dichloropropane, ug/l	<1.0	---	---
cis-1,3-Dichloropropene, ug/l	<1.0	---	---
trans-1,3-Dichloropropene, ug/l	<1.0	---	---

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Received: 07 MAR 91

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Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri/91C5233

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , REPORT FOR LIQUID SAMPLES	SAMPLED BY
00587-4	Lab Blank	Client
00587-5	Accuracy (% Recovery)	
00587-6	Precision (% RPD)	

PARAMETER	00587-4	00587-5	00587-6
Methylene chloride, ug/l	<1.0	---	---
1,1,2,2-Tetrachloroethane, ug/l	<1.0	---	---
Tetrachloroethene, ug/l	<1.0	102 %	0.98 %
1,1,1-Trichloroethane, ug/l	<1.0	---	---
1,1,2-Trichloroethane, ug/l	<1.0	---	---
Trichloroethene, ug/l	<1.0	---	---
Trichlorofluoromethane, ug/l	<1.0	---	---
Vinyl Chloride, ug/l	<1.0	---	---
Purgeable Aromatics (602)			
Benzene, ug/l	<1.0	89 %	0 %
Chlorobenzene, ug/l	<1.0	97 %	3.1 %
1,2-Dichlorobenzene, ug/l	<1.0	---	---
1,3-Dichlorobenzene, ug/l	<1.0	---	---
1,4-Dichlorobenzene, ug/l	<1.0	---	---
Ethylbenzene, ug/l	<1.0	---	---
Toluene, ug/l	<1.0	92 %	1.1 %
Xylenes, ug/l	<1.0	---	---
Methyl-Tert-Butyl-Ether (MTBE), ug/l	<10	---	---

Thomas L. Stephens

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2846 Industrial Plaza Drive • Tallahassee, FL 32301 • (904) 878-3994 • Fax (904) 878-9504

LOG NO: T1-00436

Received: 21 FEB 91

Mr. Phil Ciaravella
Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri Corp./90CDERA1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00436-1	MWC-2B	Client
00436-2	MWC-3A	
00436-3	MWC-3B	
00436-4	MWC-4B	
00436-5	MWC-5A	

PARAMETER	00436-1	00436-2	00436-3	00436-4	00436-5
Purgeable Halocarbons (601)					
Bromodichloromethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform, ug/l	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether, ug/l	<10	<10	<10	<10	<10
Chloroform, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis/trans-1,2-Dichloroethyl ene, ug/l	<1.0	<1.0	<1.0	<1.0	29

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LOG NO: T1-00436

Received: 21 FEB 91

Mr. Phil Ciaravella
Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri Corp./90CDERA1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00436-1	MWC-2B	Client
00436-2	MWC-3A	
00436-3	MWC-3B	
00436-4	MWC-4B	
00436-5	MWC-5A	

PARAMETER	00436-1	00436-2	00436-3	00436-4	00436-5
1,2-Dichloropropane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene chloride, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene, ug/l	<1.0	<1.0	<1.0	<1.0	880
1,1,1-Trichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0	180
Trichlorofluoromethane, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Purgeable Aromatics (602)					
Benzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, ug/l	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-Tert-Butyl-Ether (MTBE), ug/l	<10	<10	<10	<10	<10

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LOG NO: T1-00436

Received: 21 FEB 91

Mr. Phil Ciaravella
Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri Corp./90CDERA1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00436-6	MW-5	Client
00436-7	Dup-1	
00436-8	Field Blank	
00436-9	Rinseate	

PARAMETER	00436-6	00436-7	00436-8	00436-9
Purgeable Halocarbons (601)				
Bromodichloromethane, ug/l	<1.0	<1.0	<1.0	<1.0
Bromoform, ug/l	<5.0	<5.0	<5.0	<5.0
Bromomethane, ug/l	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride, ug/l	<1.0	<1.0	<1.0	<1.0
Chlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
Chloroethane, ug/l	<1.0	<1.0	<1.0	<1.0
2-Chloroethylvinyl ether, ug/l	<10	<10	<10	<10
Chloroform, ug/l	<1.0	<1.0	<1.0	<1.0
Chloromethane, ug/l	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane, ug/l	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane, ug/l	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0
cis/trans-1,2-Dichloroethylene, ug/l	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane, ug/l	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0	<1.0	<1.0	<1.0

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& ENVIRONMENTAL SERVICES, INC.

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LOG NO: T1-00436

Received: 21 FEB 91

Mr. Phil Ciaravella
Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri Corp./90CDERA1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00436-6	MW-5	Client
00436-7	Dup-1	
00436-8	Field Blank	
00436-9	Rinseate	

PARAMETER	00436-6	00436-7	00436-8	00436-9
trans-1,3-Dichloropropene, ug/l	<1.0	<1.0	<1.0	<1.0
Methylene chloride, ug/l	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene, ug/l	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane, ug/l	<1.0	<1.0	<1.0	<1.0
Trichloroethene, ug/l	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane, ug/l	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride, ug/l	<1.0	<1.0	<1.0	<1.0
Purgeable Aromatics (602)				
Benzene, ug/l	<1.0	<1.0	<1.0	<1.0
Chlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene, ug/l	<1.0	<1.0	<1.0	<1.0
Ethylbenzene, ug/l	<1.0	<1.0	<1.0	<1.0
Toluene, ug/l	<1.0	<1.0	<1.0	<1.0
Xylenes, ug/l	<1.0	<1.0	<1.0	<1.0
Methyl-Tert-Butyl-Ether (MTBE), ug/l	<10	<10	<10	<10

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Tallahassee, FL 32301

Project: Aero-Dri Corp./90CDERA1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00436-10	MWC-4A	Client

PARAMETER	00436-10
Purgeable Halocarbons (601)	
Bromodichloromethane, ug/l	<1.0
Bromoform, ug/l	<5.0
Bromomethane, ug/l	<1.0
Carbon tetrachloride, ug/l	<1.0
Chlorobenzene, ug/l	<1.0
Chloroethane, ug/l	<1.0
2-Chloroethylvinyl ether, ug/l	<10
Chloroform, ug/l	<1.0
Chloromethane, ug/l	<1.0
Dibromochloromethane, ug/l	<1.0
1,2-Dichlorobenzene, ug/l	<1.0
1,3-Dichlorobenzene, ug/l	<1.0
1,4-Dichlorobenzene, ug/l	<1.0
Dichlorodifluoromethane, ug/l	<1.0
1,1-Dichloroethane, ug/l	<1.0
1,2-Dichloroethane, ug/l	<1.0
1,1-Dichloroethene, ug/l	<1.0
cis/trans-1,2-Dichloroethylene, ug/l	<1.0
1,2-Dichloropropane, ug/l	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0
trans-1,3-Dichloropropene, ug/l	<1.0
Methylene chloride, ug/l	<1.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0

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LOG NO: T1-00436

Received: 21 FEB 91

Mr. Phil Ciaravella
Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

Project: Aero-Dri Corp./90CDERA1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00436-10	MWC-4A	Client

PARAMETER	00436-10
Tetrachloroethene, ug/l	<1.0
1,1,1-Trichloroethane, ug/l	<1.0
1,1,2-Trichloroethane, ug/l	<1.0
Trichloroethene, ug/l	<1.0
Trichlorofluoromethane, ug/l	<1.0
Vinyl Chloride, ug/l	<1.0
Purgeable Aromatics (602)	
Benzene, ug/l	<1.0
Chlorobenzene, ug/l	<1.0
1,2-Dichlorobenzene, ug/l	<1.0
1,3-Dichlorobenzene, ug/l	<1.0
1,4-Dichlorobenzene, ug/l	<1.0
Ethylbenzene, ug/l	<1.0
Toluene, ug/l	<1.0
Xylenes, ug/l	<1.0
Methyl-Tert-Butyl-Ether (MTBE), ug/l	<10
Total Dissolved Solids, mg/l	460
Chloride, mg/l	31
Sulfate as SO4, mg/l	76

SL SAVANNAH LABORATORIES
& ENVIRONMENTAL SERVICES, INC.

2846 Industrial Plaza Drive • Tallahassee, FL 32301 • (904) 878-3994 • Fax (904) 878-9504

LOG NO: T1-00436

Received: 21 FEB 91

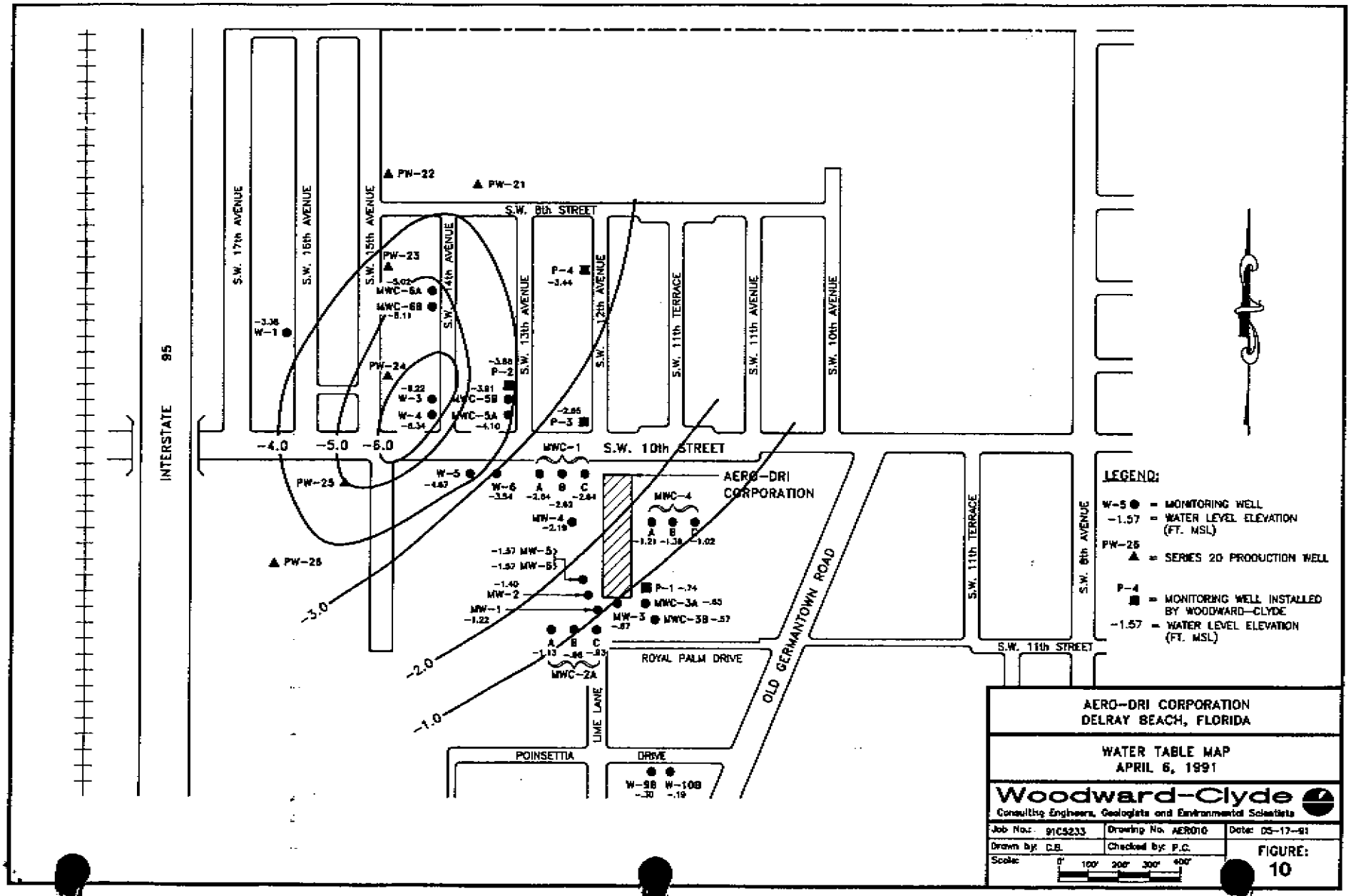
Mr. Phil Ciaravella
Woodward-Clyde Consultants
547 N. Monroe St.
Tallahassee, FL 32301

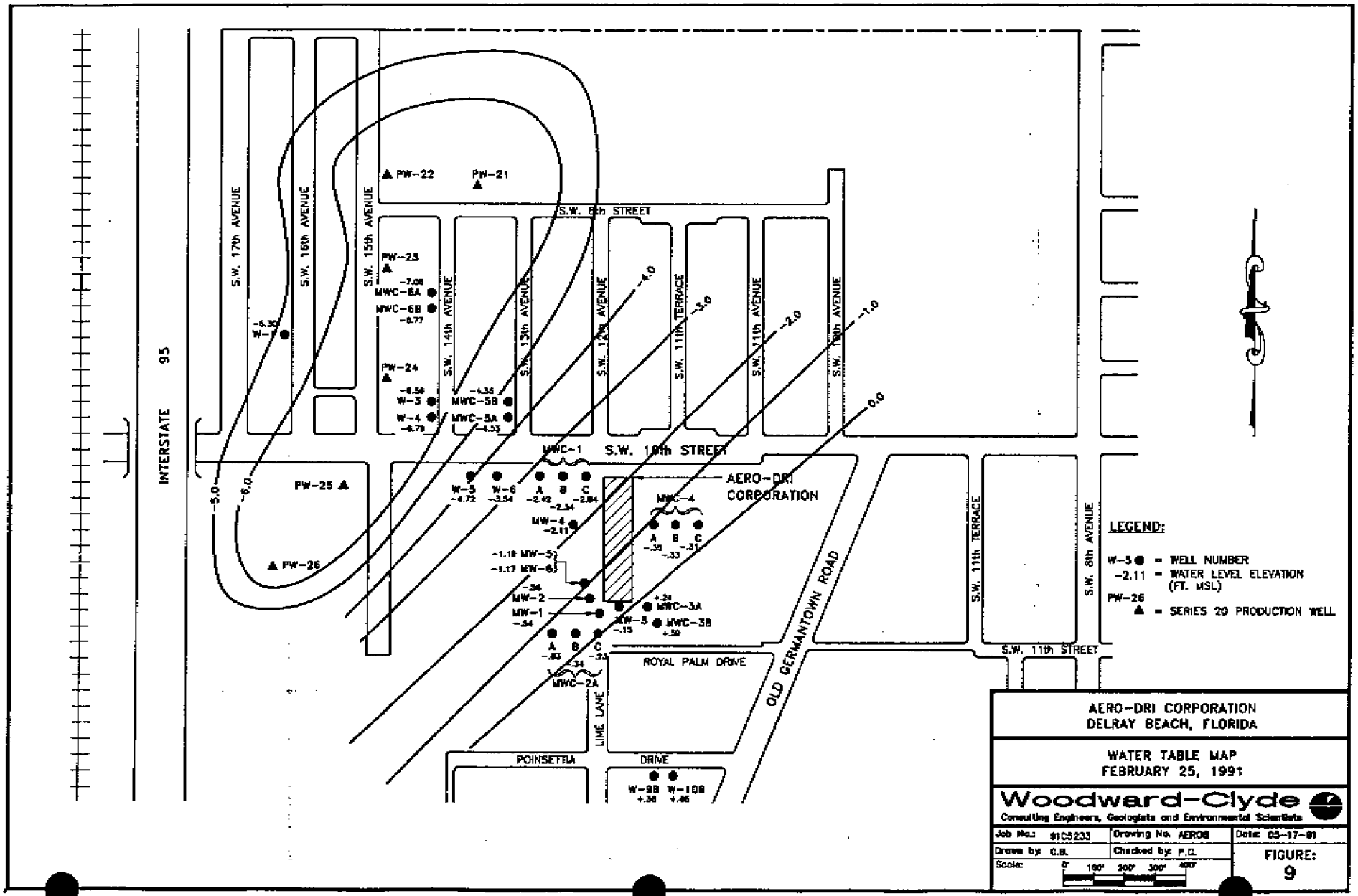
Project: Aero-Dri Corp./90CDERA1

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	SAMPLED BY
00436-11	Trip Blank	Client

PARAMETER	00436-11
Purgeable Halocarbons (601)	
Bromodichloromethane, ug/l	<1.0
Bromoform, ug/l	<5.0
Bromomethane, ug/l	<1.0
Carbon tetrachloride, ug/l	<1.0
Chlorobenzene, ug/l	<1.0
Chloroethane, ug/l	<1.0
2-Chloroethylvinyl ether, ug/l	<10
Chloroform, ug/l	<1.0
Chloromethane, ug/l	<1.0
Dibromochloromethane, ug/l	<1.0
1,2-Dichlorobenzene, ug/l	<1.0
1,3-Dichlorobenzene, ug/l	<1.0
1,4-Dichlorobenzene, ug/l	<1.0
Dichlorodifluoromethane, ug/l	<1.0
1,1-Dichloroethane, ug/l	<1.0
1,2-Dichloroethane, ug/l	<1.0
1,1-Dichloroethene, ug/l	<1.0
cis/trans-1,2-Dichloroethylene, ug/l	<1.0
1,2-Dichloropropane, ug/l	<1.0
cis-1,3-Dichloropropene, ug/l	<1.0
trans-1,3-Dichloropropene, ug/l	<1.0
Methylene chloride, ug/l	<1.0
1,1,2,2-Tetrachloroethane, ug/l	<1.0


INTERSTATE 95
S.W. 17th AVENUE
S.W. 16th AVENUE
S.W. 15th AVENUE
S.W. 14th AVENUE
S.W. 13th AVENUE
S.W. 12th AVENUE
S.W. 11th TERRACE
S.W. 11th AVENUE
S.W. 10th AVENUE
S.W. 8th AVENUE
S.W. 8th STREET
S.W. 10th STREET
S.W. 11th STREET
PW-22
PW-21
PW-23
PW-24
PW-25
PW-26
P-4
P-2
P-3
P-1
MWC-6A
MWC-6B
MWC-5B
MWC-5A
MWC-1
MWC-4
MWC-3A
MWC-3B
MWC-2A
W-1
W-3
W-4
W-5
W-6
MW-4
MW-5
MW-6
MW-2
MW-1
MW-3
W-9B
W-10B
-4.0
-5.0
-6.0
-3.0
-2.0
-1.0
AERO-DRI CORPORATION
ROYAL PALM DRIVE
OLD GERMANTOWN ROAD
LIME LANE
POINSETTIA DRIVE
LEGEND:
W-5 ● = MONITORING WELL
-1.57 = WATER LEVEL ELEVATION (FT. MSL)
PW-25 ▲ = SERIES 20 PRODUCTION WELL
P-4 ■ = MONITORING WELL INSTALLED BY WOODWARD-CLYDE
-1.57 = WATER LEVEL ELEVATION (FT. MSL)
AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA
WATER TABLE MAP
APRIL 6, 1991
Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists
Job No.: 91C5233
Drawing No. AER010
Date: 05-17-91
Drawn by: C.B.
Checked by: P.C.
Scale: 0' 100' 200' 300' 400'
FIGURE: 10


INTERSTATE 95
S.W. 17th AVENUE
S.W. 16th AVENUE
S.W. 15th AVENUE
S.W. 14th AVENUE
S.W. 13th AVENUE
S.W. 12th AVENUE
S.W. 11th TERRACE
S.W. 11th AVENUE
S.W. 10th AVENUE
S.W. 8th AVENUE
S.W. 6th STREET
S.W. 10th STREET
S.W. 11th STREET
PW-22
PW-21
PW-23
PW-24
PW-25
PW-26
MWC-6A
MWC-6B
MWC-5B
MWC-5A
MWC-1
MWC-4
MWC-3A
MWC-3B
MWC-2A
W-3
W-4
W-5
W-6
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
W-9B
W-10B
AERO-DRI CORPORATION
ROYAL PALM DRIVE
OLD GERMANTOWN ROAD
LIME LANE
POINSETTIA
DRIVE
-4.0
-3.0
-2.0
-1.0
0.0
-5.0
-6.0
LEGEND:
W-5 ● = WELL NUMBER
-2.11 = WATER LEVEL ELEVATION (FT. MSL)
PW-26 ▲ = SERIES 20 PRODUCTION WELL
AERO-DRI CORPORATION
DELRAY BEACH, FLORIDA
WATER TABLE MAP
FEBRUARY 25, 1991
Woodward-Clyde
Consulting Engineers, Geologists and Environmental Scientists
Job No.: 91C5233
Drawing No. AERO8
Date: 03-17-91
Drawn by: C.B.
Checked by: P.C.
Scale: 0' 150' 300' 450'
FIGURE: 9