Prepared for:

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September 28, 1998

REMEDIAL INVESTIGATION REPORT
31 AND 45A SEA CLIFF AVENUE SITES
PHOTOCIRCUITS CORPORATION
GLEN COVE, NEW YORK

Pall Letter Bullets - proposed general answers

Bullet One - lack of downgradient potentiometric and water quality data: Based on the results of the pilot study and the the data contained in the 2nd quarter 2003 report, we believe that hydraulic control is being achieved in the area of the hydraulic control wells. Collection of potentiometric and water quality downgradient would also be desirable, and perhaps it could be arranged with Pall's cooperation. Note that it may be some time before groundwater quality downgradient of the Hydraulic Control system improves.

Bullet Two - lack of cross gradient data: Collection of cross - gradient data to the east is inhibited by the arterial highway, and to the west by the photocircuits main building in the main contaminant area. Data further west could be collected, however, it is unlikely that the effect of the hydraulic control system could be discerned at great distance. I am not sure about what Pall means by the phrase "the flow pathways that have been confirmed under the Arterial Highway and west of the hydraulic control network". What flow pathways have been confirmed and by whom?

Bullet Three - Lack of tracer studies - we informally explored this possibility with Photocircuits before approving the system. In a sense, there are already tracers available (VOCs). This would require the cooperation of Pall. Also, it would be good to know if Pall is getting Soybean oil on their property..... Usually, the Department has not required tracer studies in similar situations.

Bullet Four - Only four wells instead of the originally designed five: The number of wells was decreased to four due to difficulties in placement encountered in the field - see 2nd quarter 2003 report. The pilot test and design documents indicate that 4 wells should be sufficient, as is confirmed by the results indicated in the above report.

Bullet 5 - less than the 3 gpm pumping rate: 2nd quarter 2003 report shows hydraulic control achieved by 1gpm per well. Actually, design document projects 2 gpm, not 3. A low pumping rate may be used because, despite the high hydraulic conductivity, the gradient that must be overcome is fairly low.

Bullet 6 - System only intended to capture from MW-7 source area: This is the only known major source area on the site. See potentiometric maps: there may be longer groundwater routes to the west that bring contamination to the Pall site - probably deep, because of the longer route. As far as I can tell, Pall and Photocircuits monitoring data confirms that the contamination entering to the west is deep.

Bullet 7 - Photocircuits maps in 3rd quarter 2003 report indicate that contamination is not being captured to the East near the arterial highway: Pall's coutour maps indicate that the flow direction in this area is more NNW than N, so the contamination is probably not getting around the hydraulic control system. Also, consider the local topography (sloping up to east).

Bullet 8 - Lowered pumping rate - rate lowered due to mechanical difficulties and due to soybean oil presence. As noted above, 2nd quarter report indicates sufficiency of current rate

Bullet 9 - DOH concerns: Have discussed with R. Mitchell. We agree with the DOH that eventually downgradient samples should be aquired

Bullet 10 - Draft Pall sampling results - we await our copy with interest

Bullet 11 - We await our copy of your results with interest

Bullet 12 - Static water heights - resisitivity images - etc: Perhaps Pall should outline their suggestion about resitivity imaging, addition injections (tracers) etc. This seems to repeat previous items.

TABLE OF CONTENTS

Section			Page
1.0	INTRODUCTION		1
2.0	SITE BACKGROUND		2
	2.1	Site Location	2
	2.2	Site Geology	2
	2.3	Site Hydrogeology	3
	2.4	Preliminary Site Investigation of August 1996	3
3.0	FIELD SAMPLING METHODOLOGIES		6
	3.1	Soil Sampling	6
	3.2	Groundwater Grab Sampling	7
	3.3	Monitoring Well Installation	8
	3.4	Monitoring Well Sampling	8
	3.5	Slug Testing	9
4.0	RESULTS AND CONCLUSIONS		12
	4.1	Soil Sampling and Analysis	12
		4.1.1 Photocircuits Site	12
		4.1.2 45A Site	12
	4.2	Groundwater Quality	13
		4.2.1 Nature of contamination	13
		4.2.2 Photocircuits Site	13
		4.2.3 45A Site	15
	4.3	Geotechnical Testing	17
	4.4	Conclusions	17
5.0	INTERIM REMEDIAL MEASURE		18
6.0	REFERENCES		20

FIGURES

2-1 Site Plan and Monitoring Well Locations

2-2 Groundwater Contour Map – Shallow Wells, May 13,1998

2-3 Groundwater Contour Map – Deep Wells, May 13, 1998

2-4 Soil and Groundwater Grab Sampling Results – 45A Site

2-5 Soil and Groundwater Grab Sampling Results – Photocircuits Site

2-6 Monitoring Well Sampling Results, May, 1998

TABLES

2-1 Analytical Summary of Volatile Organic Compounds in Soils

2-2 Summary of Soil and Groundwater Grab Analytical Results Exceeding NYSDEC Criteria

2-3 Analytical Summary of Volatile Organic Compounds in Groundwater (Grab Samples)

2-4 Water Level Measurements/Monitoring Well Construction Details

2-5 Groundwater Sampling Field-Measured Parameters

2-6 Analytical Summary of Volatile Organic Compounds – Monitoring Well Sampling Event of May 13-15, 1998

3-1 Summary of Falling/Rising Head Slug Testing Data and Results

APPENDICES

A Soil Boring Logs/Well Log

B Laboratory Analytical Data Package (provided under separate cover)

C Geotechnical Testing Results

D Slug Test Raw Data and Calculations

1.0 INTRODUCTION

This Remedial Investigation (RI) Report presents the results of the RI activities conducted on behalf of Photocircuits Corporation (Photocircuits) at the properties located at 45A Sea Cliff Avenue ("45A Site") and 31 Sea Cliff Avenue ("Photocircuits Site"), Glen Cove, New York. The RI activities described in this Report have been conducted in satisfaction of the requirements set forth in the New York Department of Environmental Conservation (NYSDEC) Orders on Consent (Nos. W1-0771-96-07 and W1-0713-94-12, and in accordance with the scope of work and procedures presented in the NYSDEC–approved Remedial Investigation / Interim Remedial Measure (RI/IRM) Work Plan dated March 25, 1997, as well as NYSDEC Technical and Administrative Guidance Memoranda (TAGMs) and other applicable guidance.

The investigation results presented in this RI Report supplement those presented in the Preliminary Site Investigation (PSI) Report of November 15, 1996 and are intended to serve as a basis for selection and design of an Interim Remedial Measure (IRM). A preliminary conceptual description of the proposed IRM is provided in this Report.

The scope of work of the activities described in this Report consisted of the following tasks:

- Soil and groundwater sampling using a Geoprobe to further delineate impacts detected during the Preliminary Site Investigation (PSI) in the vicinity of the former solvent AST located in the Building 7 area of the 45A Site
- Soil and groundwater sampling using a Geoprobe to further delineate impacts detected during the PSI in the Acid/Base/Solvent Tank Farm area of the Photocircuits Site
- Installation of one additional shallow monitoring well on the 45A Site
- Sampling of monitoring wells on both sites
- Slug testing of monitoring wells on both sites

2.0 SITE BACKGROUND

2.1 SITE LOCATION

The Photocircuits Site and the 45A Site are located on the south side of Sea Cliff Avenue in Glen Cove, New York. The 45A Site was owned by Pass & Seymour Inc. and was purchased by Alpha Forty-Five L.L.C in April 1996. Photocircuits currently leases the 45A Site in connection with its manufacturing operations. The Photocircuits Site is bordered by Pall Corporation to the north, Cedar Swamp Road to the east, the Glen Head Country Club to the south, and the former Pass & Seymour site to the west. The 45A Site is bordered by the Associated Drapery site to the north, Pall Corp. to the northeast, and Photocircuits to the east, south, and west. A Site Plan showing details of both the 31 and 45A Sea Cliff Avenue Sites is provided in Figure 2-1.

2.2 SITE GEOLOGY

The Photocircuits and 45A sites are underlain by the following sequences, in descending order: the Upper Glacial Aquifer, the Port Washington confining unit, the Port Washington aquifer, the Lloyd Aquifer, and bedrock. The Upper Glacial aquifer is composed of stratified beds of fine to coarse sand and gravel with some interbedded lenses of silt and clay and extends to a depth of approximately 200 feet below the sites. The Port Washington confining unit, which extends approximately 100 feet below the Upper Glacial aquifer, consists of silt and clay with some interbedded sand and gravel lenses. The Port Washington aquifer is composed of sand and gravel with variable amounts of interbedded clay and silt. The Port Washington aquifer is approximately 50 feet thick. The Lloyd aquifer, which is approximately 200 feet thick, consists of discontinuous layers of gravel, sand, sandy clay, silt, and clay. It roughly parallels the crystalline bedrock, which is present at a depth of approximately 550 feet below the site (Geraghty and Miller, 1989).

2.3 SITE HYDROGEOLOGY

As discussed above, the uppermost hydrogeologic unit beneath the Photocircuits and 45A Sea Cliff Sites is the Upper Glacial aquifer. Depth to water measurements collected during groundwater sampling by McLaren/Hart indicate that groundwater is present at 4 to 10 feet below ground surface beneath the Photocircuits site and at 8 to 25 feet beneath the 45A Site (McLaren/Hart Preliminary Site Investigation Report, November 11, 1996). Groundwater was encountered in soil borings drilled on the eastern portion of the 45A Site at 23 to 25 feet below grade. Groundwater level measurements collected from the deep monitoring wells at the Photocircuits site during previous investigations indicate that groundwater flow is to the northwest. Shallow groundwater flow has also been shown to be toward the northwest.

Water level measurements were collected from all wells on both sites (except MW-2) during the May, 1998 groundwater sampling event. Groundwater contour maps for the shallow and deep wells are provided in Figures 2-2 and 2-3, respectively. As indicated by the contour map, the predominant direction of groundwater flow is consistent with previous observations, that is, primarily to the northwest.

2.4 PRELIMINARY SITE INVESTIGATION OF AUGUST 1996

A preliminary site investigation was conducted in August 1996 with the following objectives:

- Confirm the results of the earlier soil sampling on the 31 Site in the Acid/Base/Solvent tank farm area
- Delineate detections of VOCs in and around the Acid/Base/Solvent tank farm
- Determine the nature and extent of soil VOC impacts on the 45A Site
- Determine groundwater flow direction
- Reevaluate groundwater quality and confirm previous groundwater sampling results

August 1996 Soil Sampling Results

Analytical results from the seventeen soil samples collected on the Photocircuits Site indicated the presence of volatile organic compounds (VOCs) in soils at five areas of review (AORs), with two of which, the drum storage area and the acid/base/solvent tank farm, contain VOCs at concentrations in excess of the NYSDEC Soil Cleanup Objectives contained in Technical and Administrative Guidance Memorandum (TAGM) HWR-94-4046.

On the 45A Site, soil samples from three of the four investigated AORs indicated the presence of VOCs. One soil sample, GP-30, near the former location of the aboveground PCE storage tank pad (since removed), contained VOC concentrations in excess of the NYSDEC Soil Cleanup Objective for tetrachloroethene (PCE).

August 1996 Ground Water Sampling Results

During the August 1996 PSI, VOCs were detected in four of the eleven monitoring wells on the Photocircuits Site. The groundwater sample from MW-7 in the vicinity of the acid/base/solvent tank farm and the drum storage area, indicated the presence of the following compounds at concentrations in excess of 6NYCRR Part 703.5 standards for Class GA waters: vinyl chloride, chloroethane, 1,1-dichloroethene, methylene chloride, 1,1-dichloroethane, 1,2-dichloroethane, 2-butanone, 1,1,1-trichloroethane, trichloroethene (TCE) , toluene, and PCE.

The sample from MW-10, a deep well on the northeast corner of the Photocircuits property, contained the following compounds at concentrations exceeding the Part 703.5 standards: 1,1-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane, TCE, and PCE.

The groundwater sample from NC-Well, a shallow well located adjacent to the north edge of the Photocircuits property along Sea Cliff Avenue, contained 1,1-dichloroethane and 1,1,1-trichloroethane in concentrations in excess of Part 703.5 standards.

Groundwater grab sample GW-GP-10 was collected from a temporary well point on the east side of the Butler No. 2 Building and indicated concentrations of toluene, m, p and o-xylene in excess of the NYSDEC standards.

On the 45A Site, groundwater samples from two of the three shallow monitoring wells indicated VOCs above the laboratory detection limits. The sample from well MW-1S, which is located southeast of the main building, indicated PCE at a concentration exceeding the part 703.5 standard. The sample from well MW-3S, located north of the main building, indicated TCE and PCE at concentrations in excess of the part 703.5 standards.

3.0 FIELD SAMPLING METHODOLOGIES

3.1 SOIL SAMPLING

Soil sampling was conducted at the 45A Site in the vicinity of the former above ground solvent storage tank. On the Photocircuits site, soil sampling was conducted in the vicinity of the Acid/Base/Solvent Tank Farm. Soil sampling was conducted using a Geoprobe direct-push sampler. Soil samples were collected continuously from ground surface to the depth at which ground water was encountered. Soil samples were screened with a PID (OVM 580B), and samples were selected for laboratory analysis based on the screening results. Soil samples were obtained by driving a decontaminated four foot long, acetate-lined, stainless steel sampling tube to the desired sampling depth. The sampling tube was then retrieved at the surface and the acetate liner split to allow PID screening. Soil was removed from the acetate liner at selected six-inch sampling intervals and transferred to laboratory containers. Soil borings were logged for lithology and moisture content. Lithologic information as well as PID readings are provided on boring logs included in Appendix A.

Soil samples were analyzed using SW-846 Method 8260, including a 15-compound library search. Soil samples were preserved on ice until delivered to the laboratory. Analytical work was performed by Envirotech Research of Edison, New Jersey, a NY-certified laboratory. Appropriate sample chain-of-custody procedures were followed for sample handling. Analytical results for soils are summarized in Tables 2-1 and 2-2. Laboratory analytical data packages are provided in Appendix B.

Geotechnical Testing

Six soil samples were collected for geotechnical testing. Four samples from the 45A Site and two samples from the Photocircuits Site were collected. The objective of the geotechnical sampling was to provide detailed data on the physical characteristics of subsurface soils for use

in the selection and design of the IRM. Testing was performed by Paulus, Sokolowski and Sartor, Inc., of Warren, New Jersey, and consisted of the following tests:

- Grain size distribution
- Moisture content
- Density
- Hydraulic Conductivity
- Total Organic Carbon (TOC) by loss on ignition method

Results of geotechnical testing are provided in Appendix C.

3.2 GROUNDWATER GRAB SAMPLING

Groundwater grab sampling was conducted with the objective of delineating the lateral extent of VOCs detected in the water table aquifer during the PSI. Delineation on the 45A Site was focused primarily on the PCE previously detected in the vicinity of the above-ground solvent storage tank. On the Photocircuits site groundwater grab sampling activities were focused on completing delineation of VOC contamination in the vicinity of the Acid/Base/Solvent tank farm, monitoring well MW-7, and a portion of the adjacent parking lot. Groundwater grab sampling locations for the 45A Site are shown in Figure 2-4. Groundwater grab sampling locations for the Photocircuits Site are shown in Figure 2-5. Analytical results for groundwater grab sampling are summarized in Tables 2-2 and 2-3.

A Geoprobe with a temporary well point sampler was used to obtain groundwater grab samples on both sites. The samples were obtained by hydraulically driving a decontaminated, vertically slotted, two-foot long temporary well point into the first water bearing zone. Once the temporary well point was positioned in the water bearing zone, a minimum of three well point volumes were removed before sampling by either bailing with a ½-inch diameter bailer, or by pumping

using a dedicated length of polyethylene tubing and a peristaltic pump. The bailer was used where the water yield in the borehole was insufficient to allow use of the peristaltic pump.

3.3 MONITORING WELL INSTALLATION

One additional shallow monitoring well (MW-4S) was installed on the 45A Site on April 22, 1998. The new well was installed to provide confirmation of the delineation of the groundwater plume in the vicinity of Building 7 and the former above ground PCE storage tank. The well was installed by Summit Drilling Co. of Bridgewater, New Jersey, using the air rotary method. Split spoon samples were collected every two feet from 5 to 11 feet, and water was encountered at approximately 9-10 feet below grade. A drilling log of the well is provided in Appendix A. The location of the well is shown in Figure 2-1.

The well was completed to a depth of 15 feet below grade with 10 feet of four inch diameter, 0.020 inch slot PVC screen set from 5 to 15 feet. The well was developed by pumping at a rate of 1.5-2 gallons per minute (gpm). Development was concluded after approximately 55 gallons of water had been removed from the well. Visible turbidity of the discharge water was not present after approximately 40 gallons had been removed.

3.4 MONITORING WELL SAMPLING

Groundwater sampling was conducted May 13-15, 1998. Depth to water measurements were made in monitoring wells using an electronic water level indicator prior to purging. Water level measurements and monitoring well construction details are provided in Table 2-4. Each of the wells was purged prior to sampling using either a centrifugal pump or submersible pump. Purging was complete when three to five well volumes were removed from each well, or when the well became dry. Measurements of temperature, specific conductance, pH, turbidity, and dissolved oxygen were taken prior to purging, after purging, and immediately after sampling. In

several cases where wells were purged dry or recovered poorly, post-purging and post-sampling measurements were not obtained due to the lack of sufficient water in the well for measurement. Field-measured parameters are presented in Table 2-5.

Samples were collected from eleven wells on the Photocircuits Site and four wells on the 45A Site. Several wells were purged to dryness and were allowed to recharge sufficiently prior to sampling. Groundwater samples were collected using disposable Teflon bailers and new bailer cord for each well. Samples were obtained by lowering the bailer into the well until it was submerged in the water column. The bailer was then retrieved and the sample transferred to laboratory-prepared containers.

Groundwater samples were analyzed for volatile organic compounds (VOCs) by SW-846 Method 8260 plus a 15-compound library search by Envirotech Research. Chain-of-custody procedures were followed throughout sample handling. In addition to the field samples, trip blanks, field blanks, and field duplicate samples were collected for internal QA/QC purposes. Analytical results of all monitoring well samples are presented in Table 2-6 and are shown in Figure 2-6.

Analytical data was subjected to an internal QA/QC review to ensure quality and completeness. Results of the internal review did not indicate any significant deficiencies in the quality or reporting of the data by the laboratory.

3.5 SLUG TESTING

Falling and rising head slug tests were conducted on monitoring wells on site to determine a range of representative hydraulic conductivity (k) values for the sand aquifer. The slug testing procedure consists of instantaneously lowering or raising the water level in a well and measuring the change in water level over time until equilibrium is re-established. The instantaneous change

in water level was achieved by rapidly inserting a sand-filled PVC tube (slug) to displace the water level in each well. After the water level had returned to its original static level (falling head test), the slug was rapidly removed, and the rising water levels were then measured (rising head test).

Prior to each slug test, the static water level in the well was measured with an electronic water level indicator, and the bottom of the well casing was sounded to confirm the exact well depth. A pressure transducer connected to an In-Situ HERMIT data logger was then lowered into the well approximately one foot off the bottom. Initial settings were programmed on the data logger prior to beginning the test. The HERMIT was programmed for high speed early time data collection at a logarithmic schedule to measure the water level changes over time.

As the slug was rapidly submerged below the water level in the well, the data logger was simultaneously started to continuously measure the initial water level rise and subsequent decline at specified time increments. After the water level in the well had recovered to static equilibrium, the slug was rapidly withdrawn and the data logger restarted to record the rising water level. The test was terminated when the water level had risen to its initial static level. The computer program AQTESOLV (Rumbaugh and Duffield, 1989) was used to compute hydraulic conductivity values.

Slug tests were conducted on 14 monitoring wells to obtain a range of hydraulic conductivity (k) values for the water-table aquifer. The analytical results for the slug tests are summarized in Table 3-1. The raw slug test data and graphs are presented in Appendix D.

The Bouwer and Rice method was used to analyze slug test data. Rising head tests were performed on 14 wells, while falling head tests were performed on 12 of those 14 wells. Static water levels must be above the screened zone in order to obtain meaningful data from a falling head test. The water levels in MW-4S and MW-6, however, were within the screened zone. Therefore, no falling head test was performed on these two wells. The combination of both rising and falling head slug

tests conducted for these 14 wells yielded variable k values ranging from 1.862E-05 cm/s at MW-5 to 5.300E-02 cm/s at MW-1S.

Of the eight wells for which analytical results were available for both rising and falling head slug tests, seven of the eight wells had good to excellent agreement between rising head and falling head test results when comparing k values in units of cm/s. Rising and falling head results within the same order of magnitude are considered to be in good agreement. The results for the slug tests conducted in MW-2S differed by about one order of magnitude.

4.0 RESULTS AND CONCLUSIONS

4.1 SOIL SAMPLING AND ANALYSIS

4.1.1 Photocircuits Site

Soil samples were collected at six locations on the Photocircuits site (31-SB-33, 34,35,36, and 37); soil sampling locations are shown on Figure 2-5, and analytical results are presented in Tables 2-1 and 2-2. TVOC concentrations ranged from non-detectable to 48 ug/kg, with all but two of the borings having TVOC concentrations of less than 10 ug/kg. PCE and TCE were the VOCs most frequently detected. NYSDEC soil cleanup objectives (TAGM 4046) were not exceeded in the soil samples collected from the Photocircuits site.

4.1.2 45A Site

Soil borings were advanced at three locations within Building 7 on the 45A Sea Cliff Avenue site, as shown on Figure 2-4. Two soil samples were collected from each borings SB-31 and -32, and three soil samples were collected from boring SB-33; analytical results are provided in Tables 2-1 and 2-2. Only the soil sample from the 12-16 ft depth in boring SB-33 contained a contaminant in excess of NYSDEC soil cleanup objectives (2,500 ug/kg of PCE, as compared to the NYSDEC cleanup objective of 1,400 ug/kg).

Photoionization (PID) readings from the screening of soil samples collected from the sampled depths in borings SB-31, -32, and –33 ranged from 100-200 ppm to 2,166 ppm. While the PID screening is only semi-quantitative, it suggests that there is substantially greater PCE present in the unsaturated zone beneath Building 7 than is detected in the soil samples, and that the PCE is largely present as soil vapor rather than being adsorbed to soil solids.

4.2 GROUNDWATER QUALITY

4.2.1 Nature of Contamination

The list of parameters for analysis of soil and groundwater samples was selected based on the results of previous studies at the site. The contaminants of concern at both the Photocircuits site and the 45A Site are volatile organic compounds (VOCs). More specifically, the majority of the VOCs detected are chlorinated hydrocarbons. Of these compounds, three are common solvents: trichloroethene, tetrachloroethene, and 1,1,1-trichloroethane. The other chlorinated hydrocarbons which were detected are likely the result of biologic degradation of the three solvent compounds, as they do not have appreciable industrial usage and several studies have shown that chlorinated hydrocarbons can undergo microbially-mediated dehalogenation reactions in groundwater under anaerobic (absence of oxygen) conditions, as follows:

tetrachloroethene $\Rightarrow$ trichloroethene $\Rightarrow$ dichloroethene isomers $\Rightarrow$ vinyl chloride$\Rightarrow$

1,1,1-trichloroethane $\Rightarrow$ 1,1-dichloroethane $\Rightarrow$ chloroethane

Both vinyl chloride and chloroethane are subject to degradation (mineralization) by aerobic (presence of oxygen) pathways (Norris, et al, 1994; Weidemeier, et al, 1996). Natural attenuation of VOC constituents is further discussed below in Section 4.2.2.

4.2.2 Photocircuits Site

Analytical results for groundwater grab samples collected on the Photocircuits site (GW-1, 4, 7, 9, 10, 11, 12 and 13) are presented in Tables 2-2 and 2-3, and the analytical results for samples collected from monitoring wells on the Photocircuits property are presented in Table 2-6.

Historic analytical results for samples collected from monitoring wells on the Photocircuits property were previously presented in the PSI Report of November 15, 1996.

Groundwater quality at the northern boundary of the property (along Sea Cliff Avenue) is defined by two clusters of monitoring wells: MW-3, -8 and the Nassau County Well (NC-Well); and MW-9, -10 and –11. Well depths and construction details for each of these wells are provided in Table 2-4. Total volatile organic compound (TVOC) concentration for MW-3, -8 and NC-Well ranged from 1.4 to 16 ug/L, with the greatest individual VOC detection being 5.7 ug/L of trichloroethene in MW-8 (this was also the only exceedance of state or federal drinking water standards in this monitoring well cluster). TVOC concentrations for MW-9, -10 and –11 ranged from 4.8 ug/L in MW-9 to 145 ug/L in MW-10. Exceedances of state or federal drinking water standards resulting from detection of individual VOCs were as follows: MW-9 - no exceedances, MW-10 (deep) - three exceedances, and MW-11 (deep) - one exceedance. By comparing the current groundwater results with results of previous studies, it is evident that groundwater quality at the downgradient boundary of the Photocircuits site is materially the same, or better, than previously reported both in terms of the VOCs detected and their respective concentrations.

The results of previous studies have indicated the presence of a localized area of relatively high concentrations of VOCs in the vicinity of MW-7. The analytical results for the groundwater sample collected from MW-7 are comparable to historic results for this well, both in terms of the VOCs detected and their respective concentrations. To assess the distribution of impacted groundwater in this area, groundwater grab samples were collected from selected locations, as shown on Figure 2-5; the first round of samples (GW-1, -4 and –7) were followed by a second set of samples (GW-9, -10, -11, -12, and –13). The first round of samples indicated that a relatively sharp concentration gradient exists when moving northward from MW-7 (3,400ug/L TVOC) to GW-4 (148 ug/L TVOC) to GW-7 (9.2 ug/L), and that the extent of shallow groundwater contamination decreases sharply in the vicinity of grab sample GW-7.

The results from GW-1 (8,000 ug/L TVOC) indicate that the extent of groundwater contamination to the south had not been defined, therefore requiring the collection of groundwater grab samples GW-9, -10, -11, -12, and -13. The results from the analysis of samples from GW-10, -11, -12, and -13 (TVOC concentrations of 200, 5, 2 and 4 ug/L, respectively) define the southern extent of the localized area of elevated shallow groundwater concentrations. The results from GW-9 (TVOC concentration of 1,800 ug/L) indicate that shallow groundwater contamination is present to the west of the chemical tank farm and south of the Photocircuits Main Building. Results from monitoring wells MW-4 and -5 (located southwest of the Main Building define the southwestern extent of the localized area of elevated shallow groundwater concentrations. Results from monitoring well MW-9 (located northwest of the Main Building) indicate that shallow groundwater contamination does not extend to MW-9, thus completing the northwest delineation activity

Basically the same suite of chlorinated VOCs were detected in MW-7 and the surrounding groundwater grab samples. With the exception of 6,000 ug/L of 1,1,1-trichloroethane in GW-1, the VOCs detected in the highest concentrations were degradation products (1,1-dichloroethane; dichloroethene isomers; vinyl chloride; and chloroethane). This finding suggests that natural attenuation through microbial degradation is occurring within the impacted area.

Comparison of MW-10 results from 1996 to the current 1998 sampling round indicates that the VOC concentrations remain essentially similar in 1998 to those detected in 1996.

4.2.3 45A Site

Groundwater samples were collected from the three existing monitoring wells and the new monitoring well, and groundwater grab samples were collected from seven locations. The locations of the grab sampling points are shown in Figure 2-4. Monitoring well locations are

shown in Figure 2-1. Analytical results for monitoring well samples are presented in Table 2-6, and analytical results for groundwater grab samples are presented in Table 2-3.

For the three wells located in the southern portion of the site (MW-1S, -2S and –4S), TVOC concentrations varied from 1.8 ug/L to 340 ug/L, with the predominant VOC being tetrachloroethene (also known as perchlororethylene, "perc" and PCE). Well 3S, located at the northern property boundary, had a TVOC concentration of 110 ug/L, with trichloroethene (TCE) being the dominant VOC.

Groundwater grab samples were proposed at locations in around Building 7, based on the results of the PSI. These locations were modified in the field based on findings. The highest TVOC concentrations were detected in samples collected from within the building; GW-2 and GW-3 had TVOC concentrations of 32,000 and 17,000 ug/L, respectively, with PCE being the dominant VOC. TVOC concentrations in groundwater grab samples collected around and downgradient of Building 7 ranged from less than 10 ug/l in GW-4, -5 and –6 to 130 ug/L in GW-7. Coupled with the groundwater results from the PSI, these results indicate that there is a localized area of elevated concentrations of VOCs (predominantly PCE) in the groundwater underlying Building 7. The concentration gradient from under Building 7 (GW-2 and –3) to the area immediately downgradient (GW-4, -5, –6 and –7) indicates that the contaminant mass is largely confined to the footprint of Building 7. Comparison of groundwater sampling results of wells MW-1S, 2S, and 3S from 1996 to the current results indicates an increase in the PCE concentration in well MW-1S from 47 ug/L in 1996 to 71 ug/L in 1998. Both wells MW-2S and MW-had sampling results within the ranges of historical data since December 1991. The Federal Maximum Contaminant Level for PCE is 5 ug/L (for drinking water).

4.3 GEOTECHNICAL TESTING

Six soil samples were submitted for geotechnical testing, including particle size distribution, moisture content, total organic carbon and permeability; the testing was conducted to aid in determining the suitability of the site for the application of soil vapor extraction technology. The results of the geotechnical testing are provided in Appendix C. The results indicate that the unsaturated zones at the Photocircuits and 45A sites are comprised of relatively coarse grained materials with low organic carbon content (0.19-0.65 %) and indicate a permeability range of 3.8 x 10^{-4} to 1.5 x10^{-2} cm/sec. These results are consistent with field observations as well as available literature.

4.4 CONCLUSIONS

The sampling and analysis described in this report accomplish the objectives of the investigation component of the approved work plan which was to determine the nature and distribution of contamination attributable to the sites and gather sufficient information to conduct the Feasibility Study. The investigation has also provided data sufficient to confirm the suitability of the proposed IRM for the Sites.

The shaded areas shown in Figure 2-6 represent the two areas which will be the focus area for implementation of the IRM at the site. Information gathered during the implementation of the IRM will be evaluated in preparing the Feasibility Study.

5.0 INTERIM REMEDIAL MEASURE

The RI work plan discussed the observed contamination and provided an evaluation of possible remedial technologies for the application of an interim remedial measure (IRM). The findings of the RI confirmed the results of the PSI in that there are two areas of relatively concentrated contamination, one on the Photocircuits site and one on the 45A site. The RI also determined that the extent of soil and groundwater contamination associated with these impacted areas is limited to the areas shown in Figure 2-6.

The RI work plan proposed the application of soil vapor extraction coupled with air sparging as the best technology for the IRM. Results of the RI confirm the applicability of these technologies, for the following reasons:

- The unsaturated soils are suitable for the application of soil vapor extraction technology because the permeability of the soils is conducive to the necessary air flow rates for the efficient extraction of soil vapors.

- The low organic carbon measurements for the soil samples indicate that contaminants will not be highly adsorbed to soils, and can therefore be readily sparged and extracted under vacuum (the PID readings collected from the borings at Building 7 further support this point).

- The concentration gradients indicate that the contaminant mass at each site are confined to a relatively localized area; remedial efficiency tends to increase if the contamination is more localized/concentrated.

- Both areas of contamination are covered (by pavement and/or a building) which limits infiltration of precipitation (thus limiting migration) and also helps to raise the efficiency of vacuum extraction (less loss of vacuum).

6.0 REFERENCES

Norris, R.D., R.E. Hinchee, R.A. Brown, P.L. McCarty, L. Semprini, J.T. Wilson, D.H. Kampbell, M. Reinhard, E.J. Bouwer, R.C. Borden, T.M. Vogel, J.M. Thomas, and C.H. Ward. 1994. *Handbook of Bioremediation.* Boca Raton, Florida: Lewis Publishers.

Wiedemeier, T.H., J.T. Wilson, D.H. Kampbell, J.E. Hansen, and P. Haas. 1996. Technical protocol for evaluating the natural attenuation of chlorinated ethenes in groundwater. *Proceedings of the Petroleum Hydrocarbons and Organic Chemicals in Groundwater: Prevention, Detection, and Remediation Conference*, Houston, Texas, November 13-15.

SEA CLIFF AVENUE

GLEN COVE ARTERIAL

GLEN HEAD COUNTRY CLUB

NC-WELL
MW-3
MW-8
MW-1
MW-9
MW-10
MW-3S
MW-7
MW-2
MW-5
MW-4
MW-6
MW-4S
MW-1S
MW-2S

PHOTOCIRCUITS
MAIN BUILDING
(31 SEA CLIFF AVENUE)

PASS AND SEYMOUR
(45A SEA CLIFF AVENUE)

BOILER ROOM
CHEM. RECOV.
MAINTENANCE

BUTLER 2

BUTLER 3

BUILDING 4

BLDG. 7

SITE 31
SITE 45A

SITE 45A
SITE 31

DRUM STORAGE AREA

ACID/BASE/SOLVENT TANK FARM

FUEL TANK
WATER TANK
GENERATOR
PUMP HOUSE

CONC. BRIDGE

BROOK

PROJECTS DEPARTMENT

WASTE TREATMENT

PUMP HOUSE

CHEMICAL STORAGE

HEALTH AND SAFETY

POSSIBLE DRUM STORAGE AREA

FORMER POE ABOVE GROUND STORAGE TANK

3 FORMER 275 GAL. ABOVE GROUND WASTE OIL TANKS

FORMER 1000 GAL. HYDRAULIC OIL TANK

FORMER DRUM STORAGE AREA

N
S
E
W

LEGEND

PROPERTY LINE
RIGHT-OF-WAY
MONITORING WELL LOCATION

SCALE

120 60 0 120 FT.

REV#	DATE	DESCRIPTION	APP'D

PHOTOCIRCUITS CORPORATION
GLEN COVE, NEW YORK

McLAREN/HART ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY

DRWN: J.R.F.	CHK'D: D.B.	APP'D: C.B.S.
SCALE: AS SHOWN		DATE: 07/22/98

SITE PLAN

FIGURE 2-1

DWG: 67800123 07/27/98

H G F

SEA CLIFF

MW-9
92.70

MW-11

MW-10

MW-3S
92.81

SITE 31
SITE 45A

93

PASS AND SEYMOUR
(45A SEA CLIFF AVEN

9

POSSIBLE DRUM STORAGE AREA

3 FORMER 1275 GAL. ABOVE GROUND WASTE OIL TANKS

MW-1S
93.19

BU.

FORMER 1000 GAL. HYDRAULIC OIL TANK

BLDG. 7

FORMER DRUM STORAGE AREA

MW-2S
94.21

FORMER PCE ABOVE GROUND STORAGE TANK

BUILDING 4

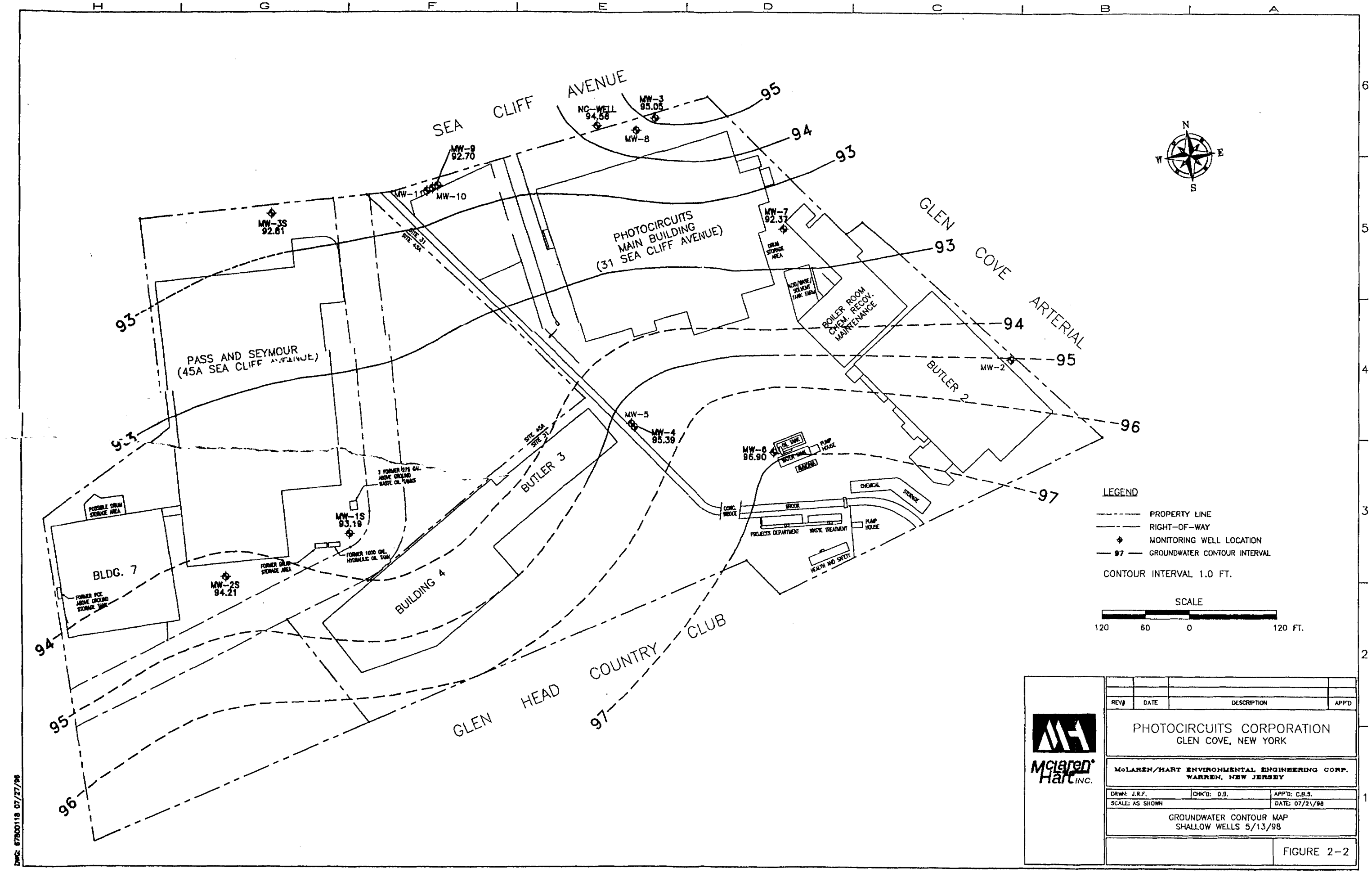
94

95

96

GLEN HEAD

DWG. 678001.18 07/27/95



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- MONITORING WELL LOCATION
- 97 GROUNDWATER CONTOUR INTERVAL

CONTOUR INTERVAL 1.0 FT.

SCALE

120 60 0 120 FT.

REV#	DATE	DESCRIPTION	APP'D

PHOTOCIRCUITS CORPORATION
GLEN COVE, NEW YORK

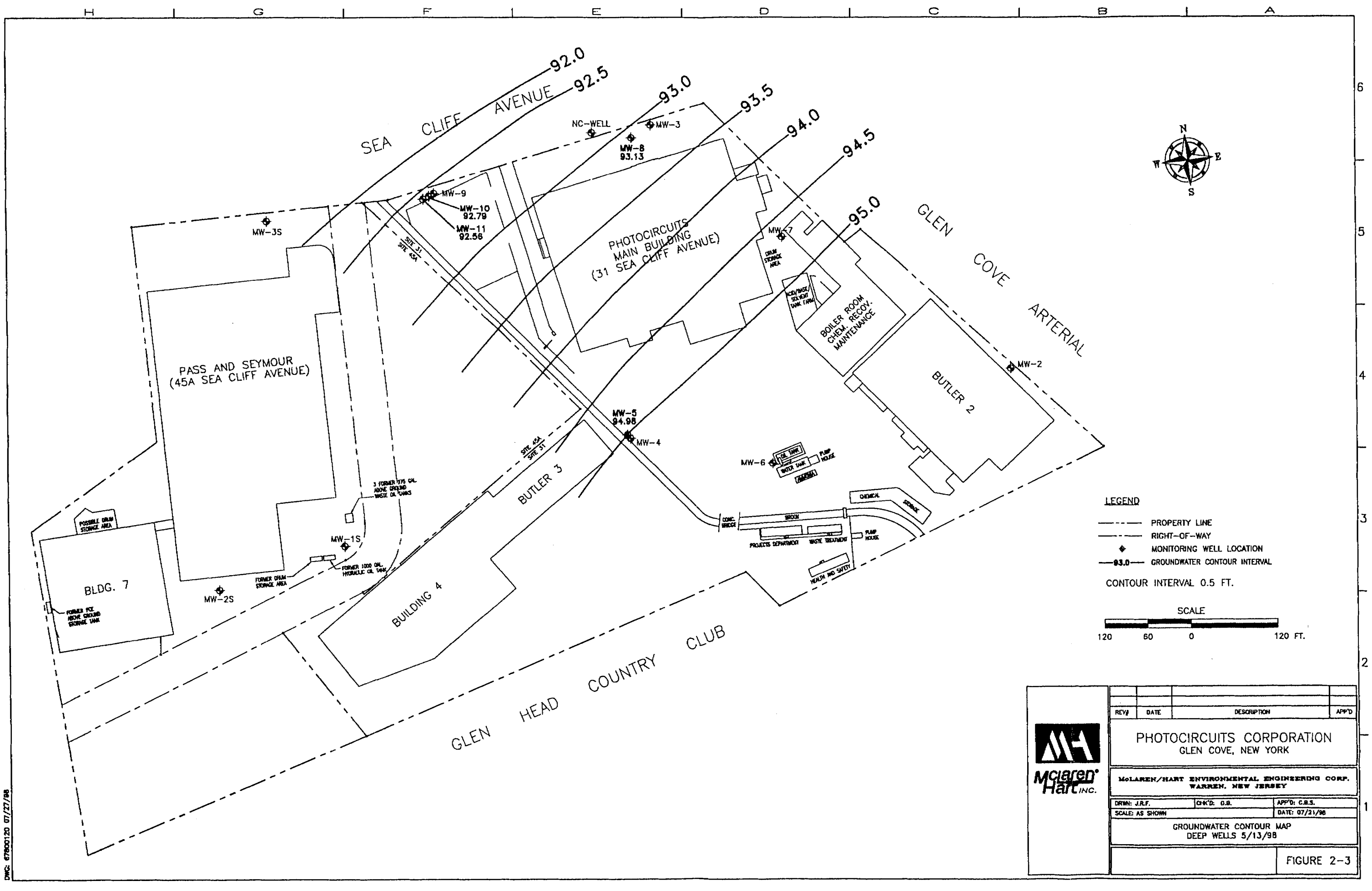
McLAREN/HART ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY

DRWN: J.R.F.	CHK'D: D.B.	APP'D: C.B.S.
SCALE: AS SHOWN		DATE: 07/21/98

GROUNDWATER CONTOUR MAP
SHALLOW WELLS 5/13/98

FIGURE 2-2

DWG: 67800118 07/27/98



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- MONITORING WELL LOCATION
- 93.0 GROUNDWATER CONTOUR INTERVAL

CONTOUR INTERVAL 0.5 FT.

SCALE

120 60 0 120 FT.

REV#	DATE	DESCRIPTION	APP'D

PHOTOCIRCUITS CORPORATION
GLEN COVE, NEW YORK

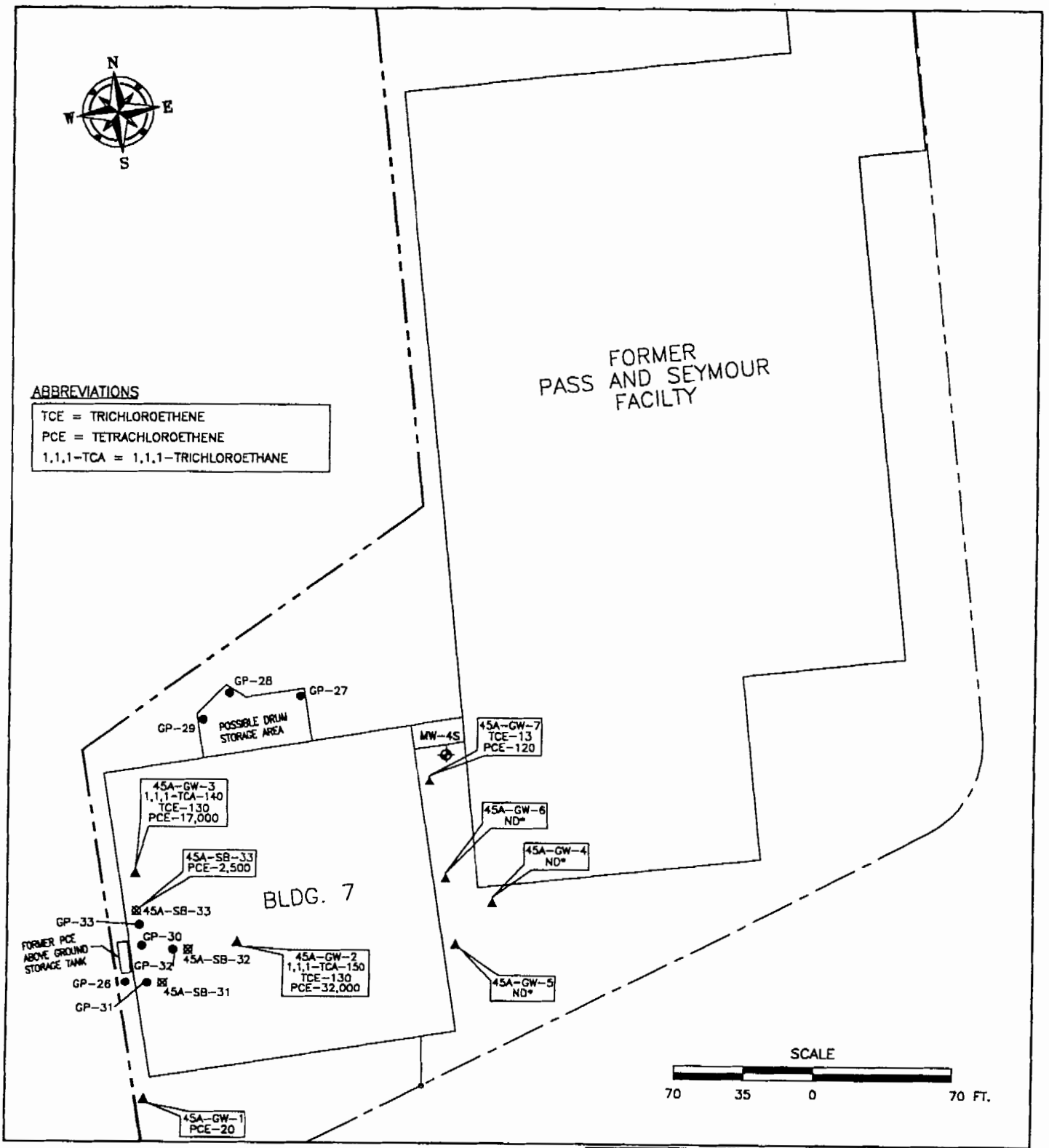
McLAREN/HART ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY

DRWN: J.R.F.	CHK'D: G.B.	APP'D: C.B.S.
SCALE: AS SHOWN		DATE: 07/21/98

GROUNDWATER CONTOUR MAP
DEEP WELLS 5/13/98

FIGURE 2-3

DWG: 67900120 07/27/98



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- SAMPLING LOCATION (1996)
- GROUNDWATER GRAB SAMPLE LOCATION (1998)
- MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION (1998)

ND* NO ANALYTES DETECTED IN EXCESS OF NYSDEC CRITERIA

NOTE: ALL RESULTS REPORTED IN PARTS PER BILLION (ppb)

DWG: 67B00119 07/28/98

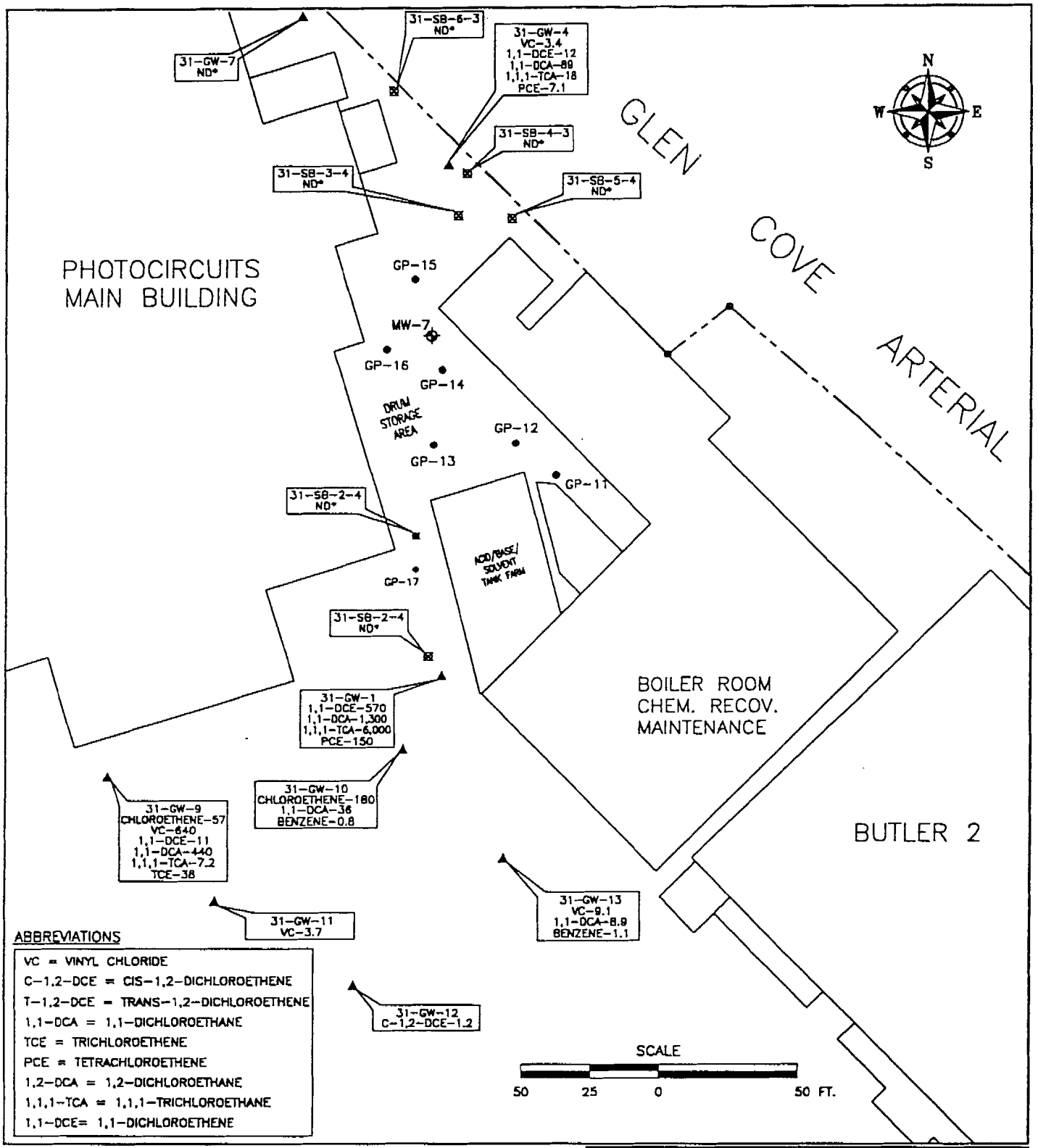
FIGURE 2-4

SOIL AND GROUNDWATER
GRAB SAMPLING RESULTS (SITE 45A)

PHOTOCIRCUITS CORPORATION
GLEN COVE, NEW YORK

McLaren Hart INC.

DRWN: J.R.F.	CHK'D: C.B.S.
SCALE: AS SHOWN	DATE: 07/28/98



ABBREVIATIONS

VC = VINYL CHLORIDE
C-1,2-DCE = CIS-1,2-DICHLOROETHENE
T-1,2-DCE = TRANS-1,2-DICHLOROETHENE
1,1-DCA = 1,1-DICHLOROETHANE
TCE = TRICHLOROETHENE
PCE = TETRACHLOROETHENE
1,2-DCA = 1,2-DICHLOROETHANE
1,1,1-TCA = 1,1,1-TRICHLOROETHANE
1,1-DCE= 1,1-DICHLOROETHENE

LEGEND

——— PROPERTY LINE
———·——— RIGHT-OF-WAY
● SOIL SAMPLE LOCATION (1996)
▲ GROUNDWATER GRAB SAMPLE
◆ MONITORING WELL LOCATION
⊠ SOIL SAMPLE LOCATION (1998)

ND* NO ANALYTES DETECTED IN EXCESS OF NYSDEC CRITERIA

NOTE: ALL RESULTS REPORTED IN PARTS PER BILLION (ppb)

DWG: 87800121 07/27/98

FIGURE 2-5

SOIL AND GROUNDWATER
SAMPLING RESULTS (PHOTOCIRCUITS SITE)

PHOTOCIRCUITS CORPORATION
GLEN COVE, NEW YORK

McLaren Hart INC.

DRWN: J.R.F	CHK'D: C.B.S.
SCALE: AS SHOWN	DATE: 07/22/98

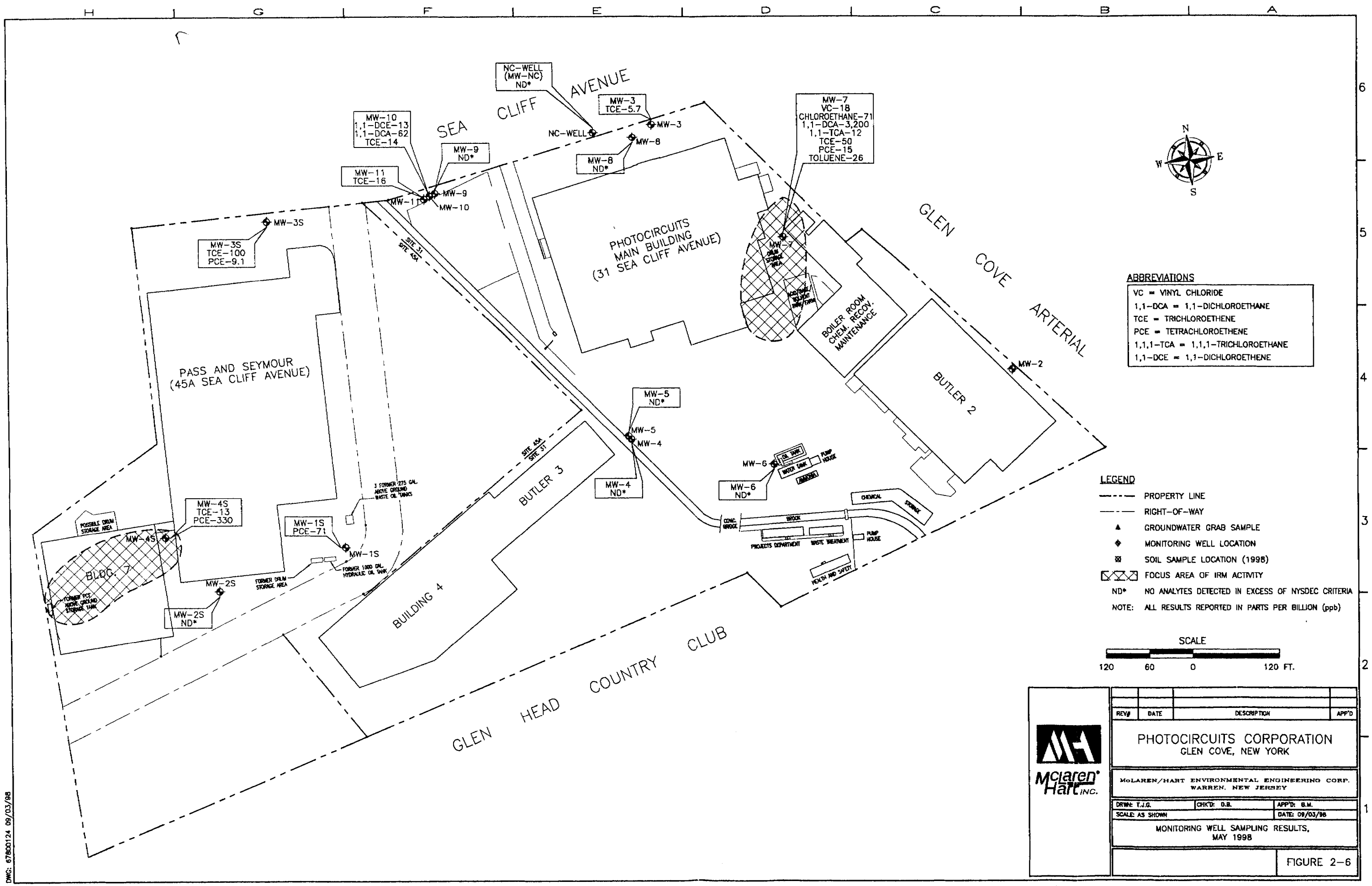

NC-WELL (MW-NC) ND*
SEA CLIFF AVENUE
MW-3 TCE-5.7
NC-WELL
MW-3
MW-8
MW-8 ND*
MW-10 1,1-DCE-13 1,1-DCA-62 TCE-14
MW-9 ND*
MW-11 TCE-16
MW-9
MW-11
MW-10
MW-7 VC-18 CHLOROETHANE-71 1,1-DCA-3,200 1,1-TCA-12 TCE-50 PCE-15 TOLUENE-26
MW-3S
MW-3S TCE-100 PCE-9.1
PHOTOCIRCUITS MAIN BUILDING (31 SEA CLIFF AVENUE)
GLEN COVE ARTERIAL
BOILER ROOM CHEM. RECOV. MAINTENANCE
MW-2
BUTLER 2
PASS AND SEYMOUR (45A SEA CLIFF AVENUE)
SITE 31
SITE 45A
MW-5 ND*
MW-5
MW-4
SITE 45A
SITE 31
BUTLER 3
MW-6
OIL TANK
PUMP HOUSE
WATER TANK
MW-6 ND*
MW-4 ND*
CONC. BRIDGE
BROOK
CHEMICAL STORAGE
PROJECTS DEPARTMENT
WASTE TREATMENT
PUMP HOUSE
HEALTH AND SAFETY
3 FORMER 275 GAL. ABOVE GROUND WASTE OIL TANKS
MW-4S TCE-13 PCE-330
MW-1S PCE-71
MW-1S
FORMER 1000 GAL. HYDRAULIC OIL TANK
POSSIBLE DRUM STORAGE AREA
MW-4S
BLDG. 7
FORMER PCE ABOVE GROUND STORAGE TANK
MW-2S
FORMER DRUM STORAGE AREA
MW-2S ND*
BUILDING 4
GLEN HEAD COUNTRY CLUB
N
S
E
W
ABBREVIATIONS
VC = VINYL CHLORIDE
1,1-DCA = 1,1-DICHLOROETHANE
TCE = TRICHLOROETHENE
PCE = TETRACHLOROETHENE
1,1,1-TCA = 1,1,1-TRICHLOROETHANE
1,1-DCE = 1,1-DICHLOROETHENE
LEGEND
PROPERTY LINE
RIGHT-OF-WAY
GROUNDWATER GRAB SAMPLE
MONITORING WELL LOCATION
SOIL SAMPLE LOCATION (1998)
FOCUS AREA OF IRM ACTIVITY
ND* NO ANALYTES DETECTED IN EXCESS OF NYSDEC CRITERIA
NOTE: ALL RESULTS REPORTED IN PARTS PER BILLION (ppb)
SCALE
120 60 0 120 FT.
REV# DATE DESCRIPTION APP'D
PHOTOCIRCUITS CORPORATION
GLEN COVE, NEW YORK
McLAREN/HART ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY
DRWN: T.J.G. CHK'D: D.B. APP'D: B.M.
SCALE: AS SHOWN DATE: 09/03/98
MONITORING WELL SAMPLING RESULTS, MAY 1998
FIGURE 2-6
DWG: 67800124 09/03/98

Table 2-1
Analytical Summary for Volatile Organic Compounds in Soil
Photocircuits Corporation
Glen Cove, New York

Sample Location	NYSDEC/USEPA	45A-SB-31	45A-SB-31	45A-SB-32	45A-SB-32	45A-SB-33	45A-SB-33
Sample Depth (ft)	Soil Cleanup	12-16	20-22	12-16	20-24	16	16-20
Sample ID	Objectives*	54859	54863	54862	54873	54866	54870
Sample Date	(ppb)	04/09/98	04/09/98	04/09/98	04/09/98	04/08/98	04/08/98
Dilution Factor		1.0	1.0	1.0	1.0	50.0	1.0
VOLATILE COMPOUNDS (ppb)							
Chloromethane	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Bromomethane	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
VinylChloride	200	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Chloroethane	1900	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
MethyleneChloride	100	1.5 B	1.2 B	1.5 B	3.6 B	140 U	1.8 B
Trichlorofluoromethane	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
1,1-Dichloroethene	400	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
1,1-Dichloroethane	200	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
trans-1,2-Dichloroethene	300	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
cis-1,2-Dichloroethene	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Chloroform	300	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
1,2-Dichloroethane	100	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
1,1,1-Trichloroethane	800	1.0 U	1.2 U	1.2 U	0.9 J	140 U	1.1 U
CarbonTetrachloride	600	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Bromodichloromethane	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
1,2-Dichloropropane	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
cis-1,3-Dichloropropene	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Trichloroethene	700	1.0 U	1.2 U	1.2 U	1.0 J	140 U	1.1 U
Dibromochloromethane	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
1,1,2-Trichloroethane	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Benzene	60	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
trans-1,3-Dichloropropene	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
2-ChloroethylVinylEther	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Bromoform	NS	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Tetrachloroethene	1400	31	33	52	48	2500	10
1,1,2,2-Tetrachloroethane	600	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Toluene	1500	1.7	1.1 J	22	3.9	140 U	2.2
Chlorobenzene	1700	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Ethylbenzene	5500	1.0 U	1.2 U	1.2 U	1.2 U	140 U	1.1 U
Xylene(Total)	1200	1.0 U	1.2 U	0.6 J	1.2 U	140 U	0.6 J
Total Confident Conc. VOAs (s)		33	33	74	52	2500	12
Total Estimated Conc. VOA TICs (s)		0	8.6	0	8.3	0	7.9

NS: Not Specified
U: Analyte was not detected above the referenced reporting limit
B: Analyte was also detected in blank
J: Estimated Concentration at or below the reporting limit
JB: Sample result below the CRQL and analyte detected in associated field blank
*: Taken from NYSDEC Soil Cleanup Oblectives to protect groundwater quality and USEPA recommended soil cleanup objectives. The higher of the two values is listed.

Table 2-1
Analytical Summary for Volatile Organic Compounds in Soil
Photocircuits Corporation
Glen Cove, New York

Sample Location	NYSDEC/USEPA	45A-SB-33	31-SB-34	31-SB-35	31-SB-36	31-SB-37
Sample Depth (ft)	Soil Cleanup	22-24	4	4	4	3
Sample ID	Objectives*	54871	56157	56159	56161	56162
Sample Date	(ppb)	04/08/98	04/20/98	04/20/98	04/20/98	04/20/98
Dilution Factor		1.0	1.0	1.0	1.0	1.0
VOLATILE COMPOUNDS (ppb)						
Chloromethane	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Bromomethane	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
VinylChloride	200	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Chloroethane	1900	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
MethyleneChloride	100	3.1 B	1.5 B	1.2 B	1.1 JB	1.1 JB
Trichlorofluoromethane	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
1,1-Dichloroethene	400	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
1,1-Dichloroethane	200	1.2 U	6.8	1.1 U	1.2 U	1.1 U
trans-1,2-Dichloroethene	300	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
cis-1,2-Dichloroethene	NS	1.2 U	2.1	1.1 U	2.2	1.1 U
Chloroform	300	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
1,2-Dichloroethane	100	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
1,1,1-Trichloroethane	800	0.8 J	3.2	1.1 U	5.8	1.1 U
CarbonTetrachloride	600	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Bromodichloromethane	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
1,2-Dichloropropane	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
cis-1,3-Dichloropropene	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Trichloroethene	700	0.7 J	1.6	1.1 U	21	1.5
Dibromochloromethane	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
1,1,2-Trichloroethane	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Benzene	60	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
trans-1,3-Dichloropropene	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
2-ChloroethylVinylEther	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Bromoform	NS	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Tetrachloroethene	1400	60	20	1.1 U	19	4.1
1,1,2,2-Tetrachloroethane	600	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Toluene	1500	6.9	2.9	4.5	1.2 U	0.6 J
Chlorobenzene	1700	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U
Ethylbenzene	5500	1.2 U	1.0 J	0.6 J	1.2 U	1.1 U
Xylene(Total)	1200	0.9 J	5.6	3.6	1.2 U	1.1 U

Total Confident Conc. VOAs (s)	67	42	8.1	48	5.6
Total Estimated Conc. VOA TICs (s)	10.0	7.0	81	0	0

NS: Not Specified
U: Analyte was not detected above the referenced reporting limit
B: Analyte was also detected in blank
J: Estimated Concentration at or below the reporting limit
JB: Sample result below the CRQL and analyte detected in associated field blank
*: Taken from NYSDEC Soil Cleanup Oblectives to protect groundwater quality and USEPA recommended soil cleanup objectives. The higher of the two values is listed.

Table 2-1
Analytical Summary for Volatile Organic Compounds in Soil
Photocircuits Corporation
Glen Cove, New York

Sample Location	YSDEC/USEP	31-SB-5	31-SB-6
Sample Depth (ft)	Soil Cleanup	4	3
Sample ID	Objectives*	56165	56168
Sample Date	(ppb)	04/20/98	04/20/98
Dilution Factor		1.0	1.0
Chloromethane	NA	1.2 U	1.1 U
Bromomethane	NA	1.2 U	1.1 U
VinylChloride	200	1.2 U	1.1 U
Chloroethane	1900	1.2 U	1.1 U
MethyleneChloride	100	1.0 JB	1.0 JB
Trichlorofluoromethane	NA	1.2 U	1.1 U
1,1-Dichloroethene	400	1.2 U	1.1 U
1,1-Dichloroethane	200	1.2 U	1.1 U
trans-1,2-Dichloroethene	300	1.2 U	1.1 U
cis-1,2-Dichloroethene	NA	1.2 U	1.6
Chloroform	300	1.2 U	1.1 U
1,2-Dichloroethane	100	1.2 U	1.1 U
1,1,1-Trichloroethane	800	1.2 U	1.1 U
CarbonTetrachloride	600	1.2 U	1.1 U
Bromodichloromethane	NA	1.2 U	1.1 U
1,2-Dichloropropane	NA	1.2 U	1.1 U
cis-1,3-Dichloropropene	NA	1.2 U	1.1 U
Trichloroethene	700	1.2 U	2.1
Dibromochloromethane	NA	1.2 U	1.1 U
1,1,2-Trichloroethane	NA	1.2 U	1.1 U
Benzene	60	1.2 U	1.1 U
trans-1,3-Dichloropropene	NA	1.2 U	1.1 U
2-ChloroethylVinylEther	NA	1.2 U	1.1 U
Bromoform	NA	1.2 U	1.1 U
Tetrachloroethene	1400	1.2 U	2.0
1,1,2,2-Tetrachloroethane	600	1.2 U	1.1 U
Toluene	1500	0.8 J	1.0 J
Chlorobenzene	1700	1.2 U	1.1 U
Ethylbenzene	5500	1.2 U	1.1 U
Xylene(Total)	1200	1.2 U	1.1 U
Total Confident Conc. VOAs (s)		0	5.7
Total Estimated Conc. VOA TICs (s)		0	0

Table 2-2
Summary of Analytical Results Exceeding NYSDEC Criteria (Soils and Groundwater Grab Samples)
Photocircuits Corporation
Glen Cove, New York

SOIL (PPB)

Sample ID Depth (ft)	NYSDEC/ USEPA Soil Cleanup (ppb) Criteria	45A-SB-33 16
Volatile Compounds (ppb)		
Tetrachloroethene	1400	2500

GROUNDWATER (PPB)

Sample ID Depth (ft)	NYSDEC GW Criteria (ppb)	45A-GW-1 28	45A-GW-2 28	45A-GW-3 28	45A-GW-7 12
1,1,1-Trichloroethene	5	-	150	140	-
Trichloroethene	5	-	130	130	13
Tetrachloroethene	5	20	32000	17000	120

GROUNDWATER (PPB)

Sample ID Depth (ft)	NYSDEC GW Criteria (ppb)	31-GW-1 8	31-GW-4 12	31-GW-9 -	31-GW-10 -	31-GW-11 -	31-GW-13 -
Vinyl Chloride	2	-	3.4	640	-	3.7	9.1
Chloroethane	50	-	-	57	180	-	-
1,1-Dichloroethene	5	570	12	11	-	-	-
1,1-Dichloroethane	5	1300	89	440	36	-	8.9
1,1,1-Trichloroethane	5	6000	18	7.2	-	-	-
Trichlorothene	5	-	-	38	-	-	-
Tetrachloroethene	5	150	7.1	-	-	-	-

"-" : Analyte was not detected above the applicable NYSDEC criteria

Table 2-3
Analytical Summary for Volatile Organic Compounds in Groundwater (Grab Samples)
Photocircuits Corporation
Glen Cove, New York

Sampling Location	NYSDEC	45A-GW-1	45A-GW-2	45A-GW-3	45A-GW-4	45A-GW-5
Sample ID	GW	54865	54874	54822	54827	54823
Sample Date	Criteria	04/08/98	04/09/98	04/10/98	04/10/98	04/10/98
Dilution Factor	(ppb)	1.0	200.0	100.0	1.0	1.0
VOLATILE COMPOUNDS (ppb)						
Chloromethane	NS	0.9 U	190 U	93 U	0.9 U	0.9 U
Bromomethane	NS	0.3 U	54 U	27 U	0.3 U	0.3 U
VinylChloride	2	0.4 U	78 U	39 U	0.4 U	0.4 U
Chloroethane	50	1.0 U	210 U	100 U	1.0 U	1.0 U
MethyleneChloride	5	1.0 U	210 U	100 U	1.0 U	1.0 U
Trichlorofluoromethane	NS	0.2 U	46 U	23 U	0.2 U	0.2 U
1,1-Dichloroethene	5	0.6 U	110 U	55 U	0.6 U	0.6 U
1,1-Dichloroethane	5	0.3 U	62 U	31 U	0.3 U	0.3 U
trans-1,2-Dichloroethene	NS	0.3 U	60 U	30 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	NS	1.0 U	200 U	100 U	1.0 U	1.0 U
Chloroform	7	0.2 U	40 U	20 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.2 U	44 U	22 U	0.2 U	0.2 U
1,1,1-Trichloroethane	5	0.3	150	140	0.2 U	0.2 U
CarbonTetrachloride	5	0.2 U	32 U	16 U	0.2 U	0.2 U
Bromodichloromethane	NS	0.2 U	38 U	19 U	0.2 U	0.2 U
1,2-Dichloropropane	NS	0.5 U	92 U	46 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	NS	0.3 U	66 U	33 U	0.3 U	0.3 U
Trichloroethene	5	0.4 U	130	130	0.4 U	0.4 U
Dibromochloromethane	50	0.2 U	46 U	23 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NS	0.4 U	86 U	43 U	0.4 U	0.4 U
Benzene	0.7	0.2 U	48 U	24 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NS	0.3 U	62 U	31 U	0.3 U	0.3 U
2-ChloroethylVinylEther	NS	0.5 U	92 U	46 U	0.5 U	0.5 U
Bromoform	NS	0.3 U	60 U	30 U	0.3 U	0.3 U
Tetrachloroethene	5	20	32000	17000	2.3	0.5
1,1,2,2-Tetrachloroethane	5	0.3 U	66 U	33 U	0.3 U	0.3 U
Toluene	5	2.9	36 U	18 U	0.9	2.6
Chlorobenzene	4	0.1 U	28 U	14 U	0.1 U	0.1 U
Ethylbenzene	5	0.4	48 U	24 U	0.2 U	0.3
Xylene(Total)	5	1.0 U	200 U	100 U	1.0 U	1.0 U
Total Confident Conc. VOAs (s)		24	32280	17270	3.2	3.4
Total Estimated Conc. VOA TICs (s)		0	0	0	0	0

NS: Not Specified
U: Analyte was not detected above the referenced reporting limit

Table 2-3
Analytical Summary for Volatile Organic Compounds in Groundwater (Grab Samples)
Photocircuits Corporation
Glen Cove, New York

Sampling Location	NYSDEC	45A-GW-6	45A-GW-7	31-GW-1	31-GW-4	31-GW-7	TB041098
Sample ID	GW	54825	54826	56169	56164	56170	54824
Sample Date	Criteria	04/10/98	04/10/98	04/20/98	04/20/98	04/20/98	04/09/98
Dilution Factor	(ppb)	1.0	1.0	100.0	1.0	1.0	1.0
VOLATILE COMPOUNDS (ppb)							
Chloromethane	NS	0.9 U	0.9 U	93 U	0.9 U	0.9 U	0.9 U
Bromomethane	NS	0.3 U	0.3 U	27 U	0.3 U	0.3 U	0.3 U
VinylChloride	2	0.4 U	0.4 U	39 U	3.4	0.4 U	0.4 U
Chloroethane	50	1.0 U	1.0 U	100 U	4.5	1.0 U	1.0 U
MethyleneChloride	5	1.0 U	1.0 U	100 U	2.7	1.0 U	1.0 U
Trichlorofluoromethane	NS	0.2 U	0.2 U	23 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	5	0.6 U	0.6 U	570	12	0.6 U	0.6 U
1,1-Dichloroethane	5	0.3 U	0.3 U	1300	89	0.3 U	0.3 U
trans-1,2-Dichloroethene	NS	0.3 U	0.3 U	30 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	NS	1.0 U	1.0 U	100 U	3.7	1.0 U	1.0 U
Chloroform	7	0.2 U	0.2 U	20 U	0.2 U	0.8	0.2 U
1,2-Dichloroethane	5	0.2 U	0.2 U	22 U	0.8	0.2 U	0.2 U
1,1,1-Trichloroethane	5	0.2 U	0.2 U	6000	18	1.4	0.2 U
CarbonTetrachloride	5	0.2 U	0.2 U	16 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NS	0.2 U	0.2 U	19 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NS	0.5 U	0.5 U	46 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	NS	0.3 U	0.3 U	33 U	0.3 U	0.3 U	0.3 U
Trichloroethene	5	0.4 U	13	41 U	4.7	1.3	0.4 U
Dibromochloromethane	50	0.2 U	0.2 U	23 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NS	0.4 U	0.4 U	43 U	0.4 U	0.4 U	0.4 U
Benzene	0.7	0.2 U	0.3	24 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NS	0.3 U	0.3 U	31 U	0.3 U	0.3 U	0.3 U
2-ChloroethylVinylEther	NS	0.5 U	0.5 U	46 U	0.5 U	0.5 U	0.5 U
Bromoform	NS	0.3 U	0.3 U	30 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	5	0.7	120	150	7.1	2.2	0.1 U
1,1,2,2-Tetrachloroethane	5	0.3 U	0.3 U	33 U	0.3 U	0.3 U	0.3 U
Toluene	5	2.1	2.4	18 U	0.2 U	0.7	0.2 U
Chlorobenzene	4	0.1 U	0.1 U	14 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	5	0.2	0.3	24 U	0.6	0.8	0.2 U
Xylene(Total)	5	1.0 U	1.0 U	100 U	2.0	2.0	1.0 U
Total Confident Conc. VOAs (s)		3.0	136	8020	148	9.2	0
Total Estimated Conc. VOA TICs (s)		0	0	0	0	0	0

NS: No standard specified
U: Analyte was not detected above the referenced reporting limit

Table 2-3
Analytical Summary for Volatile Organic Compounds in Groundwater (Grab Samples)
Photocircuits Corporation
Glen Cove, New York

Sampling Location	NYSDEC	31-GW-9	31-GW-10	31-GW-11	31-GW-12	31-GW-13	FB061798	TB061798
Sample ID	GW	66934	66935	66936	66937	66938	66939	66940
Sample Date	Criteria	6/17/98	6/17/98	6/17/98	6/17/98	6/17/98	6/17/98	6/17/98
Dilution Factor	(ppb)	6.0	1.0	1.0	1.0	1.0	1.0	1.0
VOLATILE ORGANIC COMPOUNDS								
Chloromethane	NS	4.6 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Bromomethane	NS	1.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VinylChloride	2	640	0.4 U	3.7	0.7	9.1	0.4 U	0.4 U
Chloroethane	50	57	180	1.0 U	1.0 U	2.9	1.0 U	1.0 U
MethyleneChloride	5	5.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	NS	1.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	5	11	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1-Dichloroethane	5	440	36	1	0.3 U	8.9	0.3 U	0.3 U
trans-1,2-Dichloroethene	NS	3.7	1.1	0.3 U	0.3 U	1.5	0.3 U	0.3 U
cis-1,2-Dichloroethene	NS	520	1.0 U	1.0 U	1.2	15	1.0 U	1.0 U
Chloroform	7	1.0 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	1.5	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	5	7.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
CarbonTetrachloride	5	0.8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NS	0.9 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NS	2.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	NS	1.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Trichloroethene	5	38	0.4 U	0.4 U	0.4 U	1.9	0.4 U	0.4 U
Dibromochloromethane	50	1.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NS	2.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Benzene	0.7	1.2 U	0.8	0.3	0.2 U	1.1	0.2 U	0.2 U
trans-1,3-Dichloropropene	NS	1.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-ChloroethylVinylEther	NS	2.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	NS	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	5	0.5 U	0.1	0.1 U	0.1 U	0.2	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	5	1.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Toluene	5	0.9 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6	0.2 U
Chlorobenzene	4	0.7 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	5	1.2 U	0.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene(Total)	5	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Confident Conc. VOAs (s)		1718.4	219.5	5	1.9	40.6	0.6	0
Total Estimated Conc. VOA TICs (s)		0	0	0	15	0	14	0

NS: No standard specified
U: Analyte was not detected above the referenced reporting limit

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Table 2-4
Water Level Measurements/Monitoring Well Construction Details
Photocircuits Corporation
Glen Cove, New York

Site	Well Number	Casing Diameter (in)	Depth to Bottom (ft)	Top of Casing Elevation (ft above MSL)	August 7, 1996		September 10, 1996		May 13, 1998	
					Depth to Water (ft)	Ground Water Elevation (ft above MSL)	Depth to Water (ft)	Ground Water Elevation (ft above MSL)	Depth to Water (ft)	Ground Water Elevation (ft above MSL)
45A Sea Cliff Ave. Site	MW-1s	4	20.62	101.94	10.68	91.26	11.41	90.53	8.75	82.51
	MW-2s	4	20.71	100.87	8.37	92.5	8.86	92.01	6.66	85.84
	MW-3s	4	18.73	99.83	8.8	91.03	9.56	90.27	7.02	84.01
	MW-4s	4	15.00	NA	NA	NA	NA	NA	5.20	NA
31 Sea Cliff Ave. Site	MW-2	2	24.62	102.76	9.2	93.56	10.02	92.74	NA	NA
	MW-3	2	18.98	98.8	6.2	92.6	7.15	91.65	3.75	88.85
	MW-4	2	23.66	97.56	4.24	93.32	5.28	92.28	2.17	91.15
	MW-5	2	99.32	97.39	4.26	93.13	5.56	91.83	2.41	90.72
	MW-6	2	13.45	99	4.2	94.8	5.25	93.75	2.60	92.2
	MW-7	4	23.37	95.9	5.38	90.52	6.3	89.6	3.55	86.97
	MW-8	4	169.3	99.01	8.04	90.97	8.88	90.13	5.88	85.09
	MW-9	4	27.57	98.5	7.34	91.16	8.47	90.03	5.80	85.36
	MW-10	4	130.27	98.43	7.74	90.69	8.61	89.82	5.64	85.05
	MW-11	4	170	98.46	7.9	90.56	8.79	89.67	5.90	84.66
	NC-Well	2	10.39	97.57	4.88	92.69	5.9	91.67	3.01	89.68

Note: MSL = Mean Sea Level
NA = Data Not Available
MW-2 location is assumed to be paved over

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TABLE 2-5
Ground Water Sampling Field Parameters, May 1998
Photocircuits Corporation
Glen Cove, New York

Well ID	MW-1S	MW-2S	MW-3S	MW-4S	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
Site Location	45a	45a	45a	45a	31	31	31	31	31	31
Depth to Water (ft)	8.75	6.66	7.02	5.20	?	3.75	2.17	2.41	2.60	3.55
Total Depth (ft)	20.62	20.71	18.73	15.00	24.62	18.98	23.66	99.32	13.45	23.37
Well Diameter (in)	4	4	4	4	2	2	2	2	2	4
One Volume (gal)	7.80	9.10	6.30	4.70	9.10	2.47	3.45	15.50	1.72	12.80
3 Volumes (gal)	22.00	27.30	18.00	14.00	27.30	7.40	10.40	45.00	5.20	38.00
Pre-Purge										
pH	6.65	6.33	5.48	6.72	6.41	6.53	6.73	8.12	6.81	9.08
Temperature (°C)	13.0	13.4	15.5	15.6	4.6	12.3	14.2	15.5	16.0	16.4
Sp. Cond. (uS/cm)	0.499	0.718	0.674	0.271	0.582	0.261	0.855	0.153	0.246	3.690
Turbidity (NTU)	238	118	25	475	24	248.00	771	43	322	85
DO (mg/l)	4.97	7.62	2.89	7.34		1.95	2.62	4.18	2.97	1.75
Post-Purge										
pH	6.49	6.28	5.38	7.15	6.76	6.48	6.77	7.95	DRY	9.74
Temperature (°C)	12.8	13.1	16.0	15.6	5.6	13.1	14.1	15.3	DRY	17.8
Sp. Cond. (uS/cm)	0.455	0.698	0.743	0.341	0.481	0.266	0.875	0.160	DRY	3.640
Turbidity (NTU)	284	147	999	75	44	-10	380	166	DRY	491
DO (mg/l)	4.83	7.87	3.35	8.60		1.65	1.73	6.79	DRY	3.84
Post-Sample										
pH	6.88	6.23	5.47	7.06	6.24	6.95	6.62	7.99	6.74	9.59
Temperature (°C)	12.9	13.0	16.1	15.1	5.6	14.4	15.2	15.7	16.1	18.1
Sp. Cond. (uS/cm)	0.445	0.705	0.754	0.190	0.450	0.194	0.839	0.161	0.456	3.330
Turbidity (NTU)	9	-10	999	280	16	305	58	82	113	342
DO (mg/l)	5.80	7.90	3.05	8.60		3.81	2.65	6.59	2.42	3.73
Purge Start Time	9:25	12:37	9:58	13:15	11:30	11:10	13:55	11:35	14:31	13:42
Purge End Time	9:32	12:57	10:03	13:25	11:50	11:20	14:02	12:35	14:33	13:52
Purge Method	2" Grundfos	2" Grundfos	2" Grundfos	2" Grundfos	CP	2" Grundfos	2" Grundfos	2" Grundfos	2" Grundfos	2" Grundfos
Volume Purged (gal)	23.0	28.0	20.0	24.0	27.5	13.0	12.0	25.0	4.0	30.0
Purge Rate (gpm)	3	2	3	2	2	2	2	2	2	2
Sample Date	5/13/98	5/13/98	5/14/98	5/13/98	3/18/97	5/13/98	5/13/98	5/14/98	5/13/98	5/14/98
Sample Time	9:40	15:50	10:07	15:35	8:20	15:17	16:05	14:45	16:16	14:29

CP: Centrifugal pump.

TABLE 2-5
Ground Water Sampling Field Parameters, May 1998
Photocircuits Corporation
Glen Cove, New York

Well ID	MW-8	MW-9	MW-10	MW-11	NC- Well
Site Location	31	31	31	31	31
Depth to Water (ft)	5.88	5.80	5.64	5.90	3.01
Total Depth (ft)	169.30	27.57	130.27	98.46	97.57
Well Diameter (in)	4	4	4	4	2
One Volume (gal)	106.00	14.10	81.00	106.00	1.20
3 Volumes (gal)	318.00	42.30	243.00	318.00	3.60
Pre-Purge					
pH	7.90	7.30	7.40	7.64	7.17
Temperature (°C)	18.0	14.1	18.0	17.3	16.5
Sp. Cond. (uS/cm)	0.220	0.425	0.340	0.235	0.515
Turbidity (NTU)	68	302	136	-8	999
DO (mg/l)	7.30	1.53	5.50	6.01	4.24
Post-Purge					
pH	7.50	6.83	7.10	6.81	7.45
Temperature (°C)	15.0	13.9	17.0	15.7	16.9
Sp. Cond. (uS/cm)	0.200	0.308	0.840	0.196	0.603
Turbidity (NTU)	96	999	136	-10	264
DO (mg/l)	8.80	1.97	3.00	7.32	4.83
Post-Sample					
pH	7.50	6.76	8.00	7.60	7.45
Temperature (°C)	15.0	13.3	16.0	15.0	16.6
Sp. Cond. (uS/cm)	0.220	0.347	0.340	0.220	0.560
Turbidity (NTU)	216	999	196	178	54
DO (mg/l)	9.40	3.17	6.20	7.00	2.80
Purge Start Time	11:53	12:51	10:35	9:05	10:52
Purge End Time	12:15	13:07	11:10	9:45	10:56
Purge Method	2" Grundfos	2" Grundfos	2" Grundfos	2" Grundfos	CP
Volume Purged (gal)	150.0	45.0	190.0	220.0	4.0
Purge Rate (gpm)	6	3	5	5	1
Sample Date	5/16/98	5/14/98	5/16/98	5/16/98	5/14/98
Sample Time	12:30	13:21	11:25	10:44	11:06

CP: Centrifugal pump.

Table 2-6
Analytical Summary for Volatile Organic Compounds
Monitoring Well Sampling Event May 13-15, 1998
Photocircuits Corporation
Glen Cove, New York

Sampling Location	NYSDEC	MW-1S	MW-2S	MW-3S	MW-3SD*	MW-4S
Sample ID	GW	61008	61001	61007	61011	61002
Sample Date	Criteria	5/14/98	5/13/98	5/14/98	5/14/98	5/13/98
Dilution Factor	(ppb)	1.0	1.0	1.0	1.0	2.0
VOLATILE COMPOUNDS (ppb)						
Chloromethane	NS	0.9 U	0.9 U	0.9 U	0.9 U	1.9 U
Bromomethane	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
VinylChloride	2	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	2.1 U
MethyleneChloride	5	1.0 U	1.0 U	1.0 U	1.0 U	2.1 U
Trichlorofluoromethane	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
1,1-Dichloroethene	5	0.6 U	0.6 U	0.6 U	0.6 U	1.1 U
1,1-Dichloroethane	5	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
trans-1,2-Dichloroethene	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
cis-1,2-Dichloroethene	NS	1.1	1.0 U	3.0	2.9	2.0 U
Chloroform	7	0.2 U	0.5	0.2 U	0.2 U	0.4 U
1,2-Dichloroethane	5	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,1,1-Trichloroethane	5	0.3	0.2 U	0.2 U	0.2 U	0.4 U
CarbonTetrachloride	5	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Bromodichloromethane	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,2-Dichloropropane	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U
cis-1,3-Dichloropropene	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.7 U
Trichloroethene	5	3.0	0.4 U	100	100	13
Dibromochloromethane	50	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
1,1,2-Trichloroethane	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.9 U
Benzene	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
trans-1,3-Dichloropropene	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
2-ChloroethylVinylEther	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U
Bromoform	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
Tetrachloroethene	5	71	1.3	9.1	9.7	330
1,1,2,2-Tetrachloroethane	5	0.3 U	0.3 U	0.3 U	0.3 U	0.7 U
Toluene	5	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Chlorobenzene	4	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U
Ethylbenzene	5	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Xylene(Total)	5	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
Total Confident Conc. VOAs (s)		75	1.8	112	113	343
Total Estimated Conc. VOA TICs (s)		0	0	0	0	0

NS: Not Specified
U: Analyte was not detected above the referenced reporting limit
*: Duplicate samples of MW-3S and MW-7

Table 2-6
Analytical Summary for Volatile Organic Compounds
Monitoring Well Sampling Event May 13-15, 1998
Photocircuits Corporation
Glen Cove, New York

Sampling Location	NYSDEC	MW-NC	MW-3	MW-4	MW-5	MW-6
Sample ID	GW	61005	61000	61003	61012	61004
Sample Date	Criteria	5/14/98	5/13/98	5/13/98	5/14/98	5/13/98
Dilution Factor	(ppb)	1.0	1.0	1.0	1.0	1.0
VOLATILE COMPOUNDS (ppb)						
Chloromethane	NS	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
Bromomethane	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
VinylChloride	2	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
MethyleneChloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	5	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
1,1-Dichloroethane	5	0.4	0.3 U	0.3 U	0.3 U	0.5
trans-1,2-Dichloroethene	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	NS	5.1	1.0 U	1.0 U	1.0 U	1.5
Chloroform	7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
CarbonTetrachloride	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NS	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NS	0.2	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Trichloroethene	5	2.4	0.4 U	0.4 U	0.9	0.4
Dibromochloromethane	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NS	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Benzene	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-ChloroethylVinylEther	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	NS	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	5	0.9	0.1 U	0.4	0.7	0.7
1,1,2,2-Tetrachloroethane	5	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Toluene	5	0.2 U	1.1	0.2 U	0.2 U	0.2 U
Chlorobenzene	4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	5	0.2 U	0.3	0.2 U	0.2 U	0.2 U
Xylene(Total)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Confident Conc. VOAs (s)		9.0	1.4	0.4	1.6	2.4
Total Estimated Conc. VOA TICs (s)		0	0	0	0	8.8

NS: Not Specified
U: Analyte was not detected above the referenced reporting limit

Table 2-6
Analytical Summary for Volatile Organic Compounds
Monitoring Well Sampling Event May 13-15, 1998
Photocircuits Corporation
Glen Cove, New York

Sampling Location	NYSDEC	MW-7	MW-7D*	MW-8	MW-9	MW-10
Sample ID	GW	61014	61010	61016	61009	61014
Sample Date	Criteria	5/14/98	5/14/98	5/15/98	5/14/98	5/15/98
Dilution Factor	(ppb)	25.0	25.0	1.0	1.0	1.0
VOLATILE COMPOUNDS (ppb)						
Chloromethane	NS	23 U	23 U	0.9 U	0.9 U	0.9 U
Bromomethane	NS	6.8 U	6.8 U	0.3 U	0.3 U	0.3 U
VinylChloride	2	18	16	0.4 U	1.1	1.9
Chloroethane	50	71	74	1.0 U	1.0 U	1.0 U
MethyleneChloride	5	26 U	26 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	NS	5.8 U	5.8 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	5	14 U	14 U	0.6 U	0.6 U	13
1,1-Dichloroethane	5	3200	3200	2.0	1.6	62
trans-1,2-Dichloroethene	NS	7.5 U	7.5 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	NS	25 U	25 U	6.3	2.0	46.0
Chloroform	7	5.0 U	5.0 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	5.5 U	5.5 U	0.2 U	0.2 U	1.4
1,1,1-Trichloroethane	5	12	12	0.2 U	0.2 U	3.1
CarbonTetrachloride	5	4.0 U	4.0 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NS	4.8 U	4.8 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NS	12 U	12 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	NS	8.2 U	8.2 U	0.3 U	0.3 U	0.3 U
Trichloroethene	5	50	55	5.7	0.4 U	14
Dibromochloromethane	50	5.8 U	5.8 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NS	11 U	11 U	0.4 U	0.4 U	0.4 U
Benzene	0.7	6.0 U	6.0 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NS	7.8 U	7.8 U	0.3 U	0.3 U	0.3 U
2-ChloroethylVinylEther	NS	12 U	12 U	0.5 U	0.5 U	0.5 U
Bromoform	NS	7.5 U	7.5 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	5	15	18	2.0	0.1	3.3
1,1,2,2-Tetrachloroethane	5	8.2 U	8.2 U	0.3 U	0.3 U	0.3 U
Toluene	5	26	27	0.2 U	0.2 U	0.2 U
Chlorobenzene	4	3.5 U	3.5 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	5	6.0 U	6.0 U	0.2 U	0.2 U	0.2 U
Xylene(Total)	5	25 U	25 U	1.0 U	1.0 U	1.0 U
Total Confident Conc. VOAs (s)		3392	3402	16	4.8	145
Total Estimated Conc. VOA TICs (s)		0	0	0	0	0

NS: Not Specified
U: Analyte was not detected above the referenced reporting limit
*: Duplicate samples of MW-3S and MW-7

Table 2-6
Analytical Summary for Volatile Organic Compounds
Monitoring Well Sampling Event May 13-15, 1998
Photocircuits Corporation
Glen Cove, New York

Sampling Location	NYSDEC	MW-11	FB051498	TB51298
Sample ID	GW	61015	61006	61017
Sample Date	Criteria	5/15/98	5/14/98	5/12/98
Dilution Factor	(ppb)	1.0	1.0	1.0
VOLATILE COMPOUNDS (ppb)				
Chloromethane	NS	0.9 U	0.9 U	0.9 U
Bromomethane	NS	0.3 U	0.3 U	0.3 U
VinylChloride	2	0.4 U	0.4 U	0.4 U
Chloroethane	50	1.0 U	1.0 U	1.0 U
MethyleneChloride	5	1.0 U	1.4	1.0 U
Trichlorofluoromethane	NS	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	5	0.9	0.6 U	0.6 U
1,1-Dichloroethane	5	2.6	0.3 U	0.3 U
trans-1,2-Dichloroethene	NS	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	NS	21.0	1.0 U	1.0 U
Chloroform	7	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	5	0.2	0.2 U	0.2 U
CarbonTetrachloride	5	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NS	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NS	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	NS	0.3 U	0.3 U	0.3 U
Trichloroethene	5	16	0.4 U	0.4 U
Dibromochloromethane	50	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NS	0.4 U	0.4 U	0.4 U
Benzene	0.7	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NS	0.3 U	0.3 U	0.3 U
2-ChloroethylVinylEther	NS	0.5 U	0.5 U	0.5 U
Bromoform	NS	0.3 U	0.3 U	0.3 U
Tetrachloroethene	5	1.5	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	5	0.3 U	0.3 U	0.3 U
Toluene	5	0.2 U	0.7	0.2 U
Chlorobenzene	4	0.1 U	0.1 U	0.1 U
Ethylbenzene	5	0.2 U	0.2 U	0.2 U
Xylene(Total)	5	1.0 U	1.0 U	1.0 U
Total Confident Conc. VOAs (s)		42	2.1	0
Total Estimated Conc. VOA TICs (s)		0	4.7	0

NS: Not Specified
U: Analyte was not detected above the referenced reporting limit

Table 3-1
Summary of Falling/Rising Head Slug Testing Data and Results
Photocircuits Corp.
Glen Cove, New York

MONITORING WELL	MW-1S		MW-2S		MW-3S		MW-4S		MW-3		MW-4		MW-5	
	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING
INPUT PARAMETERS *														
Ho (ft)	NQ	0.647	1.227	2.198	NQ	0.594	NA	1.736	1.416	1.934	2.42	2.561	3.116	3.86
Rc (ft)		0.1667	0.1667	0.1667		0.1667		0.1667	0.08333	0.08333	0.08333	0.08333	0.08333	0.08333
Rw (ft)		0.3333	0.3333	0.3333		0.3333		0.3333	0.25	0.25	0.25	0.25	0.25	0.25
D (ft)		190.9	193.1	193.1		191.7		191.5	194.9	194.9	196.8	196.8	196.9	196.9
l (ft)		10	10	10		10		10	10	10	10	10	10	10
H (ft)		11.45	13.75	13.75		10.38		6.5	13.83	13.83	20.46	20.46	96.22	96.22
COMPUTED PARAMETERS (Bouwer-Rice method)														
K (ft/min)	NQ	1.060E-01	1.259E-02	1.938E-03	NQ	6.266E-03	NA	2.080E-02	1.767E-03	1.262E-03	8.069E-04	6.859E-04	3.723E-05	8.042E-05
K (ft/day)		1.526E+02	1.813E+01	2.791E+00		9.023E+00		2.995E+01	2.544E+00	1.817E+00	1.162E+00	9.877E-01	5.361E-02	1.158E-01
K (cm/s)		5.300E-02	6.295E-03	9.690E-04		3.133E-03		1.040E-02	8.835E-04	6.310E-04	4.035E-04	3.430E-04	1.862E-05	4.021E-05

NA: Falling head slug test was not appropriate because water level was within screened zone
NQ Data measured during test were not of suitable quality to provide a useable analytical result
Ho: Initial drawdown in test well (Note: Yo is recalculated by program based on linearity of graph)
Rc: Internal radius of test well casing
Rw: Effective radius of test well
D: Saturated aquifer thickness under static conditions
l: Length of test well screen
H: Height of water column in test well under static conditions
K: Hydraulic conductivity
* Analytical Program: AQTESOLV, Duffield and Rumbaugh (1989)

Table 3-1
Summary of Falling/Rising Head Slug Testing Data and Results
Photocircuits Corp.
Glen Cove, New York

MONITORING WELL	MW-6		MW-7		MW-8		MW-9		MW-10		MW-11		NC Well	
	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING	FALLING	RISING
INPUT PARAMETERS *														
Ho (ft)	NA	2.023	2.639	NQ	1.496	0.044	3.728	2.697	3.853	4.23	NQ	1.442	3.136	4.393
Rc (ft)		0.08333	0.1667		0.1667	0.1667	0.1667	0.1667	0.1667	0.1667		0.1667	0.08333	0.08333
Rw (ft)		0.25	0.3333		0.3333	0.3333	0.3333	0.3333	0.3333	0.3333		0.3333	0.25	0.25
D (ft)		196.4	194.8		194.1	194.1	193.4	193.4	194.3	194.3		194.1	196	196
l (ft)		10	15.33		15.33	15.33	15.33	15.33	15.33	15.33		15	5	5
H (ft)		9.85	18.12		163.4	163.4	20.92	20.92	124.57	124.57		164.13	6.39	6.39
COMPUTED PARAMETERS (Bouwer-Rice method)														
K (ft/min)	NA	8.329E-04	6.572E-03	NQ	1.677E-02	1.566E-02	3.891E-04	1.745E-03	6.849E-03	5.866E-03	NQ	6.587E-02	5.522E-04	5.402E-04
K (ft/day)		1.199E+00	9.464E+00		2.415E+01	2.255E+01	5.603E-01	2.513E+00	9.863E+00	8.447E+00		9.485E+01	7.952E-01	7.779E-01
K (cm/s)		4.165E-04	3.286E-03		8.385E-03	7.830E-03	1.946E-04	8.725E-04	3.425E-03	2.933E-03		3.294E-02	2.761E-04	2.701E-04

NA: Falling head slug test was not appropriate because water level was within screened zone
NQ Data measured during test were not of suitable quality to provide a useable analytical result
Ho: Initial drawdown in test well (Note: Yo is recalculated by program based on linearity of graph)
Rc: Internal radius of test well casing
Rw: Effective radius of test well
D: Saturated aquifer thickness under static conditions
l: Length of test well screen
H: Height of water column in test well under static conditions
K: Hydraulic conductivity
* Analytical Program: AQTESOLV, Duffield and Rumbaugh (1989)

Appendix A

Soil Borings Logs/Well Log

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-GW-1
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/8/98	TOTAL DEPTH OF BOREHOLE: 28 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 22	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located to the south of building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1	3.0	0	Asphalt fall in and fill, coarse gravel and pebbles	
2				
3				
4				
5	3.0	0	Asphalt fall in	
6				
7				
8			Natural materials	
9	3.8	0	Back fill material Fine to coarse tan to med brwn SAND, w/ little to fine gravel and med gravel	
10				
11				
12				
13	3.8	0	Fine to coarse tan to med brwn SAND, w/ little to fine gravel and med gravel, trace pebbles and cobble	
14				
15				
16				
17	4.0	1.9	Fine to coarse tan to med brwn SAND, w/ little to fine gravel and med gravel, trace pebbles and cobble	
18				
19			Fine to med SAND with silt and trace clay	
20			Silty CLAY with a 2" lens of fine to medium sand with silt	
21	2.0	1.2	Damp Silty CLAY	
22			WET SAND with trace gravel	
23			End of boring at 28' b.g.	
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-GW-2
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/10/98	TOTAL DEPTH OF BOREHOLE: 22 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER: 22 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1	2.5	332	Dark brwn Silty SAND with fine to medium gravel and trace cobble	
2				
3			Firm Sandy CLAY	
4				
5	3.0	227	Very fine light brwn/ tan SAND w/ gravel and pebbles	
6				
7				
8				
9	3.0	370	Dark brwn Silty SAND	
10			Fine to coarse beach like SAND	
11				
12				
13	1.0	236	Light brwn/ tan Silty SAND with coarse materials	
14				
15	1.4	168	Light brwn/ tan Silty SAND with coarse materials 2" lens of sand and clay, moist	
16				
17	2.0	189	Light brwn/ tan Silty SAND with coarse materials	
18				
19	1.7	492	Light brwn/ tan fine SAND with trace clay	
20				
21	1.5	329	Damp, Light brwn/ tan fine SAND with trace clay	
22				
23			End of boring at 22' b.g.	
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-GW-3
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/10/98	TOTAL DEPTH OF BOREHOLE: 22 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 22 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1–4	3.0	176		
5–8	3.5	229	Very dark brwn fine silty SAND w/ coarse materials and pebbles Light brwn/ tan finr SAND w/ coarse materials, some gravel	
9–12	4.0		USED AS GEOTECHNICAL SAMPLE	
13–16	1.0 1.0	180 60	Fine light brwn SAND coarse Fine light brwn SAND coarse	
17–20	2.0 2	412 1036	Fine light brwn SAND coarse Dark brwn brittle, Silty SAND with clay little pebbles	
21–22	1.0	177	Light brwn/ tan fine to coarse SAND, moist	
23–24			End of boring at 22' b.g.	

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-GW-4
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/10/98	TOTAL DEPTH OF BOREHOLE: 8 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 8 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1	2.5	0	Asphalt fall in Very coarse medium brown SAND with medium and large gravel	
2				
3				
4				
5	4.0	0	Very coarse medium brown SAND with medium and large gravel	
6				
7				
8				
9			End of boring at 8' b.g.	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-GW-5
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/10/98	TOTAL DEPTH OF BOREHOLE: 12 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 12 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1–4	3.0	0.4	Asphalt fall in, fine silty SAND with coarse materials	
5–8	4.0	0.2	Fine silty SAND with coarse materials, pieces of large rock	
9–12	3.5	0	Fine silty SAND with coarse materials, pieces of large rock Very coarse SAND with pebbles, rock, wet.	
13–24			End of boring at 12' b.g.	

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-GW-6
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/10/98	TOTAL DEPTH OF BOREHOLE: 12 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER: 12 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1	2.0	0	Asphalt fall in, medium brown silty SAND with coarse material and pebbles	
2				
3				
4				
5	3.0	0	Light brown/ tan fine to coarse SAND with gravel	
6				
7				
8				
9	4.0	0	Light brown/ tan fine to coarse SAND with gravel	
10				
11			Coarse SAND, wet	
12				
13			End of boring at 12' b.g.	
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-GW-7
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/10/98	TOTAL DEPTH OF BOREHOLE: 12 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 12 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1	1.5	0	Asphalt fall in Medium brown coarse Sand with medium to fine gravel	
5	1.5	0	Medium brown coarse Sand with medium to fine gravel	
9	3.0	0	Coarse SAND with gravel and cobble	
13			End of boring at 12' b.g.	

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-SB-31
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH (N)
COMPLETION DATE: 4/9/98	TOTAL DEPTH OF BOREHOLE: 24 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 24 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1-4	2.0	1904	Concrete fall in,Very dark brwn Silty SAND	45A-SB-32-(0-4):
5-8	3.0	708	Concrete fall in,Very dark brwn Silty SAND Light brwn tan soft SAND	45A-SB-33-(4-8):
9-12	4.0	212	Light brwn/ tansoft SAND with pebbles and cobble	
13-16	3.0	270	Soft light brwn/ tan SAND Silty medium brwn CLAY, moist Medium brwn SAND w/ trace clay	
17-18	1.5	115	Fine light brwn SAND w/ trace clay	
19-20	1.5	249	Fine light brwn SAND w/ trace clay	
21-22	1.0	110	Fine light brwn SAND w/ trace clay, damp	
23-24	1.0	105	Fine light brwn SAND w/ trace clay, damp	

End of boring at 24' b.g.

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 45A-SB-32
PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH (N)
COMPLETION DATE: 4/9/98	TOTAL DEPTH OF BOREHOLE: 24 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 22 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1	2.5	1153	Dark brwn Silty SAND with little gravel and pebbles	45A-SB-32-(0-4):
2			Soft light brwn/ tan SAND with gravel and pebbles	
3				
4				
5	3.0	577	Concrete fall in Dark brwn Silty SAND with little gravel and pebbles	45A-SB-33-(4-8):
6				
7			Soft light brwn/ tan SAND and PEBBLES	
8				
9	4.0	N/A	Dark brwn Silty SAND with little gravel and pebbles	
10			Soft light brwn/ tan SAND and PEBBLES	
11				
12				
13	3.0	263	Soft light brwn/ tan SAND	
14			Silty SAND with trace clay, 4" lens stiff sand/ clay	
15			Soft tan SAND	
16				
17	1.0	728	Medium brwn SILTY CLAY, sandy silt w/ trace clay at bottom	
18				
19	2.0	514	Soft light brwn fine SAND	
20				
21	1.0	270	Damp fine light brown SAND	
22				
23	1.0	317	Wet fine light brown SAND	
24				

End of boring at 24' b.g.

SOIL BORING LOG

McLaren Hart	PROJECT NAME: Photocircuits	PROJECT NO.: 12080	Boring No: 45A-SB-33
	PROJECT LOCATION: 45A Seacliff Avenue, Glen Cove Long Island		LOCATION SKETCH ↑ N
COMPLETION DATE: 4/8/98	TOTAL DEPTH OF BOREHOLE: 28 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: Zebra/ Matt	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 22 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located inside building 7.			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface	
1	3.0	519	Concrete fall in, fine SAND with fine to med gravel, med brwn/ tan 4" lens near bottom with pieces of black sand with trace clay	45A-SB-33-(0-4):
5	3.0	217	Back fill material Med brwn to tan fine to coarse SAND, with med gravel and some pebbles and cobble	45A-SB-33-(4-8):
9	4.0	405	Back fill material and concrete fall in Med brwn to tan fine SAND	
13	3.0	1579	Fine to coarse tan to med brwn SAND	45A-SB-33-(12-16):
15			Silty SAND with trace clay	
17	3.0	197	Fine tan SAND soft, trace clay	45A-SB-33-(16-20):
21	2.0	229	Damp fine tan SAND	
23	2.0	297	WET fine tan SAND	

End of boring at 28' b.g.

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 31-SB-1
PROJECT LOCATION: 31 Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH (N)
COMPLETION DATE: 4/20/98	TOTAL DEPTH OF BOREHOLE: 8 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: McLaren/ Hart/ J. Lute	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER: 8 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1	3.0	0.7	Asphalt fall in, Black/ dark brown fine SAND with coarse material	
2			Medium brown fine SAND with coarse material, pebbles trace cobble	
3			Coarse damp fine SAND	
4			Silty SAND with little black clay and cobble	
5	3.0	3.7	Wet, very coarse black SAND with pebbles and cobble	
6				
7				
8				
9			End of boring at 8' b.g.	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 31-SB-2
PROJECT LOCATION: 31 Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/20/98	TOTAL DEPTH OF BOREHOLE: 8 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: McLaren/ Hart/ J. Lute	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 8 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1	2.0	24.7	Light brown fine SAND with some coarse material and pebbles 2" lens of white quartz rock	
2			Black very coarse SAND with pebbles	
3				
4				
5	3.0	18.9	Wet, coarse material small pebbles very little sand	
6			Black very coarse sand with pebbles and cobble mixed throughout	
7				
8				
9			End of boring at 8' b.g.	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 31-SB-3
PROJECT LOCATION: 31 Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/20/98	TOTAL DEPTH OF BOREHOLE: 12 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: McLaren/ Hart/ J. Lute	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER: 8 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1	3.0	11.7	Asphalt and white coarse SAND mixed with cobble	
2			Black Silty SAND and CLAY, pebbles	
3			Damp fine light brown tan SAND with trace clay	
4				
5	3.5	13	Fine to coarse light brown SAND, trace gravel damp	
6				
7				
8				
9	4.0	0	Wet, very coarse to fine light brown tan SAND with pebbles, gravel	
10				
11				
12				
13			End of boring at 12' b.g.	
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 31-SB-4
PROJECT LOCATION: 31 Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/20/98	TOTAL DEPTH OF BOREHOLE: 12 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: McLaren/ Hart/ J. Lute	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 8 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1	2.0	14.3	Very dark brown silty SAND, moist	
2			Very dark brown silty SAND with pebbles and cobble, moist	
3			Fine to coarse light brown/ tan SAND with pebbles and other coarse material	
4				
5	4.0	11.1	Very firm gray/ tan SANDY CLAY little coarse material	
6				
7			Red/ medium brown silty SAND, little clay	
8				
9	2.0	11.1	Wet, COBBLE Red to medium brown fine silty SAND some pebbles and cobble	
10				
11			Medium brown coarse to fine SAND with cobble and pebbles	
12				
13			End of boring at 12' b.g.	
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 31-SB-5
PROJECT LOCATION: 31 Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH (N)
COMPLETION DATE: 4/20/98	TOTAL DEPTH OF BOREHOLE: 12 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: McLaren/ Hart/ J. Lute	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER: 8 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1	3.0	12.4	Red to light brown SAND with cobble	
2				
3			Tan to light brown silty SAND with cobble and pebbles	
4				
5	3.0	18.3	Very coarse SAND with coarse materials	
6				
7			Red to brown on outside- inside light grey firm CLAY and SAND	
8				
9			End of boring at 8' b.g.	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 31-SB-6
PROJECT LOCATION: 31 Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/20/98	TOTAL DEPTH OF BOREHOLE: 12 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: McLaren/ Hart/ J. Lute	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER: 8 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1–4	2.5	0	Dark Brown SILT with cobbles and pebbles.	
5–8	3.0	0	Dark Brown SILT with cobbles and pebbles. Coarse SAND (like beach sand) with coarse materials.	
9–12			Coarse SAND (like beach sand) with coarse materials, wet	
13–24			End of boring at 12' b.g.	

SOIL BORING LOG

McLaren Hart

PROJECT NAME: Photocircuits	PROJECT NO.: 12080		Boring No: 31-SB-7
PROJECT LOCATION: 31 Seacliff Avenue, Glen Cove Long Island			LOCATION SKETCH ↑ N
COMPLETION DATE: 4/20/98	TOTAL DEPTH OF BOREHOLE: 8 Feet	MONITORING DEVICE: OVM (PID)	GEOLOGIST / OFFICE: J. Gagnon/Warren
DRILLING CONTRACTOR / DRILLER: McLaren/ Hart/ J. Lute	DRILLING EQUIPMENT: Geoprobe	DRILLING METHOD / BIT: Hollow Stem Push Rod	
SAMPLING METHOD: Acetate-Lined Macrocore	DEPTH TO GROUNDWATER 6 Feet	GROUND SURFACE ELEVATION: NA	WELL INSTALLED? No
MEMO: Boring located			

DEPTH (Feet)	RECOVERY (Feet)	OVM (PPM)	BURMEISTER SYSTEM SOIL DESCRIPTION Color, Texture, Moisture, Etc.	SAMPLES
0			Ground Surface: Asphalt	
1	3.0	2.1	Black silty SAND and CLAY with pebbles	
2				
3			Damp, coarse SAND with coarse materials	
4				
5	4.0	0	USE AS A GEOTECHNICAL SAMPLE	
6				
7				
8				
9			End of boring at 8' b.g.	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Summit DRILLING CO., INC.
ENVIRONMENTAL SPECIALISTS

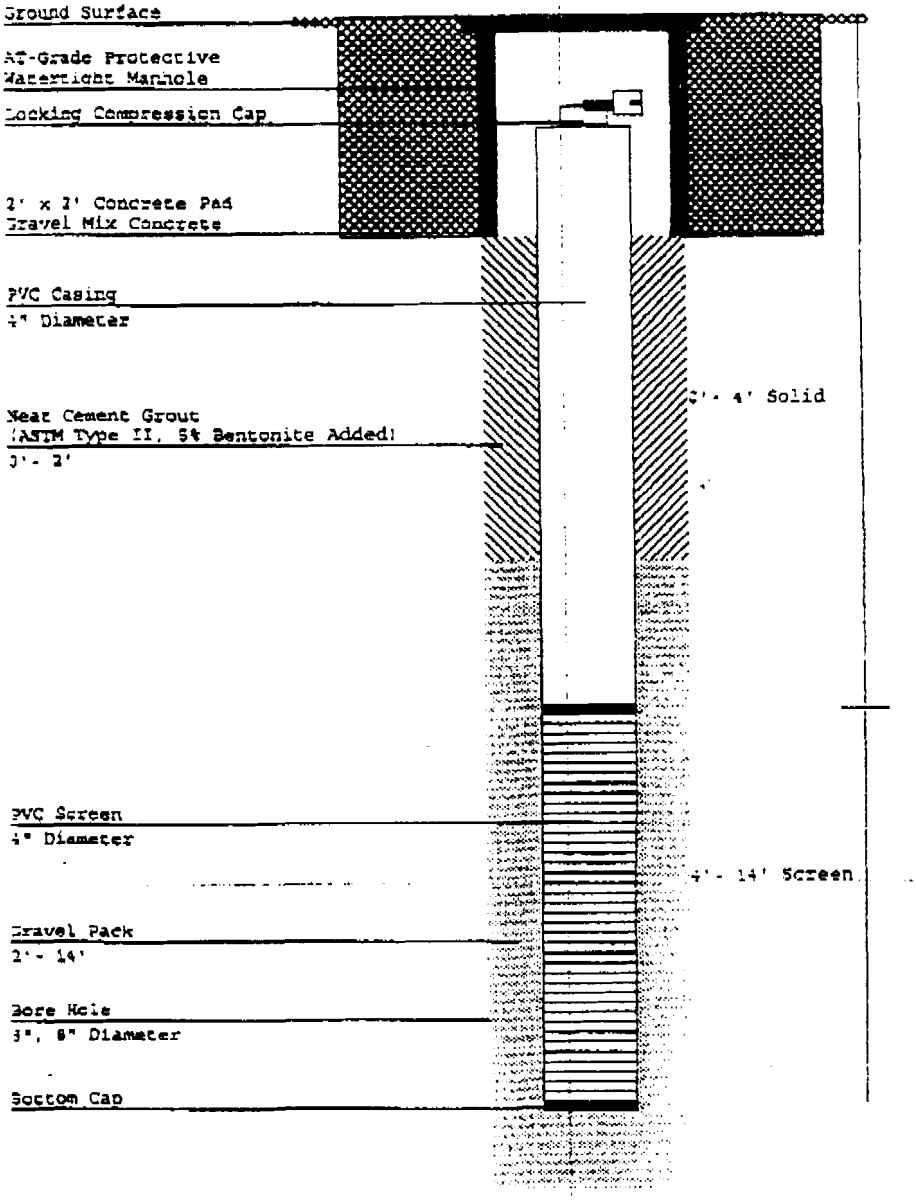
Central Jersey Industrial Park
Chimney Rock Road, Bldg. 9W
Bound Brook, NJ 08805
Telephone: (908) 722-4266
Toll Free: (800) 242-6648
FAX: (732) 356-1009

WELL LOG

WELL: MW8 DATE DRILLED: 04/22/1998 COORD #1: PERMIT #1:
COORD #2: PERMIT #2: COUNTY:
SITE: Photocircuits Corp, 31 Sea Cliff Avenue, , Glen Cove, NY XSTREET:
OWNER: Photocircuits Corp, 31 Sea Cliff Avenue, , Glen Cove, NY USE: Monitor

INNER CASING:	PVC	OUTER CASING:		SCREEN TYPE 1: PVC	DRILLING METHOD: Air Rotary
DIAMETER:	4"	DIAMETER:		SCREEN TYPE 2:	SAMPLING METHOD:
LENGTH:	4'	LENGTH:		DIAMETER: 4"	HOLE DIA: 8", 8"
				LENGTH 1: 10'	TOTAL DEPTH: 14'
SET WELL:	14'	GAL PER MIN: 3-5		LENGTH 2:	
GRAVEL PK SZ:	Morie #2	STAT H2O LVL: 9'		SLOT SIZE: .020	
DRILLER:	Carmine DeCorso	DEVELOPMENT METHOD: Pump		CASING SEAL: Portland	
SURFACE COMPLETION: M		DEVELOPMENT TIME: 1/4 Hour		OPEN HOLE:	

DEPTH BELOW SURFACE FROM - TO	BLOWS PER 6" ON SAMPLER	REMARKS / SOILS IDENTIFICATION
0' - 1'		Asphalt & road stone.
1' - 14'		Brown & tan m/f sand trace m/f grave trace silt.



Appendix B

To be submitted separately

Appendix C

Geotechnical Testing Results

UNDISTURBED SAMPLE LOG

Boring No.:

Job No.: 1434-0014-03

Sample No. & Depth: 45A-GW-1 12'-16'

Project: McLAREN HART (GLEN COVE, NY)

Recovery: 44"

Date Tested: 4/23/98

Sample Method: GEOPROBE

Tested By: LL

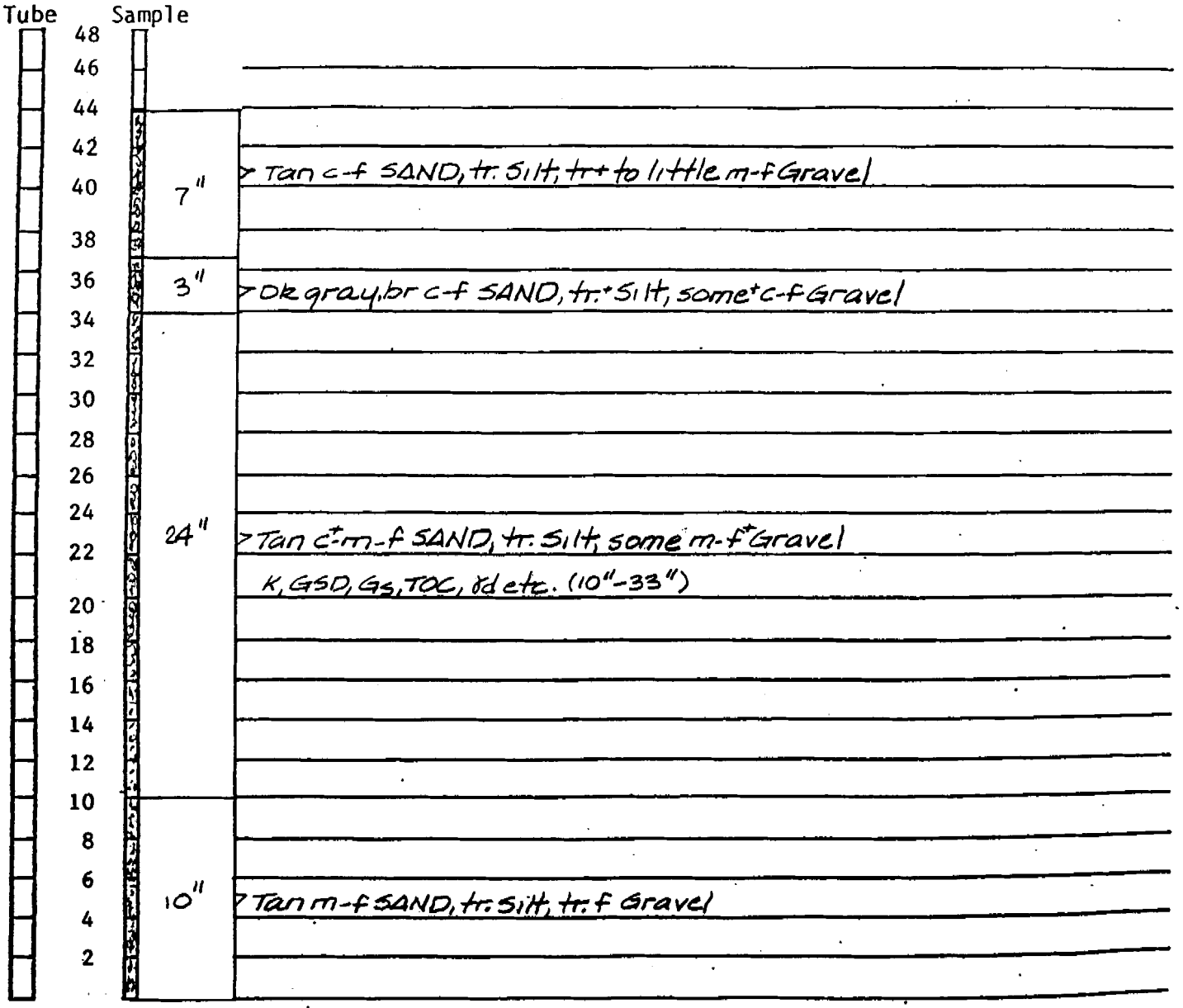
Date of Sample: 4/8/98

Checked By: DA

Testing Notes: SEE BELOW

~ BURMISTER ~

Depth Length (inches) Soil Classification



Remarks: SAVED BOT. 9"

UNDISTURBED SAMPLE LOG

Boring No.:

Job No.: 1434-0014-03

Sample No. & Depth: 45A-GW-4 depth ?

Project: McLAREN HART (GLEN COVE, NY)

Recovery: 45"

Date Tested: 4/24/98

Sample Method: GEOPROBE

Tested By: LL

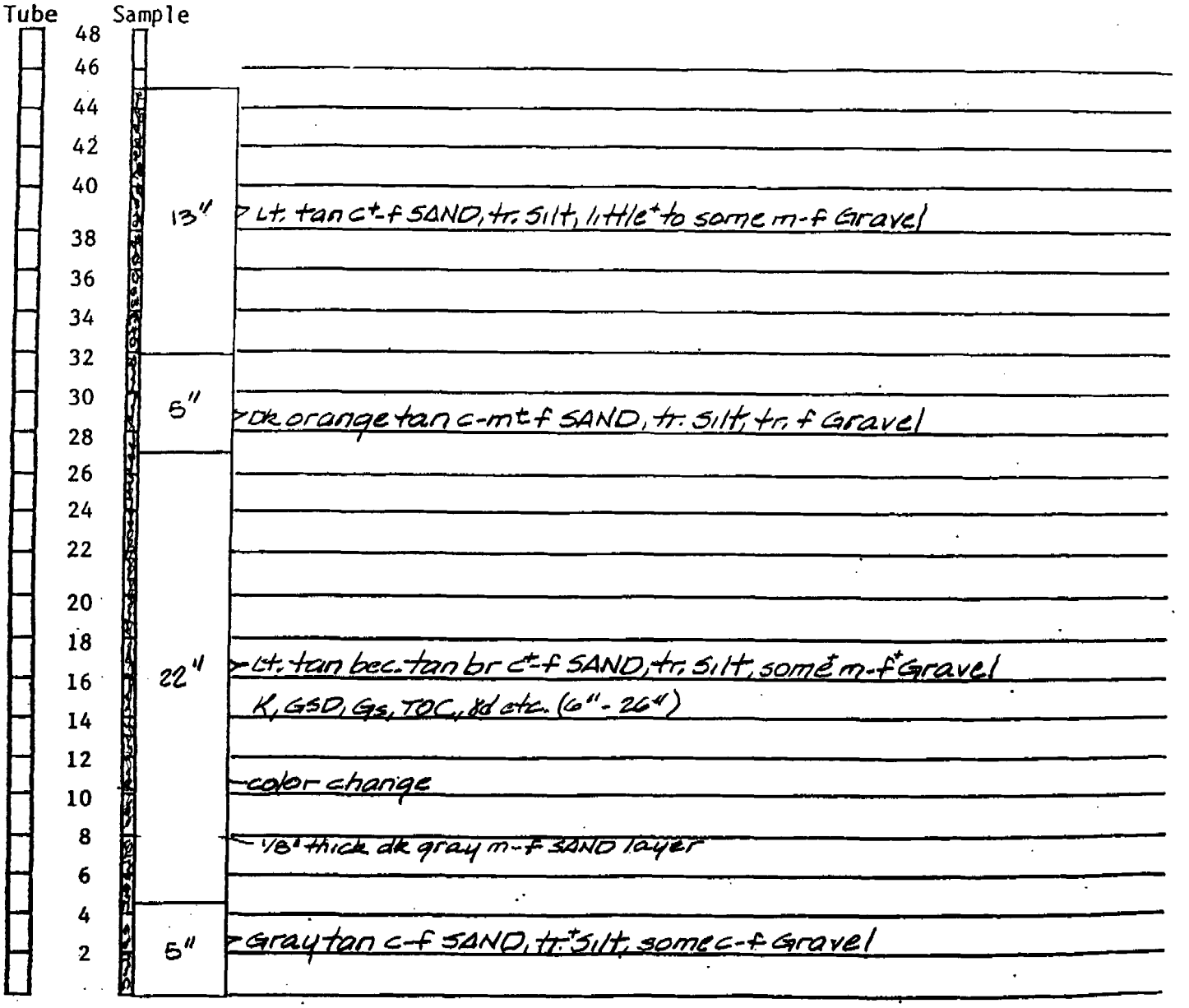
Date of Sample: 4/10/98

Checked By: DA

Testing Notes: SEE BELOW

~BURMISTER~

Depth Length (inches) Soil Classification



Remarks: SAVED 11½" OF TOP 13"

UNDISTURBED SAMPLE LOG

Boring No.:

Job No.: 1434-0014-03

Sample No. & Depth: 454-32 8'-12'

Project: McLAREN HART (GLEN COVE, NY)

Recovery: 42"

Date Tested: 4/24/98

Sample Method: GEOPROBE

Tested By: LL

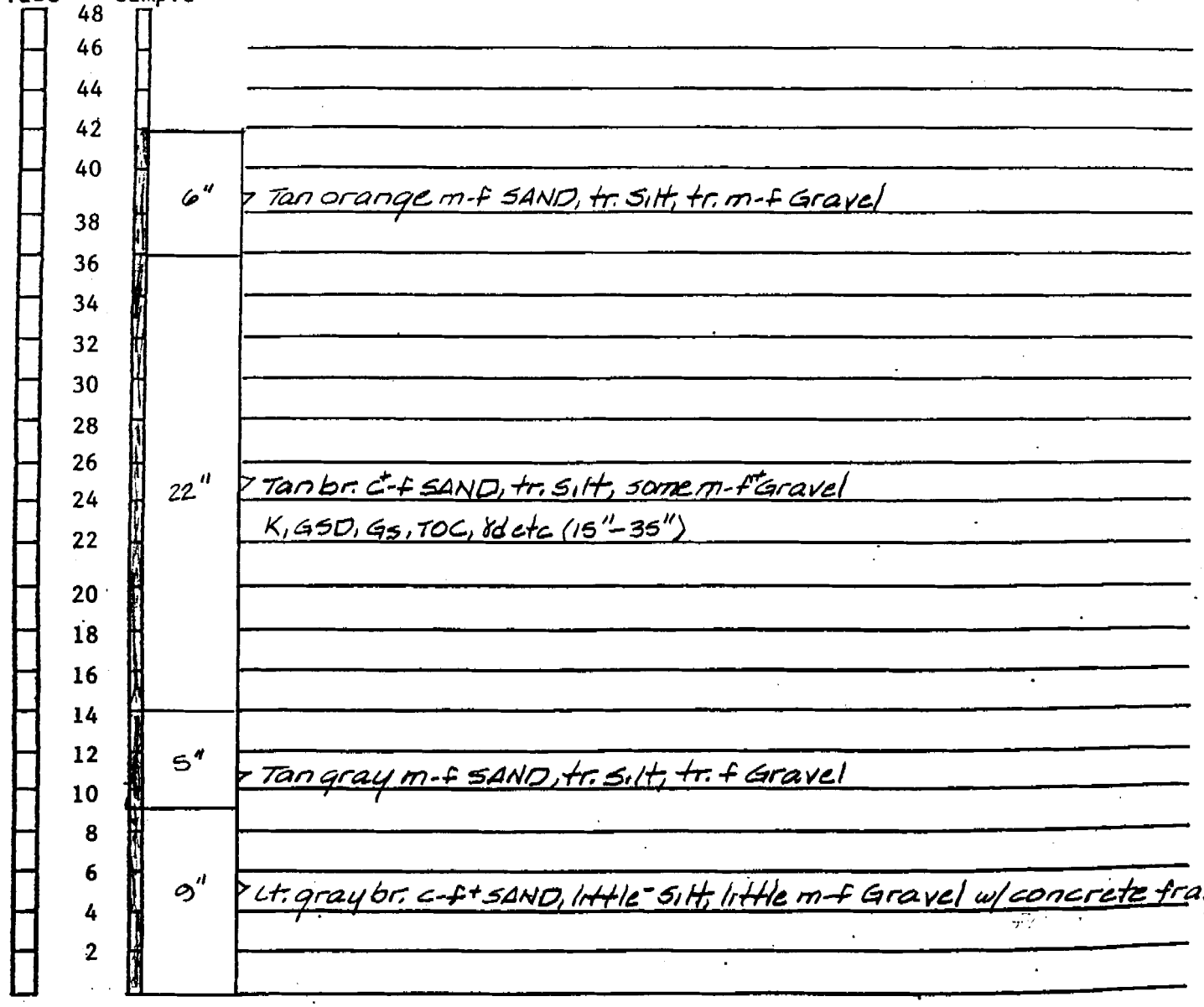
Date of Sample: 4/9/98

Checked By: DA

Testing Notes: SEE BELOW

~BURMISTER~

Depth Length (inches) Soil Classification



Remarks: a. JAR SAMPLE SAVED OF PORTION FROM 0"-9"

b. CONTENTS OF TUBE LOOSE 0"-42"

UNDISTURBED SAMPLE LOG

Boring No.:

Job No.: 1434-0014-03

Sample No. & Depth: 45A-GW-3 8'-12'

Project: McLAREN HART (GLEN COVE, N.Y.)

Recovery: 44"

Date Tested: 4/24/98

Sample Method: GEOPROBE

Tested By: LL

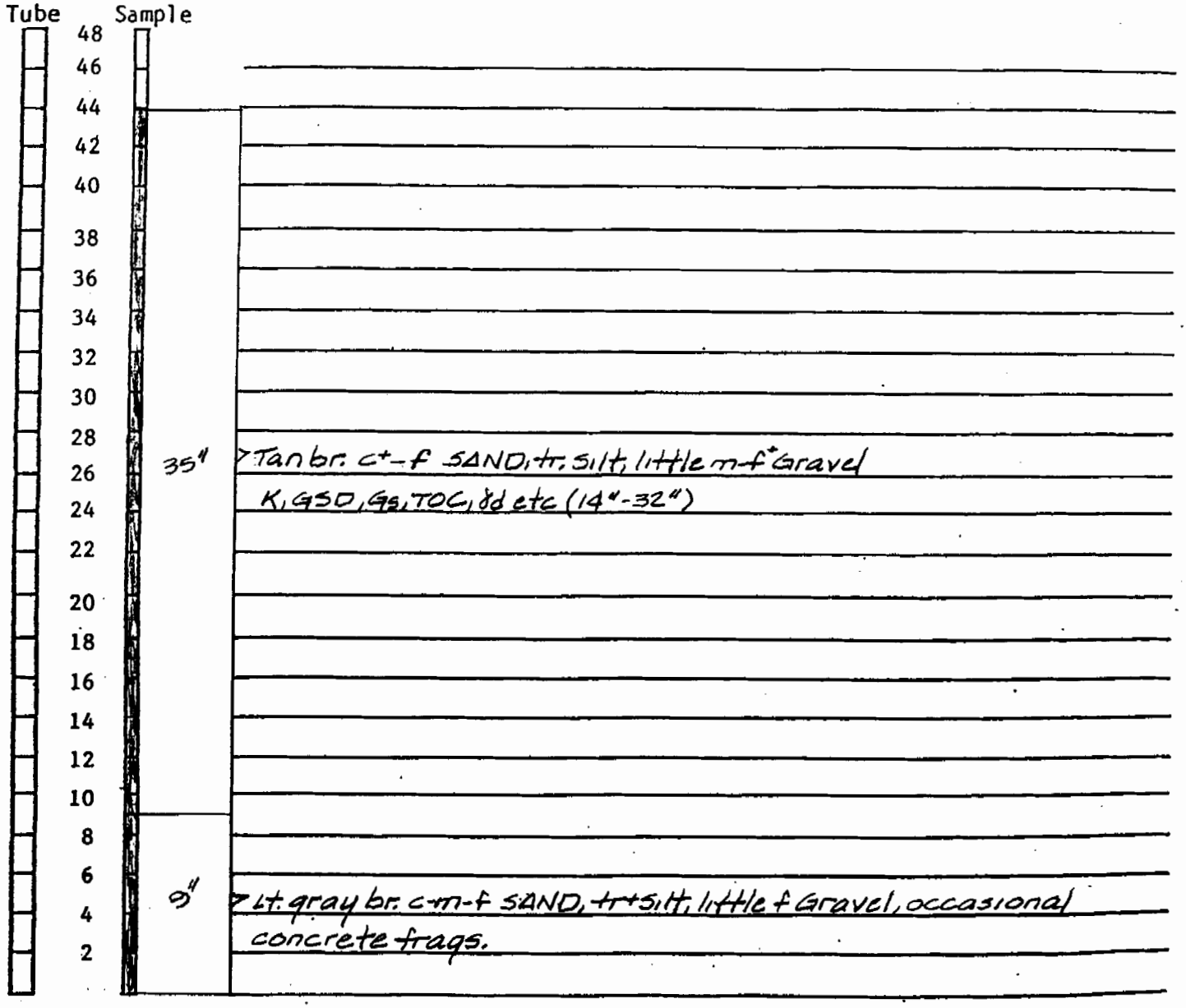
Date of Sample: 4/10/98

Checked By: DA

Testing Notes: SEE BELOW

~BURMISTER~

Depth Length (inches) Soil Classification



Remarks: @ BOTTOM 9" LOOSE

⑤ SAVED TOP 9" (33"-42")

UNDISTURBED SAMPLE LOG

Boring No.:

Job No.: 1434-0014-03

Sample No. & Depth: 31-SB-6 4'-8'

Project: McLAREN HART (GLEN COVE, NY)

Recovery: 38"

Date Tested: 4/27/98

Sample Method: GEOPROBE

Tested By: LL

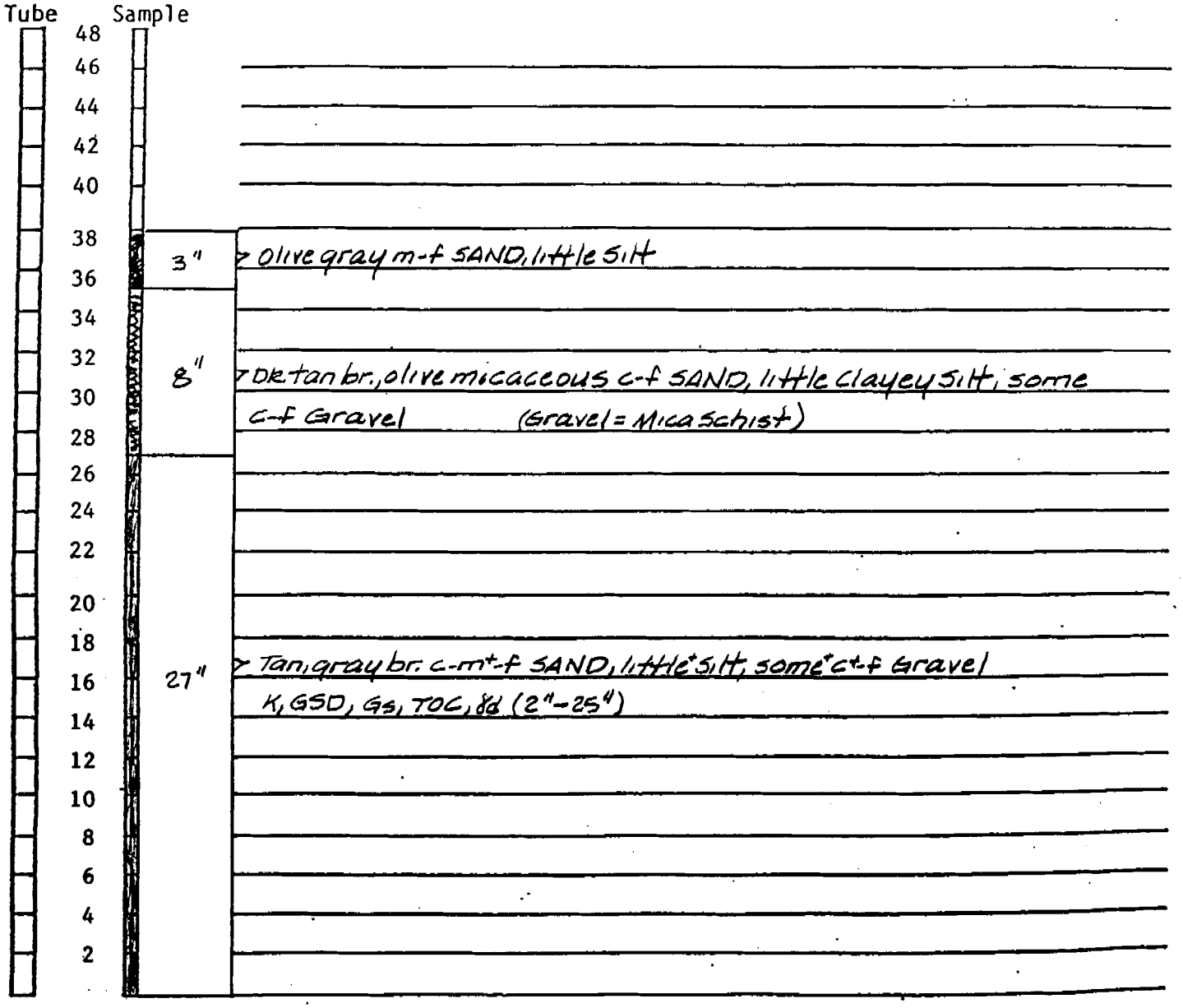
Date of Sample: 4/20/98

Checked By: DA

Testing Notes: SEE BELOW

~BURMISTER~

Depth Length (inches) Soil Classification



Remarks: JAR SAMPLE SAVED OF PORTION FROM 27"-35"

UNDISTURBED SAMPLE LOG

Boring No.:

Job No.: 1434-0014-03

Sample No. & Depth: 31-SB-1 0'-4'

Project: McLAREN HART (GLEN COVE, NY)

Recovery: 28"

Date Tested: 4/27/98

Sample Method: GEOPROBE

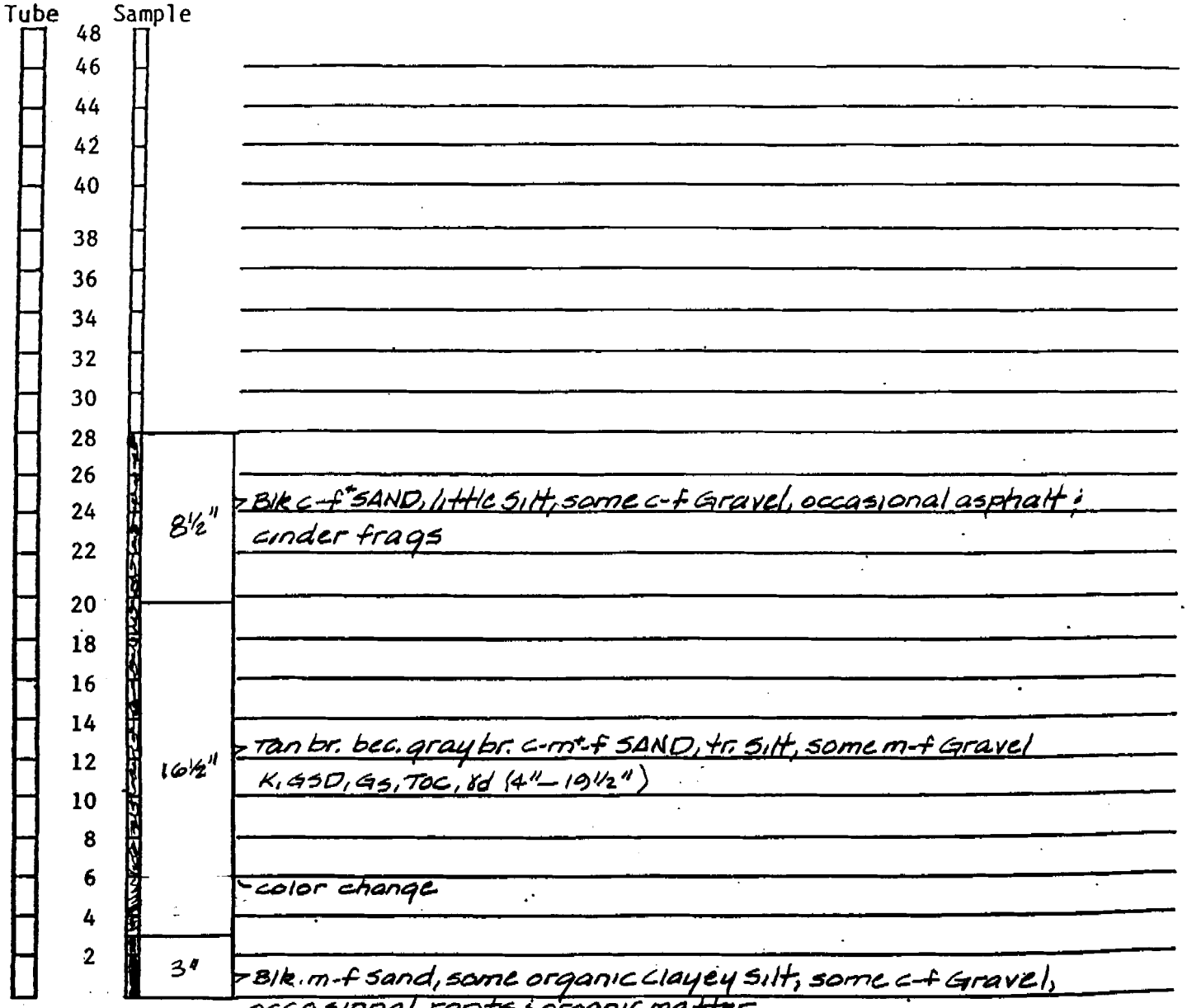
Tested By: LL

Date of Sample: 4/20/98

Checked By: DA

Testing Notes: SEE BELOW

Depth Length (inches) — BURMISTER — Soil Classification



Remarks:

① TOP 8½" LOOSE

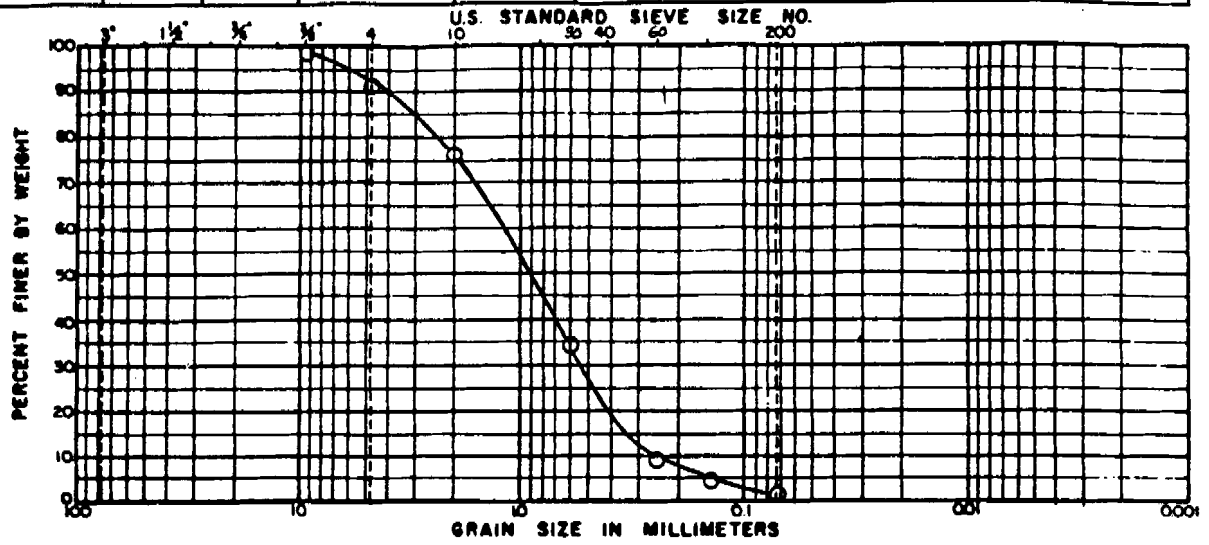
② JAR SAMPLE SAVED OF BOT. 3"

BURMISTER SOIL CLASSIFICATION SYSTEM

5/15/98

GRAIN-SIZE DISTRIBUTION

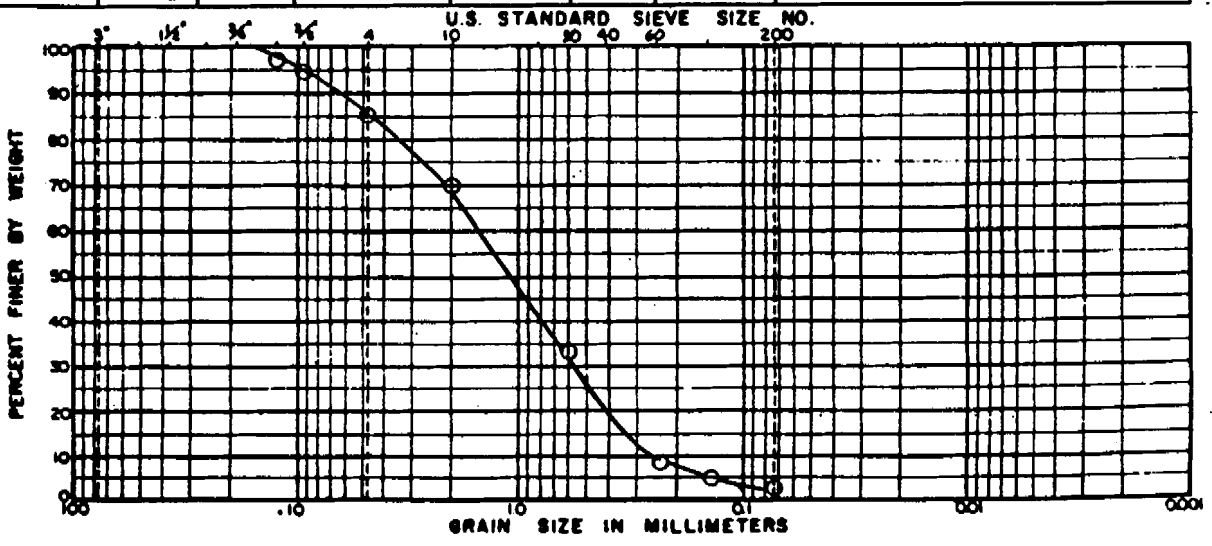
COBBLES	GRAVEL			SAND			SILT OR CLAY
	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
45A-6W-1		12'-16'		Tan c+f SAND, tr.-Silt, some m-f+Gravel	4.8	~	~

PROJ. NO. ~ 1434-0014-03 ~

COBBLES	GRAVEL			SAND			SILT OR CLAY
	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	



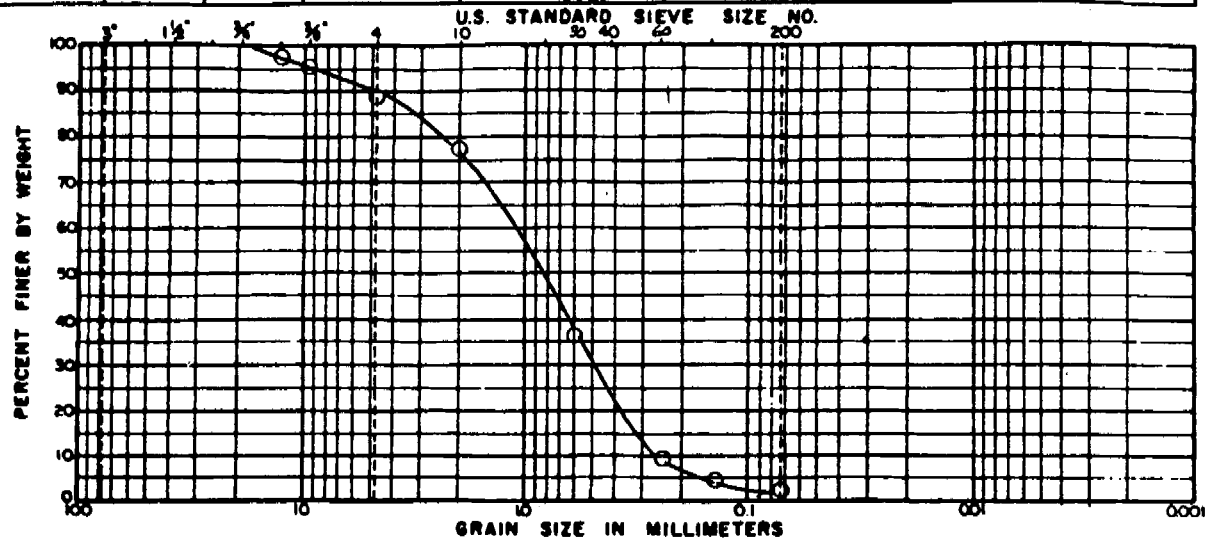
BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
45A-6W-4		?		Lt. tan c+-f SAND, tr.-Silt, some+ m-f+Gravel	5.6	~	~

BURMISTER SOIL CLASSIFICATION SYSTEM

5/15/98

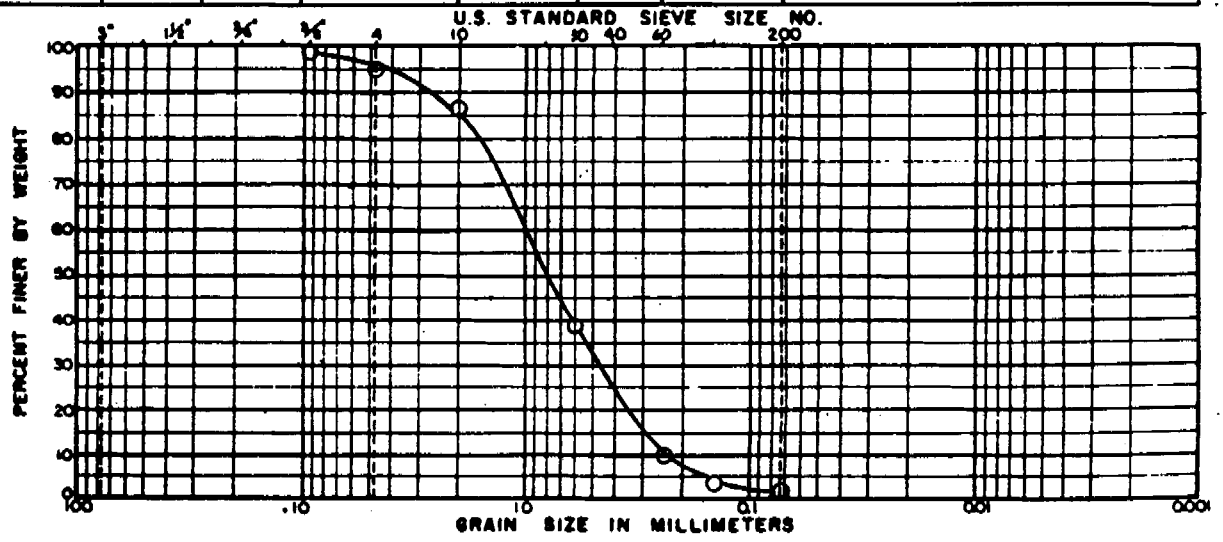
GRAIN-SIZE DISTRIBUTION

COBBLES	GRAVEL			SAND			SILT OR CLAY
	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
45A-	32	8'-12'		Tan br. c⁺-f SAND, tr. Silt, some m-f⁺ Gravel	1.2	~	~

COBBLES	GRAVEL			SAND			SILT OR CLAY
	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	



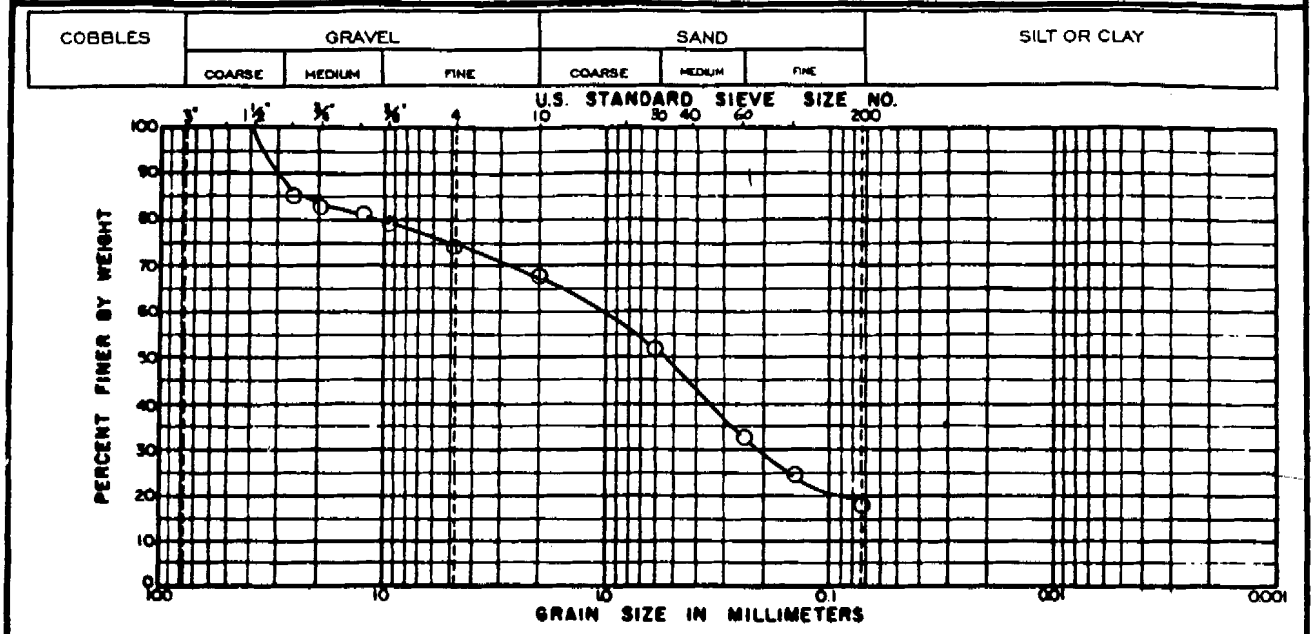
BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
45A-6	W-3	8'-12'		Tan br. c⁺-f SAND, tr. Silt, little m-f⁺ Gravel	2.6	~	~

PRE IQ ~ 1434-0014-03 ~

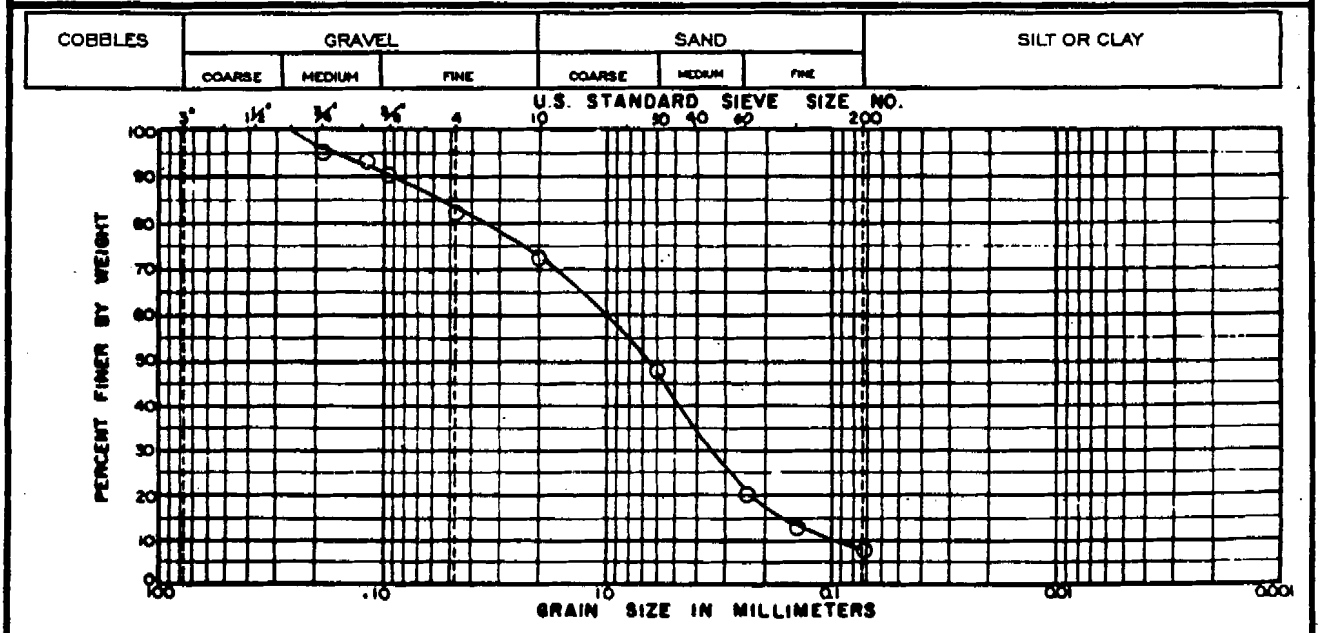
BURMISTER SOIL CLASSIFICATION SYSTEM

5/15/98

GRAIN-SIZE DISTRIBUTION



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
31-SB-6		4'-8'		Tan, gray br, c-m+-f SAND, little+ Silt, some+ c+-f Gravel	8.6	~	~



BORING	SAMPLE	DEPTH	SYMBOL	CLASSIFICATION	MC	LL	PL
31-SB-1		0'-4'		Gray br. c-m+-f SAND, tr+ Silt, some m-f Gravel	10.0	~	~

PRJ. NO. ~ 1434-0014-03 ~

TOTAL ORGANIC CARBON

(ASTM D 2974) LOSS ON IGNITION METHOD

TEST RESULTS

SAMPLE NO.	% ORGANIC MATTER
45A-6W-1	0.30
45A-6W-3	0.19
45A-6W-4	0.22
45A-32	0.19
31-SB-1	0.65
31-SB-6	0.45

5.15.98

PAULUS SOKOLOWSKI and SARTOR, inc. CONSULTING ENGINEERS

McLAREN HART
JOB. NO. 1434-0014-03 PROJECT ENGINEER LL/CLIENT TESTED BY LL DATE 5/15/98
GLEN COVE, N.Y.

	DENSITY SAMPLE	RECONST'D K SAMPLE		DENSITY SAMPLE	RECONST'D K SAMPLE						
SAMPLE #	31-SB-6	31-SB-6		31-SB-1	31-SB-1						
TARE #	28	TUBE		29	TUBE						
WGT. TARE + WET SOIL	919.2	1040.6		777.8	1073.3						
WGT. TARE + DRY SOIL	855.3	990.3		717.0	1016.5						
WGT. WATER	63.9	50.3		60.8	56.8						
WGT. TARE	110.0	425.2		110.0	431.2						
WGT. DRY SOIL	745.3	565.1		607.0	585.3						
MOIST. CONT. %	8.6	8.9		10.0	9.7						
WGT. TARE + WET SOIL	919.2	1040.6		777.8	1073.3						
WGT. TARE	110.0	425.2		110.0	431.2						
WGT. WET SOIL (grams)	809.2	615.4		667.8	642.1						
HEIGHT (in)	9.92	2.163		8.75	2.93						
Φ (in)	1.69	2.875		1.69	2.875						
VOLUME (ft³)	0.0129	0.0098		0.0114	0.0110						
γ_t (lb/ft³)	138.3	138.5		129.2	128.7						
M.C. %	8.6	8.9		10.0	9.7						
γ_d (lb/ft³)	127.3	127.2		117.4	117.3						
G_s	2.70	2.70		2.69	2.69						
e_o	0.323	0.325		0.430	0.431						
S_o	71.9%	73.9%		62.6%	60.5%						
n	0.244	0.245		0.301	0.301						
K (cm/sec)	—	3.8×10^{-4}		—	8.4×10^{-4}						

~ MOIST. CONT. ~

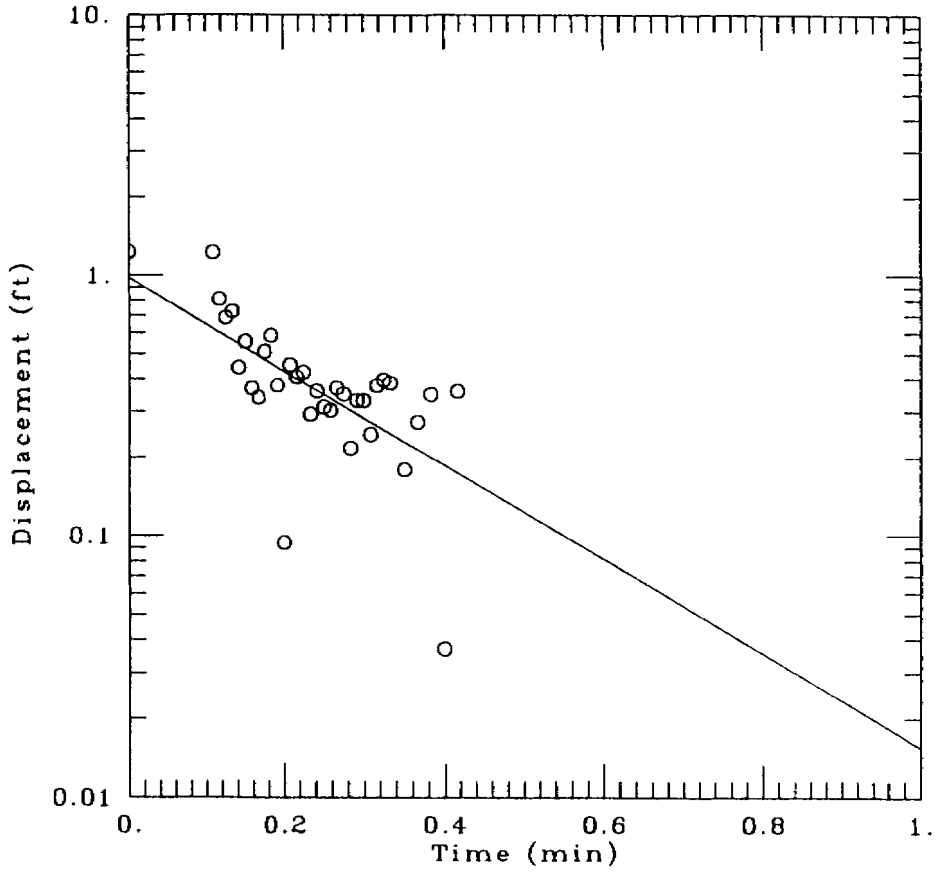
~ DENSITY ~

Appendix D

Slug Test Raw Data And Calculations

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-2S FALLING HEAD SLUG TEST



DATA SET:
a:\MW2SF.dat
08/17/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
MW-2S

ESTIMATED PARAMETERS:
K = 0.01259 ft/min
y0 = 0.9749 ft

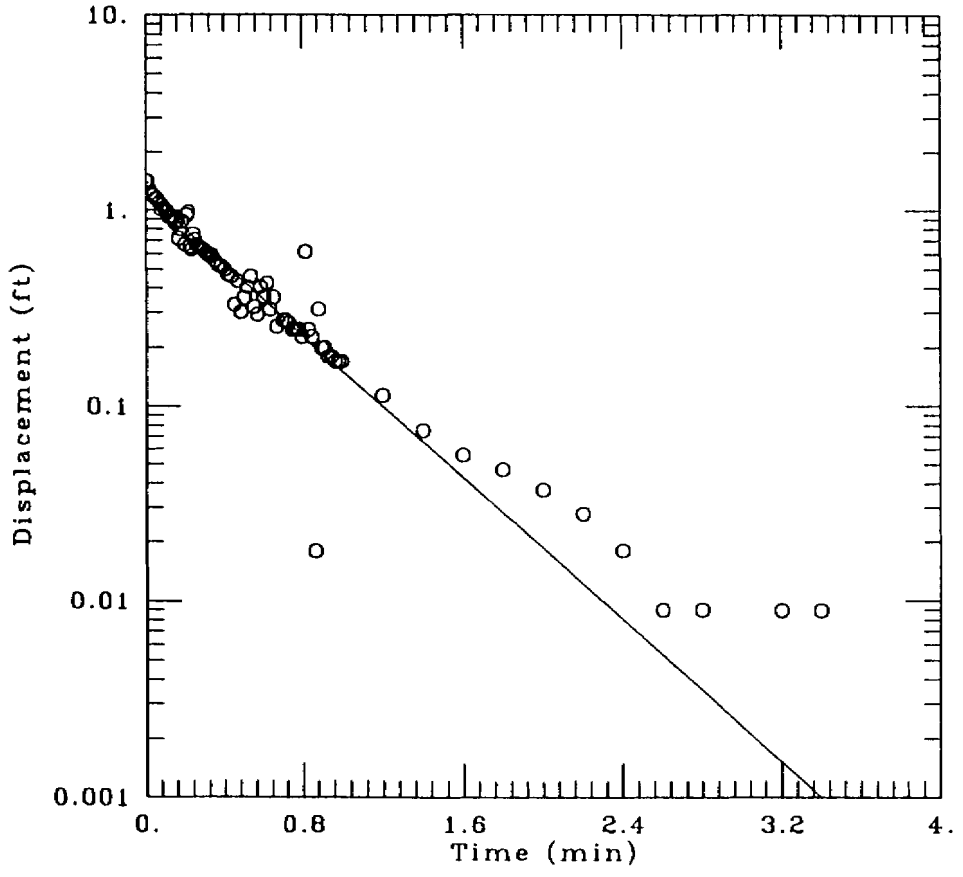
TEST DATA:
H0 = 1.227 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 10. ft
b = 193.1 ft
H = 13.75 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW2S-F.wpd

0.1083	1.227	1
0.1166	0.811	1
0.1333	0.726	1
0.15	0.556	1
0.175	0.509	1
0.2083	0.453	1
0.2166	0.405	1
0.2416	0.358	1
0.25	0.311	1
0.2583	0.302	1
0.2833	0.217	1
0.2916	0.33	1
0.3	0.33	1
0.3083	0.245	1
0.3166	0.377	1
0.325	0.396	1
0.3333	0.386	1
0.3666	0.273	1
0.3833	0.349	1

McLaren/Hart	Client: Photocircuits
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-3 FALLING HEAD SLUG TEST



DATA SET:
A:\MW3F.dat
08/17/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-3

ESTIMATED PARAMETERS:
K = 0.001767 ft/min
y0 = 1.213 ft

TEST DATA:
H0 = 1.416 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 10. ft
b = 104.9 ft
H = 13.83 ft

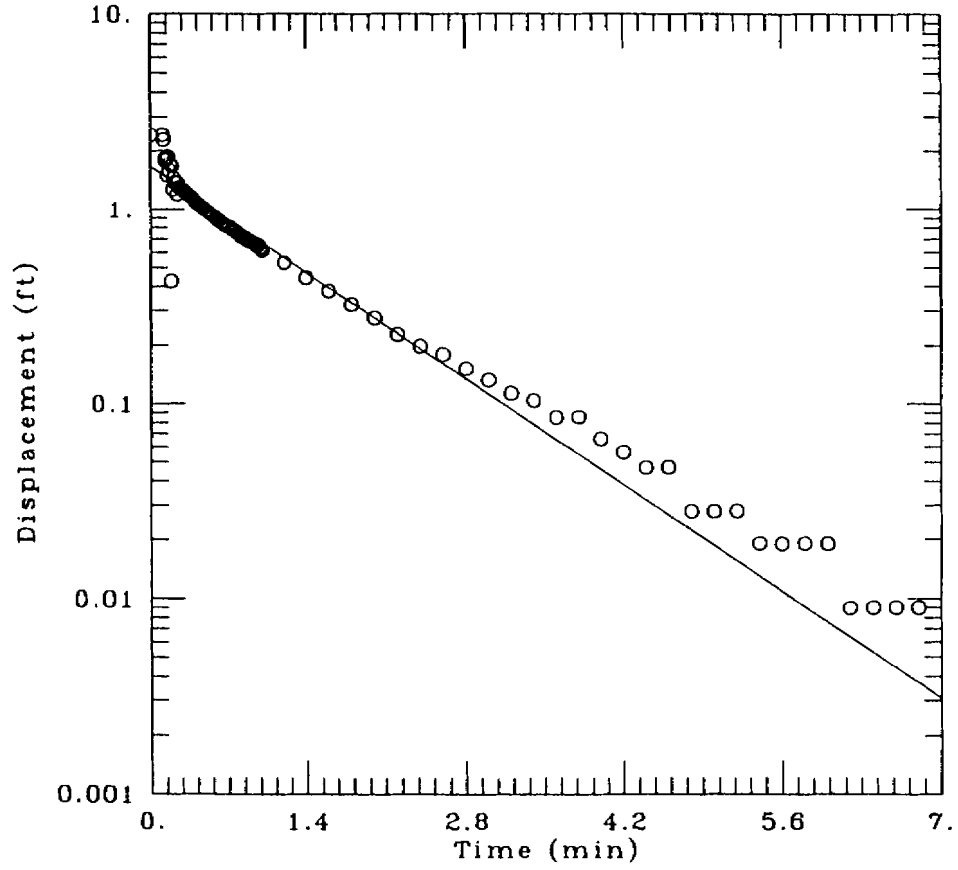
G:\STAFF\SALDER\Phtocir\SlgFinl\MW3-F.wpd

0.0083	1.416	1
0.0166	1.283	1
0.025	1.227	1
0.0333	1.198	1
0.0416	1.189	1
0.05	1.151	1
0.0583	1.151	1
0.0666	1.095	1
0.075	1.01	1
0.0833	1.066	1
0.0916	1.028	1
0.1	1	1
0.1083	0.991	1
0.1166	0.925	1
0.125	0.934	1
0.1333	0.925	1
0.1416	0.925	1
0.15	0.859	1
0.1583	0.877	1
0.1666	0.717	1
0.175	0.802	1
0.1833	0.877	1
0.2	0.67	1
0.2083	0.943	1
0.2166	0.981	1
0.225	0.651	1
0.2333	0.632	1
0.2416	0.755	1
0.25	0.707	1
0.2583	0.67	1
0.2666	0.66	1
0.275	0.651	1
0.2833	0.641	1
0.2916	0.632	1
0.3	0.622	1
0.3083	0.604	1
0.3166	0.594	1
0.325	0.585	1
0.3333	0.594	1
0.35	0.556	1
0.3666	0.528	1
0.3833	0.519	1
0.4	0.5	1
0.4166	0.471	1
0.4333	0.462	1
0.45	0.33	1
0.4666	0.434	1
0.4833	0.302	1
0.5	0.358	1
0.5166	0.405	1
0.5333	0.462	1

0.55	0.32	1
0.5666	0.292	1
0.5833	0.405	1
0.6	0.358	1
0.6166	0.424	1
0.6333	0.311	1
0.65	0.358	1
0.6666	0.254	1
0.7	0.273	1
0.7166	0.273	1
0.7333	0.264	1
0.75	0.245	1
0.7666	0.245	1
0.7833	0.245	1
0.8	0.226	1
0.8166	0.613	1
0.8333	0.245	1
0.85	0.226	1
0.8666	0.018	1
0.8833	0.311	1
0.9	0.198	1
0.9166	0.198	1
0.9333	0.179	1
0.95	0.179	1
0.9666	0.169	1
0.9833	0.169	1
1	0.169	1
1.2	0.113	1
1.4	0.075	1
1.6	0.056	1
1.8	0.047	1
2	0.037	1
2.2	0.028	1
2.4	0.018	1
2.6	0.009	1
2.8	0.009	1
3	0	1
3.2	0.009	1
3.4	0.009	1
3.6	0	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-4 FALLING HEAD SLUG TEST



DATA SET:
s:\mw4f.dat
08/17/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-4

ESTIMATED PARAMETERS:
K = 0.0008069 ft/min
y0 = 1.652 ft

TEST DATA:
H0 = 2.42 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 10. ft
b = 198.6 ft
H = 20.46 ft

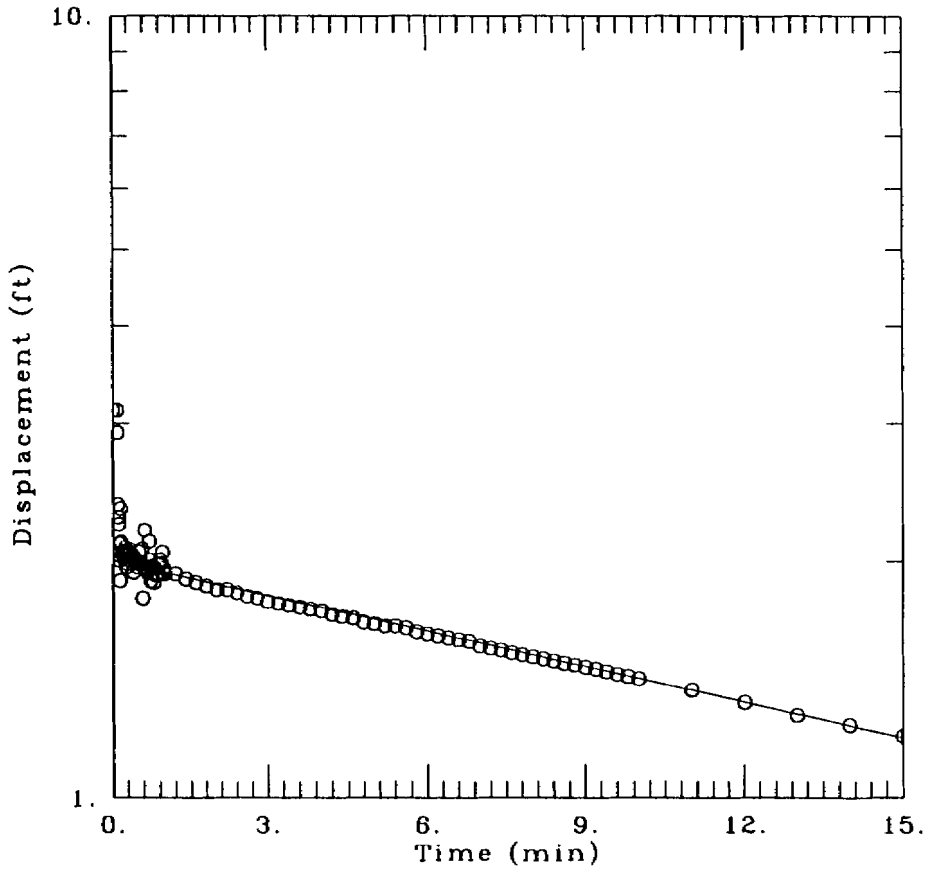
G:\STAFF\SALDER\Phtocir\SlgFinl\MW4-F.wpd

0.1083	2.42	1
0.1166	2.278	1
0.125	1.796	1
0.1333	1.768	1
0.1416	1.815	1
0.15	1.494	1
0.1583	1.853	1
0.1666	1.579	1
0.175	1.702	1
0.1833	0.425	1
0.1916	1.664	1
0.2	1.267	1
0.2083	1.437	1
0.2166	1.361	1
0.225	1.361	1
0.2333	1.371	1
0.2416	1.191	1
0.25	1.361	1
0.2583	1.286	1
0.2666	1.295	1
0.275	1.276	1
0.2833	1.267	1
0.2916	1.257	1
0.3	1.238	1
0.3083	1.229	1
0.3166	1.219	1
0.325	1.2	1
0.3333	1.191	1
0.35	1.172	1
0.3666	1.153	1
0.3833	1.134	1
0.4	1.096	1
0.4166	1.077	1
0.4333	1.059	1
0.45	1.04	1
0.4666	1.021	1
0.4833	1.011	1
0.5	0.983	1
0.5166	0.973	1
0.5333	0.955	1
0.55	0.936	1
0.5666	0.917	1
0.5833	0.898	1
0.6	0.879	1
0.6166	0.869	1
0.6333	0.851	1
0.65	0.841	1
0.6666	0.822	1
0.6833	0.813	1
0.7	0.813	1
0.7166	0.803	1

0.7333	0.784	1
0.75	0.775	1
0.7666	0.765	1
0.7833	0.747	1
0.8	0.737	1
0.8166	0.718	1
0.8333	0.718	1
0.85	0.709	1
0.8666	0.69	1
0.8833	0.69	1
0.9	0.68	1
0.9166	0.671	1
0.9333	0.661	1
0.95	0.652	1
0.9666	0.652	1
0.9833	0.633	1
1	0.614	1
1.2	0.529	1
1.4	0.444	1
1.6	0.378	1
1.8	0.321	1
2	0.274	1
2.2	0.227	1
2.4	0.198	1
2.6	0.179	1
2.8	0.151	1
3	0.132	1
3.2	0.113	1
3.4	0.104	1
3.6	0.085	1
3.8	0.085	1
4	0.066	1
4.2	0.056	1
4.4	0.047	1
4.6	0.047	1
4.8	0.028	1
5	0.028	1
5.2	0.028	1
5.4	0.019	1
5.6	0.019	1
5.8	0.019	1
6	0.019	1
6.2	0.009	1
6.4	0.009	1
6.6	0.009	1
6.8	0.009	1
7	0	1
7.2	0	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-5 FALLING HEAD SLUG TEST



DATA SET:
a:\mw5f.dat
08/17/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
MW 5

ESTIMATED PARAMETERS:
K = 3.7231E-05 ft/min
y0 = 2.002 ft

TEST DATA:
H0 = 3.116 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 10. ft
b = 106.9 ft
H = 96.22 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW5-F.wpd

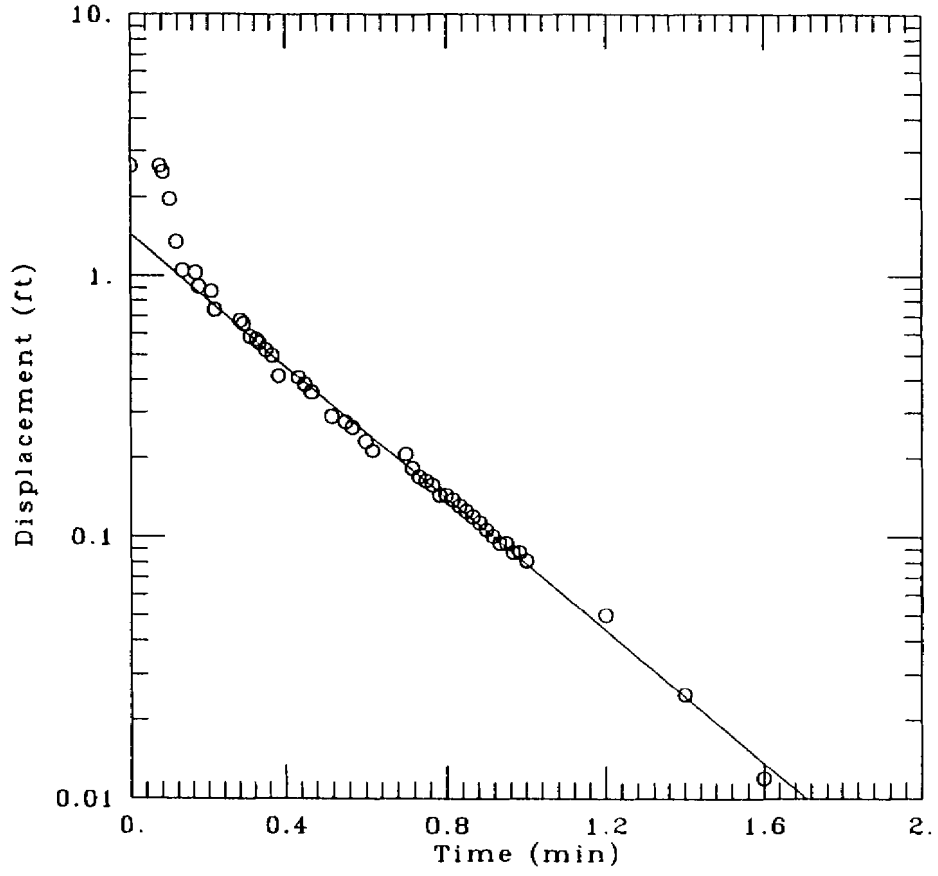
0.0833	3.116	1
0.0916	2.918	1
0.1	2.36	1
0.1083	2.275	1
0.1166	2.228	1
0.125	2.105	1
0.1333	2.002	1
0.1416	1.888	1
0.15	2.332	1
0.1583	2.105	1
0.1666	2.115	1
0.175	2.049	1
0.1833	2.039	1
0.1916	2.039	1
0.2	2.058	1
0.2083	2.011	1
0.2166	2.039	1
0.225	2.058	1
0.2333	2.077	1
0.2416	2.03	1
0.25	2.077	1
0.2583	2.058	1
0.2666	1.964	1
0.275	2.049	1
0.2833	1.983	1
0.2916	2.039	1
0.3	2.058	1
0.3083	2.002	1
0.3166	2.039	1
0.325	2.03	1
0.3333	2.068	1
0.35	2.02	1
0.3666	2.011	1
0.3833	2.03	1
0.4	1.935	1
0.4166	2.02	1
0.4333	2.011	1
0.45	2.002	1
0.4666	1.964	1
0.4833	1.983	1
0.5	2.049	1
0.5166	1.992	1
0.5333	1.992	1
0.55	1.983	1
0.5666	2.068	1
0.5833	1.794	1
0.6	1.964	1
0.6166	2.19	1
0.6333	1.983	1
0.65	1.964	1
0.6666	1.935	1

0.6833	1.945	1
0.7	2.115	1
0.7166	2.002	1
0.7333	1.888	1
0.75	1.954	1
0.7666	1.954	1
0.7833	1.964	1
0.8	1.879	1
0.8166	1.954	1
0.8333	1.917	1
0.85	1.917	1
0.8666	1.983	1
0.8833	1.926	1
0.9	1.983	1
0.9166	2.002	1
0.9333	1.983	1
0.95	2.049	1
0.9666	1.935	1
0.9833	1.954	1
1	1.926	1
1.2	1.926	1
1.4	1.898	1
1.6	1.879	1
1.8	1.86	1
2	1.841	1
2.2	1.841	1
2.4	1.822	1
2.6	1.803	1
2.8	1.794	1
3	1.775	1
3.2	1.765	1
3.4	1.756	1
3.6	1.747	1
3.8	1.737	1
4	1.728	1
4.2	1.709	1
4.4	1.699	1
4.6	1.69	1
4.8	1.671	1
5	1.662	1
5.2	1.652	1
5.4	1.652	1
5.6	1.643	1
5.8	1.624	1
6	1.614	1
6.2	1.605	1
6.4	1.595	1
6.6	1.586	1
6.8	1.577	1
7	1.558	1
7.2	1.548	1

7.4	1.539	1
7.6	1.529	1
7.8	1.52	1
8	1.51	1
8.2	1.501	1
8.4	1.492	1
8.6	1.482	1
8.8	1.473	1
9	1.463	1
9.2	1.454	1
9.4	1.444	1
9.6	1.435	1
9.8	1.425	1
10	1.416	1
11	1.369	1
12	1.322	1
13	1.274	1
14	1.237	1
15	1.199	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-7 FALLING HEAD SLUG TEST



DATA SET:
a:\mw7f.dat
08/17/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
MW-7

ESTIMATED PARAMETERS:
K = 0.006572 ft/min
y0 = 1.443 ft

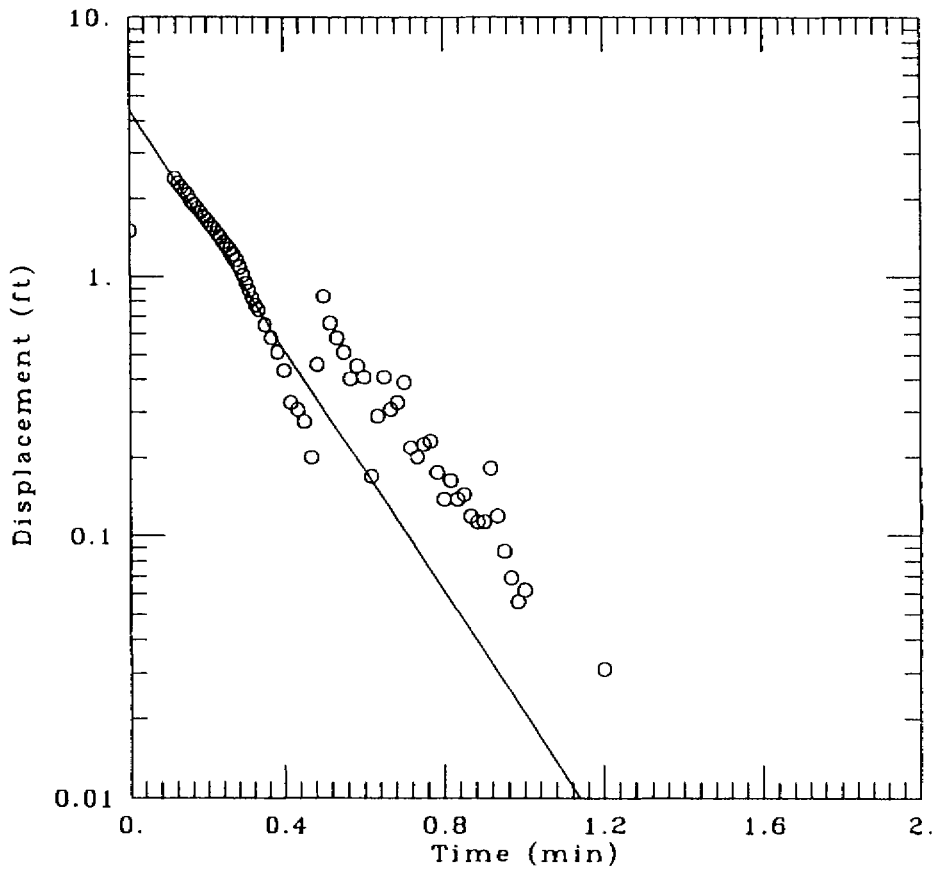
TEST DATA:
H0 = 2.639 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15.33 ft
b = 194.8 ft
H = 18.12 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW7-F.wpd

0.075	2.639	1
0.0833	2.501	1
0.1	1.967	1
0.1166	1.344	1
0.1333	1.049	1
0.1666	1.03	1
0.175	0.911	1
0.2083	0.873	1
0.2166	0.741	1
0.2833	0.672	1
0.2916	0.653	1
0.3083	0.584	1
0.325	0.571	1
0.3333	0.553	1
0.35	0.521	1
0.3666	0.496	1
0.3833	0.414	1
0.4333	0.408	1
0.45	0.383	1
0.4666	0.358	1
0.5166	0.289	1
0.55	0.276	1
0.5666	0.263	1
0.6	0.232	1
0.6166	0.213	1
0.7	0.207	1
0.7166	0.182	1
0.7333	0.169	1
0.75	0.163	1
0.7666	0.157	1
0.7833	0.144	1
0.8	0.144	1
0.8166	0.138	1
0.8333	0.131	1
0.85	0.125	1
0.8666	0.119	1
0.8833	0.113	1
0.9	0.106	1
0.9166	0.1	1
0.9333	0.094	1
0.95	0.094	1
0.9666	0.087	1
0.9833	0.087	1
1	0.081	1
1.2	0.05	1
1.4	0.025	1
1.6	0.012	1
1.8	0	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-8 FALLING HEAD SLUG TEST



DATA SET:
a:\mw81.dat
08/17/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-8

ESTIMATED PARAMETERS:
K = 0.01677 ft/min
y0 = 4.396 ft

TEST DATA:
H0 = 1.496 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15.33 ft
b = 194.1 ft
H = 163.4 ft

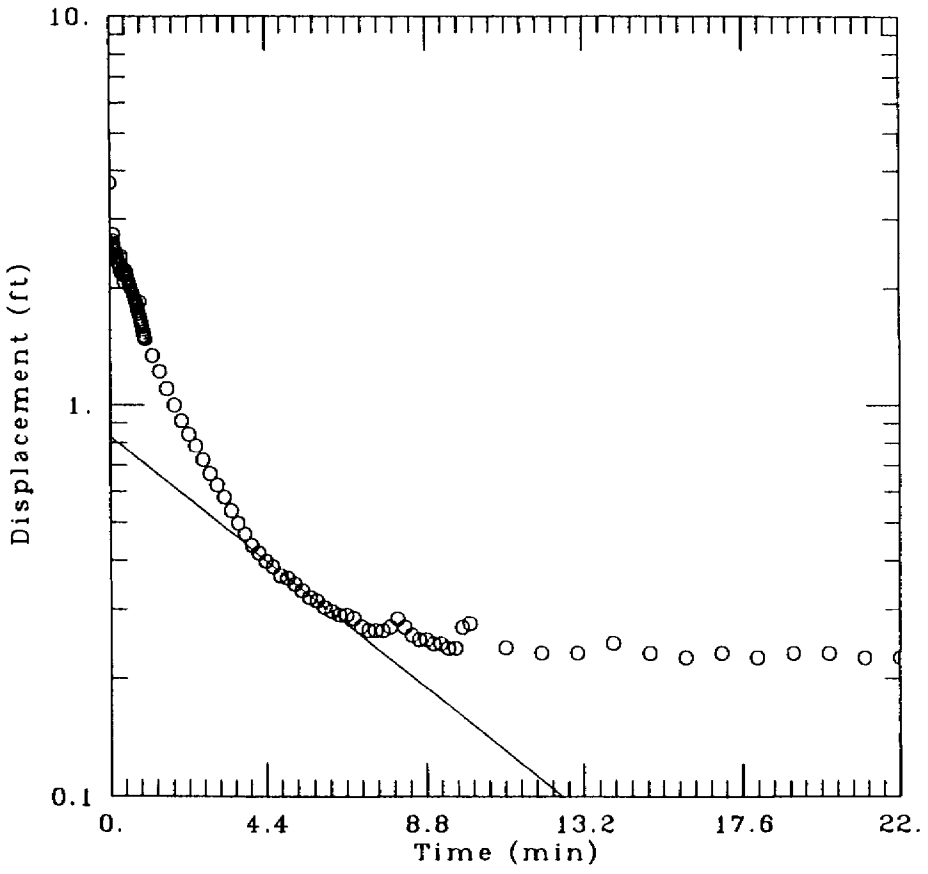
G:\STAFF\SALDER\Phtocir\SlgFinl\MW8-F.wpd

0.1166	2.394	1
0.125	2.3	1
0.1333	2.218	1
0.1416	2.143	1
0.15	2.067	1
0.1583	1.954	1
0.1666	1.898	1
0.175	1.835	1
0.1833	1.766	1
0.1916	1.703	1
0.2	1.64	1
0.2083	1.577	1
0.2166	1.533	1
0.225	1.47	1
0.2333	1.42	1
0.2416	1.357	1
0.25	1.319	1
0.2583	1.275	1
0.2666	1.219	1
0.275	1.162	1
0.2833	1.087	1
0.2916	1.011	1
0.3	0.942	1
0.3083	0.879	1
0.3166	0.823	1
0.325	0.773	1
0.3333	0.741	1
0.35	0.647	1
0.3666	0.578	1
0.3833	0.509	1
0.4	0.433	1
0.4166	0.326	1
0.4333	0.307	1
0.45	0.276	1
0.4666	0.201	1
0.4833	0.458	1
0.5	0.835	1
0.5166	0.659	1
0.5333	0.578	1
0.55	0.509	1
0.5666	0.402	1
0.5833	0.452	1
0.6	0.408	1
0.6166	0.169	1
0.6333	0.289	1
0.65	0.408	1
0.6666	0.307	1
0.6833	0.326	1
0.7	0.389	1
0.7166	0.219	1
0.7333	0.201	1

0.75	0.226	1
0.7666	0.232	1
0.7833	0.175	1
0.8	0.138	1
0.8166	0.163	1
0.8333	0.138	1
0.85	0.144	1
0.8666	0.119	1
0.8833	0.113	1
0.9	0.113	1
0.9166	0.182	1
0.9333	0.119	1
0.95	0.087	1
0.9666	0.069	1
0.9833	0.056	1
1	0.062	1
1.2	0.031	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-9 FALLING HEAD SLUG TEST



DATA SET:
a:\mw91.dat
08/18/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-9

ESTIMATED PARAMETERS:
K = 0.0003891 ft/min
y0 = 0.8325 ft

TEST DATA:
H0 = 3.726 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15.33 ft
b = 103.4 ft
H = 20.92 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW9-F.wpd

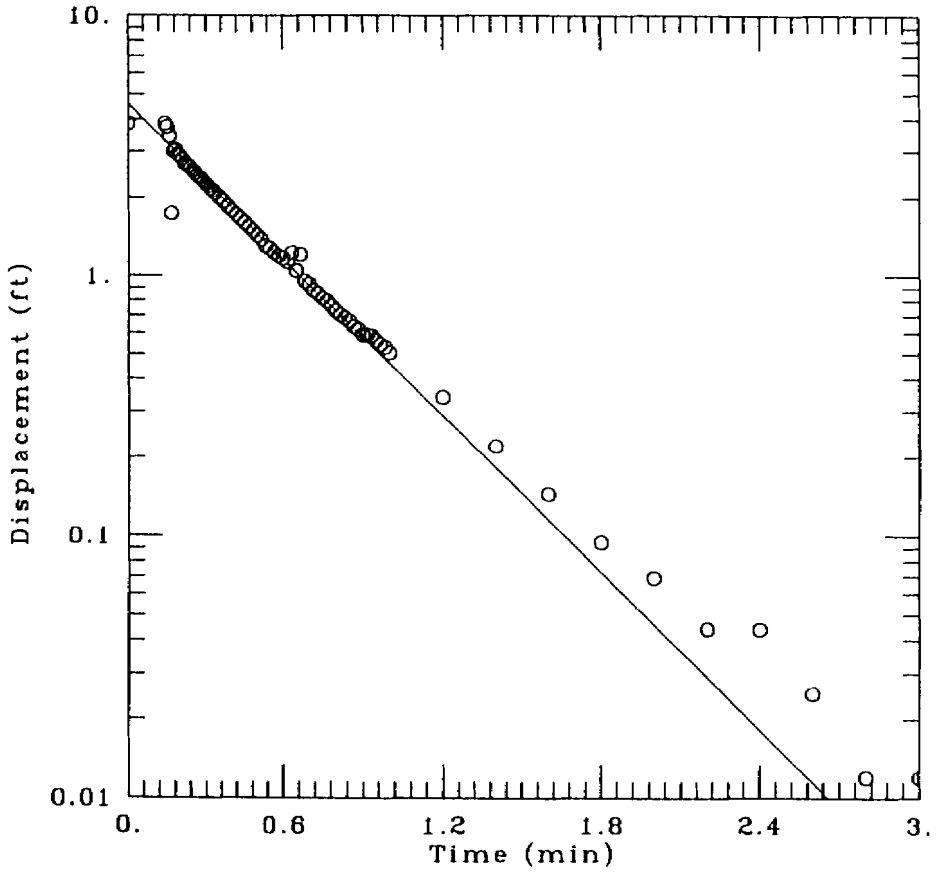
0.1	2.728	1
0.1083	2.627	1
0.1166	2.59	1
0.125	2.565	1
0.1333	2.546	1
0.1416	2.514	1
0.15	2.502	1
0.1583	2.489	1
0.1666	2.47	1
0.175	2.439	1
0.1833	2.439	1
0.1916	2.414	1
0.2	2.401	1
0.2083	2.395	1
0.2166	2.389	1
0.225	2.357	1
0.2333	2.344	1
0.2416	2.319	1
0.25	2.307	1
0.2583	2.307	1
0.2666	2.294	1
0.275	2.282	1
0.2833	2.269	1
0.2916	2.42	1
0.3	2.238	1
0.3083	2.407	1
0.3166	2.363	1
0.325	2.181	1
0.3333	2.187	1
0.35	2.175	1
0.3666	2.206	1
0.3833	2.187	1
0.4	2.156	1
0.4166	2.068	1
0.4333	2.225	1
0.45	2.187	1
0.4666	2.2	1
0.4833	2.15	1
0.5	2.124	1
0.5166	2.106	1
0.5333	2.08	1
0.55	2.062	1
0.5666	2.036	1
0.5833	2.011	1
0.6	1.999	1
0.6166	1.974	1
0.6333	1.955	1
0.65	1.936	1
0.6666	1.917	1
0.6833	1.892	1
0.7	1.873	1

0.7166	1.854	1
0.7333	1.842	1
0.75	1.823	1
0.7666	1.798	1
0.7833	1.772	1
0.8	1.741	1
0.8166	1.716	1
0.8333	1.835	1
0.85	1.684	1
0.8666	1.659	1
0.8833	1.634	1
0.9	1.609	1
0.9166	1.584	1
0.9333	1.559	1
0.95	1.534	1
0.9666	1.508	1
0.9833	1.49	1
1	1.477	1
1.2	1.339	1
1.4	1.219	1
1.6	1.1	1
1.8	0.999	1
2	0.911	1
2.2	0.842	1
2.4	0.786	1
2.6	0.723	1
2.8	0.666	1
3	0.622	1
3.2	0.578	1
3.4	0.534	1
3.6	0.496	1
3.8	0.465	1
4	0.434	1
4.2	0.415	1
4.4	0.396	1
4.6	0.383	1
4.8	0.364	1
5	0.358	1
5.2	0.346	1
5.4	0.333	1
5.6	0.32	1
5.8	0.314	1
6	0.302	1
6.2	0.295	1
6.4	0.289	1
6.6	0.289	1
6.8	0.283	1
7	0.27	1
7.2	0.264	1
7.4	0.264	1
7.6	0.264	1

7.8	0.27	1
8	0.283	1
8.2	0.27	1
8.4	0.258	1
8.6	0.251	1
8.8	0.251	1
9	0.245	1
9.2	0.245	1
9.4	0.239	1
9.6	0.239	1
9.8	0.27	1
10	0.276	1
11	0.239	1
12	0.232	1
13	0.232	1
14	0.245	1
15	0.232	1
16	0.226	1
17	0.232	1
18	0.226	1
19	0.232	1
20	0.232	1
21	0.226	1
22	0.226	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-10 FALLING HEAD SLUG TEST



DATA SET:
a:\mw10f.dat
08/18/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-10

ESTIMATED PARAMETERS:
K = 0.006849 ft/min
y0 = 4.567 ft

TEST DATA:
H0 = 3.853 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15.33 ft
b = 194.3 ft
H = 124.6 ft

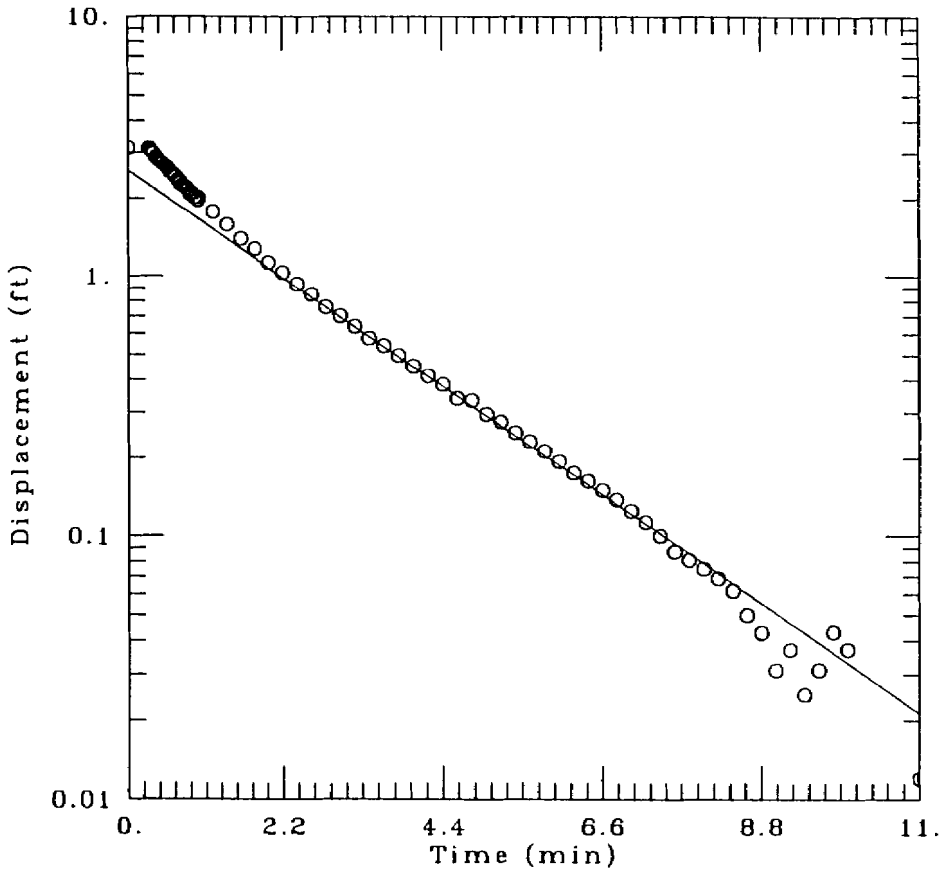
G:\STAFF\SALDER\Phtocir\SlgFinl\MW10-F.wpd

0.1416	3.853	1
0.15	3.74	1
0.1583	3.445	1
0.1666	1.735	1
0.175	3.005	1
0.1833	3.049	1
0.1916	2.923	1
0.2	2.885	1
0.2083	2.81	1
0.2166	2.69	1
0.225	2.69	1
0.2333	2.634	1
0.2416	2.583	1
0.25	2.521	1
0.2583	2.477	1
0.2666	2.42	1
0.275	2.376	1
0.2833	2.338	1
0.2916	2.288	1
0.3	2.244	1
0.3083	2.206	1
0.3166	2.156	1
0.325	2.124	1
0.3333	2.08	1
0.35	2.005	1
0.3666	1.936	1
0.3833	1.854	1
0.4	1.779	1
0.4166	1.722	1
0.4333	1.659	1
0.45	1.596	1
0.4666	1.54	1
0.4833	1.483	1
0.5	1.427	1
0.5166	1.376	1
0.5333	1.301	1
0.55	1.269	1
0.5666	1.225	1
0.5833	1.188	1
0.6	1.163	1
0.6166	1.125	1
0.6333	1.219	1
0.65	1.043	1
0.6666	1.2	1
0.6833	0.949	1
0.7	0.924	1
0.7166	0.873	1
0.7333	0.848	1
0.75	0.817	1
0.7666	0.792	1
0.7833	0.76	1

0.8	0.729	1
0.8166	0.704	1
0.8333	0.685	1
0.85	0.666	1
0.8666	0.634	1
0.8833	0.616	1
0.9	0.59	1
0.9166	0.59	1
0.9333	0.584	1
0.95	0.559	1
0.9666	0.54	1
0.9833	0.528	1
1	0.502	1
1.2	0.339	1
1.4	0.22	1
1.6	0.144	1
1.8	0.094	1
2	0.069	1
2.2	0.044	1
2.4	0.044	1
2.6	0.025	1
2.8	0.012	1
3	0.012	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

NC WELL FALLING HEAD SLUG TEST



DATA SET:
a:\nc-f.dat
08/18/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
NC (Nassau County) Well

ESTIMATED PARAMETERS:
K = 0.0005522 ft/min
y0 = 2.568 ft

TEST DATA:
H0 = 3.136 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 5. ft
b = 196. ft
H = 6.38 ft

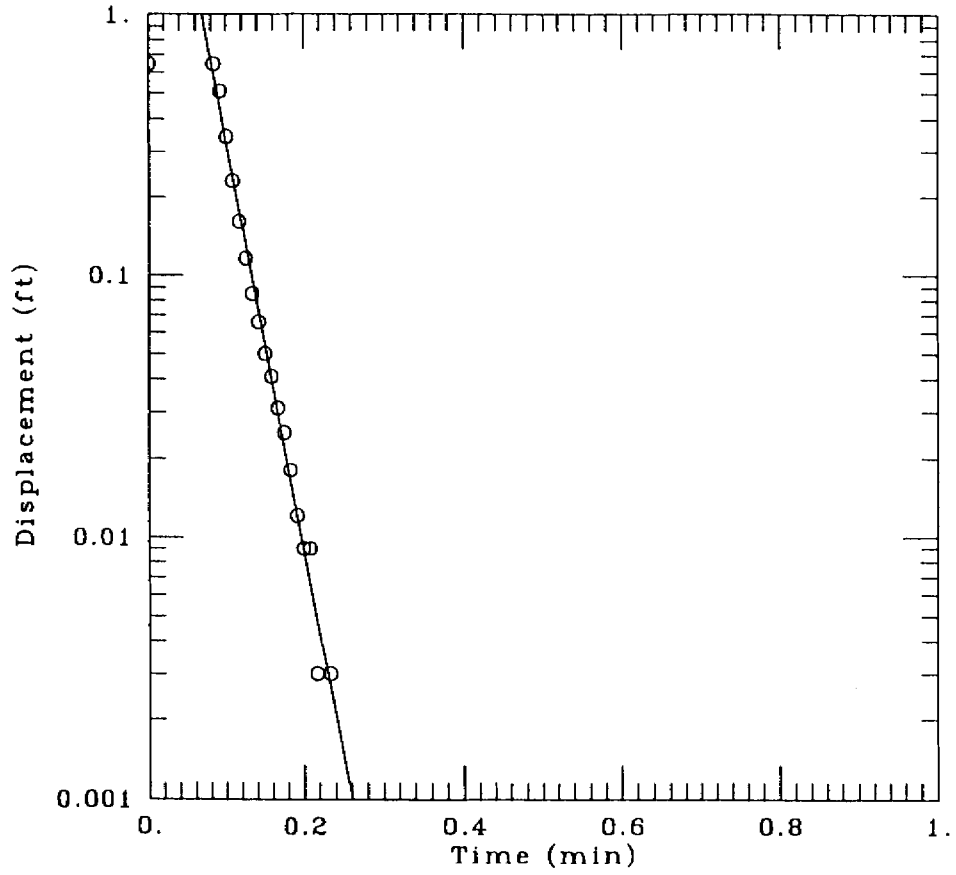
G:\STAFF\SALDER\Phtocir\SlgFinl\NC-F.wpd

0.2833	3.136	1
0.2916	3.13	1
0.3	3.13	1
0.3083	3.092	1
0.3166	3.073	1
0.325	3.061	1
0.3333	3.042	1
0.35	3.017	1
0.3666	2.979	1
0.3833	2.891	1
0.4	2.897	1
0.4166	2.86	1
0.4333	2.809	1
0.45	2.79	1
0.4666	2.765	1
0.4833	2.734	1
0.5	2.721	1
0.5166	2.684	1
0.5333	2.658	1
0.55	2.633	1
0.5666	2.633	1
0.5833	2.539	1
0.6	2.533	1
0.6166	2.526	1
0.6333	2.508	1
0.65	2.451	1
0.6666	2.42	1
0.6833	2.426	1
0.7	2.363	1
0.7166	2.363	1
0.7333	2.281	1
0.75	2.313	1
0.7666	2.25	1
0.7833	2.244	1
0.8	2.231	1
0.8166	2.2	1
0.8333	2.206	1
0.85	2.149	1
0.8666	2.086	1
0.8833	2.099	1
0.9	2.112	1
0.9166	2.08	1
0.9333	2.011	1
0.95	2.017	1
0.9666	2.017	1
0.9833	1.961	1
1	2.011	1
1.2	1.772	1
1.4	1.583	1
1.6	1.395	1
1.8	1.275	1

2	1.125	1
2.2	1.03	1
2.4	0.93	1
2.6	0.848	1
2.8	0.76	1
3	0.703	1
3.2	0.641	1
3.4	0.578	1
3.6	0.54	1
3.8	0.496	1
4	0.452	1
4.2	0.414	1
4.4	0.383	1
4.6	0.339	1
4.8	0.333	1
5	0.295	1
5.2	0.276	1
5.4	0.251	1
5.6	0.232	1
5.8	0.213	1
6	0.194	1
6.2	0.175	1
6.4	0.163	1
6.6	0.15	1
6.8	0.138	1
7	0.125	1
7.2	0.113	1
7.4	0.1	1
7.6	0.087	1
7.8	0.081	1
8	0.075	1
8.2	0.069	1
8.4	0.062	1
8.6	0.05	1
8.8	0.043	1
9	0.031	1
9.2	0.037	1
9.4	0.025	1
9.6	0.031	1
9.8	0.043	1
10	0.037	1
11	0.012	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-1S RISING HEAD SLUG TEST



DATA SET:
s:\mw1sr.dat
08/07/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-1S

ESTIMATED PARAMETERS:
K = 0.106 ft/min
y0 = 11.91 ft

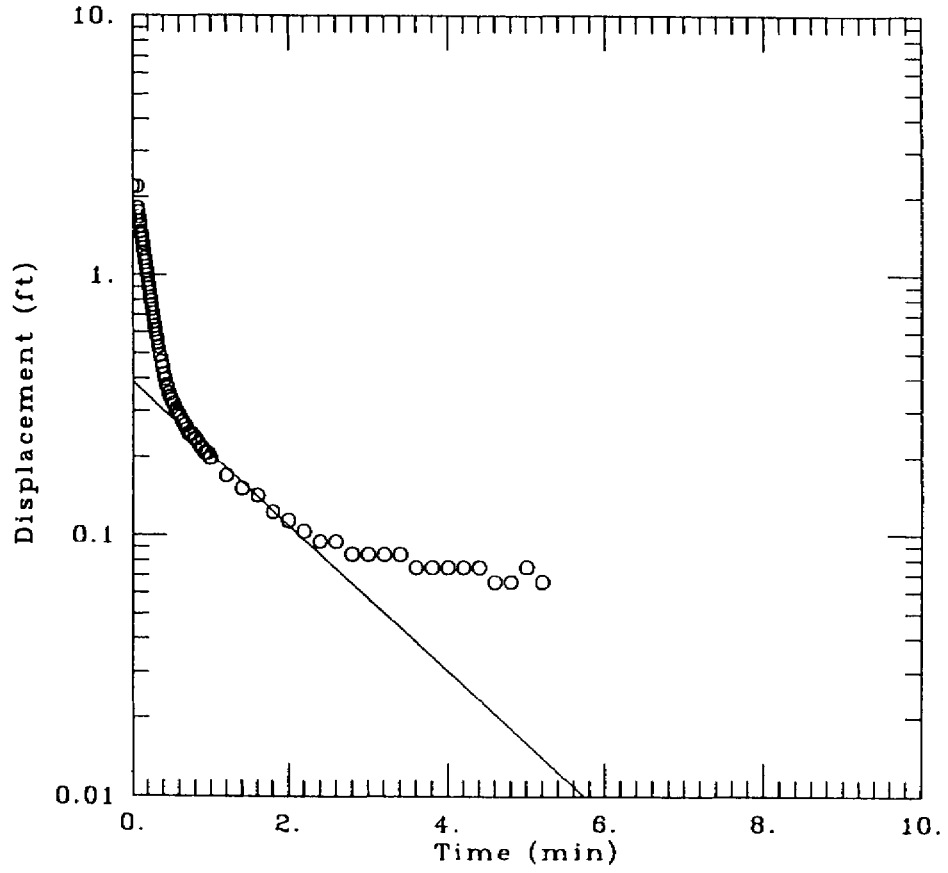
TEST DATA:
H0 = 0.647 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 10. ft
b = 190.9 ft
H = 11.45 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW1S-R.wpd

0.0833	0.647	1
0.0916	0.508	1
0.1	0.341	1
0.1083	0.23	1
0.1166	0.161	1
0.125	0.116	1
0.1333	0.085	1
0.1416	0.066	1
0.15	0.05	1
0.1583	0.041	1
0.1666	0.031	1
0.175	0.025	1
0.1833	0.018	1
0.1916	0.012	1
0.2	0.009	1
0.2083	0.009	1
0.2166	0.003	1
0.225	0	1
0.2333	0.003	1
0.2416	0	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-2S RISING HEAD SLUG TEST



DATA SET:
a:\mw2sr.dat
08/17/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-2S

ESTIMATED PARAMETERS:
K = 0.001938 ft/min
y0 = 0.3877 ft

TEST DATA:
H0 = 2.198 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 10. ft
b = 193.1 ft
H = 13.75 ft

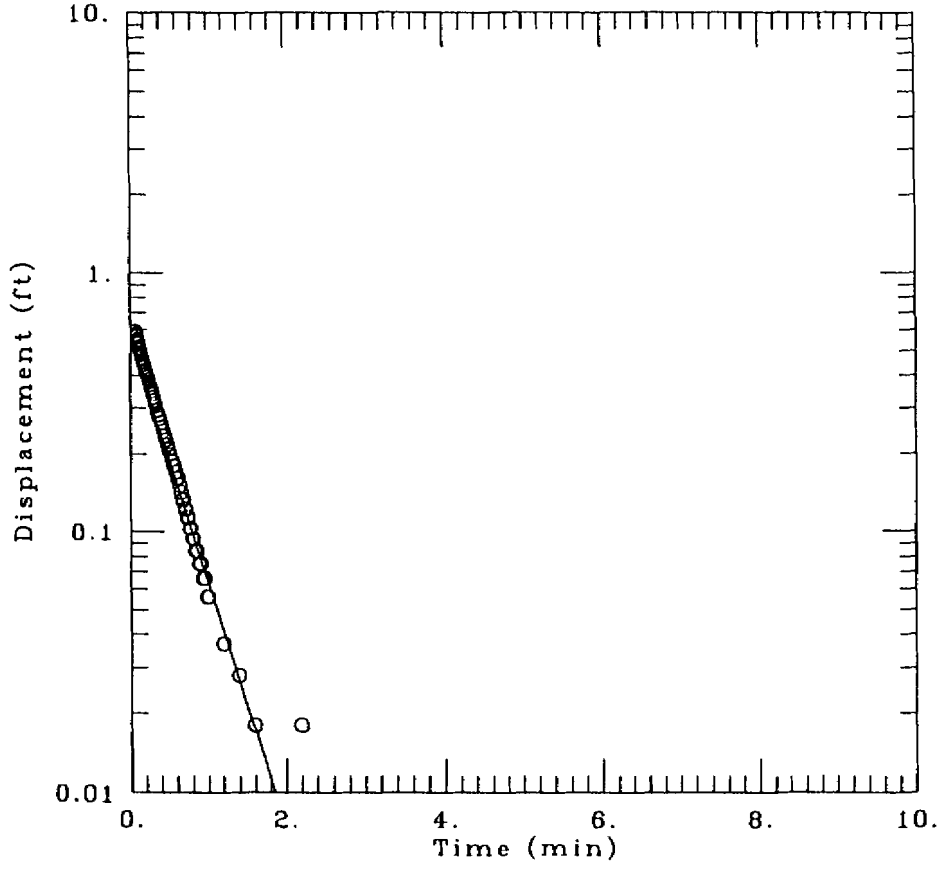
G:\STAFF\SALDER\Phtocir\SlgFinl\MW2S-R.wpd

0.0583	2.198	1
0.0666	1.811	1
0.075	1.745	1
0.0833	1.67	1
0.0916	1.604	1
0.1	1.538	1
0.1083	1.453	1
0.1166	1.415	1
0.125	1.358	1
0.1333	1.311	1
0.1416	1.255	1
0.15	1.198	1
0.1583	1.151	1
0.1666	1.113	1
0.175	1.066	1
0.1833	1.028	1
0.1916	0.99	1
0.2	0.953	1
0.2083	0.915	1
0.2166	0.887	1
0.225	0.849	1
0.2333	0.82	1
0.2416	0.792	1
0.25	0.764	1
0.2583	0.736	1
0.2666	0.707	1
0.275	0.679	1
0.2833	0.66	1
0.2916	0.632	1
0.3	0.613	1
0.3083	0.585	1
0.3166	0.566	1
0.325	0.547	1
0.3333	0.528	1
0.35	0.49	1
0.3666	0.462	1
0.3833	0.443	1
0.4	0.415	1
0.4166	0.396	1
0.4333	0.377	1
0.45	0.368	1
0.4666	0.349	1
0.4833	0.339	1
0.5	0.33	1
0.5166	0.32	1
0.5333	0.32	1
0.55	0.301	1
0.5666	0.301	1
0.5833	0.292	1
0.6	0.292	1
0.6166	0.283	1

0.6333	0.273	1
0.65	0.273	1
0.6666	0.264	1
0.6833	0.264	1
0.7	0.254	1
0.7166	0.245	1
0.7333	0.245	1
0.75	0.245	1
0.7666	0.245	1
0.7833	0.235	1
0.8	0.235	1
0.8166	0.235	1
0.8333	0.226	1
0.85	0.226	1
0.8666	0.217	1
0.8833	0.217	1
0.9	0.217	1
0.9166	0.207	1
0.9333	0.207	1
0.95	0.207	1
0.9666	0.207	1
0.9833	0.198	1
1	0.198	1
1.2	0.169	1
1.4	0.15	1
1.6	0.141	1
1.8	0.122	1
2	0.113	1
2.2	0.103	1
2.4	0.094	1
2.6	0.094	1
2.8	0.084	1
3	0.084	1
3.2	0.084	1
3.4	0.084	1
3.6	0.075	1
3.8	0.075	1
4	0.075	1
4.2	0.075	1
4.4	0.075	1
4.6	0.066	1
4.8	0.066	1
5	0.075	1
5.2	0.066	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-3S RISING HEAD SLUG TEST



DATA SET:
s:\mw3sr.dat
08/17/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-3S

ESTIMATED PARAMETERS:
K = 0.006266 ft/min
y0 = 0.5545 ft

TEST DATA:
H0 = 0.594 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 10. ft
b = 191.7 ft
H = 10.38 ft

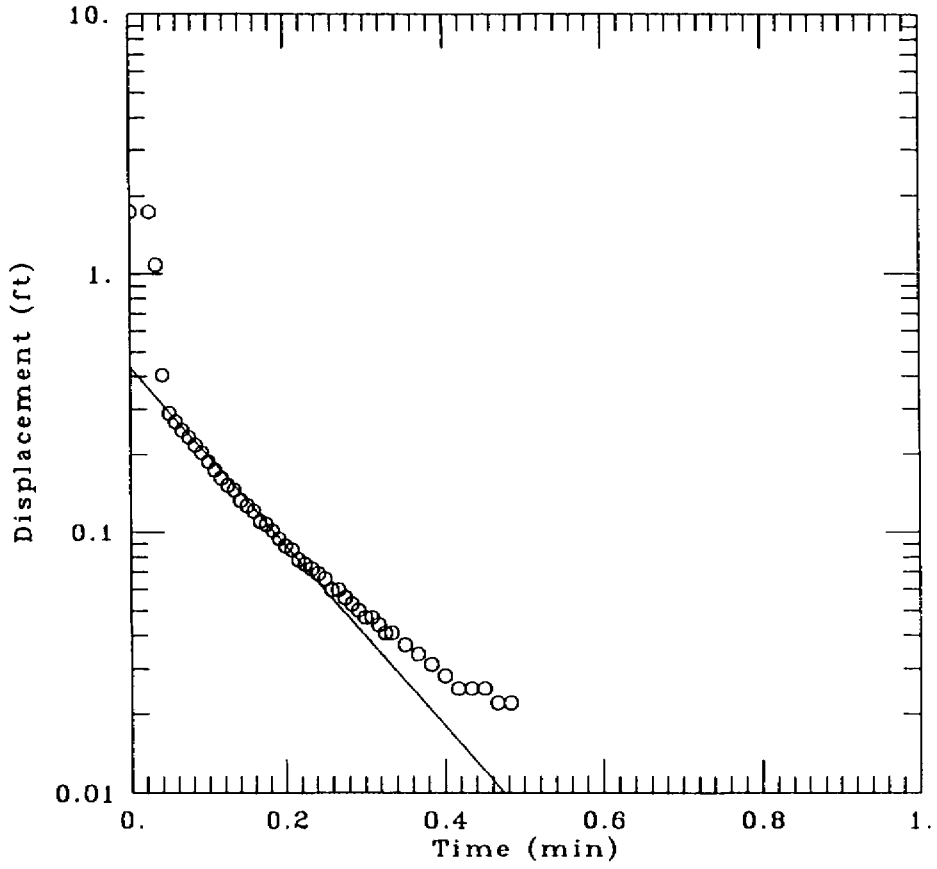
G:\STAFF\SALDER\Phtocir\SlgFinl\MW3S-R.wpd

0.0666	0.594	1
0.075	0.575	1
0.0833	0.565	1
0.0916	0.547	1
0.1	0.537	1
0.1083	0.528	1
0.1166	0.509	1
0.125	0.499	1
0.1333	0.49	1
0.1416	0.481	1
0.15	0.471	1
0.1583	0.462	1
0.1666	0.452	1
0.175	0.443	1
0.1833	0.443	1
0.1916	0.433	1
0.2	0.415	1
0.2083	0.415	1
0.2166	0.405	1
0.225	0.396	1
0.2333	0.396	1
0.2416	0.386	1
0.25	0.377	1
0.2583	0.367	1
0.2666	0.358	1
0.275	0.358	1
0.2833	0.349	1
0.2916	0.339	1
0.3	0.339	1
0.3083	0.33	1
0.3166	0.32	1
0.325	0.311	1
0.3333	0.311	1
0.35	0.292	1
0.3666	0.282	1
0.3833	0.273	1
0.4	0.264	1
0.4166	0.254	1
0.4333	0.245	1
0.45	0.235	1
0.4666	0.226	1
0.4833	0.216	1
0.5	0.207	1
0.5166	0.198	1
0.5333	0.188	1
0.55	0.179	1
0.5666	0.179	1
0.5833	0.169	1
0.6	0.16	1
0.6166	0.16	1
0.6333	0.15	1

0.65	0.141	1
0.6666	0.132	1
0.6833	0.132	1
0.7	0.122	1
0.7166	0.122	1
0.7333	0.113	1
0.75	0.113	1
0.7666	0.103	1
0.7833	0.103	1
0.8	0.094	1
0.8166	0.094	1
0.8333	0.084	1
0.85	0.084	1
0.8666	0.084	1
0.8833	0.075	1
0.9	0.075	1
0.9166	0.075	1
0.9333	0.066	1
0.95	0.066	1
0.9666	0.066	1
0.9833	0.056	1
1	0.056	1
1.2	0.037	1
1.4	0.028	1
1.6	0.018	1
1.8	0.009	1
2	0.009	1
2.2	0.018	1
2.4	0.009	1
2.6	0.009	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-4S RISING HEAD SLUG TEST



DATA SET:
a:\mw4sr.dat
08/17/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-4S

ESTIMATED PARAMETERS:
K = 0.0208 ft/min
y0 = 0.435 ft

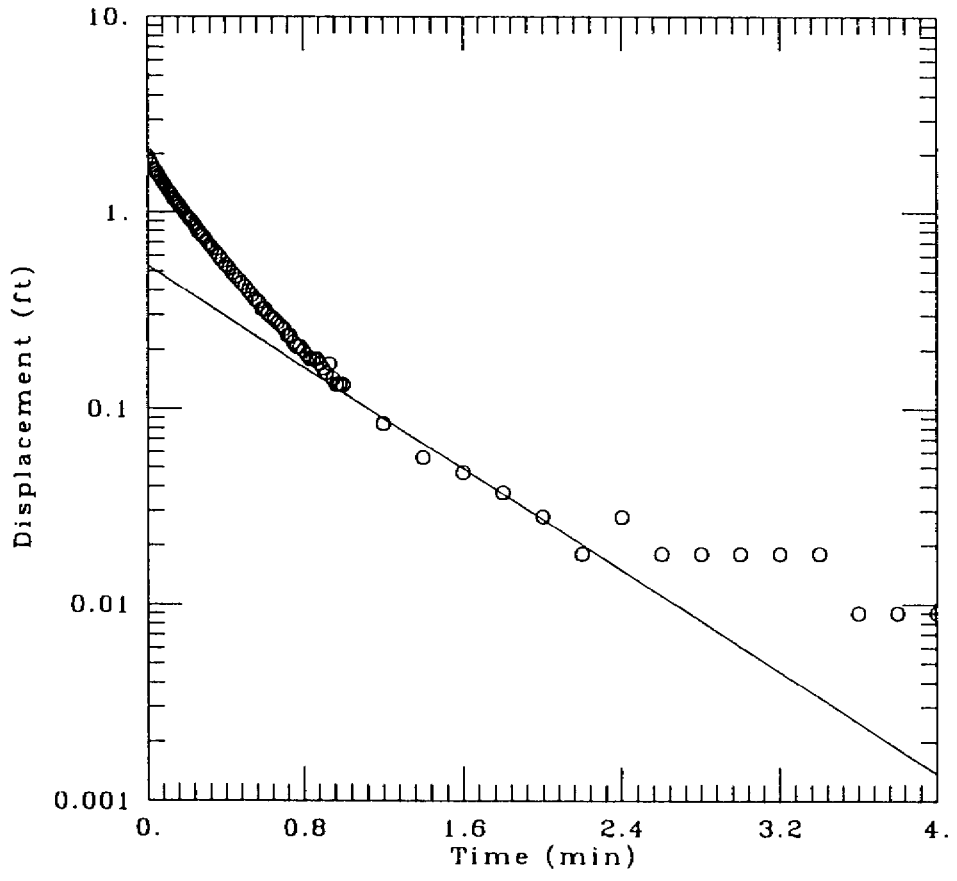
TEST DATA:
H0 = 1.736 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 10. ft
b = 191.5 ft
H = 8.5 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW4S-R.wpd

0.025	1.736	1
0.0333	1.083	1
0.0416	0.407	1
0.05	0.29	1
0.0583	0.268	1
0.0666	0.249	1
0.075	0.233	1
0.0833	0.217	1
0.0916	0.202	1
0.1	0.186	1
0.1083	0.173	1
0.1166	0.161	1
0.125	0.151	1
0.1333	0.145	1
0.1416	0.132	1
0.15	0.126	1
0.1583	0.12	1
0.1666	0.11	1
0.175	0.107	1
0.1833	0.101	1
0.1916	0.094	1
0.2	0.088	1
0.2083	0.085	1
0.2166	0.078	1
0.225	0.075	1
0.2333	0.072	1
0.2416	0.069	1
0.25	0.066	1
0.2583	0.06	1
0.2666	0.06	1
0.275	0.056	1
0.2833	0.053	1
0.2916	0.05	1
0.3	0.047	1
0.3083	0.047	1
0.3166	0.044	1
0.325	0.041	1
0.3333	0.041	1
0.35	0.037	1
0.3666	0.034	1
0.3833	0.031	1
0.4	0.028	1
0.4166	0.025	1
0.4333	0.025	1
0.45	0.025	1
0.4666	0.022	1
0.4833	0.022	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-3 RISING HEAD SLUG TEST



DATA SET:
a:\mw3r.dat
08/18/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
MW-3

ESTIMATED PARAMETERS:
K = 0.001262 ft/min
y0 = 0.5351 ft

TEST DATA:
H0 = 1.034 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 10. ft
b = 104.9 ft
H = 13.83 ft

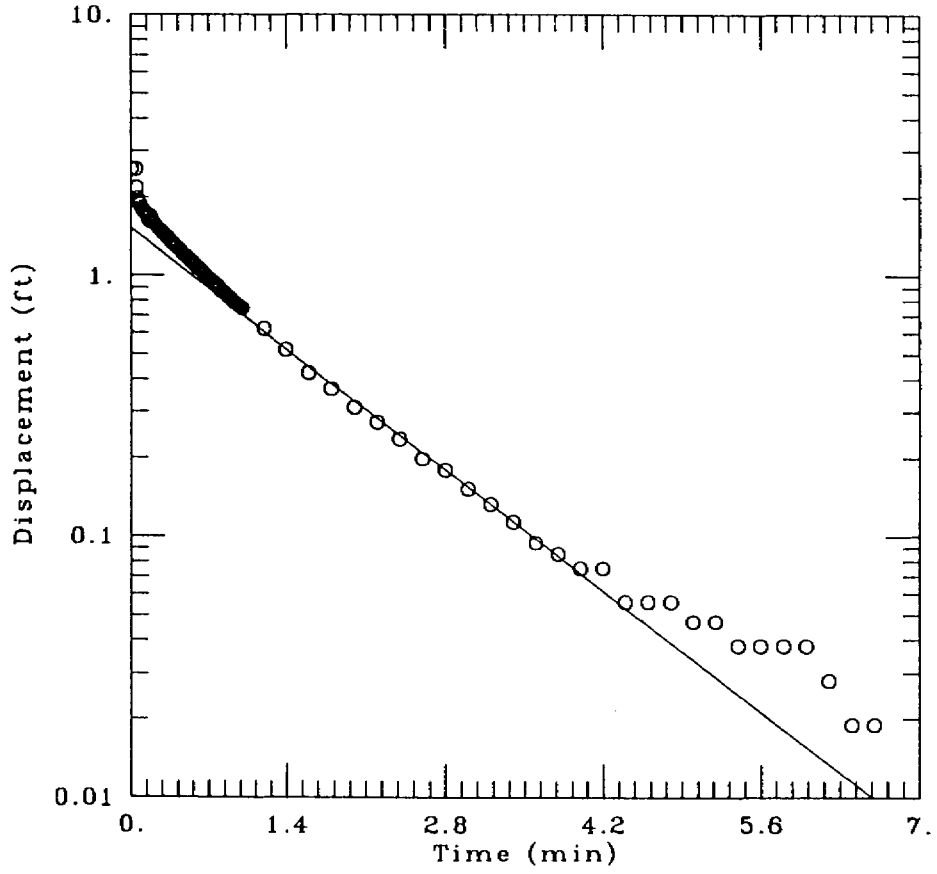
G:\STAFF\SALDER\Phtocir\SlgFinl\MW3-R.wpd

0	1.934	1
0.0083	1.859	1
0.0166	1.802	1
0.025	1.745	1
0.0333	1.66	1
0.0416	1.642	1
0.05	1.585	1
0.0583	1.538	1
0.0666	1.5	1
0.075	1.453	1
0.0833	1.415	1
0.0916	1.377	1
0.1	1.33	1
0.1083	1.292	1
0.1166	1.264	1
0.125	1.226	1
0.1333	1.179	1
0.1416	1.16	1
0.15	1.132	1
0.1583	1.104	1
0.1666	1.075	1
0.175	1.047	1
0.1833	1.019	1
0.1916	0.99	1
0.2	0.962	1
0.2083	0.943	1
0.2166	0.915	1
0.225	0.906	1
0.2333	0.877	1
0.2416	0.858	1
0.25	0.83	1
0.2583	0.792	1
0.2666	0.792	1
0.275	0.764	1
0.2833	0.755	1
0.2916	0.736	1
0.3	0.717	1
0.3083	0.698	1
0.3166	0.679	1
0.325	0.67	1
0.3333	0.651	1
0.35	0.622	1
0.3666	0.594	1
0.3833	0.566	1
0.4	0.537	1
0.4166	0.519	1
0.4333	0.49	1
0.45	0.471	1
0.4666	0.453	1
0.4833	0.434	1
0.5	0.415	1

0.5166	0.396	1
0.5333	0.377	1
0.55	0.358	1
0.5666	0.349	1
0.5833	0.32	1
0.6	0.32	1
0.6166	0.302	1
0.6333	0.292	1
0.65	0.283	1
0.6666	0.273	1
0.6833	0.264	1
0.7	0.254	1
0.7166	0.235	1
0.7333	0.235	1
0.75	0.217	1
0.7666	0.207	1
0.7833	0.207	1
0.8	0.198	1
0.8166	0.188	1
0.8333	0.179	1
0.85	0.179	1
0.8666	0.179	1
0.8833	0.169	1
0.9	0.16	1
0.9166	0.151	1
0.9333	0.169	1
0.95	0.141	1
0.9666	0.132	1
0.9833	0.132	1
1	0.132	1
1.2	0.084	1
1.4	0.056	1
1.6	0.047	1
1.8	0.037	1
2	0.028	1
2.2	0.018	1
2.4	0.028	1
2.6	0.018	1
2.8	0.018	1
3	0.018	1
3.2	0.018	1
3.4	0.018	1
3.6	0.009	1
3.8	0.009	1
4	0.009	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-4 RISING HEAD SLUG TEST



DATA SET:
a:\mw4r.dat
08/18/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
MW-4

ESTIMATED PARAMETERS:
K = 0.0006859 ft/min
y0 = 1.514 ft

TEST DATA:
H0 = 2.561 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 10. ft
b = 186.6 ft
H = 20.46 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW4-R.wpd

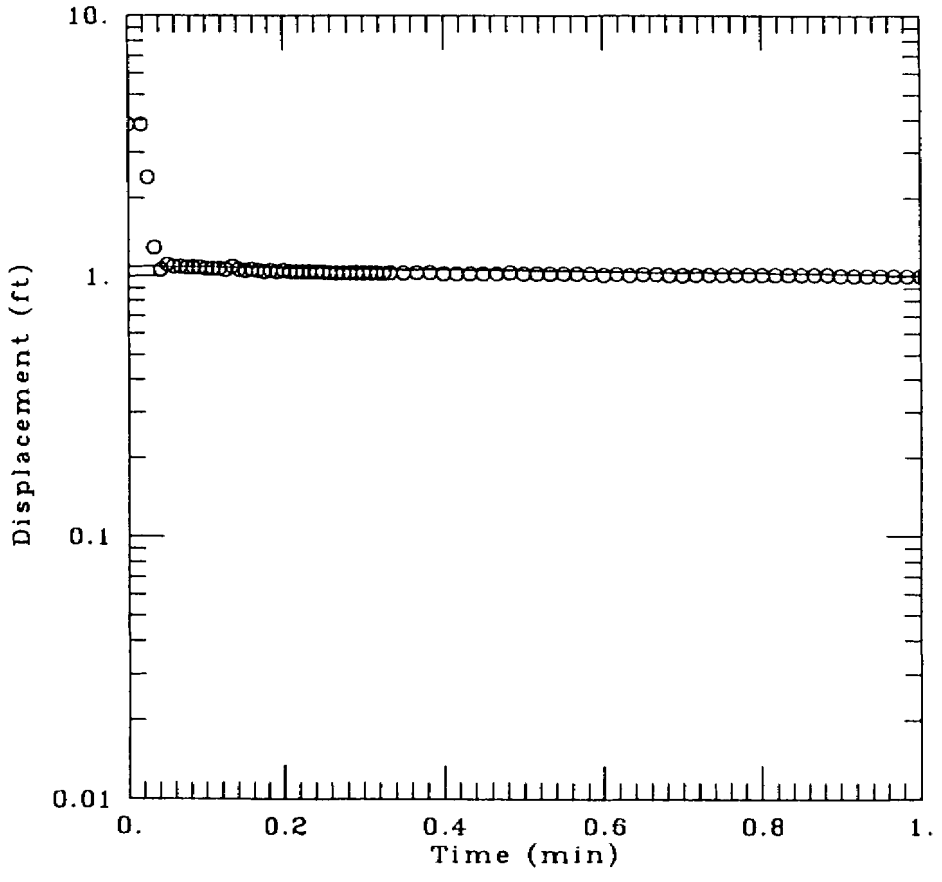
0.0416	2.561	1
0.05	2.173	1
0.0583	1.975	1
0.0666	1.918	1
0.075	1.871	1
0.0833	1.871	1
0.0916	1.824	1
0.1	1.795	1
0.1083	1.786	1
0.1166	1.748	1
0.125	1.758	1
0.1333	1.72	1
0.1416	1.72	1
0.15	1.654	1
0.1583	1.692	1
0.1666	1.606	1
0.175	1.692	1
0.1833	1.588	1
0.1916	1.625	1
0.2	1.588	1
0.2083	1.578	1
0.2166	1.569	1
0.225	1.55	1
0.2333	1.54	1
0.2416	1.521	1
0.25	1.503	1
0.2583	1.493	1
0.2666	1.484	1
0.275	1.465	1
0.2833	1.455	1
0.2916	1.446	1
0.3	1.436	1
0.3083	1.417	1
0.3166	1.408	1
0.325	1.389	1
0.3333	1.389	1
0.35	1.361	1
0.3666	1.332	1
0.3833	1.314	1
0.4	1.295	1
0.4166	1.276	1
0.4333	1.257	1
0.45	1.238	1
0.4666	1.21	1
0.4833	1.191	1
0.5	1.181	1
0.5166	1.162	1
0.5333	1.143	1
0.55	1.125	1
0.5666	1.106	1
0.5833	1.087	1

0.6	1.068	1
0.6166	1.058	1
0.6333	1.039	1
0.65	1.021	1
0.6666	1.002	1
0.6833	0.983	1
0.7	0.973	1
0.7166	0.964	1
0.7333	0.945	1
0.75	0.935	1
0.7666	0.917	1
0.7833	0.907	1
0.8	0.888	1
0.8166	0.869	1
0.8333	0.86	1
0.85	0.85	1
0.8666	0.832	1
0.8833	0.822	1
0.9	0.813	1
0.9166	0.794	1
0.9333	0.784	1
0.95	0.775	1
0.9666	0.765	1
0.9833	0.756	1
1	0.746	1
1.2	0.624	1
1.4	0.52	1
1.6	0.425	1
1.8	0.368	1
2	0.312	1
2.2	0.274	1
2.4	0.236	1
2.6	0.198	1
2.8	0.179	1
3	0.151	1
3.2	0.132	1
3.4	0.113	1
3.6	0.094	1
3.8	0.085	1
4	0.075	1
4.2	0.075	1
4.4	0.056	1
4.6	0.056	1
4.8	0.056	1
5	0.047	1
5.2	0.047	1
5.4	0.038	1
5.6	0.038	1
5.8	0.038	1
6	0.038	1
6.2	0.028	1

6.4	0.019	1
6.6	0.019	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-5 RISING HEAD SLUG TEST



DATA SET:
a:\mw5r.dat
08/17/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-5

ESTIMATED PARAMETERS:
K = 8.0415E-05 ft/min
y0 = 1.066 ft

TEST DATA:
H0 = 3.86 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 10. ft
b = 106.9 ft
H = 96.22 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW5-R.wpd

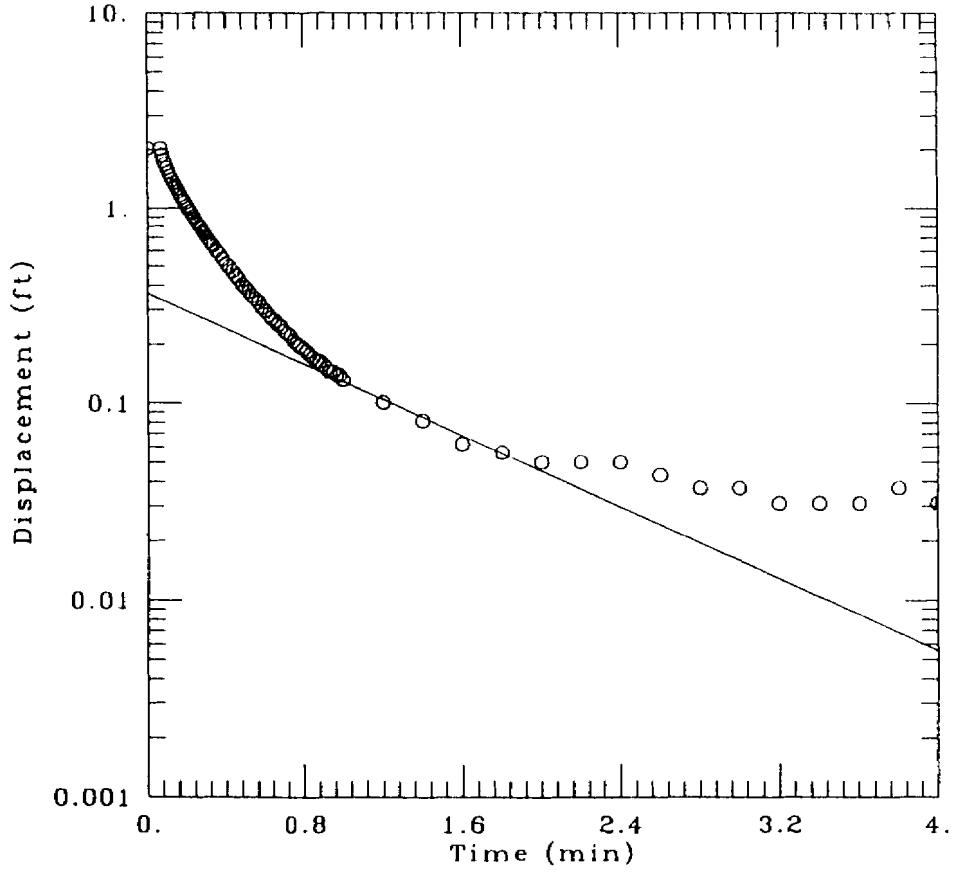
0.0166	3.86	1
0.025	2.406	1
0.0333	1.283	1
0.0416	1.057	1
0.05	1.104	1
0.0583	1.085	1
0.0666	1.085	1
0.075	1.076	1
0.0833	1.076	1
0.0916	1.076	1
0.1	1.066	1
0.1083	1.066	1
0.1166	1.066	1
0.125	1.057	1
0.1333	1.085	1
0.1416	1.057	1
0.15	1.047	1
0.1583	1.057	1
0.1666	1.047	1
0.175	1.038	1
0.1833	1.047	1
0.1916	1.038	1
0.2	1.047	1
0.2083	1.038	1
0.2166	1.038	1
0.225	1.038	1
0.2333	1.038	1
0.2416	1.038	1
0.25	1.038	1
0.2583	1.029	1
0.2666	1.029	1
0.275	1.029	1
0.2833	1.029	1
0.2916	1.029	1
0.3	1.029	1
0.3083	1.029	1
0.3166	1.029	1
0.325	1.029	1
0.3333	1.029	1
0.35	1.029	1
0.3666	1.029	1
0.3833	1.029	1
0.4	1.019	1
0.4166	1.019	1
0.4333	1.019	1
0.45	1.019	1
0.4666	1.019	1
0.4833	1.029	1
0.5	1.019	1
0.5166	1.019	1
0.5333	1.019	1

0.55	1.019	1
0.5666	1.019	1
0.5833	1.019	1
0.6	1.01	1
0.6166	1.019	1
0.6333	1.01	1
0.65	1.019	1
0.6666	1.019	1
0.6833	1.01	1
0.7	1.01	1
0.7166	1.01	1
0.7333	1.01	1
0.75	1.01	1
0.7666	1.01	1
0.7833	1.01	1
0.8	1.01	1
0.8166	1.01	1
0.8333	1.01	1
0.85	1.01	1
0.8666	1.01	1
0.8833	1.01	1
0.9	1	1
0.9166	1	1
0.9333	1	1
0.95	1	1
0.9666	1	1
0.9833	1	1
1	1	1
1.2	1	1
1.4	0.991	1
1.6	0.991	1
1.8	0.981	1
2	0.981	1
2.2	0.972	1
2.4	0.972	1
2.6	0.972	1
2.8	0.962	1
3	0.953	1
3.2	0.953	1
3.4	0.953	1
3.6	0.953	1
3.8	0.944	1
4	0.944	1
4.2	0.944	1
4.4	0.934	1
4.6	0.934	1
4.8	0.925	1
5	0.925	1
5.2	0.925	1
5.4	0.925	1
5.6	0.915	1

5.8	0.915	1
6	0.906	1
6.2	0.906	1
6.4	0.896	1
6.6	0.906	1
6.8	0.906	1
7	0.896	1
7.2	0.896	1
7.4	0.887	1
7.6	0.887	1
7.8	0.887	1
8	0.887	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-6 RISING HEAD SLUG TEST



DATA SET:
a:\mw6r.dat
08/18/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-6

ESTIMATED PARAMETERS:
K = 0.0008329 ft/min
y0 = 0.3643 ft

TEST DATA:
H0 = 2.023 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 10. ft
b = 186.4 ft
H = 0.85 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW6-R.wpd

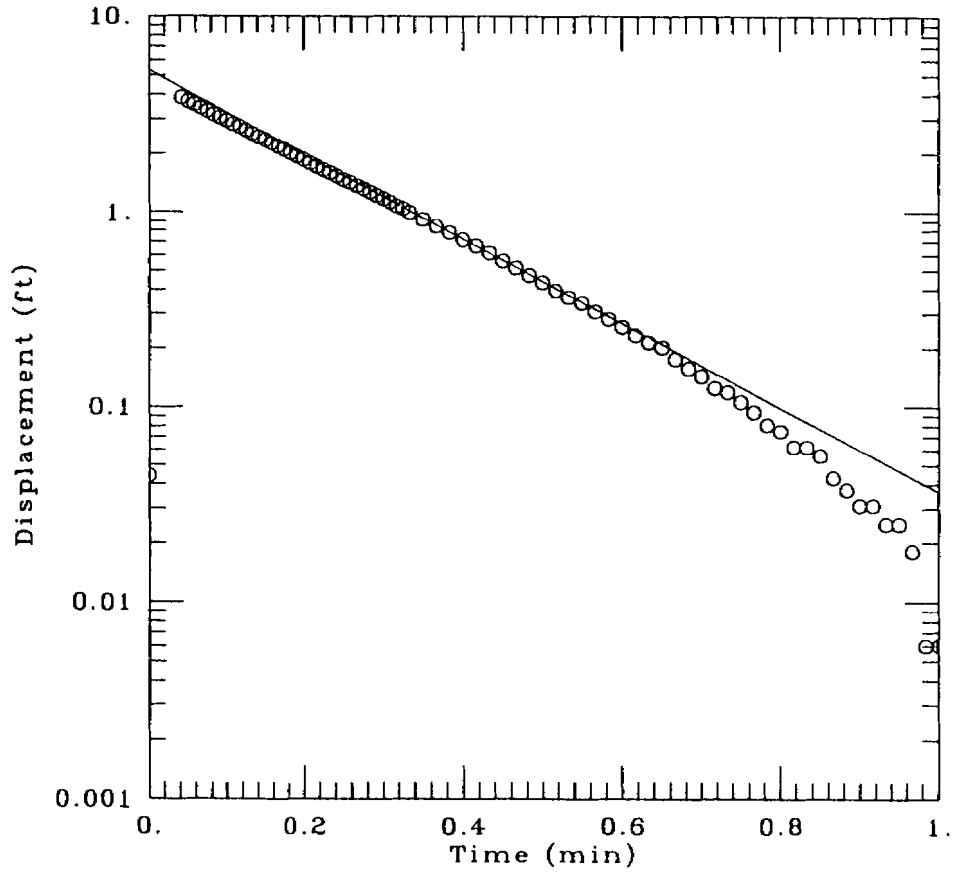
0.0666	2.023	1
0.075	1.879	1
0.0833	1.759	1
0.0916	1.684	1
0.1	1.608	1
0.1083	1.533	1
0.1166	1.47	1
0.125	1.407	1
0.1333	1.357	1
0.1416	1.307	1
0.15	1.263	1
0.1583	1.219	1
0.1666	1.168	1
0.175	1.131	1
0.1833	1.093	1
0.1916	1.062	1
0.2	1.024	1
0.2083	0.992	1
0.2166	0.961	1
0.225	0.936	1
0.2333	0.905	1
0.2416	0.879	1
0.25	0.848	1
0.2583	0.823	1
0.2666	0.798	1
0.275	0.779	1
0.2833	0.754	1
0.2916	0.735	1
0.3	0.71	1
0.3083	0.691	1
0.3166	0.672	1
0.325	0.653	1
0.3333	0.641	1
0.35	0.603	1
0.3666	0.578	1
0.3833	0.546	1
0.4	0.515	1
0.4166	0.496	1
0.4333	0.471	1
0.45	0.446	1
0.4666	0.427	1
0.4833	0.402	1
0.5	0.389	1
0.5166	0.37	1
0.5333	0.351	1
0.55	0.339	1
0.5666	0.326	1
0.5833	0.307	1
0.6	0.295	1
0.6166	0.282	1
0.6333	0.27	1

0.65	0.263	1
0.6666	0.251	1
0.6833	0.245	1
0.7	0.232	1
0.7166	0.226	1
0.7333	0.219	1
0.75	0.207	1
0.7666	0.201	1
0.7833	0.194	1
0.8	0.188	1
0.8166	0.182	1
0.8333	0.175	1
0.85	0.169	1
0.8666	0.163	1
0.8833	0.163	1
0.9	0.157	1
0.9166	0.15	1
0.9333	0.144	1
0.95	0.144	1
0.9666	0.138	1
0.9833	0.138	1
1	0.131	1
1.2	0.1	1
1.4	0.081	1
1.6	0.062	1
1.8	0.056	1
2	0.05	1
2.2	0.05	1
2.4	0.05	1
2.6	0.043	1
2.8	0.037	1
3	0.037	1
3.2	0.031	1
3.4	0.031	1
3.6	0.031	1
3.8	0.037	1
4	0.031	1
4.2	0.037	1
4.4	0.037	1
4.6	0.037	1
4.8	0.031	1
5	0.031	1
5.2	0.031	1
5.4	0.031	1
5.6	0.031	1
5.8	0.031	1
6	0.031	1
6.2	0.025	1
6.4	0.031	1
6.6	0.031	1
6.8	0.031	1

7	0.031	1
7.2	0.025	1
7.4	0.018	1
7.6	0.018	1
7.8	0.012	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-8 RISING HEAD SLUG TEST



DATA SET:
s:\mw8r.dat
08/18/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
MW-8

ESTIMATED PARAMETERS:
K = 0.01586 ft/min
y0 = 5.315 ft

TEST DATA:
H0 = 0.044 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15.33 ft
b = 184.1 ft
H = 163.4 ft

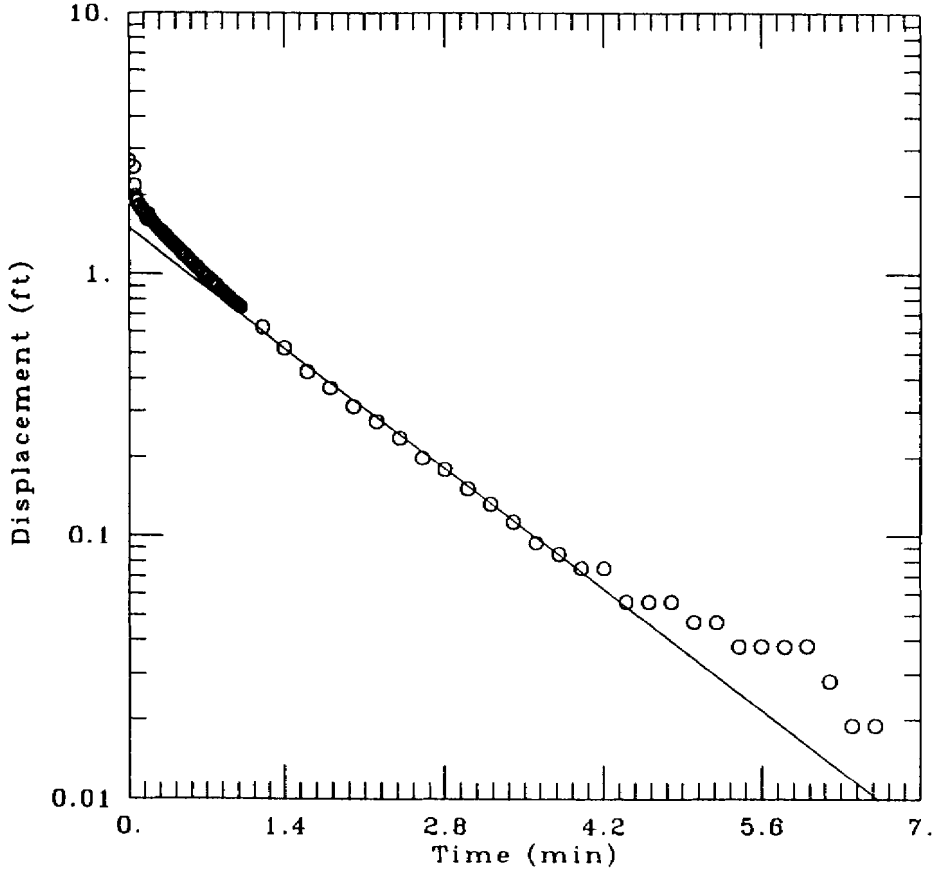
G:\STAFF\SALDER\Phtocir\SlgFinl\MW8-R.wpd

0.0416	3.846	1
0.05	3.676	1
0.0583	3.563	1
0.0666	3.406	1
0.075	3.274	1
0.0833	3.148	1
0.0916	3.035	1
0.1	2.928	1
0.1083	2.803	1
0.1166	2.715	1
0.125	2.608	1
0.1333	2.514	1
0.1416	2.413	1
0.15	2.338	1
0.1583	2.237	1
0.1666	2.155	1
0.175	2.08	1
0.1833	1.998	1
0.1916	1.923	1
0.2	1.854	1
0.2083	1.784	1
0.2166	1.709	1
0.225	1.646	1
0.2333	1.59	1
0.2416	1.527	1
0.25	1.464	1
0.2583	1.414	1
0.2666	1.357	1
0.275	1.307	1
0.2833	1.257	1
0.2916	1.206	1
0.3	1.162	1
0.3083	1.118	1
0.3166	1.068	1
0.325	1.037	1
0.3333	0.993	1
0.35	0.911	1
0.3666	0.842	1
0.3833	0.779	1
0.4	0.716	1
0.4166	0.666	1
0.4333	0.615	1
0.45	0.559	1
0.4666	0.515	1
0.4833	0.471	1
0.5	0.433	1
0.5166	0.395	1
0.5333	0.364	1
0.55	0.339	1
0.5666	0.307	1
0.5833	0.282	1

0.6	0.257	1
0.6166	0.232	1
0.6333	0.213	1
0.65	0.201	1
0.6666	0.175	1
0.6833	0.157	1
0.7	0.144	1
0.7166	0.125	1
0.7333	0.119	1
0.75	0.106	1
0.7666	0.094	1
0.7833	0.081	1
0.8	0.075	1
0.8166	0.062	1
0.8333	0.062	1
0.85	0.056	1
0.8666	0.043	1
0.8833	0.037	1
0.9	0.031	1
0.9166	0.031	1
0.9333	0.025	1
0.95	0.025	1
0.9666	0.018	1
0.9833	0.006	1
1	0.006	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-9 RISING HEAD SLUG TEST



DATA SET:
A:\MW9R.DAT
08/18/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW 9

ESTIMATED PARAMETERS:
K = 0.001745 ft/min
y0 = 1.488 ft

TEST DATA:
H0 = 2.697 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15.33 ft
b = 103.4 ft
H = 20.92 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW9-R.wpd

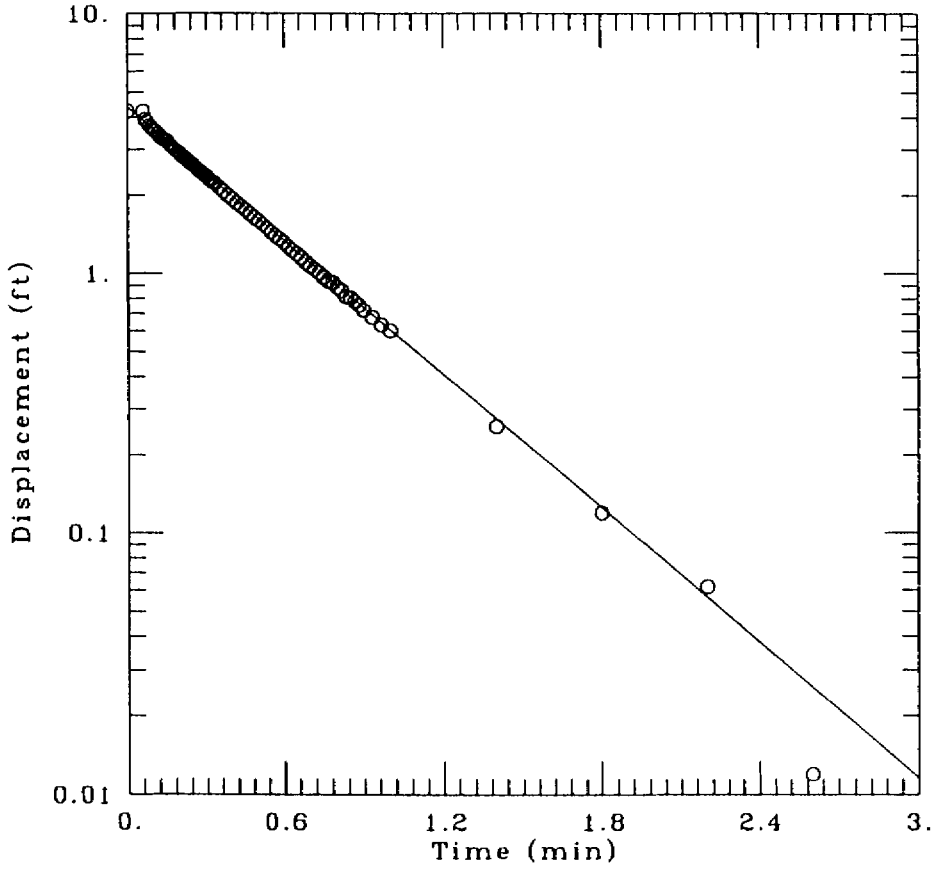
0.0583	2.697	1
0.0666	2.653	1
0.075	2.628	1
0.0833	2.602	1
0.0916	2.59	1
0.1	2.571	1
0.1083	2.552	1
0.1166	2.533	1
0.125	2.521	1
0.1333	2.502	1
0.1416	2.489	1
0.15	2.471	1
0.1583	2.458	1
0.1666	2.445	1
0.175	2.427	1
0.1833	2.414	1
0.1916	2.401	1
0.2	2.389	1
0.2083	2.376	1
0.2166	2.364	1
0.225	2.345	1
0.2333	2.339	1
0.2416	2.32	1
0.25	2.307	1
0.2583	2.295	1
0.2666	2.282	1
0.275	2.269	1
0.2833	2.263	1
0.2916	2.244	1
0.3	2.232	1
0.3083	2.225	1
0.3166	2.207	1
0.325	2.2	1
0.3333	2.188	1
0.35	2.163	1
0.3666	2.137	1
0.3833	2.119	1
0.4	2.093	1
0.4166	2.075	1
0.4333	2.056	1
0.45	2.031	1
0.4666	2.005	1
0.4833	1.993	1
0.5	1.974	1
0.5166	1.949	1
0.5333	1.93	1
0.55	1.911	1
0.5666	1.892	1
0.5833	1.873	1
0.6	1.855	1
0.6166	1.836	1

0.6333	1.817	1
0.65	1.798	1
0.6666	1.779	1
0.6833	1.767	1
0.7	1.748	1
0.7166	1.729	1
0.7333	1.71	1
0.75	1.697	1
0.7666	1.679	1
0.7833	1.66	1
0.8	1.641	1
0.8166	1.635	1
0.8333	1.616	1
0.85	1.597	1
0.8666	1.584	1
0.8833	1.565	1
0.9	1.553	1
0.9166	1.54	1
0.9333	1.521	1
0.95	1.509	1
0.9666	1.496	1
0.9833	1.484	1
1	1.465	1
1.2	1.295	1
1.4	1.151	1
1.6	1.025	1
1.8	0.918	1
2	0.817	1
2.2	0.736	1
2.4	0.667	1
2.6	0.597	1
2.8	0.541	1
3	0.484	1
3.2	0.434	1
3.4	0.396	1
3.6	0.352	1
3.8	0.302	1
4	0.258	1
4.2	0.227	1
4.4	0.201	1
4.6	0.189	1
4.8	0.176	1
5	0.157	1
5.2	0.126	1
5.4	0.113	1
5.6	0.107	1
5.8	0.101	1
6	0.088	1
6.2	0.082	1
6.4	0.082	1
6.6	0.069	1

6.8	0.069	1
7	0.063	1
7.2	0.057	1
7.4	0.063	1
7.6	0.063	1
7.8	0.057	1
8	0.051	1
8.2	0.051	1
8.4	0.044	1
8.6	0.044	1
8.8	0.038	1
9	0.038	1
9.2	0.038	1
9.4	0.038	1
9.6	0.038	1
9.8	0.038	1
10	0.032	1
11	0.025	1
12	0.025	1
13	0.019	1
14	-0.006	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-10 RISING HEAD SLUG TEST



DATA SET:
a:\mw10r.dat
08/07/98

AQUIFER TYPE:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATE:
7/98

OBS. WELL:
MW-10

ESTIMATED PARAMETERS:
K = 0.005866 ft/min
y0 = 4.371 ft

TEST DATA:
H0 = 4.23 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15.33 ft
b = 104.3 ft
H = 124.6 ft

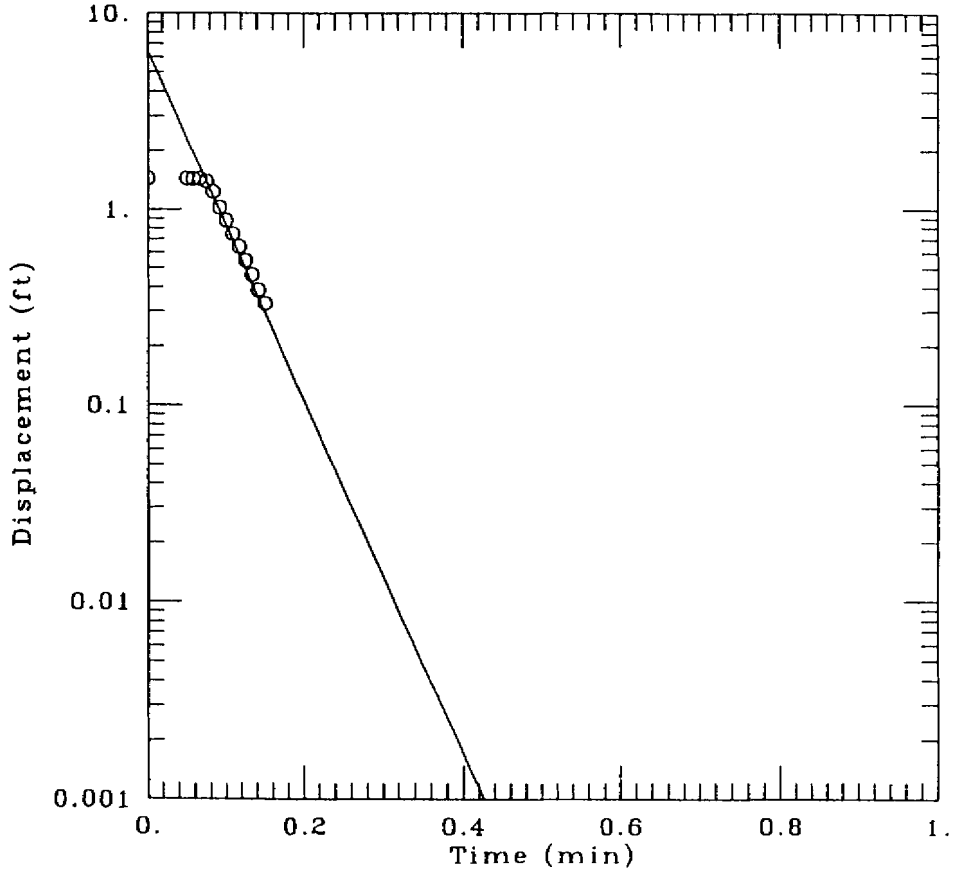
G:\STAFF\SALDER\Phtocir\SlgFinl\MW10R.wpd

0.0583	4.23	1
0.0666	3.922	1
0.075	3.847	1
0.0833	3.715	1
0.0916	3.658	1
0.1	3.589	1
0.1083	3.539	1
0.1166	3.463	1
0.125	3.388	1
0.1333	3.325	1
0.1416	3.275	1
0.15	3.262	1
0.1583	3.168	1
0.1666	3.105	1
0.175	3.048	1
0.1833	2.986	1
0.1916	2.942	1
0.2	2.891	1
0.2083	2.841	1
0.2166	2.791	1
0.225	2.747	1
0.2333	2.703	1
0.2416	2.659	1
0.25	2.621	1
0.2583	2.571	1
0.2666	2.527	1
0.275	2.489	1
0.2833	2.445	1
0.2916	2.407	1
0.3	2.37	1
0.3083	2.326	1
0.3166	2.288	1
0.325	2.25	1
0.3333	2.225	1
0.35	2.15	1
0.3666	2.074	1
0.3833	1.999	1
0.4	1.936	1
0.4166	1.873	1
0.4333	1.816	1
0.45	1.76	1
0.4666	1.703	1
0.4833	1.647	1
0.5	1.596	1
0.5166	1.546	1
0.5333	1.496	1
0.55	1.439	1
0.5666	1.395	1
0.5833	1.357	1
0.6	1.313	1
0.6166	1.263	1

0.6333	1.225	1
0.65	1.188	1
0.6666	1.15	1
0.6833	1.106	1
0.7	1.068	1
0.7166	1.037	1
0.7333	1.005	1
0.75	0.968	1
0.7666	0.936	1
0.7833	0.924	1
0.8	0.886	1
0.8166	0.861	1
0.8333	0.817	1
0.85	0.81	1
0.8666	0.779	1
0.8833	0.754	1
0.9	0.722	1
0.9166	0.71	1
0.9333	0.678	1
0.95	0.653	1
0.9666	0.634	1
0.9833	0.622	1
1	0.603	1
1.2	0.396	1
1.4	0.257	1
1.6	0.176	1
1.8	0.119	1
2	0.081	1
2.2	0.062	1
2.4	0.025	1
2.6	0.012	1
2.8	0	1
3	0	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

MW-11 RISING HEAD SLUG TEST



DATA SET:
a:\mw11r.dat
08/07/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
MW-11

ESTIMATED PARAMETERS:
K = 0.06587 ft/min
y0 = 6.474 ft

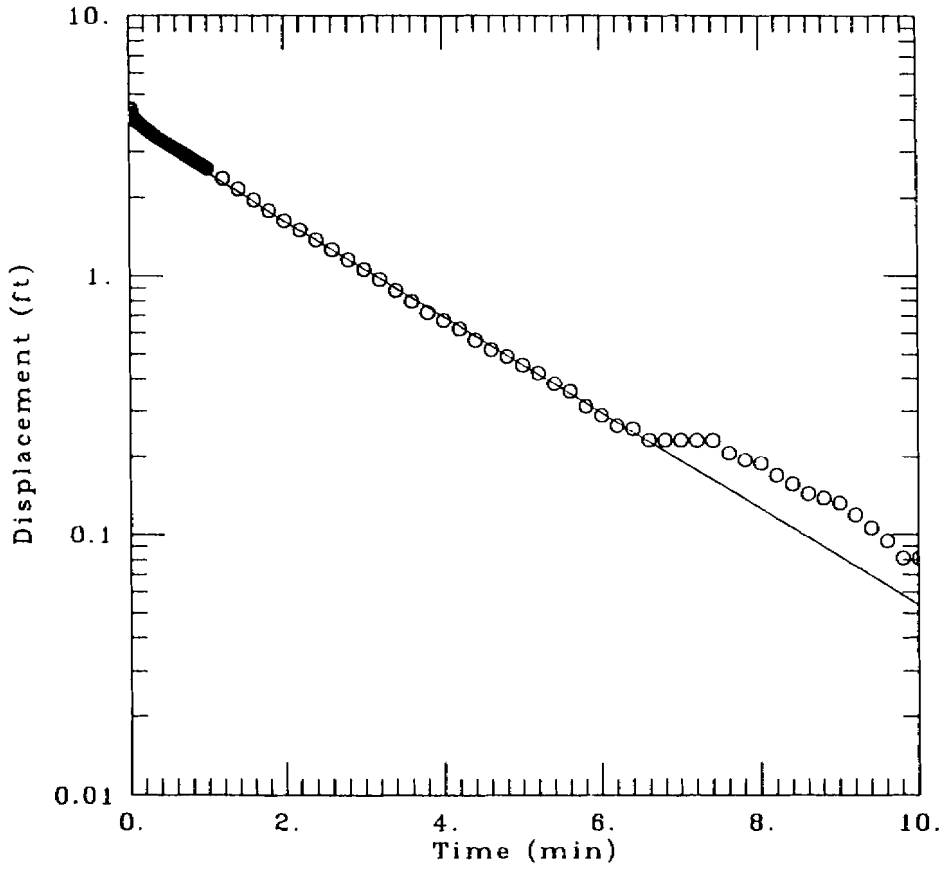
TEST DATA:
H0 = 1.442 ft
rc = 0.1667 ft
rw = 0.3333 ft
L = 15. ft
b = 194.1 ft
H = 164.1 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\MW11-R.wpd

0.05	1.442	1
0.0583	1.433	1
0.0666	1.433	1
0.075	1.386	1
0.0833	1.225	1
0.0916	1.018	1
0.1	0.876	1
0.1083	0.744	1
0.1166	0.641	1
0.125	0.546	1
0.1333	0.462	1
0.1416	0.386	1
0.15	0.33	1
0.1583	0.282	1
0.1666	0.235	1
0.175	0.198	1
0.1833	0.16	1
0.1916	0.132	1
0.2	0.113	1
0.2083	0.094	1
0.2166	0.084	1
0.225	0.066	1
0.2333	0.056	1
0.2416	0.047	1
0.25	0.037	1
0.2583	0.037	1
0.2666	0.028	1
0.275	0.018	1
0.2833	0.018	1
0.2916	0.018	1
0.3	0.009	1
0.3083	0.009	1
0.3166	0.009	1
0.325	0	1

McLaren/Hart	Client: Photocircuits Corp.
Project No.: 120802678001.013	Location: Glen Cove, NY

NC WELL RISING HEAD SLUG TEST



DATA SET:
a:\ncr.dat
08/18/98

AQUIFER TYPE:
Unconfined
SOLUTION METHOD:
Bouwer-Rice
TEST DATE:
7/98
OBS. WELL:
NC Well (Nassau County Well)

ESTIMATED PARAMETERS:
K = 0.0005402 ft/min
y0 = 3.822 ft

TEST DATA:
H0 = 4.393 ft
rc = 0.08333 ft
rw = 0.25 ft
L = 5. ft
b = 198. ft
H = 6.39 ft

G:\STAFF\SALDER\Phtocir\SlgFinl\NC-R.wpd

0.0333	4.393	1
0.0416	4.33	1
0.05	4.211	1
0.0583	4.148	1
0.0666	4.11	1
0.075	4.079	1
0.0833	4.047	1
0.0916	4.016	1
0.1	3.985	1
0.1083	3.959	1
0.1166	3.934	1
0.125	3.909	1
0.1333	3.89	1
0.1416	3.871	1
0.15	3.846	1
0.1583	3.827	1
0.1666	3.809	1
0.175	3.79	1
0.1833	3.771	1
0.1916	3.752	1
0.2	3.733	1
0.2083	3.714	1
0.2166	3.702	1
0.225	3.683	1
0.2333	3.664	1
0.2416	3.645	1
0.25	3.633	1
0.2583	3.614	1
0.2666	3.601	1
0.275	3.582	1
0.2833	3.57	1
0.2916	3.551	1
0.3	3.551	1
0.3083	3.526	1
0.3166	3.507	1
0.325	3.494	1
0.3333	3.482	1
0.35	3.45	1
0.3666	3.419	1
0.3833	3.394	1
0.4	3.369	1
0.4166	3.343	1
0.4333	3.318	1
0.45	3.287	1
0.4666	3.262	1
0.4833	3.237	1
0.5	3.211	1
0.5166	3.186	1
0.5333	3.167	1
0.55	3.142	1
0.5666	3.117	1

0.5833	3.098	1
0.6	3.073	1
0.6166	3.048	1
0.6333	3.029	1
0.65	3.004	1
0.6666	2.985	1
0.6833	2.966	1
0.7	2.941	1
0.7166	2.922	1
0.7333	2.897	1
0.75	2.878	1
0.7666	2.853	1
0.7833	2.841	1
0.8	2.815	1
0.8166	2.797	1
0.8333	2.778	1
0.85	2.753	1
0.8666	2.734	1
0.8833	2.715	1
0.9	2.696	1
0.9166	2.683	1
0.9333	2.658	1
0.95	2.646	1
0.9666	2.621	1
0.9833	2.608	1
1	2.589	1
1.2	2.376	1
1.4	2.156	1
1.6	1.961	1
1.8	1.785	1
2	1.634	1
2.2	1.502	1
2.4	1.376	1
2.6	1.263	1
2.8	1.156	1
3	1.062	1
3.2	0.968	1
3.4	0.88	1
3.6	0.798	1
3.8	0.722	1
4	0.672	1
4.2	0.622	1
4.4	0.565	1
4.6	0.521	1
4.8	0.49	1
5	0.452	1
5.2	0.421	1
5.4	0.383	1
5.6	0.358	1
5.8	0.314	1
6	0.289	1

6.2	0.264	1
6.4	0.257	1
6.6	0.232	1
6.8	0.232	1
7	0.232	1
7.2	0.232	1
7.4	0.232	1
7.6	0.207	1
7.8	0.194	1
8	0.188	1
8.2	0.169	1
8.4	0.157	1
8.6	0.144	1
8.8	0.138	1
9	0.132	1
9.2	0.119	1
9.4	0.106	1
9.6	0.094	1
9.8	0.081	1
10	0.081	1