ENVIRONMENTAL SITE INVESTIGATION MATERIAL RESEARCH CORPORATION 542 ROUTE 303 ORANGETOWN, NEW YORK

Prepared For

SONY

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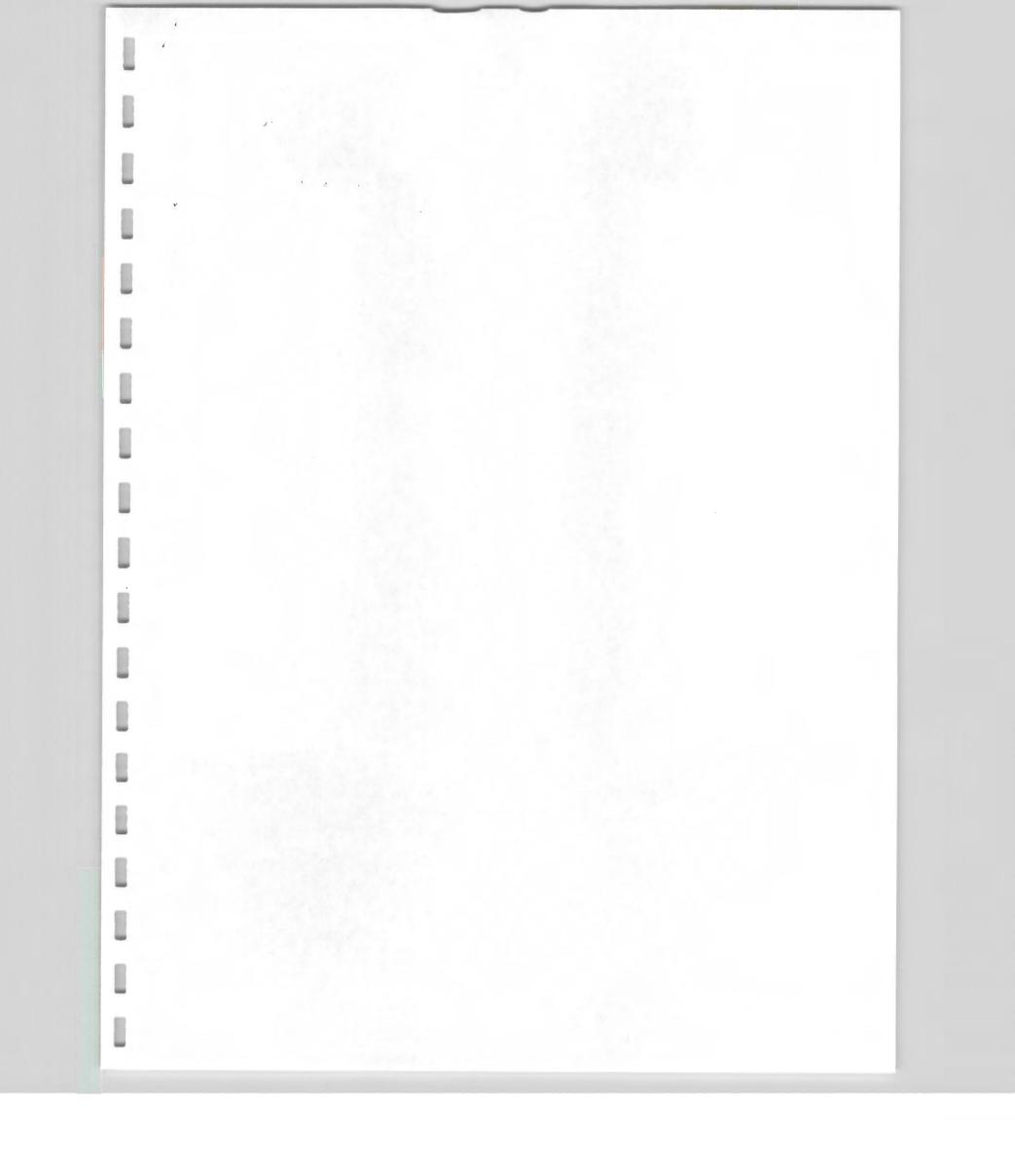


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ENVIRONMENTAL SITE INVESTIGATION MATERIALS RESEARCH CORPORATION 542 ROUTE 303 ORANGETOWN, NEW YORK

1.0 INTRODUCTION

Sony Electronics, Inc, (Sony) retained Leggette, Brashears & Graham, Inc. (LBG) to perform an environmental investigation at the site located at 542 Route 303 in the Town of Orangetown, New York (figure 1). The environmental investigation was completed in accordance with the following New York State Department of Environmental Conservation (NYSDEC) approved work plan and work plan amendment:

- February 2001, "Work Plan for Additional Environmental Investigations, Materials Research Corporation, 542 Route 303, Orangetown, Rockland County, New York"
- February 2002, "Work Plan Amendment, Materials Research Corporation, 542 Route 303, Orangetown, Rockland County, New York"

2.0 SITE DESCRIPTION

2.1 Physical Characteristics

The Materials Research Corporation (MRC) property at 542 Route 303 is currently operated as a manufacturing facility which engages in metal purification and production of metal targets used in sputtering machines. The property is currently owned by Praxair Surface Technologies, Inc. and is located in Orangetown, Rockland County, New York (figure 1).

The subject property is identified on Orangetown Tax Map 70.19, Section 1, Lot 46. Access to the 2.79-acre property is unrestricted; two ingresses/egresses extend onto the site from Glenshaw Street (figure 2) and parking lots are located on the east, west and south sides of the building. The property contains an approximately 43,000 square feet (ft^2), one-story building. The original building, approximately 20,300 ft^2 , was constructed in 1961; an additional 20,750 ft^2 , the rear half of the building, was constructed in 1969. A final addition of 1,920 ft^2 , the hazardous materials storage area, was constructed in November 1981.

The building consists of administrative offices, a cafeteria/lunch room, manufacturing areas, laboratory areas, stockrooms, two shipping and receiving areas, cleaning rooms, etching rooms, degreasing rooms, several mechanical rooms, and a hazardous materials storage area (figure 3). Most of the unpaved property is landscaped with trees, bushes and grass and one area along the north side of the building is gravel. A small drainage swale is located on the rear (west) side of the property and contains natural vegetation with trees and underbrush.

The topography of the site is generally flat but grades slightly downward toward the southeast. Building grade is at an elevation approximately 116 feet above mean sea level.

2.2 Facility Operations

The MRC facility purifies metals and forms metal targets used in sputtering machines that manufacture chips for electronic equipment. The sputtering process creates a metallic coat generated from a metal target disk (dependant on the metal required for the final product chip) onto a silicon disk. The current operations at the site are essentially unchanged since MRC began manufacturing metal targets at the facility in 1961.

2.3 Facility Utilities

The MRC property is provided a potable water supply from United Water Company and is connected to public sanitary sewers. Based on site plans for the facility dated 1969, reviewed during a file review at the Orangetown Building Department, a septic tank and leachfield existed in the front lawn area of the building at that time (figure 2). It is unknown when the facility was connected to the public sewer.

Electrical power is supplied to the site by Orange and Rockland Utility and natural gas is supplied by Texas and Ohio Utility. One pad-mounted transformer is located along the south side of the existing building (figure 2). The transformer is owned by MRC and reported to be non-PCB containing. Leaks, stains or other signs of failure are not present in the vicinity of the transformer which serves the property.

The building is heated primarily by forced air; limited baseboard heat serves the front office areas. Air conditioning units are located on the roof of the facility.

3.0 SUMMARY OF PREVIOUS INVESTIGATIONS

At the request of Sony, LBG completed a Phase I Environmental Site Assessment (ESA) for the subject property in September 1997. As part of the Phase I ESA, LBG completed a review of Federal and State environmental databases for the subject and surrounding properties pursuant to ASTM standards. In response to concerns identified during the 1997 ESA, Sony retained LBG to complete two subsurface investigations at the MRC property, and identify all releases documented by the Region II United States Environmental Protection Agency and Region III NYSDEC at and surrounding the MRC property. The Freedom of Information Act review resulted in a further detailed review of releases that had occurred at the property upgradient of the MRC facility. The further detailed files reviewed were maintained at the Rockland County Health Department (RCHD). Files were reviewed for the Interstate Distribution Center and Conrail Railway. Aluf Plastics, Glenshaw Glass Company and NYNEX were identified during the search as having environmental files and as being a former or current occupant at the now-identified Interstate Distribution Center. Pertinent information from the aforementioned files are discussed below. There were no environmental files identified for the Conrail Railway. The subsurface investigation included completion of 11 test borings, collection of surficial soil samples, and collection and analyses of ground-water and soil samples. The subsurface investigations and detailed file review are summarized below.

Areas of Concern (AOC) identified during the environmental site investigations included the following:

- The historical use of 1,1,1-trichloroethane (TCA) and the generation of metal solutions at the MRC property are substances of concern. Locations of concern include the former septic leach field on the northeastern portion of the property, the loading dock areas on the southern side of the facility, the hazardous material storage area on the western side of the facility and a former TCA storage area identified in the north-central portion of the facility (identified during the September 16, 1999 FOIL search).
- The release of highly acidic water (pH 2.0 to 3.0) from a corroded discharge pipe, which was connected to the precious metals refining room on the northern side of the facility

(near soil borings H-1 and H-2 (figure 2)).

• The potential PCB-containing pad-mounted transformer formerly located on the southern side of the facility (near soil sample locations P-1 and P-2 (figure 2)).

3.1 Field Investigation

3.1.1 Soil Investigations

To address the above areas of concern, LBG completed a subsurface investigation at the site on July 9, 1999 which consisted of the drilling of five test borings (MW-1, MW-2, MW-3, MW-4 and TB-1) hand-augured two test borings (H-1 and H-2) and collected two surficial soil samples (P-1 and P-2) at the MRC property (figure 2). Test boring MW-2 was drilled to identify the presence of any potential contaminants migrating onto the MRC property and not to investigate a potential release area. Test borings were drilled by hollow-stem auger and soil samples were collected using split-spoon samples. Soil samples were screened for the presence of volatile organic compounds (VOCs) with the use of a photoionization detector (PID). There were no VOC detections identified during the field screening. All geologic logs are shown in Appendix I.

Test borings TB-1, MW-1, MW-2 and MW-3 were drilled to address potential releases which may have occurred through the septic system leach field and at the loading and storage areas. The test borings were completed to depths ranging from 7 ft bg (TB-1) to 20 ft bg (MW-3). Soil samples from MW-1, MW-2 and MW-3 were collected and analyzed for halogenated VOCs by EPA Method 8021B and total RCRA metals. There were no detections of VOCs in any of the soil samples analyzed (table 1). Metals were detected in the soil samples at concentrations below the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) recommended soil clean-up objectives (table 2). The levels detected are representative of background soil concentrations.

Test borings H-1 and H-2 were hand-augered to investigate the reported release of highly acidic waters from the discharge pipe on the northern side of the facility, which were documented in the 1997 ESA. The test borings were completed to a depth of 4.5 ft bg. Soil samples from 4 to 4.5 ft bg were collected from these locations and analyzed for halogenated VOCs by EPA Method 8021B and total RCRA metals. There were no detections of VOCs in the

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soil samples analyzed. Metals were detected at concentrations similar to background levels and below the NYSDEC TAGM recommended clean-up objectives.

Surficial soil samples were collected at locations P-1 and P-2 (figure 2) to investigate concerns over the removal of the potential PCB containing pad-mounted transformer. The soil samples were analyzed for polychlorinated bi-phenyls by EPA Method 8080. There were no detections of PCBs in the soils. Laboratory reports and chain-of-custody forms for the soil samples analyzed are provided in Appendix II.

On September 8 and 9, 1999, LBG personnel supervised the drilling of test borings MW-5S, MW-5D, MW-6S and MW-6D. MW-5D and MW-6D were drilled to the top of bedrock. Soil samples were collected and screened for the presence of VOCs with the use of a PID; there were no PID detections. No soil samples were analyzed from the test borings because of the lack of the PID responses and because the borings were located in an area identified as upgradient of potential release areas.

3.1.2 Ground-Water Investigation

Test borings MW-1, MW-2, MW-3, MW-4, MW-5S, MW-5D, MW-6S and MW-6D were all completed as monitor wells. Well construction details are provided in Appendix I and table 3. The locations of the monitor wells are shown on figure 2.

The monitor wells were surveyed by LBG personnel to an arbitrary datum to determine the direction of ground-water flow at the MRC property. Depth to ground-water measurements were taken on September 10, 1999 and used to create a water-table contour map (figure 4) for the MRC property. Table 4 includes the relative ground-water elevation data for 1999. In general, figure 4 shows that the ground water in the unconsolidated materials at the subject property flows from the northwest to the southeast. As shown, MW-5S through MW-6D were installed as upgradient monitor points to identify any VOCs which may be migrating onto the MRC property.

All ground-water samples were collected by the low-stress purging and sampling technique which is outlined in the July 30, 1996 U.S. Environmental Protection Agency Region I "Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Ground Water Samples from Monitoring Wells." The sampling procedure was initially created to address the

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need to obtain accurate inorganic results from unfiltered ground-water samples. However, more recent technical literature indicates the sampling procedure produces water-quality data with more reproducible and representative results of actual conditions for both organic and inorganic analyses.

Ground-water samples were collected on July 13, 1999 from Monitor Wells MW-1 through MW-4 and analyzed for halogenated VOCs by EPA Method 8021B and RCRA metals. There were no detections of dissolved metals in any of the samples analyzed. Table 5 shows the concentrations of all detected VOCs and compares the concentrations to the NYSDEC Technical and Operational Guidance Series (TOGS). VOCs were not detected in the ground-water samples collected from Monitor Wells MW-1 and MW-2. The occurrence of the VOCs above the criteria was limited to two monitor wells (MW-3 and MW-4) located on the western and southern sides of the facility.

Ground-water samples were collected on September 10, 1999 from Monitor Wells MW-2 through MW-6D and analyzed for halogenated VOCs by EPA Method 8021B. A ground-water sample was not collected from MW-1 on September 10, 1999, because of the limited water column in the well and poor aquifer recharge characteristics. As with the previous results, there were no VOCs detected in the sample collected from Monitor Well MW-2. Table 5 shows the concentrations of all detected VOCs. VOCs were detected in the upgradient Monitor Wells MW-5S through MW-6D. All laboratory reports and chain-of-custody forms for all groundwater samples collected are shown in Appendix III.

3.2 September 16, 1999 RCHD File Review

Files containing information from the Glenshaw Glass Company and Aluf Plastics were reviewed. These properties were located on the same parcel, which is located west of the MRC facility. The Glenshaw Glass Company and Aluf Plastics warehouse were located directly west of the MRC property, while the manufacturing building and discharge outfall pipes were located southwest of the MRC property. Detailed notes from the file review are presented in Appendix IV.

Concentrations of TCA, tetrachloroethylene (PCE) and trichloroethylene (TCE) were identified in samples collected from the Glenshaw Glass Company Wells 1 and 2. These wells

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are assumed to be set in bedrock. High concentrations of VOCs, including TCE, were identified in a sump located in the southern portion of the Glenshaw Glass Company manufacturing facility, the stream located near two outfall pipes which discharge to the stream from the facility and at two locations identified as catch basins. A relatively high concentration of TCA (869 ppb (parts per billion)) was identified in a 1981 surface-water sample collected in a catch basin located 30 feet west of Route 303 and Glenshaw Street. There was no map identifying the location of this sample, but the description locates it close to the MRC property.

The file review indicated that a total of five monitor wells have been installed on the property during subsequent investigations. There were no detections of VOCs in any of the samples collected from the monitor wells. Two of the monitor wells were located north of Glenshaw Street, upgradient of the MRC property. Files for Aluf Plastics identified a machine repair shop located at the northeast corner of the manufacturing facility. Neither of the monitor wells discussed were located downgradient of this portion of the manufacturing facility. It is LBG's understanding that additional subsurface investigations have occurred at the property during 2000, however, the results of the investigations have not been obtained by LBG for review.

3.3 Results of Previous Investigations

Soil samples were collected near the southern loading dock, hazardous waste storage area, former septic leach field and acidic water release area and analyzed for the presence of halogenated VOCs. There were no detections of halogenated VOCs in any of the samples collected.

Soil samples were collected from MW-1, MW-3, MW-4, H-1 and H-2 and analyzed for RCRA 8 metals. Metals were detected in the soil samples at concentrations below the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) recommended soil clean-up objectives. The levels detected are representative of background soil concentrations. Ground-water samples were collected from MW-1 through MW-4 and analyzed for RCRA 8 metals. The only metal detected was barium at concentrations ranging from 0.52 to 0.90 milligrams per liter (mg/l). The results are not indicative of a release of RCRA 8 metals.

The results of VOC ground-water quality and ground-water flow data are incorporated into the conclusions section at the end of this report.

4.0 FIELD INVESTIGATION

Between October 29 and November 6, 2001 and March 26 and April 19, 2002, LBG completed an extensive field investigation at the site consisting of drilling 56 soil borings, collection and analysis of 44 soil samples, installation of 16 monitor wells and collection and analysis of 35 ground-water samples.

The investigation was completed in two phases. The first phase of the field investigation was completed in accordance with the February 2001, "Work Plan for Additional Environmental Investigations, Materials Research Corporation, 542 Route 303, Orangetown, Rockland County, New York." The scope of work described in this work plan was developed during communications between Sony and the NYSDEC. In general the plan consisted of the collection of soil and ground-water samples throughout the site using the probing/direct-push method with a drill-rig mounted on a truck (Geoprobe rig). During this field investigation, a total of 40 soil borings were drilled and 14 ground-water and 26 soil samples were collected for analysis. This drilling operation occurred between October 29 and November 6, 2001. The drilling operation was halted because of slow progress and because the Geoprobe drill rig was unable to penetrate the deeper unconsolidated materials.

The second phase of the investigation was completed in accordance with the February 2002, "Work Plan Amendment, Materials Research Corporation, 542 Route 303, Orangetown, Rockland County, New York." This amendment was developed during a joint meeting of Sony, NYSDEC and LBG personnel. This investigation included the drilling of 16 soil borings, installation of 16 monitor wells and the collection and analysis of 7 surficial soil samples, 11 boring soil samples and 21 ground-water samples. Details describing these field investigations are presented below.

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Drilling of Soil Borings, Collection of Soil Samples and Installation of Monitor Wells 4.1 Between October 29 and November 9, 2001, LBG and NYSDEC staff supervised the drilling of 40 soil borings (figure 2; B-1, B-2, B-6, B-7, B-7A, B-8, B-8A, B-9, B-13, B-14, B-15, B-15A, B-16 and all noted incomplete borings). The soil borings were drilled by Zebra Environmental, Inc. of Lynbrook, New York, using a Geoprobe rig. Soil samples were collected using a macro-core sampler, which measured 2 inches in diameter by 24 inches in length, and was fitted with a disposable acetate liner. The soil borings were drilled to depths ranging from 2 to 40 feet below grade (ft bg). Soil samples were collected every 10 feet. All soil samples from each boring were logged and then placed into dedicated, sealed plastic bags. The resultant headspace within each plastic bag was screened for the presence of VOCs with a photoionization detector (PID) that was calibrated to an isobutylene standard. No VOCs were detected in any of the samples (Appendix I). All soil samples were containerized, properly labeled, and then placed into an ice-chilled cooler for delivery to York for analysis of halogenated VOCs by EPA Method 8021B. Table 1 and 5 presents a summary of all soil and ground-water samples collected for laboratory analysis. Duplicate soil samples were collected every 10 samples, while triplicate samples were collected every 20 samples (total of two duplicate samples and one triplicate sample).

Geologic logs are presented in Appendix I. Laboratory reports and chain-of-custody forms are presented in Appendix II. Note that the Category B quality assurance and quality control documentation is maintained at LBG.

As identified in previous investigations, the unconsolidated materials at the site are extremely compact and not conducive to drilling with a Geoprobe rig. During this portion of the drilling investigation two steel macrocore samplers split due to the dense nature of the unconsolidated material. The drilling program was halted because of slow progress due to the difficult drilling conditions at the site.

An alternative investigative approach was developed by Sony, NYSDEC and LBG personnel to more productively investigate the environmental condition of the site. The investigative approach which is detailed in the February 21, 2002 Work Plan Amendment, included the use of a hollow-stem auger drill rig. The drilling portion of this investigation

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occurred between March 26 and April 4, 2002. During this time, LBG and NYSDEC supervised the drilling of 16 soil borings (MW-3D, MW-4D, MW-7S, MW-7D, MW-8S, MW-8D, MW-9S, MW-9D, MW-10S, MW-10D, MW-11S, MW-11D, MW-12, MW-13, MW-14S, and MW-14D), collected seven shallow soil samples and 16 boring soil samples for analyses (figure 2). All of the soil borings were completed as monitor wells. Ten locations were designed as cluster wells (due to water-table conditions identified during the investigation, only eight locations were completed as cluster wells). The soil borings and monitor wells were drilled/installed by Soiltesting, Inc. of Oxford, Connecticut.

All soil boring clusters were drilled using the hollow-stem auger drilling method. The deep soil borings in each cluster were sampled every 5 feet until bedrock with use of a split spoon, with the exception of Monitor Well MW-4D. Split-spoon samples were collected every 5 feet until the water table (23 feet below grade) at Monitor Well MW-4D. Split spoons were decontaminated before and between each use. Decontamination procedures included brushing with an Alconox wash, followed by a deionized water rinse.

All soil samples were collected then logged and placed into a dedicated, sealed plastic bag. The resultant headspace within the plastic bag was screened for the presence of VOCs with a PID that was calibrated to an isobutylene standard. Once soil samples were identified for analyses, the samples were containerized, properly labeled, and then placed into an ice-chilled cooler for delivery to York for analysis. At least one sample per borehole was analyzed for halogenated VOCs by EPA Method 8021B.

Table 1 identifies all soil samples collected for laboratory analyses. Duplicate soil samples were collected every 10 samples, while triplicate samples were collected every 20 samples (total of two duplicate samples and one triplicate sample). Geologic logs are presented in Appendix I. Laboratory reports and chain-of-custody forms are presented in Appendix II.

Each monitor well was installed with 0.010-inch slotted, flush-joint PVC screen set from the bottom of the borehole and measuring 10 to 15 feet in length. Two-inch diameter PVC casing was installed from the top of the screen to grade. The annular space in the vicinity of the well screen was filled with FilterSil No. 00 gravel pack. At a minimum, a 2-foot bentonite and/or grout seal was placed above the screen setting. Soil cuttings were used for backfill from

the top of the bentonite seal to approximately 2 ft bg. The monitor wells were completed with steel cased road boxes set in cement. All of the monitor wells were covered with watertight locking well caps. Construction details for each monitor well are presented in the geologic logs and well construction diagrams located in Appendix I and on table 3.

Following completion of the monitor wells, LBG personnel surveyed the top-of-casing elevations for all monitor wells. The survey was based on an arbitrary onsite benchmark of 100 feet. The results of the survey are presented in table 3. The monitor wells were developed by surging and bailing with a clean PVC bailer until dry or until the purge water was free of heavy sediment.

Seven surficial soil samples (S-1 through S-7 on figure 2) were collected with use of a clean stainless steel trowel. The samples were containerized, labeled and placed in an ice chilled cooler until delivery to York Analytical Laboratories for analyses of halogenated VOCs by EPA Method 8021B.

4.2 Ground-Water Sampling

Between October 29 and November 9, 2001, LBG and NYSEDC personnel collected ground-water samples from the Geoprobe boreholes with use of a screen point sampler for analyses of halogenated VOCs by EPA Method 8021B. Ground-water samples were collected at every 10-foot interval that was identified to be saturated. Ground-water samples were collected with use of a peristaltic pump or bailer. The table below identifies the locations and depths at which ground-water samples were collected. Laboratory reports and chain of custody forms are presented in Appendix II. The Category B quality assurance and quality control documentation is maintained at LBG.

Location	Depth (ft bg)
B-1	20
	30
B-2	20
B-3	20
	30
	40
B-7	20

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Location	Depth (ft bg)
B-8	20
B-13	20
B-15	28

The collection of ground-water samples was extremely difficult because of the fine and dense nature of the materials encountered. Ground water did not drain from these materials readily, in fact at most locations it took at least 2-hours for enough water to drain from the unconsolidated materials into the sampling apparatus to fill the two 40 milliliter sample containers. The Geoprobe drilling investigation was halted as a result of the slow drainage of the aquifer and difficult drilling conditions.

On April 19, 2002, ground-water samples were collected from 19 site monitor wells (MW-2, MW-3D, MW-4D, MW-5S, MW-5D, MW-6S, MW-6D, MW-7S, MW-7D, MW-8D, MW-9S, MW-9D, MW-10S, MW-10D, MW-11S, MW-11D, MW-12, MW-13 and MW-14D). Note that MW-3S, MW-4S, MW-8S and MW-14S were dry at the time of sampling. A triplicate sample was collected from MW-13.

All ground-water samples were collected using the low-stress purging and sampling technique. Ground water was drawn from the monitor wells through Tygon tubing with a peristaltic pump at and an approximate rate of 140 ml/min (milliliter per minute). Each sample was collected once stabilization for three consecutive readings was achieved for the following parameters and variance: turbidity (10 percent for values greater than 1 NTU), dissolved oxygen (10 percent), specific conductance (3 percent), temperature (3 percent), pH (+/-0.1 unit) and oxygen reduction potential (+/- 10 millivolt). Once collected, ground-water samples were placed into an ice-chilled cooler for delivery to York for analyses. Field sampling sheets are shown in Appendix V. Laboratory reports and chain-of-custody forms are presented in Appendix III.

5.0 GEOLOGY AND HYDROGEOLOGY

5.1 Composition of Unconsolidated Materials

Unconsolidated materials encountered during the investigations primarily consisted of reddish-brown fine sand with some silt to reddish-brown clay with some silt. Geologic cross

sections through the site are shown on figures 5 through 7. The locations of the cross sections are shown on figure 2. As shown on figure 2 and presented in the geologic logs (Appendix I), finer grained materials primarily consisting clay and silt were identified on the western portion of the site. Unconsolidated materials on the remaining portion of the site primarily consisted of fine sand and some silt with lenses of silts and fine sand (figures 6 and 7).

All unconsolidated materials at the site should be considered poor water bearing units. During the field investigations, unconsolidated materials at the property were observed to have an extremely low permeability. In fact, during the drilling of several monitor wells, the unconsolidated materials in the saturated zone were observed to be damp, and not wet. As noted, it took approximately two hours for enough water to drain at each Geoprobe ground-water sampling point to fill the two 40 ml sample containers.

5.2 Composition of Bedrock

Bedrock was encountered in thirteen soil borings (table 3) ranging from 17 to 50 ft bg. Bedrock was observed to consist of a red sandstone. This correlates with the mapped Brunswick Formation of the Newark Group of Upper Triassic age. In general, bedrock was noted to rise from the western to eastern portion of the site (figure 5). Depth to bedrock on the western portion of the site was observed at 44 to 50 ft bg, while depth to bedrock was observed at 17 to 35 ft bg on the eastern portion of the site. Bedrock was identified to be shallowest on the northwest portion of the site.

5.3 Characteristics of Ground Water

5.3.1 Depth to Water Levels

Depth to ground-water levels have been measured at the site during 1999 through 2002 (Table 6). During 1999, the depth to ground water at the site ranged between 1.8 and 16.5 feet below the top of the well casing (ft bc). During the drought of 2002, depth to ground water ranged between 4.7 to 24.7 ft bc. As shown on table 6, ground-water elevations were observed to decline as much as 19.7 feet (MW-5D) from 1999 to 2002. The substantial decline in water levels at the site is attributed to below normal precipitation levels measured during 2001 and 2002. While a drop in water levels is anticipated during a drought period, this decline is magnified by the low permeability material identified at the site.

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Water levels moderately recovered from May 2002 through August 2002. Water levels rose across the site from 2.1 to 13.6 feet. The greatest recovery was shown in Monitor Wells MW-5D and MW-6D, locations identified to consist of primarily clay and silt. Water levels in these wells rose at least 6.5 feet more than any other location at the site. Note that Monitor Wells MW-5S and MW-6S rose only approximately 2 feet during this same period.

5.3.2 Vertical Flow Direction and Magnitude

A relative survey of the site wells was completed on May 14, 2002. Depth-to-water levels were used with the relative survey to determine ground-water flow direction at the site and magnitude of vertical flow. Table 7 show the magnitude of vertical flow between the shallow and deeper saturated unconsolidated materials at the site. Hydrographs of all monitor wells are presented in Appendix VI. In general, the magnitude of vertical gradients shown at the site are dependent on location. A large downward vertical flow gradient (15.62 and 12.41 feet) was shown on the western edge of the site (MW-5 and MW-6 clusters) during April 2002. This indicates a poor connection between the shallow and deep saturated materials on the western edge of the property. During August 2002, the of vertical flow gradients at MW-5 and MW-6 clusters was 4.38 and 0.61 feet, respectively. This is a significant decrease in the magnitude of vertical flow from the April measurements. Note that an upward vertical flow direction was shown at Monitor Well Cluster MW-6 during 1999.

The vertical flow direction in Monitor Well MW-8 cluster was shown to be consistently upward during 2002, while a downward and upward vertical flow was shown at the Monitor Well MW-3 cluster. Moving directly south of these wells, the Monitor Well clusters MW-7 and MW-9 have shown downward vertical flow directions. The difference in the vertical flow directions and magnitude of the vertical flow along this north-south transect (MW-8, MW-3, MW-7 and MW-9 clusters) is important for interpreting and understanding the ground-water flow direction at the site. Note that a storm water discharge point is located at the western unnamed tributary between MW-5 and MW-6. During 2001 and 2002, surface water was observed to only be present at and south of the storm-water discharge point. This tributary and storm water drains to the shallow aquifer on the southwestern portion of the site. At the MW-6 cluster, a large downward vertical flow gradient is shown, indicating the poor connection

between the shallow and deeper unconsolidated materials. This corresponds with the clay and silt materials shown at this location. Slightly coarser materials are shown approximately 75 feet east of this location (north-south transect of MW-8, MW-3, MW-7 and MW-9). As shown on figure 8 and table 4, water elevations are approximately 6 feet higher in MW-7S and MW-9S as compared to MW-8S and MW-3S. These higher elevations are attributed to the recharge from the water in the unnamed tributary south of the storm-water discharge point. In addition, because slightly coarser materials are shown along this transect, the deeper unconsolidated materials at MW-7 and MW-9 clusters are also recharged from the tributary.

Relatively minor vertical flow gradients are shown in the remaining four monitor well clusters (MW-4, MW-10, MW-11 and MW-14), which are located on the south central portion of the site. The only upward vertical flow direction identified in these wells was at the MW-10 cluster during the August 2002 measurement.

Additional monitoring is required to determine flow directions and gradients during the different seasons of the year. As evident by the April 2002 measurements, it is clear that during periods of low recharge, a general downward vertical flow direction is shown throughout the site.

5.3.3 Water Table and Potentiometric Surface

Figure 4 shows the September 10, 1999 water-table map for the site, which is prior to the substantial decline in the water levels measured in 2001 and 2002. In general, this water-table map shows that ground water at the site flows from the northwest to the southeast. Figures 8 and 10 shows water-table contours for July 25 and August 30, 2002, which corresponds to periods of lower recharge periods at the site. As discussed in section 5.3.2, ground-water elevations in MW-7S and MW-9S were approximately 6 feet higher than those measured in MW-8S and MW-3S. These higher elevations are attributed to the recharge from the water in the unnamed tributary south of the storm-water discharge point. Figures 8 and 9 reflect this recharge by the larger horizontal gradients shown between MW-6S and MW-7S as compared to MW-5S and MW-3S. Nonetheless, as shown on figures 8 and 9, both water-table maps show the general shallow ground-water flow direction is from the northwest to the southeast. This is similar to the flow direction shown during the normal higher recharge period of September 10, 1999.

As noted, ground-water flow at the site is generally from the northwest to the southeast. The hydraulic gradient throughout the site ranges from 0.011 in the southeastern portion of the site to 0.094 in the northwestern portion. The overall average hydraulic gradient for the site is approximately 0.039.

Figures 10 and 11 show potentiometric surfaces for July 25 and August 30, 2002. The potentiometric surface for July 25, 2002 shows a potentiometric mound located near MW-7D and MW-9D. As discussed in section 5.3.2, the higher elevations shown in MW-7D and MW-9D as compared to MW-6D is because of coarser unconsolidated materials allowing drainage to the deeper aquifer. In addition, the higher elevations in these deeper wells as compared to MW-3D and MW-8D are the result of the additional recharge to this area as a result of the storm-water outfall draining into the southwestern tributary. The ground-water flow direction on the July 25, 2002 potentiometric surface is shown to be to the west, north and east, with the mound on the southwestern portion of the site. It is unclear the magnitude this artificial mound has on the overall deep ground-water flow. This mound is not shown on the August 30, 2002 potentiometric surface. This is because ground-water levels have recovered to more normal levels. This potentiometric map shows the overall ground-water flow to be from the west to the southeast.

5.3.4 Hydraulic Conductivity Testing and Ground-Water Flow Velocity

Between August 14 and September 4, 2002, slug tests were conducted in several monitor wells in order to determine the hydraulic conductivity of the saturated sediments throughout the site. Slug tests were completed at 4 wells on the western half of the site and 3 wells on the eastern half of the site. Upon removal of the well caps, the expansion plugs were pulled and the wells were given time to equilibrate in order to obtain accurate depth-to-water readings. Prior to each test static water level was measured to the nearest 1/100 of a foot using an electric tape. A pressure transducer connected to an In-Situ, Inc. minitroll PXD data logger was placed near the bottom of the well and the static water level was entered. After several measurements of depth to water were measured to confirm that the wells had returned to static levels, the data logger was activated. Once the data logger had taken several readings to determine a baseline, water levels were displaced by inserting a 6-foot air-tight steel slug. The change in the water level over

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time was recorded until levels had recovered at least 70 percent of the original displacement. Depth-to-water readings that had been recorded by the data logger were then extracted from the device and stored in the form of data files. The data was then used to calculate hydraulic conductivity values using the Bouwer-Rice Method (Bouwer and Rice, 1976). Hydraulic conductivity in the wells tested ranged from 0.06 ft/day to 3.2 ft/day as shown on table 8 and presented in Appendix VII. The median hydraulic conductivity across the site is 0.60 ft/day.

Onsite, the ground water generally flows from the northwest to the southeast, discharging in the direction of the State Route 303 and Glenshaw Street intersection. The ground-water flow generally follows the surface bedrock surface topography. The overall hydraulic gradient onsite was determined to be 0.039 ft/ft. This gradient is relatively uniform throughout the site. The median hydraulic conductivity across the site is 0.60ft/day.

With the use of Darcy's Law, a ground-water flow velocity was approximated across the site utilizing the overall site hydraulics gradient (0.039 ft/ft), median hydraulic conductivity (0.60 ft/day) and approximate site effective porosity of 40 percent (Peyton, G.R. and others, 1986 & Fetter 1988). Therefore, the average ground-water flow velocity across the site is 0.058 ft/day (approximately 21 feet per year). This is an extremely low ground-water flow velocity. Note that any VOCs identified in the site ground water would be moving at a notably slower rate because these types of constituents tend to strongly sorb to the finer silts and clays identified at the site. Considering the ground-water flow velocity at the site, it is reasonable to conclude that the migrations of VOCs at the site would be dominated by diffusion and dispersion, rather than advective flow.

6.0 RESULTS OF INVESTIGATION

6.1 Soil-Quality Results

Table 1 summarizes all detected volatile organic compounds in the soil samples analyzed, while laboratory results and chains-of-custody forms are presented in Appendix II.

Seven surficial soil samples (S-1 through S-7 on figure 2) were collected from throughout the site and analyzed for VOCs. The samples were collected to determine if there was a potential

of contact with the VOCs previously identified in the ground water. No VOCs were detected in any of the samples.

A total of 37 soil samples were collected for analyses of VOCs during the 2001 and 2002 subsurface investigations. As shown on table 1, trace concentrations of trichlorthane (TCE), tetrachloroethylene (PCE), (cis) 1,2-dichloroethylene ((cis) 1,2-DCE) and/or methylene chloride were detected in nearly all 26 soil samples collected during the Geoprobe drilling investigation of 2001. All of these samples were collected from saturated soils. The results of the total VOC detections ranged from 3 to 49 ug/l. These trace detections are not indicative of source VOC materials, but rather the soil water contained in the soil samples.

Eleven soil samples were collected for VOC analyses during the 2002 hollow-stem auger drilling investigation. TCE was detected at 3 ug/l in the MW-3D (5 to 7 ft bg) sample, while TCE and (cis) 1,2-DCE were detected at 36 ug/l and 10 ug/l in the MW-7D (10 to 12 ft bg) sample, respectively. While not apparent in the field, both samples were collected from the saturated zone. These trace detections do not represent source VOC material. No other VOCs were detected during the 2002 drilling investigation.

As shown on table 1, no VOC source materials were identified in any soil samples analyzed during the 1999, 2001 and 2002 investigations. In addition, no VOCs have been detected in any of the soil samples collected during all of the investigations and screened with a PID. All VOC soil sample results were within the NYSDEC TAGM recommended soil clean-up objectives (table 1).

6.2 Ground-Water Quality Results

Table 5 summarizes all detected constituents in the ground-water samples, while laboratory results and chains-of-custody forms are presented in Appendix III. As shown on table 5, TCE, 1,1,1-trichloroetnae (TCA), PCE, 1,1-dichloroethylene (DCE), 1,1-dichloroethane (DCA), (cis) 1,2-DCE, (trans) 1,2-dichloroethylene ((trans) 1,2-DCE), chloroform and vinyl chloride (VC) were detected in many of the ground-water wells sampled. A discussion of each of the primary constituents follows.

6.2.1 Tetrachloroethylene

PCE is a virgin product constituent and is not a breakdown component of any constituent identified on site. It is important to note that PCE does breakdown to TCE, but not TCA. As shown on table 5, PCE has only been detected in Monitor Wells MW-5D (ND<1 to 3.6 ug/l), MW-6D (ND<1 to 7.9 ug/l) and MW-12 (3,700 ug/l). Trace detections of PCE have historically been detected in Monitor Wells MW-5D and MW-6D, which are located on the upgradient portion of the property. The highest concentration of PCE identified at the site was identified in the downgradient Monitor Well MW-12. Accounting for the site ground-water characteristics and distribution and magnitude of PCE occurrences at the site, the occurrence of PCE in MW-12 would not be the result of the PCE detections in the MW-5D and MW-6D samples.

The peak concentration of PCE identified at the site was 3,700 ug/l (at Monitor Well MW-12). The published solubility for PCE is 150,300 ug/l (Horvath, 1982). A concentration of 3,700 ug/l is approximately 2.5 percent of the solubility of PCE. The rule-of-thumb for an indication of possible Non Aqueous Phase Liquids (NAPLs) is to have at least 1 to 10 percent of the VOC's solubility in a water sample. The concentration of PCE identified at Monitor Well MW-12 is within 1 to 10 percent of the solubility of PCE. Therefore, there is the potential that NAPL is located within the vicinity of Monitor Well MW-12, on or off of the site.

Additional ground-water sampling and potentially subsurface investigations are necessary to determine the location and further assess the possibility of NAPLs. Note that it is unclear if the potential source area for the PCE is located on the MRC property or on the adjacent street or southern property. The concentrations of PCE in MW-12 could be the result of diffusive and dispersive flows from these adjacent properties. No PCE was identified in ground-water samples collected from Boring B-15 or in the MW-11 cluster. In addition, no source VOCs were detected in any of the soil samples analyzed or screened from borings B-14, B-15 and Monitor Wells MW-11D and MW-12. As indicated in section 5.0, flow at the site in general follows the surficial bedrock topography and contaminant migrations would be dominated by dispersion and diffusion because of the extremely slow ground-water flow velocity. Therefore, the PCE detection in MW-12 could represent the fringe of a release that occurred off of the MRC property. Note that as discussed in section 3.2 and presented in Appendix IV, releases of

halogenated VOCs have been documented on the western abutting manufacturing property. In addition, there is no supporting evidence to suggest that the operations at MRC caused the source of contamination found at MW-12.

6.2.2 Trichloroethylene and Breakdown Constituents

As noted above, TCE is a breakdown constituent of PCE and is also a virgin product constituent. TCE has been identified in ground-water samples collected from Borings B-3, B-7, B-8, B-13 and B-15 and in Monitor Wells MW-3S, MW-3D, MW-4S, MW-4D, MW-6S, MW-6D, MW-7S, MW-7D, MW-9S, MW-9D, MW-10S, MW-10D, MS-11S, MW-11D, MW-12, MW-13 and MW-14D (table 5 and figure 13).

Concentrations of TCE at MW-6D have increased from 9.5 ug/l in 1999 to 140 ug/l in 2002 (table 5). TCE has a relatively high water partition coefficient of 2.42 (Hansch, 1985), which indicates that TCE should sorb relatively easily to the unconsolidated materials at the site, tending to provide more repeatable concentrations assuming no new release has occurred. Therefore, this increase in concentration at MW-6D is somewhat unusual. Concentrations of TCE in MW-9D and MW-7D are approximately 6 times higher than the concentration identified in MW-6D. In addition, repeatability has been shown in Monitor Well MW-4S during 1999. Therefore, the increase in TCE concentrations at MW-6D is likely attributed to the potentiometric mound identified in the July 25, 2002 potentiometric surface for the site. This mound would facilitate the migration/dispersion/diffusion of PCE from the MW-7 and MW-9 region to the rear of the property.

Similar concentrations of TCE are identified in ground-water samples obtained from monitor wells MW-7D and MW-9D of 850 ug/l and 900 ug/l, respectively (figure 13). Somewhat lower concentrations of TCE have been identified in the MW-4 cluster (270 to 330 ug/l). Further downgradient of these wells, concentrations of TCE are shown at lower concentrations in ground-water samples obtained from borings B-13, B-15 and in Monitor Wells MW-10 cluster, MW-11 cluster and MW-13. This would indicate that the migration of TCE is not dominated by advective flow, but rather diffusion and dispersion. The slow migration of TCE is allowing the VOC to breakdown to daughter constituents such as (cis) 1,2-DCE and vinyl chloride (table 5 and figures 14 and 15).

The chemical distribution of TCE, DCE and vinyl chloride indicates that a potential source area is located on the western portion of the property, likely east the MW-7 cluster and north of the MW-4 cluster. This conclusion is based on the observation that these are the only locations on the site in which relatively high concentrations of TCE occur with generally high concentrations of (cis) 1,2-DCE and vinyl chloride. In a diffusive, dispersive and anaerobic environment (field sheets in Appendix V), one would anticipate this type of degradation to occur within or near a source area. The concentrations of TCE in the ground water do not suggest that a source is located at the MW-7 or MW-4 clusters, but rather these concentrations would represent the fringe of the edge TCE plume.

TCE was detected in MW-12 at a concentration of 21,000 ug/l. As discussed previously, MW-12 is located on the downgradient edge of the property and no other wells upgradient of it show concentrations of this magnitude. The concentration of TCE in this location is likely attributed to the breakdown of PCE in this area or a separate release. The data does point toward the existence of NAPLs below the water table. The concentration of TCE at MW-12 is 21,000 ug/l (micrograms per liter). The published solubility for TCE ranges from 1,100,000 ug/l (NIOSH, 1983). A concentration of 21,000 ug/l is approximately 1.9 percent of the solubility of PCE. This percentage of PCE indicates the possibility of NAPL in a water sample.

6.2.3 1,1,1-Trichloroethane

TCA is a virgin product constituent and is not a breakdown component of any constituent identified on site. TCA does follow a similar breakdown path as TCE, with slight deviations. As shown on table 5 and figure 16, TCA has been identified in Borings B-7, B-8 and Monitor Wells MW-3 cluster, MW-4 cluster, MW-5 cluster, MW-7S, MW-8D, MW-9 cluster and MW-14D. TCA has been detected at relatively low concentrations in ground water, ranging from 1.5 to 62 ug/l. In every sampling event, TCA has been detected in at least one of the upgradient Monitor Wells MW-5 and MW-6 clusters. Releases of TCA to the ground water on the western abutting property are well documented (Section 3.2 and Appendix IV). The chemical distribution of TCA and concentrations identified do not indicate a source is located on the site. It is more likely that these concentrations represent slugs of TCA migrating off of the western property onto the site.

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6.2.4 Total Volatile Organic Compounds

Figure 17 shows that two separate areas of relatively high VOC concentrations are present at the site. The first location is near the MW-7 cluster. As discussed, the likely source of these detections is to the east of the MW-7 cluster and north of the MW-4 cluster. The second area of high VOCs is located near MW-12. The detections in MW-12 are generally isolated from the rest of the site and it is not clear if the source of these VOCs is located on the site.

7.0 DATA GAPS

Data gaps identified during the Environmental Site Investigation are presented below.

- Additional monitoring is required to determine flow directions and gradients during the different seasons of the year.
- Only one round of ground-water samples have been collected from most of the site monitor wells. This round was collected during drought conditions at the site. Additional monitoring would be needed to assess trends in ground-water quality.
- The results of the subsurface investigations revealed the potential of two VOC source areas at or near the site. The first is potentially located beneath the southwestern portion of the MRC building and the second is located near the southeastern portion of the site. Additional work would be needed to define the precise location of the release and characterize these potential source locations.
- The source of VOCs identified near MW-12 is unknown. Potential sources of the VOC concentrations identified in this area includes the potential illegal disposal of contaminants by non-MRC employees to the offsite storm-water drainage system that runs parallel to site's southeast property boundary.

8.0 CONCLUSIONS

1. Unconsolidated materials encountered during the investigations primarily consisted of reddish-brown fine sand with some silt to reddish-brown clay with some silt. Finer

grained materials consisting primarily of silts and clays were identified on the western edge of the site. The thickness of the unconsolidated materials was identified to range from 17 to 50 feet. The underlying bedrock consists of red sandstone.

2. In general, ground-water flow follows the surficial topography of the bedrock, flowing from the northwest to the southeast. An ephemeral ground-water mound was observed during July 2002. This mound was caused by recharge from the discharge outlet and tributary. The mound is only apparent during significant dry periods and appears to have an impact on chemical distribution at the site.

3. The ground-water flow velocity at the site was determined to be approximately 0.06 feet per day or 21 feet per year. The extremely low permeability material at the site does impact the solute transport at the site. Solute transport in the ground water is dominated by diffusion and dispersive flow rather than advective flow.

4. The MRC building was originally constructed in 1961, and expanded in 1969 to approximately twice its original square footage of 20,000 ft^2 . A Hazardous Materials Storage Area (HMSA) was completed in 1981. The facility is connected to public water and sewer systems. Natural gas and electric are supplied to the site by Texas and Ohio Utilities.

5. Seven surficial soil samples were collected and analyzed to determine the potential for contact with VOCs. No VOCs were identified in the shallow soils at the site. There is no evidence to suggest that direct exposure of VOCs is a potential concern.

6. No residual sources of VOCs were identified in the unsaturated soils during the subsurface soil investigations.

7. Halogenated VOC releases to the tributary south of the site and to the ground-water have been documented for the manufacturing facility located west and upgradient of the site. Some halogenated VOCs are entering the site ground water from this property.

8. TCA was identified in 14 of the 31 ground-water sampling locations. The distribution and concentration of the TCA concentrations indicates that there is no TCA source on site. In addition, the TCA detections on site are likely the result of slugs TCA entering the site from the western/upgradient manufacturing facility.

9. The results of the subsurface ground-water investigations revealed the potential of a VOC source area located beneath the southwestern portion of the MRC building. Transport of the plume emanating from this source area appears to be dominated by diffusive and dispersive flow. Degradation of the potential source material (TCE) is occurring. Generally low concentrations of VOCs are identified downgradient of the source area. The data indicates that the VOC plume attributed to this release is primarily contained on the site.

10 A second potential VOC source area was identified near the southeastern portion of the site. Concentrations of TCE and PCE in the groundwater near MW-12 suggest the potential presence of NAPL near this area. The potential source area contains TCE and PCE. It is unclear if this source area is located on the site.

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Affirmed by: Vallerica

Robert Lamonica, CPG, LEP Principal

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REFERENCES

Darcey, H. P. G., 1856 "Les Fontaines Publique De La Ville De Dijon: Paris, Victor Dalmont"

Fetter, C.W., 1988, "Applied Geohydrology (2nd ed.)", Merrill, Columbus.

Hansch, C. and Leo, A. J., 1985 "Medchem Project Issue No 26. Clarmont CA", Pomona College.

Horvath, A. L., 1982 "Halogenated Hydrocarbons: Solubility-Miscibility with Water. New York, NY", Marcel Dekker, Inc. pp 889.

Howard, Philip, Robert Boethling, William Jarvis, William Meylan and Edward Michalenko, 1991, "Handbook of Environmental Degradation Rates", Lewis Publishers, Inc.

Peyton, G.R. and others, 1986 "EPA/600/9-86/022", pp. 21-28.

United States Geological Survey, 1967, Photorevised 1979, "Nyack Quadrangle, New York."

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Summary of Volatile Organic Compounds Results in All Soil Samples Collected

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Sample Location	Sample Depth (ft bg)	Date Sampled	Trichloroethylene (ug/kg)	Tetrachloroethylene (ug/kg)	(cis)1,2-Dichloroethylene (ug/kg)	Methylene Chloride (ug/kg)
B-1	10	10/29/01	ND<5	4J	ND<5	ND<5
B-1	20	10/29/01	ND<5	3J	ND<5	ND<5
B-1	30	10/29/01	ND<5	3J	ND<5	ND<5
B-2	10	10/30/01	ND<5	4J	ND<5	ND<5
B-2	20	10/30/01	ND<5	3Ј	ND<5	ND<5
B-3	10	10/30/01	ND<5	3Ј	ND<5	ND<5
B-3	20	10/30/01	ND<5	3J	ND<5	ND<5
B-3	30	10/31/01	ND<5	3J	ND<5	ND<5
B-3	40 .	10/31/01	3J	3J ·	ND<5	ND<5
B-6	10	11/07/01	ND<5	6 .	ND<5	20B
B-6 (Duplicate)	10	11/07/01	ND<5	6	ND<5	.19B
B-7	10	11/02/01	5	3Ј	ND<5	ND<5
B-8	10	10/31/01	22	3J	ND<5	ND<5
B-8	20	11/01/01	ND<5	17	ND<5	ND<5
B-9	10	11/08/01	ND<5	6B	ND<5	36B
B-9 (Duplicate)	10	11/08/01	ND<5	8B	ND<5	32B
B-9 (Triplicate)	10	11/08/01	ND<5	7B	ND<5	31B
B-13	10	11/08/01	ND<5	6B	ND<5	42B
B-13	20	11/09/01	ND<5	6B	ND<5	43B
B-14	10	11/05/01	ND<5	5	ND<5	24B
B-14	20	11/06/01	ND<5	5	ND<5	19B
B-15	10	11/02/01	ND<5	3Ј	ND<5	ND<5
B-15	20	11/02/01	ND<5	3Ј	ND<5	ND<5
B-15	28	11/05/01	ND<5	6	ND<5	19B
B-16	10	11/06/01	ND<5	6	ND<5	20B
B-16	20	11/06/01	ND<5	6	ND<5	20B
MW-1	10 to 11	07/09/99	ND<5	ND<5	ND<5	ND<5

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TABLE 1 (continued)

MATERIALS RESEARCH CORPORATION 542 ROUTE 303 ORANGETOWN, NEW YORK

Summary of Volatile Organic Compounds Results in All Soil Samples Collected

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Sample Location	Sample Depth (ft bg)	Date Sampled	Trichloroethylene (ug/kg)	Tetrachloroethylene (ug/kg)	(cis)1,2-Dichloroethylene (ug/kg)	Methylene Chlorid (ug/kg)
MW-3	3 to 5	07/09/99	ND<5	ND<5	ND<5	ND<5
MW-3D	5 to 7	04/02/02	3J	ND<5	ND<5	ND<5
MW-3D (duplicate)	5 to 7	04/02/02	2J	ND<5	ND<5	ND<5
MW-4	1 to 3	07/09/99	ND<5	ND<5	ND<5	ND<5
MW-4D	5 to 7	03/26/02	ND<5	ND<5	ND<5	ND<4
MW-4D	10 to 12	03/26/02	ND<5	ND<5	ND<5	ND<4
MW-7D	10 to 12	04/02/02	36	ND<5	10	ND<5
MW-8D	0 to 2	04/04/02	ND<5	ND<5	ND<5	ND<5
MW-8D (duplicate)	0 to 2	04/04/02	ND<5	ND<5	ND<5	ND<5
MW-8D (triplicate)	0 to 2	04/04/02	ND<5	ND<5	ND<5	ND<5
MW-11D	10 to 12	3/27/02	ND<5	ND<5	ND<5	ND<5
MW-12D	10 to 12	03/26/02	ND<5	ND<5	ND<5	ND<5
MW-13D	15 to 17	3/27/02	ND<5	ND<5	ND<5	ND<5
S-1	0 to 0.25	4/02/02	ND<5	ND<5	ND<5	ND<5
S-2	0 to 0.25	4/02/02	ND<5	ND<5	ND<5	ND<5
S-3	0 to 0.25	4/02/02	ND<5	ND<5	ND<5	ND<5
S-4	0 to 0.25	4/02/02	ND<5	ND<5	ND<5	ND<5
S-5	0 to 0.25	4/02/02	ND<5	ND<5	ND<5	ND<5
S-6	0 to 0.25	4/02/02	ND<5	ND<5	ND<5	ND<5
S-7	0 to 0.25	4/02/02	ND<5	ND<5	ND<5	ND<5
YSDEC TAGM Rec		n-up Objectives	700	1,400	3001/	100

 NYSDEC TAGM
 New York State Department of Conservation Technical and Administrative Guidance Memorandum

 ft bg
 Feet below grade

 ug/kg
 Micrograms per kilogram (parts per billion)

 1/
 Criterion for 1,2-dichloroethene (trans)

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Summary of Inorganic Detections in Soil Samples Collected on July 9, 1999

Sample Location	Sample Depth (ft bg)	Lead (mg/kg)	Total Chromium (mg/kg)	Barium (mg/kg)
MW-1	10 to 11	2.4	5.3	29
MW-3	3 to 5	3.0	4.0	37
MW-4	1 to 3	6.4	5.5	42
H-1	4 to 4.5	3.9	3.8	34
Н-2	4 to 4.5	ND<2	2.6	26
NYSDEC TAGM Recommended Soil Clean-up Objectives		30	10	300

NYSDEC New York State Department of Environmental Conservation.

TAGM Technical and Administrative Guidance Memorandum.

ND<2 not detected above noted concentration.

ft bg feet below grade.

mg/kg milligrams per kilogram (parts per million).

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Monitoring Well Completion/Soil Boring Summary Table

Monitor Well	Date Installed	Relative Elevation of Top of Casing	Depth of Boring (ft bg)	Monitor Well Depth (ft bg)	Diameter of Borehole (inches)	Well Screen Diameter and Material	Screen Length (feet)	Screen Setting (ft bg)	Well Screen Slot Size (inches)	Gravel Pack size and type	Gravel Pack Setting (ft bg)	Bentonite Setting (ft bg)	Depth to Bedrock (ft bg)
MW-1	July 9, 1999	105.64	17	17	6.75	2-inch PVC	5	12 to 17	0.010	1	10 to 17	8 to 10	17 <u>1/</u>
MW-2	July 9, 1999	110.17	20	20	6.75	2-inch PVC	10	10 to 20	0.010	1	8 to 20	6 to 8	
MW-3	July 9, 1999	104.70	20	20	6.75	2-inch PVC	10	10 to 20	0.010	1	8 to 20	6 to 8	
MW-3D	April 4, 2002	104.75	52	45	6.75	2-inch PVC	15	30 to 45	0.010	00	28 to 45.5	28 to 26 45 to 52	50
MW-4	July 9, 1999	100.60	15	15	6.75	2-inch PVC	10	5 to 15	0.010	1	3 to 15	1 to 3	gi 10
MW-4D	March 26, 2002	100.57	42	38	6.75	2-inch PVC	15	23 to 38	0.010	00	21 to 39	21 to 19 38 to 43	42
MW-5S	September 8, 1999	105.85	20	20	6.75	2-inch PVC	10	10 to 20	0.010	1	8 to 20	6 to 8	8
MW-5D	September 8, 1999	105.82	48.25	45	6.75	2-inch PVC	20	25 to 45	0.010	1	23 to 45.5	21 to 23 45.5 to 48.25	48
MW-6S	September 8, 1999	102.82	20	20	6.75	2-inch PVC	10	10 to 20	0.010	1	8 to 20	6 to 8	
MW-6D	September 9, 1999	102.75	44.25	41.5	6.75	2-inch PVC	15	26.5 to 41.5	0.010	1	25 to 42	23 to 25 42 to 44.25	44
MW-7S	April 2, 2002	103.91	20	20	6.75	2-inch PVC	15	5 to 20	0.010	00	4 to 20	2 to 4	
MW-7D	April 2, 2002	103.80	44.5	40	6.75	2-inch PVC	15	25 to 40	0.010	00	23 to 40	21 to 23 40 to 42.5	44
MW-8S	April 3, 2002	105.00	20	20	6.75	2-inch PVC	15	5 to 20	0.010	00	4 to 20	2 to 4	
MW-8D	April 4, 2002	105.57	52	46.5	6.75	2-inch PVC	15	30.5 to 46.5	0.010	00	27.5 to 47	24.5 to 27.5 46.5 to 50.5	50
MW-9S	April 4, 2002	103.99	20	20	6.75	2-inch PVC	15	5 to 20	0.010	00	3 to 20	1 to 3	
MW-9D	April 1, 2002	103.30	47	44	6.75	2-inch PVC	15	29 to 44	0.010	00	27 to 44	24.5 to 27 44 to 47	47
MW-10S	March 28, 2002	100.29	20	20.5	6.75	2-inch PVC	15	4.5 to 20	0.010	00	4 to 20.5	2.5 to 4	
MW-10D	March 28, 2002	100.60	47	38	6.75	2-inch PVC	15	23 to 38	0.010	00	20 to 38	18 to 20 38 to 45	42
MW-11S	March 28, 2002	98.75	20	20	6.75	2-inch PVC	15	5 to 20	0.010	00	3.5 to 20	2 to 3.5	
MW-11D	March 27, 2002	98.63	42	34.5	6.75	2-inch PVC	10	25 to 35	0.010	00	22 to 35	20 to 22 35 to 40	38
MW-12	March 26, 2002	97.00	34	30.5	6.75	2-inch PVC	15	15.5 to 30.5	0.010	00	13 to 31	11 to 13 30 to 34	34
MW-13	March 27, 2002	100.00	37	30	6.75	2-inch PVC	15	15 to 30	0.010	00	13 to 30	11 to 13 30 to 34	35
MW-14S	March 29, 2002	99.73	20	19	6.75	2-inch PVC	15	4 to 19	0.010	00	2 to 19	1 to 2 19 to 20	
MW-14D	March 29, 2002	99.88	40.5	37.5	6.75	2-inch PVC	15	22 to 37	0.010	00	20 to 37.5	18 to 20 37 to 40.5	40

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 Auger refusal presumed to be bedrock.

 ft bg
 Feet below grade.

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MATERIALS RESEARCH CORPORATION 542 ROUTE 303 ORANGETOWN, NEW YORK

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Relative Water Elevation Summary Table

Well ID	07/13/99	10/10/99	11/19/01	04/10/02	04/19/02	05/14/02	07/25/02	08/30/02
MW-1	89.70	89.15						
MW-2	99.38	98.22	91.47		91.12	91.17	92.35	93.22
MW-3S	99.76	99.00			Dry	88.88	89.45	
MW-3D				85.69	85.43	87.43	89.95	
MW-4S	96.05	95.00			Dry	Dry	88.8	88.62
MW-4D				82.69	82.88	84.62	87.42	88.28
MW-5S		101.38			96.77	98.89	99.1	99.04
MW-5D		100.88	85.97		81.15	85.57	87.67	94.66
MW-6S		100.01	96.10		96.27	96.92	97.17	98.1
MW-6D		101.00	85.07		83.86	87.71	88.5	97.49
MW-7S				95.19	95.32	96.08	96.56	97.39
MW-7D				90.09	90.36	91.57	93.4	94.81
MW-8S					Dry	86.92	89.6	91.93
MW-8D				85.55	85.81	87.88	89.97	92.97
MW-9S			-	93.65	93.77	94.58	95.19	96.23
MW-9D		-		91.54	91.69	93.14	93.8	95.73
MW-10S					83.3	85.39	87.79	87.46
MW-10D				82.79	82.67	84.65	86.5	87.69
MW-11S					80.86	82.53	84.66	85.03
MW-11D					79.66	81.46	83.26	84.56
MW-12				76.89	76.93	78.87	79.33	80.91
MW-13				77.88	77.87	80.5	80.6	84.01
MW-14S					Dry	82.69	87.48	87.14
MW-14D				80.87	80.79	81.98	84.98	86.73

Note: All elevations presented in feet.

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TABLE 5

MATERIALS RESEARCH CORPORATION 542 ROUTE 303 ORANGETOWN, NEW YORK

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Depth to Water Summary Table

Well ID	07/13/99	10/10/99	11/19/01	04/10/02	04/19/02	05/14/02	07/25/02	08/30/02
MW-1	15.94	16.49						
MW-2	10.79	11.95	18.70		19.05	19.00	17.82	16.95
MW-3S	4.94	5.70			Dry	15.82	15.25	
MW-3D				19.06	19.32	17.32	14.80	
MW-4S	4.55	5.60			Dry	Dry	11.80	11.98
MW-4D				17.88	17.69	15.95	13.15	12.29
MW-5S		4.47			9.08	6.96	6.75	6.81
MW-5D		4.94	19.85		24.67	20.25	18.15	11.16
MW-6S		2.81	6.72		6.55	5.90	5.65	4.72
MW-6D		1.75	17.68		18.89	15.04	14.25	5.26
MW-7S				8.72	8.59	7.83	7.35	6.52
MW-7D				13.71	13.44	12.23	10.40	8.99
MW-8S					Dry	18.08	15.40	13.07
MW-8D				20.02	19.76	17.69	15.60	12.60
MW-9S				10.34	10.22	9.41	8.80	7.76
MW-9D				11.76	11.61	10.16	9.50	7.57
MW-10S					16.99	14.90	12.50	12.83
MW-10D				17.81	17.93	15.95	14.10	12.91
MW-11S					17.89	16.22	14.09	13.72
MW-11D					18.97	17.17	15.37	14.07
MW-12				20.11	20.07	18.13	17.67	16.09
MW-13				22.12	22.13	19.50	19.40	15.99
MW-14S					Dry	17.04	12.25	12.59
MW-14D				19.01	19.09	17.90	14.90	13.15

Note: All depth to water data presented in feet below top of PVC casing. H:SONY/2002/542 Route 202/All Sony Tables.doc

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Sample Location	Depth of Sample (ft bg)	Date Sampled	Trichlens-1,2- toethylene ug/l)	Chloroform (ug/l)	Vinyl Chloride (ug/l)	Total VOC (ug/l)
B-1	20	10/29/01	1D<1	ND<1	ND<10	ND
B-1	30	10/30/01	ND<1	ND<1	ND<10	ND
B-2	20	10/30/01	ND<1	ND<1	ND<10	ND
B-3	20	10/30/01	ND<1	ND<1	ND<10	ND
B-3	30	10/31/01	ND<1	ND<1	ND<20	
B-3	40	10/31/01	D<2	ND<1		ND
B-7	20	11/02/01	D<2	and the second se	ND<20	2
B-8	20	11/01/01	1	ND<1	ND<10	92
B-13	20	11/09/01	I	ND<1	12	385
B-15	28	11/05/01	D×1	ND<1	ND<10	14
MW-1		7/13/99	D<1	ND<1	ND<10	20
MW-2		7/13/99		ND<1	ND<1	ND
		9/10/99	hD<1 hD<1	ND<1	ND<1	ND
		4/19/02		ND<1	ND<2	ND
MW-3S		7/13/99		ND<1	ND<1	ND
		9/10/99	ID<1	ND<1	ND<1	91
MW-3D	37.5	4/19/02	D<1	ND<1	ND<2	47.1
MW-4S		7/13/99	D<1	2	ND<10	177
		9/10/99	ID<1	ND<1	130	855
MW-4D	30.5	4/19/02	D<1	ND<1	89	707.7
MW-5S		9/10/99	<u>5</u> ND<1	3J	55	671
		11/19/01		ND<1	ND<2	8.3
	15	4/19/02	ND<1	ND<1	ND<10	ND
MW-5D		9/10/99	<u>nD<1</u>	ND<1	ND<10	ND
		11/19/01	13.6	ND<1	ND<2	9.8
	35	4/19/02	ND<1	ND<1	ND<10	2
MW-6S		9/10/99	<u>ND<1</u>	ND<1	ND<10	ND
		11/19/01	3.9	ND<1	ND<2	14.3
	15	4/19/02	<u>n</u> D<1 D<1	ND<1	ND<10	ND
MW-6D	35	9/10/99		ND<1	ND<10	ND
		11/19/01	D<1	ND<1	ND<2	20.9
		4/19/02	D<1	ND<1	ND<10	147
SDEC TOGS (Guidance Values		5	ND<1	ND<10	280
			3		2	NA
MW-7S	12.5	4/19/02	D<1	ND		
MW-7D	33	4/19/02	36	ND<1	44	259
MW-8D	38	4/19/02	<u>ND<1</u>	ND<5	730	3,952
MW-9S	12.5	4/19/02	D<1	ND<1 ND<1	ND<10 1J	3

Sample Location	Depth of Sample (ft bg)	Date Sampled	Trichl _{ns-1,2-} roethylene [ug/l]	Chloroform (ug/l)	Vinyl Chloride (ug/l)	Total VOC (ug/l)
MW-9D	30	4/19/02	ND<1	ND<1	29	1,460
MW-10S	19	4/19/02	ND<1	ND<1	58	180
MW-10D	30	4/19/02	ND<1	ND<1	84	406
MW-11S	19	4/19/02	ND<1	ND<1	ND<10	112
MW-11D	29	4/19/02	ND<1	ND<1	3J	188
MW-12	23	4/19/02	D<500	ND<500	ND<5000	24,700
MW-13	25	4/19/02	ND<1	ND<1	ND<10	ND
MW-13 Duplicate	25	4/19/02	VD<1	ND<1	ND<10	1
MW-13 Triplicate	25	4/19/02	VD<1	ND<1	ND<10	1
MW-14D	30	4/19/02	VD<2	ND<2	ND<20	116
NYSDEC TOGS	Guidance Values	3	5	110~2	2	446 NA

 Note:
 Monitor wells MW-1, MW-2 and M

 NYSDEC TOGS
 New York State Department of Con

 ND<1</td>
 Not detected above noted concentra

 ft bg
 Feet below grade

 ug/l
 Micrograms per liter (parts per billider)

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TABLE 7

MATERIALS RESEARCH CORPORATION 542 ROUTE 303 ORANGETOWN, NEW YORK

Summary of Magnitude of Vertical Flow Gradient

Date	Location and Grou	und-Water Elevation	Magnitude of Vertical Flow
	MW-3S	MW-3D	
05/14/2002	88.88	87.43	1.45
07/25/2002	89.45	89.95	-0.50
0112012002	MW-4S	MW-4D	
07/25/2002	88.8	87.42	1.38
08/30/2002	88.62	88.28	0.34
00/30/2002	MW-5S	MW-5D	
09/10/1999	101.38	100.88	0.50
04/19/2002	96.77	81.15	15.62
05/14/2002	98.89	85.57	13.32
07/25/2002	99.1	87.67	11.43
08/30/2002	99.04	94.66	4.38
08/30/2002	MW-6S	MW-6D	
09/10/1999	100.01	101	-0.99
11/19/2001	96.1	85.07	11.03
04/19/2002	96.27	83.86	12.41
05/14/2002	96.92	87.63	9.29
07/25/2002	97.17	88.5	8.67
08/30/2002	98.1	97.49	0.61
00/30/2002	MW-7S	MW-7D	
04/10/2002	95.19	90.09	5.10
04/19/2002	95.32	90.36	4.96
05/14/2002	96.08	91.57	4.51
07/25/2002	95.56	93.4	2.16
08/30/2002	97.39	94.81	2.58
00/30/2002	MW-8S	MW-8D	
05/14/2002	86.92	87.88	-0.96
07/25/2002	89.6	89.97	-0.37
08/30/2002	91.93	92.97	-1.04
08/30/2002	MW-9S	MW-9D	
04/10/2002	93.65	91.54	2.11
04/10/2002	93.03	91.69	2.08
05/14/2002	94.58	93.14	1.44
07/25/2002	94.58	93.8	1.39
08/30/2002	96.23	95.73	0.50
0015012002	MW-10S	MW-10D	
04/19/2002	83.3	82.67	0.63
05/14/2002	85.39	84.65	0.74
07/25/2002	87.79	86.5	1.29
08/30/2002	87.46	87.61	-0.15
000012002	MW-11S	MW-11D	
04/19/2002	80.86	79.66	1.20
05/14/2002	82.53	81.46	1.07
07/25/2002	84.66	83.26	1.40
08/30/2002	85.03	84.56	0.47
00/30/2002	MW-14S	MW-14D	
05/14/2002	82.69	81.98	0.71
07/25/2002	87.48	84.98	2.50
08/30/2002	87.14	86.73	0.41

Note: Positive denotes downward vertical flow direction. H:\SONY\2002\542 Route 202\All Sony Tables.doc

LEGGETTE, BRASHEARS & GRAHAM, INC.

TABLE 8

MATERIALS RESEARCH CORPORATION 542 ROUTE 303 ORANGETOWN, NEW YORK

Slug Test Results

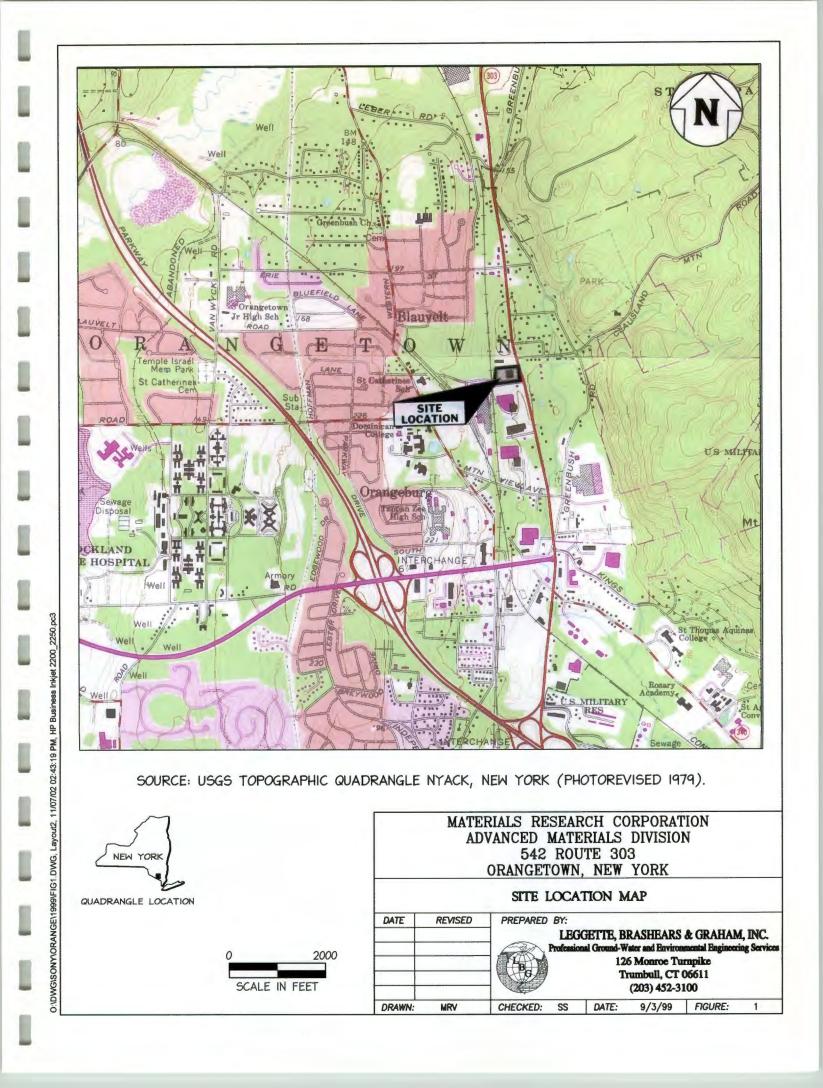
Well ID	Date	Average Hydraulic Conductivity (feet/day)	Percent Recovery
MW-5D	August 14, 2002	0.067	75
MW-8S	September 4, 2002	1.376	74
MW-8D	August 30, 2002	0.971	100
	September 4, 2002	1.366	100
MW-9D	August 15, 2002	0.225	89
MW-11	September 4, 2002	3.223	100
MW-12	August 15, 2002	0.060	70
MW-13	August 30, 2002	0.079	88

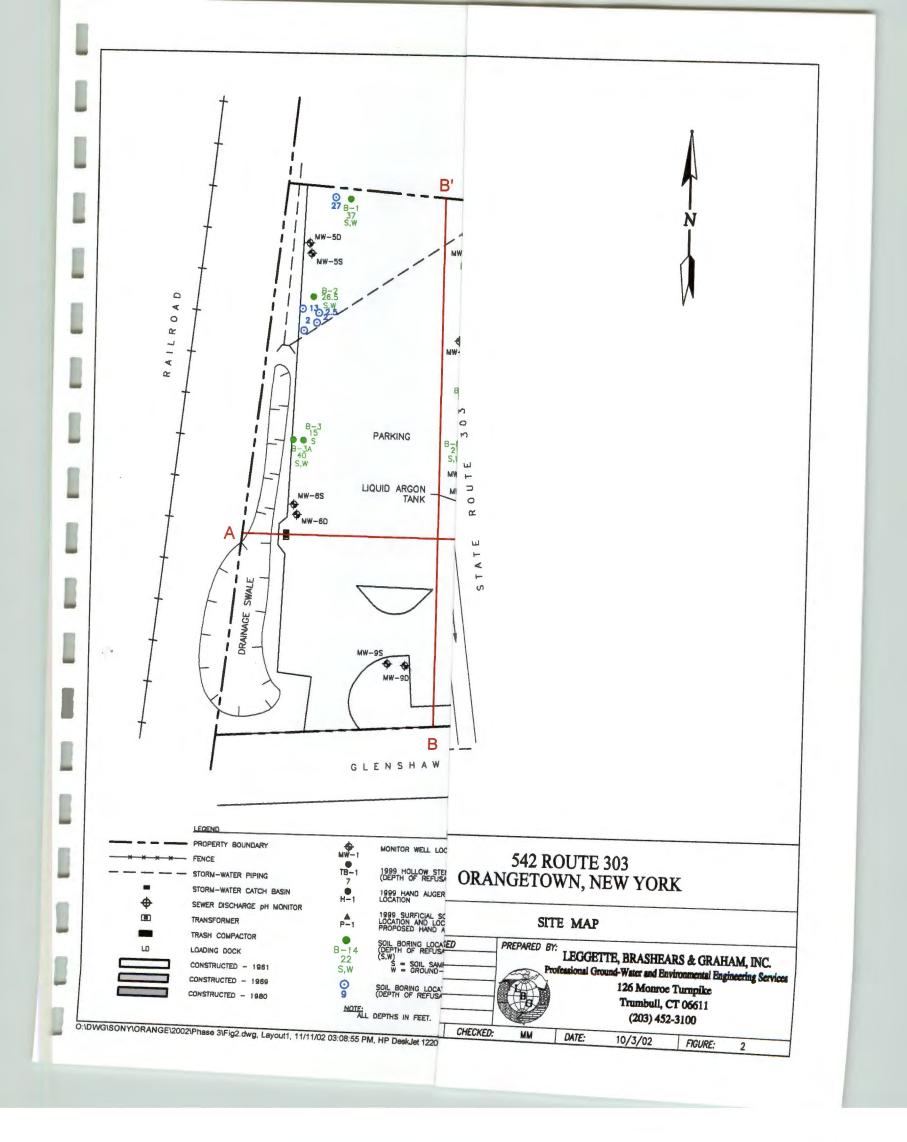
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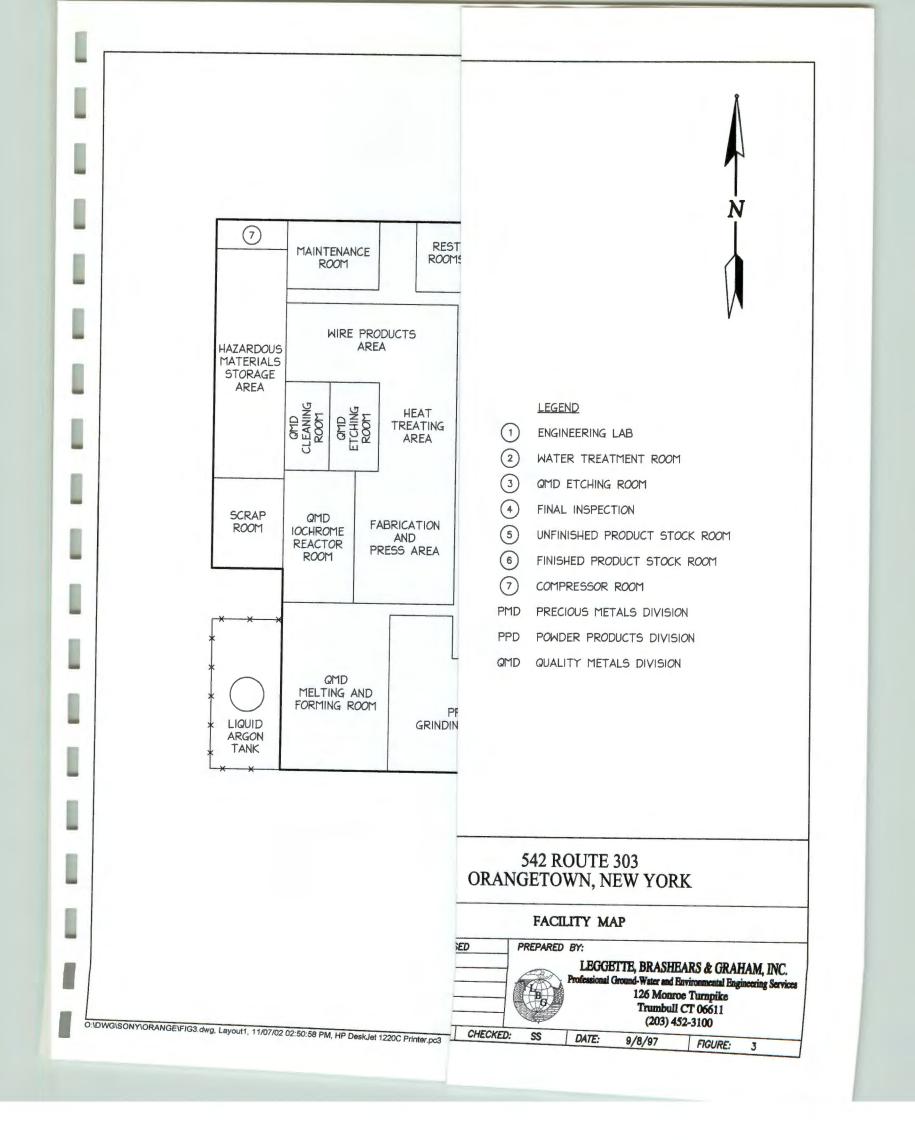
LEGGETTE, BRASHEARS & GRAHAM, INC.

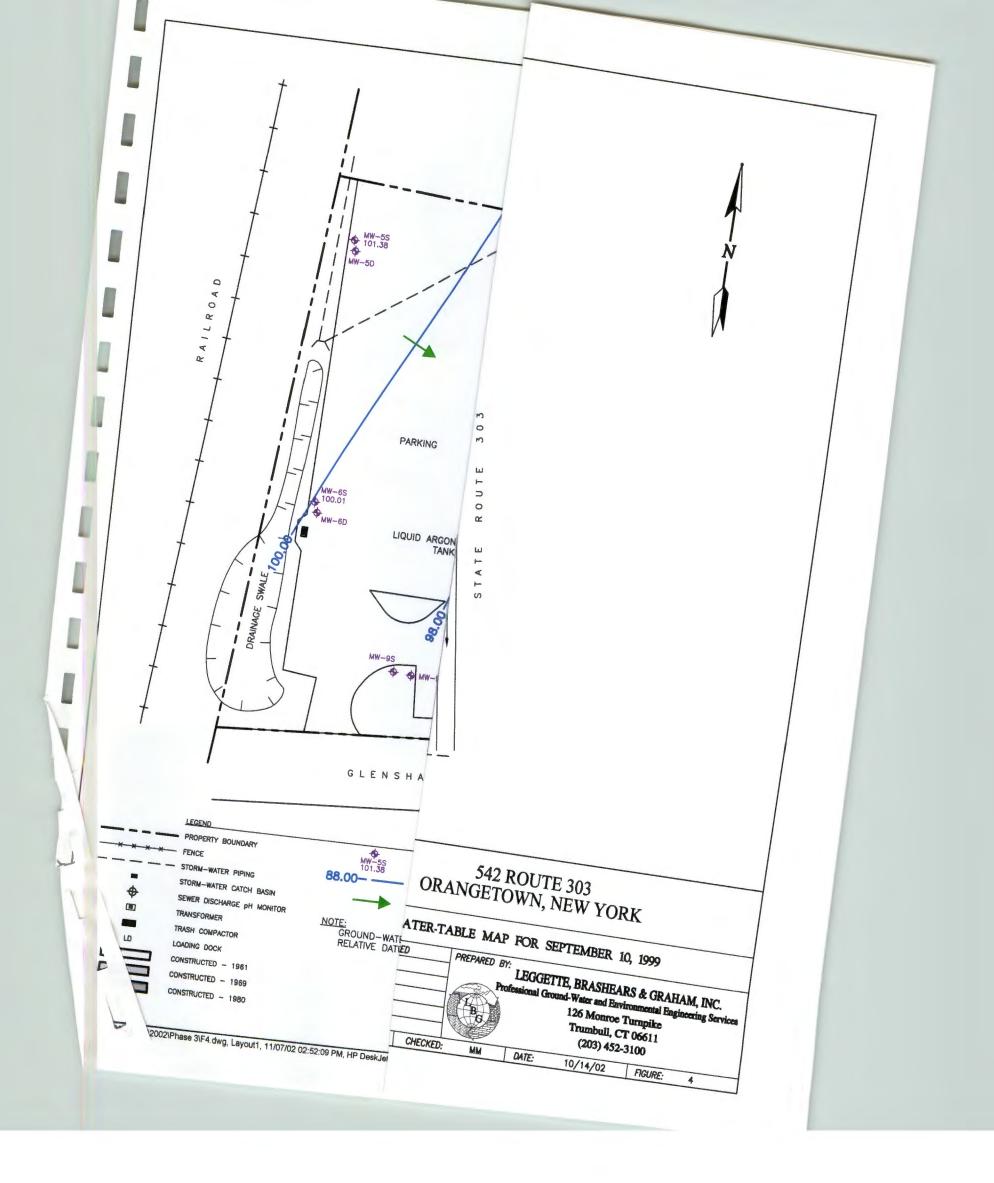


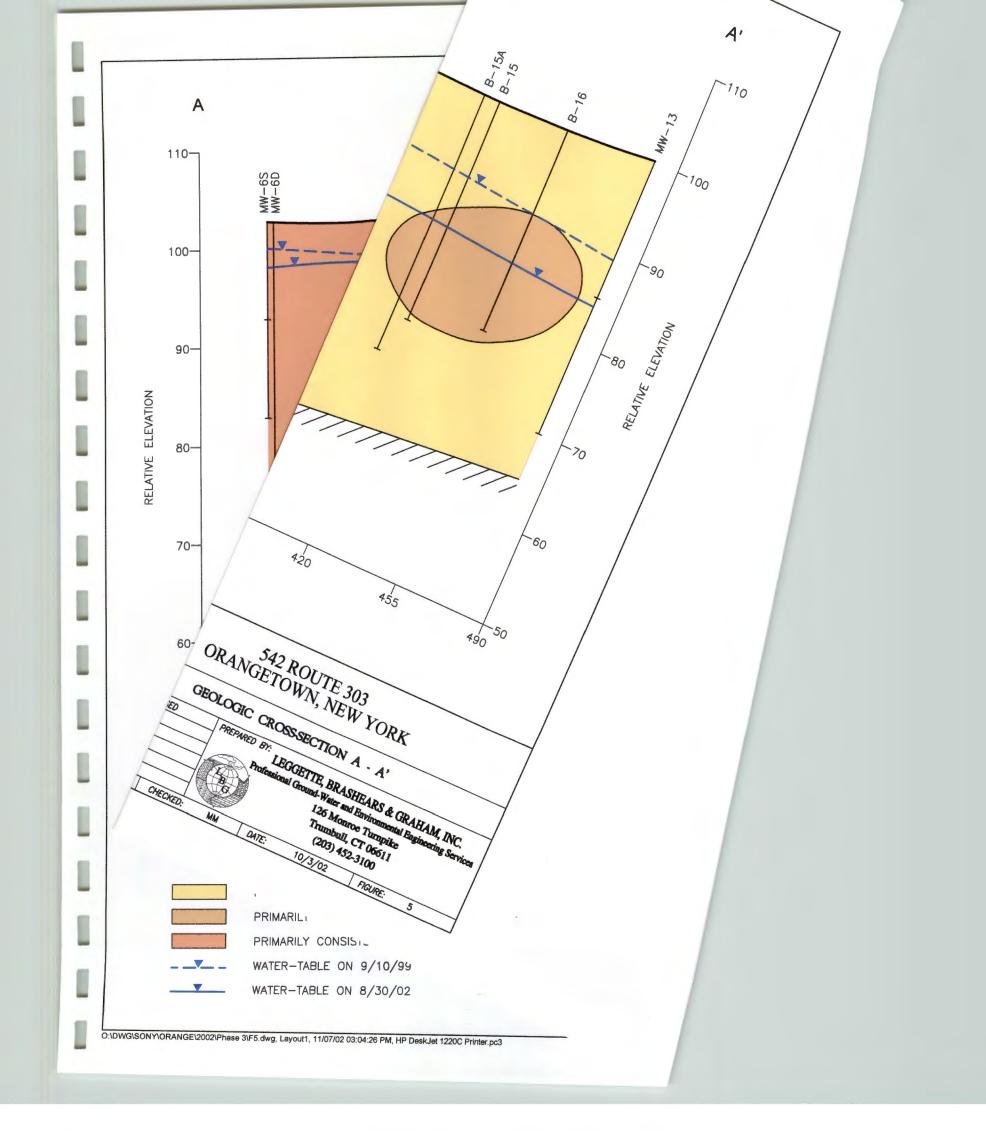
LEGGETTE, BRASHEARS & GRAHAM, INC.

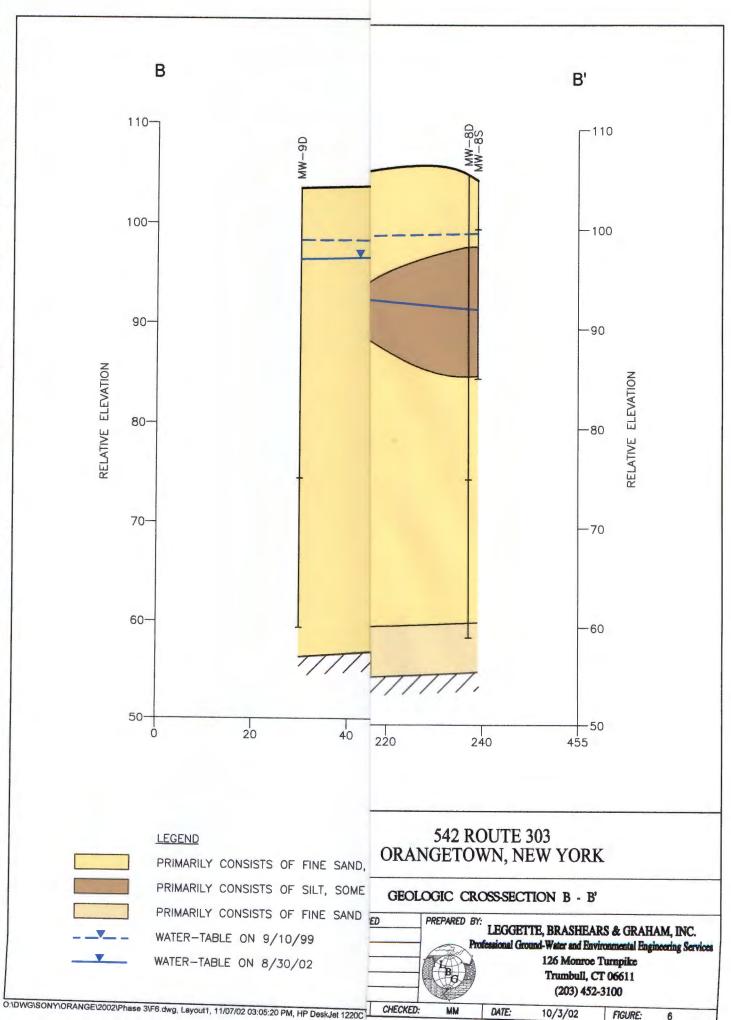




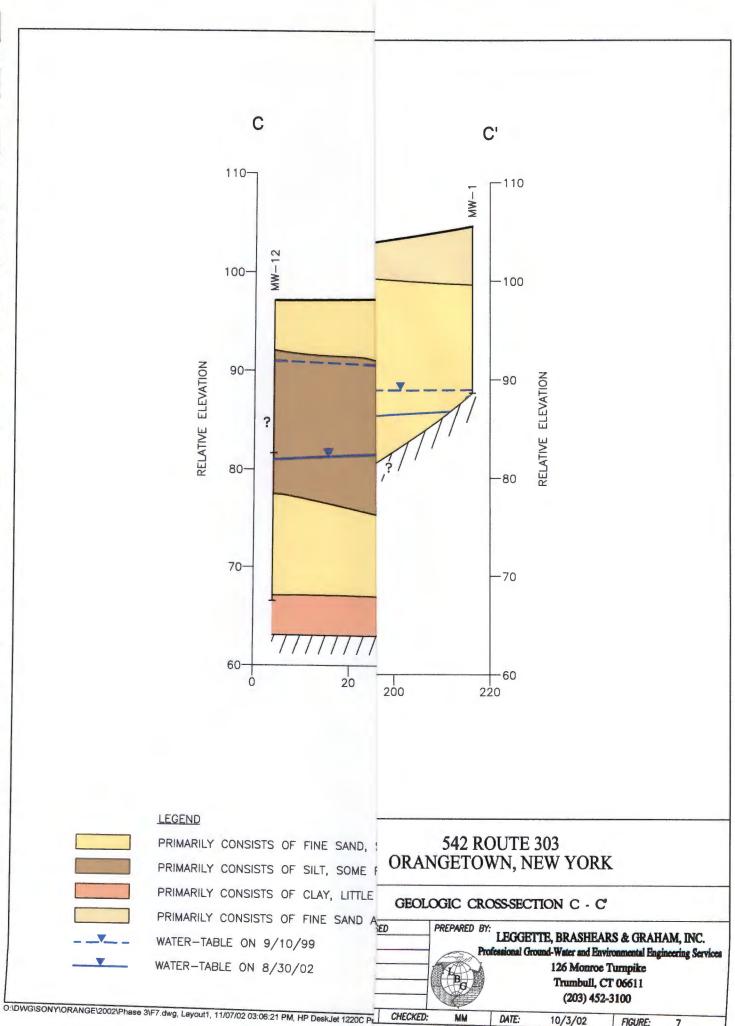








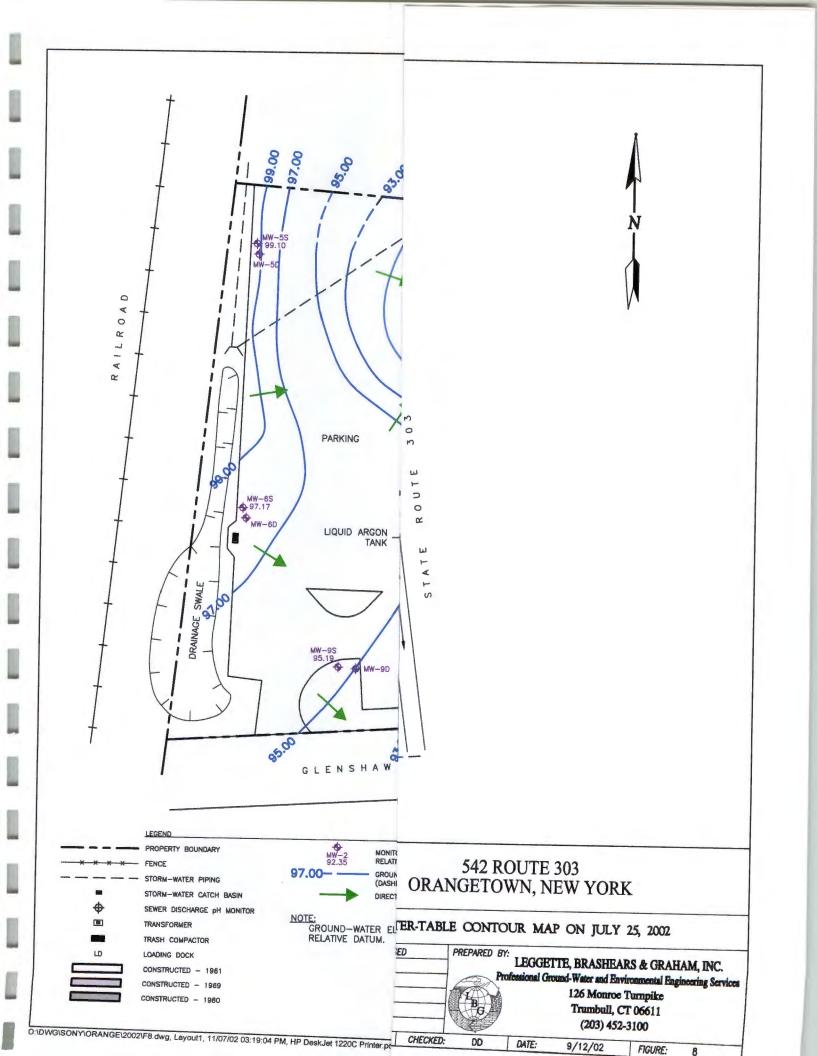
CHECKED: MM DATE:

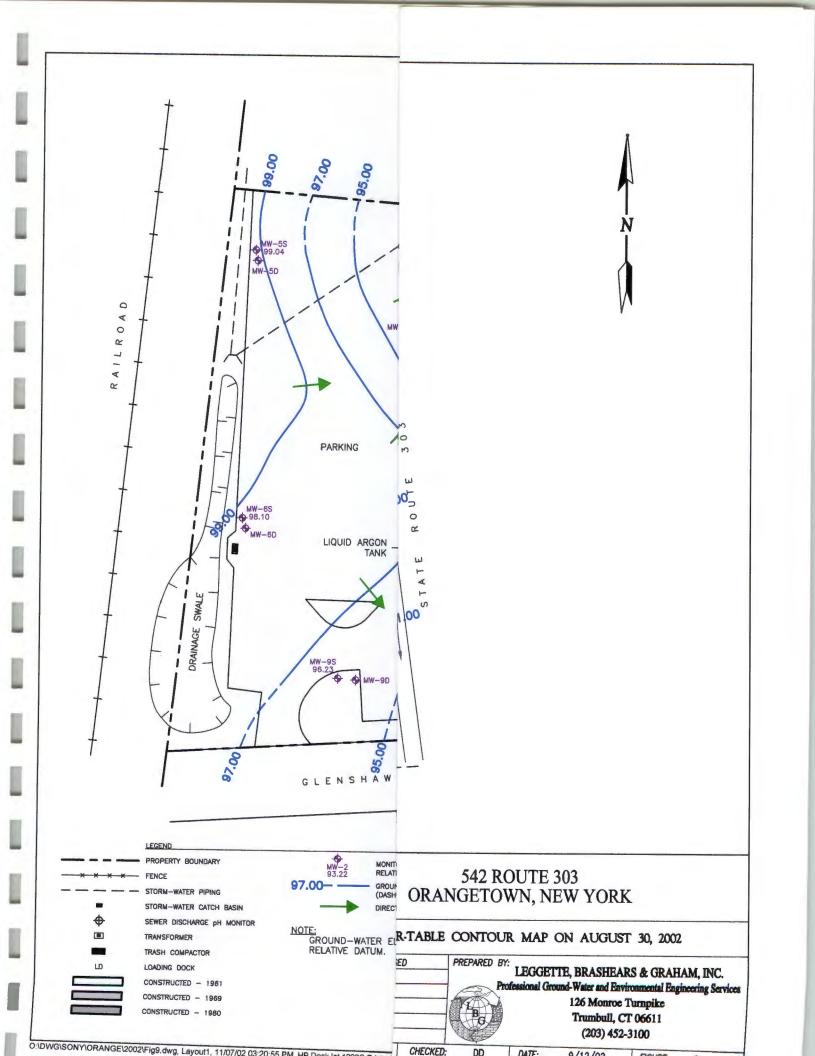


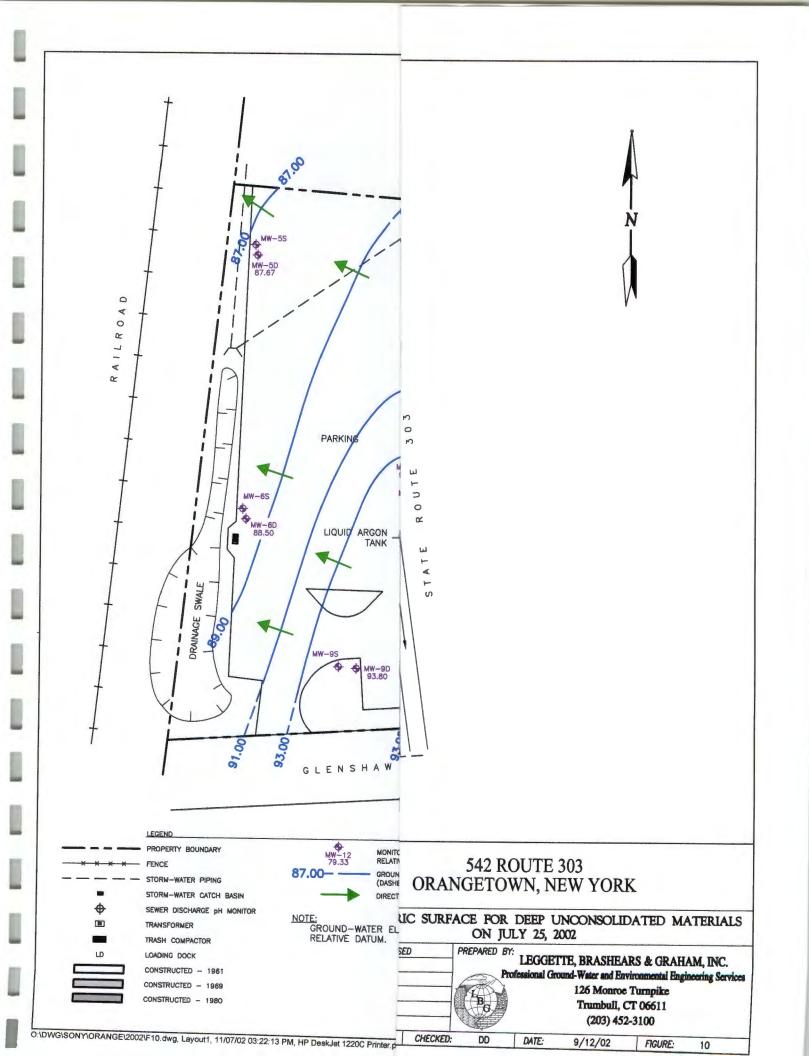
DATE: 10/3/02

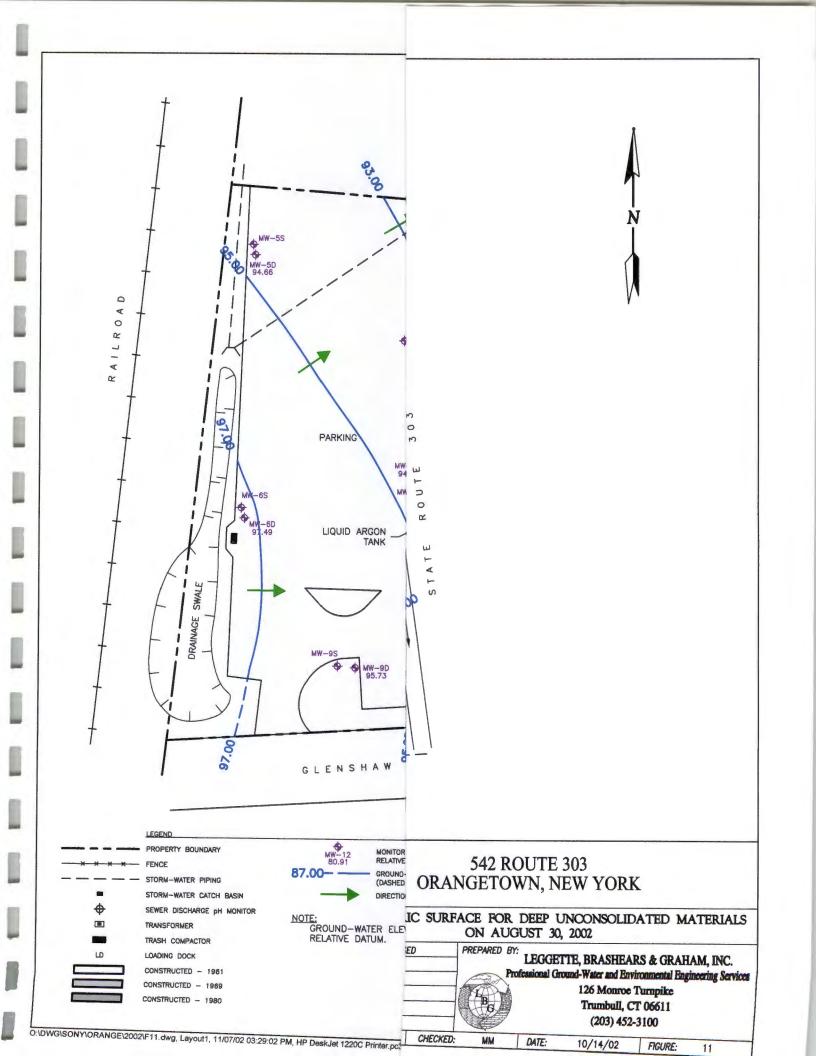
FIGURE:

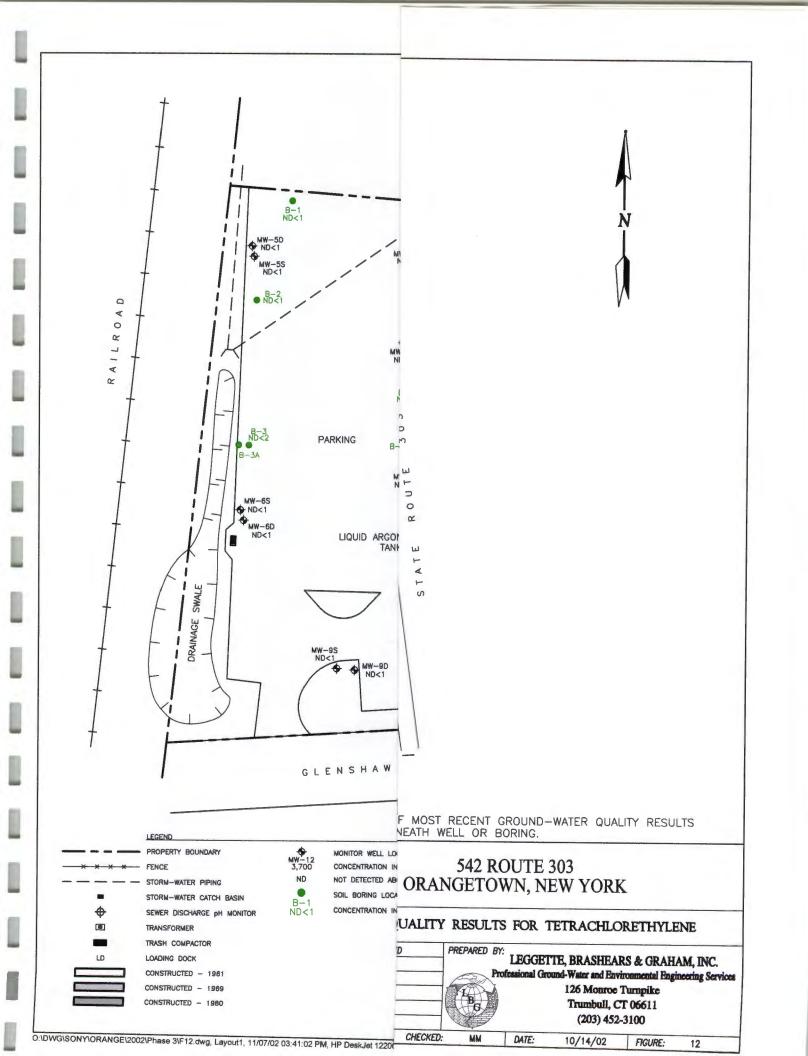
CHECKED: MM

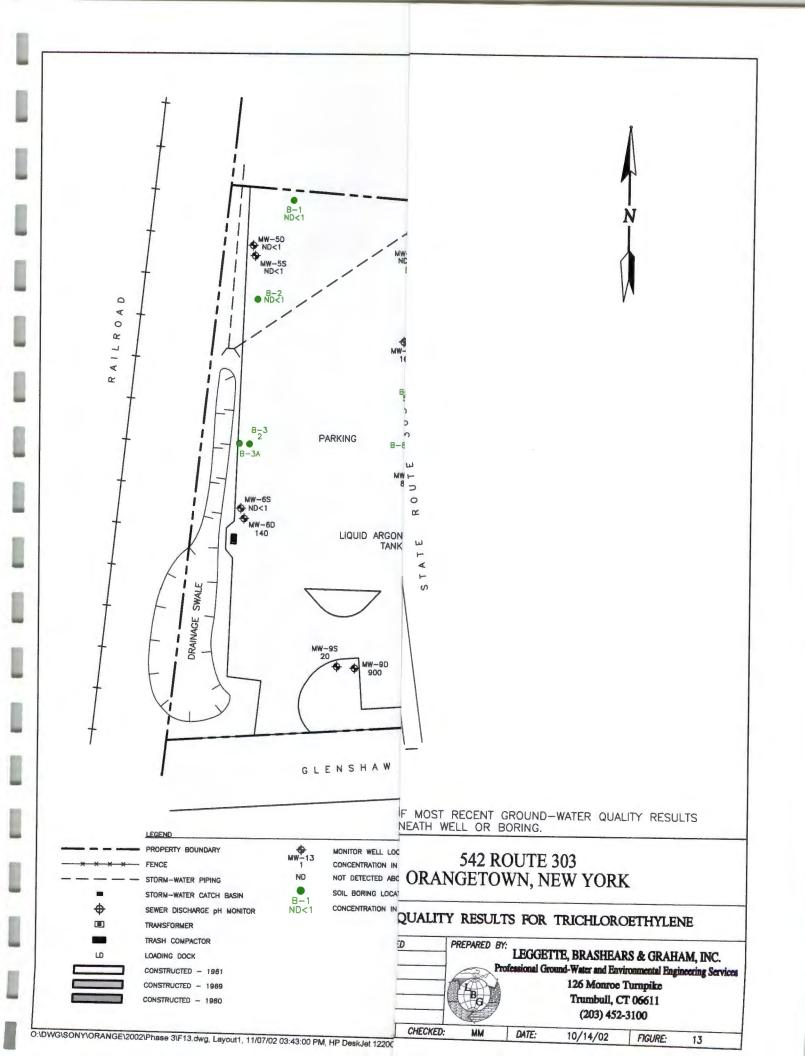


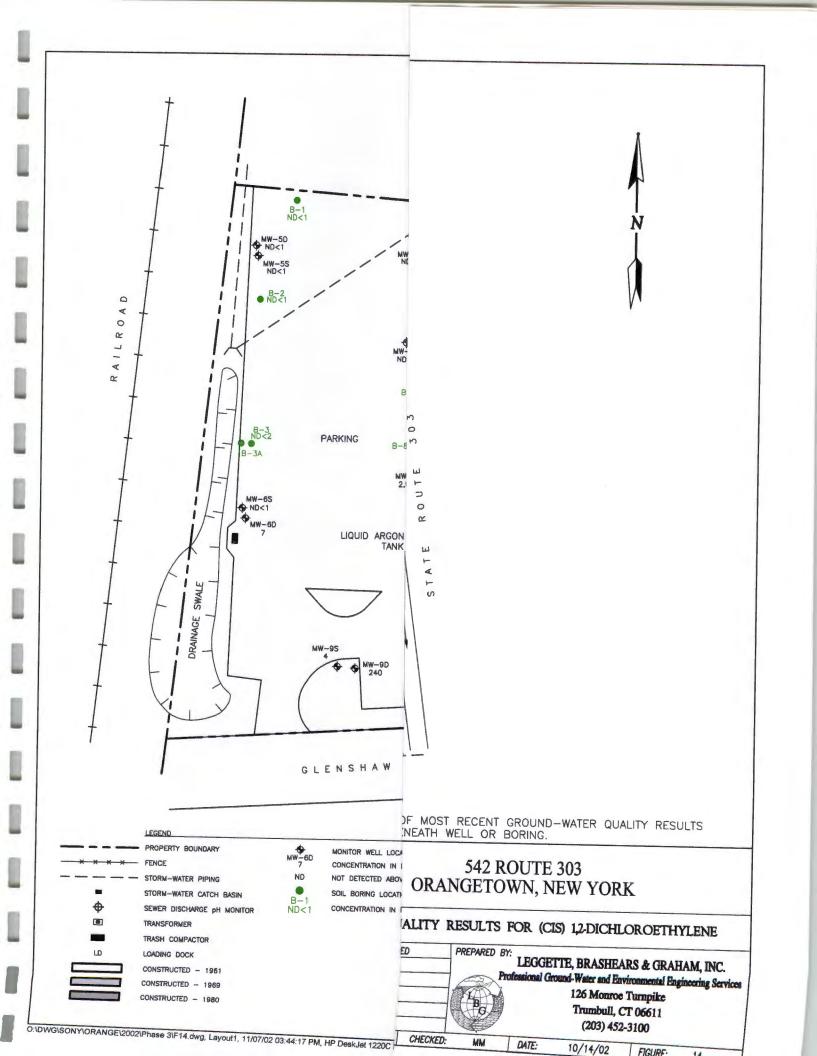


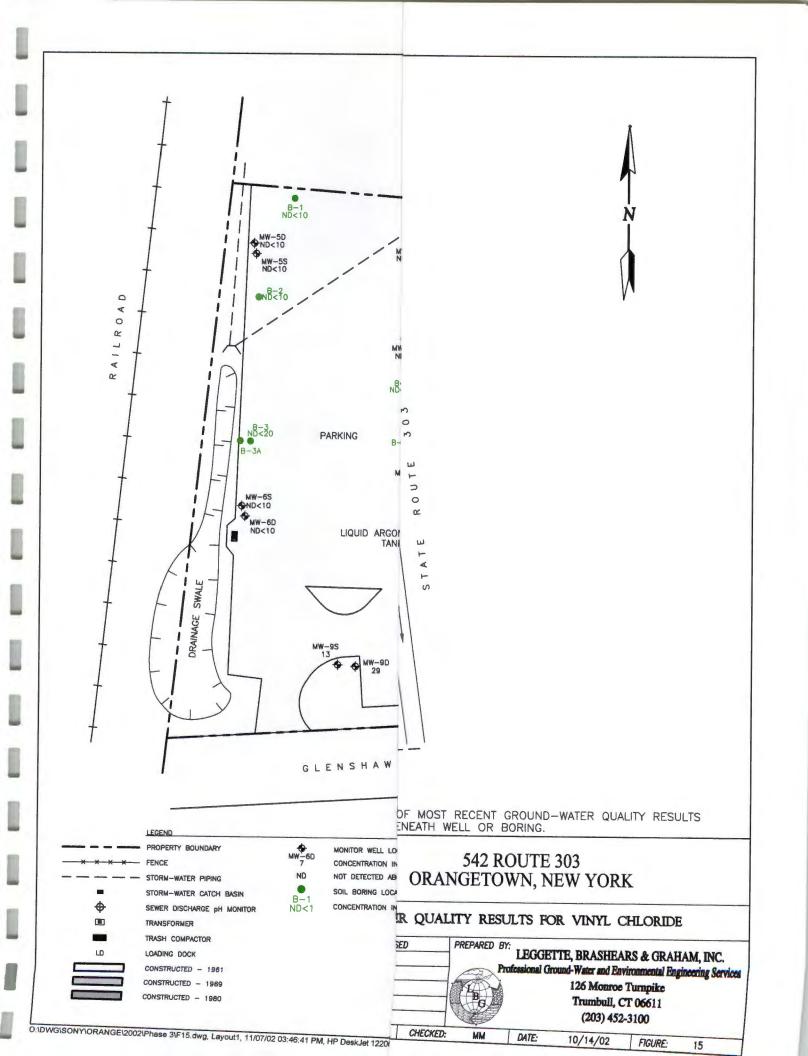


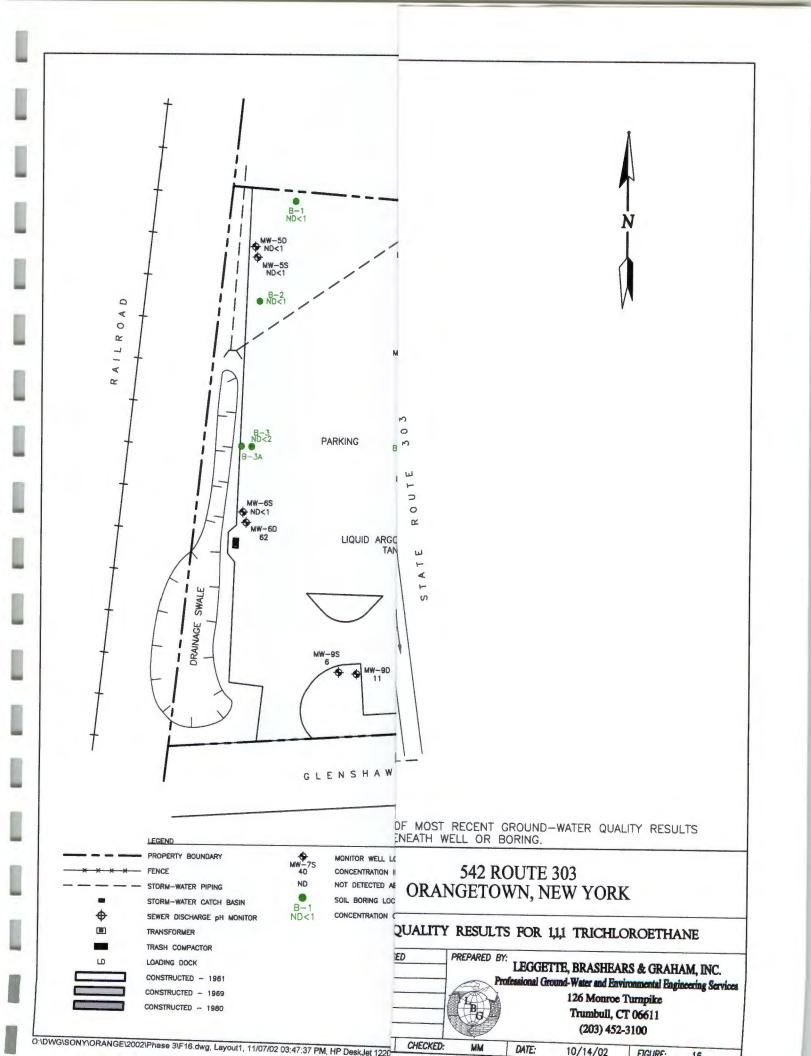


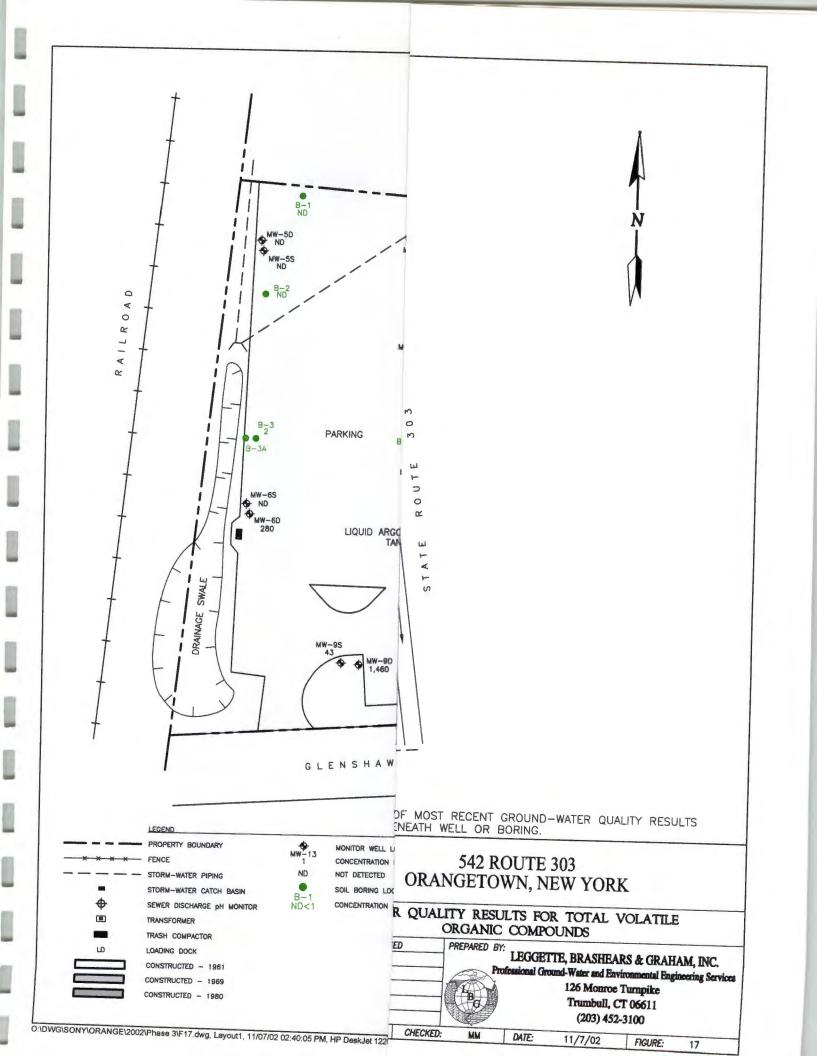












APPENDIX I GEOLOGIC LOGS AND WELL CONSTRUCTION DIAGRAMS

 A.: MW-1 A.: MW-1 A.: DF 1 PAGE BIZE & TYPE: A. 10 :SETTING: 12 ft bg to 17 ft bg CK SIZE & TYPE: Morie No. 1 C: 10 ft bg to 17 ft bg IZE & TYPE: 2-inch PVC 	
SIZE & TYPE: 0. 10 :SETTING: 12 ft bg to 17 ft bg CK SIZE & TYPE: Morie No. 1 S: 10 ft bg to 17 ft bg	
 D. 10 :SETTING: 12 ft bg to 17 ft bg CK SIZE & TYPE: Morie No. 1 CK 10 ft bg to 17 ft bg 	
CK SIZE & TYPE: Morie No. 1 C: 10 ft bg to 17 ft bg	
5: 10 ft bg to 17 ft bg	
IZE & TYPE: 2-inch PVC	
: 0 ft bg to 12 ft bg	
SEAL TYPE: Bentonite	
G: 8 ft bg to 10 ft bg	
BACKFILL TYPE: Cuttings	
ATER LEVEL: ~ 11ft bg	
MENT METHOD:	
DURATION: YIELD:	
F	

REC = Recovery	PPM = parts per million	ft bg = feet below grade	_

DEPTH	(FEET) SAMPLE		BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	(PPM)	
0	10	с				Sand, fine and silt; trace gravel; compact; reddish brown; dry
10	12	. SS	20-35-50/5	1.5	2.2	SAND, fine; some silt; some medium sand; little clay; com- pact; reddish brown, damp/wet.
12	15	С				SAND, fine; some silt; some medium sand; little clay; com- pact; reddish brown, damp/wet.
15	17	SS	50/5	0.5	2	SAND, fine; some silt; some medium sand; little clay; com- pact; reddish brown, damp/wet.
	17					End of boring.

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-2			
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGE			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO. 10 :SETTING: 10 ft bg to 20 ft bg			
DATE COMPLETED: July 9, 1999	SAND PACK SIZE & TYPE: Morie No. 1			
DRILLING COMPANY: Soiltesting Inc.	SETTING: 8 ft bg to 20 ft bg			
	CASING SIZE & TYPE: 2-inch PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 10 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Michael Manolakas	SETTING: 6 ft bg to 8 ft bg			
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings			
ELEVATION OF RP: 95.53 (Relative Datum)	STATIC WATER LEVEL: ~ 12ft bg			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION: Road box set in cement	DURATION: YIELD:			

DESCRIPTION	PID READING	PID READING	REC.	BLOW	SAMPLE	DEPTH (FEET)	
	(PPM)	(FEET)	COUNT	TYPE	то	FROM	
Sand, fine and silt; trace cobbles; compact; reddish brown damp.				с	12	0	
Sand, fine and silt; trace cobbles; compact; reddish brown damp/wet.				с	20	12	
End of boring.					20		
			<u> </u>				

H:\TEXTTEMP\SONY\ORANGE\MW-2.LOG

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.		
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-3		
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGE		
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO. 10 :SETTING: 10 ft bg to 20 ft bg SAND PACK SIZE & TYPE: Morie No. 1 SETTING: 8 ft bg to 20 ft bg		
DATE COMPLETED: July 9, 1999 DRILLING COMPANY: Soiltesting Inc.			
DRILLING METHOD: Hollow Stem Auger	CASING SIZE & TYPE: 2-inch PVC SETTING: 0 ft bg to 10 ft bg		
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite		
OBSERVER: Michael Manolakas	SETTING: 6 ft bg to 8 ft bg		
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings		
ELEVATION OF RP: 90.07 (Relative Datum)	STATIC WATER LEVEL: ~ 12 ft bg		
STICK-UP:	DEVELOPMENT METHOD:		
SURFACE COMPLETION: Road box set in cement	DURATION: YIELD:		

ABBREVIATION	IS: SS = split spoon	W = wash	C = cuttings	G = grab	ST = shelby tube
	PPM = parts per mi				

DEPTH	(FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
ROM	то	TYPE	COUNT	(FEET)	(PPM)	
0	3	с				Sand, fine and silt; compact; reddish brown; dry.
3	5	SS	20-20-19-22	1.5	2.6	SAND, medium; some silt; little clay; compact; reddish brown, damp.
5	7	SS	34-50/3	0.75	0	SAND, medium; some silt; little clay; compact; reddish brown, damp.
7	10	С				SAND, medium; some silt; little clay; compact; reddish brown, damp.
10	12	SS	35-48-50/2	0.75	0	SAND, medium; some silt; little clay; compact; reddish brown, damp.
12	20	С				SAND, medium; some silt; little clay; compact; reddish brown, damp.
	20					End of boring.
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-3D			
TRUMBULL, CONNECTICUT	PAGE: 1 OF 2 PAGE			
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE:			
542 Route 303 Orangetown, New York	SLOT NO. 10 :SETTING: 45 ft bg to 30 ft bg			
DATE COMPLETED: April 4, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
DRILLING COMPANY: Soiltesting Inc.	SETTING: 45.5 ft bg to 28 ft bg			
	CASING SIZE & TYPE: 2-inch PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 30 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Andrew Linton	SETTING: 28 ft bg to 26 ft bg			
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: ~ 19.06ft bg			
STICK-UP:	DEVELOPMENT METHOD: Bail Purge			
SURFACE COMPLETION: Road box set in cement	DURATION: 3 well volumes YIELD: 12 gal			
REMARKS:				

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	READING (PPM)	
0	2	SS	20-23-29-39	2.0	0	SAND; fine, some silt, little med sand, little gravel, trace clay; brown, some reddish brown; compact.
2	5	с		-	-	SAND; fine, some silt, little med sand, little gravel, trace clay; brown, some reddish brown; compact.
5	7	SS	31-54-52-60	2.0	0	SAND; fine, little silt, little medium sand, little gravel, trace clay; reddish brown; compact.
7	10	с		-		SAND; fine, little silt, little medium sand, little gravel, trace clay; reddish brown; compact.
10	12	SS	27-44-100/5	1.65	0	SAND; fine, little silt, little gravel, little clay; moist compact; reddish brown.
12	15	С		-		SAND; fine, little silt, little gravel, little clay; moist compact; reddish brown.
15	17	SS	59-112/6	1.40	0	SAND; fine, little silt, little gravel, trace clay,:compact; reddisbrown.
17	20	с	-	-	-	SAND; fine, little silt, little gravel, trace clay,:compact; reddis brown.
20	22	SS	60-82-120/6	1.25	0	SAND; some silt, little clay, little gravel, compact; reddish brown.

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OWNER: Sony Electronics, Inc.

WELL NO .: MW-3D

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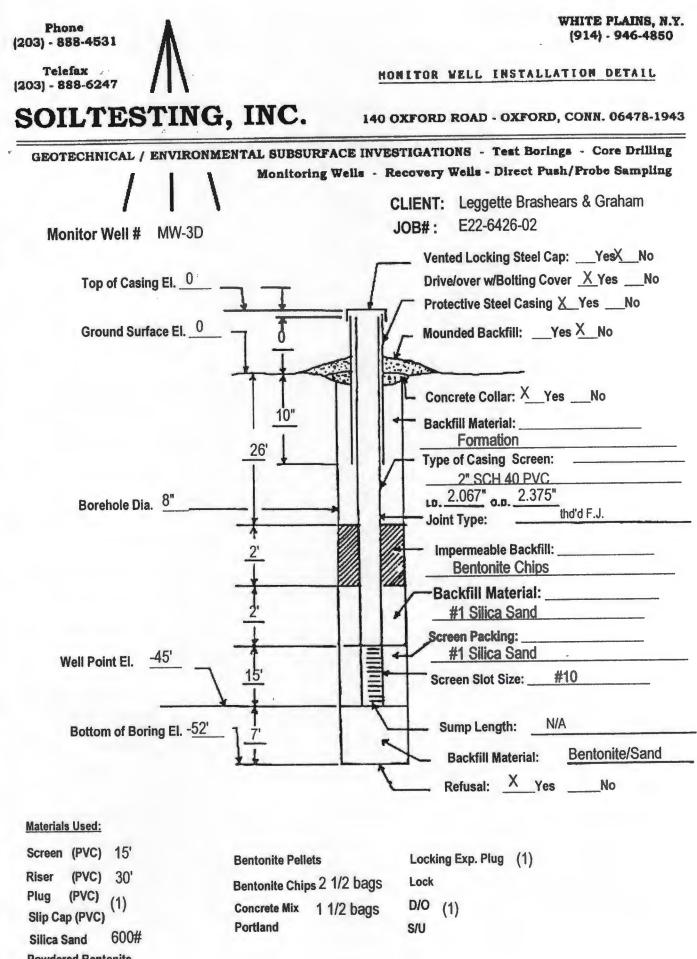
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PAGE: 2 OF 2 PAGES

DEPTH	(FEET)	SAMPLE	BLOW		PID READING	DESCRIPTION
FROM	то	ТҮРЕ	COUNT	(FEET)	(PPM)	
22	25	°C A	-			SAND; some silt, little clay, little gravel, compact; reddish brown.
25	27	SS	100/3	0.40	0	SAND; fine, some silt, little clay, little gravel; moist compact; reddish brown.
27	30	С	-	-		SAND; fine, some silt, little clay, little gravel; moist compact; reddish brown.
30	32	SS	127-100/4	0.85	0	SAND; little - some silt, little clay, little gravel, trace medium sand,; compact, reddish brown.
32	35	с	-	-		SAND; little - some silt, little clay, little gravel, trace medium sand,; compact, reddish brown
35	37	SS	200/6	0.55	0	SAND; little-some silt, little clay, little gravel, little medium sand; compact moist; reddish brown.
37	40	с	-	-		SAND; little-some silt, little clay, little gravel, little medium sand; compact moist; reddish brown.
40	42	SS	71-75-100/3	1.55	0	SAND; fine, some medium sand, little silt, trace clay and grave moist-wet compact; reddish brown.
42	45	С		-	-	SAND; fine, some medium sand, little silt, trace clay and grave moist-wet compact; reddish brown.
45	47	SS	58-91-100/6	1.85	0	SAND and SILT; fine, some clay, little small gravel; very compact and wet; reddish brown.
47	50	С		-	-	SAND and SILT; fine, some clay, little small gravel; very compact and wet; reddish brown.
50	52	SS	86-49-56-65	1.85	0	SANDSTONE; decomposed soft sandstone, fine - medium sand little silt, little clay; compact; reddish brown.
	52					End of boring.

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Powdered Bentonite

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-4			
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGE			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO. 10 :SETTING: 5 ft bg to 15 ft bg			
DATE COMPLETED: July 9, 1999	SAND PACK SIZE & TYPE: Morie No. 1			
DRILLING COMPANY: Soiltesting Inc.	SETTING: 3 ft bg to 15 ft bg			
	CASING SIZE & TYPE: 2-inch PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 5 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Michael Manolakas	SETTING: 1 ft bg to 3 ft bg			
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings			
ELEVATION OF RP: 86.00 (Relative Datum)	STATIC WATER LEVEL: ~ 3 ft bg			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION: Road box set in cement	DURATION: YIELD:			

DESCRIPTION	PID	REC.	BLOW	SAMPLE		(FEET)	DEPTH (FEET)	
	READING (PPM)	(FEET)	COUNT	TYPE	то	ROM		
SAND, fine; some silt; compact; brown; dry.				с	1	0		
Sand, fine and silt; compact; reddish brown, damp.	2.4	1.5	5-11-13-13	SS	3	1		
Sand, fine and silt; compact; reddish brown, wet.				с	5	3		
SILT; some clay; compact; brown, wet.	1	2	8-8-12-13	SS	7	5		
SILT; some clay; compact; brown, wet.				с	15	7.		
End of boring.					15			

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.		
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-4D PAGE: 1 OF 2 PAGE		
TRUMBULL, CONNECTICUT			
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE:		
542 Route 303 Orangetown, New York	SLOT NO. 10 :SETTING: 38 ft bg to 23 ft bg		
DATE COMPLETED: March 26, 2002	SAND PACK SIZE & TYPE: FilterSil 00		
DRILLING COMPANY: Soiltesting Inc.	SETTING: 39 ft bg to 21 ft bg		
	CASING SIZE & TYPE: 2-inch PVC		
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 23 ft bg		
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite		
OBSERVER: Andrew Linton	SETTING: 21 ft bg to 19 ft bg		
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings		
ELEVATION OF RP:	STATIC WATER LEVEL: 17.88ft bg		
STICK-UP:	DEVELOPMENT METHOD: Bail Purge		
SURFACE COMPLETION: Road box set in cement	DURATION: 3 well volumes YIELD: 6.5 gal		

DEPTH	(FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	(PPM)	
1	3	SS	7-25-30-22	2.0	0	SAND; fine, little silt, trace clay, some gravel; compact; reddis brown
3	5	С	-	-	-	SAND; fine, little silt, trace clay, some gravel; compact; reddis brown
5	7	SS	7-7-15-8	2.0	0	SAND; fine, some silt, trace clay, medium sand and gravel; compact; reddish brown
7	10	с		-	-	SAND; fine, some silt, trace clay, medium sand and gravel; compact; reddish brown
10	12	SS	30-39-33-30	2.0	0	SAND; fine, some silt, trace medium sand, gravel and clay; compact; reddish brown
12	15	с		-	-	SAND; fine, some silt, trace medium sand, gravel and clay; compact; reddish brown
15	17	SS	65-50/4	1.0	0	SAND; fine, silt, trace clay and gravel, large piece gravel; compact; reddish brown
17	20	С	ana			SAND; fine, silt, trace clay and gravel, large piece gravel; compact; reddish brown
20	22	SS	30-60/3	0.89	0	SAND; fine, little medium sand, trace gravel and clay; little si compact; moist; brown
22	25	с				SAND; fine, silt, little clay; saturated at 23 ft bg; brown.

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OWNER: Sony Electronics, Inc.

WELL NO .: MW-4D

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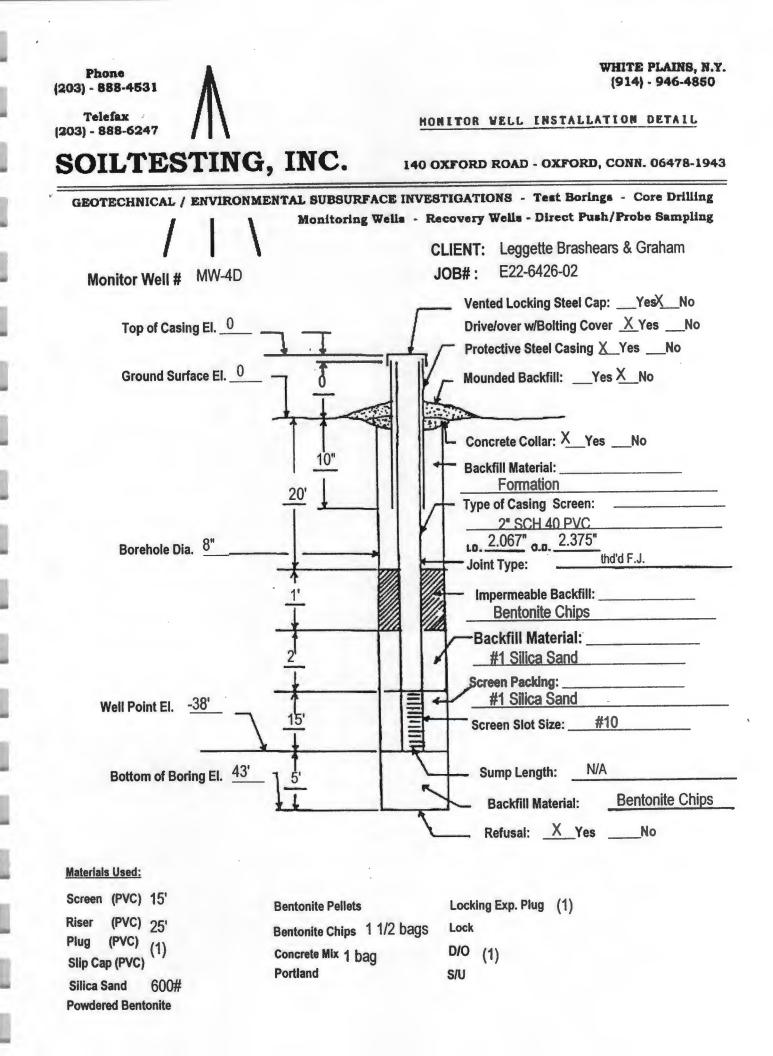
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DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE A	COUNT	(FEET)	(PPM)	
25	30	С	•			SAND; fine, silt, little clay; trace gravel; wet; brown.
30	35	С				SAND; fine, silt, little clay; trace gravel; wet; brown.
35	40	С				SAND; fine, silt, little clay; trace gravel; wet; brown. brown.
40	43	С				Top 2 feet: SAND; fine, silt, little clay; trace gravel; wet; brown. brown. Bottom 1 foot: SANDSTONE; decomposed soft sandstone, fine to medium sand, little silt, little clay; compact; reddish brown.
	43					End of boring.

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-5S			
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGES			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO. 10 :SETTING: 10 ft bg to 20 ft bg			
DATE COMPLETED: September 8, 1999	SAND PACK SIZE & TYPE: Morie No. 1			
DRILLING COMPANY: Soiltesting Inc.	SETTING: 8 ft bg to 20 ft bg			
	CASING SIZE & TYPE: 2-inch PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 10 ft bg			
SAMPLING METHOD:	SEAL TYPE: Bentonite			
OBSERVER: Greg Cellamare	SETTING: 6 ft bg to 8 ft bg			
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: ~7 ft bg			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION: Road box set in cement	DURATION: YIELD:			

DEPTH (FEET)		SAMPLE	PLE BLOW COUNT	REC. PI	PID READING	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	(PPM)	
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO .: MW-5D			
TRUMBULL, CONNECTICUT	PAGE: 1 OF 2 PAGES			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO. 10 :SETTING: 25 ft bg to 45 ft bg			
DATE COMPLETED: September 8, 1999	SAND PACK SIZE & TYPE: Morie No. 1 SETTING: 23 ft bg to 45.5 ft bg			
DRILLING COMPANY: Soiltesting Inc.				
	CASING SIZE & TYPE: 2-inch PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 25 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Michael Manolakas/Greg Cellamare	SETTING: 21 ft bg to 23 ft bg and 45.5 ft bg to 48 ft bg			
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: ~7 ft bg			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION: Road box set in cement	DURATION: YIELD:			

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DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	(PPM)	
0	1	С				Silt; some fine sand; trace fine to medium gravel; compact; reddish brown; damp.
1	3	SS	21-32-37-36	1.75	0	Silt; some fine sand; trace fine to medium gravel; compact; reddish brown; damp.
3	5	SS	20-11-12-26	1.5	0	Clay, some silt; trace fine gravel; compact; grey; damp.
5	10	с				Silt; some fine sand; compact; reddish brown; wet at 7 ft bg.
10	12	SS	11-15-27-34	1.75	0	Silt; some clay, trace fine to medium gravel; compact; reddish brown; wet.
12	15					Silt; some clay, trace fine to medium gravel; compact; reddish brown; wet.
15	17	SS	26-40-50-38	1.75	0	Silt; some clay; trace fine to medium gravel; compact; reddis brown; wet.
17	20	С				Silt; some clay; trace fine to medium gravel; compact; reddis brown; wet.
20	22	SS	47-50-50/2	1.0	0	Clay; some fine to medium gravel; little silt; compact; reddist brown; wet.
22	25	с				Clay; some fine to medium gravel; little silt; compact; reddist brown: wet

OWNER: Sony Electronics, Inc.

WELL NO .: MW-5D

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DEPTH	(FEET)	SAMPLE	BLOW	REC.	PID	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	READING (PPM)	
25	27	SS	37-51-48-50	1.80	0	Clay; some fine to medium gravel; little silt; compact; reddish brown; wet.
27	30	С	*			Clay; some fine to medium gravel; little silt; compact; reddish brown; wet.
30	32	SS	38-43-100	0.25	0	Clay; some fine to medium gravel; little silt; compact; reddish brown; wet.
31	35	с				Clay; some fine to medium gravel; little silt; compact; reddish brown; wet.
35	37	SS	18-70-50/3	1.0	0	Clay; some fine to medium gravel; little silt; compact; reddist brown; wet.
37	40	С				Clay; some fine to medium gravel; little silt; compact; reddish brown; wet.
40	42	SS	50/1	0.1	0	Clay; some fine to medium gravel; little silt; compact; reddist brown; wet.
42	45	с				Clay; some fine to medium gravel; little silt; boulder at 43 ft bg to 43.5 ft bg; compact; reddish brown; wet.
45	48	С				Clay; some fine to medium gravel; little silt; compact; reddish brown; wet.
48	48.25	SS	100/1	0.25	0	Bedrock (red sandstone, probably Triassic); dry.
48.25						End of boring.
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.				
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-6S				
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGES				
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO. 10 :SETTING: 10 ft bg to 20 ft bg				
DATE COMPLETED: September 8, 1999	SAND PACK SIZE & TYPE: Morie No. 1				
DRILLING COMPANY: Soiltesting Inc.	SETTING: 8 ft bg to 20 ft bg				
	CASING SIZE & TYPE: 2-inch PVC				
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 10 ft bg				
SAMPLING METHOD:	SEAL TYPE: Bentonite				
OBSERVER: Greg Cellamare	SETTING: 6 ft bg to 8 ft bg				
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings				
ELEVATION OF RP:	STATIC WATER LEVEL: ~7.5 ft bg				
STICK-UP:	DEVELOPMENT METHOD:				
SURFACE COMPLETION: Road box set in cement	DURATION: YIELD:				

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = Recovery PPM = parts per million ft bg = feet below grade

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	(PPM)	
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc. WELL NO.: MW-6D			
LEGGETTE, BRASHEARS & GRAHAM, INC.				
TRUMBULL, CONNECTICUT	PAGE: 1 OF 2 PAGES			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO. 10 :SETTING: 26.5 ft bg to 41.5 ft bg			
DATE COMPLETED: September 9, 1999	SAND PACK SIZE & TYPE: Morie No. 1			
DRILLING COMPANY: Soiltesting Inc.	SETTING: 25 ft bg to 42 ft bg			
	CASING SIZE & TYPE: 2-inch PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 26.5 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite SETTING: 23 ft bg to 25 ft bg and 42 ft bg to 44 ft bg			
OBSERVER: Greg Cellamare				
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: ~7.5 ft bg			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION: Road box set in cement	DURATION: YIELD:			
REMARKS: Located near western property line. Determinate	or used to measure VOCs. Till started at approximately 17 ft bg.			

REC = Recovery PPM = parts per million ft bg = feet below grade

DEPTH	(FEET)	SAMPLE	BLOW	REC.	PID	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	READING (PPM)	
0	1	с				Silt; compact; reddish brown; damp.
1	3	SS	18-27-31-34	1.75	0.6	Silt; some fine sand; trace medium gravel; compact; reddish brown; damp.
3	5	SS	13-11-14-24	1.0	0.8	Clay, some silt; trace medium gravel; compact; grey-green; damp.
5	7	SS	24-11-13-16	0.75	2.0	Clay, some silt; trace fine to medium gravel; compact; grey- green; damp.
7	10	С				Clay, some silt; trace fine to medium gravel; compact; grey- green; wet at 7.5 ft bg.
10	12	SS	24-25-23-24	1.60	1.6	Silt; some clay, trace fine to medium gravel; compact; reddis brown; wet.
12	15	С				Silt; some clay, trace fine to medium gravel; compact; reddis brown; wet.
15	17	SS	32-36-41-40	1.0	2.1	Silt; some clay, trace fine to medium gravel; compact; reddis brown; wet.
17	25	С				Silt; some clay; trace fine to medium gravel; trace boulder; compact; reddish brown; wet.
25	27	SS	27-18-24-29	1.4	1.5	Clay; some silt; trace fine to medium gravel; compact; reddi brown: wet

OWNER: Sony Electronics, Inc.

WELL NO .: MW-6D

PAGE: 2 OF 2 PAGES

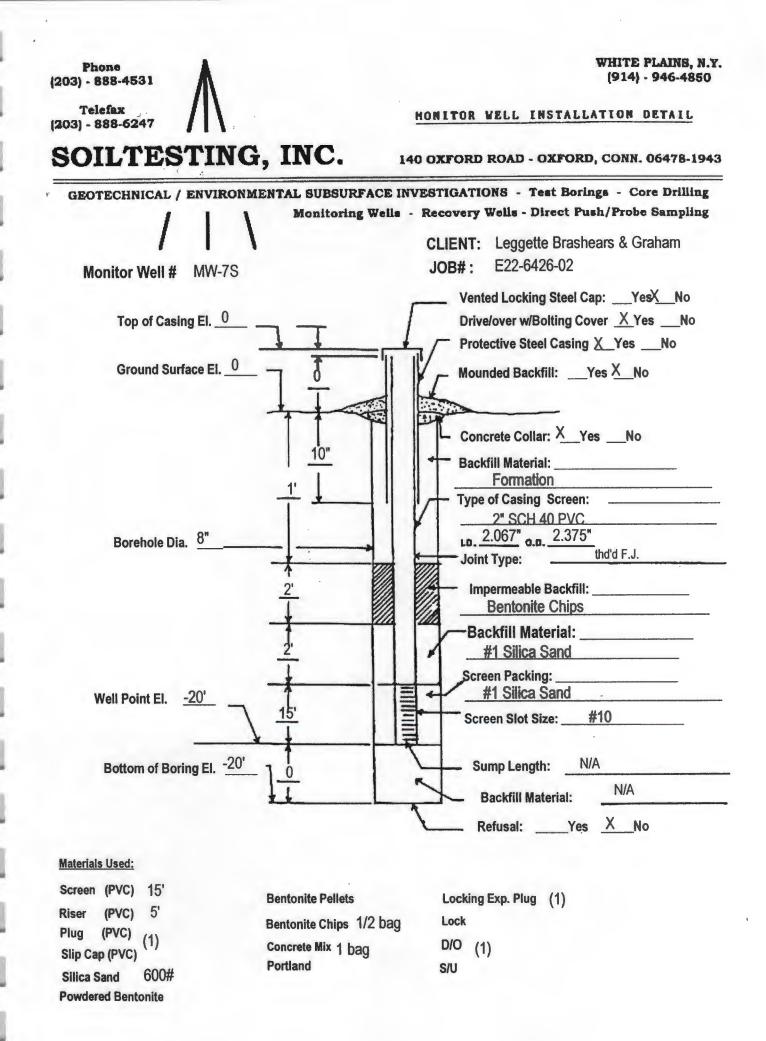
DEPTH	(FEET)	SAMPLE TYPE	BLOW	COUNT READIN	PID READING	DESCRIPTION
FROM	то				(PPM)	
27	35	с				Clay; little silt; trace fine to medium gravel; trace boulder; compact; reddish brown; wet.
35	37	SS	38-50	0.5	2.5	Clay; little silt; trace medium gravel; compact; reddish brown wet.
37	44	с				Clay; little silt; trace medium gravel; compact; reddish brown wet.
44	44.25	SS	100/1	0.25	0	Bedrock (red sandstone, probably Triassic); dry.
44.25						End of boring.
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.				
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-7S				
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGE				
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE:				
542 Route 303 Orangetown, New York	SLOT NO. 10 :SETTING: 5 ft bg to 20 ft bg				
DATE COMPLETED: April 2, 2002	SAND PACK SIZE & TYPE: FilterSil 00				
DRILLING COMPANY: Soiltesting Inc.	SETTING: 4 ft bg to 20 ft bg				
	CASING SIZE & TYPE: 2-inch PVC				
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 ft bg to 5 ft bg				
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite				
OBSERVER: Andrew Linton	SETTING: 2 ft bg to 4 ft bg				
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings				
ELEVATION OF RP:	STATIC WATER LEVEL: 8.72				
STICK-UP:	DEVELOPMENT METHOD: Bail Purge				
SURFACE COMPLETION: Road box set in cement	DURATION: 3 well volumes YIELD: 5.5 gal				
REMARKS: See geologic log of Monitor Well MW-7d for de	etails of geology and photoionization detector meaurements.				

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	(PPM)	

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.				
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: MW-7D				
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGE				
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE:				
542 Route 303 Orangetown, New York	SLOT NO. 10 :SETTING: 25 ft bg to 40 ft bg				
DATE COMPLETED: April 2, 2002	SAND PACK SIZE & TYPE: FilterSil 00				
ORILLING COMPANY: Soiltesting Inc.	SETTING: 23 ft bg to 40 ft bg				
	CASING SIZE & TYPE: 2-inch PVC				
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 25 ft bg				
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite				
DBSERVER: Andrew Linton	SETTING: 21ft bg to 23 ft bg				
REFERENCE POINT (RP): Grade	BACKFILL TYPE: Cuttings				
ELEVATION OF RP:	STATIC WATER LEVEL: 13.71				
STICK-UP:	DEVELOPMENT METHOD: Bail Purge				
	DURATION: 3 well volumes YIELD: 8 gal				

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = Recovery PPM = parts per million ft bg = feet below grade

DEPTH	(FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	(PPM)	
1	3	SS	13-12-12-16	1.0	0	SAND; fine, little medium sand, little silt, little gravel, trace clay; compact; brown to brownish gray
3	5	С	-	-	-	SAND; fine, little medium sand, little silt, little gravel, trace clay; compact; brown to brownish gray
5	7	SS	16-20-26-30	1.85	0	SAND; fine, little-some gravel, little medium sand, trace silt and clay; compact, reddish brown
7	10	С	-	-	-	SAND; fine, little-some gravel, little medium sand, trace silt an clay; compact, reddish brown
10	12	SS	55-54-59-65	1.75	0	SAND; fine, little medium sand, little gravel, trace clay and silt compact; reddish brown
12	15	С	wa	-		SAND; fine, little medium sand, little gravel, trace clay and silt compact; reddish brown
15	17	SS	75/1	0	0	No record
17	20	с		-	-	SAND; fine, little silt, gravel and clay; compact; brown - gray brown
20	22	SS	69-80-100/6	1.8	1.3	SAND; fine, little silt, gravel and clay; compact; brown - gray brown
22	25	с		-	-	SAND; fine, little silt, gravel and clay; compact; brown - gray brown

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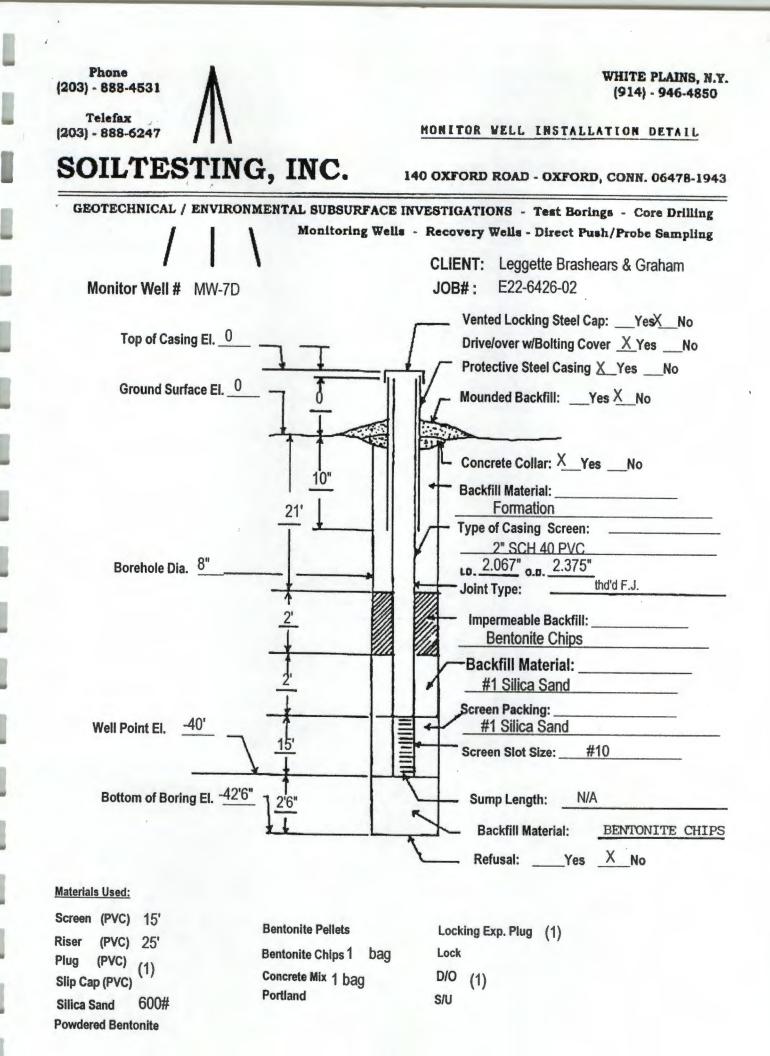
OWNER: Sony Electronics, Inc.

WELL NO .: MW-7D

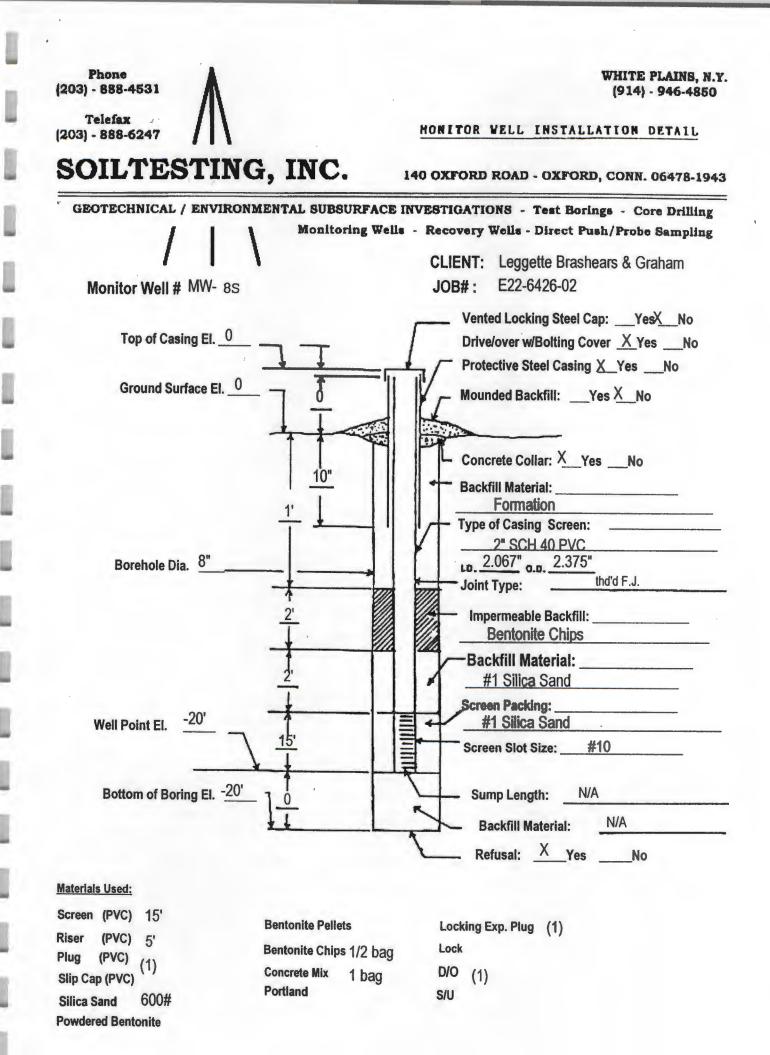
PAGE: 2 OF 2 PAGES

DEPTH (FEET)		SAMPLE	BLOW	REC.		DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	READING (PPM)	
25	27	SS	86-75/1	0.75	1.5	SAND; fine, little silt, little trace clay, little-trace gravel; compact; medium brown
27	30	с		-		SAND; fine, little silt, little trace clay, little-trace gravel; compact; medium brown
30	32	SS	59-78-70/3	1.0	0	SAND; fine, silt, some little clay, little gravel; compact; brown- grayish brown
		С		-		SAND; fine, silt, some little clay, little gravel; compact; brown- grayish brown
35	37	SS	68-100/4	1.25	0.5	SAND; fine, little silt and clay, little gravel; very moist compact brown
40	42.5	с		-		boulder or bedrock.
42.5	44.5	SS	120/6	0.5	2.0	Silt and clay, little fine sand and gravel; very moist compact; brown.
	44.5					End of boring due to refusal.

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LEGG	ETTE, BRAS	LOGIC LOG SHEARS & GRAI L, CONNECTIC		OWNER: Sony Electronics, Inc. WELL NO: MW-8S PAGE 1 OF 1 PAGES			
SITE LOCATIO	542 R	als Research Corpo oute 303 etown, New York		SCREEN SIZE & TYPE: 2" PVC SLOT NO.: 10 SETTING: 5 ft bg to 20 ft bg			
DATE COMPL				SAND PACK SIZE & TYPE: FilterSil 00 SETTING: 40 ft bg to 20 ft bg CASING SIZE & TYPE: 2" PVC			
DRILLING ME	THOD: Ho	llow Stem Auger			SETTING: 0 to 5 ft bg		
SAMPLING MI					SEAL TYPE: Bentonite SETTING: 2 ft bg to 4 ft bg		
REFERENCE H	POINT (RP):			1	BACKFILL TYPE: Cuttings		
ELEVATION O)F RP:			1	STATIC WATER LEVEL:		
STICK-UP:				1	DEVELOPMENT METHOD:		
SURFACE CON	MPLETION:	Roadbox set in ce	ement	1	DURATION: YIELD:		
	DNS: SS = spl	it spoon W = wa			cology and photoionization detector measurements. rab ST = shelby tube		
DEPTH (FEET) FRO TO M	SAMPLE TYPE	BLOW COUNT	REC. (FEET)	PID READIN (PPM)			
			-				



GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-8D PAGE 1 OF 2 PAGES			
TRUMBULL, CONNECTICUT				
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE: 2" PVC			
542 Route 303 Orangetown, New York	SLOT NO.: 10 SETTING: 30.5 ft bg to 46.5 ft bg			
DATE COMPLETED: April 4, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
DRILLING COMPANY: Soil Testing Inc.	SETTING: 27.5 ft bg to 47 ft bg			
	CASING SIZE & TYPE: 2" PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0.2 to 30.5 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Andrew Linton	SETTING: 24.5 ft bg to 27.5 ft bg and 47 ft bg to 52 ft bg			
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: 202			
STICK-UP:	DEVELOPMENT METHOD: Bail Purge			
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD: 12 gal			
REMARKS:				

DEPTH (FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION	
FROM	то	TYPE	COUNT	(FEET)	(PPM)	
0	2	SS	29-27-31-38	1.5	0	SAND; fine, some silt, little sand, trace gravel; compact; reddish brown.
2	5	с				SAND; fine, some silt, little sand, trace gravel; compact; reddish brown.
5	7	SS	32-55-87-62	1.8	0	SAND; fine, some silt, trace gravel; compact; reddish brown; damp
7	10	с				SILT; some fine sand, trace gravel; compact; reddish brown; damp
10	12	SS	100/4	0.4	0	SILT; some fine sand, trace gravel; compact; reddish brown; damp
12	15	с				SILT; some fine sand, trace gravel; compact; reddish brown; damp
15	17	SS	79-100/4	0.7	0	SILT; fine sand, trace gravel; compact; reddish brown; damp.

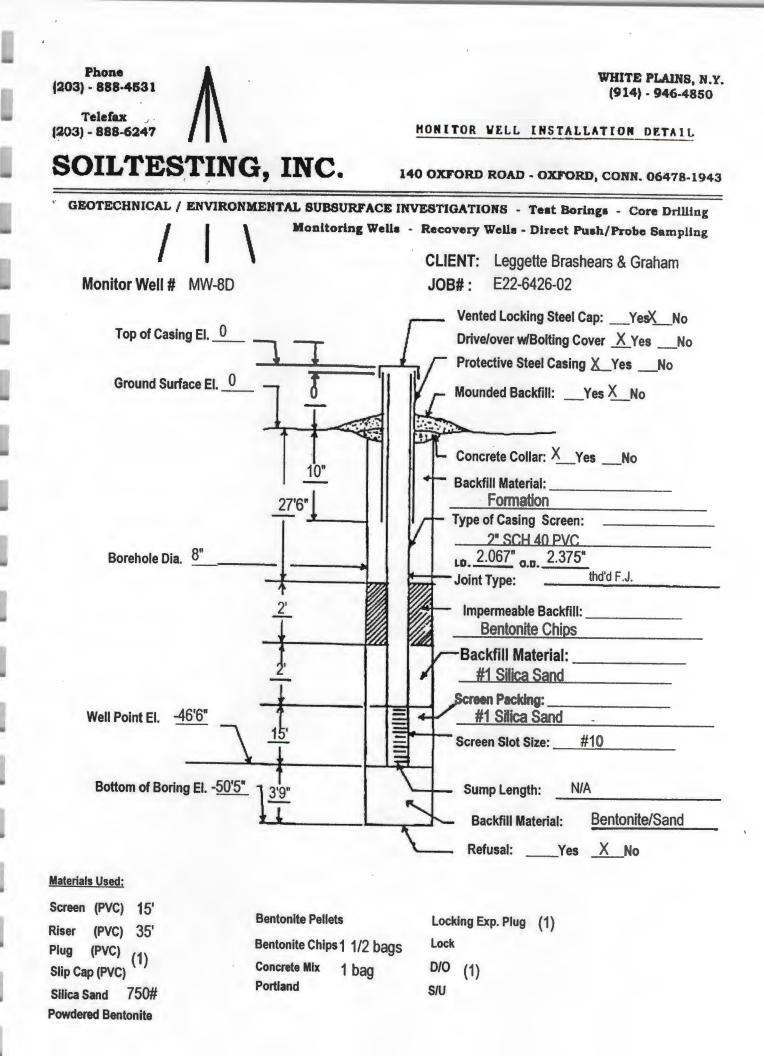
OWNER: Sony Electronics, Inc.

WELL NO .: MW-8D

PAGE 2 OF 2 PAGES

DEPTH	(FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то	TYPE	A COUNT	(FEET)	(PPM)	DESCRIPTION
17	20	с				SILT; fine sand, trace gravel; compact; reddish brown; damp.
20	22	SS	16-100/5	0.6	0	SAND; fine, some silt, trace gravel; compact; reddish brown; damp
22	25	С				SAND; fine, some silt, trace gravel; compact; reddish brown; damp
25	27	SS	74-100/2	0.5	0	SAND; fine, some silt, trace gravel; compact; reddish brown; damp
27	30	с				SAND; fine, some silt, trace gravel; compact; reddish brown; wet.
30	32	SS	150/5	0.4	0	SAND; fine, some silt, trace gravel; compact; reddish brown; wet.
32	35	с				SAND; fine, some silt, trace gravel; compact; reddish brown; wet.
35	37	SS	52-65-100/3	0.7	0	SAND; fine, some silt, little medium sand, trace gravel; compact; reddish brown; wet.
37	40	с				SAND; fine, some silt, little medium sand, trace gravel; compact; reddish brown; wet.
40	42	SS	49-57-38-62	1.2	0	SAND; fine, some silt, little coarse sand; compact; reddish brown; wet.
42	45	с				SAND; fine, some silt, little coarse sand; compact; reddish brown; wet.
45	47	SS	100-100/4	0	0	SILT and SAND; fine, trace gravel; compact; reddish brown; wet.
47	50	С				SILT and SAND; fine, trace gravel; compact; reddish brown; wet.
50	52	SS	150/5	0.4	0	Bedrock- red Triassic sandstone; damp.

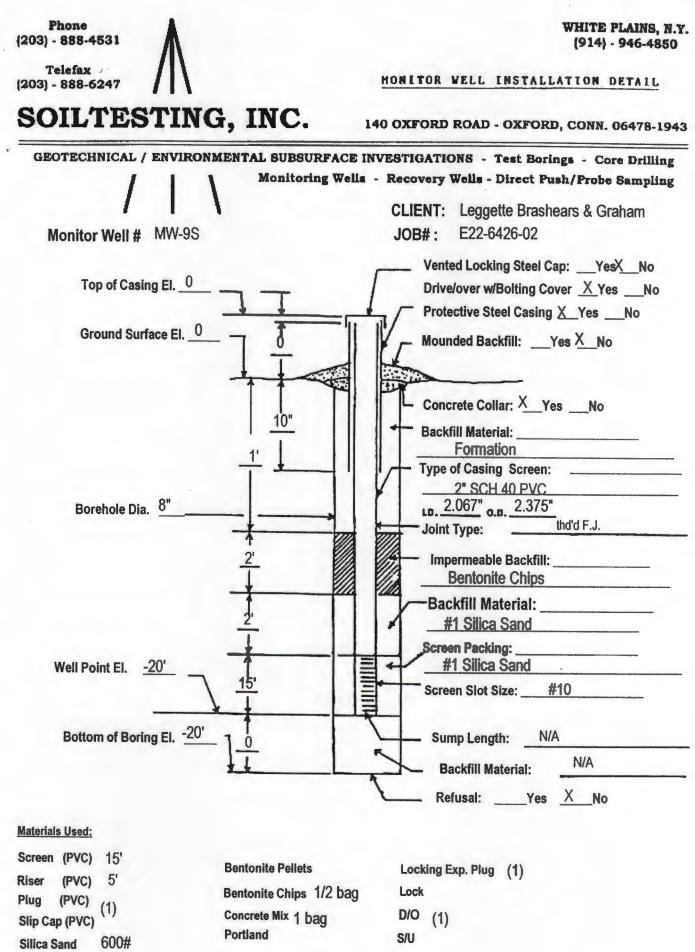
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.		
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-9S		
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES		
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE: 2" PVC		
542 Route 303 Orangetown, New York	SLOT NO.: 10 SETTING: 5 ft bg to 20 ft bg		
DATE COMPLETED: April 4, 2002	SAND PACK SIZE & TYPE: FilterSil 00		
DRILLING COMPANY: Soil Testing Inc.	SETTING: 35 ft bg to 20 ft bg		
	CASING SIZE & TYPE: 2" PVC		
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 5 ft bg		
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite		
OBSERVER: Andrew Linton	SETTING: 2 ft bg to 4 ft bg		
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings		
ELEVATION OF RP:	STATIC WATER LEVEL: 10.34		
STICK-UP:	DEVELOPMENT METHOD: Bail Purge		
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD: 5 gal		
REMARKS: See geologic log MW-9D for geology details and Pl	hotoionization Detector Measurements.		
BBREVIATIONS: SS = split spoon W = wash C = cuttings EC = Recovery PPM = parts per million			

DEPTH (FEET)	SAMPLE TYPE	BLOW REC.	PID READING	DESCRIPTION	
FROM	то		COUNT	(FEET)	(PPM)	
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Powdered Bentonite

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-9D			
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES			
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE: 2" PVC			
542 Route 303 Orangetown, New York	SLOT NO.: 10 SETTING: 44 ft bg to 29 ft bg			
DATE COMPLETED: April 4, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
DRILLING COMPANY: Soil Testing Inc.	SETTING: 27 ft bg to 44.5 ft bg			
	CASING SIZE & TYPE: 2" PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 29 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Andrew Linton	SETTING: 24.5 ft bg to 27 ft bg			
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: 11.76			
STICK-UP:	DEVELOPMENT METHOD: Bail Purge			
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD: 12 gal			
REMARKS:				

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
0	2	SS	7-11-19-15	1.25	0	Topsoil –Organics; SAND; fine, little silt, little gravel, trace clay; medium brown, reddish brown.
2	5	С				SAND; fine-medium, some gravel, little silt, little clay, damp, reddish brown
5	7	SS	4-5-7-6	0	0	No record.
7	10	C				SAND; fine-medium, some gravel, little silt, little clay, damp, reddish brown
10	12	SS	17-22-21-30	1.4	0	SAND; fine-medium, some gravel, little silt and clay; wet; reddish brown
12	15	с				SAND; fine-medium, some gravel, little silt and clay; wet; reddish brown
15	17	SS	60-75/5	1.35	0	SAND; fine, little medium sand, little gravel, little silt, trace clay; reddish brown; compact moist.

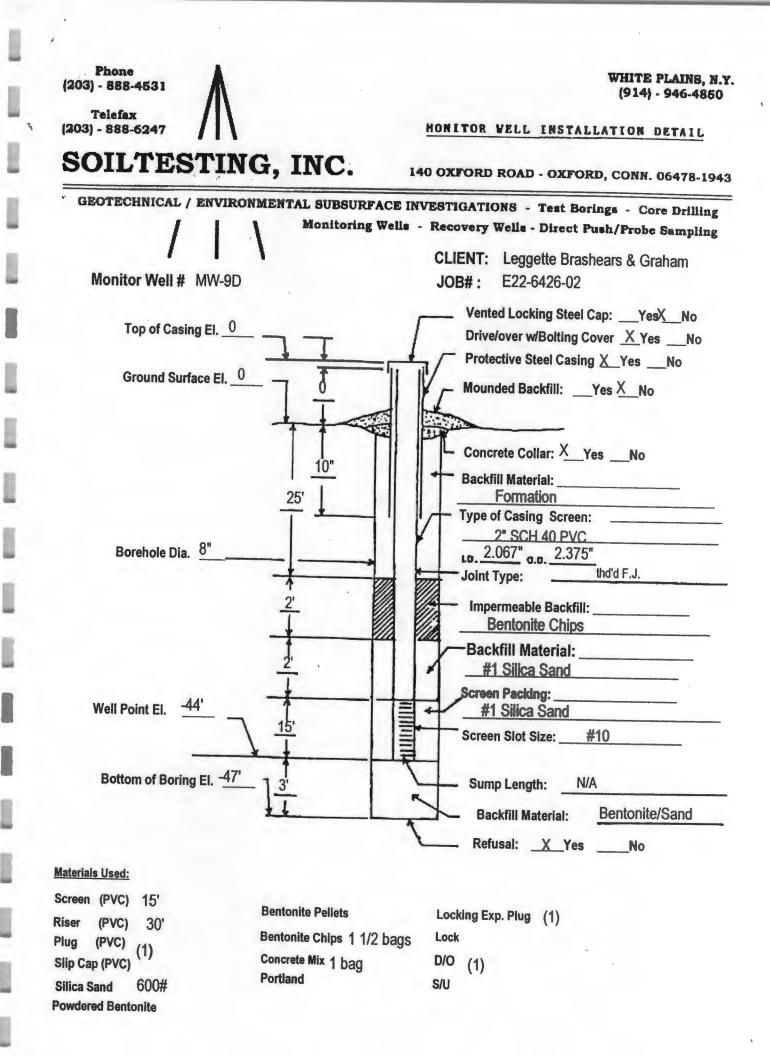
OWNER: Sony Electronics, Inc.

WELL NO .: MW-9D

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DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	DESCRIPTION
17	20	С				SAND; fine, little medium sand, little gravel, little silt, trace clay; reddish brown; compact moist.
20	22	SS	61-98-50/2	1.70	0	SAND; fine, little clay, little silt, little gravel; compact; brown- reddish brown.
22	25	С				SAND; fine, little clay, little silt, little gravel; compact; brown- reddish brown.
25	27	SS	103/6	1.0	0	SAND; fine, some silt, little clay, little gravel; wet; brown to reddist brown.
27	30	с				SAND; fine, some silt, little clay, little gravel; wet; brown to reddist brown.
30	32	SS	87-5-/3	1.05	0	SAND; fne, little medium sand and gravel, little silt, trace clay; compact; brown to medium reddish brown.
32	35	С				SAND; fne, little medium sand and gravel, little silt, trace clay; compact; brown to medium reddish brown.
35	37	SS	165/6	0.85	0	SAND; fine, little gravel, little silt, trace medium sand and clay; compact; brown to reddish brown.
37	40	С				SAND; fine, little gravel, little silt, trace medium sand and clay; compact; brown to reddish brown.
40	42	SS	121/5	0.85	0	SAND; fine, little gravel and silt, trace clay; compact; brown.
42	45	с				SAND; fine, little gravel and silt, trace clay; compact; brown.
45	47	SS	59-112-100	1.5	0	SAND; fine, some silt, little clay, little gravel; very compact, moist; brown with some reddish brown.
	47					Refusal at bedrock.

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-10S			
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES			
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE: 2" PVC			
542 Route 303 Orangetown, New York	SLOT NO.: 10 SETTING: 5 ft bg to 20 ft bg			
DATE COMPLETED: March 28, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
DRILLING COMPANY: Soil Testing Inc.	SETTING: 4 ft bg to 20.5 ft bg			
	CASING SIZE & TYPE: 2" PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 5 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Andrew Linton	SETTING: 3 ft bg to 4 ft bg			
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: 16.63			
STICK-UP:	DEVELOPMENT METHOD: Bail Purge			
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD: 1.6 gal			
REMARKS: See geologic log of Monitor Well MW-10D for deta	ails of geology and photoionization detector measurements.			
ABBREVIATIONS: SS = split spoon W = wash C = cuttings	G = grab ST = shelby tube			
REC = Recovery PPM = parts per million				
DEPTH (FEET) SAMPLE BLOW REC.	PID			
TYPE COUNT	READING DESCRIPTION			

II DEITI	(1001)	TYPE	BLOW		READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
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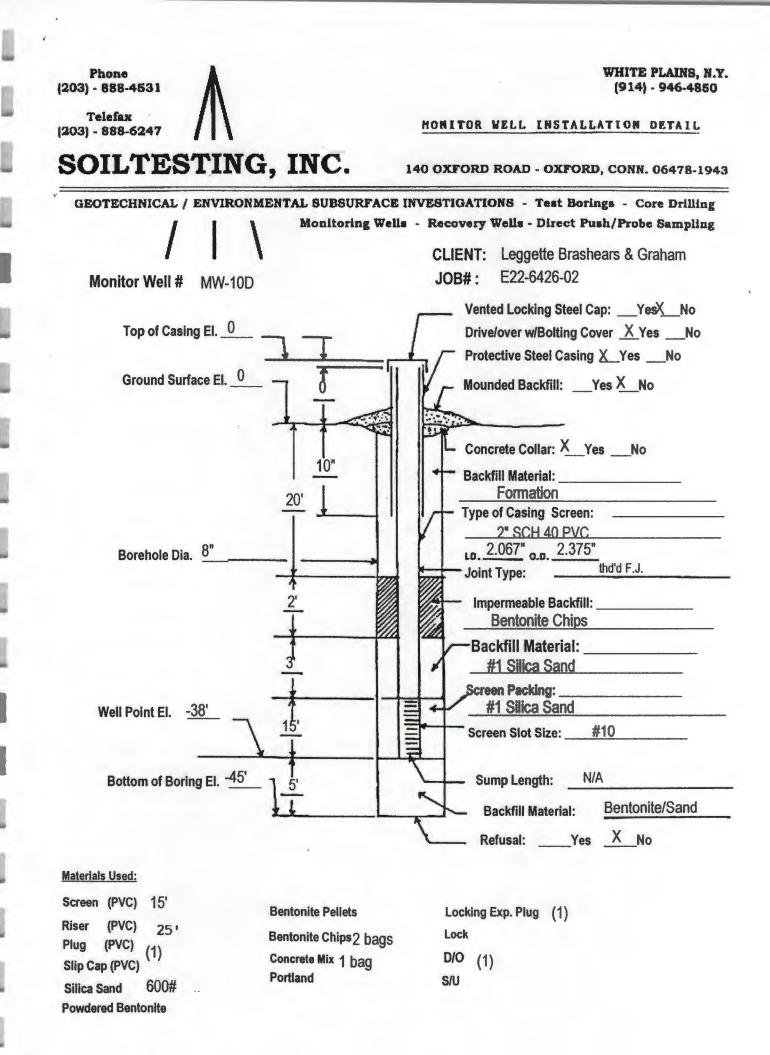
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-10D PAGE 1 OF 2 PAGES			
TRUMBULL, CONNECTICUT				
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE: 2" PVC SLOT NO.: 10 SETTING: 23 ft bg to 38 ft bg			
542 Route 303 Orangetown, New York				
DATE COMPLETED: March 28, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
DRILLING COMPANY: Soil Testing Inc.	SETTING: 2 ft bg to 38 ft bg			
	CASING SIZE & TYPE: 2" PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 23 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite SETTING: 18 ft bg to 20 ft bg			
OBSERVER: Andrew Linton				
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: 17.81			
STICK-UP:	DEVELOPMENT METHOD: Bail Purge			
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD: 10 gal			
REMARKS:				

DEPTH	DEPTH (FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
0	2	SS	4-15-27-27	1.4	0	SAND; fine, little-some silt, little clay, little-trace gravel; reddish brown
2	5	С				SAND; fine, little-some silt, little clay, little-trace gravel; reddish brown
5	7	SS	8-12-13-18	1.5	0	SAND; fine, little silt, little clay, little gravel, trace medium sand; compact, brown to reddish brown
7	10	С	-	-		SAND; fine, little silt, little clay, little gravel, trace medium sand; compact, brown to reddish brown
10	12	SS	28-60-50/2	1.3	0	SAND; fine, some silt, little clay, trace gravel; moist, compact; brown to reddish brown
12	15	С				SAND; fine, some silt, little clay, trace gravel; moist, compact; brown to reddish brown
15	17	SS	40-50-50-50/3	1.25	0	SAND; fine, some silt, little clay and gravel; compact; brown to reddish brown

VELL	NO.: MW	7-10D		GE 2 OF 2 PAGES		
20	22	SS	25-47-41-19	1.75	0	SILT; some fine sand, little clay, trace gravel; brown ; moist compac
22	25	с	-	-		SILT; some fine sand, little clay, trace gravel; brown ; moist compact
25 •	27	SS	72-100/5	0.45	0	SAND; fine, little clay, little silt, some coarse gravel; very compact; brown
27	30	С			-	SAND; fine, little clay, little silt, some coarse gravel; very compact; brown
30	32	SS	38-34-31-50/5	1.6	0	SILT and SAND; fine, little clay, trace gravel; compact, moist; brown
32	35	с		-		SILT and SAND; fine, little clay, trace gravel; compact, moist; brown
35	37	SS	36-48-60-47	1.8	0	SAND; fine, some silt, little gravel, trace clay, trace medium sand; very compact; moist; brown
37	40	с	-	-		SAND; fine, some silt, little gravel, trace clay, trace medium sand; very compact; moist; brown
40	42	SS	48-36-48-35	1.75	0	Weathered bedrock, some clay, some silt, some fine sand, little gravel; very compact; reddish brown
42	45	С	-	-	-	Weathered bedrock, some clay, some silt, some fine sand, little gravel; very compact; reddish brown
45	47	SS	50-100/2	0.5	0	Weathered sandstone, clay and silt, some fine and medium sand; compact, wet; reddish brown

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-11S PAGE 1 OF 1 PAGES			
TRUMBULL, CONNECTICUT				
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE: 2" PVC			
y 542 Route 303 Orangetown, New York	SLOT NO.: 10 SETTING: 20 ft bg to 5 ft bg			
DATE COMPLETED: March 28, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
PRILLING COMPANY: Soil Testing Inc.	SETTING: 3.5 ft bg to 25 ft bg			
	CASING SIZE & TYPE: 2" PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 5 ft bg			
AMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
DBSERVER: Andrew Linton	SETTING: 2 ft bg to 3.5 ft bg			
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings			
CLEVATION OF RP:	STATIC WATER LEVEL:			
TICK-UP:	DEVELOPMENT METHOD: Bail Purge			
URFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD:			
EMARKS: See geologic log of Monitor Well MW-11D for det	ails of geology and photoionization detector measurements.			

DEPTH (FEET)		SAMPLE TYPE	BLOW	REC.	PID READING	DESCRIPTION
ROM	то		COUNT	(FEET)	(PPM)	
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.		
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-11D		
TRUMBULL, CONNECTICUT	PAGE 1 OF 2 PAGES		
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: 2" PVC SLOT NO.: 10 SETTING: 25 ft bg to 35 ft bg		
DATE COMPLETED: March 28, 2002	SAND PACK SIZE & TYPE: FilterSil 00		
DRILLING COMPANY: Soil Testing Inc.	SETTING: 22 ft bg to 35 ft bg		
	CASING SIZE & TYPE: 2" PVC		
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 25 ft bg		
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite		
OBSERVER: Andrew Linton	SETTING: 20 ft bg to 22 ft bg		
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings		
ELEVATION OF RP:	STATIC WATER LEVEL:		
STICK-UP:	DEVELOPMENT METHOD: Bail Purge		
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD:		
REMARKS:			

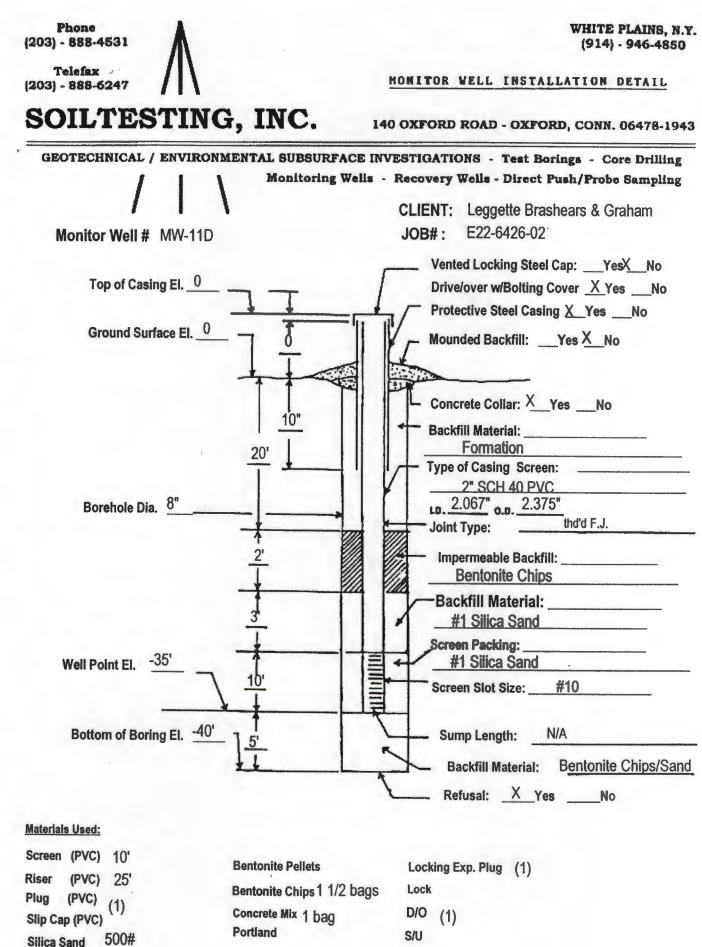
REC = Recovery	PPM = J	parts per	million
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DEPTH (FEET)		SAMPLE TYPE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
0	2	SS	6-8-10-28	1.75	0	SAND; fine, little silt, trace clay, little gravel, little organics; reddish brown; slightly moist.
2	5	С		-	-	SAND; fine, little silt, trace clay, little gravel, little organics; reddish brown; slightly moist.
5	7	SS	36-52-49-28	1.8	0	SAND; fine, little medium sand, trace clay, little gravel; compact; redish brown; damp.
7	10	С		-		SAND; fine, little medium sand, trace clay, little gravel; compact; redish brown; damp.
10	12	SS	10-100/4	1.00	0	SAND; fine, little silt, trace clay, trace gravel; compact, damp; brown to reddish brown.
12	15	С		-		SAND; fine, little silt, trace clay, trace gravel; compact, damp; brown to reddish brown.
15	17	SS	47-100/5	1.10	0	SAND; fine, some silt, little clay, little medium sand, trace gravel; compact; reddish gray brown.

VELL N	0.: MW	-11D			PAG	PAGE 2 OF 2 PAGES		
20	22	SS	36-75-100/2	1.20	0	SAND; fine, some little medium sand, little clay, little silt, trace gravel; compact, moist; grey reddish brown.		
22 *	25	С		-		SAND; fine, some little medium sand, little clay, little silt, trace gravel; compact, moist; grey reddish brown.		
25	27	SS	20-30-90/4	1.4	0	SAND; fine, some silt, little clay, trace medium sand, trace gravel very compact; reddish brown.		
27	30	С		-	-	SAND; fine, some silt, little clay, trace medium sand, trace gravel very compact; reddish brown.		
30	32	SS	100/1	0.4	0	SAND; medium, sandstone or boulder.		
32	35	с			-	SAND; medium, sandstone or boulder.		
35	37	SS	100/5	0.4	0	SAND; some clay and fine sand, sandstone fragments; very wet		
37	40	С		-		SAND; some clay and fine sand, sandstone fragments; very wet		
40	42	SS	100/3	0.1	0	Bedrock		

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Powdered Bentonite

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-12			
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: 2" PVC SLOT NO.: 10 SETTING: 15 ft bg to 30 ft bg			
DATE COMPLETED: March 26, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
DRILLING COMPANY: Soil Testing Inc.	SETTING: 13 ft bg to 30 ft bg			
	CASING SIZE & TYPE: 2" PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 15 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite			
OBSERVER: Andrew Linton	SETTING: 13 ft bg to 11 ft bg			
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL: 20.11			
STICK-UP:	DEVELOPMENT METHOD: Bail Purge			
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD: 4.5 gal			
REMARKS:				

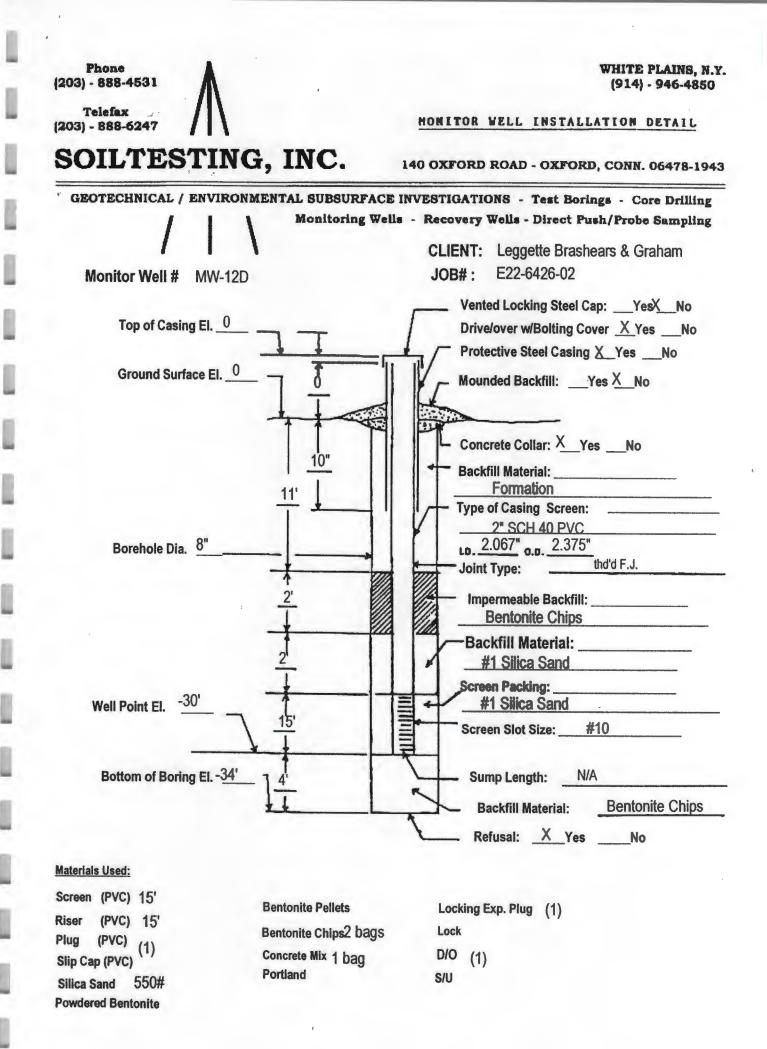
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DEPTH ((FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
0	2	SS	2-3-6-4	1.5	0	SAND; fine, some silt, trace gravel; compact; reddish brown' slightly mois
3	5	с		-	-	SAND; fine, some silt, trace gravel; compact; reddish brown' slightly moist
5	7	SS	12-22-23-30	2.0	0	SILT; some fine sand, little clay, trace gravel; compact; reddish brown
7	10	С				SILT; some fine sand, little clay, trace gravel; compact; reddish brown
10	12	SS	20-9-13-19	1.25	0	SILT; some fine sand, little clay, trace gravel; compact; reddish brown
12	15	с	Nop.	-	-	SILT; some fine sand, little clay, trace gravel; compact; reddish brown
15	17	SS	14-19-29-30	2.0	0	SILT; little fine sand, some clay, trace gravel; very compact; reddish brown
17	20	С	**	-	-	SILT; little fine sand, some clay, trace gravel; very compact; reddish brown
20	22	SS	24-40-60/5	1.20	0	SAND; fine, some silt, little clay, trace gravel; compact; reddish brown
22	25	С	100			SAND; fine, some silt, little clay, trace gravel; compact; reddish brown

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VELL N	10.: MW	-12			PAGE 2 OF 2 PAGES		
25	27	SS	50-60-100	1.20	0	SAND; fine, some silt, little clay; very compact	
27	30	С	×		-	SAND; fine, some silt, little clay; very compact	
30 [%]	32	SS	32-33-55-50/1	1.35	0	CLAY; little silt, little gravel; very compact; sandstone at bottom	
32	34	С		-		CLAY; little silt, little gravel; very compact; sandstone at bottom	
34						Bedrock - sandstone	

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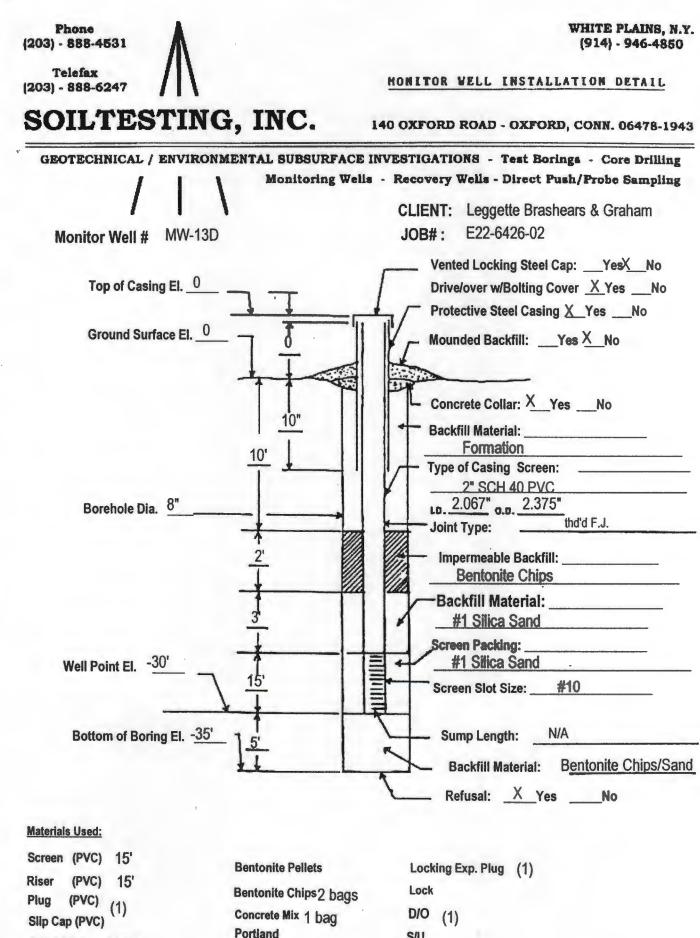
GEOLOGIC LOG	OWNER: Sony Electronics, Inc.		
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: MW-13		
TRÚMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES		
SITE LOCATION: Materials Research Corporation 542 Route 303	SCREEN SIZE & TYPE: 2" PVC		
Orangetown, New York	SLOT NO.: 10 SETTING: 15 ft bg to 30 ft bg		
DATE COMPLETED: March 27, 2002	SAND PACK SIZE & TYPE: FilterSil 00		
DRILLING COMPANY: Soil Testing Inc.	SETTING: 13 ft bg to 31 ft bg		
	CASING SIZE & TYPE: 2" PVC		
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 15 ft bg		
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite		
DBSERVER: Andrew Linton	SETTING: 13 ft bg to 11 ft bg		
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings		
ELEVATION OF RP:	STATIC WATER LEVEL: 22.12		
STICK-UP:	DEVELOPMENT METHOD: Bail Purge		
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD: 4.0 gal		
REMARKS:			

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DEPTH (FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
0	2	SS	13-16-17-32	1.0	0	Top soil organics, some fine sand, some gravel; moist; brown- reddish brown
2	5	с	-	-		Top soil organics, some fine sand, some gravel; moist; brown-reddish brown
5	7	SS	8-13-12-12	2.0	0	SAND; fine - medium, little silt, little - trace gravel; reddish brown
7	10	с		-		SAND; fine - medium, little silt, little - trace gravel; reddish brown
10	12	SS	38-56-50/4	2.0	0.2	SAND; fine, little medium sand and silt, trace clay and gravel; compact; reddish brown; moist
12	15	с	aa	-		SAND; fine, little medium sand and silt, trace clay and gravel; compact; reddish brown; moist
15	17	SS	16-45-48-50/4	2.0	0.3	SAND; fine, some silt, trace medium sand, trace gravel; compact; moist; reddish brown
17	20	с		-		SAND; fine, some silt, trace medium sand, trace gravel; compact; moist; reddist brown

WELL NO.: MW-13					PAG	PAGE 2 OF 2 PAGES		
20	22	SS	43-75-100/4	1.8	0.4	SAND; fine, some silt, trace clay, trace gravel; compact; reddish brown; moist		
22 *	25	С		-		SAND; fine, some silt, trace clay, trace gravel; compact; reddish brown; moist		
25	27	SS	57-78-100/4	1.20	0	SAND; fine, some silt, trace clay, trace gravel; compact; reddish brown; moist		
27	30	С		-		SAND; fine, some silt, trace clay, trace gravel; compact; reddish brown; moist		
30	32	SS	29-140-100/2	1.4	0	SAND; fine, silt, little clay and gravel; very compact; reddish brown slightly moist		
32	35	С		-	-	SAND; fine, silt, little clay and gravel; very compact; reddish brown slightly moist		
35	37	SS	100/1	0.25	0	Sandstone bedrock. Some clay; wet		

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Silica Sand 550# **Powdered Bentonite**

S/U

GEOLOGIC LOG	OWNER: Sony Electronics, Inc. WELL NO: MW-14S			
LEGGETTE, BRASHEARS & GRAHAM, INC.				
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES			
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE: 2" PVC			
, 542 Route 303	SLOT NO.: 10 SETTING: 4 ft bg to 19 ft bg			
Orangetown, New York				
DATE COMPLETED: March 29, 2002	SAND PACK SIZE & TYPE: FilterSil 00			
DRILLING COMPANY: Soil Testing Inc.	SETTING: 2 ft bg to 19 ft bg			
	CASING SIZE & TYPE: 2" PVC			
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 4 ft bg			
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite SETTING: 1 ft bg to 2 ft bg			
OBSERVER: Andrew Linton				
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings			
ELEVATION OF RP:	STATIC WATER LEVEL:			
STICK-UP:	DEVELOPMENT METHOD: Bail Purge			
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD:			
REMARKS: See geologic log of Monitor Well MW-14D for det	ails of geology and photoionization detector measurements.			
ABBREVIATIONS: SS = split spoon W = wash C = cuttings	G = grab ST = shelby tube			
REC = Recovery PPM = parts per million				

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
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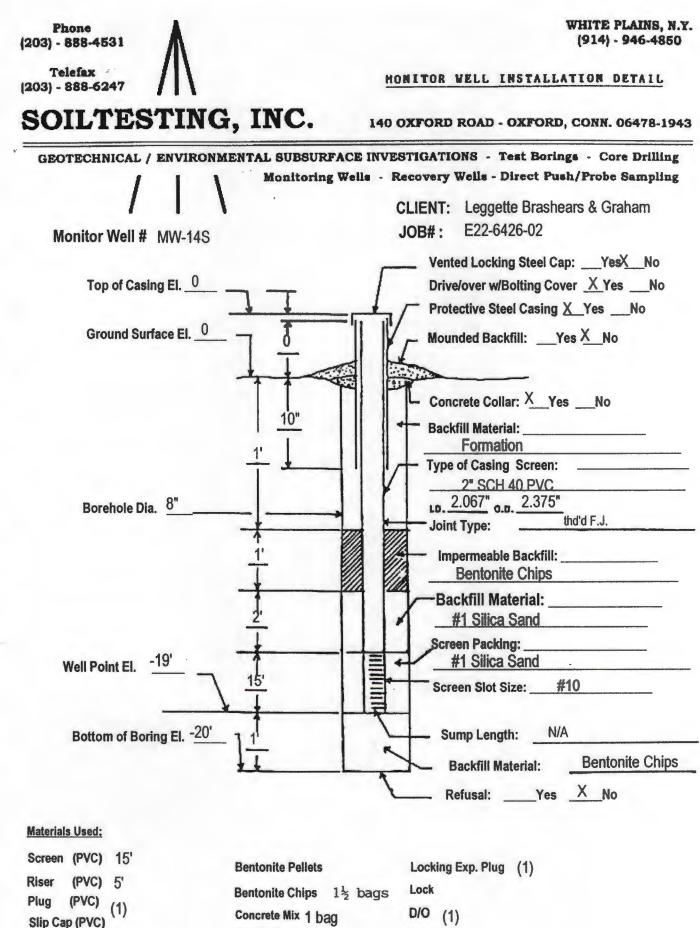
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600# Silica Sand **Powdered Bentonite**

Portland S/U

GEOLOGIC LOG	OWNER: Sony Electronics, Inc. WELL NO: MW-14D PAGE 1 OF 2 PAGES		
LEGGETTE, BRASHEARS & GRAHAM, INC.			
TRUMBULL, CONNECTICUT			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: 2" PVC SLOT NO.: 10 SETTING: 22 to 37 ft bg		
DATE COMPLETED: March 29, 2002	SAND PACK SIZE & TYPE: FilterSil 00		
DRILLING COMPANY: Soil Testing Inc.	SETTING: 20 to 37.5 ft bg		
	CASING SIZE & TYPE: 2" PVC		
DRILLING METHOD: Hollow Stem Auger	SETTING: 0 to 22 ft bg		
SAMPLING METHOD: Split Spoon	SEAL TYPE: Bentonite		
OBSERVER: Andrew Linton	SETTING: 1 to 20 ft bg and 37.5 to 40.5 ft bg		
REFERENCE POINT (RP):	BACKFILL TYPE: Cuttings		
ELEVATION OF RP:	STATIC WATER LEVEL:		
STICK-UP:	DEVELOPMENT METHOD: Bail Purge		
SURFACE COMPLETION: Roadbox set in cement	DURATION: 3 well volumes YIELD:		
REMARKS:			

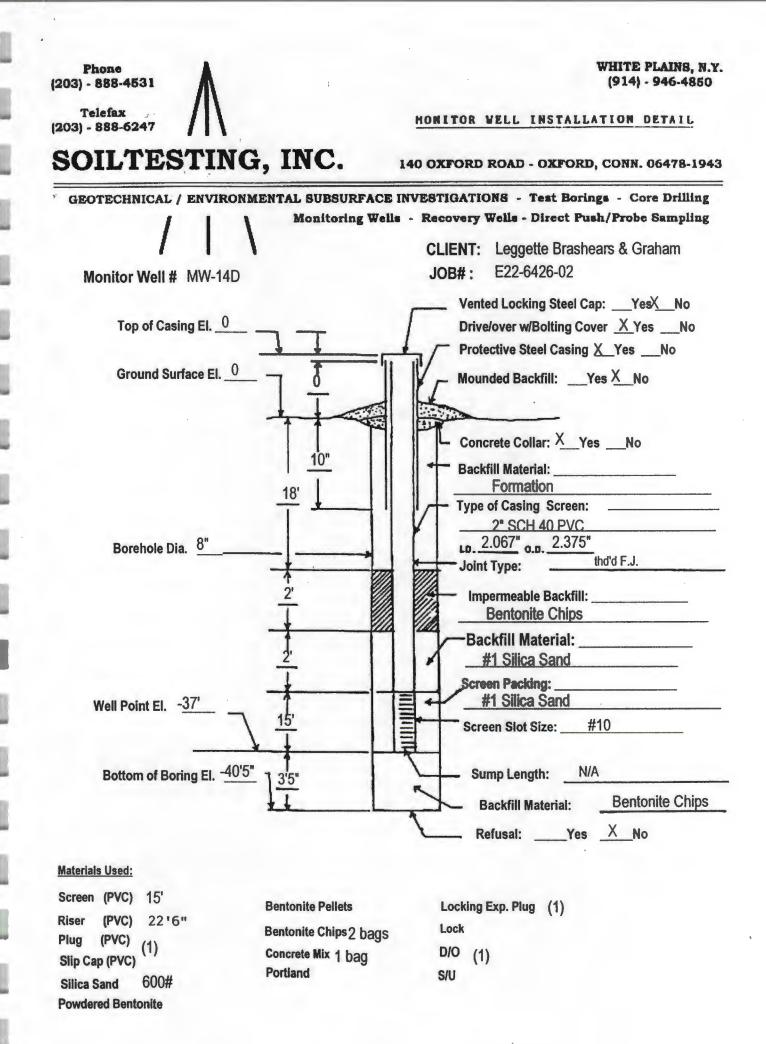
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DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
0	1	с		-	-	SAND; fine, little-some medium sand, little gravel, little silt, trace clay; brown to reddish brown; compact.
1	3	SS	12-24-28-30	1.2	0	SAND; fine, little-some medium sand, little gravel, little silt, trace clay; brown to reddish brown; compact.
3	5	с		-	an da	SAND; fine, little-some medium sand, little gravel, little silt, trace clay; brown to reddish brown; compact.
5	7	SS	24-47-50-31	1.25	0	SAND; fine to medium, little silt, little gravel, trace clay; compact brown.
7	10	С	-	-	-	SAND; fine to medium, little silt, little gravel, trace clay; compact brown.
10	12	SS	51-50-50/2	1.40	0	SAND; fine, some silt, little medium sand, little gravel, trace clay, brown; compact.
12	15	с			-	SAND; fine, some silt, little medium sand, little gravel, trace clay, brown; compact.

WELL N	NO.: MW	-14D		PAG	E 2 OF 2 PAGES	
15	17	SS	46-75-50/2	1.3	0	SAND; fine, little silt, little clay, trace gravel; brown; slightly moist compact.
17	20	С	A	-		SAND; fine, little silt, little clay, trace gravel; brown; slightly moist compact.
20	22	SS	100/5	0.7	0	SAND; fine, little silt, little gravel, trace clay; compact; brown.
22	25	С		-		SAND; fine, little silt, little gravel, trace clay; compact; brown.
25	27	SS	75-93-50/1	0.95	0	SAND; fine, little silt, little clay, little gravel; very compact; reddis brown.
27	30	С		-		SAND; fine, little silt, little clay, little gravel; very compact; reddis brown.
30	32	SS	100/5	0.75	0	SAND; fine, little silt, little clay, little gravel; very compact; reddis brown.
32	35	С	-	-		SAND; fine, little silt, little clay, little gravel; very compact; reddis brown.
35	37	SS	120/5	0.5	0	SAND, fine, some silt, little medium sand, trace clay, little gravel; very compact, brown.
37	40	С		-	-	SAND, fine, some silt, little medium sand, trace clay, little gravel; very compact, brown.
40	40.5	SS	265/5	0.35	0	Sandstone bedrock, some silt and clay; very compact; very wet.

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.				
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: H-1				
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGE				
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO.: SETTING:				
DATE COMPLETED: July 9, 1999	SAND PACK SIZE & TYPE:				
DRILLING COMPANY: NA	SETTING:				
	CASING SIZE & TYPE:				
DRILLING METHOD: Hand Auger	SETTING:				
SAMPLING METHOD: Grab	SEAL TYPE:				
DBSERVER: Michael Manolakas	SETTING:				
REFERENCE POINT (RP): Grade	BACKFILL TYPE:				
CLEVATION OF RP: NA	STATIC WATER LEVEL:				
TICK-UP:	DEVELOPMENT METHOD:				
SURFACE COMPLETION:	DURATION: YIELD:				

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = Recovery PPM = parts per million

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	READING (PPM)	
0	0.25	с				GRAVEL, coarse; loose; grey; dry.
0.25	1.5	с			0	SAND, fine; some silt; little medium sand; little coarse gravel; compact; reddish brown; dry.
1.5	4.5	с			0	SAND, fine; some silt; little medium sand; little coarse gravel; compact; reddish brown; damp.
	4.5					End of boring.
						
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.		
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO.: H-2		
TRUMBULL, CONNECTICUT	PAGE: 1 OF 1 PAGE		
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO.: SETTING:		
DATE COMPLETED: July 9, 1999	SAND PACK SIZE & TYPE:		
DRILLING COMPANY: NA	SETTING:		
	CASING SIZE & TYPE:		
DRILLING METHOD: Hand Auger	SETTING:		
SAMPLING METHOD: Grab	SEAL TYPE:		
OBSERVER: Michael Manolakas	SETTING:		
REFERENCE POINT (RP): Grade	BACKFILL TYPE:		
ELEVATION OF RP: NA	STATIC WATER LEVEL:		
STICK-UP:	DEVELOPMENT METHOD:		
SURFACE COMPLETION:	DURATION: YIELD:		

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = Recovery PPM = parts per million

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID	DESCRIPTION
FROM	то	TYPE	COUNT	(FEET)	READING (PPM)	
0	0.25	с				GRAVEL, coarse; loose; grey; dry.
0.25	2	с			0	SAND, fine; some silt; little medium sand; little coarse gravel; compact; reddish brown; dry.
2	4.5	с			0	SAND, fine; some silt; little medium sand; little coarse gravel; compact; reddish brown; damp.
	4.5					End of boring.

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-1			
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES			
SITE LOCATION: Materials Research Corporation 542 Route 303	SCREEN SIZE & TYPE:			
Orangetown, New York	SLOT NO.: SETTING:			
DATE COMPLETED: 10/30/01	SAND PACK SIZE & TYPE:			
DRILLING COMPANY: Zebra Environmental	SETTING: CASING SIZE & TYPE:			
DRILLING METHOD: Geoprobe	SETTING:			
SAMPLING METHOD: Split Spoon	SEAL TYPE:			
OBSERVER: Andrew Linton	SETTING:			
REFERENCE POINT (RP): Grade	BACKFILL TYPE:			
ELEVATION OF RP:	STATIC WATER LEVEL: 17.3 feet			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION:	DURATION: YIELD:			
REMARKS: Two attempts were made to probe to 40 ft., one refu	usal occurred at 27 ft., and the second rejection at 37 ft.			
ABBREVIATIONS: SS = split spoon W = wash C = cuttings REC = Recovery PPM = parts per million MC = Macrocore	G = grab ST = shelby tube			

то		BLOW	REC.	PID READING	DESCRIPTION
10	TYPE COUNT (FEET) (PPM)				
11	мс		2.0	0	SILT; some fine. sand; little-trace small gravel; trace clay. Compact reddish-brown; damp.
21	мс		1.75	0	SILT; some-little clay; little-trace small gravel. Compact; reddishbrown; wet.
31	мс		2.0	0	CLAY; little silt; little small and medium gravel. Brown; very compact; wet.
37					Refusal.
	21 31	21 MC 31 MC	21 MC 31 MC	21 MC 1.75 31 MC 2.0	21 MC 1.75 0 31 MC 2.0 0

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-2 PAGE 1 OF PAGES			
TRUMBULL, CONNECTICUT				
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO.: SETTING:			
DATE COMPLETED: 10/30/01	SAND PACK SIZE & TYPE:			
DRILLING COMPANY: Zebra Environmental	SETTING:			
	CASING SIZE & TYPE:			
DRILLING METHOD: Geoprobe	SETTING:			
SAMPLING METHOD: Split Spoon	SEAL TYPE:			
OBSERVER: Andrew Linton	SETTING:			
REFERENCE POINT (RP): Grade	BACKFILL TYPE:			
ELEVATION OF RP:	STATIC WATER LEVEL: 18.0			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION:	DURATION: YIELD:			
REMARKS: Six attempts were made to probe to the desired 40 ft	t. depth, refusal occurred at 26.5 ft.			
ABBREVIATIONS: SS = split spoon W = wash C = cuttings REC = Recovery PPM = parts per million MC = Macrocore	G = grab ST = shelby tube			

DEPTH (FEET)	SAMPLE TYPE	BLOW	REC.	PID READING	DESCRIPTION	
FROM	то		COUNT	(FEET)	(PPM)	
9	11	мс		1.55	0	SILT; some fine, sand; little-trace clay. Compact; reddish brown; damp.
19	21	мс		1.30	0	CLAY; little silt; little small gravel. Reddish brown-gray; wet.
	26.5					Refusal.

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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-3			
TRUMBULL, CONNECTICUT	PAGE 1 OF PAGES			
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE:			
542 Route 303 Orangetown, New York	SLOT NO.: SETTING:			
DATE COMPLETED: 10/31/01	SAND PACK SIZE & TYPE:			
DRILLING COMPANY: Zebra Environmental	SETTING:			
	CASING SIZE & TYPE:			
DRILLING METHOD: Geoprobe	SETTING:			
SAMPLING METHOD: Split Spoon	SEAL TYPE:			
OBSERVER: Andrew Linton	SETTING:			
REFERENCE POINT (RP): Grade	BACKFILL TYPE:			
ELEVATION OF RP:	STATIC WATER LEVEL: 18.0 feet			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION:	DURATION: YIELD:			
REMARKS: Two attempts were made to probe to 40 feet.				
ABBREVIATIONS: SS = split spoon W = wash C = cuttings REC = Recovery PPM = parts per million MC = Macrocore	G = grab ST = shelby tube			

DEPTH (FEET)		SAMPLE TYPE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
9	11	мс		1.40	0	SILT; some fine. sand; little small gravel; trace clay; trace medium sand; trace medium gravel. Compact; brown; damp.
19	21	MC		1.10	0	CLAY; some silt; some small gravel. Compact; wet; brown.
29	31	мс		1.00	0	CLAY; little silt; little small gravel. Compact; wet; brown.
38	40	мс		1.10	0	CLAY; little silt; little-some small gravel. Very compact; wet; brown.
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GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-6 PAGE 1 OF 1 PAGES			
TRUMBULL, CONNECTICUT				
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO.: SETTING:			
DATE COMPLETED: 11/7/01	SAND PACK SIZE & TYPE:			
DRILLING COMPANY: Zebra Environmental	SETTING:			
	CASING SIZE & TYPE:			
DRILLING METHOD: Geoprobe	SETTING:			
SAMPLING METHOD: Split Spoon	SEAL TYPE:			
OBSERVER: Andrew Linton	SETTING:			
REFERENCE POINT (RP): Grade	BACKFILL TYPE:			
ELEVATION OF RP:	STATIC WATER LEVEL:			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION:	DURATION: YIELD:			
REMARKS: Three attempts were made to probe to a depth of 40	feet. Refusal occurred at 17 feet.			
ABBREVIATIONS: SS = split spoon W = wash C = cuttings REC = Recovery PPM = parts per million MC = Macrocore	G = grab ST = shelby tube			

DEPTH (FEET)		SAMPLE TYPE	BLOW		PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
9	11	мс		1.70	0	SAND; fine; little silt; little small gravel; trace clay; trace medium gravel. Reddish-brown; dry; compact.
	17		and the family of the second			Refusal.

OWNER: Sony Electronics, Inc. WELL NO: B-7			
SCREEN SIZE & TYPE: SLOT NO.: SETTING:			
SAND PACK SIZE & TYPE:			
SETTING: CASING SIZE & TYPE:			
			SETTING:
SEAL TYPE:			
SETTING:			
BACKFILL TYPE:			
STATIC WATER LEVEL:			
DEVELOPMENT METHOD:			
DURATION: YIELD:			

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube

REC = Recovery PPM = parts per million MC = Macrocore

DESCRIPTION
SAND; fine. Some silt; little clay; little small gravel. Damp; compact; brown.
Refusal. (A water sample was obtained from 20 feet, however a sois sample was not obtained due to the nature of the material)

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WELL NO: B-8			
WELL NO: B-8 PAGE 1 OF 1 PAGES			
SAND PACK SIZE & TYPE: SETTING:			
			CASING SIZE & TYPE:
SETTING:			
SEAL TYPE:			
SETTING:			
BACKFILL TYPE:			
STATIC WATER LEVEL:			
DEVELOPMENT METHOD:			
DURATION: YIELD:			

ABBREVIATIONS: SS = split spoon W = wash C = cuttings G = grab ST = shelby tube

REC = Recovery PPM = parts per million MC = Macrocore

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DESCRIPTION	PID READING	REC.	BLOW	SAMPLE TYPE	DEPTH (FEET)	
	(PPM)	COUNT (FEET)	COUNT		то	FROM
SILT; some clay; trace small gravel. Dry; brown; slightly compact	0	1.20		MC	11	9
SILT; some clay; little small gravel. Wet; brown/red; very compac	0			мс	21	19

OWNER: Sony Electronics, Inc.			
WELL NO: B-9			
PAGE 1 OF 1 PAGES			
SCREEN SIZE & TYPE: SLOT NO.: SETTING:			
SAND PACK SIZE & TYPE:			
SETTING:			
CASING SIZE & TYPE:			
SETTING:			
SEAL TYPE: SETTING:			
			BACKFILL TYPE:
STATIC WATER LEVEL:			
DEVELOPMENT METHOD:			
DURATION: YIELD:			
G = grab ST = shelby tube			
	WELL NO:B-9PAGE 1OF 1 PAGESSCREEN SIZE & TYPE:SLOT NO.:SETTING:SAND PACK SIZE & TYPE:SETTING:CASING SIZE & TYPE:SETTING:SEAL TYPE:SETTING:BACKFILL TYPE:STATIC WATER LEVEL:DEVELOPMENT METHOD:DURATION:YIELD:feet. Refusal occurred at 19 feet.		

DEPTH (FEET)		SAMPLE TYPE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
9	11	мс		2.0	0	SILT; little clay; little small gravel. Reddish-brown; compact; dry.
	18					Refusal.

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-13 PAGE 1 OF 1 PAGES			
TRUMBULL, CONNECTICUT				
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO.: SETTING:			
DATE COMPLETED: 11/9/01	SAND PACK SIZE & TYPE:			
DRILLING COMPANY: Zebra Environmental	SETTING: CASING SIZE & TYPE:			
DRILLING METHOD: Geoprobe	SETTING:			
SAMPLING METHOD: Split Spoon	SEAL TYPE:			
OBSERVER: Andrew Linton	SETTING:			
REFERENCE POINT (RP): Grade	BACKFILL TYPE:			
ELEVATION OF RP:	STATIC WATER LEVEL:			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION:	DURATION: YIELD:			
REMARKS: Three attempts were made to probe to a depth of 4	0 feet. Refusal occurred at 23 feet.	_		
ABBREVIATIONS: SS = split spoon W = wash C = cutting REC = Recovery PPM = parts per million MC = Macrocore	s G = grab ST = shelby tube			

DEPTH (FEET)		SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	то		COUNT	(FEET)	(PPM)	
9	11	мс		1.60	0	SILT; little-some clay; little-trace small gravel. Reddish-brown; compact; dry.
19	21	мс		1.55	0	SILT; some-little clay; trace small gravel. Reddish-brown; compac- wet.
	23					Refusal.
					-	

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-14			
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES			
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO.: SETTING:			
DATE COMPLETED: 11/6/01	SAND PACK SIZE & TYPE:			
DRILLING COMPANY: Zebra Environmental	SETTING:			
	CASING SIZE & TYPE:			
DRILLING METHOD: Geoprobe	SETTING:			
SAMPLING METHOD: Split Spoon	SEAL TYPE:			
OBSERVER: Andrew Linton	SETTING:			
REFERENCE POINT (RP): Grade	BACKFILL TYPE:			
ELEVATION OF RP:	STATIC WATER LEVEL:			
STICK-UP:	DEVELOPMENT METHOD:DURATION:YIELD:			
SURFACE COMPLETION:				
REMARKS: Four attempts were made to probe to 40 feet. Refus	sal was encountered at 24 feet.			
ABBREVIATIONS: SS = split spoon W = wash C = cuttings REC = Recovery PPM = parts per million MC = Macrocore				

DEPTH (FEET)		TEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION
FROM	м	то		COUNT	(FEET)	(PPM)	
9		11	мс			0	SILT; little fine sand; little clay; trace small gravel. Reddish brown; slightly compact; damp.
19		21	мс			0	SILT; some clay; some-little small gravel. Reddish/brown; compact wet.
		24					Refusal. (No water was encountered in this location)

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.			
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-15 PAGE 1 OF 1 PAGES			
TRUMBULL, CONNECTICUT				
SITE LOCATION: Materials Research Corporation	SCREEN SIZE & TYPE:			
542 Route 303 Orangetown, New York	SLOT NO.: SETTING:			
DATE COMPLETED: 11/5/01	SAND PACK SIZE & TYPE: SETTING: CASING SIZE & TYPE:			
DRILLING COMPANY: Zebra Environmental				
DRILLING METHOD: Geoprobe	SETTING:			
SAMPLING METHOD: Split Spoon	SEAL TYPE:			
OBSERVER: Andrew Linton	SETTING:			
REFERENCE POINT (RP): Grade	BACKFILL TYPE:			
ELEVATION OF RP:	STATIC WATER LEVEL:			
STICK-UP:	DEVELOPMENT METHOD:			
SURFACE COMPLETION:	DURATION: YIELD:			
REMARKS: Three attempts were made to probe to 40 feet. Refu	sal occurred at 28 feet.			
ABBREVIATIONS: SS = split spoon W = wash C = cuttings REC = Recovery PPM = parts per million MC = Macrocore	s G = grab ST = shelby tube			

DEPTH ((FEET)	SAMPLE	BLOW	REC.	PID READING	DESCRIPTION	
FROM	то		COUNT	(FEET)	(PPM)		
9	11	MC		1.00	0	SAND; fine; some silt; little-trace clay; little small gravel. Brown; damp.	
19	21	мс	<u></u>	1.10	0	SILT; little clay; little small gravel. Reddish-brown; compact; damp	
26	28	MC			0	SAND; fine; some silt; trace small gravel. Wet; brown; compact.	
	28					Refusal.	

GEOLOGIC LOG	OWNER: Sony Electronics, Inc.				
LEGGETTE, BRASHEARS & GRAHAM, INC.	WELL NO: B-16				
TRUMBULL, CONNECTICUT	PAGE 1 OF 1 PAGES				
SITE LOCATION: Materials Research Corporation 542 Route 303 Orangetown, New York	SCREEN SIZE & TYPE: SLOT NO.: SETTING:				
DATE COMPLETED: 11/6/01	SAND PACK SIZE & TYPE:	-			
DRILLING COMPANY: Zebra Environmental	SETTING:				
	CASING SIZE & TYPE:				
DRILLING METHOD: Geoprobe	SETTING:				
SAMPLING METHOD: Split Spoon	SEAL TYPE:				
OBSERVER: Andrew Linton	SETTING:				
REFERENCE POINT (RP): Grade	BACKFILL TYPE:				
ELEVATION OF RP:	STATIC WATER LEVEL:				
STICK-UP:	DEVELOPMENT METHOD:				
SURFACE COMPLETION:	DURATION: YIELD:				
REMARKS: Refusal was encountered at 22 feet on a very hard s	surface.				

DESCRIPTION
Damp; reddish-brown.
SILT; some-little clay; little-trace fine sand; trace small gravel. Damp; reddish-brown.
SILT; some clay; little small gravel; trace medium gravel. Compact wet; reddish-brown.
Refusal.

APPENDIX II LABORATORY REPORTS AND CHAIN OF CUSTODY FORMS FOR SOIL AND GEOPROBE WATER SAMPLES



Technical Report

prepared for

Leggette Brashears & Graham **126 Monroe Turnpike** Trumbull, CT 06611 **Attention: Mike Manolakas**

> Report Date: 11/9/2001 **Re:** Client Project ID: Sony York Project No.: 01110022

CT License No. PH-0723 New York License No. 10854

Mass. License No. M-CT106

Rhode Island License No. 93 EPA I.D. No. CT00106

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ONE RESEARCH DRIVE

STAMFORD, CT 06906

(203) 325-1371

FAX (203) 357-0166

Page 1 of 10

Report Date: 11/9/2001 Client Project ID: Sony York Project No.: 01110022

Leggette Brashears & Graham

126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 10/31/01. The project was identified as your project "Sony".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			B-1-10-S		B-1-20-S	
York Sample ID			01110022-01		01110022-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0

Analysis Results



Client Sample ID			B-1-10-S		B-1-20-S	
York Sample ID			01110022-01		01110022-02	
Matrix	den and the second s		SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	. 5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			4 J	5.0	3 J	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			B-1-30-S		B-2-10-S	
York Sample ID			01110022-03		01110022-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50

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Client Sample ID			B-1-30-S		B-2-10-S	
York Sample ID			01110022-03		01110022-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			3 J	5.0	4 J	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

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Client Sample ID			B-2-20-S		B-3-10-S	
York Sample ID			01110022-05		01110022-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane		_	Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0

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Client Sample ID			B-2-20-S		B-3-10-S	
York Sample ID			01110022-05		01110022-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			· Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			3 J	5.0	3 J	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			B-3-20-S		B-3-30-S	
York Sample ID			01110022-07		01110022-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	5.0
1,1,1-Trichloroethane			Not detected	1	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	5.0
1,1,2-Trichloroethane			Not detected	1	Not detected	5.0
1,1-Dichloroethane			Not detected	1	Not detected	5.0
1,1-Dichloroethylene			Not detected	1	Not detected	5.0
1,2-Dichlorobenzene			Not detected	1	Not detected	5.0
1,2-Dichloroethane			Not detected	1	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	5.0
1,2-Dichloropropane			Not detected	1	Not detected	5.0
1,3-Dichlorobenzene			Not detected	1	Not detected	5.0
1,4-Dichlorobenzene			Not detected	1	Not detected	5.0
1-Chlorohexane			Not detected	1	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	1	Not detected	5.0
2-Chlorotoluene			Not detected	1	Not detected	5.0
4-Chlorotoluene			Not detected	1	Not detected	5.0
Benzyl chloride			Not detected	10	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	50
Bromobenzene			Not detected	1	Not detected	5.0
Bromodichloromethane			Not detected	1	Not detected	5.0
Bromoform			Not detected	1	Not detected	5.0

Client Sample ID			B-3-20-S		B-3-30-S	
York Sample ID			01110022-07		01110022-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bromomethane			Not detected	10	Not detected	50
Carbon tetrachloride			Not detected	1	Not detected	5.0
Chloroacetaldehyde	Factor (MCS		Not detected	10	Not detected	50
Chlorobenzene			Not detected	1	Not detected	5.0
Chloroethane			Not detected	10	Not detected	50
Chloroform			Not detected	1	Not detected	5.0
Chloromethane			Not detected	10	Not detected	50
Chloromethyl methyl ether			Not detected	1	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	1	Not detected	5.0
Dibromochloromethane			Not detected	1	Not detected	5.0
Dibromomethane			Not detected	1	Not detected	5.0
Dichlorodifluoromethane			Not detected	1	Not detected	5.0
Methylene chloride			Not detected	1	Not detected	5.0
Tetrachloroethylene			3 J	1	3 J	5.0
trans-1,3-Dichloropropylene			Not detected	1	Not detected	5.0
Trichloroethylene			Not detected	1	Not detected	5.0
Trichlorofluoromethane			Not detected	1	Not detected	5.0
Trichloropropane			Not detected	1	Not detected	5.0
Vinyl chloride			Not detected	10	Not detected	50

Client Sample ID			B-3-40-S		B-8-10- S	
York Sample ID			01110022-09		01110022-10	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	1
1,1,1-Trichloroethane			Not detected	5.0	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	1
1,1,2-Trichloroethane			Not detected	5.0	Not detected	1
1,1-Dichloroethane			Not detected	5.0	Not detected	1
1,1-Dichloroethylene			Not detected	5.0	Not detected	1
1,2-Dichlorobenzene			Not detected	5.0	Not detected	1
1,2-Dichloroethane			Not detected	5.0	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	1
1,2-Dichloropropane			Not detected	5.0	Not detected	1
1,3-Dichlorobenzene			Not detected	5.0	Not detected	1
1,4-Dichlorobenzene		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	Not detected	5.0	Not detected	1
1-Chlorohexane	- 1967 (1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 1977 - 197		Not detected	5.0	Not detected	1
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	1
2-Chlorotoluene			Not detected	5.0	Not detected	1
4-Chlorotoluene			Not detected	5.0	Not detected	1
Benzyl chloride			Not detected	50	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	10
Bromobenzene			Not detected	5.0	Not detected	1
Bromodichloromethane			Not detected	5.0	Not detected	1
Bromoform			Not detected	5.0	Not detected	1
Bromomethane			Not detected	50	Not detected	10
Carbon tetrachloride			Not detected	5.0	Not detected	1

Client Sample ID			B-3-40-S		B-8-10-S	
York Sample ID			01110022-09		01110022-10	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Chloroacetaldehyde			Not detected	50	Not detected	10
Chlorobenzene			Not detected	5.0	Not detected	1
Chloroethane			Not detected	50	Not detected	10
Chloroform			Not detected	5.0	Not detected	1
Chloromethane			Not detected	50	Not detected	10
Chloromethyl methyl ether			Not detected	5.0	Not detected	1
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	1
Dibromochloromethane			Not detected	5.0	Not detected	1
Dibromomethane			Not detected	5.0	Not detected	1
Dichlorodifluoromethane			Not detected	5.0	Not detected	1
Methylene chloride			Not detected	5.0	Not detected	1
Tetrachloroethylene			3 J	5.0	3 J	1
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	1
Trichloroethylene			3 J	5.0	22	1
Trichlorofluoromethane			Not detected	5.0	Not detected	1
Trichloropropane			Not detected	5.0	Not detected	1
Vinyl chloride			Not detected	50	Not detected	10

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Client Sample ID			B-1-20		B-1-30	
York Sample ID			01110022-11		01110022-12	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1

Client Sample ID			B-1-20		B-1-30	
York Sample ID			01110022-11		01110022-12	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDI
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Client Sample ID			B-2-20		B-3-20	
York Sample ID			01110022-13		01110022-14	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane		1200-203	Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane		-	Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10

Client Sample ID			B-2-20		B-3-20	
York Sample ID			01110022-13		01110022-14	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether	100000		Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

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Client Sample ID			B-3-30		B-3-40	
York Sample ID			01110022-15		01110022-16	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	2.0	Not detected	2.0
1,1,1-Trichloroethane			Not detected	2.0	Not detected	2.0
1,1,2,2-Tetrachloroethane			Not detected	2.0	Not detected	2.0
1,1,2-Trichloroethane			Not detected	2.0	Not detected	2.0
1,1-Dichloroethane	*		Not detected	2.0	Not detected	2.0
1,1-Dichloroethylene			Not detected	2.0	Not detected	2.0
1,2-Dichlorobenzene	and meansaided a		Not detected	2.0	Not detected	2.0
1,2-Dichloroethane			Not detected	2.0	Not detected	2.0
1,2-Dichloroethylene (Total)			Not detected	2.0	Not detected	2.0
1,2-Dichloropropane			Not detected	2.0	Not detected	2.0
1,3-Dichlorobenzene			Not detected	2.0	Not detected	2.0
1,4-Dichlorobenzene			Not detected	2.0	Not detected	2.0
1-Chlorohexane			Not detected	2.0	Not detected	2.0
2-Chloroethylvinyl ether			Not detected	2.0	Not detected	2.0
2-Chlorotoluene			Not detected	2.0	Not detected	2.0
4-Chlorotoluene			Not detected	2.0	Not detected	2.0
Benzyl chloride			Not detected	20	Not detected	20
Bis(2-chloroethoxy)methane			Not detected	20	Not detected	20
Bis(2-chloroisopropyl)ether			Not detected	20	Not detected	20

Client Sample ID			B-3-30		B-3-40	
York Sample ID			01110022-15		01110022-16	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Bromobenzene			Not detected	2.0	Not detected	2.0
Bromodichloromethane			Not detected	2.0	Not detected	2.0
Bromoform			Not detected	2.0	Not detected	2.0
Bromomethane			Not detected	20	Not detected	20
Carbon tetrachloride			Not detected	2.0	Not detected	2.0
Chloroacetaldehyde			Not detected	20	Not detected	20
Chlorobenzene			Not detected	2.0	Not detected	2.0
Chloroethane			Not detected	20	Not detected	20
Chloroform			Not detected	2.0	Not detected	2.0
Chloromethane			Not detected	20	Not detected	20
Chloromethyl methyl ether			Not detected	2.0	Not detected	2.0
cis-1,3-Dichloropropylene			Not detected	2.0	Not detected	2.0
Dibromochloromethane			Not detected	2.0	Not detected	2.0
Dibromomethane			Not detected	2.0	Not detected	2.0
Dichlorodifluoromethane			Not detected	2.0	Not detected	2.0
Methylene chloride			Not detected	2.0	Not detected	2.0
Tetrachloroethylene			Not detected	2.0	Not detected	2.0
trans-1,3-Dichloropropylene			Not detected	2.0	Not detected	2.0
Trichloroethylene			Not detected	2.0	2	2.0
Trichlorofluoromethane			Not detected	2.0	Not detected	2.0
Trichloropropane			Not detected	2.0	Not detected	2.0
Vinyl chloride			Not detected	20	Not detected	20

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 01110022

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.

3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.

5. All samples were received in proper condition for analysis with proper documentation.

6. All analyses conducted met method or Laboratory SOP requirements.

7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:

Robert Q. Bradley Managing Director Date: 11/9/2001

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CHAIN OF CUSTODY DOCUMENTATION

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ANALYTICAL LABORATORIES, INC.

Field Chain-of-Custody Record

ONE RESEARCH DRIVE STAMFORD, CT 06906 (203) 325-1371 FAX (203) 357-0166

Company LBG Trumbul		Report Mike Manela	<u>to:</u> kas	Invoi Maria Sou	la		oject ID/N getown,		Andrew C	ed By (Signature)
Sample No.	Loca	tion/ID	Date	Sampled		ple Matrix oil Air OTHE	R ANA	ALYSES RE	EQUESTED	Container Description(s)
B-1-10-5		·····	10/2	19/01	l		Halous	enated Only	EPA Mothed 8013	1
B-1-20-5			10/2	9/01	L	/				1
3-1-30-5			10/2	9/01	L			þ		1
B-2-10-5			1013	30 01	١					1
B-2-20-5			103	30 01	L					
B-3-10-5			10	30/01	(1
B3-20-5			10/2	30/01	L					
R-3-30-5			10 0	31/01	V	/				1
B-3-40-5			10/31	101	i i					1
B-8-10-5	0		103	101	ι	/		4		1
	<u>Ş</u>									
Chain-of-Custoc Bottles Relinquish	N	/ Date/Tim	•		uished by	/0. Date	31/01 1700 Mime) Sample	Received by	Date/Time
Bottles Received		Date/Time	8	Sample Reling	uished by	Date	/Time			1 <u>0-71-01/17-0</u> Date/Time
Comments/Speci	tegory	$() \cap ($	ivera	ble	Pack	lege			-Around Time StandardRUSH	l(define)

	CT 0690	5		E	ield	Chain-	of-Custo	dy Record	Page of
Company N LBS Trumbull, CA		<u>Repo</u> tuike Manola	1		ice To: Smy	Proj Soni Orangete	6.3	Andrew Lin Name (Yon Printed)
Sample No.	Loca	tion/ID	Date S	ampled		nple Matrix Soil Air OTHER	ANALYSES	REQUESTED	Container Description(s)
B-1-20			10/29	101	1		1	my EPA Method 3021B	2
B-1-30			14	101	V		1	1	2
B-2-20			10/20	1	V				Q
B-3-20		· · · · · · · · · · · · · · · · · · ·	10/30		V				2
3-3-30			16/3/1	1	~				2
B-3-40			16 31	1 :	V		- A		2
0000									
13									· · · · · · · · · · · · · · · · · · ·
Chain-of-Custody	Record				<u>1</u> 1				
Bottles Relinquished		Date/T	ïme		duispied by	N 65.01 Date/T		ample Received by	Date/Time
Bottles Received in	Field by	Date/1		Sample Relin	quished by	Date/T	ime Sa	mple Received in LAB by	Date/Time



Technical Report

prepared for

Leggette Brashears & Graham **126 Monroe Turnpike** Trumbull, CT 06611 **Attention: Mike Manolakas**

Report Date: 11/9/2001 **Re: Client Project ID: Sony Orangetown** York Project No.: 01110091

CT License No. PH-0723 New York License No. 10854

Mass. License No. M-CT106

Rhode Island License No. 93 EPA I.D. No. CT00106



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ONE RESEARCH DRIVE

STAMFORD, CT 06906

(203) 325-1371

FAX (203) 357-0166

Page 1 of 5

Report Date: 11/9/2001 Client Project ID: Sony Orangetown York Project No.: 01110091

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 11/02/01. The project was identified as your project "Sony Orangetown ".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			B-7-10-S		B-15-20-S	
York Sample ID			01110091-01		01110091-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0

Analysis Results



Client Sample ID			B-7-10-S		B-15-20-S	
York Sample ID			01110091-01		01110091-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDI
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene	· · · · · · · · · · · · · · · · · · ·		Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			3 J	5.0	3 J	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			5	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			B-8-20-S		B-15-10-S	
York Sample ID			01110091-03		01110091-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50

Client Sample ID			B-8-20-S		B-15-10-S	
York Sample ID			01110091-03		01110091-04	MDL
Matrix	102 (C) 103		SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene		100	Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			17	5.0	3 J	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

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Client Sample ID			B-7-20		B-8-20	
York Sample ID			01110091-05		01110091-06	
Matrix			WATER		WATER	_
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			9	1	9	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			7	1	14	1
1,1-Dichloroethylene			12	1	9	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			6(cis-)	1	1(t-)160(cis-)	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1

Client Sample ID			B-7-20		B-8-20	
York Sample ID			01110091-05		01110091-06	MDL
Matrix			WATER		WATER	
- Parameter	Method	Units	Results	MDL	Results	
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			58	1	180	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	12	10

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm; ug/kg = ppb

Notes for York Project No. 01110091

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or nontarget analytes and matrix interference.

2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.

York's liability for the above data is limited to the dollar value paid to York for the referenced project. 3.

- This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc. 4.
- All samples were received in proper condition for analysis with proper documentation. 5.
- All analyses conducted met method or Laboratory SOP requirements. 6.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:

Robert Q. Bradley

Managing Director

Date: 11/9/2001

CHAIN OF CUSTODY DOCUMENTATION

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ANALYTICAL LA	ARCH DRIVE			E	Field					y Record	Page of
Company N LBG Trimbull,		Repor Mike Manolo	1	Som	retow	n	Pro Sony	oran NY	10. getown	Andrew	(Printed)
Sample No.	Locat	ion/ID	Date	Sampled	S Water	Soil A	atrix Air DTHER			EQUESTED	Container Description(s)
B-7-10-5	orange	town/NSY	11/2	101 930		\checkmark		Halogen	ated only f	PA nuclicad 8001 B	1
B-15-20-5			1 . 4	101 1470		~		0	1		1
8-8-20-5			1 4	01 830		V					1
13-15-10-5	1		ulalo	01 1130		1					1
B-7-20		•	11/2/	01815							2
8-8-20	1		11/10	1000	V	1			V		2
00											
000									<u> </u>		
<u>~`</u>										and the second secon	References in the second second
Chain-of-Custod		Date/Tir	me Q	Menter A	Later Juished by	>	11/2/01 gate/	1615 Fime		le Received by	1 <u>1</u> 2 <u>16</u> 1 Date/Time
Bottles Received		Date/Tir		Sample Reling			Date/		4.6	PP ,	11-2-01 /16/5 Date/Time



Technical Report

prepared for

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 **Attention: Mike Manolakas**

> Report Date: 11/16/2001 **Re: Client Project ID: Sony** York Project No.: 01110286

CT License No. PH-0723 New York License No. 10854

Mass. License No. M-CT106

Rhode Island License No. 93 EPA I.D. No. CT00106



000001

DNE RESEARCH DRIVE

STAMFORD, CT 06906 Page 1 of 6

(203) 325-1371

FAX (203) 357-0166

Report Date: 11/16/2001 Client Project ID: Sony York Project No.: 01110286

Leggette Brashears & Graham

126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 11/09/01. The project was identified as your project "Sony".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			B-9-10-S-2		B-9-10-S-1	
York Sample ID			01110286-01		01110286-02	_
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0

Analysis Results

000002 YORK

Client Sample ID			B-9-10-S-2		B-9-10-S-1	
York Sample ID			01110286-01		01110286-02	
Matrix		_	SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane	Contraction Process		Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			32 B	5.0	36 B	5.0
Tetrachloroethylene			8 B	5.0	6 B	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			B-9-10-S-3		B-13-10-S	
York Sample ID			01110286-03		01110286-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene		1	Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50

Client Sample ID	E.		B-9-10-S-3		B-13-10-S	
York Sample ID			01110286-03		01110286-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane	anatari di taken		Not detected	5.0	Not detected	5.0
Methylene chloride			31 B	5.0	42 B	5.0
Tetrachloroethylene			7 B	5.0	6 B	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

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Client Sample ID			B-13-20-S	
York Sample ID			01110286-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg		
1,1,1,2-Tetrachloroethane			Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0
1,1-Dichloroethane			Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0
1,2-Dichloroethane			Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0
1,2-Dichloropropane			Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0
1-Chlorohexane			Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0
2-Chlorotoluene			Not detected	5.0
4-Chlorotoluene			Not detected	5.0
Benzyl chloride			Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50
Bromobenzene			Not detected	5.0

Client Sample ID	A STATE A STATE		B-13-20-S	
York Sample ID			01110286-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Bromodichloromethane			Not detected	5.0
Bromoform			Not detected	5.0
Bromomethane			Not detected	50
Carbon tetrachloride			Not detected	5.0
Chloroacetaldehyde			Not detected	50
Chlorobenzene			Not detected	5.0
Chloroethane			Not detected	50
Chloroform			Not detected	5.0
Chloromethane			Not detected	50
Chloromethyl methyl ether			Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0
Dibromochloromethane			Not detected	5.0
Dibromomethane			Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0
Methylene chloride			43 B	5.0
Tetrachloroethylene			6 B	5.0
trans-1,3-Dichloropropylene			Not detected	5.0
Trichloroethylene			Not detected	5.0
Trichlorofluoromethane			Not detected	5.0
Trichloropropane			Not detected	5.0
Vinyl chloride			Not detected	50

Client Sample ID			B-13-20	
York Sample ID			01110286-06	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L		
1,1,1,2-Tetrachloroethane			Not detected	1 -
1,1,1-Trichloroethane			Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1
1,1,2-Trichloroethane			Not detected	1
1,1-Dichloroethane			Not detected	1
1,1-Dichloroethylene			Not detected	1
1,2-Dichlorobenzene			Not detected	1
1,2-Dichloroethane			Not detected	1
1,2-Dichloroethylene (Total)			9(cis-)	1
1,2-Dichloropropane			Not detected	1
1,3-Dichlorobenzene			Not detected	1
1,4-Dichlorobenzene			Not detected	1
1-Chlorohexane			Not detected	1
2-Chloroethylvinyl ether			Not detected	1
2-Chlorotoluene			Not detected	1
4-Chlorotoluene			Not detected	1

Client Sample ID			B-13-20	
York Sample ID			01110286-06	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Benzyl chloride			Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10
Bromobenzene			Not detected	1
Bromodichloromethane			Not detected	1
Bromoform			Not detected	1
Bromomethane			Not detected	10
Carbon tetrachloride			Not detected	1
Chloroacetaldehyde			Not detected	10
Chlorobenzene			Not detected	1
Chloroethane			Not detected	10
Chloroform			Not detected	1
Chloromethane			Not detected	10
Chloromethyl methyl ether			Not detected	1
cis-1,3-Dichloropropylene			Not detected	1
Dibromochloromethane			Not detected	1
Dibromomethane			Not detected	1
Dichlorodifluoromethane			Not detected	1
Methylene chloride			Not detected	1
Tetrachloroethylene			Not detected	1
trans-1,3-Dichloropropylene			Not detected	1
Trichloroethylene			5	1
Trichlorofluoromethane			Not detected	1
Trichloropropane			Not detected	1
Vinyl chloride			Not detected	10

Units Key:

For Waters/Liquids: mg/L = ppm; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 01110286

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation.
- 6. All analyses conducted met method or Laboratory SOP requirements.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:

Robert Q. Bradley

Managing Director

Date: 11/16/2001

CHAIN OF CUSTODY DOCUMENTATION

YORK

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B-9-12-5-3	Ojaras		11/8/01 "			V				1
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Technical Report

prepared for

Leggette Brashears & Graham **126 Monroe Turnpike** Trumbull, CT 06611 **Attention: Mike Manolakas**

Report Date: 11/15/2001 **Re: Client Project ID: Sony-Orangetown** York Project No.: 01110207

CT License No. PH-0723 New York License No. 10854

Mass. License No. M-CT106 Rhode Island License No. 93

EPA I.D. No. CT00106



000001

ONE RESEARCH DRIVE

(203) 325-1371 STAMFORD, CT 06906 Page 1 of 7

FAX (203) 357-0166

Report Date: 11/15/2001 Client Project ID: Sony-Orangetown York Project No.: 01110207

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 11/07/01. The project was identified as your project "Sony-Orangetown".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			B-14-10-S		B-14-20-S	
York Sample ID			01110207-01		01110207-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	1
1,1,1-Trichloroethane			Not detected	5.0	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	1
1,1,2-Trichloroethane			Not detected	5.0	Not detected	1
1,1-Dichloroethane			Not detected	5.0	Not detected	1
1,1-Dichloroethylene			Not detected	5.0	Not detected	1
1,2-Dichlorobenzene			Not detected	5.0	Not detected	1
1,2-Dichloroethane			Not detected	5.0	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	1
1,2-Dichloropropane			Not detected	5.0	Not detected	1
1,3-Dichlorobenzene			Not detected	5.0	Not detected	1
1,4-Dichlorobenzene		1	Not detected	5.0	Not detected	1
1-Chlorohexane			Not detected	5.0	Not detected	1
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	1
2-Chlorotoluene			Not detected	5.0	Not detected	1
4-Chlorotoluene			Not detected	5.0	Not detected	1

Analysis Results



Client Sample ID			B-14-10-S		B-14-20-S	
York Sample ID			01110207-01		01110207-02	
Matrix	MALINE THE .		SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDI
Benzyl chloride			Not detected	50	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	10
Bromobenzene	Call Mills		Not detected	5.0	Not detected	1
Bromodichloromethane			Not detected	5.0	Not detected	1
Bromoform			Not detected	5.0	Not detected	1
Bromomethane			Not detected	50	Not detected	10
Carbon tetrachloride			Not detected	5.0	Not detected	1
Chloroacetaldehyde			Not detected	50	Not detected	10
Chlorobenzene			Not detected	5.0	Not detected	1
Chloroethane			Not detected	50	Not detected	10
Chloroform			Not detected	5.0	Not detected	1
Chloromethane			Not detected	50	Not detected	10
Chloromethyl methyl ether			Not detected	5.0	Not detected	1
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	1
Dibromochloromethane			Not detected	5.0	Not detected	1
Dibromomethane			Not detected	5.0	Not detected	1
Dichlorodifluoromethane			Not detected	5.0	Not detected	1
Methylene chloride			24 B	5.0	19 B	1
Tetrachloroethylene			5	5.0	5	1
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	1
Trichloroethylene			Not detected	5.0	Not detected	1
Trichlorofluoromethane			Not detected	5.0	Not detected	1
Trichloropropane			Not detected	5.0	Not detected	1
Vinyl chloride			Not detected	50	Not detected	10

Client Sample ID			B-16-20-S		B-15-28-S	
York Sample ID			01110207-03		01110207-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene	1998		Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether		-	Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10

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Client Sample ID			B-16-20-S		B-15-28-S	
York Sample ID			01110207-03		01110207-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene	********		Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane	·····		Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride	······································		20 B	1	19 B	1
Tetrachloroethylene			6	1	6	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Client Sample ID			B-16-10-S		B-6-10-S	
York Sample ID			01110207-05		01110207-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1

Client Sample ID			B-16-10-S		B-6-10-S	
York Sample ID			01110207-05		01110207-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			20 B	1	20 B	1
Tetrachloroethylene			6	1	6	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Client Sample ID			B-6-10-D	
York Sample ID			01110207-07	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/Kg		
1,1,1,2-Tetrachloroethane			Not detected	1
1,1,1-Trichloroethane			Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1
1,1,2-Trichloroethane			Not detected	1
1,1-Dichloroethane			Not detected	1
1,1-Dichloroethylene			Not detected	1
1,2-Dichlorobenzene			Not detected	1
1,2-Dichloroethane			Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1
1,2-Dichloropropane			Not detected	1
1,3-Dichlorobenzene		1.12	Not detected	1
1,4-Dichlorobenzene			Not detected	1
1-Chlorohexane			Not detected	1
2-Chloroethylvinyl ether			Not detected	1
2-Chlorotoluene			Not detected	1
4-Chlorotoluene			Not detected	1
Benzyl chloride			Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10
Bromobenzene			Not detected	1
Bromodichloromethane			Not detected	1
Bromoform			Not detected	1

Client Sample ID	TORTAL A		B-6-10-D	
York Sample ID			01110207-07	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Bromomethane	V 3		Not detected	10
Carbon tetrachloride			Not detected	1
Chloroacetaldehyde			Not detected	10
Chlorobenzene			Not detected	1
Chloroethane			Not detected	10
Chloroform			Not detected	1
Chloromethane			Not detected	10
Chloromethyl methyl ether			Not detected	1
cis-1,3-Dichloropropylene			Not detected	1
Dibromochloromethane			Not detected	1
Dibromomethane			Not detected	1
Dichlorodifluoromethane			Not detected	1
Methylene chloride			19 B	1
Tetrachloroethylene			6	1
trans-1,3-Dichloropropylene			Not detected	1
Trichloroethylene			Not detected	1
Trichlorofluoromethane			Not detected	1
Trichloropropane			Not detected	1
Vinyl chloride			Not detected	10

Client Sample ID			B-15-28		RB-1	
York Sample ID			01110207-08		01110207-09	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			10)cis-)	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene	and the second second		Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1

Client Sample ID			B-15-28		RB-1	
York Sample ID			01110207-08		01110207-09	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane	5.4 St.		Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			10	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Units Key:

For Waters/Liquids: mg/L = ppm; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 01110207

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.

3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.

5. All samples were received in proper condition for analysis with proper documentation.

6. All analyses conducted met method or Laboratory SOP requirements.

7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:

Innert Robert Q. Bradley Managing Director

Date: 11/15/2001

000007

CHAIN OF CUSTODY DOCUMENTATION

YORK

	CARCH DRIVE	5		E	ielc	l Cha	in-	of-Custoc	ly Record	Page of
Company 1 LBS Trumbull,		Report Mike Manolal		5	<u>ce To:</u> M		Son	y getown My	Samples Collecte Andrew (Name (inton
Sample No.	Loca	tion/ID	Date	Sampled	Sa Water	ample Matrix Soil Air (OTHER	ANALYSES F	REQUESTED	Container Description(
B-14-10-S	Orange	etown, NY	11)8	01 1500		1		Hal Only : EPA	Method Soa,B	1
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B-15-28-S			1.5	01 1145		~				1
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B-15-28		al and a second s	14	01 (340	V			-		2
B-6-10-5	Oranget	DWN, NY		01 1345		V		Hal. Duly: EPA	method 6021B	1
B-6-10-D	0	,	1,1,	01 1345		~				1
RB-1	000	•	1.111	1500				4		2
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						Negarita (
Chain-of-Custo	dy Record			Anola.	1	in >	Inta	,		
Bottles Relinquish	ed from Lab by	Date/Tim	18	Sample Relin	Alma	<u> </u>	pate/Ti	me San	nple Received by	Date/Time 11-7-01/16
Bottles Received	in Field by	Date/Tim	ne –	Sample Reline	guished by		Date/Ti	me / Samp	le Received in LAB by	Date/Time



Technical Report

prepared for

Leggette Brashears & Graham **126 Monroe Turnpike** Trumbull, CT 06611 **Attention: Mike Manolakas**

Report Date: 4/15/2002 **Re: Client Project ID: Sony Orangetown** York Project No.: 02040126

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 EPA I.D. No. CT00106



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Page 1 of 7

Report Date: 4/15/2002 Client Project ID: Sony Orangetown York Project No.: 02040126

Leggette Brashears & Graham

126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/03/02. The project was identifed as your project "Sony Orangetown ".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			S-1		S-2	
York Sample ID			02040126-01		02040126-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene	1		Not detected	5.0	Not detected	5.0

Analysis Results



Client Sample ID			S-1		S-2	
York Sample ID			02040126-01		02040126-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride	• • • • • • • • • • •		Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane	******		Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			S-3		S-4	
York Sample ID			02040126-03		02040126-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50

Client Sample ID			S-3	•	S-4	
York Sample ID			02040126-03		02040126-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene	0.7.7.2		Not detected	5.0	Not detected	5.0
Bromodichloromethane	and the second		Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride	·····		Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane		1	Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			S-5		S-6	
York Sample ID		1	02040126-05		02040126-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane	-		Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene	······································		Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane	C. P. A. WINGS		Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0

Client Sample ID			S-5		S-6	
York Sample ID			02040126-05		02040126-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDI
Bromodichloromethane		-	Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			S-7		MW-7D-10-12	
York Sample ID			02040126-07		02040126-08	
Matrix			SOIL		SOIL	1.000
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg		-		
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	10(cis-)	5.0
1,2-Dichloropropane		1	Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0

Client Sample ID			S-7	1	MW-7D-10-12	
York Sample ID			02040126-07		02040126-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDI
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	36	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			MW-3D-5-7		MW-3D-5-7 Dup	
York Sample ID			02040126-09		02040126-10	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				***
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1.2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane	and a second		Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0

Client Sample ID			MW-3D-5-7	1.1	MW-3D-5-7 Dup	
York Sample ID			02040126-09		02040126-10	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane	*		Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			3 J	5.0	2 J	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 02040126

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.

3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.

4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.

5. All samples were received in proper condition for analysis with proper documentation.

6. All analyses conducted met method or Laboratory SOP requirements.

7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:

Robert Q. Brad

Managing Director

Date: 4/15/2002

ANALYTICAL L	DRK		. <u>Е</u>	Field C	hain-	of-Custo	dy Record	Page 1 of _
STAMFO	SEARCH DRIVE Rd, CT 06906 1 FAX (203) 357-0166						0204	1012ie.
Company LBC Trambull		ort To: o lakas	Invoi (Be	ice To:	Proj Sony Oran	ect ID/No. getown, NY	Andrew L	ted By (Signature)
Sample No.	Location/ID	Date S	ampled	Sample Water Soil	Matrix Air OTHER	ANALYSES	REQUESTED	Container Description(s)
1	5-1	4/2/	02	5		502 B (Hal	only)	1
2	5-2	11		5			17	1
3	5-3			5				1
4	3-4			5				l
S	5-5			5				1
6	5-6			2				1
7	5-7			5				1
8	MW-70-10-12	*		5		*		
9	MW-30-5-7	\$4	302	5)
10	Mw-30-5-70	r Fi	1302	5		-)
Chain-of-Custor	-	Time		terter dished by	e //4/02 Dete/Til	- <u>//640</u>		
Bottles Received	d in Field by Date/	lime	Sample Reling	uished by	Date/Tir	ne San	aple Received in CAB by	Date/Time



Technical Report

prepared for

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Report Date: 4/8/2002 *Re: Client Project ID: Sony Orangetown NY* York Project No.: 02040058

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No. 10854 Mass. License No. M-CT106

Rhode Island License No. 93 EPA I.D. No. CT00106



ONE RESEARCH DRIVE

STAMFORD, CT 06906

(203) 325-1371

FAX (203) 357-0166

Page 1 of 5

Report Date: 4/8/2002 Client Project ID: Sony Orangetown NY York Project No.: 02040058

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/01/02. The project was identifed as your project "Sony Orangetown NY".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			MW-10D-5-7		MW-10D-10-12	
York Sample ID			02040058-01		02040058-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene	-		Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0

Analysis Results



Client Sample ID			MW-10D-5-7		MW-10D-10-12	
York Sample ID			02040058-01		02040058-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MD
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			MW-14D-5-7		MW-14D-10-12	
York Sample ID			02040058-03		02040058-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0.
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50

Client Sample ID			MW-14D-5-7		MW-14D-10-12	
York Sample ID			02040058-03		02040058-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			MW-9D-10-12	
York Sample ID			02040058-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg		
1,1,1,2-Tetrachloroethane			Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0
1,1-Dichloroethane			Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0
1,2-Dichloroethane	and management of		Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0
1,2-Dichloropropane			Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0
1-Chlorohexane			Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0
2-Chlorotoluene			Not detected	5.0
4-Chlorotoluene			Not detected	5.0
Benzyl chloride			Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50
Bromobenzene			Not detected	5.0

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Client Sample ID			MW-9D-10-12	
York Sample ID			02040058-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Bromodichloromethane			Not detected	5.0
Bromoform			Not detected	5.0
Bromomethane			Not detected	50
Carbon tetrachloride			Not detected	5.0
Chloroacetaldehyde			Not detected	50
Chlorobenzene			Not detected	5.0
Chloroethane			Not detected	50
Chloroform			Not detected	5.0
Chloromethane			Not detected	50
Chloromethyl methyl ether			Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0
Dibromochloromethane			Not detected	5.0
Dibromomethane			Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0
Methylene chloride			Not detected	5.0
Tetrachloroethylene			Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0
Trichloroethylene			Not detected	5.0
Trichlorofluoromethane			Not detected	5.0
Trichloropropane			Not detected	5.0
Vinyl chloride			Not detected	50

Units Key:

For Waters/Liquids: mg/L = ppm; ug/L = ppb

For Soils/Solids: mg/kg = ppm; ug/kg = ppb

Notes for York Project No. 02040058

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.

- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation.
- 6. All analyses conducted met method or Laboratory SOP requirements.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:

Robert Q. Bradley

Managing Director

Date: 4/8/2002

ANALYTICAL L	DRK			ŀ	Field	Ch	ain-o	of-Custod	dy Record	
STAMFO (203) 325-137	RD, CT 0690 1 FAX (203)								02	040058
<u>Company</u> LBG		Report		Invoi	<u>ce To:</u> F			orangetown Y	- Aud Ulu Samples Colle	ted By (Signature)
Trumbull,	CT	Manda	las				N	4	Hndrew ((Printed)
Sample No.	Loca	ition/ID	Date Sar	npled		nple Mat Soil Air		ANALYSES F		Container Description(s)
1	MW-IOT)-5-7	3/28/0	2		1		8021B (Hal	Vik's only)	1
2	MW-10	0-10-12	3/28/1			V		had	1/	1
3	mw-r	10.5-7	329	02		1				1
4	MW-	40.8-14	3/29/	60		V			an a	1
5	nw.	-9D-10-12	4/1	62		V				1
								·····		
						145.000				
Chain-of-Custo	the second s							<u>er e an </u>		an a
Bottles Relinquist	ned from Lab by	Date/Time		ple Reling	1		Date/Time		ple Received by	I Date/Time
Bottles Received	d in Field by	Date/Time		Lu F		2.	Glilo 2 L		Received in LAB by	4 1 D2D Date/Time



Technical Report

prepared for

Leggette Brashears & Graham **126 Monroe Turnpike** Trumbull, CT 06611 Attention: Mike Manolakas

Report Date: 4/4/2002 Re: Client Project ID: Sony, Orangetown NY York Project No.: 02030696

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Mass. License No. M-CT106 Rhode Island License No. 93

EPA I.D. No. CT00106



ONE RESEARCH DRIVE

STAMFORD, CT 06906

(203) 325-1371

FAX (203) 357-0166

Report Date: 4/4/2002 Client Project ID: Sony, Orangetown NY York Project No.: 02030696

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 03/27/02. The project was identified as your project "Sony, Orangetown ".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			MW-4D-5-7		MW-12D-10-12	
York Sample ID			02030696-01		02030696-02	
Matrix			3 SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated,	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane		•	Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotohuene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0

Analysis Results



Client Sample ID			MW-4D-5-7		MW-12D-10-12	
York Sample ID			02030696-01		02030696-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDI
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			· Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			MW-4D-10-12		MW-13D-15-17	
York Sample ID			02030696-03		02030696-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			³ Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene		-	Not detected	5.0	Not detected	5.0
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50



Client Sample ID			MW-4D-10-12		MW-13D-15-17	
York Sample ID			02030696-03		02030696-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDI
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

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Client Sample ID			MW-11D-10-12	
York Sample ID			02030696-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg		
1,1,1,2-Tetrachloroethane			Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0
1,1,2,2-Tetrachloroethane	1		Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0
1,1-Dichloroethane			Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0
1,2-Dichloroethane			Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0
1,2-Dichloropropane			Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0
1-Chlorohexane			Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0
2-Chlorotoluene			Not detected	5.0
4-Chlorotoluene			Not detected	5.0
Benzyl chloride			Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50
Bromobenzene			Not detected	5.0



Client Sample ID			MW-11D-10-12	
York Sample ID			02030696-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Bromodichloromethane			Not detected	5.0
Bromoform			Not detected	5.0
Bromomethane			Not detected	50
Carbon tetrachloride			Not detected	5.0
Chloroacetaldehyde	1		Not detected	50
Chlorobenzene			Not detected	5.0
Chloroethane			Not detected	50
Chloroform			Not detected	5.0
Chloromethane			Not detected	50
Chloromethyl methyl ether			Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0
Dibromochloromethane			Not detected	5.0
Dibromomethane			Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0
Methylene chloride			Not detected	5.0
Tetrachloroethylene			Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0
Trichloroethylene			Not detected	5.0
Trichlorofluoromethane			Not detected	5.0
Trichloropropane			Not detected	5.0
Vinyl chloride			Not detected	50

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm; ug/kg = ppb

Notes for York Project No. 02030696

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation.
- 6. All analyses conducted met method or Laboratory SOP requirements.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: Robert Q. B dlev Managing Director

Date: 4/4/2002

	ABORATORI BEARCH DRIVI RD, CT 0690	6		E	Field	d C	hain-	of-Cus	tody	<u>/ Record</u>	Page 1 of
Company LBG Trunabull	Name	Report Nike Manola		Invoi LB	Ce To:		Proje Sorry,	ect ID/No. Dranezes NY	owy	Samples Collect And Vew	ted By (Signature) Linton (Printed)
Sample No.	Loca	tion/ID	Date S	ampled	Sa Water	ample N Soil	Air OTHER	ANALYS	ES RE	QUESTED	Container
1	MW-4	D-5-7	3/26/	102		5		80213 H	tal. e	alu	1
2	MW-la	210-10-12	3/26/	62		5			1		1
3	MWY	D-10-12	3/26			5					1
4		30-15-17	3/27/			5					
5	MW-I	1D-10-12	5/27	102		8			-		1
			1 1								·
Chain-of-Custod	lv Record										
Bottles Relinquish		Date/Time	a		Jished by	>	3/27/12 Date/Tim	<u>1435</u>	Sample F	Received by	Date/Tim
Bottles Received	in Field by	Date/Time		ample Relinqu	uished by		Date/Tim	e	Sample Re	ceived in LAB by	Date/Tim



Technical Report

prepared for

Leggette Brashears & Graham 126 Monroe' Turnpike Trumbull, CT 06611 **Attention: Mike Manolakas**

Report Date: 4/15/2002 **Re: Client Project ID: MRC** York Project No.: 02040176

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ONE RESEARCH DRIVE

STAMFORD, CT 06906

(203) 325-1371

FAX (203) 357-0166

Report Date: 4/15/2002 Client Project ID: MRC York Project No.: 02040176

Leggette Brashears & Graham

126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/04/02. The project was identified as your project "MRC ".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			MW-8D		MW-8D Duplicate	
York Sample ID			02040176-01		02040176-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethane			Not detected	5.0	Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0	Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,2-Dichloroethane			Not detected	5.0	Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0	Not detected	5.0
1,2-Dichloropropane			Not detected	5.0	Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0	Not detected	5.0
1-Chlorohexane			Not detected	5.0	Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	5.0
2-Chlorotoluene			Not detected	5.0	Not detected	5.0
4-Chlorotoluene			Not detected	5.0	Not detected	5.0

Analysis Results



Client Sample ID			MW-8D		MW-8D Duplicate	
York Sample ID			02040176-01		02040176-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDI
Benzyl chloride			Not detected	50	Not detected	50
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	50
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	50
Bromobenzene			Not detected	5.0	Not detected	5.0
Bromodichloromethane			Not detected	5.0	Not detected	5.0
Bromoform			Not detected	5.0	Not detected	5.0
Bromomethane			Not detected	50	Not detected	50
Carbon tetrachloride			Not detected	5.0	Not detected	5.0
Chloroacetaldehyde			Not detected	50	Not detected	50
Chlorobenzene			Not detected	5.0	Not detected	5.0
Chloroethane			Not detected	50	Not detected	50
Chloroform			Not detected	5.0	Not detected	5.0
Chloromethane			Not detected	50	Not detected	50
Chloromethyl methyl ether			Not detected	5.0	Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Dibromochloromethane			Not detected	5.0	Not detected	5.0
Dibromomethane			Not detected	5.0	Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0	Not detected	5.0
Methylene chloride			Not detected	5.0	Not detected	5.0
Tetrachloroethylene			Not detected	5.0	Not detected	5.0
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	5.0
Trichloroethylene			Not detected	5.0	Not detected	5.0
Trichlorofluoromethane			Not detected	5.0	Not detected	5.0
Trichloropropane			Not detected	5.0	Not detected	5.0
Vinyl chloride			Not detected	50	Not detected	50

Client Sample ID			MW-8D Triplicate	
York Sample ID			02040176-03	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 Halogenated	SW846-8021	ug/Kg		
1,1,1,2-Tetrachloroethane			Not detected	5.0
1,1,1-Trichloroethane			Not detected	5.0
1,1,2,2-Tetrachloroethane			Not detected	5.0
1,1,2-Trichloroethane			Not detected	5.0
1,1-Dichloroethane			Not detected	5.0
1,1-Dichloroethylene			Not detected	5.0
1,2-Dichlorobenzene			Not detected	5.0
1,2-Dichloroethane			Not detected	5.0
1,2-Dichloroethylene (Total)			Not detected	5.0
1,2-Dichloropropane			Not detected	5.0
1,3-Dichlorobenzene			Not detected	5.0
1,4-Dichlorobenzene			Not detected	5.0
1-Chlorohexane			Not detected	5.0
2-Chloroethylvinyl ether			Not detected	5.0
2-Chlorotoluene			Not detected	5.0
4-Chlorotoluene			Not detected	5.0
Benzyl chloride			Not detected	50
Bis(2-chloroethoxy)methane			Not detected	. 50



Client Sample ID			MW-8D Triplicate	
York Sample ID			02040176-03	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Bis(2-chloroisopropyl)ether			Not detected	50
Bromobenzene			Not detected	5.0
Bromodichloromethane			Not detected	5.0
Bromoform			Not detected	5.0
Bromomethane			Not detected	50
Carbon tetrachloride			Not detected	5.0
Chloroacetaldehyde			Not detected	50
Chlorobenzene			Not detected	5.0
Chloroethane			Not detected	50
Chloroform			Not detected	5.0
Chloromethane			Not detected	50
Chloromethyl methyl ether			Not detected	5.0
cis-1,3-Dichloropropylene			Not detected	5.0
Dibromochloromethane			Not detected	5.0
Dibromomethane			Not detected	5.0
Dichlorodifluoromethane			Not detected	5.0
Methylene chloride			Not detected	5.0
Tetrachloroethylene			Not detected	5.0
trans-1,3-Dichloropropylene	F		Not detected	5.0
Trichloroethylene			Not detected	5.0
Trichlorofluoromethane			Not detected	5.0
Trichloropropane			Not detected	5.0
Vinyl chloride			Not detected	50

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 02040176

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation.
- 6. All analyses conducted met method or Laboratory SOP requirements.

7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: Robert Q. Bradley Managing Director

Date: 4/15/2002

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Company CBG, Inc 126 Monroe Tremball, CT	Twensile	<u>Repor</u> Michael Mano lab			<u>ce To:</u> Inc.		MRC 542 Re	de 7	iect ID/No. te 303 wn, NY	Michael Mans	ed By (Signature)
Sample No.	Loca	tion/ID	Date Sa	ampled	S Water	ample Soil	Matrix Air OTHE	ER	ANALYSES	REQUESTED	Container Description(s)
Mw.80	0+02	fiba	4/4/0	S		¥			BOZIB	Halogo auto only	1 .
MW-80 Duplat	0+0 Z	ftba	4/4/0	2		×		***	8021 B Hale	genated only	1- An jam
MW-SD Triplic	ate Ot	zfiby	4/4/6	2		X			8021 B H	for an and the second s	1-402 jas
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			the state water					Charles			
Chain-of-Custoc	ly Record		0		1.1.	7	4-4-0	72	1445		
Bottles Relinquish	ed from Lab by	Date/Tim	ie Esi	ample Reling	uished by		Date				f 4/D2 4:4
Bottles Received	in Field by	Date/Tim	ie Sa	ample Relinqu	uished by		Date	e/Tir	me San	aple Received in LAB by	Date/Time

APPENDIX III LABORATORY REPORTS AND CHAIN OF CUSTODY FORMS FOR GROUND-WATER SAMPLES



York Analytical Laboratories, Inc.

Technical Report

prepared for

Leggette, Brashears & Graham Trumbull, CT Mr. Michael Manolakas

Re: SONY Orangetown

York Project No. 01110487

11/28/2001

Volume 1 of 1

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APPENDIX A - LABORATORY RAW DATA + NARRATIVE (including Project SDG Statement)	008 - 097
-VOLATILES DATA	009 - 097

-VOLATILES DATA

YORK



Technical Report

prepared for

Leggette Brashears & Graham **126 Monroe Turnpike** Trumbull, CT 06611 Attention: Mr. Mike Manolakas

Report Date: 11/28/2001 **Re: Client Project ID: SONY Orangetown** York Project No.: 01110487

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Mass. License No. M-CT106

Rhode Island License No. 93

EPA I.D. No. CT00106



000001

ONE RESEARCH DRIVE

STAMFORD, CT 06906 (203) 325-1371 Page 1 of 4

FAX (203) 357-0166

Report Date: 11/28/2001 Client Project ID: SONY Orangetown York Project No.: 01110487

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mr. Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 11/19/01. The project was identified as your project "SONY Orangetown ".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			MW6S		MW6D	
York Sample ID			01110487-01		01110487-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	37	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	2	1
1,1-Dichloroethylene			Not detected	1	32	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	3(cis-)	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1

Analysis Results



Client Sample ID			MW6S		MW6D	
York Sample ID			01110487-01		01110487-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	1	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	72	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Client Sample ID			MW5S		MW5D	
York Sample ID			01110487-03		01110487-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8240	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	1	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	1	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10

000003

YORK

Client Sample ID			MW5S		MW5D	
York Sample ID			01110487-03		01110487-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDI
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene	, granted of a set		Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane		-	Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 01110487

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.

- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation.
- 6. All analyses conducted met method or Laboratory SOP requirements.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:

Stalle Robert Q./Bradley Managing Director

Date: 11/28/2001

000004

YORK



Technical Report

prepared for

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Report Date: 4/29/2002 **Re: Client Project ID: MRC** York Project No.: 02040542

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Mass. License No. M-CT106

Rhode Island License No. 93 EPA I.D. No. CT00106



ONE RESEARCH DRIVE

STAMFORD, CT 06906 (203) 325-1371 FAX (203) 357-0166

Page 1 of 14

Report Date: 4/29/2002 Client Project ID: MRC York Project No.: 02040542

Leggette Brashears & Graham 126 Monroe Turnpike Trumbull, CT 06611 Attention: Mike Manolakas

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/22/02. The project was identified as your project "MRC ".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Client Sample ID			MW-2		MW-3D	
York Sample ID			02040542-01		02040542-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8260	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	48	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane	ALC: NO DECEMBER OF	NOT PLEASED	Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	22	1
1,1-Dichloroethylene			Not detected	1	75	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1

Analysis Results



Client Sample ID			MW-2		MW-3D	
York Sample ID			02040542-01		02040542-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDI
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	2	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	30	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Client Sample ID			MW-4D		MW-5S	
York Sample ID			02040542-03		02040542-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8260	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	5.0	Not detected	1
1,1,1-Trichloroethane			5	5.0	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	5.0	Not detected	1
1,1,2-Trichloroethane			Not detected	5.0	Not detected	1
1,1-Dichloroethane			6	5.0	Not detected	1
1,1-Dichloroethylene			17	5.0	Not detected	1
1,2-Dichlorobenzene			Not detected	5.0	Not detected	1
1,2-Dichloroethane			Not detected	5.0	Not detected	1
1,2-Dichloroethylene (Total)			5(t-)250(c-)	5.0	Not detected	1
1,2-Dichloropropane			Not detected	5.0	Not detected	1
1,3-Dichlorobenzene			Not detected	5.0	Not detected	1
1,4-Dichlorobenzene			Not detected	5.0	Not detected	1
1-Chlorohexane			Not detected	5.0	Not detected	1
2-Chloroethylvinyl ether			Not detected	5.0	Not detected	1
2-Chlorotoluene			Not detected	5.0	Not detected	1
4-Chlorotoluene			Not detected	5.0	Not detected	1
Benzyl chloride			Not detected	50	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	50	Not detected	10

Client Sample ID			MW-4D		MW-5S	
York Sample ID			02040542-03		02040542-04	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Bis(2-chloroisopropyl)ether			Not detected	50	Not detected	10
Bromobenzene			Not detected	5.0	Not detected	1
Bromodichloromethane			Not detected	5.0	Not detected	1
Bromoform			Not detected	5.0	Not detected	1
Bromomethane			Not detected	50	Not detected	10
Carbon tetrachloride			Not detected	5.0	Not detected	1
Chloroacetaldehyde			Not detected	50	Not detected	10
Chlorobenzene			Not detected	5.0	Not detected	1
Chloroethane			Not detected	50	Not detected	10
Chloroform			3 J	5.0	Not detected	1
Chloromethane			Not detected	50	Not detected	10
Chloromethyl methyl ether			Not detected	5.0	Not detected	1
cis-1,3-Dichloropropylene			Not detected	5.0	Not detected	1
Dibromochloromethane			Not detected	5.0	Not detected	1
Dibromomethane			Not detected	5.0	Not detected	1
Dichlorodifluoromethane			Not detected	5.0	Not detected	1
Methylene chloride			Not detected	5.0	Not detected	1
Tetrachloroethylene			Not detected	5.0	Not detected	1
trans-1,3-Dichloropropylene			Not detected	5.0	Not detected	1
Trichloroethylene			330	5.0	Not detected	1
Trichlorofluoromethane			Not detected	5.0	Not detected	1
Trichloropropane			Not detected	5.0	Not detected	1
Vinyl chloride			55	50	Not detected	10

Client Sample ID			MW-5D		MW-6S	
York Sample ID			02040542-05		02040542-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDI
Volatiles-8021 Halogenated	SW846-8260	ug/L	***			
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethylene			Not detected	1	Not detected	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1

Client Sample ID			MW-5D		MW-6S	
York Sample ID			02040542-05		02040542-06	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDI
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane	and the set of the		Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			Not detected	1	Not detected	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Client Sample ID			MW-6D		MW-7S	
York Sample ID			02040542-07		02040542-08	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8260	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			62	1	40	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			5	1	5	1
1,1-Dichloroethylene			66	1	12	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			7(cis-)	1	48(cis-)	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1

Client Sample ID			MW-6D		MW-7S	
York Sample ID			02040542-07		02040542-08	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MD
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			140	1	110	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	44	10

Client Sample ID			MW-7D		MW-8D	
York Sample ID			02040542-09		02040542-10	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8260	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	25	Not detected	1
1,1,1-Trichloroethane			Not detected	25	3	1
1,1,2,2-Tetrachloroethane			Not detected	25	Not detected	1
1,1,2-Trichloroethane			Not detected	25	Not detected	1
1,1-Dichloroethane			68	25	Not detected	1
1,1-Dichloroethylene			98	25	Not detected	1
1,2-Dichlorobenzene			Not detected	25	Not detected	1
1,2-Dichloroethane			Not detected	25	Not detected	1
1,2-Dichloroethylene (Total)			36(t-)2900(c-)	25	Not detected	1
1,2-Dichloropropane			Not detected	25	Not detected	1
1,3-Dichlorobenzene			Not detected	25	Not detected	1
1,4-Dichlorobenzene	error errorer er		Not detected	25	Not detected	1
1-Chlorohexane			Not detected	25	Not detected	1
2-Chloroethylvinyl ether			Not detected	25	Not detected	1
2-Chlorotoluene			Not detected	25	Not detected	1
4-Chlorotoluene			Not detected	25	Not detected	1
Benzyl chloride			Not detected	250	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	250	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	250	Not detected	10
Bromobenzene			Not detected	25	Not detected	1
Bromodichloromethane			Not detected	25	Not detected	1
Bromoform			Not detected	25	Not detected	1
Bromomethane			Not detected	250	Not detected	10
Carbon tetrachloride			Not detected	25	Not detected	1

Client Sample ID			MW-7D		MW-8D	
York Sample ID			02040542-09		02040542-10	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Chloroacetaldehyde	1 Anna Anna Anna Anna Anna Anna Anna Ann		Not detected	250	Not detected	10
Chlorobenzene	11.2		Not detected	25	Not detected	1
Chloroethane			Not detected	250	Not detected	10
Chloroform			Not detected	25	Not detected	1
Chloromethane			Not detected	250	Not detected	10
Chloromethyl methyl ether			Not detected	25	Not detected	1
cis-1,3-Dichloropropylene			Not detected	25	Not detected	1
Dibromochloromethane			Not detected	25	Not detected	1
Dibromomethane			Not detected	25	Not detected	1
Dichlorodifluoromethane			Not detected	25	Not detected	1
Methylene chloride			Not detected	25	Not detected	1
Tetrachloroethylene			Not detected	25	Not detected	1
trans-1,3-Dichloropropylene			Not detected	25	Not detected	1
Trichloroethylene			850	25	Not detected	1
Trichlorofluoromethane			Not detected	25	Not detected	1
Trichloropropane			Not detected	25	Not detected	1
Vinyl chloride	· · · · · · · · · · · · · · · · · · ·		730	250	Not detected	10

Client Sample ID			MW-9D		MW-9S	
York Sample ID		-	02040542-11		02040542-12	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8260	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			11	1	6	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			100	1	4	1
1,1-Dichloroethylene			180	1	8	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			240(cis-)	1	4(cis-)	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether		Constant of	Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotoluene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1



Client Sample ID			MW-9D		MW-9S	
York Sample ID			02040542-11		02040542-12	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			900	1	20	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			29	10	1 J	10

Client Sample ID			MW-10S		MW-10D	
York Sample ID			02040542-13		02040542-14	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 Halogenated	SW846-8260	ug/L				
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,1-Trichloroethane			Not detected	1	Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1
1,1,2-Trichloroethane			Not detected	1	Not detected	1
1,1-Dichloroethane			25	1	31	1
1,1-Dichloroethylene			3	1	11	1
1,2-Dichlorobenzene			Not detected	1	Not detected	1
1,2-Dichloroethane			Not detected	1	Not detected	1
1,2-Dichloroethylene (Total)			83(cis-)	1	180(cis-)	1
1,2-Dichloropropane			Not detected	1	Not detected	1
1,3-Dichlorobenzene			Not detected	1	Not detected	1
1,4-Dichlorobenzene			Not detected	1	Not detected	1
1-Chlorohexane			Not detected	1	Not detected	1
2-Chloroethylvinyl ether			Not detected	1	Not detected	1
2-Chlorotoluene			Not detected	1	Not detected	1
4-Chlorotohuene			Not detected	1	Not detected	1
Benzyl chloride			Not detected	10	Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10
Bromobenzene			Not detected	1	Not detected	1
Bromodichloromethane			Not detected	1	Not detected	1
Bromoform			Not detected	1	Not detected	1
Bromomethane			Not detected	10	Not detected	10
Carbon tetrachloride			Not detected	1	Not detected	1
Chloroacetaldehyde			Not detected	10	Not detected	10
Chlorobenzene			Not detected	1	Not detected	1
Chloroethane			Not detected	10	Not detected	10
Chloroform			Not detected	1	Not detected	1

Client Sample ID			MW-10S		MW-10D	
York Sample ID			02040542-13		02040542-14	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Chloromethane			Not detected	10	Not detected	10
Chloromethyl methyl ether			Not detected	1	Not detected	1
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			11	1	100	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			58	10	84	10

Client Sample ID			MW-11S		MW-11D		
York Sample ID			02040542-15		02040542-16		
Matrix			WATER		WATER		
Parameter	Method	Units	Results	MDL	Results	MDI	
Volatiles-8021 Halogenated	SW846-8260	ug/L					
1,1,1,2-Tetrachloroethane		-	Not detected	1	Not detected	1	
1,1,1-Trichloroethane			Not detected	1	Not detected	1	
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1	
1,1,2-Trichloroethane			Not detected	1	Not detected	1	
1,1-Dichloroethane			2	1	3	1	
1,1-Dichloroethylene			Not detected	1	Not detected	1	
1,2-Dichlorobenzene			Not detected	1	Not detected	1	
1,2-Dichloroethane			Not detected	1	Not detected	1	
1,2-Dichloroethylene (Total)			45(cis-)	1	90(cis-)	1	
1,2-Dichloropropane			Not detected	1	Not detected	1	
1,3-Dichlorobenzene			Not detected	1	Not detected	1	
1,4-Dichlorobenzene			Not detected	1	Not detected	1	
1-Chlorohexane			Not detected	1	Not detected	1	
2-Chloroethylvinyl ether			Not detected	1	Not detected	1	
2-Chlorotoluene			Not detected	1	Not detected	1	
4-Chlorotoluene			Not detected	1	Not detected	1	
Benzyl chloride			Not detected	10	Not detected	10	
Bis(2-chloroethoxy)methane	State State State State	and the second	Not detected	10	Not detected	10	
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10	
Bromobenzene			Not detected	1	Not detected	1	
Bromodichloromethane			Not detected	1	Not detected	1	
Bromoform			Not detected	1	Not detected	1	
Bromomethane			Not detected	10	Not detected	10	
Carbon tetrachloride			Not detected	1	Not detected	1	
Chloroacetaldehyde			Not detected	10	Not detected	10	
Chlorobenzene			Not detected	1	Not detected	1	
Chloroethane			Not detected	10	Not detected	10	
Chloroform			Not detected	1	Not detected	1	
Chloromethane			Not detected	10	Not detected	10	
Chloromethyl methyl ether			Not detected	1	Not detected	1	

Client Sample ID			MW-11S		MW-11D	
York Sample ID			02040542-15		02040542-16	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
cis-1,3-Dichloropropylene			Not detected	1	Not detected	1
Dibromochloromethane			Not detected	1	Not detected	1
Dibromomethane			Not detected	1	Not detected	1
Dichlorodifluoromethane			Not detected	1	Not detected	1
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			65	1	92	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	3 J	10

Client Sample ID			MW-12		MW-13		
York Sample ID			02040542-17		02040542-18		
Matrix			WATER		WATER		
Parameter	Method	Units	Results	MDL	Results	MDL	
Volatiles-8021 Halogenated	SW846-8260	ug/L					
1,1,1,2-Tetrachloroethane			Not detected	500	Not detected	1	
1,1,1-Trichloroethane			Not detected	500	Not detected	1	
1,1,2,2-Tetrachloroethane			Not detected	500	Not detected	1	
1,1,2-Trichloroethane			Not detected	500	Not detected	1	
1,1-Dichloroethane			Not detected	500	Not detected	1	
1,1-Dichloroethylene			Not detected	500	Not detected	1	
1,2-Dichlorobenzene			Not detected	500	Not detected	1	
1,2-Dichloroethane			Not detected	500	Not detected	1	
1,2-Dichloroethylene (Total)			Not detected	500	Not detected	1	
1,2-Dichloropropane			Not detected	500	Not detected	1	
1,3-Dichlorobenzene			Not detected	500	Not detected	1	
1,4-Dichlorobenzene			Not detected	500	Not detected	1	
1-Chlorohexane			Not detected	500	Not detected	1	
2-Chloroethylvinyl ether			Not detected	500	Not detected	1	
2-Chlorotoluene			Not detected	500	Not detected	1	
4-Chlorotoluene			Not detected	500	Not detected	1	
Benzyl chloride			Not detected	5000	Not detected	10	
Bis(2-chloroethoxy)methane			Not detected	5000	Not detected	10	
Bis(2-chloroisopropyl)ether			Not detected	5000	Not detected	10	
Bromobenzene			Not detected	500	Not detected	1	
Bromodichloromethane			Not detected	500	Not detected	1	
Bromoform			Not detected	500	Not detected	1	
Bromomethane			Not detected	5000	Not detected	10	
Carbon tetrachloride			Not detected	500	Not detected	1	
Chloroacetaldehyde			Not detected	5000	Not detected	10	
Chlorobenzene			Not detected	500	Not detected	1	
Chloroethane			Not detected	5000	Not detected	10	
Chloroform			Not detected	500	Not detected	1	
Chloromethane			Not detected	5000	Not detected	10	
Chloromethyl methyl ether			Not detected	500	Not detected	1	
cis-1,3-Dichloropropylene			Not detected	500	Not detected	1	
Dibromochloromethane			Not detected	500	Not detected	1	

Client Sample ID			MW-12		MW-13	
York Sample ID			02040542-17		02040542-18	
Matrix			WATER		WATER	-
Parameter	Method	Units	Results	MDL	Results	MDL
Dibromomethane			Not detected	500	Not detected	1
Dichlorodifluoromethane			Not detected	500	Not detected	1
Methylene chloride			Not detected	500	Not detected	1
Tetrachloroethylene			3700	500	Not detected	1
trans-1,3-Dichloropropylene			Not detected	500	Not detected	1
Trichloroethylene			21000	500	Not detected	1
Trichlorofluoromethane			Not detected	500	Not detected	1
Trichloropropane			Not detected	500	Not detected	1
Vinyl chloride			Not detected	5000	Not detected	10

Client Sample ID			MW-13 Dup		MW-13 Trip		
York Sample ID			02040542-19		02040542-20		
Matrix			WATER		WATER		
Parameter	Method	Units	Results	MDL	Results	MDL	
Volatiles-8021 Halogenated	SW846-8260	ug/L					
1,1,1,2-Tetrachloroethane			Not detected	1	Not detected	1	
1,1,1-Trichloroethane			Not detected	1	Not detected	1	
1,1,2,2-Tetrachloroethane			Not detected	1	Not detected	1	
1,1,2-Trichloroethane			Not detected	1	Not detected	1	
1,1-Dichloroethane			Not detected	1	Not detected	1	
1,1-Dichloroethylene			Not detected	1	Not detected	1	
1,2-Dichlorobenzene			Not detected	1	Not detected	1	
1,2-Dichloroethane			Not detected	1	Not detected	1	
1,2-Dichloroethylene (Total)			Not detected	1	Not detected	1	
1,2-Dichloropropane			Not detected	1	Not detected	1	
1,3-Dichlorobenzene			Not detected	1	Not detected	1	
1,4-Dichlorobenzene			Not detected	1	Not detected	1	
1-Chlorohexane			Not detected	1	Not detected	1	
2-Chloroethylvinyl ether			Not detected	1	Not detected	1	
2-Chlorotoluene			Not detected	1	Not detected	1	
4-Chlorotoluene			Not detected	1	Not detected	1	
Benzyl chloride			Not detected	10	Not detected	10	
Bis(2-chloroethoxy)methane			Not detected	10	Not detected	10	
Bis(2-chloroisopropyl)ether			Not detected	10	Not detected	10	
Bromobenzene			Not detected	1	Not detected	1	
Bromodichloromethane			Not detected	1	Not detected	1	
Bromoform			Not detected	1	Not detected	1	
Bromomethane	a		Not detected	10	Not detected	10	
Carbon tetrachloride			Not detected	1	Not detected	1	
Chloroacetaldehyde			Not detected	10	Not detected	10	
Chlorobenzene			Not detected	1	Not detected	1	
Chloroethane			Not detected	10	Not detected	10	
Chloroform			Not detected	1	Not detected	1	
Chloromethane			Not detected	10	Not detected	10	
Chloromethyl methyl ether			Not detected	1	Not detected	1	
cis-1,3-Dichloropropylene			Not detected	i	Not detected	1	
Dibromochloromethane			Not detected	1	Not detected	1	
Dibromomethane			Not detected	1	Not detected	1	
Dichlorodifluoromethane			Not detected	1	Not detected	1	

Client Sample ID			MW-13 Dup		MW-13 Trip	
York Sample ID			02040542-19		02040542-20	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Methylene chloride			Not detected	1	Not detected	1
Tetrachloroethylene			Not detected	1	Not detected	1
trans-1,3-Dichloropropylene			Not detected	1	Not detected	1
Trichloroethylene			1	1	1	1
Trichlorofluoromethane			Not detected	1	Not detected	1
Trichloropropane			Not detected	1	Not detected	1
Vinyl chloride			Not detected	10	Not detected	10

Client Sample ID			MW-14D		Trip Blank		
York Sample ID			02040542-21		02040542-22		
Matrix			WATER		WATER		
Parameter	Method	Units	Results	MDL	Results	MDI	
Volatiles-8021 Halogenated	SW846-8260	ug/L					
1,1,1,2-Tetrachloroethane			Not detected	2.0	Not detected	1	
1,1,1-Trichloroethane			21	2.0	Not detected	1	
1,1,2,2-Tetrachloroethane			Not detected	2.0	Not detected	1	
1,1,2-Trichloroethane			Not detected	2.0	Not detected	1	
1,1-Dichloroethane			4	2.0	Not detected	1	
1,1-Dichloroethylene			21	2.0	Not detected	1	
1,2-Dichlorobenzene			Not detected	2.0	Not detected	1	
1,2-Dichloroethane			Not detected	2.0	Not detected	1	
1,2-Dichloroethylene (Total)			200(cis-)	2.0	Not detected	1	
1,2-Dichloropropane			Not detected	2.0	Not detected	1	
1,3-Dichlorobenzene			Not detected	2.0	Not detected	1	
1,4-Dichlorobenzene			Not detected	2.0	Not detected	1	
1-Chlorohexane			Not detected	2.0	Not detected	1	
2-Chloroethylvinyl ether			Not detected	2.0	Not detected	1	
2-Chlorotoluene			Not detected	2.0	Not detected	1	
4-Chlorotoluene			Not detected	2.0	Not detected	1	
Benzyl chloride			Not detected	20	Not detected	10	
Bis(2-chloroethoxy)methane			Not detected	20	Not detected	10	
Bis(2-chloroisopropyl)ether			Not detected	20	Not detected	10	
Bromobenzene			Not detected	2.0	Not detected	1	
Bromodichloromethane			Not detected	2.0	2	1	
Bromoform			Not detected	2.0	Not detected	1	
Bromomethane			Not detected	20	Not detected	10	
Carbon tetrachloride			Not detected	2.0	Not detected	1	
Chloroacetaldehyde			Not detected	20	Not detected	10	
Chlorobenzene			Not detected	2.0	Not detected	1	
Chloroethane			Not detected	20	Not detected	10	
Chloroform			Not detected	2.0	13	1	
Chloromethane			Not detected	20	Not detected	10	
Chloromethyl methyl ether			Not detected	2.0	Not detected	1	
cis-1,3-Dichloropropylene			Not detected	2.0	Not detected	1	
Dibromochloromethane			Not detected	2.0	Not detected	1	
Dibromomethane			Not detected	2.0	Not detected	1	
Dichlorodifluoromethane			Not detected	2.0	Not detected	1	
Methylene chloride			Not detected	2.0	Not detected	1	
Tetrachloroethylene			Not detected	2.0	Not detected	1	

Client Sample ID			MW-14D		Trip Blank	
York Sample ID			02040542-21		02040542-22	
Matrix			WATER		WATER	MDL
Parameter	Method	Units	Results	MDL	Results	
trans-1,3-Dichloropropylene			Not detected	2.0	Not detected	1
Trichloroethylene			200	2.0	Not detected	1
Trichlorofluoromethane	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		Not detected	2.0	Not detected	1
Trichloropropane			Not detected	2.0	Not detected	1
Vinyl chloride			Not detected	20	Not detected	10

Client Sample ID			Field Blank	
York Sample ID			02040542-23	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Volatiles-8021 Halogenated	SW846-8260	ug/L		
1,1,1,2-Tetrachloroethane			Not detected	1
1,1,1-Trichloroethane			Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1
1,1,2-Trichloroethane			Not detected	1
1,1-Dichloroethane			Not detected	1
1,1-Dichloroethylene			Not detected	1
1,2-Dichlorobenzene			Not detected	1
1,2-Dichloroethane			Not detected	1
1,2-Dichloroethylene (Total)			Not detected	1
1,2-Dichloropropane			Not detected	1
1,3-Dichlorobenzene			Not detected	1
1,4-Dichlorobenzene			Not detected	1
1-Chlorohexane			Not detected	1
2-Chloroethylvinyl ether			Not detected	1
2-Chlorotoluene			Not detected	1
4-Chlorotoluene			Not detected	1
Benzyl chloride			Not detected	10
Bis(2-chloroethoxy)methane			Not detected	10
Bis(2-chloroisopropyl)ether			Not detected	10
Bromobenzene			Not detected	1
Bromodichloromethane			Not detected	1
Bromoform			Not detected	1
Bromomethane			Not detected	10
Carbon tetrachloride			Not detected	1
Chloroacetaldehyde			Not detected	10
Chlorobenzene	7.7.9.9.9.9.9.9.9		Not detected	1
Chloroethane			Not detected	10
Chloroform			Not detected	1
Chloromethane			Not detected	10
Chloromethyl methyl ether			Not detected	1
cis-1,3-Dichloropropylene			Not detected	1
Dibromochloromethane			Not detected	1
Dibromomethane			Not detected	1
Dichlorodifluoromethane			Not detected	1
Methylene chloride			Not detected	1
Tetrachloroethylene			Not detected	1
trans-1,3-Dichloropropylene			Not detected	1
Trichloroethylene			Not detected	1



Client Sample ID			Field Blank	
York Sample ID			02040542-23	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Trichlorofluoromethane			Not detected	1
Trichloropropane			Not detected	1
Vinyl chloride	Contraction of the second		Not detected	10

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 02040542

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or nontarget analytes and matrix interference.

- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation.
- 6. All analyses conducted met method or Laboratory SOP requirements.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: MMM Robert Q. Bradley

Managing Director

Date: 4/29/2002

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Company M LBG, Inc 126 Monroe Trumbull, C	Turnpite	<u>Repo</u> Michael		lakes		ice To , Tnc,		MRC	lown, N		Samples Col Midual Munola	lected By (Signature)
Sample No.	Locat	ion/ID	Dat	e Sam	pled	S Water	ample Soil	Matrix Air OTHE	ANA	ALYSES	REQUESTED	me (Printed) Container
MW-2			4/	1910	2	X	0011				hed only)	Z VOAS
Mw-30				t r		.X.				1		· · · · · · · · · · · · · · · · · · ·
mw-40						¥			4			2 Von 5
MW-55				[·		X				+		2 Vons 2 Vons
Ma				M	~							- 00005
MW-5D						X						2 Voors
MW-65						X			-			2 Voas
MW-6D						X				1		2 Voas
MW-75						X				+		2 Voas
MW-70			V	1		X						2 Voas
Chain of Custode					-10							- Nas
Bottles Relinquished Bottles Received in	from Lab by	Date/Tin Date/Tin				uished by		Date/		Sam	Flick ple Received by Le Received in LAB by	4-22-02 <u>C11:00</u> Date/Time <u>4-22-02</u> /1530

Company LBG, Inc. (26 Monne Trumbull, C	<u>Name</u> Turnpike	<u>Repo</u> Michuel		- C - C - C - C - C - C - C - C - C - C	ice To: , Inc.	MRC	four, r	Samples Colle	ected By (Signature)
Sample No.	Loca	tion/ID	Date	Sampled	Samp Water So	le Matrix		YSES REQUESTED	Container
MW-80			4/10	7/02	X			Habsgenated only	Description(s) 2 Voas
MW-9D					X	1			1.2.000
MW-95					X				+
MW- 10 5					1			1	
MW-10D					X				+
MW-115					X				
MW-11D					X				
MW-12					X				
MW-13					X		11		
MW-13 (C	Uplicato	.)	V		X		V		
chain-of-Custod	y Record		A						4-22-02
Bottles Relinquishe	d from Lab by	Date/Tim	•	Sample Reling	uished by	Date/Tir	6	Sample Received by	<u>enico</u> Date/Time
Bottles Received	in Field by	Date/Tim	e	Sample Reling	ished by	Date/Tir	/	Sample Received in LAB by	4-22-02/1530 Date/Time

ANALYTICAL LABO ONE RESEAR STAMFORD, ((203) 325-1371 FA)				E	ielo	d Ch	ain-	of-Cı	<u>istody R</u>	ecord	Page <u>3</u> of
Company Na LBG, Inc. 126 Monroe Turn Trumbull, (To	pike	<u>Report</u> Michael Mana		LBG, -	ce To: In C, roc Turr , CT 066	pike	MA	iect ID/No RC cwn, M		ael Manolaka	cted By (Signature) us = Jim Lanta (Printed)
Sample No.	Locati	on/ID	Date Sa	ampled	Sa Water	ample Matr Soil Air		ANAI	YSES REQUE		Container
MW-13	7 Fri	plicute)	4/1	9/02	X			8021B	Habgenatul on	1	2 UDAS
MW-140	,,		4/19	102	X			8023 H	alogenated only]	2 Voas
Fip Blank			411	9/02	X			8021B	Halog and a	lonly	ZVOAS
rield Black			4/19	102	x			8021	B Haloyant	- I only	ZVOAS
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					\$7.38 ¹ 20		· · · · · · · · · · · · · · · · · · ·				A1.2
hain-of-Custody R	ecord	6								/	4-22-02
Bottles Relinquished fro	m Lab by	Date/Time	S	ample Relinqu	ished by		722/C Date/Tir	<u>>2/1100</u> ne.	Sample Received	1.	ellios Date/Time
Bottles Received in Fie	ld by	Date/Time	Si	ample Relingu	ished by		Date/Tir	ne	Sample Received i		-22-02/15 30 Date/Time

APPENDIX IV NOTES FROM ROCKLAND COUNTY HEALTH DEPARTMENT FILE REVIEW

Glenshaw Glass Company

7/6/65 (hand written notes)

Six to eight months prior to date; oil running over bank to Southeast of building along fence into tributary to brook. Glenshaw Glass installed a 5,000-gallon waste oil underground storage tank (UST) on west side of property to remedy problem.

Overflow of the tank occurred two to three week prior. Mercury Oil of Bayonne, N.J. periodically cleaned tank. They were called on this occasion, but overflow occurred prior to cleaning.

Other releases to stream have occurred from drums were spilled and pile near bank since no permanent containment structure existed. Figure 1 goes with above comments, there is no clear description in text as to better describe release areas. Please note, there was no signature attached with written text.

8/6/65 (hand written notes)

Two problems;

- 1) black oil; and
- 2) soluble oil from cutting machines and material handling white emulsion.

Pump failure, 8/8/65 in recirculation of soluble oil, discharge milk effluent to drainage ditch (figure 1).

<u>9/11/79 (Letter)</u>

Trichloroethylene (TCE) and tetrachloroethylene (PCE) were detected in the two wells on the Glenshaw Glass Company property. Detection levels were not noted. The letter also discusses water discharged to Sparkill Creek under SPEDES Permit No. NY-0006467. It says test results from these discharge waters will be reported to the New York State Department of Environmental Conservation (NYSDEC), but does not discuss results.

Author:	Robert J. Mansfield, P.E.
	Assistant Public Health Engineer

March 23, 1982 (Memorandum)

Letter references the September 11, 1978 samples collected from Wells 1 and 2 on Glenshaw Property. Considering the poor hydrogeologic characteristics of the unconsolidated materials in the area and shallow bedrock, it is reasonable to assume that both of the wells are set in the bedrock. The results are shown in the following table:

September 11, 1978					
Constituent	Well 1	Well 2			
Trichloroethylene (ug/l)	101.6	73.4 ^{1/}			
Tetrachloroethylene (ug/l)	1.6	1.6			

1/ September 26, 1978 showed result of 73.4 ug/l rather than 173.4 ug/l which was indicated in February 6, 1986 letter.

The letter indicates that the source of the contamination was "an improperly maintained 2,500-gallon waste storage tank on southeast corner of the building which contained an industrial degreaser called Act Soln manufactured by Aetna Chemical Corp. of Elmwood Park, New Jersey (see sketch enclosed)." Sketch is attached as figure 2.

The memorandum recommends that periodic testing for halogenated hydrocarbons be reexamined.

Author: Robert J. Mansfield, P.E. Assistant Public Health Engineer

2//6/86 (Letter)

Results of January 9, 1981 samples collected from Glenshaw Glass Company are shown on table below.

1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	January 9, 1981	
	Catch Basin at Northwest corner of Route 303 and Glenshaw Street	Catch Basin located 30 feet west of Route 303 and Glenshaw Street
Chloroform (ug/l)	2	2
1,1,1 Trichloroethane (ug/l)	69	869
Bromodichloromethane (ug/l)	1	1
Trichloroethylene (ug/l)	18	7
Dibromochloromethane (ug/l)	3	2
Bromoform (ug/l)	3	2
Tetrachloroethylene (ug/l)	7	6

The letter expresses concerns of the concentrations of the volatile organic compounds detected, because of the proximity of the release to Blauvelt Well 15 of the Spring Valley Water Company.

Author John A. Hroncich Sanitary Engineer Hackensack Water Company

Arglass Corporation/Aluf Plastics

General Discussion

A February 3, 1984 plate of the Arglass Corporation (former Glenshaw Glass Company facility and map) noted that the general plant maintenance shop and machine repair department were located on the northeast corner of the facility. This would place these rooms just north of the Glenshaw Street entrance and directly upgradient of the Materials Research Corporation facility. A hazardous material storage location plate showed all chemical storage is located at and south of the north/south midpoint of the facility.

Later maps show two monitor wells located north of Glenshaw Street upgradient of the MRC (figure 3). Neither are downgradient of the maintenance shop and machine repair department. In addition, there were no VOCs detected in either of the wells.

A surface-water sample was collected from a catch basin identified as 30 feet west of Glenshaw Street and Route 303. The location was not identified on a map. Nonetheless, a high concentration of TCA (869 ppb (parts per billion)) was identified.

Samples were also collected in 1993 which are not discussed in the below text. The samples were collected from Aluf Plastics discharge location. These samples showed low levels of halogenated VOCs.

1/21/92 NYSDEC Spills (Spill No. 91-10894)

Aluf plastics is listed under NYSDEC Spills (Spill No. 91-10894). Notes of spill are on sheets dates January 21, 1992. The NYSDEC spill supersedes complaint No. 92-5 made by the Orangetown Police. Aluf was noted for pumping liquid into stream from companies sump system. It identifies the liquid as unknown and indicates that it has impacted surface water and ground water. The spill was reported under Article 15 of New York State Navigation Law. Aluf plastics was also noted as having two outfall pipes discharging into the stream abutting property.

Banks of stream were noted as heavy black sedimentation (staining). Samples were collected during the investigation, but it is unclear where the results are and what was sampled.

September 18, 1990				
Contaminant	Aluf Discharge ^{/1}			
Bromochloromethane (ug/l)	7			
Chloroform (ug/l)	59			
1,1 Dichlorobenzene (ug/l)	276			
Ethylbenzene (ug/l)	6			
Toluene (ug/l)	26			
1,1,1 Trichloroethane (ug/l)	5			
M,P-Xylenes (ug/l)	20			
O-Xylenes (ug/l)	7			

VOC Analytical Results

1/ unknown location, but review of files indicates it is south of Glenshaw Street.

Note: Analyzed by EPA Method 524.

January 2	l, 1992
Contaminant	Aluf Discharge ⁿ
Acetone (ug/l)	163
Chloroform (ug/l)	11
1,1,1 Trichloroethane (ug/l)	681
1,4 Dichlorobenzene (ug/l)	16
Toluene (ug/l)	5

1/ Discharge from 12-inch pipe from ALUF Plastics.

	February 7, 1992					
Contaminant	Stream Abutting Aluf Plastics ^{/1}	Stream Abutting Aluf Plastics ¹¹	Sump in Aluf Plastics			
1,4-Dichlorobenze (ug/l)	49	52	130			
Chloroform (ug/l)	8.6	ND<1	16			
1,1 Dichloroethane (ug/l)	18	12	ND<0.5			
Methylene Chloride (ug/l)	97	84	1,200			
1,1,1-Trichloroethane (ug/l)	784	800	810			
Tetrachloroethylene (ug/l)	ND<0.5	ND<1	8.4			
Toluene (ug/l)	ND<0.5	ND<1	13			
Total Xylenes (ug/l)	8.1	8.9	ND<1			

1/ Two samples collected from stream. The point was a down stream of Aluf discharge.

Note: Analyzed by EPA Methods 601 and 602.

3/5/86 YWC Engineering Division Letter

This letter was addressed to American Trading Real Estate Properties, Inc. The letter discusses results of the soil investigation described below (3/25/86 letter) and discusses ground-water analyses. The location of the samples are shown on figure 3. Please note, only aromatic volatile organic compounds (VOCs) were found during the soil investigation. Ground-water sample results are below.

	August 1981	
	Glenshaw Well #1	Glenshaw Well #2
1,1-Trichloroethane (ug/l)	2.1	7.7
Trichloroethylene (ug/l)	. 3.9	2
Tetrachloroethylene (ug/l)	2.8	ND<1
	September 1978	
Trichloroethylene (ug/l)	101.6	173.4
Tetrachloroethylene (ug/l)	1.6	1.6

-5-

YWC collected ground-water samples in February 1986 from Monitor Wells MW-1, MW-2 and MW-3 (figure 3). The samples were analyzed for aromatic and halogenated VOCs. There was no detection VOCs detected in any of the wells. There was no details provided for the well constructions.

3/25/86 Pollution Enterprises, Inc. Letter

The above completed a soil boring investigation of the southwestern (believe 5,000-gallon waste-oil UST mentioned 7/6/65 notes) UST. Bedrock was found to be range from 13 to 14 ft bg. A total of eight borings were drilled around the UST, two of the borings were completed as wells. Two soil samples were collected from two borings (total four soil samples). Aromatic VOCs were identified in all four samples. There were no leachable metals or halogenated VOCs. In addition, two ground-water samples were analyzed for metals, aromatic VOCs and halogenated VOCs. There were no detections identified in the ground water.

Author: Paul Spilman Staff Geologist Pollution Enterprises, Inc.

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near the sil stain which could have been responsible for uffen . oil Joverflow -ditch ١ white El 108 EENCE DAN Figure 1

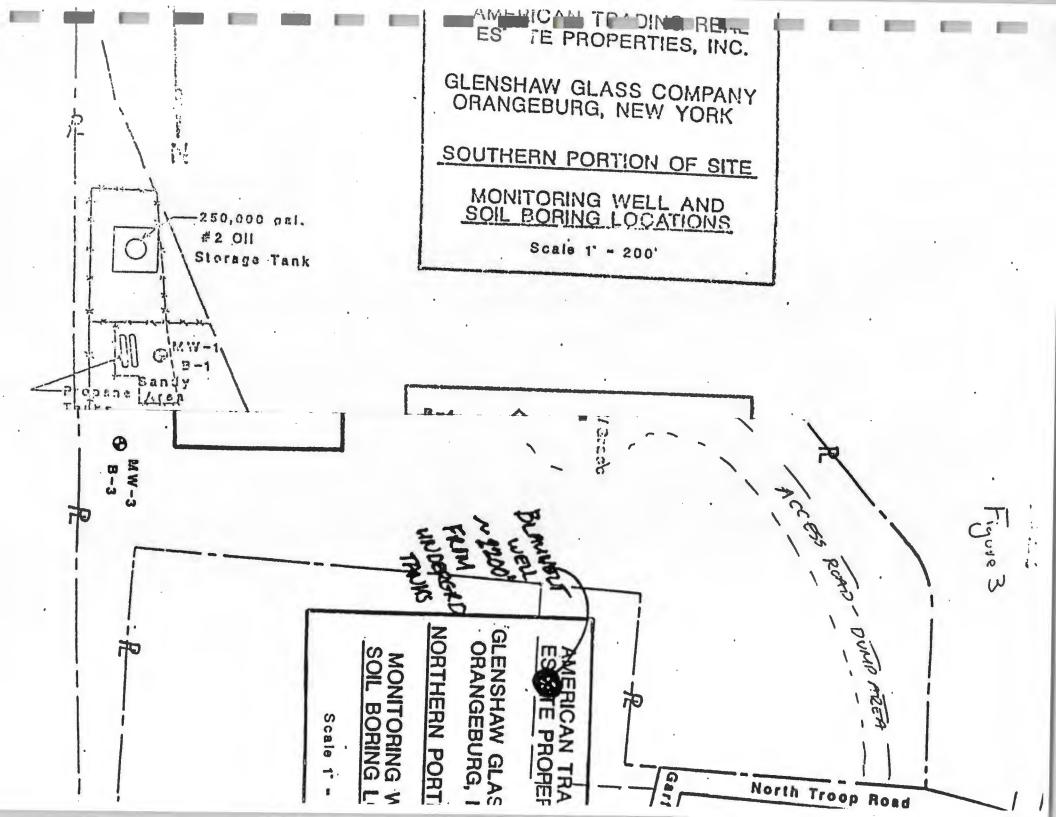
1 := 1H L71-79 Le mar des 10my Bucci - Plant Manager Are that was 1250,000 = such pump. 1. THERE IS AN A " INTERCONNECTION BET. SULLOY

WELL LINE. THIS CONNECTION WITCH SE REMOVED FOOTX.

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ACTASOLV ALTNACHLAICURA ELPILIOD HK N.J. [H. THUINE SCA SERV. 201-772-9496 JA-02 18+6 5. BH

Figure 2



APPENDIX V FIELD SAMPLING SHEETS

Vell: MW-2			Date: 4/19/02			Weather: 80 and clear		
Depth to Water (feet belo	ow top of casing): 19.05				Total Depth (feet below top of casing): 19.6			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
abilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
me sample collected: 9	:50			Sampled by: .	l Jim Lantowski			

And the part and the

/ell: MW-3S			Date: 4/19/02			Weather:	
epth to Water (feet belo	w top of casing):				Total Depth (feet below	v top of casing):	
Time	Evacuation Rate (ml/min)	рН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
abilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
ime sample collected:	<u> </u>			Sampled by:	<u> </u>		

And any and any any and any and any any and any any any any any any any any any

Well: MW-3D			Date: 4/19/02		AMPLING	Weather: 80 clear	
Depth to Water (feet below	ow top of casing): 19.32				Total Depth (feet below		
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential
12:36	1.4	7.84	2.40	163.0	4.78	18.5	(mv) 123
12:39	1.4	7.77	2.28	90.6	0.02	19.6	112
12:42	1.4	7.75	2.38	100.2	0.01	19.7	108
12:45	1.4	7.72	2.38	100.1	0.01	19.8	104
tabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
Time sample collected: 1 Comments: Sample colle				Sampled by: .	Jim Lantowski		

			LOW FLOW LO	OWN, NEW Y W STRESS S.	AMPLING			
Vell: MW-4S			Date: 4/19/02			Weather:	Weiter States and States	
epth to Water (feet belo	w top of casing):				Total Depth (feet below top of casing):			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
			-					
abilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
me sample collected:	4L			Sampled by:	I	1		
omments: Dry			······································					

Vell: MW-4D			Date: 4/19/02			Weather: 80 and clear		
epth to Water (feet belo	ow top of casing):17.69		<u></u>		Total Depth (feet below top of casing): 38			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
11:03	1.4	7.52	1.6	61.9	3.17	18.8	136	
11:06	1.4	7.42	1.53	51.1	0.35	22.1	128	
11:09	1.4	7.39	1.52	52.8	0.32	22.2	123	
11:12	1.4	7.39	1.53	54.8	0.30	22.3	118	
abilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
me sample collected:	1:14 ected from 30.5' btoc.		1	Sampled by:	Jim Lantowski	<u> </u>	the second s	

Well: MW-5S			Date: 4/19/02			Weather: 80 and c	lear	
Depth to Water (feet bel	ow top of casing):9.08				Total Depth (feet below top of casing): 19.88			
Time	Evacuation Rate (ml/min)	pН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
13:32	1.4	7.49	1.20	62.9	3.59	15.42	164	
13:35	1.4	7.40	1.20	66.5	0.70	15.21	162	
13:38	1.4	7.36	1.20	62.6	0.05	14.74	160	
13:41	1.4	7.34	1.19	38.5-	0	15.01	157	
13:44	1.4	7.32	1.19	34.5	0	14.95	153	
13:47	1.4	7.32	1.19	34.0	0	14.90	151	
tabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
ime sample collected: 1	13:50		1	Sampled by:	Sampled by: Michael Manolakas			

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Vell: MW-5D			Date: 14/19/02			Weather: 80 and clear		
Depth to Water (feet belo	ow top of casing): 24.67				Total Depth (feet below top of casing): 44.85			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
13.07	1.4	7.71	0.674	77.5	0.44	16.89	135	
13:12	1.4	7.63	0.675	58.9	0	16.37	126	
13:15	1.4	7.62	0.674	62.9	0	16.34	126	
13:18	1.4	7.61	0.672	6.5	0	16.30	117	
tabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
ime sample collected: 1	3:20			Sampled by:	Michael Manolakas			

Well: MW-6S			Date: 4/19/02		5. 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 199 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	Weather: 80 and c	lear
Depth to Water (feet bel	ow top of casing):6.55				Total Depth (feet below	v top of casing): 20	
Time	Evacuation Rate (ml/min)	рН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
14:08		7.74	0.767	78.1	2.75	14.3	-135
14:11		7.64	0.746	73.9	0.52	14.7	-137
14:14		7.61	0.748	78.8	0.44	14.7	-138
14:17		7.61	0.449	78.9	0.43	14.7	-140
							······································
Stabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
Time sample collected:	14:18			Sampled by:	Jim Lantowski		and the second

Well: MW-6D			Date: 4/19/02			Weather: 75 and c	lear	
Depth to Water (feet belo	ow top of casing): 18.89				Total Depth (feet below top of casing): 43.36			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
14:12	1.4	7.69	0.626	20.5	2.10	15.25	177	
14:15	1.4	7.66	0.621	22.5	0.0	14.85	173	
14:18	1.4	7.66	0.620	19.8	0.0	14.8	169	
14:21	1.4	7.65	0.618	20.1	0.0	14.78	166	
Stabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
Time sample collected: 1	4:24			Sampled by:	Michael Manolakas	I		

Vell: MW-7S			Date: 4/19/02			Weather: 80 and clear		
Depth to Water (feet belo	ow top of casing): 8.59				Total Depth (feet below top of casing): 20			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
13:07	1.4	7.62	0.801	127	3.52	16.5	-88	
13:10	1.4	7.41	0.736	81.6	0	17.9	-94	
13:13	1.4	7.35	07.29	82.1	0	18.0	-94	
13:16	1.4	7.32	0.730	76.5	0	18.1	-96	
tabilization Criteria		+/0.1	+/- 3 %	+/10%	1/ 100/			
ime sample collected: 1	3-18	+70.1	+/- 3 70		+/-10%	+/- 3%	+/10 mv	
comments: Sample colle				Sampled by:	Jim Lantowski			

Well: MW-7D			LOW FLOW LO Date: 4/19/02			Weather: 80 clear		
Depth to Water (feet belo	ow top of casing): 13.44			A	Total Depth (feet below top of casing): 40.5			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
13:23	1.4	7.27	1.38	142	2.43	18.6	-115	
13:26	1.4	7.29	1.33	150	0	20.6	-113	
13:29	1.4	7.33	1.35	140	0	20.7	-110	
13:32	1.4	7.34	1.36	141	0	20.6	-109	
tabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
ime sample collected: 1	3:33		1	Sampled by:	Jim Lantowski			
omments: Sample colle	ected from 33' btoc.	0 13 mm	- V	1			an a	

			LOW FLOW LO	OWN, NEW Y W STRESS SA	AMPLING			
Vell: MW-8S			Date: 4/19/02			Weather: 80 clear		
Depth to Water (feet belo	w top of casing):				Total Depth (feet below top of casing):			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
······································		-						
tabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
ime sample collected:	1		,,	Sampled by:	1			
omments: Dry				I				

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/ell: MW-8D			LOW FLOW LO Date: 4/19/02			Weather: 80 and c	lear
epth to Water (feet belo	ow top of casing): 19.76	an i se an			Total Depth (feet below	v top of casing): 46.	.5
Time	Evacuation Rate (ml/min)	рН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
11:38		7.44	6.45	138	8.32	17.5	164
11:41		7.24	6.47	103	4.13	20.5	165
11:44		7.19	6.46	112.0	4.03	21.2	164
anna ann an a							
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abilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
me sample collected: 1	1 11:45			Sampled by:	Jim Lantowski		
omments: Sample colle	cted at 38' htoc						

	Total Depth (feet below top of casing): 19.5
N.	InctanceTurbidityDissolved OxygenTemperatureOxygen ReductionS/cm)(NTU)(mg/l)(°C)Potential(my)
11:04 1.4 7.20	39 52.4 1.47 14.63 (IIV) 214
11:12 1.4 6.96 1	.39 32.8 0 13.83 174
11:15 1.4 6.94 1	.39 32.1 0 13.87 165
11:18 1.4 6.93 1	.39 30.6 0 13.88 164
tabilization Criteria +/0.1 +/	- 3 % +/10% +/-10% +/- 3% +/10 mv
me sample collected: 11:20	Sampled by: Michael Manolakas

Well: MW-9D			Date: 4/119/02	W STRESS SA	in an	Weather: 85 and c	lear
Depth to Water (feet belo	ow top of casing): 11.61				Total Depth (feet below	v top of casing): 37.	7
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
11:34	1.4	7.78	0.702	85.2	409	16.34	-274
Battery died restart							·····
12:12	1.4	7.8	0.688	86.9	0	15.26	-344
12:15		7.86	0.688	89.5	0	15.37	-351
12:18		7.86	0.690	90.8	0	15.36	-354
Stabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
Fime sample collected: 1	2:20			Sampled by:	Michael Manolakas	1	
Comments: Sample colleg	cted 30' btoc.						

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Vell: MW-10S			LOW FLOW LO Date: 4/19/02		and the second secon	Weather: 80 Clear		
Depth to Water (feet belo	ow top of casing):16.99				Total Depth (feet below top of casing): 20.5			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
10:33	1.4	7.17	3.98	101.0	7.36	18.1	147	
10:36	1.4	7.15	3.98	80.3	0.20	17.6	147	
10:39	1.4	7.13	3.98	78.3	0.20	17.5	142	
10:42	1.4	7.11	3.98	75.3	0.18	17.5	138	
							· ·	
tabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
ime sample collected: 1	0:44		k	Sampled by:	Jim Lantowski			
omments: Sample colle	cted at 19' btoc.			L				

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Vell: MW-10D			Date: 4/19/02			Weather: 80 and clear	
Depth to Water (feet belo	ow top of casing): 17.93		1		Total Depth (feet below	v top of casing): 38	
Time	Evacuation Rate (ml/min)	рН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
10:16	1.4	7.10	3.75	17.7	2.12	17.7	165
10:19	1.4	7.05	3.69	17.4	0	17.6	155
10:22	1.4	7.04	3.75	18.1	0	17.6	148
10:25	1.4	7.03	3.33	18.0	0	17.5	147
							anteren
tabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
ime sample collected: 1	0:27			Sampled by:	Jim Lantowski		

Well: MW-11S			Date: 4/19/02		Weather: Clear, 80		
Depth to Water (feet bel	ow top of casing):17.89				Total Depth (feet below	v top of casing): 20.	42
Time	Evacuation Rate (ml/min)	рН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
8:59	1.4	6.6	2.6	12.6	9.17	15.01	280
9:02		6.88	2.67	5.5	2.59	15.02	264
9:06		7.00	2.67	4.8	1.85	14.90	256
9:09		7.06	2.70	4.6	1.78	14.67	247
9:12		7.09	2.70	4.3	1.29	14.54	242
9:15		7.11	2.72	4.4	1.35	14.50	240
9:18		7.13	2.74	4.4	1.19	14.52	230
Stabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
Time sample collected: 9	:19		1	Sampled by:	J Michael Manolakas		
Comments: Sample colle	cted 19' btoc.						and the second

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Vell: MW-11D			Date: 4/19/02			Weather: Clear 80		
epth to Water (feet belo	ow top of casing): 18.97				Total Depth (feet below top of casing): 35.04			
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
9:35	1.4	7.30	2.75	33	0	15.21	245	
9:40		7.32	2.73	34.5	0	15.8	240	
9:43		7.33	2.73	32.3	0	15.24	323	
							and the second	
·····								
- Apple Count								
100 100 100 100 100 100								
abilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
me sample collected: 9	9:45			Sampled by:	Michael Manolakas			
omments: Sample dept	h 29' bg							

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Well: MW-12			LOW FLOW LO Date: 4/19/02	III DIRESS S	Lini Lini	Weather: 80 clear		
Depth to Water (feet belo	ow top of casing): 20.07				Total Depth (feet below top of casing): 30.5			
Time	Evacuation Rate (ml/min)	рН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)	
8:46	1.4	6.73	5.04	167	2.05	15.5	181	
8:49		6.89	5.01	170.0	0.45	16.4	177	
8:52		6.94	5.01	114.0	0.21	16.4	173	
		•						
Stabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv	
ime sample collected: 8	:54			Sampled by:	Jim Lantowski			
Comments: Sample colle	ected at 23' btoc					······································		

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Well: MW-13			LOW FLOW LO Date: 4/19/02			Weather: 80 and c	lear
			Date: WISHOL				
Depth to Water (feet belo	ow top of casing): 22.13				Total Depth (feet below	w top of casing): 30	
Time	Evacuation Rate (ml/min)	pH	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
9:11	1.4	7.33	2.66	466	12.07	15.5	166
9:14		7.30	2.71	390	9.06	15.6	166
9:17		7.25	2.71	677	7.97	16.8	167
9:20		7.25	2.71	446	8.01	16.7	167
		•					
Stabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
Time sample collected: 9	9:21			Sampled by:	Jim Lantowski		
Comments: Sample colle	cted from 25' btoc.			L			

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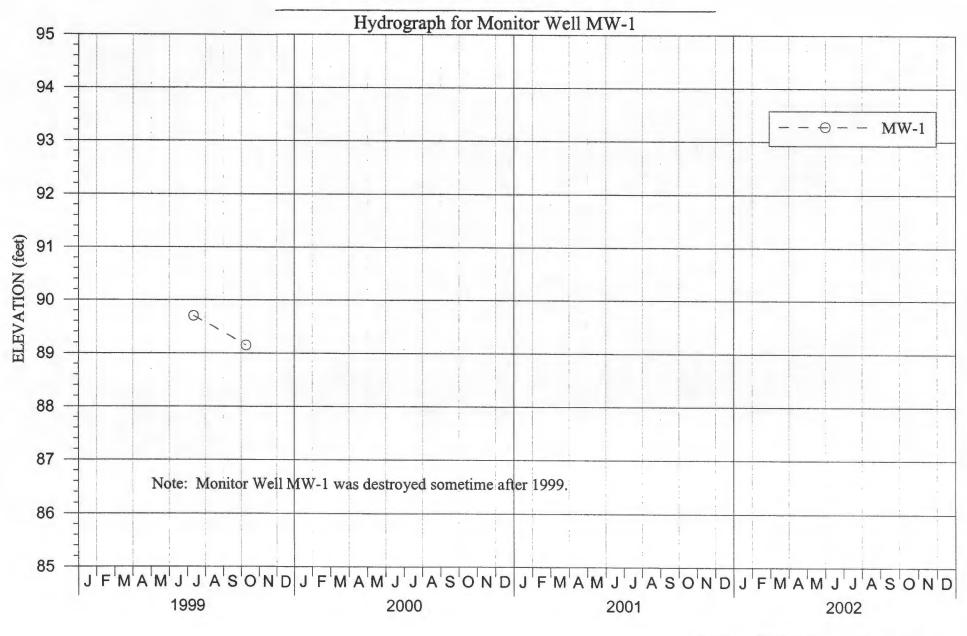
	ential
TimeEvacuation Rate (ml/min)pHConductance (μS/cm)Turbidity (NTU)Dissolved Oxygen (mg/l)Temperature (°C)Oxygen F Pote	ential
(ml/min) $(\mu S/cm)$ (NTU) (mg/l) (°C) Pote	ential
	nv)
Stabilization Criteria +/0.1 +/- 3 % +/10% +/- 3% +/10%	0 mv

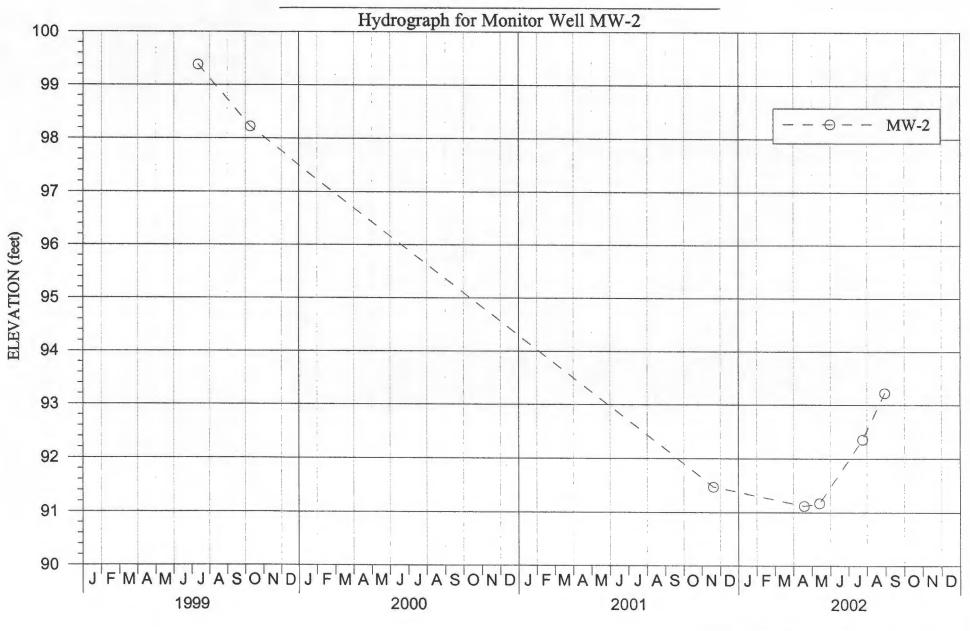
Well: MW-14D			LOW FLOW LO Date: 4/19/02	W BIRESS B		Weather: 85 clear	
					T-4-1 D41 (6-41-1-		1
Depth to Water (feet belo	w top of casing):19.09				Total Depth (feet below	w top of casing): 37.	1
Time	Evacuation Rate (ml/min)	рН	Conductance (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temperature (°C)	Oxygen Reduction Potential (mv)
10:10	1.4	7.25	2.35	101	1.75	18.16	234
10:13		7.25	2.37	72.7	0	17.52	226
10:18		7.25	2.37	60.8	0	17.68	213
10:21		7.25	2.37	56.0	0	17.59	206
10:24		7.25	2.38	57.1	0	17.59	205
Stabilization Criteria		+/0.1	+/- 3 %	+/10%	+/-10%	+/- 3%	+/10 mv
Time sample collected:	10:26			Sampled by:	Michael Manolakas	I	
Comments: Sample colle	cted from 30' bg.			1,,			

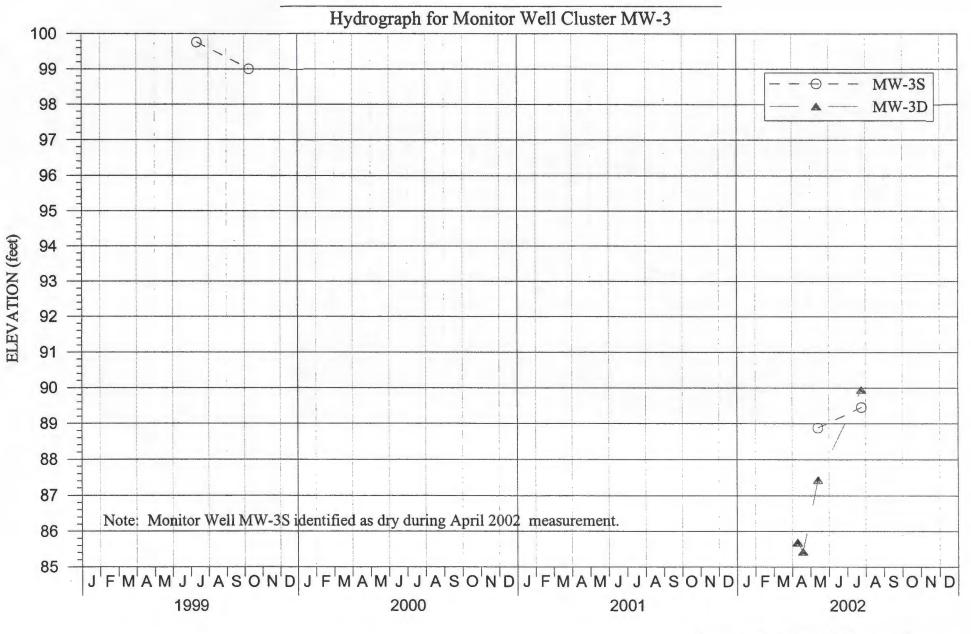
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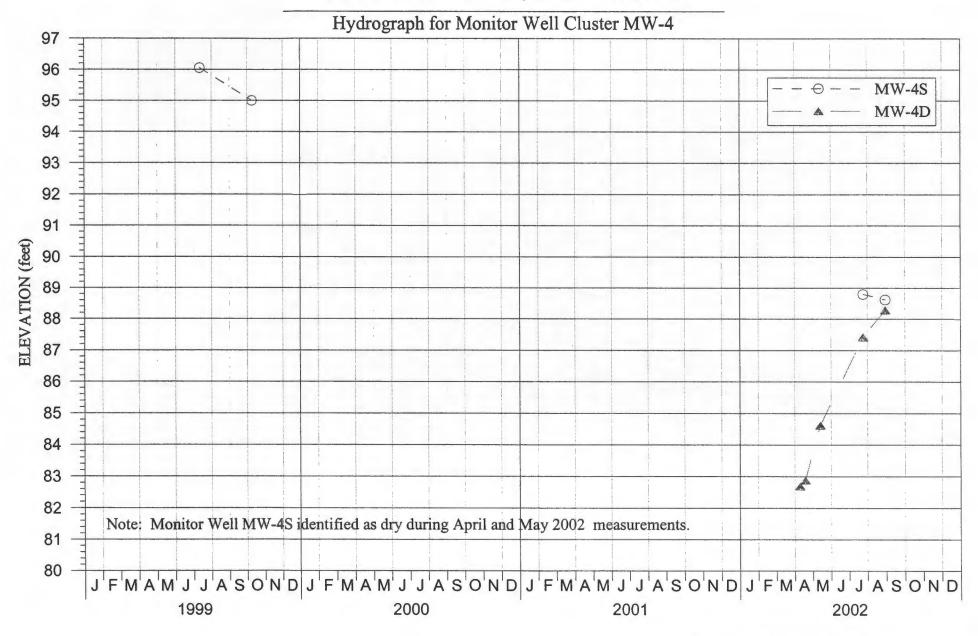
APPENDIX VI HYDROGRAPHS

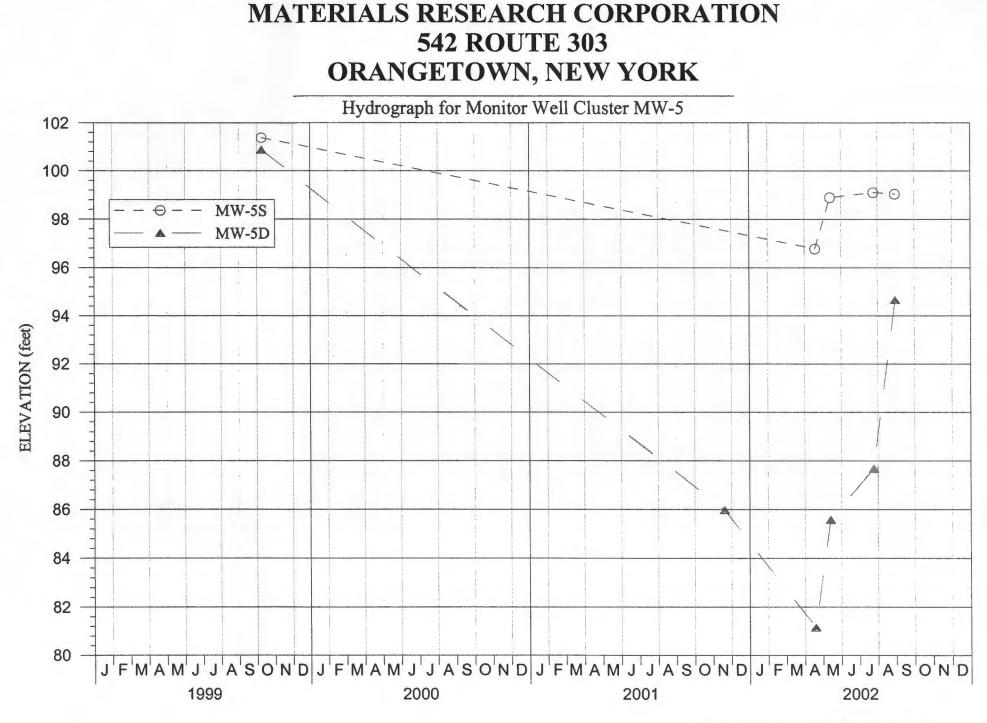
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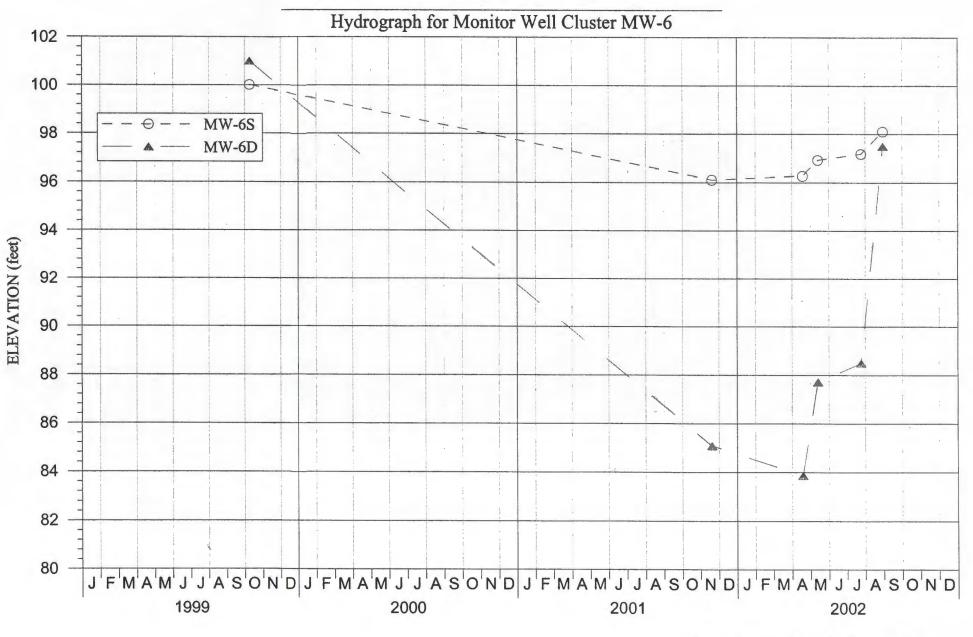


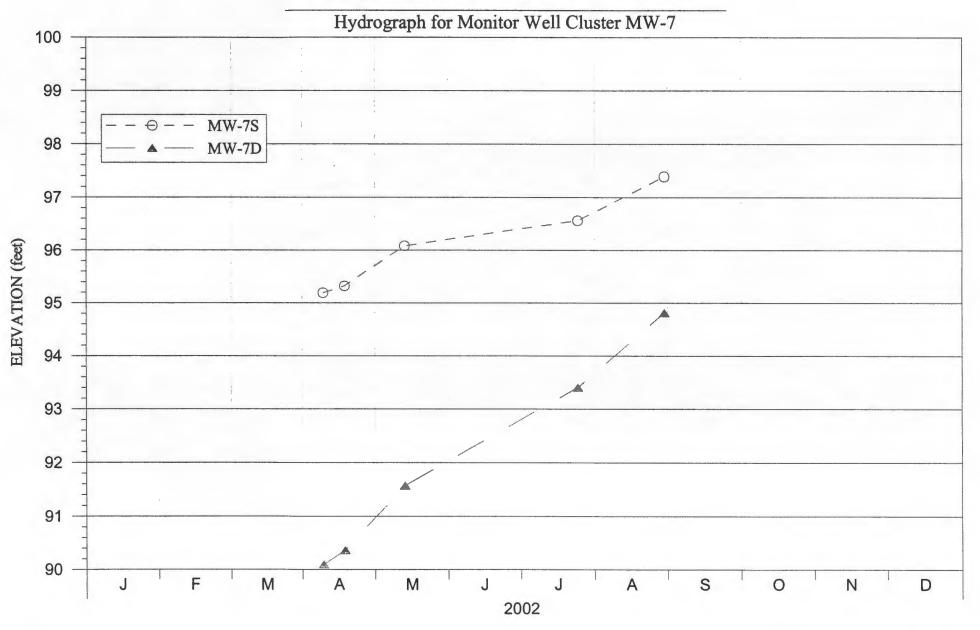


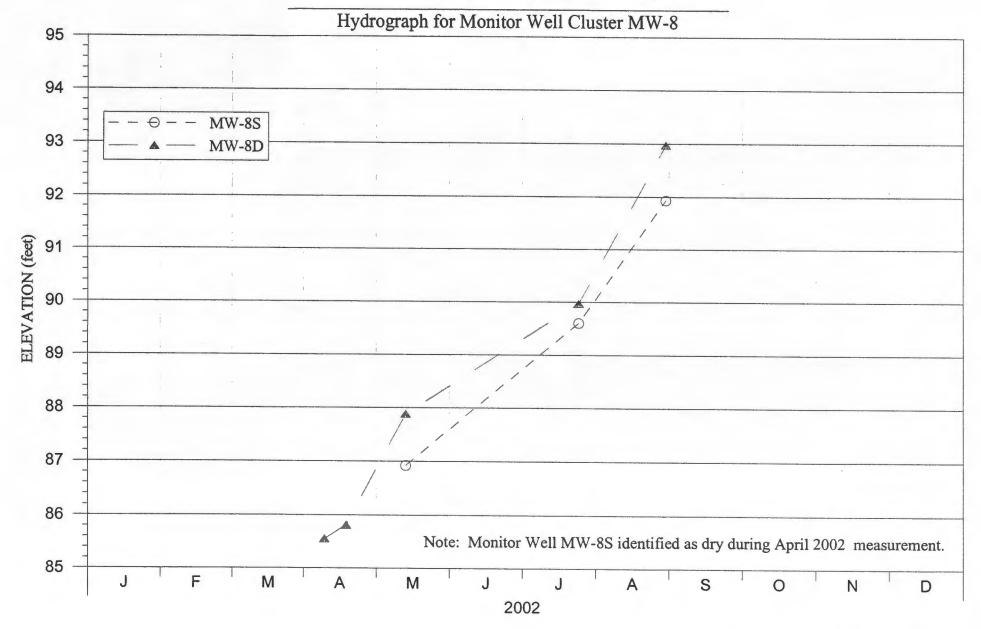




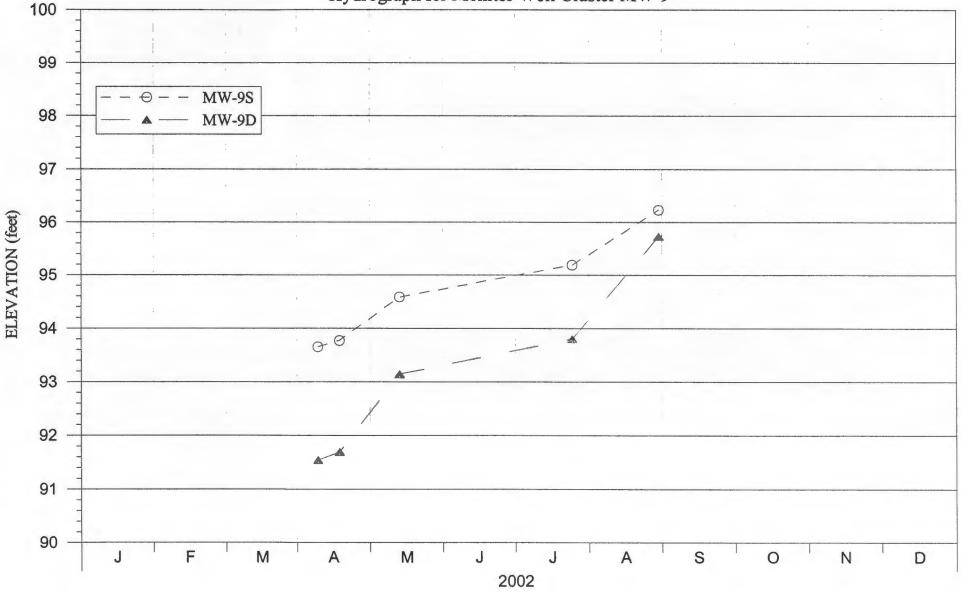


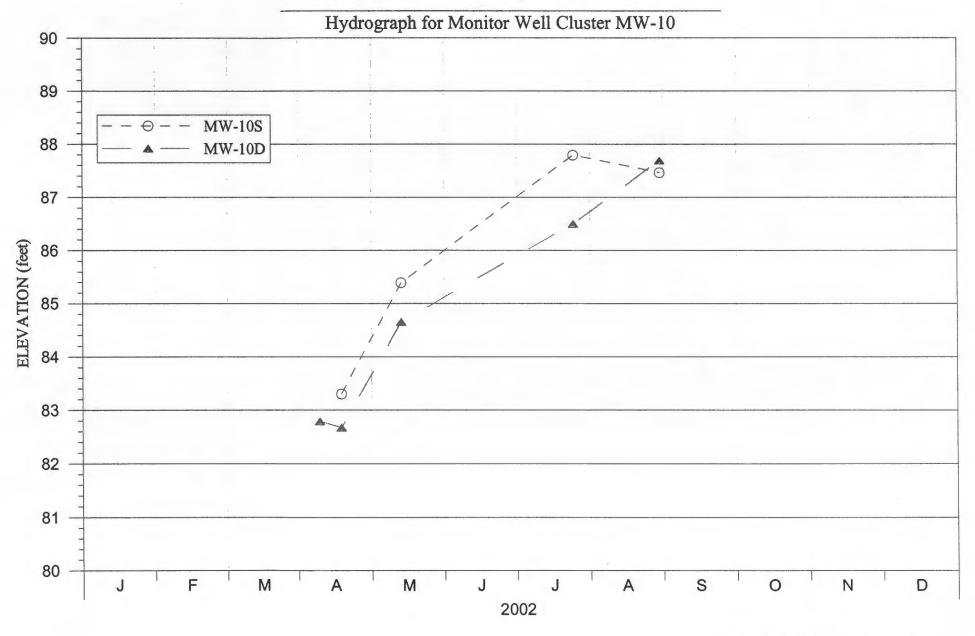




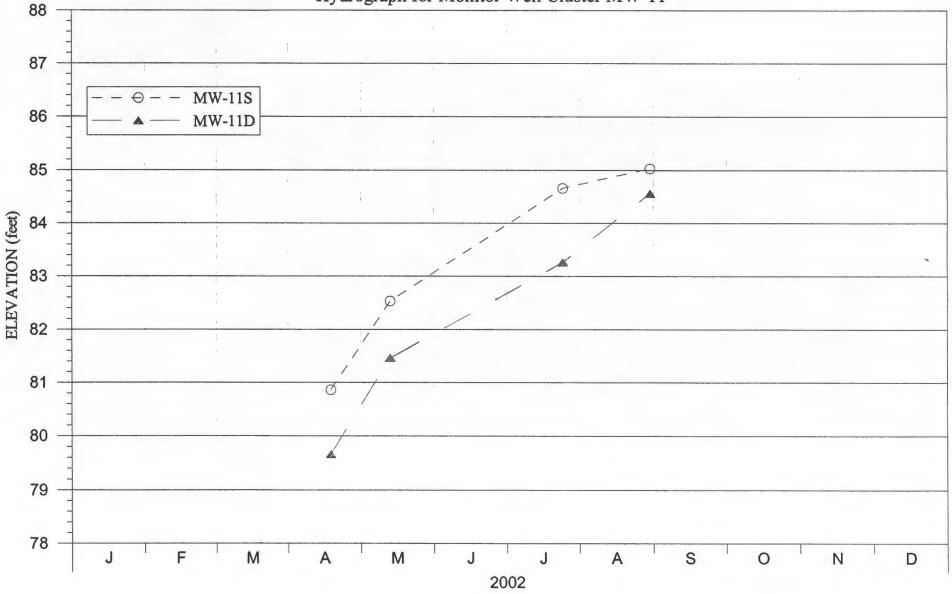


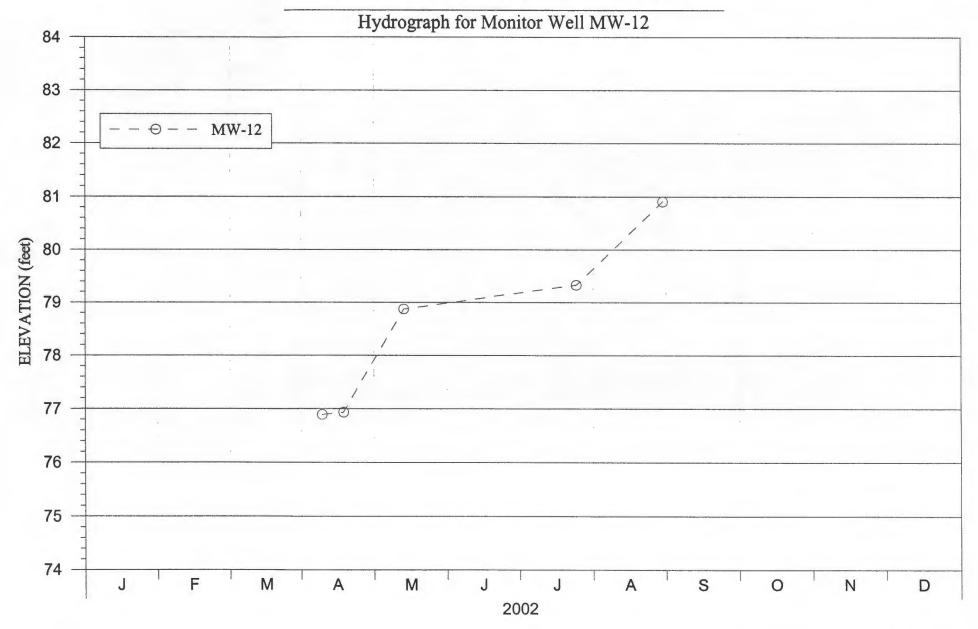
Hydrograph for Monitor Well Cluster MW-9



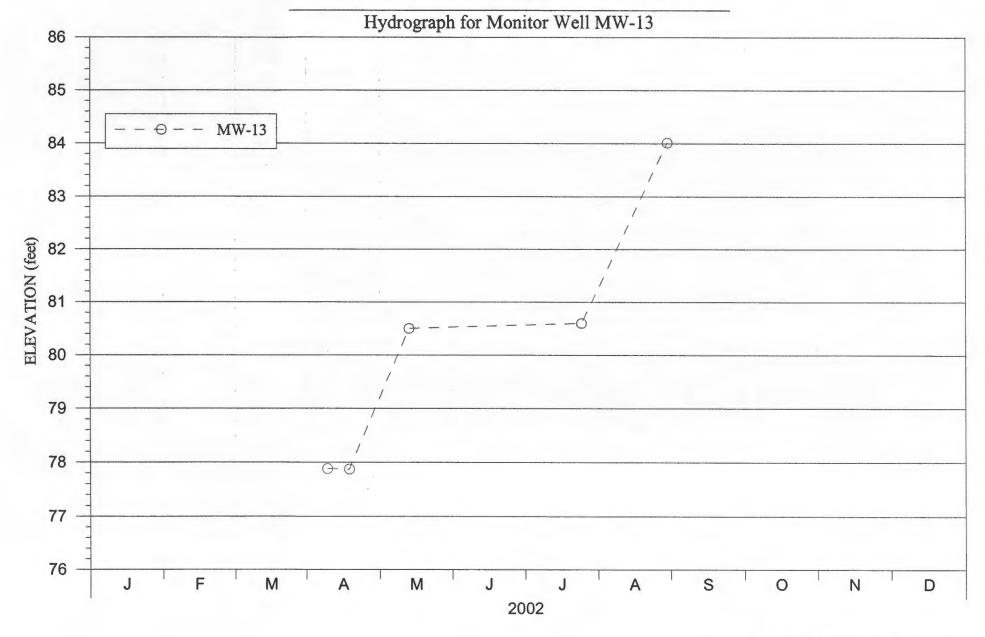


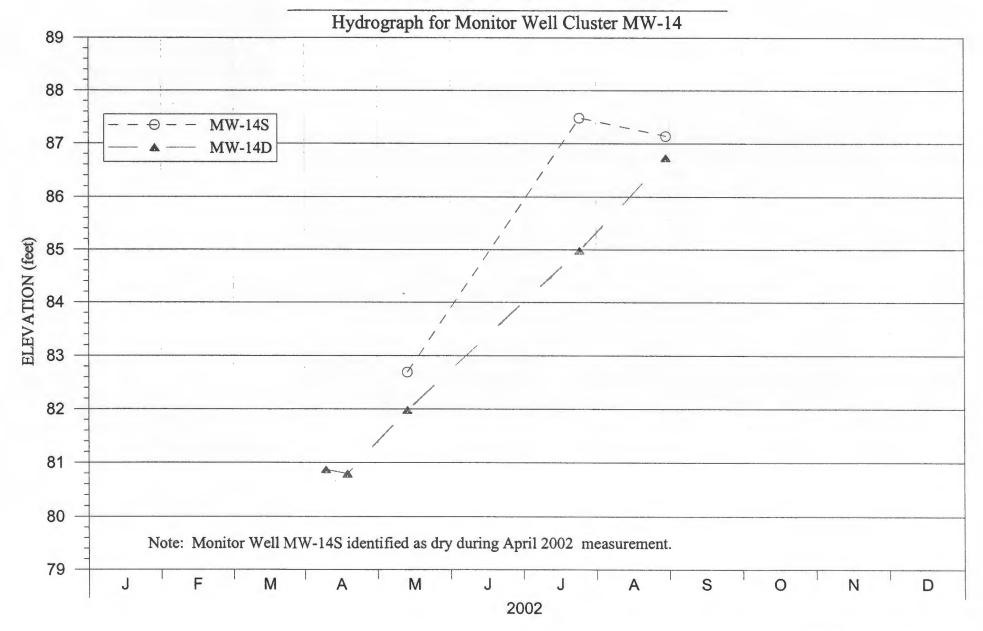
Hydrograph for Monitor Well Cluster MW-11





Leggette, Brashears & Graham, Inc.





Leggette, Brashears & Graham, Inc.

APPENDIX VII SLUG TEST RESULTS

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