SAIC
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GROUNDWATER MONITORING PROGRAM WESTCHESTER COUNTY AIRPORT FIRST SEMIANNUAL 2010 REPORT

SAIC Project 01-1633-00-9568-100

Prepared for:

Westchester County Airport

240 Airport Road
Suite 202
White Plains, NY 10604

August 2010

Science Applications International Corporation
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Groundwater Monitoring Program
Westchester County Airport
First Semiannual 2010 Report

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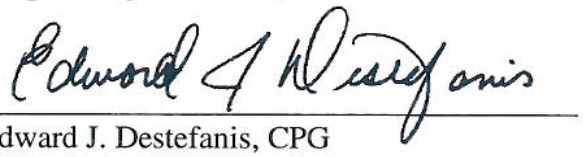
Respectfully submitted,



Edward J. Destefanis, CPG
Project Director

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1.0 INTRODUCTION

Science Applications International Corporation (SAIC) was retained by Westchester County Department of Transportation (WCDOT) to implement a groundwater monitoring program at the Westchester County Airport located in White Plains, New York. The primary purpose of the monitoring program is to determine the groundwater quality beneath the airport and the potential for groundwater migration toward Rye Lake and other surrounding water bodies. The field activities related to the groundwater monitoring program are conducted by SAIC on a semiannual basis.

2.0 GROUNDWATER MONITORING PROGRAM

The purpose of the groundwater monitoring program is to obtain data regarding groundwater quality in areas of concern and along the boundary of the airport. In addition, the program will be used for determining the subsurface groundwater flow regime in relation to the nearby surface water bodies.

The monitor well network consists of 57 monitor wells which are located at the airport. There are 31 regulatory control wells which are utilized to monitor groundwater quality in areas of concern. The remaining 26 wells are sentinel wells which are utilized to monitor the groundwater quality of the surrounding areas prior to discharging toward nearby surface water bodies such as Rye Lake. A summary of wells in the monitor well network and their status are presented on Table 1, and their locations are shown on Figure 1.

3.0 FIELD INVESTIGATION

The field activities associated with the groundwater monitoring program for the first semiannual sampling event occurred between May 24 and May 26, 2010. The field activities included well inspections, depth-to-groundwater measurements, and groundwater sampling. Details of each of these activities are summarized in the sections that follow.

3.1 Well Inspections

As part of the groundwater monitoring program, well inspections were conducted during the field activities. Each well is sealed with a locking watertight cap and is identified with an identification marking either on the outer well casing or on the concrete pad surrounding the well. Well caps and locks are replaced, as needed, and well access was improved in areas where vegetation was overgrown. Well inspections will continue to be conducted in conjunction with the groundwater sampling events or, in some instances, on an as-needed basis. The well inspections ensure that the well integrity, security, and access will be maintained for the duration of the program.

3.2 Groundwater Elevation Measurements

On May 24, 2010, water levels were measured in 56 wells of the monitor well network. The water level was not measured in the supply well because this well was inaccessible due to equipment installed in the well. The water level measurements were collected synoptically to ensure that data would be representative of the groundwater surfaces for that point in time. The water level measurements were used to calculate groundwater elevations throughout the airport, prepare groundwater elevation contour maps, determine the direction of groundwater flow, and determine the hydraulic gradient.

Prior to collecting water level measurements, each well was opened and allowed to equilibrate to atmospheric pressure. The water level and total well depth were measured from the top of the inner

polyvinyl chloride (PVC) well casing using an electronic water level indicator tape to an accuracy of 0.01 foot.

3.3 Groundwater Sampling

3.3.1 Sampling Procedure

On May 25 and 26, 2010, groundwater samples were collected from 57 wells in the monitor well network. The depth-to-water level and total depth of each well measured prior to sampling were used to calculate the standing volume of water in each well. Three standing volumes of water were then removed from each well to ensure that a representative groundwater sample of the aquifer was collected. The groundwater purged from the shallow wells was evacuated with a dedicated disposable bailer. The groundwater from the deeper bedrock wells was purged with a submersible pump or a peristaltic pump equipped with a check valve and dedicated tubing. The purge water was stored in a 55-gallon drum located in SAIC's field vehicle and then transferred to an on-site 550-gallon purge water tank for later disposition.

After three standing volumes were removed or, in the case of the bedrock wells, after field parameters became stable, a groundwater sample was collected from the well. Samples were transferred into laboratory-prepared containers and stored on ice in a cooler to maintain a constant temperature until delivered to the laboratory.

Quality assurance and quality control (QA/QC) samples, including a field and trip blank, accompanied the sample shipment. The trip blank, consisting of a laboratory-prepared sample, was included to document the quality of the samples during shipment. The field blank was prepared to document the quality of sampling equipment and consisted of a distilled water rinse of groundwater sampling equipment.

The groundwater samples were then delivered to American Analytical Laboratories, Inc. (AAL), a New York state-certified laboratory located in Farmingdale, New York, for analysis under chain-of-custody procedures.

3.3.2 Analysis Method

The groundwater samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, modified to include methyl tertiary-butyl ether (MTBE); semi-volatile organic compounds (SVOCs) by EPA Method 8270; ethylene and propylene glycol by EPA Method 8015; and Target Analyte List (TAL) total metals and TAL dissolved metals by Methods SW-846 6010 and 7470.

The QA/QC samples were analyzed for VOCs by EPA Method 8260, modified to include MTBE, SVOCs by Method SW-846 8270, ethylene and propylene glycol by EPA Method 8015, and TAL total metals by Methods SW-846 6010 and 7470.

4.0 INVESTIGATION RESULTS

4.1 Site Hydrogeology

The aquifer system is comprised of two units: a shallow unconfined overburden aquifer and the underlying bedrock aquifer. The shallow unconfined aquifer ranges in depth from 1.5 to 20 feet below grade (fbg) and consists of glacial outwash deposits like sand, gravel, clay, and silts. The lower part of the shallow unconfined aquifer also includes the uppermost weathered bedrock. The bedrock aquifer is composed of the fractured Manhattan Formation consisting of highly metamorphosed rocks. The Manhattan Formation includes three geologic units—Fordham Gneiss, Inwood Marble, and Manhattan Schist—which are highly metamorphosed.

4.2 Groundwater Elevation Measurements

Water levels were measured in 56 monitor wells on May 24, 2010. Depth-to-water measurements in all wells ranged from 0.05 feet to 20.73 feet. The depth to water in the 41 monitor wells completed in the shallow overburden aquifer ranged from 0.05 feet to 17.60 feet, while the depth to water in the 15 monitor wells completed in the bedrock aquifer ranged from 0.69 feet to 20.73 feet. The water level was not measured in the supply well, which was inaccessible and is part of a sealed irrigation system.

Groundwater elevations in the shallow aquifer ranged from 362.80 feet (FMW-4) to 430.88 feet (FMW-1R) above mean sea level (AMSL). Groundwater elevations in the bedrock aquifer ranged from 388.96 feet (XDDMW-10) to 429.64 feet (MW-41) AMSL. The fluid level measurements and calculated groundwater elevations for the monitor wells are summarized on Table 2.

4.3 Groundwater Flow

The shallow aquifer groundwater elevation contour map indicates that there is a groundwater divide present which represents a water table with a high relief in which groundwater flows in opposing

directions. The groundwater divide, also known as a flow divide, bisects the airport in a north-south direction. Therefore, groundwater to the west of the divide will flow westerly toward Rye Lake, while groundwater to the east of the divide will flow easterly toward Blind Brook. The hydraulic gradient west of the divide ranges from 0.021 foot per foot (ft/ft) to 0.075 ft/ft, while east of the divide ranges from 0.013 ft/ft to 0.017 ft/ft. The groundwater elevation contour map and groundwater flow directions for the shallow aquifer are shown on Figure 2.

The groundwater elevations in the bedrock aquifer represent the potentiometric surface in the aquifer, which is the level at which the water in an aquifer would rise in a well due to pressure. The bedrock aquifer groundwater elevation contour map indicates that groundwater flows to the southwest, having an average hydraulic gradient of 0.020 ft/ft. The groundwater elevation contour map and groundwater flow directions for the bedrock aquifer are shown on Figure 3.

4.4 Groundwater Analytical Results

The groundwater analytical results were tabulated and compared to the New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for GA water class for groundwater. For review purposes, only analytes detected in any of the samples during this groundwater sampling event are summarized on Table 3. Therefore, analytes not listed on the table were below laboratory detection limits in all of the monitor wells.

The groundwater sampling results indicated that of the 57 monitor wells which were sampled, VOCs were detected in 6 monitor wells above TOGS Guidance Values. SVOCs, ethylene glycol, and propylene glycol were not detected in any of the samples analyzed.

Due to the elevated turbidity in the groundwater, water samples were also collected for dissolved metals since the higher turbidity tends to bias the results of a total metals analysis. For this reason, the dissolved TAL metals analysis was used to compare to the TOGS Guidance Values. The dissolved TAL metals were detected above TOGS Guidance Values in 44 wells. The dissolved

metals which were detected above TOGS Guidance Values were iron, manganese, magnesium, zinc, and sodium. The groundwater samples also contained elevated dissolved concentrations of aluminum, calcium, and potassium, for which there is no guidance value. The dissolved metals that were detected above TOGS Guidance Values and the dissolved metals with elevated concentrations with no guidance value are also the primary elements that comprise the underlying bedrock in and around the airport.

Saprolite, which is a silt/clay-rich weathered bedrock, overlies the competent bedrock and is most likely the reason for the occurrences of elevated concentrations of both total and dissolved metals in the groundwater. After reviewing the boring logs for the monitor wells, it was determined that the boring for each well was terminated at the top of the bedrock contact but within the saprolitic material. This explains the highly turbid water samples and elevated concentrations of total and dissolved metals in the groundwater samples collected. Based on the data reviewed and the nature of the rocks underlying the airport, we believe that the occurrences of metals observed in the groundwater samples are naturally occurring. For this reason, the metals results will not be further discussed, but the results are summarized on Table 3.

4.4.1 Sentinel Wells

Groundwater sampling results indicated that of the 26 sentinel wells sampled, VOCs were detected in 2 wells above TOGS Guidance Values—FMW-14 and FMW-34R. The analytes detected above TOGS Guidance Values were chlorobenzene, vinyl chloride, cis-1,2-dichloroethene, and trans-1,2-dichloroethene. SVOCs were not detected above TOGS Guidance Values in any of the samples analyzed. Groundwater sampling results also indicated that ethylene glycol and propylene glycol were below TOGS Guidance Values in all sentinel wells. The laboratory results for this groundwater sampling event are summarized on Table 3.

4.4.2 Regulatory Control Wells

Groundwater sampling results indicated that of the 31 regulatory control wells which were sampled, VOCs were detected in 4 wells above TOGS Guidance Values—MW-43, XDDMW-7R, XDDMW-12, and TEXMW-1. The analytes detected above TOGS Guidance Values were chloroethane, cis-1,2-dichloroethene, 1,1-dichloroethane, 1,1-dichloroethene, tetrachloroethene, trichloroethene, vinyl chloride, and MTBE. SVOCs were not detected above TOGS Guidance Values in any of the samples analyzed. Groundwater sampling results also indicated that ethylene glycol and propylene glycol were below TOGS Guidance Values in all regulatory control wells. The laboratory results for this groundwater sampling event are summarized on Table 3.

5.0 WELL INSPECTION REPORTS

Well inspection reports were prepared for each monitor well to summarize groundwater level fluctuations and groundwater quality variations in greater detail throughout the groundwater monitoring program. The well inspection reports will assist in evaluating if groundwater quality in impacted areas is improving through natural attenuation, as well as monitoring groundwater quality in sentinel wells.

Each report includes the baseline groundwater sampling results, as well as each subsequent groundwater sampling event, and provides a historical record of monitoring results. The well inspection reports can be found in Appendix A.

6.0 GROUNDWATER QUALITY EVALUATION

A comparative evaluation of the groundwater quality results from this sampling event and previous sampling events was performed. Each area is evaluated using existing wells in the monitoring well network as outlined in the groundwater monitoring program. The well inspection reports, which are discussed in Section 5.0, provide a historical data base for each well for the duration of the groundwater monitoring program. The following is a discussion of groundwater quality for each of the areas of concern.

6.1 Area 8 - Hangar D-1, Bay 2, NYSDEC Site No. 360037

The groundwater in Area 8 has been impacted by VOCs, specifically chlorinated solvents. Monitor wells PMMW-1, TEXMW-1, XDDMW-3, XDDMW-5, XDDMW-7R, XDDMW-10, XDDMW-11, XDDMW-12, and XDDMW-13 were selected to monitor the groundwater quality in this area. This area was previously operated by Mobil Oil Corporation and is still under investigation. Woodward and Curran (W&C), on behalf of ExxonMobil, has conducted groundwater investigations for the presence of chlorinated solvents. W&C installed a soil vapor extraction system (SVES) in accordance with the approved remedial action work plan to further reduce chlorinated solvents in the groundwater. The installation of the SVES was completed on February 2, 2004, and the system is operational.

Groundwater sampling results from May 2010 indicated that VOCs were below TOGS Guidance Values in all wells, with the exception of monitor wells XDDMW-7R, XDDMW-12, and TEXMW-1. In addition, SVOCs, ethylene glycol, and propylene glycol were below TOGS Guidance Values in all wells.

The VOCs which were detected above TOGS Guidance Values were dissolved chlorinated solvents—cis-1,2-dichloroethene, 1,1-dichloroethane, 1,1-dichloroethene, trichloroethene, and vinyl chloride. The concentrations of the chlorinated solvents detected in these wells have increased since the last sampling event conducted in November 2009. Overall, the concentrations of the VOCs

detected in this area have steadily decreased over time, which is most likely attributed to remedial efforts conducted by W&C.

Area 8 is located to the east of the groundwater divide for the shallow aquifer; therefore, the groundwater flow is to the southeast and away from Rye Lake. For the bedrock aquifer, groundwater flow is to the southeast. The downgradient monitor wells XDDMW-11 and XDDMW-13 are below TOGS Guidance Values, and the data suggest that the detected VOCs are localized beneath Hangar D and do not appear to be migrating. Because groundwater flows to the southeast, the water chemistry would suggest that there is no threat to Rye Lake.

6.2 Area 12 - Fuel Tank Farm, NYSDEC Spill No. 93-09928 and Area 16 - Former Gasoline Service Station, NYSDEC Spill No. 98-11676

The groundwater in Areas 12 and 16 has been impacted by VOCs. Monitor well MW-5, located at the fuel tank farm, was selected to monitor the groundwater quality in this area. Both the fuel tank farm and the former gasoline service station have been the subject of previous investigations. SAIC conducts groundwater monitoring in this area on a quarterly basis through a separate groundwater monitoring program. Groundwater sampling results from May 2010 indicated that VOCs, SVOCs, ethylene glycol, and propylene glycol were below TOGS Guidance Values in well MW-5.

Areas 12 and 16 are located to the east of the groundwater divide for the shallow aquifer; therefore, the groundwater flow is to the southeast and away from Rye Lake. Because the concentrations are below TOGS Guidance Values, the water chemistry would suggest that there is no threat to Rye Lake.

6.3 Area 25 - Aircraft Rescue and Firefighting Burn Pit, NYSDEC Spill No. 9911702

The Aircraft Rescue and Firefighting (ARFF) burn pit was used for fire fighting and training exercises in which aviation fuel was repeatedly burned and extinguished and had been impacted by VOCs and SVOCs. Monitor wells FMW-6, FMW-7, FMW-8, FMW-23, MW-50, BRMW-1, and

BRMW-2 were selected to monitor the groundwater quality in this area. Monitor wells FMW-6, FMW-7, and FMW-8 are screened in the shallow aquifer, while FMW-23, BRMW-1, BRMW-2, and MW-50 are screened in the bedrock aquifer.

Groundwater sampling results from May 2010 indicated that VOCs were below TOGS Guidance Values in all wells. In addition, ethylene glycol and propylene glycol were below TOGS Guidance Values in all wells. Historically, FMW-23 has been the only well in Area 25 that has contained VOCs above TOGS Guidance Values—more specifically, cis-1,2-dichloroethene, and vinyl chloride. The VOCs which were detected above TOGS Guidance Values in well FMW-23 were cis-1,2-dichloroethene and vinyl chloride. A decrease in the concentration of cis-1,2-dichloroethene and vinyl chloride has been observed when compared to the November 2009 sampling results.

Area 25 is located to the west of the groundwater divide for the shallow aquifer; therefore, the groundwater flow in this area is to the northwest toward Rye Lake. The concentrations of VOCs, SVOCs, ethylene glycol, and propylene glycol were below TOGS Guidance Values in shallow aquifer monitor wells FMW-6, FMW-7, and FMW-8. Therefore, the water chemistry would suggest that there is no threat to Rye Lake.

For the bedrock aquifer, the regional groundwater flow is to the southwest, but the local groundwater flow in this area is to the north. The VOC concentrations in FMW-23 have decreased to below TOGS Guidance Values. In addition, adjacent monitor wells BRMW-1 and BRMW-2, as well as downgradient monitor well MW-50, did not contain VOCs above TOGS Guidance Values.

In addition, the concentrations of SVOCs, ethylene glycol, and propylene glycol were below TOGS Guidance Values in bedrock wells FMW-23, MW-50, BRMW-1, and BRMW-2. Therefore, the water chemistry would suggest that there is no threat to Rye Lake.

6.4 Areas 26 and 27 - Former Hangar B, NYSDEC Spill No. 98-11689

The groundwater in Areas 26 and 27 has been impacted by VOCs and SVOCs related to the tank closure activities. Monitor wells FMW-10, FMW-19, and FMW-30, which were originally selected to monitor the groundwater quality in this area, were destroyed during construction activities related to the Taxiway L extension project conducted in 2002.

In order to monitor groundwater in this area, four well clusters containing eight monitor wells—four shallow overburden wells (MW-44, MW-45, MW-46, and MW-47) and four bedrock wells (MW-42, MW-43, MW-48, and MW-49)—were installed both upgradient and downgradient from the former Hangar B septic field site.

The area known as the former Hangar B septic field site has been remediated under the NYSDEC Voluntary Cleanup Program. On May 16, 2002, WCDOT entered into a voluntary cleanup agreement with NYSDEC to facilitate the remediation and closure of this site. The site is referenced by NYSDEC Site No. V-00611-3 under the Voluntary Cleanup Program. Leggette, Brashears, and Graham (LBG) conducted a site investigation in 2003 and submitted the final report to NYSDEC on October 27, 2003. In July 2005, LBG completed an Interim Remedial Measure (IRM) to remove residual impacted soil which was identified during the site investigation. On February 21, 2006, a final closure report was submitted to the NYSDEC, and the closure of the site is pending.

Groundwater sampling results from May 2010 indicated that VOCs, SVOCs, ethylene glycol, and propylene glycol were below TOGS Guidance Values in all wells. However, MTBE was detected above TOGS Guidance Values in bedrock well MW-43 (42 micrograms per liter [µg/L]). The concentration of MTBE which has been observed in MW-43 has increased when compared to the November 2008 sampling results.

Concentrations of MTBE, which have been detected above TOGS Guidance Values in MW-44 and MW-46 in the past, have decreased to non-detectable concentrations since 2005 sampling events. Overall, the concentrations of MTBE detected in this area have steadily decreased over time. In addition, the downgradient monitor well GEMW-2 did not contain concentrations of VOCs, SVOCs, ethylene glycol, and propylene glycol above TOGS Guidance Values.

Areas 26 and 27 are located to the west of the groundwater divide for the shallow aquifer; therefore, the groundwater flow in this area is south-southwest toward Rye Lake. Based on overall decreasing concentrations of MTBE in monitor wells in this area and the favorable groundwater quality results of downgradient GEMW-2, the data would suggest that MTBE detected in MW-43 and other wells has been naturally attenuating and is not migrating downgradient. Therefore, the water chemistry would suggest that there is no threat to Rye Lake.

6.5 Area 29 - Department of Public Works Staging Area

Previous investigations indicated that the soil in this area may have been impacted by petroleum hydrocarbons and contained VOCs and SVOCs. In April 2007, two monitor wells were installed in the vicinity of the Department of Public Works (DPW) Staging Area. Monitor wells DPW-1 and DPW-2 were completed as shallow overburden wells to monitor groundwater in this area as required under the Voluntary Cleanup Program. Monitor wells GEMW-2, MW-202, DPW-1, and DPW-2 were selected to monitor the groundwater quality in this area.

On August 28, 2003, WCDOT entered into a voluntary cleanup agreement with NYSDEC to facilitate the remediation and closure of this site. The site is referenced by NYSDEC Site No. V-00652-3 under the Voluntary Cleanup Program.

Groundwater sampling results from May 2010 indicated that VOCs, SVOCs, ethylene glycol, and propylene glycol were below TOGS Guidance Values in wells GEMW-2, MW-202, DPW-1, and DPW-2. Area 29 is located to the west of the groundwater divide for the shallow aquifer; therefore, the groundwater flow in this area is west toward Rye Lake. Therefore, the water chemistry would suggest that there is no threat to Rye Lake.

6.6 Area 34 - Former Air National Guard - Septic No. 3, NYSDEC Spill No. 0008501

Results of previous investigations indicate that the groundwater in Area 34 has been impacted by VOCs, specifically chlorinated solvents, via a septic tank and leach field which were used in the past by the Air National Guard. The area is being remediated under the NYSDEC Voluntary Cleanup Program (Site No.V-00499-3). WCDOT has entered into a voluntary cleanup agreement with NYSDEC to facilitate the remediation and closure of this site.

Monitor wells FMW-12, FMW-31, FMW-32, FMW-33, FMW-34R, FMW-35, FMW-36, FMW-37, and FMW-40 were selected to monitor the groundwater quality in this area. Monitor wells FMW-12, FMW-31, FMW-32, FMW-33, FMW-34R, FMW-37, and FMW-40 are screened in the shallow aquifer, while FMW-35 and FMW-36 are screened in the bedrock aquifer.

Groundwater sampling results from May 2010 indicated that VOCs were below TOGS Guidance Values in all shallow monitor wells, with the exception of FMW-34R. The dissolved chlorinated solvents detected above TOGS Guidance Values in this well were vinyl chloride, trans-1,2-dichloroethene, and cis-1,2-dichloroethene. In addition, SVOCs ethylene glycol and propylene glycol were below TOGS Guidance Values in all shallow monitor wells.

Groundwater sampling results from May 2010 indicated that VOCs were below TOGS Guidance Values in all bedrock monitor wells. In addition, SVOCs, ethylene glycol, and propylene glycol were below TOGS Guidance Values in all bedrock monitor wells.

Area 34 is located to the east of the groundwater divide for the shallow aquifer; therefore, the groundwater flow is to the southeast and away from Rye Lake. Therefore, the water chemistry would suggest that there is no threat to Rye Lake.

6.7 Study Area Boundary and General Site Coverage

Several monitor wells were included in the groundwater monitoring program in order to evaluate the groundwater quality along the airport perimeter and in areas to provide additional site coverage where groundwater quality data were lacking. These monitor wells are FMW-1R, FMW-2R, FMW-3, FMW-4, FMW-11, FMW-13R, FMW-14, FMW-15, FMW-16, FMW-24, FMW-25, FMW-26, WW-1, and the supply well.

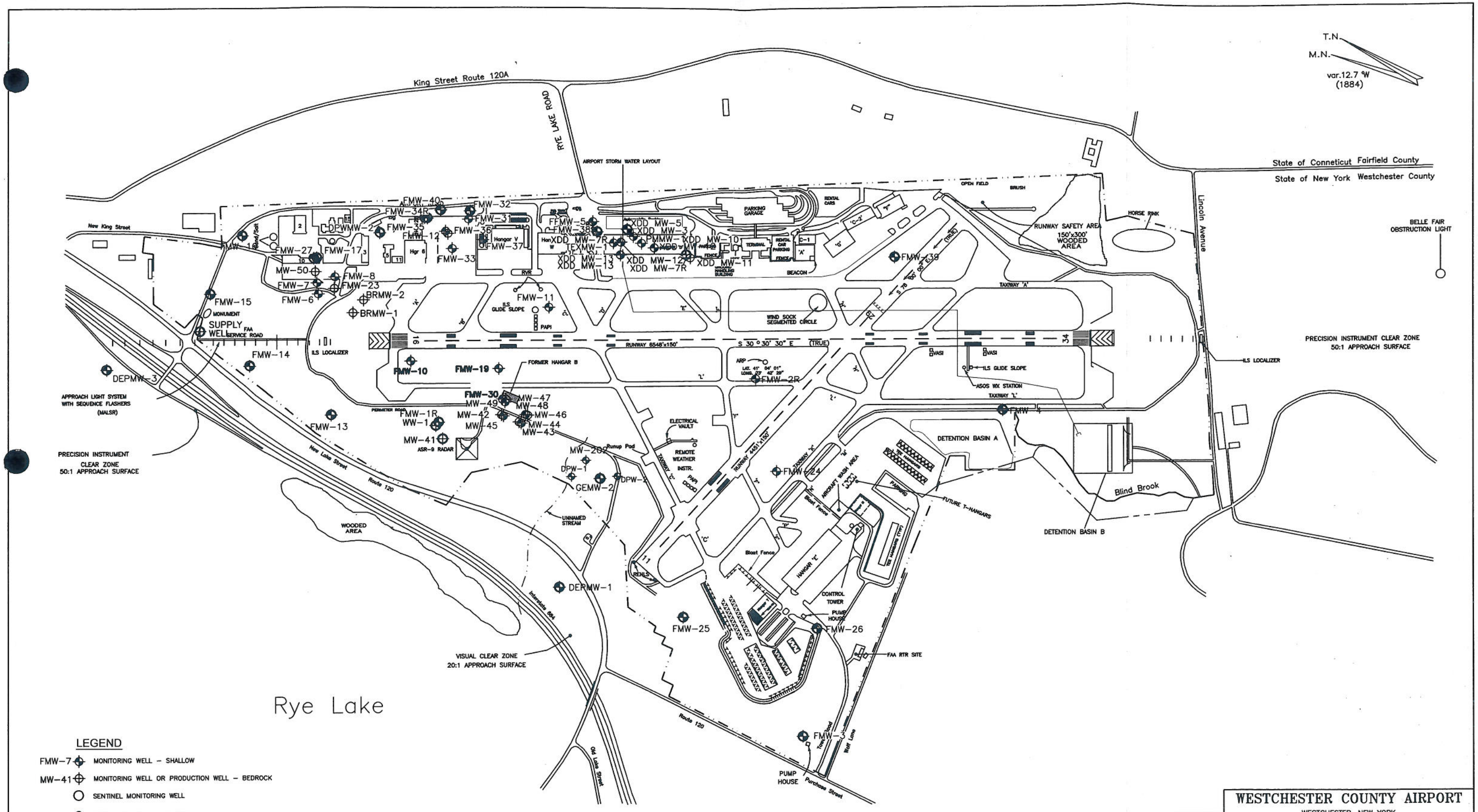
Groundwater sampling results from May 2010 indicated that SVOCs ethylene glycol and propylene glycol were below TOGS Guidance Values in all monitor wells selected for this area. In addition, results from this sampling event indicated that VOCs were below TOGS Guidance Values in all wells, with the exception of FMW-14, which contained chlorobenzene (8.2 µg/L) and 4-isopropyltoluene (7.5 µg/L). The concentration of chlorobenzene which has been detected in FMW-14 has decreased when compared to the November 2008 sampling results.

In response to the occurrence of chlorobenzene in FMW-14, a bioremediation pilot study and groundwater investigation were conducted by SAIC in November 2007. The purpose of the study was to characterize groundwater quality in and adjacent to FMW-14 and to initiate a bioremediation program to address the chlorobenzene.

The groundwater investigation in this area included the sampling of groundwater from 31 on-site borings and 1 downgradient off-site boring. The water quality results indicated that chlorobenzene was detected above TOGS Guidance Values in only three samples. In addition, the groundwater sample collected from the off-site downgradient boring did not contain detectable concentrations of chlorobenzene. The results of the investigation are summarized in SAIC's March 10, 2008, report entitled Westchester County Airport, Subsurface Investigation Enhanced Bioremediation Project, which was submitted to WCDOT.

Monitor well FMW-14 is located to the west of the groundwater divide for the shallow aquifer; therefore, the groundwater flow in this area is west toward Rye Lake. Based on the water quality results from the groundwater investigation, as well as the non-detectable concentrations exhibited in the downgradient off-site location, the water quality results would suggest that there is no off-site migration of VOCs and therefore no threat to Rye Lake.

FIGURES



LEGEND

- FMW–7 ⊕ MONITORING WELL – SHALLOW
- MW–41 ⊕ MONITORING WELL OR PRODUCTION WELL – BEDROCK
- ○ SENTINEL MONITORING WELL
- STREAM 1 ● STREAM SAMPLING LOCATION

NOTE:
BASE MAP TAKEN FROM FIRST ENVIRONMENT REPORT "SITE INVESTIGATION REPORT AND GROUND–WATER MONITORING PROGRAM, WESTCHESTER COUNTY AIRPORT, FEBRUARY 2001."

MONITOR WELLS FMW–10, FMW–19 AND FMW–30 DESTROYED DURING CONSTRUCTION ACTIVITIES.

Verify Scale
bar is one inch on original drawing
0' 400'
if not one inch on this sheet, adjust scales accordingly

WESTCHESTER COUNTY AIRPORT

WESTCHESTER, NEW YORK

SITE MAP

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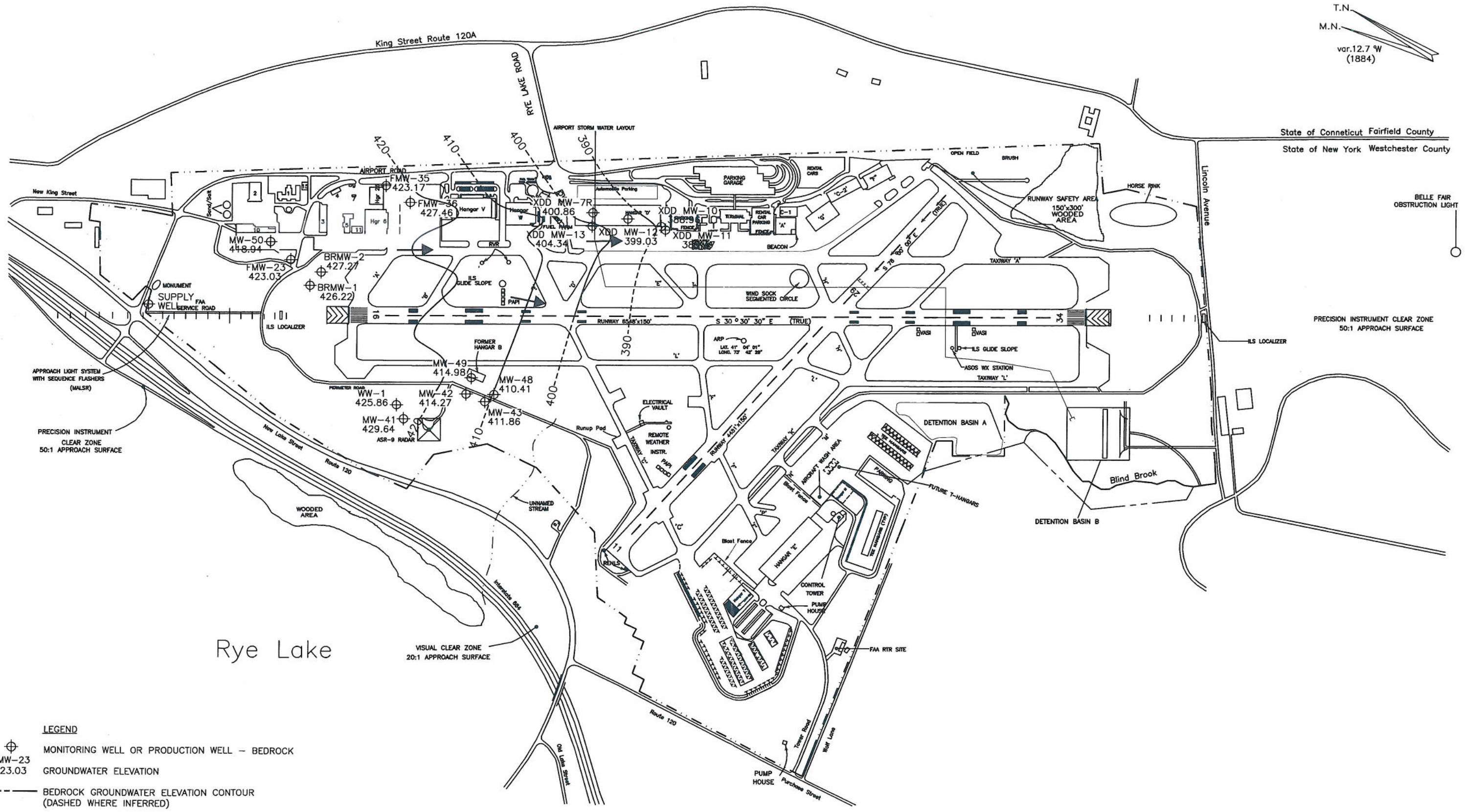

LEGEND

- ⊕ FMW-23 / 423.03 — MONITORING WELL OR PRODUCTION WELL – BEDROCK / GROUNDWATER ELEVATION
- 420 - - — BEDROCK GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- → GROUNDWATER FLOW DIRECTION

NOTE:
BASE MAP TAKEN FROM FIRST ENVIRONMENT REPORT "SITE INVESTIGATION REPORT AND GROUND-WATER MONITORING PROGRAM, WESTCHESTER COUNTY AIRPORT, FEBRUARY 2001."

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0' — 400'
if not one inch on this sheet, adjust scales accordingly

WESTCHESTER COUNTY AIRPORT

WESTCHESTER, NEW YORK

BEDROCK AQUIFER GROUNDWATER CONTOUR MAP – MAY 24, 2010

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date 10/12/10	date	date	
job no. 01-1633-00-9568-100		file no. 9568-003.dwg	

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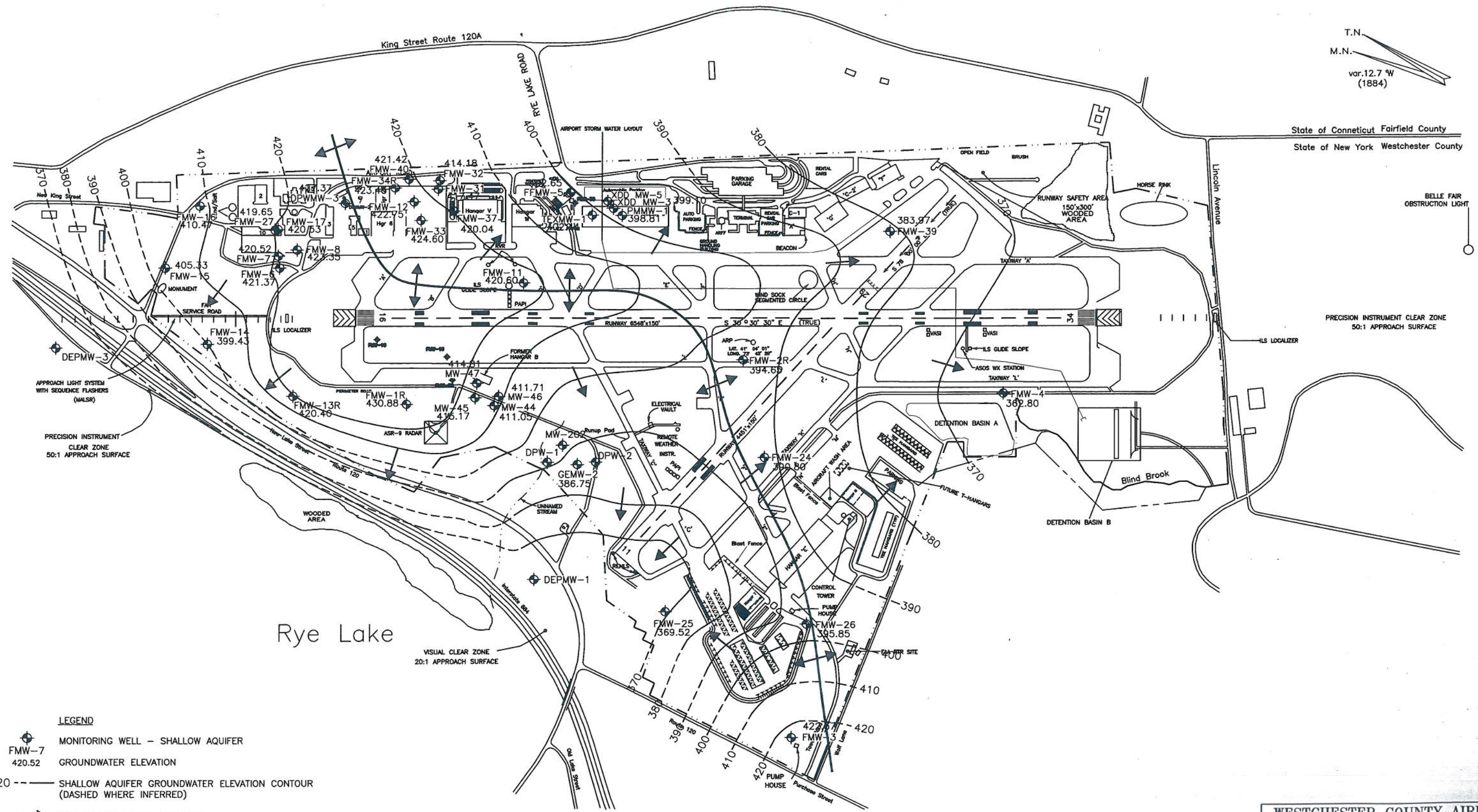

LEGEND

- FMW–7 — MONITORING WELL – SHALLOW AQUIFER
- 420.52 — GROUNDWATER ELEVATION
- 420 – – – — SHALLOW AQUIFER GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- → GROUNDWATER FLOW DIRECTION
- ═══ APPROXIMATE GROUNDWATER DIVIDE

NOTE:

BASE MAP TAKEN FROM FIRST ENVIRONMENT REPORT "SITE INVESTIGATION REPORT AND GROUND–WATER MONITORING PROGRAM, WESTCHESTER COUNTY AIRPORT, FEBRUARY 2001."

MONITOR WELLS FMW–10, FMW–19 AND FMW–30 DESTROYED DURING CONSTRUCTION ACTIVITIES.

Verify Scale

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0' ——— 400'

if not one inch on this sheet, adjust scales accordingly

WESTCHESTER COUNTY AIRPORT

WESTCHESTER, NEW YORK

SHALLOW AQUIFER GROUNDWATER CONTOUR MAP – MAY 24, 2010

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date 10/12/10	date	date	
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SAIC From Science to Solutions

TABLES

Table 1
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Monitor Well Network

Monitor Well Location	Well Type	Aquifer Screened	Area Monitored	Notes
FMW-1R	Sentinel	Overburden	Areas 19 & 20, Study Area Boundary	Was both but considered Sentinel
FMW-2R	Reg. Control	Overburden	General Site Coverage	
FMW-3	Sentinel	Overburden	Study Area Boundary	
FMW-4	Sentinel	Overburden	Study Area Boundary	
FMW-6	Reg. Control	Overburden	Area 25	
FMW-7	Reg. Control	Overburden	Area 25	
FMW-8	Reg. Control	Overburden	Area 25	
FMW-11	Reg. Control	Overburden	General Site Coverage	
FMW-12	Reg. Control	Overburden	Area 34	
FMW-13R	Sentinel	Overburden	Study Area Boundary	Replaced destroyed FMW-13
FMW-14	Sentinel	Overburden	Study Area Boundary	
FMW-15	Sentinel	Overburden	Study Area Boundary	
FMW-16	Sentinel	Overburden	Study Area Boundary	
FMW-17	Sentinel	Overburden	Area 36	Changed to Sentinel after 6/01 sampling
FMW-23	Reg. Control	Bedrock	Area 25	
FMW-24	Reg. Control	Overburden	General Site Coverage	
FMW-25	Sentinel	Overburden	Study Area Boundary	
FMW-26	Sentinel	Overburden	Study Area Boundary	
FMW-27	Sentinel	Overburden	Area 36	Changed to Sentinel after 6/01 sampling
FMW-31	Reg. Control	Overburden	Area 34	
FMW-32	Sentinel	Overburden	Area 34, Study Area Boundary	Was both but considered Sentinel
FMW-33	Reg. Control	Overburden	Area 34	
FMW-34R	Sentinel	Overburden	Area 34, Study Area Boundary	Replaced destroyed FMW-34
FMW-35	Sentinel	Bedrock	Area 34, Study Area Boundary	Was both but considered Sentinel
FMW-36	Reg. Control	Bedrock	Area 34	
FMW-37	Reg. Control	Overburden	Area 34	
FMW-39	Sentinel	Overburden	Study Area Boundary	
FMW-40	Sentinel	Overburden	Area 34, Study Area Boundary	Was both but considered Sentinel
MW-41	Sentinel	Bedrock	Study Area Boundary	
MW-42	Reg. Control	Bedrock	Areas 26 & 27	
MW-43	Reg. Control	Bedrock	Areas 26 & 27	
MW-44	Reg. Control	Overburden	Areas 26 & 27	
MW-45	Reg. Control	Overburden	Areas 26 & 27	
MW-46	Reg. Control	Overburden	Areas 26 & 27	
MW-47	Reg. Control	Overburden	Areas 26 & 27	
MW-48	Reg. Control	Bedrock	Areas 26 & 27	
MW-49	Reg. Control	Bedrock	Areas 26 & 27	
MW-50	Reg. Control	Bedrock	Area 25	
BRMW-1	Sentinel	Bedrock	Area 25	
BRMW-2	Sentinel	Bedrock	Area 25	
WW-1	Sentinel	Bedrock	Study Area Boundary	
SUPPLY WELL	Sentinel	Bedrock	Study Area Boundary	
DPWMW-3	Sentinel	Overburden	Area 19	Replaced damaged DPWMW-2
GEMW-2	Sentinel	Overburden	Area 29, Study Area Boundary	Was both but considered Sentinel
TEXMW-1	Reg. Control	Overburden	Areas 8 & 9	
XDDMW-3	Reg. Control	Overburden	Areas 8 & 9	
XDDMW-5	Sentinel	Overburden	Areas 8 & 9, Study Area Boundary	Was both but considered Sentinel
XDDMW-7R	Reg. Control	Bedrock	Areas 8 & 9	
XDDMW-10	Sentinel	Bedrock	Areas 8 & 9, Study Area Boundary	Was both but considered Sentinel
XDDMW-11	Reg. Control	Bedrock	Areas 8 & 9	
XDDMW-12	Reg. Control	Overburden	Areas 8 & 9	
XDDMW-13	Reg. Control	Overburden	Areas 8 & 9	
MW-5	Sentinel	Overburden	Areas 12 & 16, Study Area Boundary	Replaced FMW-38 (Fuel Farm Well)
PMMW-1	Reg. Control	Overburden	Areas 8 & 9	
DPW-1	Reg. Control	Overburden	DPW Staging Area	
DPW-2	Reg. Control	Overburden	DPW Staging Area	
MW-202	Reg. Control	Overburden	DPW Staging Area	

Table 2
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Groundwater Elevation Measurements

Well	Date	Casing Elevation (feet MSL)	Depth to Groundwater (feet)	Groundwater Elevation (feet MSL)
FMW-1R	5/24/2010	440.90	10.02	430.88
FMW-2R	5/24/2010	398.60	3.95	394.65
FMW-3	5/24/2010	428.42	6.05	422.37
FMW-4	5/24/2010	366.62	3.82	362.80
FMW-6	5/24/2010	424.75	3.38	421.37
FMW-7	5/24/2010	423.72	3.20	420.52
FMW-8	5/24/2010	423.40	0.05	423.35
FMW-11	5/24/2010	424.36	3.76	420.60
FMW-12	5/24/2010	435.45	12.70	422.75
FMW-13R	5/24/2010	427.87	7.47	420.40
FMW-14	5/24/2010	404.69	5.26	399.43
FMW-15	5/24/2010	415.29	9.96	405.33
FMW-16	5/24/2010	416.20	5.73	410.47
FMW-17	5/24/2010	422.37	1.84	420.53
FMW-23	5/24/2010	423.72	0.69	423.03
FMW-24	5/24/2010	394.21	3.41	390.80
FMW-25	5/24/2010	375.35	5.83	369.52
FMW-26	5/24/2010	404.79	8.94	395.85
FMW-27	5/24/2010	421.89	2.24	419.65
FMW-31	5/24/2010	428.37	10.90	417.47
FMW-32	5/24/2010	430.78	16.60	414.18
FMW-33	5/24/2010	433.62	9.02	424.60
FMW-34R	5/24/2010	441.05	17.60	423.45
FMW-35	5/24/2010	440.53	17.36	423.17
FMW-36	5/24/2010	435.42	7.96	427.46
FMW-37	5/24/2010	425.71	5.67	420.04
FMW-39	5/24/2010	388.77	4.80	383.97
FMW-40	5/24/2010	428.93	7.51	421.42
WW-1	5/24/2010	443.76	18.95	424.81
SUPPLY WELL	5/24/2010	----	NM	----
DPWMW-3	5/24/2010	435.02	7.65	427.37
GEMW-2	5/24/2010	402.25	15.50	386.75
TEXMW-1	5/24/2010	411.72	9.28	402.44
XDDMW-3	5/24/2010	409.54	10.44	399.10
XDDMW-5	5/24/2010	----	8.55	----
XDDMW-7R	5/24/2010	409.46	8.60	400.86
XDDMW-10	5/24/2010	409.69	20.73	388.96
XDDMW-11	5/24/2010	409.19	19.72	389.47
XDDMW-12	5/24/2010	409.48	10.45	399.03
XDDMW-13	5/24/2010	411.59	7.25	404.34
PMMW-1	5/24/2010	408.93	10.12	398.81
MW-41	5/24/2010	441.62	11.98	429.64
MW-42	5/24/2010	423.08	8.81	414.27
MW-43	5/24/2010	417.08	5.22	411.86
MW-44	5/24/2010	417.66	6.61	411.05
MW-45	5/24/2010	421.84	6.67	415.17
MW-46	5/24/2010	426.17	14.46	411.71
MW-47	5/24/2010	428.90	14.09	414.81
MW-48	5/24/2010	425.51	15.10	410.41
MW-49	5/24/2010	428.26	13.28	414.98
MW-50	5/24/2010	424.07	5.13	418.94
BRMW-1	5/24/2010	429.62	3.40	426.22
BRMW-2	5/24/2010	431.33	4.06	427.27
MW-5	5/24/2010	412.09	9.44	402.65
DPW-1	5/24/2010	----	9.77	----
DPW-2	5/24/2010	----	3.40	----
MW-202	5/24/2010	----	9.60	----

Note:
NM = Not Measured

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	FMW-1R 5/25/2010	FMW-2R 5/26/2010	FMW-3 5/26/2010	FMW-4 5/26/2010	FMW-6 5/25/2010	FMW-7 5/25/2010	FMW-8 5/25/2010	FMW-11 5/26/2010	FMW-12 5/25/2010	FMW-13R 5/25/2010	FMW-14 5/25/2010	FMW-15 5/25/2010
Volatile Organic Compounds (ug/l) ***EPA Method 8260***															
Benzene	74-43-2	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	56-23-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	ND
Chloroform	67-66-3	7	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	3	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.6	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3	0.5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	99-87-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	75-09-2	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4 Trichlorobenzene	120-82-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	75-01-4	2	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	62-64-1	50	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	75-15-0	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	108-10-1	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1330-20-7	5	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-t-Butyl Ether (MTBE)	1634-04-4	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (ug/l) ***EPA Method 8270***															
Phenol	108-95-1	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	100-51-6	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3+4-Methylphenol	106-44-5/108-39-4	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	65-85-0	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	111-91-1	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	84-74-2	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	206-44-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	129-00-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	218-01-9	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	117-81-7	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonhalogenated Organic Compounds (ug/l) ***EPA Method 8015 (Selected Compounds)***															
Propylene Glycol	57-55-6	--	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylene Glycol	107-21-1	50	64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	FMW-1R 5/25/2010	FMW-2R 5/26/2010	FMW-3 5/26/2010	FMW-4 5/26/2010	FMW-6 5/25/2010	FMW-7 5/25/2010	FMW-8 5/25/2010	FMW-11 5/26/2010	FMW-12 5/25/2010	FMW-13R 5/25/2010	FMW-14 5/25/2010	FMW-15 5/25/2010
Total Metals (mg/l) [Unfiltered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	159	7.78	54.7	5.76	73.3	8.34	121	15.2	48	30.4	16.2	135
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	0.0268	ND	ND	ND	0.0251	ND	ND	ND	ND	ND	ND	0.0511
Barium	7440-39-3	1	0.020	2.26	0.153	0.887	0.15	0.782	0.105	1.68	0.203	0.727	0.314	0.242	1.52
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	41.2	68.3	54.9	26	124	59.1	97.8	10.2	63.6	18.1	75.9	157
Chromium	7440-47-3	0.050	0.020	0.355	ND	0.2	ND	0.171	ND	0.328	0.0335	0.0959	0.0663	0.0334	0.315
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	7440-50-8	0.200	0.020	0.254	0.0327	0.0998	ND	0.174	0.0371	0.367	0.0339	0.168	0.0527	0.0306	0.304
Iron*	7439-89-6	0.300	0.020	178	12.4	75.4	13.6	104	13.6	173	21.5	70.9	41.3	40	186
Lead	7439-92-1	0.025	0.015	0.0733	ND	0.0261	ND	0.0541	ND	0.0944	ND	0.0271	0.0186	0.0161	0.113
Magnesium	7439-95-4	35	0.020	57.1	34.4	42.5	12.4	44.1	12.1	91	9.83	39.8	17.6	33.4	132
Manganese*	7439-96-5	0.300	0.020	3.75	2.22	1.28	2.93	2.08	1.87	8.94	0.431	2.04	0.999	10.3	6.05
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	0.263	0.0208	0.123	ND	0.123	ND	0.269	ND	0.073	0.0476	0.0289	0.271
Potassium	7440-09-7	--	0.060	59.7	10.3	25.2	3.18	28.3	5.6	68.9	9.38	28.1	8.62	6.04	47.4
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	13.4	3.18	10.5	5.68	4.81	4.5	9.97	3.95	12.7	4.09	7.1	7.12
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	0.481	ND	0.198	ND	0.213	0.0225	0.391	0.0444	0.144	0.0737	0.0316	0.348
Zinc	7440-66-6	2	0.020	0.827	0.0704	0.262	0.0613	0.51	0.264	1.27	0.116	0.35	0.173	0.0995	0.755
Dissolved Metals (mg/l) [Filtered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	0.291	0.0212	0.264	0.65	0.0437	0.0311	0.039	0.0503	0.0222	0.142	ND	0.0591
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7440-39-3	1	0.020	0.0517	0.0455	0.126	0.0847	0.0854	0.0353	0.101	ND	0.106	ND	0.0819	0.0549
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	7.94	64.5	54.9	28	104	58.3	75.9	7.42	65.5	10.7	70.8	63.1
Chromium	7440-47-3	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	7440-50-8	0.200	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron*	7439-89-6	0.300	0.020	0.328	0.0562	0.274	2.53	0.0726	0.0563	0.0548	0.076	0.0334	0.134	1.72	0.0885
Lead	7439-92-1	0.025	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	7439-95-4	35	0.020	1.33	31.2	20.6	11.4	10.3	9.7	31.7	3.41	23	4.48	25.3	22.4
Manganese*	7439-96-5	0.300	0.020	0.0742	ND	ND	3.01	0.214	1.22	4.39	ND	1.38	0.14	10.3	0.118
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	7440-09-7	--	0.060	2.31	6.8	4.44	2.23	7.05	4.21	3.05	1.26	3.13	0.83	2.67	2.26
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	12.2	2.58	12.4	5.5	4.18	4.89	6.28	3.67	13.4	2.74	7.52	5.23
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	7440-66-6	2	0.020	ND	ND	ND	0.05	ND	0.0453	0.0203	ND	ND	ND	ND	ND

Notes:
* - Sum of iron and manganese should not exceed 0.50 mg/l (500 ug/l)
** - TOGS values pertain to dissolved metals
Shaded Concentration Exceeds NYSDEC TOGS Groundwater Guidance Values

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	FMW-16 5/25/2010	FMW-17 5/25/2010	FMW-23 5/26/2010	FMW-24 5/26/2010	FMW-25 5/26/2010	FMW-26 5/26/2010	FMW-27 5/25/2010	FMW-31 5/25/2010	FMW-32 5/25/2010	FMW-33 5/25/2010	FMW-34R 5/25/2010	FMW-35 5/25/2010
Volatile Organic Compounds (ug/l) ***EPA Method 8260***															
Benzene	74-43-2	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	56-23-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	7	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	3	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.6	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	1	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	97	ND
trans-1,2-Dichloroethene	156-60-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	ND
1,2-Dichloropropane	78-87-5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3	0.5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	99-87-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	75-09-2	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND
Toluene	108-88-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4 Trichlorobenzene	120-82-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	75-01-4	2	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	62-64-1	50	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND
Carbon Disulfide	75-15-0	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	108-10-1	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1330-20-7	5	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-t-Butyl Ether (MTBE)	1634-04-4	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (ug/l) ***EPA Method 8270***															
Phenol	108-95-1	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	100-51-6	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3+4-Methylphenol	106-44-5/108-39-4	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	65-85-0	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	111-91-1	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	84-74-2	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	206-44-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	129-00-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	218-01-9	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	117-81-7	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonhalogenated Organic Compounds (ug/l) ***EPA Method 8015 (Selected Compounds)***															
Propylene Glycol	57-55-6	--	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylene Glycol	107-21-1	50	64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	FMW-16 5/25/2010	FMW-17 5/25/2010	FMW-23 5/26/2010	FMW-24 5/26/2010	FMW-25 5/26/2010	FMW-26 5/26/2010	FMW-27 5/25/2010	FMW-31 5/25/2010	FMW-32 5/25/2010	FMW-33 5/25/2010	FMW-34R 5/25/2010	FMW-35 5/25/2010
Total Metals (mg/l) [Unfiltered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	60.6	19	0.783	15.4	13.5	71	4	49.2	11.1	9.41	82.2	0.572
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	0.0373	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	ND	0.0253	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7440-39-3	1	0.020	0.888	0.982	0.0374	0.299	0.238	0.825	0.352	0.588	0.354	0.256	1.28	0.0338
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	0.034	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	38.4	140	20.8	53	39.6	32.6	73.3	90.1	61.6	84	65.9	5.38
Chromium	7440-47-3	0.050	0.020	0.121	0.0465	ND	0.0389	0.0403	0.177	ND	0.107	0.026	0.0302	0.131	ND
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	7440-50-8	0.200	0.020	0.134	0.0767	0.0209	0.0266	0.0336	0.106	ND	0.185	0.0204	0.03	0.153	ND
Iron*	7439-89-6	0.300	0.020	87.4	58.6	1.49	22.9	43	77.3	21.8	102	15.7	14.9	103	2.07
Lead	7439-92-1	0.025	0.015	0.0526	0.0247	ND	ND	ND	0.0305	ND	0.0754	ND	ND	0.0405	ND
Magnesium	7439-95-4	35	0.020	31.5	35.2	2.15	25.5	21.8	37.3	14.6	41.9	28.7	36.9	56.1	1.01
Manganese*	7439-96-5	0.300	0.020	1.66	6.13	0.0422	1.38	5.74	1.76	1.89	7.16	0.35	0.215	11.8	0.279
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	0.0937	0.0334	ND	0.0244	0.0341	0.096	ND	0.0868	ND	ND	0.126	ND
Potassium	7440-09-7	--	0.060	35.9	25.3	3.21	9.16	7.79	21.2	16.4	18.2	6.79	7.08	50.2	0.382
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	28.6	31.5	3.53	5.65	4.8	30.3	31.1	6.18	6.94	5.59	20.9	1.95
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	0.172	0.0539	ND	0.0455	0.0507	0.201	ND	0.188	0.0244	0.0275	0.209	ND
Zinc	7440-66-6	2	0.020	0.302	0.204	0.359	0.123	0.108	0.249	0.0844	0.797	0.0932	0.0946	0.404	0.0537
Dissolved Metals (mg/l) [Filtered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	0.0639	0.544	0.0349	0.1	ND	0.0634	ND	0.0602	ND	0.0459	0.0232	ND
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7440-39-3	1	0.020	0.288	0.763	ND	0.0819	0.0783	0.153	0.293	0.103	0.148	0.129	0.179	ND
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	42.5	146	21.3	49.1	38.3	26.7	76.9	83.8	56.2	82.7	63.6	5.13
Chromium	7440-47-3	0.050	0.020	ND	0.0308	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	7440-50-8	0.200	0.020	ND	0.0268	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron*	7439-89-6	0.300	0.020	0.108	4.83	0.0546	0.187	0.0402	0.0811	1.21	10.8	0.0284	0.063	0.131	0.0479
Lead	7439-92-1	0.025	0.015	ND	0.0255	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	7439-95-4	35	0.020	14.4	31.1	1.97	19.6	15.2	10.2	14.4	18.9	23.1	35.5	27.1	0.866
Manganese*	7439-96-5	0.300	0.020	0.265	6.04	ND	0.0428	5.38	ND	1.89	7.03	0.161	ND	10.9	ND
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	7440-09-7	--	0.060	5.05	22.1	4.13	5	1.79	2.62	17	3.51	3.18	4.35	3.28	0.446
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	29.1	28.2	4.06	6.04	4.6	30.7	32.8	8.85	6.79	6.16	21.7	2.64
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	7440-66-6	2	0.020	0.06	0.144	0.136	0.0205	0.04	ND	ND	0.0258	ND	ND	ND	ND

Notes:
* - Sum of iron and manganese should not exceed 0.50 mg/l (500 ug/l)
** - TOGS values pertain to dissolved metals
Shaded Concentration Exceeds NYSDEC TOGS Groundwater Guidance Values

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	FMW-36 5/25/2010	FMW-37 5/25/2010	FMW-39 5/26/2010	FMW-40 5/25/2010	WW-1 5/25/2010	SUPPLY WELL 5/25/2010	GEMW-2 5/25/2010	TEXMW-1 5/26/2010	XDDMW-3 5/26/2010	XDDMW-5 5/25/2010	XDDMW-7R 5/26/2010	XDDMW-10 5/26/2010
Volatile Organic Compounds (ug/l) ***EPA Method 8260***															
Benzene	74-43-2	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	56-23-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	7	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	3	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	5	1	ND	ND	ND	ND	ND	ND	ND	35	ND	ND	130	ND
1,2-Dichloroethane	107-06-2	0.6	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
cis-1,2-Dichloroethene	156-59-2	5	1	ND	ND	ND	ND	ND	ND	ND	65	ND	ND	57	ND
trans-1,2-Dichloroethene	156-60-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3	0.5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	99-87-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	75-09-2	5	1	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND
Toluene	108-88-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4 Trichlorobenzene	120-82-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	1	ND	ND	ND	ND	ND	ND	ND	16	ND	ND	13	ND
1,3,5-Trimethylbenzene	108-67-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	75-01-4	2	1	ND	ND	ND	1.6	ND	ND	ND	56	ND	ND	3.7	ND
Acetone	62-64-1	50	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	75-15-0	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	108-10-1	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1330-20-7	5	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-t-Butyl Ether (MTBE)	1634-04-4	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (ug/l) ***EPA Method 8270***															
Phenol	108-95-1	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	100-51-6	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3+4-Methylphenol	106-44-5/108-39-4	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	65-85-0	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	111-91-1	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	84-74-2	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	206-44-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	129-00-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	218-01-9	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	117-81-7	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonhalogenated Organic Compounds (ug/l) ***EPA Method 8015 (Selected Compounds)***															
Propylene Glycol	57-55-6	--	40	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND
Ethylene Glycol	107-21-1	50	64	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND	ND

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	FMW-36 5/25/2010	FMW-37 5/25/2010	FMW-39 5/26/2010	FMW-40 5/25/2010	WW-1 5/25/2010	SUPPLY WELL 5/25/2010	GEMW-2 5/25/2010	TEXMW-1 5/26/2010	XDDMW-3 5/26/2010	XDDMW-5 5/25/2010	XDDMW-7R 5/26/2010	XDDMW-10 5/26/2010
Total Metals (mg/l) [Unfiltered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	3.52	34.3	12.5	3.54	0.0408	0.0229	41.6	1.28	1.55	60.8	0.0454	0.456
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7440-39-3	1	0.020	0.0708	0.797	0.2	0.18	0.266	0.051	0.675	0.122	0.289	0.834	0.0945	0.0529
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	142	72.4	49.5	28.9	46.3	16.2	122	19	41.1	37.5	24.2	16.2
Chromium	7440-47-3	0.050	0.020	0.0364	0.0507	0.0268	ND	ND	0.00541	0.0895	ND	ND	0.118	ND	ND
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0574	ND	ND
Copper	7440-50-8	0.200	0.020	ND	0.0572	0.0412	ND	ND	0.0263	0.421	ND	ND	0.103	ND	ND
Iron*	7439-89-6	0.300	0.020	0.662	99.4	21.1	40.8	6.36	0.0681	83.8	11.1	75.1	102	8.79	11
Lead	7439-92-1	0.025	0.015	ND	0.0264	ND	ND	ND	ND	0.0514	ND	ND	0.0342	ND	ND
Magnesium	7439-95-4	35	0.020	0.385	36.7	24.9	8.17	14.2	2.43	43.9	9.29	24.2	30.3	4.92	3.85
Manganese*	7439-96-5	0.300	0.020	0.0426	3.21	0.935	2.19	0.216	ND	12.8	6.38	5.23	3.87	0.0753	0.139
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	ND	0.0601	ND	ND	ND	ND	0.0703	ND	ND	0.082	ND	ND
Potassium	7440-09-7	--	0.060	14.4	23.3	7.57	3.36	6.98	1.87	38	18.2	7.53	14.7	4.32	2.6
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	4.45	32	6.52	4.67	16	12	9.48	6.89	8.22	6.79	6.64	13.8
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	ND	0.0939	0.0462	ND	ND	ND	0.117	ND	ND	0.199	ND	ND
Zinc	7440-66-6	2	0.020	0.0664	0.218	0.103	0.0657	0.166	0.0472	0.264	0.0858	0.0806	1.01	0.0202	0.0493
Dissolved Metals (mg/l) [Filtered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	3.18	ND	0.0224	0.028	ND	ND	ND	ND	ND	0.0941	ND	ND
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7440-39-3	1	0.020	0.0528	0.253	0.0689	0.0941	0.259	0.0632	0.109	0.11	0.138	0.101	0.0862	0.0476
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	132	72.5	50.2	31.3	47.6	18	113	23.1	41.8	26.1	29.6	16.7
Chromium	7440-47-3	0.050	0.020	0.0391	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	7440-50-8	0.200	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron*	7439-89-6	0.300	0.020	ND	0.0519	0.113	10.2	0.0274	0.0251	2.63	4.13	35.9	0.527	0.0632	0.348
Lead	7439-92-1	0.025	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	7439-95-4	35	0.020	0.06	26.3	21.2	8.36	15.2	2.9	26.5	11.8	25.5	9.24	7.02	4.37
Manganese*	7439-96-5	0.300	0.020	ND	2.49	0.57	2.31	0.171	ND	11.7	7.5	5.14	0.741	0.042	0.0814
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	7440-09-7	--	0.060	17.2	4.97	2.47	2.44	8.37	2.84	10.8	24.5	8.26	2.34	7.01	3.65
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	5.52	32.7	7.08	5.63	18	15	9.28	9.78	9.22	7.01	9.99	17.8
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	7440-66-6	2	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
* - Sum of iron and manganese should not exceed 0.50 mg/l (500 ug/l)
** - TOGS values pertain to dissolved metals
Shaded Concentration Exceeds NYSDEC TOGS Groundwater Guidance Values

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	XDDMW-11 5/26/2010	XDDMW-12 5/26/2010	XDDMW-13 5/26/2010	PMMW-1 5/26/2010	BRMW-1 5/26/2010	BRMW-2 5/26/2010	MW-41 5/25/2010	MW-42 5/26/2010	MW-43 5/26/2010	MW-44 5/26/2010	MW-45 5/26/2010	MW-46 5/26/2010
Volatile Organic Compounds (ug/l) ***EPA Method 8260***															
Benzene	74-43-2	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	56-23-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	7	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	3	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	5	1	1.2	51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.6	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	5	1	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	1	ND	57	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3	0.5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	99-87-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	75-09-2	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	1	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4 Trichlorobenzene	120-82-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	75-01-4	2	1	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	62-64-1	50	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	75-15-0	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	108-10-1	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1330-20-7	5	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-t-Butyl Ether (MTBE)	1634-04-4	10	1	ND	ND	ND	ND	ND	ND	ND	ND	38	ND	ND	ND
Semivolatile Organic Compounds (ug/l) ***EPA Method 8270***															
Phenol	108-95-1	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	100-51-6	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3+4-Methylphenol	106-44-5/108-39-4	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	65-85-0	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	111-91-1	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	84-74-2	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	206-44-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	129-00-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	218-01-9	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	117-81-7	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nonhalogenated Organic Compounds (ug/l) ***EPA Method 8015 (Selected Compounds)***															
Propylene Glycol	57-55-6	--	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylene Glycol	107-21-1	50	64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	XDDMW-11 5/26/2010	XDDMW-12 5/26/2010	XDDMW-13 5/26/2010	PMMW-1 5/26/2010	BRMW-1 5/26/2010	BRMW-2 5/26/2010	MW-41 5/25/2010	MW-42 5/26/2010	MW-43 5/26/2010	MW-44 5/26/2010	MW-45 5/26/2010	MW-46 5/26/2010
Total Metals (mg/l) [Unfiltered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	0.221	0.164	0.142	3.5	0.172	0.144	0.322	0.08	0.0695	4.63	54.7	13.5
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	0.0262	ND	ND	ND	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7440-39-3	1	0.020	0.0768	0.145	0.106	0.375	0.102	0.0918	0.19	0.136	0.119	0.125	0.64	0.214
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	0.0591	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	56.6	35	38.8	91.4	22.7	29.5	154	19.2	43.4	25	22.3	40.8
Chromium	7440-47-3	0.050	0.020	0.0341	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0995	0.028
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	7440-50-8	0.200	0.020	ND	ND	ND	0.0341	ND	ND	ND	ND	ND	ND	0.167	0.0282
Iron*	7439-89-6	0.300	0.020	32.3	22.6	33.2	85.9	18.4	1.42	21.5	17.3	36.5	9.08	80.1	20.3
Lead	7439-92-1	0.025	0.015	ND	ND	ND	0.0193	ND	ND	ND	ND	ND	ND	0.0326	ND
Magnesium	7439-95-4	35	0.020	12.9	13	6.83	55.8	7.5	6.74	5.56	4.93	21.6	12.6	28.5	19.8
Manganese*	7439-96-5	0.300	0.020	0.752	4.15	0.18	3.36	0.315	0.108	0.437	0.487	1.47	0.117	1.56	0.395
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	ND	ND	ND	0.0245	ND	ND	ND	ND	0.0685	ND	0.0861	0.0219
Potassium	7440-09-7	--	0.060	3.97	3.36	3.84	5.3	3.11	2.57	5.04	2.75	3.5	5.12	31.5	11.8
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	5.71	7.09	4.73	11.8	4.52	2.66	20.9	7.06	9.68	8.47	6.76	11.4
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.173	0.0356
Zinc	7440-66-6	2	0.020	0.0327	0.0414	0.0337	0.146	0.0699	9.03	0.0339	ND	0.045	0.0923	0.263	0.0889
Dissolved Metals (mg/l) [Filtered]**															
SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)															
Aluminum	7429-90-5	--	0.020	ND	0.0424	0.0229	0.0485	0.0225	ND	0.0543	ND	ND	0.058	0.286	0.0246
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	7440-39-3	1	0.020	0.0656	0.141	0.0445	0.19	0.097	0.0946	0.164	0.0995	0.0803	0.0721	0.0641	0.0646
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	7440-70-2	--	0.020	72.9	40	41.6	99	24.9	30.6	149	20.9	39.7	26	21.5	35.8
Chromium	7440-47-3	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	7440-50-8	0.200	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron*	7439-89-6	0.300	0.020	0.231	11.8	0.218	40.5	0.704	0.144	0.0219	0.298	4.71	0.0683	0.258	0.0439
Lead	7439-92-1	0.025	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	7439-95-4	35	0.020	17.5	15.1	7.9	62.9	8.44	7.29	0.205	5.66	21	12.1	9.71	14.1
Manganese*	7439-96-5	0.300	0.020	0.684	4.5	0.0689	3.46	0.306	0.108	0.0396	0.463	1.31	0.025	ND	ND
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	7440-02-0	0.100	0.020	ND	ND	ND	ND	ND	ND	ND	ND	0.021	ND	ND	ND
Potassium	7440-09-7	--	0.060	6.34	4.62	5.08	5.86	4.28	3.29	6.54	3.81	3.78	3.04	2.15	3.29
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	7440-23-5	20	0.030	8.64	8.9	6.32	13.7	6.13	3.01	24.8	8.97	9.86	10.3	7.47	12.1
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	7440-62-2	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	7440-66-6	2	0.020	ND	0.0348	ND	0.0235	ND	7.67	ND	ND	ND	ND	0.0267	ND

Notes:
* - Sum of iron and manganese should not exceed 0.50 mg/l (500 ug/l)
** - TOGS values pertain to dissolved metals
Shaded Concentration Exceeds NYSDEC TOGS Groundwater Guidance Values

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	MW-47 5/26/2010	MW-48 5/26/2010	MW-49 5/26/2010	MW-50 5/25/2010	FFMW-5 5/25/2010	DPWMW-3 5/25/2010	DPW-1 5/25/2010	DPW-2 5/25/2010	MW-202 5/25/2010	Field Blank 5/26/2010	Trip Blank 5/26/2010
Volatile Organic Compounds (ug/l) ***EPA Method 8260***														
Benzene	74-43-2	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	104-51-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	135-98-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	56-23-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	75-00-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	7	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1	3	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	75-34-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	0.6	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	75-35-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	78-87-5	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	563-58-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100-41-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3	0.5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	98-82-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	99-87-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	75-09-2	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	91-20-3	10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	103-65-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	108-88-3	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4 Trichlorobenzene	120-82-1	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	71-55-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	108-67-8	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	95-63-6	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	75-01-4	2	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	62-64-1	50	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	75-15-0	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	108-10-1	--	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1330-20-7	5	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-t-Butyl Ether (MTBE)	1634-04-4	10	1	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (ug/l) ***EPA Method 8270***														
Phenol	108-95-1	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Benzyl Alcohol	100-51-6	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
3+4-Methylphenol	106-44-5/108-39-4	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Benzoic Acid	65-85-0	--	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
bis(2-Chloroethoxy)methane	111-91-1	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Naphthalene	91-20-3	10	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Di-n-butylphthalate	84-74-2	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Fluoranthene	206-44-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Pyrene	129-00-0	50	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Chrysene	218-01-9	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
bis(2-Ethylhexyl)phthalate	117-81-7	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Benzo[b]fluoranthene	205-99-2	0.002	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Nonhalogenated Organic Compounds (ug/l) ***EPA Method 8015 (Selected Compounds)***														
Propylene Glycol	57-55-6	--	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Ethylene Glycol	107-21-1	50	64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS

Table 3
Groundwater Monitoring Program
Westchester County Airport
Westchester, New York
Water Quality Results

Well ID Date Sampled	CAS No.	TOGs Ambient Water Quality Standards	Method Detection Limit	MW-47 5/26/2010	MW-48 5/26/2010	MW-49 5/26/2010	MW-50 5/25/2010	FFMW-5 5/25/2010	DPWMW-3 5/25/2010	DPW-1 5/25/2010	DPW-2 5/25/2010	MW-202 5/25/2010	Field Blank 5/26/2010	Trip Blank 5/26/2010
Total Metals (mg/l) [Unfiltered]** ***SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)***														
Aluminum	7429-90-5	--	0.020	19.5	0.621	0.0622	0.056	1.73	4	102	5.36	6.36	ND	NS
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Barium	7440-39-3	1	0.020	0.234	0.223	0.0701	0.0423	0.0624	0.704	1.37	0.0645	0.169	ND	NS
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Calcium	7440-70-2	--	0.020	35.7	29.1	12.6	20.5	28	151	89.8	27.3	90.4	1.33	NS
Chromium	7440-47-3	0.050	0.020	0.0265	0.121	ND	ND	ND	ND	0.254	ND	0.0278	ND	NS
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Copper	7440-50-8	0.200	0.020	0.0345	0.0273	ND	ND	ND	0.0632	0.405	0.0297	0.0257	ND	NS
Iron*	7439-89-6	0.300	0.020	22.3	16.7	13	21.9	3.17	7.67	141	7.8	12.9	0.0573	NS
Lead	7439-92-1	0.025	0.015	0.0183	0.0866	ND	ND	ND	ND	0.0835	ND	ND	ND	NS
Magnesium	7439-95-4	35	0.020	20.8	12.1	6	9.53	11	14.1	63.2	9.33	21.8	0.149	NS
Manganese*	7439-96-5	0.300	0.020	2.72	0.876	0.491	0.364	0.507	2.95	8.71	1.74	1.23	ND	NS
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Nickel	7440-02-0	0.100	0.020	0.0314	0.106	ND	ND	ND	0.0307	0.172	ND	ND	ND	NS
Potassium	7440-09-7	--	0.060	8.91	3.8	2.05	2.21	2.6	21.6	70	3.58	11.9	0.132	NS
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Sodium	7440-23-5	20	0.030	6.81	10.8	6.92	4.64	5.75	24.4	9.49	5.05	6.15	1.87	NS
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Vanadium	7440-62-2	--	0.020	0.033	ND	ND	ND	ND	ND	0.333	ND	ND	ND	NS
Zinc	7440-66-6	2	0.020	0.0973	0.296	0.0315	0.0317	0.0451	0.161	0.631	0.365	0.117	0.08	NS
Dissolved Metals (mg/l) [Filtered]** ***SW-846 6010 (ICP) Mercury SW-846 7470 (Cold Vapor)***														
Aluminum	7429-90-5	--	0.020	0.0257	ND	ND	0.0286	0.038	1.32	0.0584	0.104	0.0221	NS	NS
Antimony	7440-36-0	0.003	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Arsenic	7440-38-2	0.025	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Barium	7440-39-3	1	0.020	0.0634	0.17	0.0563	0.0357	0.0516	0.612	0.125	0.0316	0.101	NS	NS
Beryllium	7440-41-7	0.003	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Cadmium	7440-43-9	0.005	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Calcium	7440-70-2	--	0.020	33.5	25.8	13.2	22.7	30.6	170	85.6	27.4	99.2	NS	NS
Chromium	7440-47-3	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Cobalt	7440-48-4	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Copper	7440-50-8	0.200	0.020	ND	ND	ND	ND	ND	0.0413	ND	ND	ND	NS	NS
Iron*	7439-89-6	0.300	0.020	0.0447	0.111	0.191	3.07	0.0384	6.06	0.0718	0.604	0.266	NS	NS
Lead	7439-92-1	0.025	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Magnesium	7439-95-4	35	0.020	16.2	11.4	6.61	11.2	11.9	15.5	19.9	8.16	22.3	NS	NS
Manganese*	7439-96-5	0.300	0.020	0.403	0.699	0.439	0.375	0.41	0.215	6.87	1.3	1.05	NS	NS
Mercury	7439-97-6	0.0007	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Nickel	7440-02-0	0.100	0.020	ND	ND	ND	ND	ND	0.251	ND	ND	ND	NS	NS
Potassium	7440-09-7	--	0.060	2.88	3.35	2.77	3.16	2.96	24	12.2	3.81	11.3	NS	NS
Selenium	7782-49-2	0.010	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Silver	7440-22-4	0.050	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Sodium	7440-23-5	20	0.030	7.78	7.74	8.75	6.05	6.85	16.9	9.25	6.46	7.07	NS	NS
Thallium	7440-28-0	0.0005	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Vanadium	7440-62-2	--	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Zinc	7440-66-6	2	0.020	ND	ND	ND	ND	0.0274	0.15	ND	0.108	ND	NS	NS

Notes:
* - Sum of iron and manganese should not exceed 0.50 mg/l (500 ug/l)
** - TOGS values pertain to dissolved metals
Shaded Concentration Exceeds NYSDEC TOGS Groundwater Guidance Values